

# THE AMERICAN ARCHITECT AND BUILDING NEWS.

VOL. IV.]

Copyright, 1878, HOUGHTON, OSGOOD & CO.

[No. 157.]

BOSTON, DECEMBER 28, 1878.

## CONTENTS.

### SUMMARY:—

St. Alban's Abbey Church. — Architects against Restorers. — A new Turner. — Underground Telegraph Lines in New York. — Building in Brooklyn. — The Labor Troubles. — Strikes and Labor Statistics . . . . .	209
THE OPEN FIRE-PLACE. V. . . . .	210
HOUSE DRAINAGE IN PHILADELPHIA . . . . .	212
THE ILLUSTRATIONS:—	
The Salisbury Building. — House at Winchester, Mass. — St. Paul's Church, Harrisburg, Pa. — Interior of the Church of St. Lambert, Münster, Westphalia . . . . .	213
BOOK NOTICES:—	
Vose's Geometrical Drawing. — The Old House Altered . . . . .	213
REPORT OF THE COMMITTEE ON NATIONAL SURVEYS . . . . .	214
THE ASSYRIAN GATES . . . . .	215
COMPETITIONS IN INTERIOR DECORATION . . . . .	215
BOOKS RECEIVED . . . . .	216
NOTES AND CLIPPINGS . . . . .	216

A WARM controversy is going on in England over the proposed continuation of the restorations of the famous Abbey Church of St. Alban's. We gave, some time ago (*American Architect*, May 25, 1878), an account of the ingenious method adopted for restoring the warped walls of the nave to their upright position. The church is one of the most interesting in England, being the largest not a cathedral — ranking in length with Winchester, Canterbury, and Ely — and having the remnants of one of the finest as well as one of the earliest Norman naves that exist. The restoration was in the hands of Sir Gilbert Scott, and it is possible that if he had lived the controversy would never have arisen. If our readers will look back to two of Mr. Neale's plates of this building, which we copied from the *Architect* (*American Architect*, June 29, 1878), they will see that a noble tower and transepts of Norman work are conjoined with an eastern arm of early English and decorated work, the whole much bedevilled — if we can be forgiven the word — by battlemented parapets and traceries of various periods. All four arms of the church originally wore high-pitched roofs; and our plate of the exterior shows clearly some of the channels of the old roof lines, which exist on all sides of the central tower. The transept fronts also retain the springings of the original gables, with remains of a blank arcade which crossed the gables at their feet, things not visible, however, in our plate. All the old roofs have been replaced with flat roofs of very low pitch, put on, probably, in the Perpendicular period, when the parapets were added which hide them. The interior view that we gave shows only the three westernmost bays of the nave, which are early English, there being nine bays of the Norman work still left on the north side, and fewer on the south. Over this nave the low-pitched roof carries a flat ceiling, which, with the roof, is in a very dilapidated condition. Here is the bone of contention. The committee in charge of the restorations have declared that the present roof of the nave is ruinous, and propose to replace it by a roof following the lines of the old weathering in the tower. The Society of Antiquaries and many of the leading architects, as well as most of the architectural journals, have united in protesting against this project, and the Institute was, at the last account, apparently getting ready to enter the lists.

THE curious thing in the controversy is, that it is the architects — representatives of the profession abhorred by the conservators of old architecture, the profession whose zeal for restoration has brought down the anathemas of those who revere old work — that have intervened to keep things as they are by simply repairing the existing roof; while the chief of the party that, in the true spirit of modern restoration, would substitute what they think should have been and must have been for what they find, is — who but Sir Edmund Beckett himself, whose services in the diocese of York we mentioned last week? Sir Gilbert Scott had decided that the present roof could be repaired to advantage. He believed that the removal of the high-pitched roofs had injured the appearance of the church, but that the difficulties in the way of a return to them were too formidable. Mr. Street, with Mr. Christian, Mr. Neale, and others, has examined the roof, and has reported that, although he can make

out with certainty the form and construction of the original roof, the present one can be and ought to be repaired. It is evident that the real quarrel is not over the condition of the roof, but between a desire to preserve it and a desire to replace it. The opponents of "restoration" argue that to replace the roof means ultimately to reroof the whole building, rebuild the gables of the transepts, and replace the western front. The significant point is the change of position on the restoration question that the quarrel indicates. A few years ago no conscientious restoring architect would have hesitated to pull away the later work, roof, parapet, and battlements, which he would have considered to be simply a disfigurement of the older and purer portions, and to bring the whole back to what he would have considered its original likeness. It is not very long since the Royal Institute, in its published recommendations for restoration and conservation, urged that it should be a main object in restoring "to get rid of modern additions put up without regard to architectural propriety," and that therefore the low roofs added in the Perpendicular period should be replaced by steep ones like their predecessors. It is but little more than a year since Mr. Stevenson, in a sharp onslaught on restorers in presence of the Institute, attacked both Sir Gilbert Scott and Mr. Street for making this very change. To-day we find Mr. Street protesting against a similar change, and citing Sir Gilbert's opinion against it, while the committee in charge of the most important unrestored building in the kingdom is urging it. And we find Sir Edmund Beckett, the amateur corrector of architects, boldly affronting, with the zeal of a catechumen, the difficulties which Sir Gilbert found "too formidable."

It is not known that more than three or four of Turner's pictures have ever been brought to the United States. Those have been in private collections where they were not accessible to the public. One of them, of high reputation, has been in the hands of a collector who has persistently refused to let any one see it. The only one that has been generally known is the *Slave Ship*, now in the Museum of Fine Arts in Boston. Mr. Thomas Moran now claims to have discovered one that has lain *perdu* in the country for a quarter of a century. It is a picture of Conway Castle, a famous castle in North Wales, built by Edward First, of which Turner is known to have made several drawings — water-colors and others. This particular picture seems to have passed out of the notice of Turner's admirers. It has not been mentioned by Mr. Ruskin, we think, nor is it named in the voluminous lists of Turner's works given by Mr. Thornbury in his biography. It was not exhibited by Turner either at the Royal Academy or at the British Institution; and, rather curiously, since the subject seems to have been a favorite one with Turner, none of his drawings of it have been engraved, if we can trust Mr. Stokes's catalogue of the engraved works. Mr. Moran, however, has found a very direct and straightforward history for his picture. It was painted, he says, in or near 1810, for Mr. Thomas Goodall, banker, of Abingdon, Berkshire, England, and after his death came into the possession of Mr. John Butterton of Staffordshire. His son of the same name, an artist, inherited the picture and brought it twenty-five years ago to Philadelphia. There Mr. Moran, being then a boy, saw it, and he has treasured it in his memory ever since. Lately he got track of it again by means of an advertisement in *Scribner's Monthly*, so the story goes. Finding it and Mr. Butterton in Hammoncton, New Jersey, he secured it. It is larger than the *Slave Ship*, being three feet eight inches by four feet eight inches. He is reported to value it at from twenty-five to thirty thousand dollars. This seems rather an enthusiastic valuation of an obscure work of Turner's early period, considering that the highest price ever paid for a Turner was five thousand guineas, and that only three or four have ever brought more than three thousand. What Mr. Moran's purchasing price was we are not told.

A NEW proposition for burrowing under ground in the streets of New York is that of the company which has just procured an ordinance allowing it to lay "subterranean telegraph wires and electric conductors" in the streets. These are, by the terms of the ordinance, to be laid under the direction of the Commissioners of Public Works, in trenches not more than two feet wide and two feet deep, and four feet from the curb-stones, so as not

to interfere with gas and water mains, or with sewers. It is proposed to inclose a bundle of copper wires in an iron pipe, first separating them by wrapping each with cloth, and then to complete the insulation by pouring in melted paraffine. The purpose of the company that is to lay these wires is obviously to offer them as a substitute for the wires that are carried on poles and through the air; possibly to enforce their offer by a little municipal persuasion, and even with an eye to the ultimate use of the electric light. The Union Telegraph Company, which has a large amount of money invested in street poles and elevated wires, does not favor the scheme; but maintains that the underground wires would be more likely to get out of order, which does not look plausible, and more difficult to repair, which is plausible, and that the next move of the new company will be to press an ordinance banishing the poles from the streets, so as to bring their wires into demand. Whatever may be the convenience of the telegraph companies, there is no doubt that the poles and air-wires are an annoyance as well as a disfigurement in the streets. The poles carry anywhere from a dozen wires to a hundred, which occasionally break, or are blown down together by a gale, and are in that condition of no use to the companies, but extremely obnoxious to passengers. In London and Paris the underground railways and sewer tunnels give an opportunity to relieve the streets by carrying telegraph wires as well as the gas and water pipes where they are at once out of the way and accessible. Here is another argument for introducing sub-ways under our streets where it is practicable, and for wasting no more money in putting them off. If the city of New York, instead of requiring every new company that wishes to disturb the streets to pay for its franchise, as seems now to be the pet idea of municipal thrift, should require them all to bear their part in building sub-ways, perhaps something might be done.

THE Chief of the Brooklyn Department of Fire and Buildings, Mr. Williams, presents a list of building-permits issued during eleven months of 1878, which shows that the amount of work reported to his department does not differ much from the average of the last four years. The whole number of permits is given by the *Brooklyn Eagle* in one table as 1638, and in another as 1738. The estimated cost of the work is set at \$6,525,742. Among these buildings are 832 single dwelling-houses, 213 for two or four families each, 255 shops and dwellings combined, and 45 tenement houses. There were six churches, 21 factories, seven school-houses, six railway stations, one observatory, and one distillery; 1,086 are set down as brick buildings, and 652 as wooden. The numbers and cost reported for the last five years, but for twelve months against eleven in 1878, are: in 1873, the year of the panic, 307 buildings, costing \$1,885,600; in 1874, 1344, costing \$7,773,500,—an extraordinary increase; in 1875, 1648, costing \$7,710,000; in 1876, 1743, costing \$8,165,300; and in 1877, 1686, costing \$7,000,000. The growth and decline of tenement-house building is noticeably illustrated in that there are reported in 1873, six; in 1874, 81; in 1875, 113; in 1876, 124; in 1877, 60; in 1878, 45. This may be assumed to indicate the sudden demand for such houses which the pressure of hard times has developed, and the approximate satisfaction of the demand. In the same years the numbers of private houses permitted were 160, 639, 751, 843, 887, 832. Some suggestion of the relative prosperity of mechanical employments may be inferred from the numbers of workshops reported: two, 37, 33, 47, 80, 70.

THE long disturbances of the labor market, here and abroad, do not seem likely to come to an end. There is no great reason to expect that they will so long as business depression and falling prices continue. It is the stumbling-block of the workingmen that they do not feel such depression by direct contact, but only through their employers, and they are therefore tempted not only to resist by force their share of the general burden, but to visit upon their employers the injuries which are only the transmitted shocks of a universal disturbance. Mr. Bishop, of Pittsburgh, touched upon a like difficulty in saying before Mr. Hewitt's Labor Committee that the greatest cause of discontent among workingmen at present is that they do not realize that prices fall with wages. The condition of England is particularly unsettled. The workmen in the building-trades, among whom there has been a pretty general reduction of wages of late, have not yet shown a disposition to renew their strikes. The iron-workers of Staffordshire have found it necessary to reduce their

wages, and one of the largest companies, the New British Iron Company, has decided to shut down the greater part of its works. The twelve or fifteen thousand cotton hands who have been on strikes at Oldham hold out with pertinacity, except a few who have gone to work provisionally, pending the discussion of a settlement. The cost of the strike to the workmen during the first four weeks is estimated at \$300,000.

THE weakest phase of the workingman's position was shown in the recent strike of car-drivers in New York, where the refusal of the Third Avenue horse-railroad to take on two men who had been prominent in a previous contest led to a general strike. The company's firmness and the fact that plenty of new men could be had have enabled it to keep the upper hand. Probably there is no field on which the general question of strikes can be fought out with so little ultimate advantage to the workingman as on the railroads, or like public services, for there is none in which the public is so sure to be enlisted against them. In other businesses the community feels the injurious effect of strikes only indirectly, in the general depression of the businesses and the disturbance of prices; but here the immediate injury is so direct and serious that the public is aroused at once to oppose the strikers. We notice, on the other hand, as a step in the right direction, the petition of the workmen of Missouri that their legislature should establish a Bureau of Statistics of Labor; which, however, is at once discredited, and reduced to a piece of class legislation, by the provision that the Commissioner shall be a "bona fide representative workingman."

#### THE OPEN FIRE-PLACE. V.

IN its primitive form it consisted of a simple niche cut in the thickness of the wall, the sides terminating in small piers supporting the massive hood as shown in perspective view by Fig. 17, from Viollet-le-Duc. The oldest fire-places of the Middle Ages were

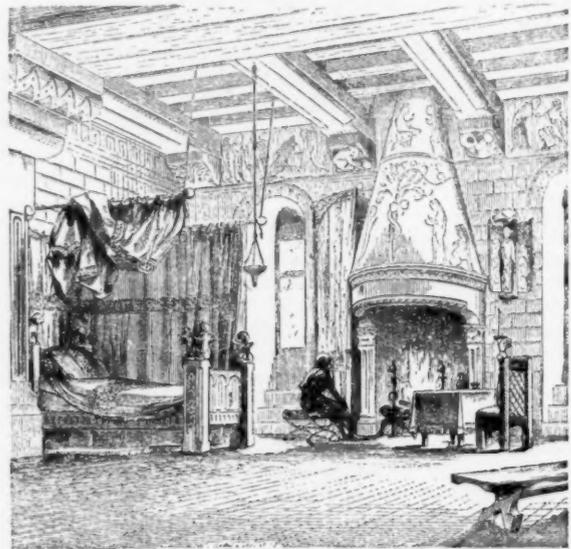


Fig. 17.

often circular in plan, the back of the fire-place forming one segment of the circle, and the mantel and hood the other. Those supposed to be of the twelfth century were not so large as those of a century later, and the mantel was apt to be formed of a single piece or of two pieces of material, as in that of the Cathedral of Puy en Velay, shown above, or in that of the private house in the old town of Cluny, France, represented in Fig. 18. Here the hood is supported by a single curved timber. In this example the entire thickness of the wall is used, the back of the fire-place being on a line with the outside of the wall, so that the masonry of the chimney shows in projection on the exterior. The hood is elliptical and resolves itself, as it ascends, into a circular flue. On the right and left are little shelves for lamps, corresponding to our modern gas-burners on the chimney breast. The low windows near the fire-place enabled the occupants to see what was going on in the street while they sat by the fire.

Fig. 19 represents the old fire-place in Roslin Castle, of colossal dimensions and extreme simplicity of design. In these great fire-places huge trunks of trees six or eight feet long were sometimes burned. Seats were placed on and about the hearth, and the screens and jambs of the fire-place formed together a complete antechamber as it were, apart from the large halls in which they were built, and

here the family united to pass the long winter evenings and listen to the famous legends of olden times.

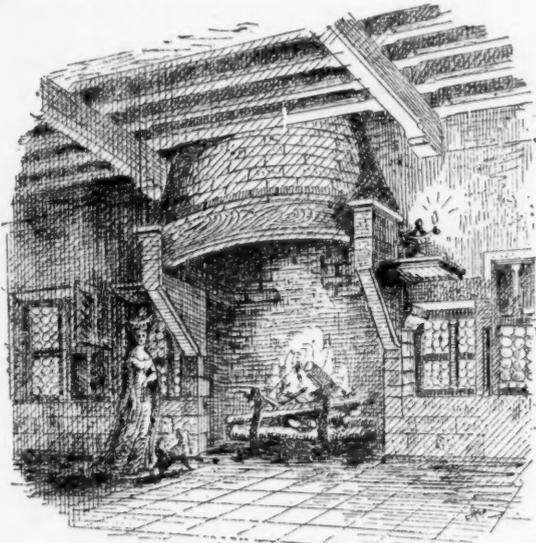


Fig. 18. Fire-place in the Ville de Cluny, Rue d'Avril, No. 13. From Viollet-le-Duc. After the thirteenth century the kitchen, forming part of the main house, and no longer a separate establishment in which whole sheep

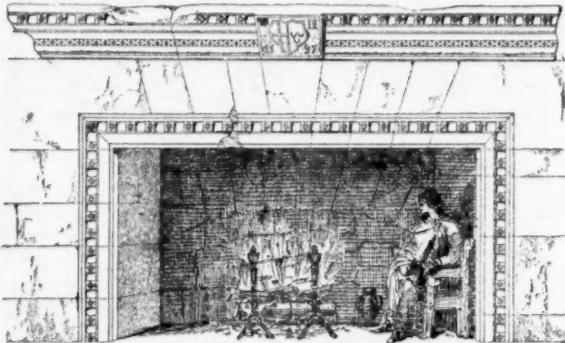


Fig. 19. Fire-place in Roslin Castle.

and oxen were cooked at one time, was furnished with one or more of these massive fire-places, of which Fig. 20 furnishes a beautiful

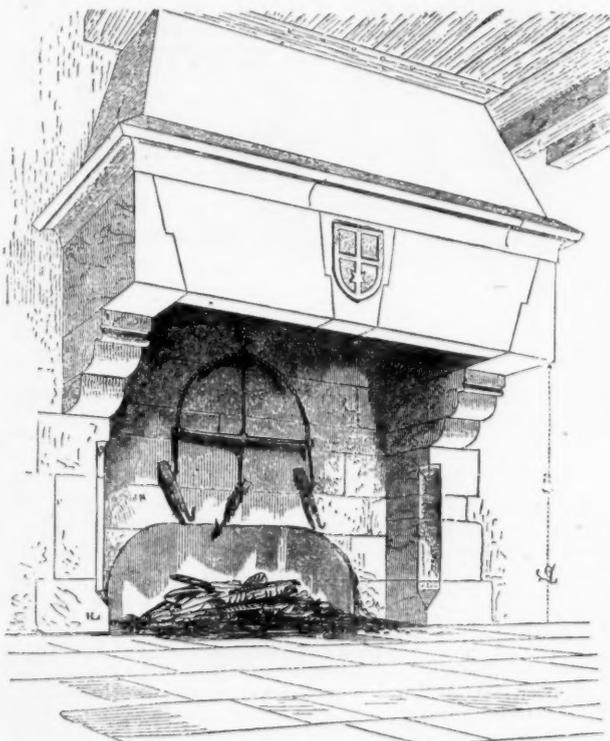


Fig. 20. Kitchen Fire-place of Granite. From Viollet-le-Duc.

example. It belonged to the Abbey Blanche de Mortain, was built of granite, and still bears the arms of the abbey and the triple pot-hanger with the iron plate behind the fuel.

Here we have no piers at all, the hood resting on heavy corbels of granite, and the fire-place is built as usual in the thickness of the wall.

Up to the fourteenth century the fire-places of private houses and



Fig. 21. From Viollet-le-Duc.

châteaux were generally of great simplicity, and it was only later that we see any attempt at decoration.

Figs. 21 and 22 represent two fire-places of the fifteenth century, with jambs of stone and hoods of wood plastered and curiously decorated. They are in the little town of Saint Antonin (Tarn-et-Garonne).

Fig. 23 gives a section of the first fire-place, showing the construc-

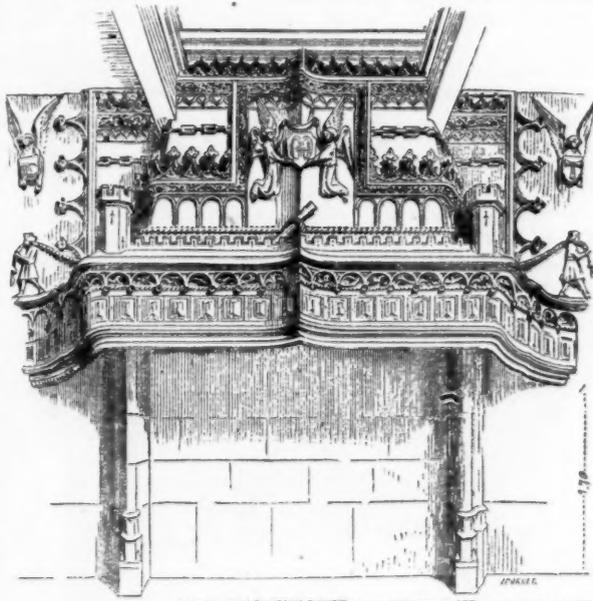


Fig. 22. From Viollet-le-Duc.

tion of the hood, which stands 1 meter and 77 centimeters (about 5 feet 9 inches) above the hearth. Fig. 24 gives a detail of a lower corner of the framework. The hood, being plastered and having therefore the appearance of stonework, seemed to the eye too heavy to be self-sustaining. The artist has therefore taken the pains to carve upon the surface heavy cables, in the hopes of being able

thereby to diminish in a measure this disagreeable effect of weakness.

The second fire-place is more profusely decorated, and chains are added as well as man-power on the right and left, to assist the cable in supporting the heavy hood.

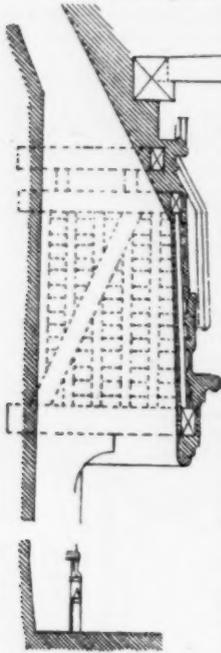


Fig. 23.

or when less than the ordinary amount of the heat was required, it was possible to confine the fire to a single section. By this arrangement each part, besides having sufficient draught of itself, served also to heat and improve that of the rest.

The fire-place represented by Fig. 28 was built in the fifteenth century, and occupies one end of the hall in which it stands. "It is," says Viollet-le-Duc, "no less than 10 meters long and 2.30 meters (7 feet) high under the mantel. . . . In the interior of the public buildings as well as in the exterior, the Middle Age understood how to produce imposing effects of architecture, which make the treatment even of our most important modern buildings seem weak and insignificant by comparison.

"When the counts of Poitiers, in their grand robes of state, sat en-

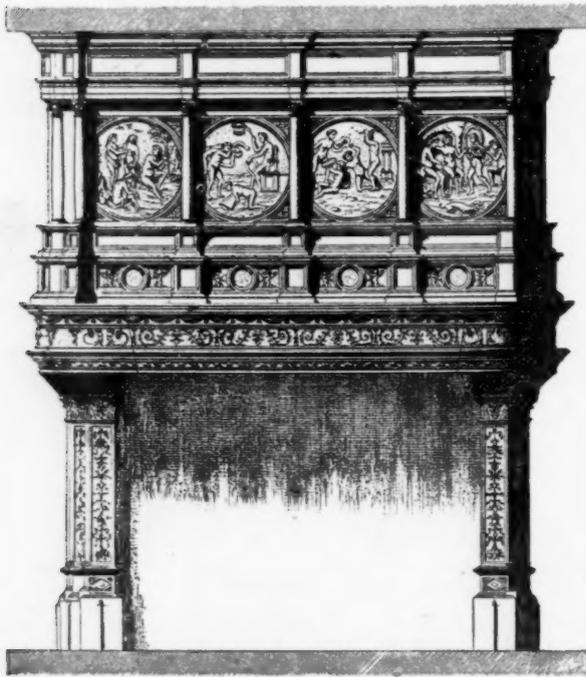


Fig. 25

Fig. 25 represents one of the richly sculptured fire-places in the Château d'Arnay-le-Duc, of the sixteenth century. It is two and a half meters long by nearly two meters high, and stands in a room four and two tenths meters high.

The fire-places thus far described have not exceeded eight or ten feet in width. When very large halls or saloons in palaces or public buildings were to be heated they sometimes measured thirty or forty feet, and were decorated in a most sumptuous manner. In this case, however, it was necessary to support the mantel by intermediate piers, as shown in Fig. 26. When these piers extended from the front to the back they formed, under a single mantel, separate fire-places, each having a distinct flue of its own, as shown in Figs. 27 and 28, the former being from the Château de Coucy, France, and the latter from the Grand Hall of the Palais des Comtes of Poitiers.

The subdivision of the opening and flue into several parts had other objects besides that of properly supporting the mantel. The ties or wibes strengthened the walls, and the draught of each was materially improved by having its own small, independent flue. When the fire was first lighted,



Fig. 24.

throne in this hall, surrounded by their officers; when behind the feudal court blazed the three fires on their three hearths; and when,

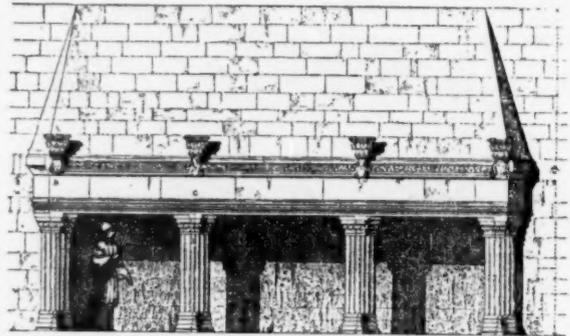


Fig. 26.

to complete the picture, the assistants were seated on benches before the gorgeous windows above the mantel, one can imagine the respect



Fig. 27.

that a scene of such nobility and grandeur ought to have inspired in the minds of the vassals assembled around the court of their lord.

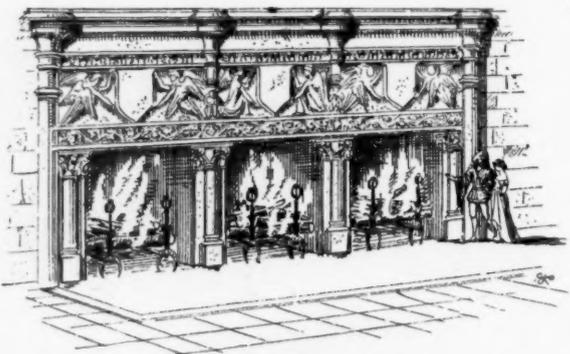
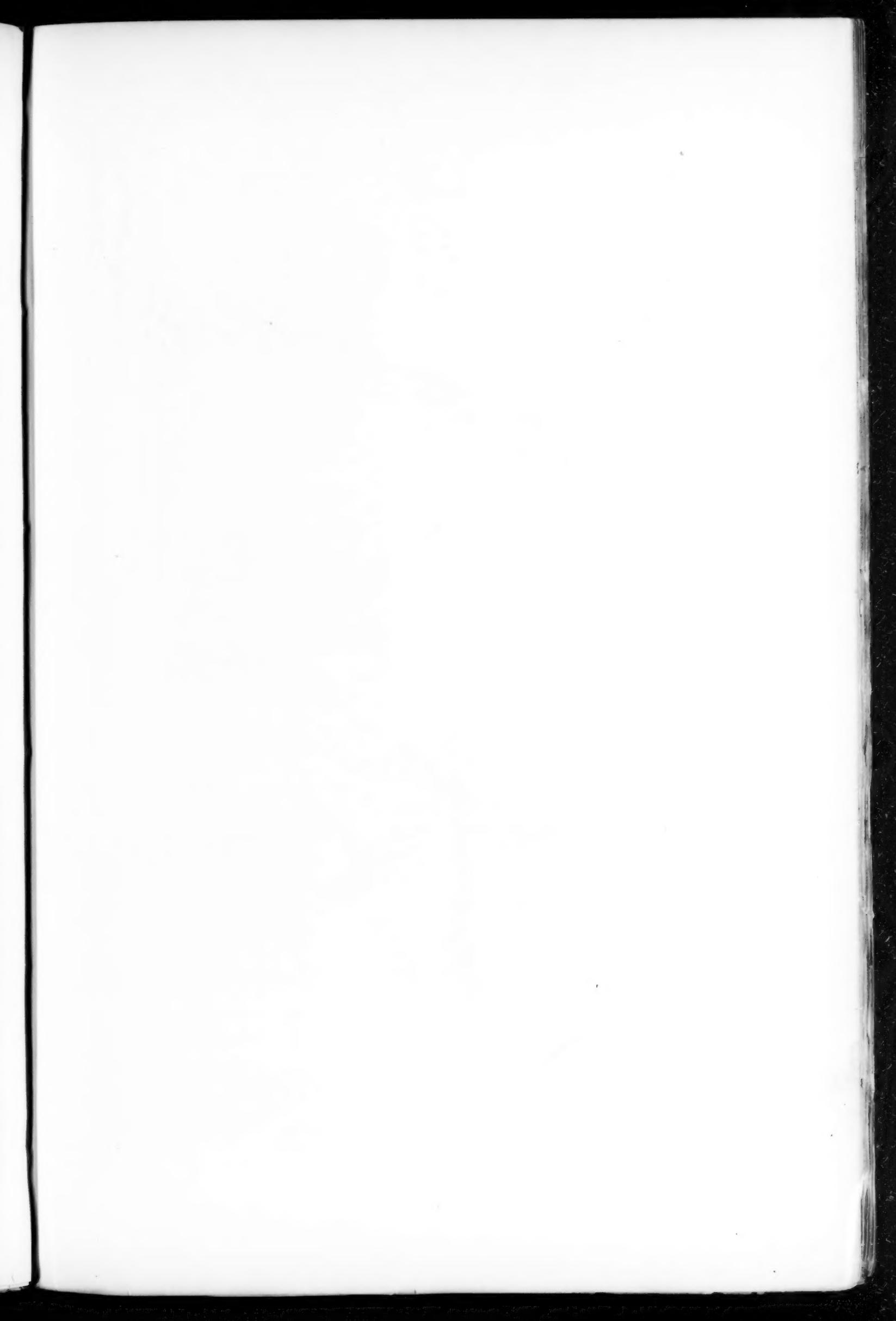


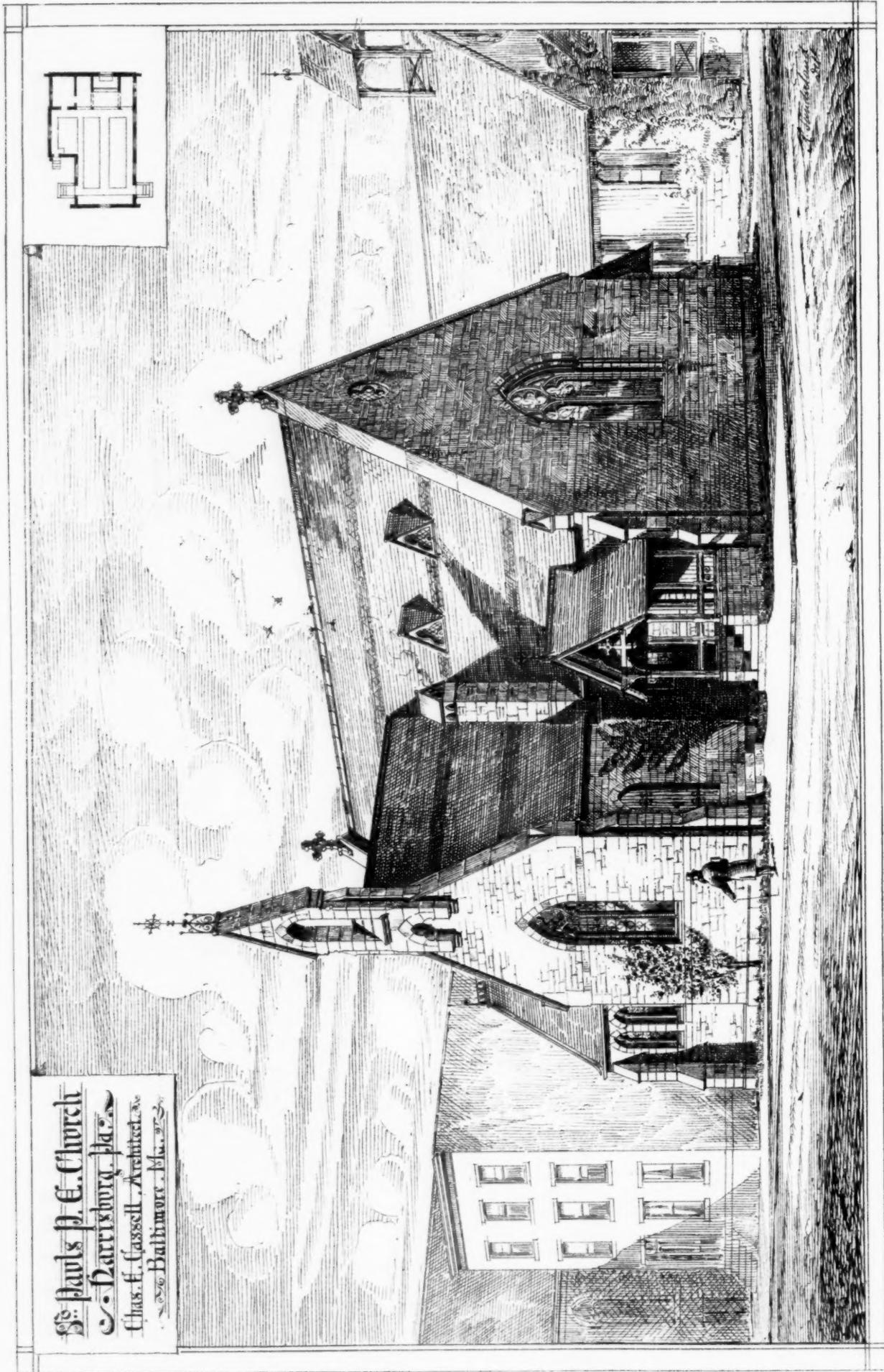
Fig. 28.

Certainly one should feel himself triply in the right to be able to defend his cause before a tribunal so nobly seated and surrounded."

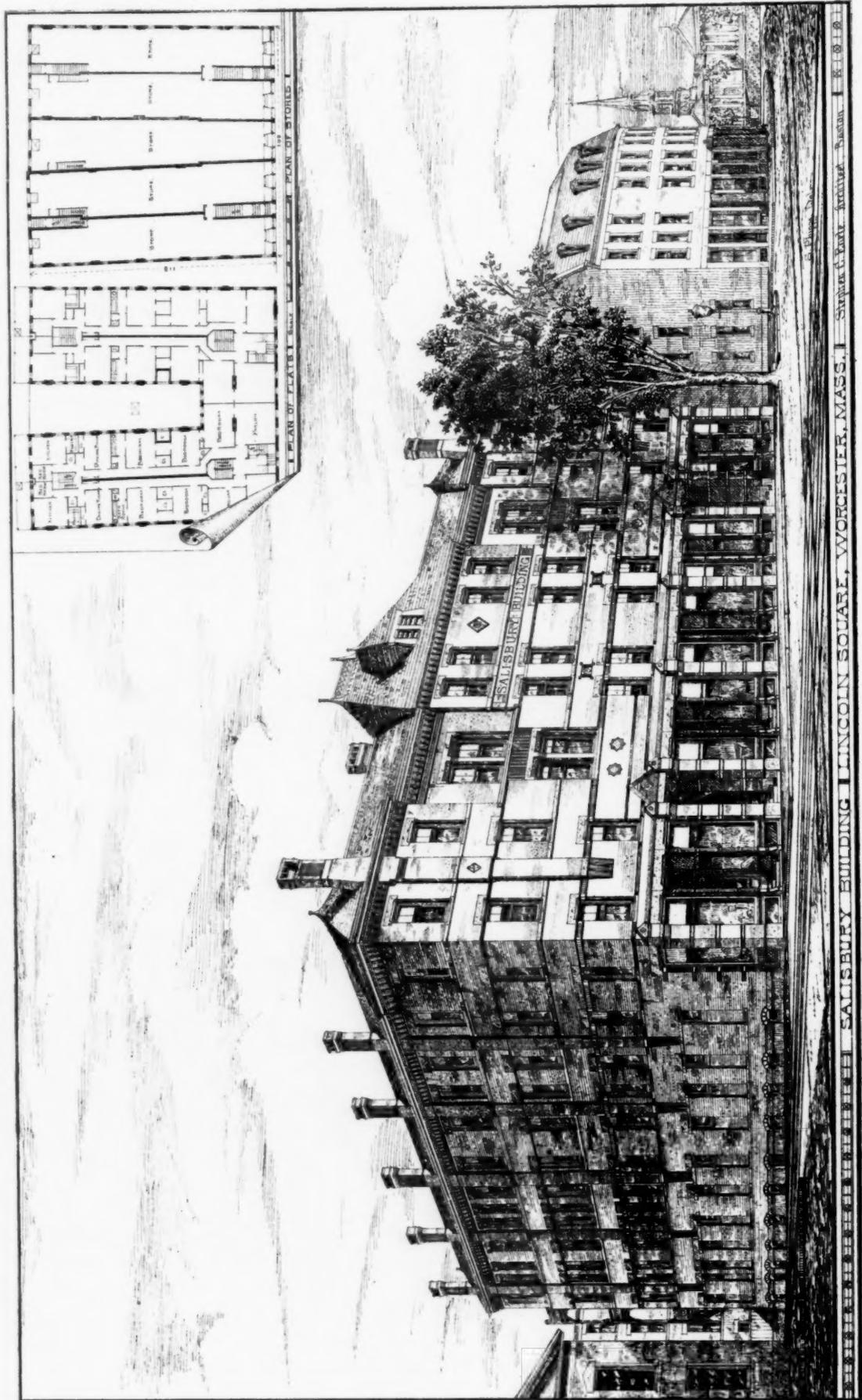
HOUSE DRAINAGE IN PHILADELPHIA.

A TYPICAL case of modern house drainage is now being considered by the College of Physicians, — typical in so far as it is believed to represent the rule rather than the exception among a large class of houses of modern construction. In the particular house in question there recently occurred four cases of typhoid fever of the most malignant sort, two of the cases proving fatal. The attending physician, in a communication to the Philadelphia Inquirer, says that in a house "with a handsome exterior, and in a fashionable part of the city, his attention was called to the drainage, on account of the odors that prevailed and the sickness that was induced thereby. He made, with an experienced plumber, a careful examination of the drainage. The pipe from the roof in the front part of the house was a corrugated galvanized iron one, and passed









SALISBURY BUILDING LINCOLN SQUARE, WORCESTER, MASS. | SARGENT & PAUL ARCHT. Boston. | 1878

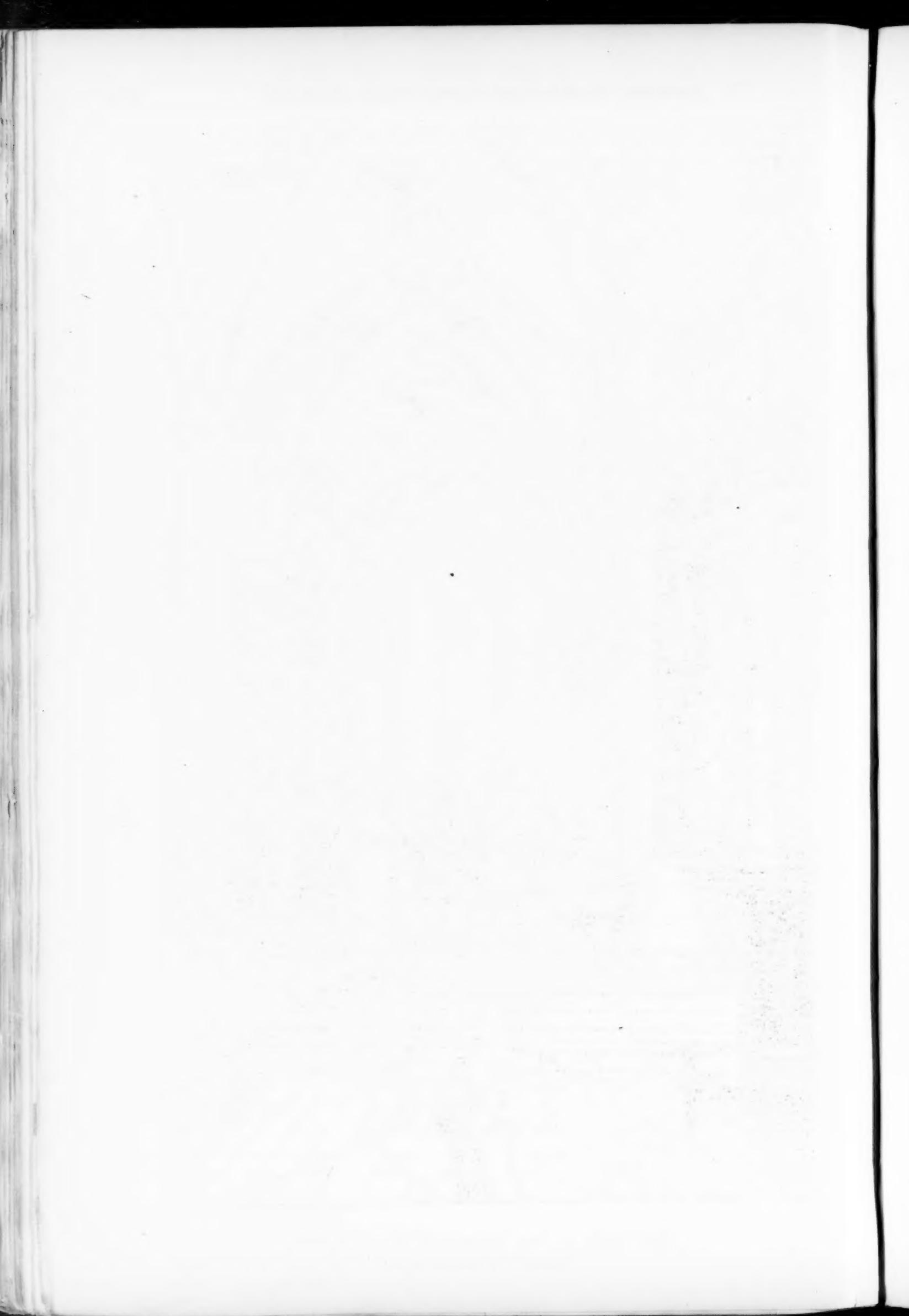
THE BULLOCK PRINTING CO. 250 DEVEREUX ST. BOSTON

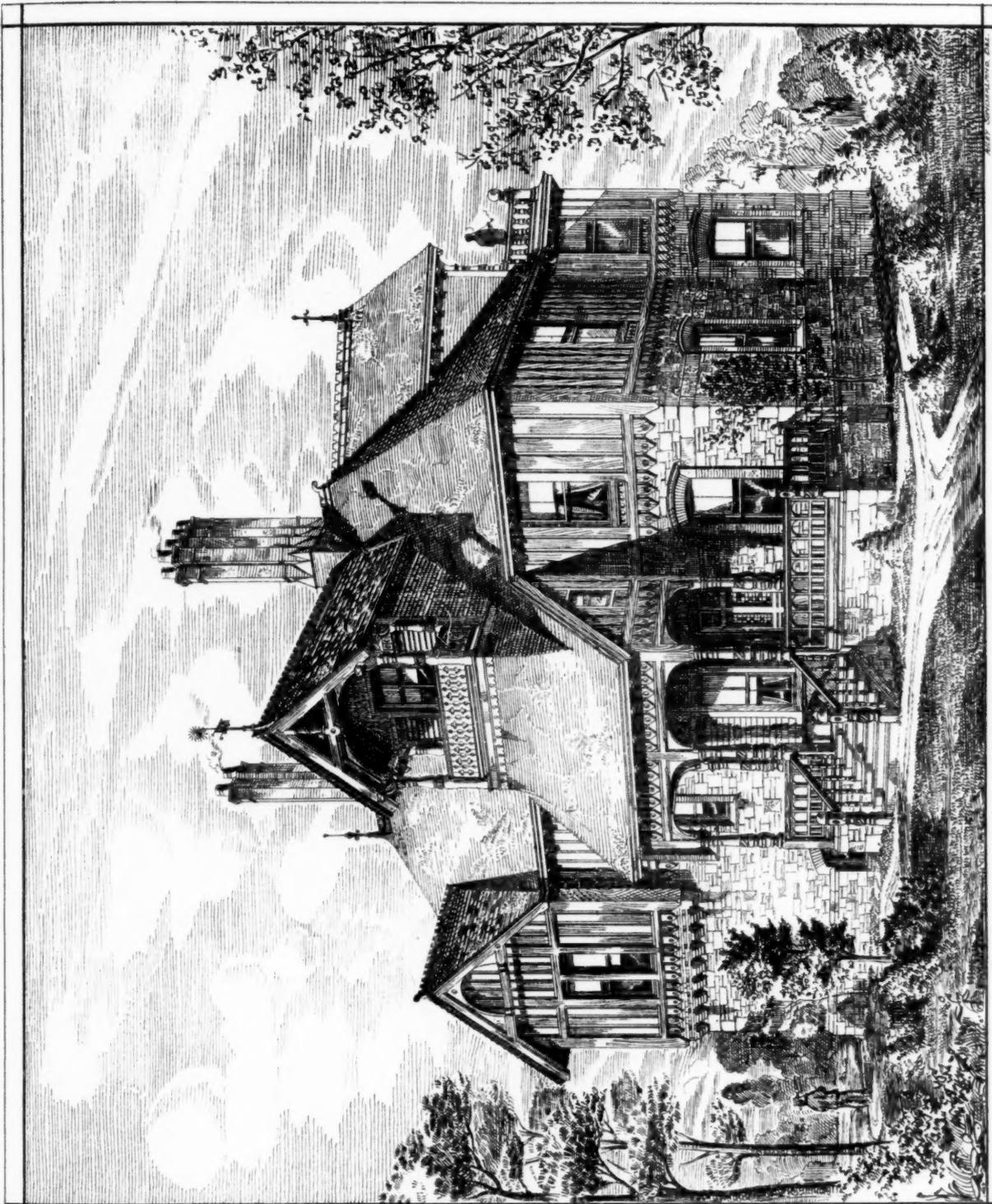


S. H. P. 1873. N. Y.

THE HELIOTYPIC PRINTING CO. 220 DEVONSHIRE ST. BOSTON

INTERIOR OF THE CHURCH OF ST. LAMBERT  
MÜNSTER, WESTPHALIA.





**House at  
Winchester  
for Mrs. S. J. Nowell**



- A. VERANDAH
- B. PANTRY
- C. KITCHEN
- D. BACK STAIRS
- E. CHINA CLY
- F. CLOSET
- G. STAIRCASE
- H. DINING RM
- I. HALL
- J. PARLOR
- K. PARLOR

PLAN OF FIRST STORY

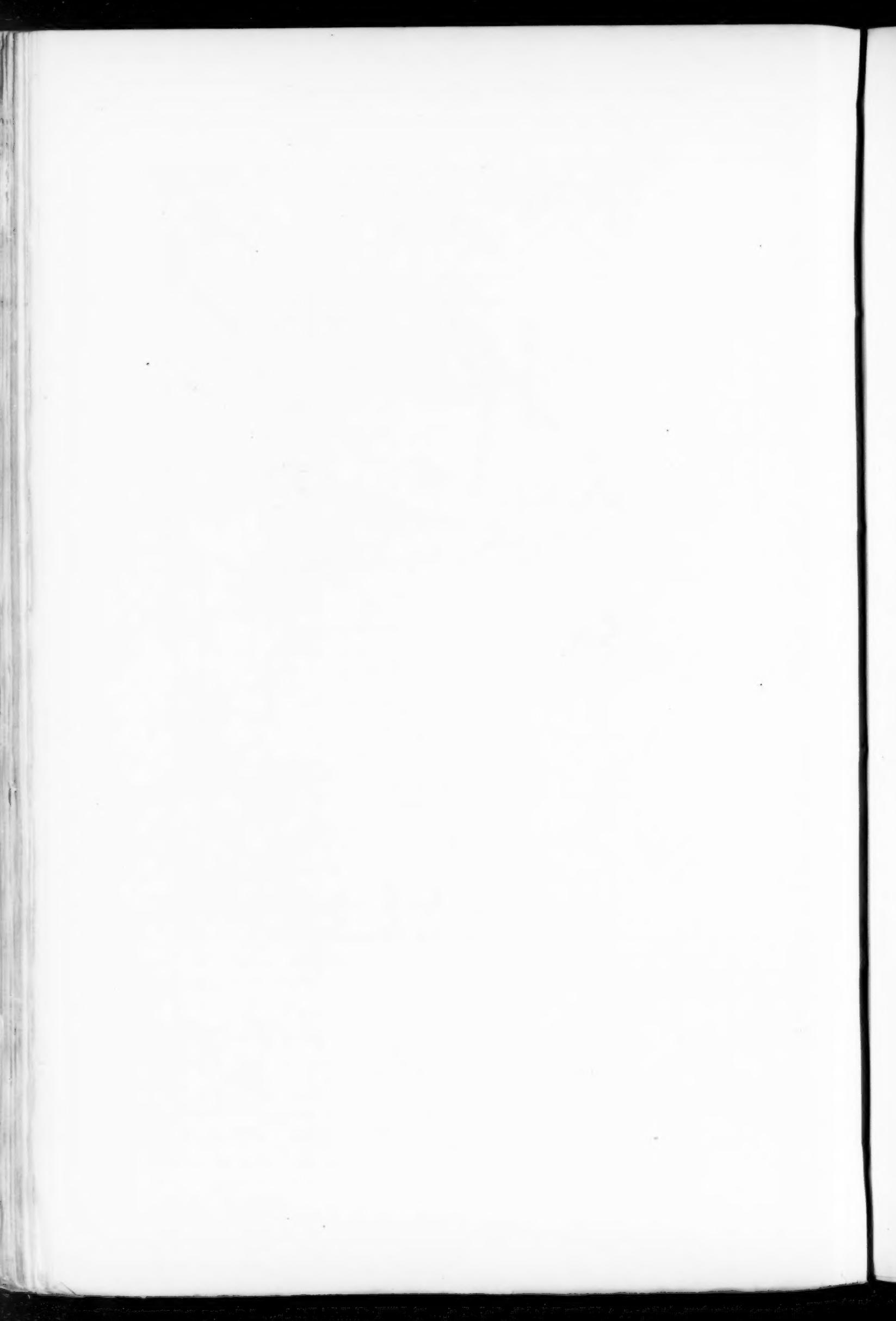


- A. CLOSET
- B. BATH RM
- C. W. C.
- D. BED RM
- E. STAIRCASE
- F. CLOSET
- G. CLOSET
- H. LINEN CLY
- I. NURSERY
- J. DRESS'G RM
- K. DRESS'G RM
- L. BED RM
- M. BED RM

PLAN OF SECOND STORY

*W. P. Allen and G. A. Stone  
Architects  
Boston, Mass.*

THE ILLUSTRATION BY J. VAN DER WOUDE



to the cellar between the studding and the wall; it opened into an iron one that emptied into the terra-cotta drain, and from that into the sewer without a trap.

"Its joints were so loose that the sewer gas was noticeable at once in the cellar, and the pipe thus absolutely carried the emanations from the sewer directly into the house. The stationary wash-stands in the second and third stories were trapped by one trap in the cellar alone. Then, again, the roof-pipe in the back building ran down the outside of the house into the terra-cotta drain, trapless, and, as all its joints were loose, sewer gas was carried by every breath of wind into the chambers from the rear."

A strenuous movement is now being made, by influential members of the profession, to secure a proper supervision of house drainage by the public authorities.

This is but one of many indications of the attention now being given to this question by men who five years ago were content to leave it entirely with the plumbers. It is inevitable that their agitation and solicitude must result in a thorough and radical reform of the whole subject. Its importance is unquestionable. It lies at the very foundation of the question of public health, and it is safe to predict that it must soon take its proper position as by far the most important branch of the whole subject of house building.

It is of the greatest consequence to the architectural profession. It was not to be wondered at that architects, following their profession as a business, should have applied themselves chiefly to furnishing their clients with the wares for which a demand existed. It was not to be expected that they, more than any other business men, should interest themselves in matters lying outside of the accustomed line of their trade. Being generally men of artistic training and tendencies, without especial leaning to the dry scientific problems of disease and its causation, it was quite natural that they should pursue their art as artists, and leave to mechanics the prosaic matter of plumbing.

Such a course of action will not much longer be prudent. Attention being generally called to the subject, the house-building public will naturally demand that it receive the best and most thorough consideration at the hands of those who are employed to prescribe details of construction. It has frequently been suggested that sanitary experts be employed, at the expense of the client, to regulate all matters connected with drainage. This seems to us as unreasonable as it would be to require the client to employ an engineer to determine the required strength of material. It is the architect's business to build the house, and he should be qualified to do the whole work from beginning to end, — not only as an artist to determine its appearance, but as an engineer to determine its strength, and as a sanitarian to regulate its drainage, its ventilation, and its temperature.

Indeed, the architect who knows all the details of the structure, from the bottom of the foundation, is ordinarily the only person who is competent to decide precisely what should be done, or, in the case of old buildings, precisely what has been done. The writer was employed to examine a house previous to its occupancy by a tenant. Everything in sight was in satisfactory condition, and the owner gave assurances that he had himself had every part of the work outside the walls thoroughly renewed. The mason who did this work was confident that it was perfectly sound. Later, indications of diphtheria appearing, this same mason made a second examination, occupying the whole of two days, without finding anything wrong. Pursuing his investigations still further, he found an unsuspected old drain connected with the interior drainage by a concealed pipe, which was clearly the cause of the mischief. The most competent expert cannot always discover, without a destructive amount of overhauling, what the architect should know as a matter of course, — what he should know, but by no means always does know, for we have in mind a case of an architect of much eminence whom we found entirely ignorant as to the direction and use of the waste-pipes in his own house.

#### THE ILLUSTRATIONS.

THE "SALISBURY BUILDING," FOR STEPHEN SALISBURY, JR., WORCESTER, MASS. STEPHEN C. EARLE, ARCHITECT, BOSTON.

This building was finished in the early part of the season. The walls are of faec-brick and Longmeadow brown stone, and the inside is finished throughout with hard woods. There are five stores in the first story and twelve dwellings in the three flats above. The cost was about \$70,000.

HOUSE AT WINCHESTER, MASS. MESSRS. J. F. OBER AND G. D. RAND, ARCHITECTS, BOSTON.

ST. PAUL'S CHURCH, HARRISBURG, PA. MR. CHARLES E. CASSELL, ARCHITECT, BALTIMORE, MD.

CHURCH OF ST. LAMBERT, AT MÜNSTER, WESTPHALIA.

This interior view, like the exterior which we gave in our number of December 14, is copied from the *Allgemeine Bauzeitung*.

WORKMEN'S SHARE IN PROFITS. — Recent calculations represent that the Italian workman receives 17 to 20 per cent of the profit on his work; the Frenchman, 47 per cent; the Englishman, 56 per cent; and the American, 72 per cent.

#### VOSE'S GEOMETRICAL DRAWING.<sup>1</sup>

This is a well-ordered manual, intended to acquaint beginners with the methods of graphical construction. It consists of a series of problems arranged in seven parts or chapters, beginning with the ordinary graphical problems of the construction and division of lines, angles, and arcs, the construction of polygons, circles, and tangents, continued with conic sections and cycloids, the orthographic projections and penetrations of various solids, development of surfaces, and, finally, isometric projections. The problems are, for the most part, such as are of common occurrence and use in graphical work, some rather unusual and ingenious ones being added, which will be of value as exercises. The matter is well selected and well distributed, with an occasional lapse of symmetry or proportion, which is more a literary blemish than a practical one. Thus, in the problems on conic sections, no description of the ellipse is given, nor any means of determining the foci, or account of their properties; nor is the ordinary means of describing the ellipse from its foci alluded to. On the other hand, the characteristic focal property of the parabola is given; but the distinction, very important to a clear graphical idea of the curves, that whereas ellipses and hyperbolas vary infinitely all parabolas are alike except in size, is not noticed. The chapters on projection and penetrations are remarkably well developed, the method of revolutions used in Descriptive Geometry being systematically applied throughout, in such a way as ought to lead a learner by easy progression to a very clear and serviceable knowledge of the projections, sections, and intersections of the various solids that are discussed, chiefly prisms, pyramids, and solids of revolution. A knowledge of geometry is presupposed or ignored; no definitions are supplied, and the solutions are given without demonstrations. The explanations are terse and usually clear, with now and then something that looks like an oversight, as when, in problem 3 of Plate VII. in the ellipse, the student is told to bisect any two parallel lines, meaning chords, the distinction being by no means inessential. The learner is recommended in the preface to begin the book with a master. A student with a fair knowledge of geometry ought to find no difficulty in using it alone, although he would perhaps here and there meet with a construction of which he would find it hard to see the reason; and a student who did not know geometry might, with a good teacher's help, get from it a good working knowledge of most of its substance, but alone he would probably find it rather discouraging, as all such study is apt to be. It is a book which should be very useful in the instruction of mechanical or architectural draughtsmen, and due study of it would relieve a good deal of helplessness that now exists.

#### THE OLD HOUSE ALTERED.<sup>2</sup>

EVERY new venture into the field of general literature by an architect, having in mind the inculcation of sound principles of building, the creation of a popular sympathy for his processes, and the formation of an intelligent appreciation of the results of his work, should be received by the profession in no hypercritical spirit, if the effort is honest and the workmanship, with pen and pencil, respectable. It would seem that the development of a design in the mind of an architect, as, in its successive stages, it is set down upon paper, until a result is finally reached meeting the conditions of the problem in a manner to satisfy all the conditions of design, both practical and æsthetical, might readily be made interesting and profitable reading to the layman. But however familiar the operation of this mental machinery may be to the professional man, it has rarely or never been so graphically set forth as to do justice to the subject. Up to this time Viollet-le-Duc appears to have been the only architectural littérateur who has in any degree succeeded in interesting the public in such work, though he has been by no means either the first or the last to attempt it.

The latest effort which we have to record is that of Mr. George C. Mason, an architect whose work in Newport is favorably known. This effort takes the form of a series of letters between Fred, the architect, and Mary, his sister, touching the alteration of an old familiar homestead for her use, so as to suit the requirements of a more civilized and luxurious method of living. There are twenty-nine of these letters, on the one hand giving professional advice upon practice and theory, and on the other setting forth the questions, the trials, the wants, of the amiable client, who, in her relations with the adviser, exhibits a subordination, an intelligence, an appreciation, which we fear is rare in the experience of the profession. We beg to pay our respectful homage to this excellent lady as an ideal employer of professional talent. Were all our clients like her, domestic architecture would indeed be what to the outsider it seems, "the prettiest occupation in the world." Design developed in such a blissful atmosphere of mutual accommodation, with no difficult whims or caprices to reconcile with art, no compromises to make between convenience and beauty, should be Arcadian in its results. The temple in Paradise Lost, which

"Rose like an exhalation to the sound  
Of dulcet symphonies and voices sweet,"

<sup>1</sup> *An Elementary Course of Constructive Drawing: containing Problems on the Right Line and Circle, Conic Sections, and other Curves; the Projection, Section, and Intersection of Solids; the Development of Surfaces; and Isometric Perspective.* By George L. Vose, A. M., Professor of Civil Engineering in Bowdoin College, author of *Manual for Railroad Engineers*. Illustrated by Thirty-Eight Plates. Boston: Lee & Shepard, Publishers; New York: Charles T. Dillingham.

<sup>2</sup> *The Old House Altered.* By George C. Mason. Illustrated. New York: G. P. Putnam's Sons. 1878.

is the only other example we can recall of architecture so harmoniously created, unless indeed we may refer to the older fable of Amphion. The weary practitioner turns to the new dulcet symphonies and voices sweet in these mellifluous letters with a certain feeling of gratitude, recognizing in them an echo of his earliest ideals of practice, now long since forgotten in the midst of the jarring and discord of actual experience.

Thus the architectural achievement in this book is unusual rather in its method than in its result. Old things are made new in the customary fashion, and in a manner which hardly challenges professional criticism. It may be observed, however, that the plan and perspective view of the original house do not comport one with the other, in an essential point; that the old honest square hipped-roof house becomes a sophisticated Swiss cottage, with balconies, bay-windows, verandas, and decorated gables, and, withal, with a certain display of blank windows, which assuredly is not according to sound principles of design; that the elevations are confused with a curious tangle of cross-hatching, suggesting shadows and shades which could hardly exist; but that the plans are intelligent and well put together, and that the practical advice for the most part is good. There are various sketches of furniture and chimney-pieces in the style of the period.

The digressions relating to theory, those, for instance, entering upon the large questions of honesty in design, color, furniture, and other matters of decoration, contain nothing that we are not used to hearing. The theories of interior decoration, in especial, are open to the objection, so common in most books of this class, of substituting absolute assertions for principles logically deduced and rationally developed, — principles which in their nature shrink from dogmatic statement. The advice upon these points is very elementary, and the good lady, in following it, can hardly have passed beyond the limits of the conventional "good taste" into the region of free and intelligent artistic expression. The scheme of the book is well devised to show how certain fundamental principles of design may be applied to common things, such as the treatment of walls, floors, and ceilings, and the selecting of furniture; but the opportunity is not used with that mastery of the subject which the architect should display in order to justify his authority. The points which he makes are in the nature of hints of practice; they scarcely open any new vistas of thought. The book therefore seems from an architect's point of view, to have no distinct *raison d'être*. It was, however, undoubtedly written for the non-professional public.

#### REPORT OF THE COMMITTEE ON NATIONAL SURVEYS.

[The Committee of the National Academy of Sciences, appointed under Act of Congress to consider and report upon the system of public surveys, has made its report, of which we give the essential parts.]

THE works which seem to fall especially within the limits of the meaning of the law are the geographical surveys west of the one hundredth meridian under the War Department, the United States geographical and geological surveys of the Territories and of the Rocky Mountain region under the Interior Department, and the system of land surveys under the supervision of the Land Office. Besides these, although not enumerated in the law, one of the most important works now in progress in the Interior, under Act of Congress, is the geodetic work of the Coast and Geodetic Survey. Parties of this organization are now conducting a systematic triangulation at several points in the interior, and any general system, such as is contemplated in the above law, cannot be wisely devised without taking into account the object and organization of this survey. The objects of these various surveys are: 1. An accurate geodetic survey. 2. A general geographical and topographical reconnaissance. 3. Land-parcelling surveys, on which the Government can part title to portions of the public domain. 4. The economic classification and valuation of the public domain. To these should be added the gradual completion of a general accurate topographical map of the whole territory of the United States, which shall serve as a basis for all the scientific and practical needs of the Government and people. All this work may be included under two distinct and separate heads: 1. Surveys of mensuration. 2. Surveys of geology and economic resources of the soil.

We will first consider the present operations of the surveys of mensuration. Such surveys are now in progress under five different independent organizations: that of the Coast and Geodetic Survey; of the geographical surveys west of the one hundredth meridian, under the War Department; of the topographical work of the two surveys under the Interior Department; and of the land survey under the Land Office. The final object of all these works of mensuration is the accurate determination of position and the laying down of lines and points by measurement. There is at present no coordination between these five surveys; their original determinations of position are independent; their systems of survey discordant; their results show many contradictions, and involve unnecessary expenditure. The geographical reconnaissances carried on under the War and Interior Departments are of little value for the parcelling of land, while the land surveys are of correspondingly slight topographical and geographical value. The operations of the Coast and Geodetic Survey in the interior do not at present include topography and land parcelling. To attain the desirable accuracy

and economy it is absolutely essential that there should be only one geodetic system, one topographical system, and one land-parcelling system, all conducted under the same head. It is evident that both topographical and land-parcelling surveys, to be properly coordinated and sufficiently exact, must be based upon a single rigid geodetic foundation. All these three divisions are departments of measuring, all are based upon accurate determinations of position, and, to be effectively and economically carried out, should be united into one comprehensive system. After a careful consideration of the facilities at the disposal of the several existing organizations engaged in this work, the committee believes that the Coast and Geodetic Survey is practically best prepared to execute the entire mensuration system required for the survey of the public domain. Within this domain the dominant interest of the United States is centered in the public lands which remain to be surveyed and sold. The administration of this domain, consisting of 1,101,107,183 acres, is necessarily within the Department of the Interior, while the Coast and Geodetic Survey, having been originally inaugurated to meet the wants of commerce, has been hitherto under the Treasury Department. In view of the paramount importance of the public lands, the committee recommends that the Coast and Geodetic Survey should be transferred from the Treasury Department to the Department of the Interior, retaining its original field of operations, and assuming also the entire mensuration of the public domain, and that, so modified and extended, it should hereafter be known as the United States Coast and Interior Survey. This organization would then embrace, in addition to its former work, a geodetic survey of the whole public domain; a topographical survey comprising detailed topographical work and rapid reconnaissance and land-parcelling surveys. The Superintendent of the Coast and Interior Survey should be appointed by the President, and should report directly to the Secretary of the Interior.

The best interests of the public domain require, for the purposes of intelligent administration, a thorough knowledge of its geological structure, natural resources, and products. The domain embraces a vast mineral wealth in its soils — metals, salines, stones, clays, etc. To meet the requirements of existing laws in the disposition of the agricultural, mineral, pastoral, timber, desert, and swamp lands a thorough investigation and classification of the acreage of the public domain is imperatively demanded. The committee therefore recommends that Congress should establish, under the Department of the Interior, an independent organization to be known as the United States Geological Survey, to be charged with the study of the geological structure and economical resources of the public domain; such survey to be placed under a director who shall be appointed by the President, and who shall report directly to the Secretary of the Interior. It should be specially provided that the director and members of the Geological Survey, charged as they are with the investigation of the natural resources of the public domain, should have no personal or private interests in the lands or mineral wealth of the region under survey, and should execute no surveys or examinations for private parties or corporations. Officers of the army and navy, when not otherwise employed, may be detailed by the Secretaries of War or of the Navy to take part in the operations of the general survey.

With the inauguration of the two surveys above defined, the committee recommends a discontinuance, first, of the present geographical and geological surveys west of the one hundredth meridian under the War Department, except surveys necessary for military purposes and local internal improvements; second, the geographical and geological surveys now in progress under the Department of the Interior; and, third, the present land surveys under the Land Office. The effect of the above changes will be to maintain within the Interior Department three distinct organizations, — first, the Coast and Interior Survey, whose function shall embrace all questions of position and mensuration; second, the United States Geological Survey, whose function shall be the determination of all questions relating to the geological structure and natural resources of the public domain; third, the Land Office, controlling the disposition and sale of the public lands, including all questions of title and record. With this division should be secured a perfect coordination and cooperation between the three branches. The Land Office should call upon the Coast and Interior Survey for all surveys and measurements required for the sale and disposition of lands. The Land Office should also call upon the United States Geological Survey for all information as to the value and classification of lands. The results of all the mensuration surveys, as soon as completed, should be immediately available for the Land Office, and for the Geological Survey, and for other branches of the Government as required. The Geological Survey should be authorized to execute local topographical surveys for special purposes, — such, for instance, as the subterraneous surveys of mining districts and metallic deposits, etc.

Each of the three organizations thus defined should make an annual report of its operations to the Secretary of the Interior. The publications of the Land Office should embrace reports of its business operations relating to the disposition and sale of land, together with the necessary maps. The publications of the Coast and Interior Survey, besides the annual report of operations, should consist of its geodetic results, geographical, topographical, and cadastral maps, coast charts, and such discussions and treatises connected therewith as the superintendent shall deem of value. The publications of the Geological Survey should consist of an annual report of

operations, geological and economic maps, illustrating the resources and classification of the land, reports upon general and economical geology in all its branches, with the necessarily connected paleontology.

All collections made by the Coast and Interior and the Geological Surveys, when no longer needed for the investigations in progress, should be transferred to the National Museum.

The committee recommends that, upon the organization of the United States Coast and Interior Survey, and the United States Geological Survey, a commission should be formed, to consist of the Commissioner of the Land Office, Superintendent of the Coast and Interior Survey, Director of the United States Geological Survey, the chief engineer of the army, and three other persons to be appointed by the President, who shall take into consideration the codification of the present laws relating to the survey and disposition of the public domain, and who shall report to Congress within one year a standard of classification and valuation of the public land, together with a system of land-parcelling survey. The necessity of this commission is evident from the fact that by far the larger part of the public domain lies in the region where, from geological and climatic causes, the lands are, for the most part, not valuable for field culture, and where the system of homestead, preemption, and sale in accordance with existing laws is both impracticable and undesirable.

In regard to publications of the two surveys above defined, the committee recommends that, besides the number of copies of each report which Congress may order for its own distribution, 3000 copies be published for scientific exchanges by the heads of surveys, and for sale at the price of publication; that all literary and cartographical material received by the heads of these surveys, in exchange, be the property of the United States, and form a part of the libraries of the two organizations; that the money resulting from the sale of these publications be covered into the Treasury. The committee recommends that the annual reports of operations of the two surveys accompany the report of the Secretary of the Interior; that the special memoirs and reports of both surveys be issued in uniform quarto series; that the style and scale of the cartographic publications be determined by the heads of each organization, so as to express the scientific results in the most effective and economical manner.

B.

#### THE ASSYRIAN GATES.

THE new session of the Society of Biblical Archaeology was opened lately, the president, Dr. Samuel Birch, in the chair. Mr. Theophilus G. Pinches read a paper on "The Bronze Gates of Shalmaneser III., lately discovered by Mr. Rassam at Balawat." Mr. Pinches confined himself in his paper to the two pairs of bronze gates of Shalmaneser III., a larger and a smaller, as he will also in at least one more paper which is to follow. The mound of Balawat is nine miles northeast of Mosul, or say the Ninevah site, and represents an ancient Assyrian fortress, which before the reign of Assurnazirpal, father of Shalmaneser III., whose reception of tribute from Jehu, king of Israel, is recorded on the famous black obelisk, was known as Kharutu. Though so close to Nineveh, it had been taken and held by the Babylonians during a period of Assyria's political decline, perhaps coincident with the epoch of Hebrew ascendancy. But when Assurnazirpal, a great warrior, came to the throne, he recovered the city, and renamed it Ingur-Beli, and built there a temple to the god Makhir, near the city's northeastern wall. These facts are recorded on alabaster tablets found by Mr. Rassam in a coffer of the same material near the entrance of the temple itself. As Mr. Pinches remarked, they shed a fresh ray of light on one of the darkest periods of Assyrian history. The mound is nearly rectangular, and its corners are turned pretty accurately towards the four cardinal points of the compass. The temple ruins lie near the northeastern edge, where ran the city wall. In the western half of the mound four stone platforms were found, marking the sides of an irregular square. While digging round these platforms Mr. Rassam unearthed some pieces of bronze, chased, and at length two huge bronze monuments slowly came to view. They were of the strangest shape. Each seemed formed of a centre piece with seven long arms on either hand, like colossal hat-racks, with which the first published accounts compared them. Even after laying them bare, the energetic excavator had great difficulty in disinterring them, and was mortified at having the precious bronzes split and cracked as the sun dried up the earth in which they had lain buried during so many centuries. According to the explorer's ground-plan the platforms mark the entrances to the court-yard of a noble palace, having two entrances on the northeast and two others on the northwest. The bronzes arrived at the British Museum at the beginning of August last. There they met with an enthusiastic welcome, and no less naturally called forth much speculation as to their nature and use. To Mr. Ready, the ingenious artificer of the department at the British Museum, whose task it was to see to the cleansing of the fragments, piecing them together, and nailing them with the original bronze nails on wood of the same thickness as that which underlay the plates thus fastened, belongs the merit of solving the riddle. He was the first to see that the bronze plates of the larger of the two monuments had formed the coverings of an enormous pair of rectangular folding-doors, each about twenty-two feet in height and six feet broad, which had evidently turned on pivots, and were held up at the top by strong rings fixed in the ma-

sourey. The body of the doors was of wood, three inches thick, as measured by the nails, which are found to be clinched a little more than that distance from the heads, the overplus being just the thickness of the bronze plates themselves, which is about one sixteenth of an inch. Each door revolved on a circular post, about a foot in diameter. Each post had a pivot at the bottom. The pivots are at the Museum, but the sockets in which they turned were unfortunately left behind. The bronze plates are about eight feet long. They were nailed horizontally across each door, but allowing for their extension round the post, the total length across each leaf was but six feet. The style of each leaf was also overlaid with a bronze edging, which overlapped the door by about a couple of inches. On the right it is cut plain, but is indented on the side overlapping the back of the doors. The smaller pair of gates is much more decayed than the other. Its designs represent hunting scenes, and it belongs to the same reign as the larger, whose inscriptions are those of Shalmaneser III. The representations on the plates of both pairs are in the *repoussé* style. Those on the plates of the great gates depict Shalmaneser's battles, sieges, triumphal processions, the tortures inflicted on his prisoners, and his worship of the gods. The bronze plates covering the styles of the doors are also engraved with historical inscriptions, of which, reserving for another time his account of the extremely numerous and interesting designs chased on the doors themselves, Mr. Pinches gave an outline. The record on the styles, he observed, though somewhat fuller than that on the black obelisk, and than the Kurkh and Bull inscriptions, is very carelessly executed, even the chronological order of events having been to some extent inverted. The new document begins with Shalmaneser's Babylonian campaign, when he went to help King Marduku Suna-Iddin against that Babylonian monarch's revolting brother. Next, it places his war in the region of Mount Ararat, followed by that against Gozan, and his triumph over Akhuni, king of Borsippa, which paved the way for his conquest of Syria and Palestine. A critical comparison of all the sources proves, however, that the Ararat campaign came first, and then his expeditions against Akhuni and the Babylonian war. In concluding, Mr. Pinches held out the hope of identifying, in his future paper on the bas-reliefs (which greatly exceed in number those in the Nimroud Gallery of the British Museum), some Jewish faces of the ninth century B. C. It is certain that, as he remarked, this wonderful monument cannot fail to be of great use to the ethnologist, as well as to the philologist and the antiquarian. — *The Architect*.

#### THE LATE COMPETITIONS IN INTERIOR DECORATION.

BEFORE we enter upon a new series of competitions, as we shall do early in the following year, we must, in accordance with our promise, give some account of the competitions which have taken place during the present year.

Of these competitions there have been five, the subjects of which have been (1) a staircase; (2) the interior of a bay window in a drawing-room; (3) the decoration of a dining-room wall; (4) a stone fire-place in a dining-room; and (5) the interior of a vestibule.

Fifty-three competitors have taken part in these trials of skill, and have contributed their drawings, ninety-one in all, from many distant cities, as we have received drawings from Boston, Cambridgeport, and Roxbury, Mass.; Providence, R. I.; Hartford and Fair Haven, Conn.; New York, Troy, Rochester, and Mamaroneck, N. Y.; Camden, N. J.; Philadelphia and Lancaster, Penn.; Baltimore, Md.; Chicago, Ill.; Cleveland, O.; St. Louis, Mo.; St. Paul, Minn.; Oakland, Cal.; Toronto and Ottawa, Can.

We trust that this exhibit will urge our old competitors to renew their contributions, and will encourage others to disregard the fact that they and our office are separated widely.

The honors have been awarded as follows, the committee of award being composed of different architects for each competition, to whom the authors of the respective designs were wholly unknown.

*First Prizes.* Competition I., J. T. Kelley, Boston, "*A. B. C.*" Competition II., P. P. Furber and R. D. Andrews, both of Boston, "*Midnight Oil.*" Competition III., J. T. Kelley, Boston, "*X. Y. Z.*" Competition IV., J. W. H. Watts, Ottawa, Can., "*Hope.*" Competition V. (no prize was given).

*Second Prizes.* Competition I., H. M. Stephenson, Boston, "*1878 over a shield.*" Competition II., J. W. H. Watts, Ottawa, Can., "*A Rough Sketch.*" Competition III., D. W. Willard, New York, "*Bay Gate.*" Competition IV., A. Trescott, Camden, N. J., "*Hope with an Anchor.*" Competition V. (no prize was given).

*Mentions.* Competition I., A. Trescott, Camden, N. J., "*St. Ansell.*" W. A. Bates, New York, "*Essays.*" W. E. Chamberlin, Cambridgeport, "*T-Square Push.*" P. Phipps, Boston, "*With Hope.*" J. H. Clough, Boston, "*Japanese Fan.*" Competition II., D. W. Willard, New York, "*Ars longa vita brevis est,*" and the author of the design "*H in a circle,*" whom we cannot identify. Competition III., C. H. Walker, Boston, "*Inconnu.*" A. Trescott, Camden, N. J., "*A palm branch crossed by an arrow.*" Competition IV., C. H. Walker, Boston, "*Acanthus.*" Competition V., A. Matthews, Oakland, Cal., "*Hero.*" J. W. H. Watts, Ottawa, Can., "*Stat nomen in umbra.*" R. G. Kennedy, Philadelphia, "*Nemo.*" J. J. Dull, Philadelphia, "*Echinus.*"

## BOOKS RECEIVED.

**ART IN THE HOUSE.** Historical, Critical, and Æsthetic Studies on the Decoration and Furnishing of the Dwelling. By Jacob von Falke, Vice Director of the Austrian Museum of Art and Industry at Vienna. Authorized American edition, translated from the third German edition. Edited, with notes, by Charles C. Perkins, A. M., author of "Tuscan and Italian Sculptors," etc.; corresponding member of the French Institute. Illustrated by chromolithographs, albertotypes, and typographic etchings. Boston: L. Prang and Company.

**PLANS OF TWENTY-SEVEN DORIC TEMPLES.** Taken from the best authorities and drawn on a uniform scale. By Charles H. Burr, student in the Lawrence Scientific School, Harvard University, Cambridge, 1878.

## NOTES AND CLIPPINGS.

**FAIRMOUNT PARK.**—At the seventh annual meeting of the Fairmount Park Art Association the report of the Secretary stated that "since the last annual meeting the Tam O'Shanter group, consisting of four life-size figures in red stone, executed by Thom, has been placed on the river drive opposite the boat-houses, in the old park, under a handsome rustic shelter, which was built from a design made expressly for this purpose by Chas. M. Burns, Jr., architect." A drinking fountain, the gift of Mrs. R. D. Wood, has been erected on the Wissahickon Drive near the site of the Old Log Cabin. Also near the same site an Italian white marble horse trough, the gift of Mr. Charles S. Kates. A Trophy in buff terra cotta and faience was presented by Messrs. H. Doulton & Co., of Lambeth, London, England, to the Association at the close of the Centennial Exhibition, but it has been discovered that it is so defective that it cannot be placed in position; no less than 127 pieces of its several hundred parts having been lost or hopelessly broken. An effort has been made to get their duplicates in England, but without success. It has been determined, however, to procure in this city eight pieces of the work necessary to complete the six columns which were designed to support the dome of the Trophy, and then place them in Horticultural Hall, if the Commissioners of Fairmount Park approve of such disposition of them.

**WASHINGTON SEWERAGE.**—The urgent necessity of taking some effective measures to complete the sewerage of Washington, so as to make it effective in carrying off and ridding the city of the noisome filth, decaying matter, and poisonous gases which now taint the atmosphere, becomes every day more apparent. The Senate committee on the District appears to have taken the matter into earnest and energetic consideration, and in order to avail itself of the widest and best possible information on the subject, some six or eight months ago requested Col. Gustavus A. Karweise, who was then departing for Europe as commissioner for Missouri to the Paris Exposition, to examine the sewerage systems of European cities similarly situated to our own, and draw up and report an effective plan for perfecting ours. The colonel has accordingly made an extended survey of the subject in Europe, and has recently returned and submitted a most elaborate report, with explanatory maps and drawings, which are now being printed. Colonel Karweise was once consulting engineer to the Khedive of Egypt, has been engaged in engineering enterprises at and about St. Louis, and throughout the West.

**THE ILLINOIS CAPITOL.**—A committee, consisting of five architects in Illinois, will make an examination of the new Capitol building of that State, to ascertain whether reports of its unsafe condition are well founded.

**WIND PRESSURE AND THE OBELISK.**—Mr. John Dixon, in reference to a correspondence as to the capability of "Cleopatra's Needle" to weather the severest gales in its present position, writes: "As to its stability there need be no fear,—one hundred and thirty pounds of wind pressure will not upset it. Eighty pounds of wind-pressure? What does it mean? The structure supporting any instrument that fairly registered such must have been strong enough to withstand itself such a strain, and as a practical engineer I unhesitatingly say no modern building exists in England that will bear anything like it,—certainly not the Bidston Observatory. Twenty-eight pounds pressure per square foot of surface would send a man flying through the air; it would sweep from the rails any passenger train. Seventeen pounds pressure would level the Charing-Cross Station. What fraction of this would obliterate the Crystal Palace, a Lancashire cotton-mill, the Houses of Parliament, the dome of St. Paul's, or an ordinary house, I have not taken the trouble to inquire; but it would be a figure to alarm the theorists of such high pressures as have been mentioned. The windows of a building certainly have to bear an equal strain with the walls, and I suppose it would be immaterial to the glass whether it were placed vertically or horizontally. No obelisk has ever been overturned by the wind,—ours never will be. Revolution, communism, or natural convulsion can a'one upset it."

**DRAINING THE ROMAN COLOSSEUM.**—The big drain from the Arch of Constantine toward the Church S. Gregorio, which is to carry off the water in the Colosseum, is nearly finished, and already the green and poisonous water seems lower. But the heavy rains have interfered with the work so that it is not likely that the ruin will be drained dry before another season.

**STEEL IN SHIPS.**—A speaker at the British Iron and Steel Institute said: Should it ultimately be proved that sea-water would destroy steel quicker than wrought iron, the use of wrought iron for the skins of ships might be continued; but, with present knowledge, nothing, in his opinion, existed to prevent the whole framework of every steamer and sailing vessel being constructed of Bessemer or Martin-Siemens steel, as at least one third the weight might be saved at the same time that greater security was insured. In the diluted sulphuric-acid bath the evidences were quite clear in favor of mild steel and the purest iron to resist corrosion, but before as much could be said as to the influence of sea or salt water a more extended and careful series of experiments would be required.

**TOWER AT PARIS.**—The discovery has just been made in Paris of an old tower dating from the time of Philippe-Auguste. It is situated between the Rues Frances-Bourgeois and Blancs-Matenaux. It was completely concealed by a mass of houses built up against it, which have now been pulled down. It is perfectly recognizable both by its cylindrical form and by the nature of its masonry, and was the tenth, starting from the Tower or "Barbel-sur-l'Yeane," the traces of which were found some months ago in digging the foundations for the new market of Ave Maria. The towers and their connecting walls were, in their time, a great work, which excited the admiration of their contemporaries.

**FLOODING THE SAHARA.**—It is probable that the question whether or not the Desert of Sahara, or, to speak more strictly, that portion of it lying in Algeria, can be converted into an inland sea will be definitely settled by the expedition which has been sent out by the French Minister of Education under the charge of Captain Roudaire. He is to make a thorough examination of the Shot-el-Jerid, and will be assisted by two civil engineers.

**THE LIGHTHOUSE SERVICE.**—The following extracts are from the annual report of the Lighthouse Board:—

"The lighthouse establishment now maintains, for the protection of life and the safety of commerce, 1,336 lights (including 638 on the Western rivers), 471 day beacons, 55 fog-signals, operated by steam or hot-air engines, and 3,002 buoys."

"An important work recently undertaken, and for which a large sum is required, is the structure now in course of erection on Stannard's Rock, Lake Superior. The Board has, by a modification of the original plans, reduced the estimated cost about \$100,000."

"A slight increase in the estimate for repairs and incidental expenses is rendered necessary by the fact that the greater part of the expenses attending a change in the form of lamps, to adapt them to the use of mineral oil instead of lard oil, must be paid out of this year's appropriations. The change is only made in lamps of the fourth, fifth, and sixth classes, lard oil being found to give better results in the larger lamps."

**DUST ON THE ATLANTIC.**—About the latitude of the Cape Verde Islands on the Atlantic it is a frequent experience of voyagers to observe falls of red dust and a dry kind of mist. The material of the dust-mass was examined microscopically many years ago by Ehrenberg, and his opinion was that small particles carried aloft from all countries here formed a transparent dust zone, from which they sometimes sank down, and in whirling movement came to the earth's surface. The material of observation open to Ehrenberg was somewhat scanty. The phenomenon has therefore been lately studied anew, and in a more thorough way, by Herr Hellmann, who examined the log-books of 1,196 ships that had passed through the region in question during the years 1854 to 1871. He deals with the case chiefly from a meteorological point of view, and the following are some of the facts elicited: Most of the dust-falls occur in the zone of the Atlantic between 9 deg. and 16 deg. north. South of 6 deg. north they are extremely rare, and the farthest south hitherto was in 2 deg. 56 min. north, 26 deg. west. The two farthest west were both in 38 deg. 5 min. west, both about 300 miles from Cape Verde. Dust-falls often occur simultaneously at very different points of the "Dunkel Meer," or Dark Sea (as Ehrenberg called it); in one case they were 150 miles apart. They also often last for several days, e. g., ten (April, 1859). Surfaces of very different size, up to 100,000 square miles, may receive dust-falls. There is a yearly period in the frequency of the falls. It seems that near the African coast most occur in winter; farther west, in the early spring. The direction of the wind during dust-falls was from the east quadrant, and most frequently north-northeast to northeast. The dust-falls observed are very irregularly distributed over the years in question. Of sixty-three, taken at random, there were eight falls of sand and three of sand or dust. Sometimes sand and dust fell simultaneously. The dust-falls with great extent east and west are denser the nearer the African coast. In forty out of sixty-five instances the color of the dust was red. Sometimes there is no coloration. The dry mist of the Dark Sea is in casual connection with the dust-falls. Herr Hellmann concludes from these facts that the dust-material comes principally from Africa and from the Western Sahara. The possibility of occasional mixture of particles from South America is not excluded. The distribution of the dust-falls, both in space and in time (they follow the movements of the trade-winds), supports the hypothesis, as also does the fact that the falling material is coarser in the east than in the west. — *London Times*.

**FREE IRON IN NATURE.**—Mr. Murray, in examining the deep-sea clays which had been brought home by the Challenger Expedition, found them to contain many particles of native iron, which, on being extracted with a magnet and examined under the microscope, showed structure similar to the structure shown in meteorites. A Swedish observer also collected particles of native iron from the clean snow which fell at a distance from towns. Mr. Ranyard, in returning from America, exposed glycerine plates at the prow of the vessel when more than one thousand miles from land, and had caught a single particle of iron which was rather less than the one hundred and twentieth part of an inch in its longest diameter. He was anxious that other observers should repeat the experiment at sea, taking every precaution to keep the plates free from dust in boxes coated on the inside with glycerine.

**THE OPACITY OF FLAME.**—It has been commonly believed that flame is transparent. Some observations have lately been made by M. Van Eyndhoven on the flame of a bat's-wing burner with one of Sugg's photometers, and he found in two experiments a difference of 1.5 candles, or 17 to 18 per cent, between the narrow and the broad side of the flame—the latter giving most light; whence he infers that the flame is not transparent. For this reason the entire luminous power is not obtained from an Argand burner. For good street lighting, the slit of the burner and the direction of the street should be at right angles to each other. — *English Mechanic*.

# THE AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 132.]

SATURDAY, JULY 6, 1878.

[PRICE 15 CENTS.

**BUILDERS' SUPPLIES.**  
**OTIS BROTHERS & CO.**  
SAFETY STEAM AND HYDRAULIC  
ELEVATORS.  
A specialty for a quarter of a century.  
**BUILDERS OF THE HALE HYDRAULIC ELEVATOR.**  
No. 348 Broadway, New York.

**WALWORTH MANUFACTURING CO.,**  
60 KILBY ST., BOSTON.  
**PUBLIC BUILDINGS,**  
PRIVATE RESIDENCES,  
GREENHOUSES, ETC.  
Warmed and ventilated by  
STEAM OR HOT WATER.  
Correspondence solicited. Plans and estimates furnished  
on application.

"HOTCHKISS" TOWER CLOCKS,  
MANUFACTURED BY  
SETH THOMAS CLOCK CO., THOMASTON, CONN.  
Prices \$100 to \$6,000.  
WARRANTED ACCURATE, STRONG, DURABLE.  
OFFICE, 581 BROADWAY, NEW YORK.  
Send for Illustrated Catalogue.

"MINTON'S ART AND ENAMELLED  
TILES."  
(China Works, Stoke-Up-on-Trent.) Also, The Campbell  
Brick and Tile Co.'s  
ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS,  
ETC.  
For Churches, Banks, Halls, Vestibules, and Hearths;  
Outside Decorations, Flower Boxes, Etc.  
**TIOS, ASPINWALL & SON,**  
604 Broadway, NEW YORK.  
The only representatives in the United States for the  
above firms.

**ASPHALT (FELT) ROOFING.**  
WARREN'S NEW PATENT  
FELT AND GRAVEL ROOFING.  
Substitutes NATIVE ASPHALT for Coal-Tar materials for  
these roofs.  
The very best and most durable material for flat roofs.  
Also, Native Asphalt and Asphaltic Cement for Concrete  
Walks and Pavements.  
Roofers and pavers supplied with the above, and with War-  
ren's original Coal Tar Roofing and Paving Materials.  
Send for circulars and samples.  
**WARREN CHEMICAL AND MANUFACTURING CO.,**  
88 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**THE MITCHELL GRANITE WORKS,**  
QUINCY, MASS.  
Has abundant facilities for furnishing the very best work  
and all the most celebrated Granites of the New England  
States, for  
**MONUMENTAL, CEMETERY, AND BUILDING**  
**PURPOSES,**  
WORK PROMPTLY DONE, AND AT REASONABLE RATES.  
Polishing a specialty. Orders solicited.  
Address G. H. MITCHELL, Agent.

**TILES FROM ALL PARTS OF THE**  
WORLD,  
FOR  
BANKS, PUBLIC BUILDINGS, AND PRIVATE HOUSES  
References given to Tile Work throughout the United  
States and British Provinces.  
AGENT FOR THE AMERICAN ROOFING TILE  
Contracts Solicited.  
**C. A. WELLINGTON, HOUSEHOLD ART ROOMS,**  
No. 171 TREMONT STREET, BOSTON.

**E. HOWARD & CO.**  
MANUFACTURERS OF CLOCKS AND WATCHES  
CLOCKS FOR PUBLIC BUILDINGS.  
114 Tremont Street, Boston, and 692 Broadway, New York

**GOLD'S WROUGHT IRON HEATERS.**  
THE "HEALTH" AND "TUBULAR"  
Manufactured by the  
**GOLD'S HEATER MANUFACTURING CO.**  
114 LEONARD ST., NEW YORK.  
Send for Pamphlet.  
**E. E. GOLD, Pres't** **WILLIS H. WARNER, Treas'r.**

**BUILDERS' SUPPLIES.**  
**THE FIRE-PROOF BUILDING CO. OF**  
NEW YORK. Hollow Blocks of any pattern, uniting  
strength, and resistance to fire and water. The Hydraulic  
Lime of Teil (France), one of the strongest cements kn wn, is  
largely used in this manufacture. The blocks do not conduct  
heat, cold, or sound, and weigh sixty per cent less than brick.  
Fire-proof partitions, floor arches between iron beams,  
ceilings under wooden or iron beams, in the following  
buildings:—  
Western Union Telegraph, Orient & Queens Insurance,  
Del. and Hudson Canal Co., Museum of Natural History,  
Equitable, Staats-Zeitung, Hudson R. R. Fr'ght Depot,  
Winsburgh Savings Bank, Cluny & Young's Hotels, Bos-  
Windor Westm'n's Hotel, ton.  
Syracuse Savings Bank, New York Hospital, Draxel,  
Columbia College, Tribune, West Point Military Hospital,  
Baltimore Safe Deposit Co., Lenox Library, Bennett,  
Peabody Museum, New Westmoreland Flats,  
Haven, Peabody Institute, Baltimore.  
Insurance on Wooden Mansards reduced ninety cents per  
\$100. Sidewalks laid at Lenox Library, Tribune, etc. Hol-  
low Bricks of all kinds. Our Fire-Proof work is the only  
one approved by the New York Board of Fire Underwriters,  
and the Superintendent of Buildings, after severe public  
tests.  
**LEONARD F. BECKWITH, President.**  
Office, Room 54 Coal and Iron Exchange, New York.

**MINTON'S TILES.**  
PLAIN AND ENCAUSTIC  
FOR PUBLIC BUILDINGS AND DWELLINGS,  
As laid by us at  
**THE CAPITOL AT WASHINGTON,**  
And in numerous Churches, Banks, and Dwellings in every  
part of the Country.  
Glazed and Enamelled Tiles for Mantels, Hearths, Wain-  
scoting, &c., and for Exterior Decoration.  
**MILLER & COATES,**  
275 PEARL STREET NEW YORK.

**BARTLETT, ROBBINS & CO.**  
HEATING AND VENTILATING OF PUBLIC AND  
PRIVATE BUILDINGS  
A SPECIALTY  
PLANS AND SPECIFICATIONS FURNISHED.  
FOUNDERS, AND MANUFACTURERS OF GAS WORKS,  
ETC., ETC.  
24 LIGHT STREET, BALTIMORE.

**ELEVATORS.—COOKE & BEGGS.**  
No. 6 COURTLAND ST., NEW YORK.  
Works at Paterson, N.J.  
PATENT SAFETY STEAM ELEVATORS  
for Public and Bank Buildings, Hotels, Private Dwell-  
ings, etc.  
SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP  
GUARANTEED.  
Send for Circular.

**THE NEW ENGLAND GRANITE WORKS.**  
HARTFORD, CONN., and 1321 BROADWAY, N.Y.  
Quarries at Westbury, N.Y.  
MONUMENTAL AND BUILDING WORK  
of every description, all the varieties of  
AMERICAN AND FOREIGN GRANITE.  
UNEQUALLED FACILITIES OFFERED TO THE TRADE.  
**J. G. BATTERSON, Pres't.** **H. R. BATTERSON, Sec'y.**  
**J. G. BATTERSON, C. B. CANFIELD, H. A. BATTERSON,**  
**G. T. BATTERSON,**  
**CARL CORREADES, Sculptor.**

**WHITTIER MACHINE CO.**  
Manufacturers of Steam and Hydraulic  
ELEVATORS,  
STEAM ENGINES, BOILERS, AND MACHINERY.  
No. 1176 Tremont Street, Boston.  
Office in the New England Mutual Life Insurance Co.'s  
Building, Post Office Square,  
and 120 Broadway, New York  
**CHARLES WHITTIER, Pres't.** **A. C. WHITTIER, Treas'r.**

**ART PAINTED TILES**  
FOR MANTELS, CABINETS, ETC.  
SHARPLESS & WATTS,  
225 MARKET STREET, PHILADELPHIA,  
Agents for  
MINTON'S TILES,  
AND TERRELLATED PAVEMENTS.

**HAWTHORNE & TUCKER,**  
PLUMBERS,  
16 PROVINCE STREET, BOSTON  
Estimates for Plumbing made, and work done in any part  
of the United States or Provinces.

**BUILDERS' SUPPLIES.**  
**NICHOLL & MILLER,**  
OHIO BUILDING STONE.  
GRIND AND SCOTCH STONE,  
From our FLORENCE and AMHERST QUARRIES.  
Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS  
111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
Designers and Manufacturers of  
GAS FIXTURES,  
ORNAMENTAL METAL WORK, CLOCKS AND BROSERS  
ARCHITECTS' ORDERS SOLICITED.  
Special designs submitted on application.  
WAREHOUSES, 836 AND 838 BROADWAY, NEW YORK  
MANUFACTORY, 24th AND 25th STS., AND 10th AVENUE, N. Y.

**FISHER & BIRD,**  
Workers in all kinds of Foreign and Domestic  
MARBLES,  
97 to 103 EAST HOUSTON ST., NEW YORK.  
Established 1830.  
Among our notable decorations are: The Illinois New  
State House; Palace Hotel, San Francisco; Baldwin's Ho-  
tel, San Francisco; Insurance Building, 10th and Chestnut  
Streets, Philadelphia; Mutual Life Insurance Building,  
Boston; Orient Mutual Insurance Building, New York;  
Union College, Schenectady; and numerous Churches,  
Private Residences, etc., throughout the country. We  
solicit the opportunity to estimate upon all classes of work,  
viz., Tiling, Wainscoting, Staircases, Mantels, etc. Ceme-  
tery work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
Are ready to estimate on contracts of any size for furnish-  
ing their celebrated Amherst, Ohio,  
**BUFF AND LIGHT DRAB SANDSTONE,**  
IN BLOCKS, OR CUT AND SET.  
We are prepared to fill promptly all orders for Amherst  
and Independence grindstones.  
OFFICE, 170 SUPERIOR ST., CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MO-**  
SAICS." Floor Tiles, beautiful in color and design, for  
Dwellings, Churches, and Public Buildings.  
SPANISH WALL TILES. White, Glazed, Valencia.  
Tiles for Walls and for decorative painting.  
PRINTED GAZETTES. Tiles of Spanish designs, for  
Wainscoting, Mantels, Jardinières, etc.  
Floors of "Nolla Mosaics" can be seen at the "Rock-  
ingham," corner of Broadway and 56th Street. Imported  
and for sale by **JOHN CHADWICK, Sole Ag't for U. S.**  
48 Broadway, N. Y.  
**C. E. PARKER, Agent, 14 Exchange Place, Boston.**

**TUFTS' ELEVATOR WORKS,**  
MANUFACTURERS OF "TUFTS' PATENT" COMBI  
NATION ROPE ELEVATOR.  
TO BE OPERATED EITHER BY STEAM OR WATER.  
The only safe and reliable machine made for passenger use  
in Public Buildings and Hotels, and for business purposes in  
Warehouses, Stores, &c.  
37 FOUNDRY STREET, SOUTH BOSTON  
OFFICE, 243 Broadway, New York.  
**OTIS TUFTS,** **L. A. BIGELOW,**  
President. Treas'r and Gen'l Manager.

**STEAM WARMING APPARATUS.**  
HIGH AND LOW PRESSURE.  
HOUSE WARMING A SPECIALTY.  
Pamphlet with more than 1,000 references sent on appli-  
cation.  
**WYLLIS H. WARNER,**  
114 LEONARD STREET, NEW YORK,  
and 33 West Railroad Street, Syracuse.

**OHIO VALLEY PRESS BRICK CO.**  
Challenge the world for fine stock Brick; also manufac-  
turers of all kinds of Bricks, octagon and square. Office 61  
3d St., Yard Preston and Knapp Sts. **LOUISVILLE, KY.**

**GAS FIXTURES**  
OF EVERY DESCRIPTION.  
SPECIAL RATES TO BUILDERS.  
**R. HOLLINGS & CO., 447 Washington St., BOSTON**

**BUILDERS' SUPPLIES.**

**HUGH SISSON & SON,**  
Importers, Dealers, and Manufacturers of  
**MARBLE.**  
INTERIOR MARBLE WORK AND MONUMENTAL  
WORK A SPECIALTY.  
Salesrooms, No. 140 W. Baltimore St.: Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,  
SPEAKING TUBES,  
AND BURGLAR ALARMS,**  
For Public and Private Buildings.  
**THE BEST IN USE.**  
**S. W. FULLER,**  
63 Devonshire Street, Boston.

**TOWER CLOCKS.**  
FOR CHURCHES,  
PUBLIC AND PRIVATE BUILDINGS,  
**G. M. STEVENS & CO., MANUFACTURERS,**  
90 SUDBURY ST., BOSTON, MASS.

**JOHN MACK, Plain and Ornamental Plasterer.**  
41 Cambridge Street, Boston.

**J. H. BURT & CO., Carpenters and Builders,**  
Blue Hill Avenue, Mattapan (Ward 24), Boston.

**THE EUREKA VENTILATION CO.**  
OFFICE AND MANUFACTORY,  
74 CHARLESTOWN STREET,  
BOSTON, MASS.

**PRESSED BRICK,  
STOCK AND COMMON**  
MANUFACTURED BY  
**FLETCHER & THOMAS,**  
Indianapolis, Ind.  
All brick warranted. Send for price list and samples.

**STEAM HEATING**  
BY  
**GILLIS & GEOGHEGAN,**  
Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 50th St. and 5th Av.;  
Drexel Building, cor Wall and Broad; Bennett Building,  
Fulton and Nassau, etc.  
Architects and owners promptly furnished with speci-  
fications and estimates.

**BUILDING MARBLE.**  
Branch yard of the RUTLAND MARBLE CO., 198 Cause-  
way Street, Boston. JOHN D. ALLAN, Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Rut-  
land and Continental Marble, furnished at low prices.

**ARCHITECTS.**

**P. B. WIGHT,**  
CONSULTING ARCHITECT,  
78 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.

Consultations on matters pertaining to Fire-Proof Con-  
struction, Foundations, Drainage, Sanitary Work, Ventila-  
tion, Machinery, Valuations, Interior Decorations, and  
Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**  
ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E., ARCHITECT  
AND SANITARY ENGINEER,**  
KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes  
of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,  
ARCHITECT,**  
Room 17, Life Insurance Building,  
ST. LOUIS, MO.  
Special attention to Churches, Schools, and other  
public buildings.

**WALTER ARCHITECT PERRY BUILDING.  
DICKSON, Albany, N. Y.**

**GEO. E. WARING, JR.,  
CONSULTING ENGINEER,  
FOR SANITARY AND AGRICULTURAL WORKS,  
NEWPORT, R.I.**

**SANITARY ENGINEERING.**  
**EDWARD S. PHILBRICK, C. E.,**  
12 WEST ST., BOSTON, MASS.,  
Offers advice and superintendence in  
CONSTRUCTION OF WORKS,  
IN PLUMBING, DRAINAGE, AND VENTILATION,  
And has no interest in any patent right.

**FRANK HILL SMITH,  
117M TREMONT STREET,  
BOSTON . . . . . MASS.**

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
837 HARRISON AVENUE . . . . . BOSTON,  
**SHEET METAL CORNICES, HAYES'S PAT-  
ENT VENTILATING SKY-LIGHTS,  
WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.**

**MANTELS AND GRATES.**  
**RANKIN'S PATENT** makes the Cleanest, Cheap-  
est, and Hottest Fire. Avoid infringements, and send for  
Circular to  
**C. S. RANKIN & CO.,  
ARCHITECTURAL IRON WORKS,**  
Manufacturers of all kinds of Iron Work for  
**BUILDINGS, JAILS, ETC.**  
187 W. PEARL ST., CINCINNATI, O.

**EXCELSIOR  
ROOF PAINT.**  
This paint has been thoroughly tested throughout the  
Eastern States, and has been found to be a perfect tin or  
metallic preserver. We warrant it neither to crack nor  
blister by **HEAT or COLD**, and to last  
**IN ANY CLIMATE TEN YEARS.**  
Those desiring to use this valuable preparation upon  
their buildings, can secure the same by addressing  
**C. M. WHEELER, J. M. ROOT,**  
Toledo, Ohio.

**ARCHITECTURAL IRON AND JAIL WORKS.**  
**M. CLEMENTS,**  
MANUFACTURER OF  
Iron Railing, Bank Vaults, and Jail Cells,  
Iron Stairs, Fire-proof Buildings, Wrought Iron Columns  
and Girders; Iron Arches, Plain and Corrugated;  
Fire-proof Shutters, Doors, etc.  
BAYMILLER STREET, near Sixth and C. H. & D. R. R.  
Depot, CINCINNATI, OHIO.

**DECORATORS.**

**W. J. MCPHERSON,**  
(Established A.D. 1845.)  
**MURAL PAINTER,  
DESIGNER,**

**Ecclesiastical Decorator,**  
AND  
**ART STAINED GLASS MANUFACTURER,**  
440 TREMONT STREET,  
BOSTON, MASS.

(Established 1842.)  
**L. HABERSTROH & SON,  
Fresco Painters,  
and INTERIOR DECORATORS,**  
No. 19 SCHOOL STREET, BOSTON.

**PEIRCE & LORING.**  
ARTISTIC DECORATION AND FURNITURE.  
No. 5 PARK STREET, BOSTON.  
**H. H. D. PEIRCE. R. F. LORING.**

**PHILIP A. BUTLER,**  
DECORATOR AND DESIGNER,  
No. 17 PEMBERTON SQUARE,  
BOSTON.

**COOK, REDDING & CO.**  
149 CONGRESS ST., BOSTON,  
Ornamental, Stained, and Cut Glass,  
FOR  
**Churches, Public Buildings, and  
Private Residences.**

**HENRY B. JONES & CO.**  
IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS.  
612 WASHINGTON STREET, BOSTON.

**STAINED GLASS.**  
Thirty years' experience in Stained Glass enables the  
subscriber to produce Modern and Medieval styles of work  
equal to any European examples, for Churches, Private  
Residences, Halls, etc.  
The value of the work is attained by a careful selection  
of colors in Cathedral and French Glass of his own impor-  
tation.  
Designs in accord with architects' plans furnished at  
short notice. Reference of work at office.  
**SAMUEL WEST, 115 Eliot St., Boston.**

**DECORATORS.**

**JOHN LAFARGE,  
MURAL DECORATION,**  
51 W. Tenth St., New York, and Newport, R. I.

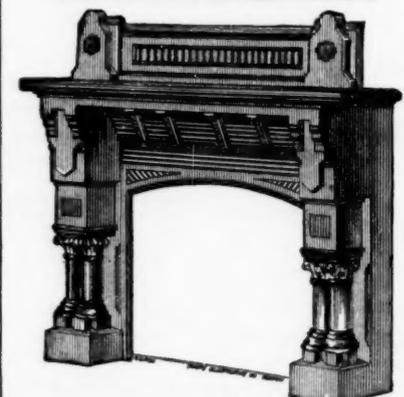
**SOCIETY OF DECORATIVE ART.**  
4 East 20th Street,  
NEW YORK.  
Architects' designs for panels, tiles and plaques for inser-  
tion in Cabinet Work, and other decorative uses, and for  
Art Needlework applied to curtains, hangings, portieres,  
screens, table-covers, etc., carefully executed. Original  
designs for any of the above, subject to approval, will be  
gladly received, and paid for by the Society when used.  
Orders are earnestly solicited.  
The Society has arranged with Mr. Russell Sturgis,  
Architect, for the Exhibition and Sale of his well-known  
Wall Papers. Some of these are faithful reproductions of  
Japanese decorative papers; some are taken from Oriental  
and other stuffs; some are of original design. New pat-  
terns will be added from time to time.

**Fresco Decoration.**  
**EMMART & QUARTLEY,**  
Designers, Decorators, and Painters,  
32 PARK AVENUE, BALTIMORE, MD.  
Designs for Halls, Churches, Theatres, and Private Mansions made  
and executed in harmony with the plans of Architects.

**SLATE MANTELS**  
Of the latest and most beautiful designs, and all other Slate  
work on hand or made to order. No. 1210 Ridge Avenue.  
JOSEPH S. MILLER, successor to Wilson & Miller, Philadel-  
phia, Pa. Send for Illustrated Price-List.

**Donald MacDonald,  
GLASS STAINER AND DECORATOR,**  
No. 6 Hayward Place,  
BOSTON.

**MANTELS.**



IN WALNUT, OAK, ASH, OR OTHER WOODS.  
On hand, made to order, shipped to and set up  
IN ANY PART OF THE COUNTRY.  
**CALDWELL MANUFACTURING CO.,**

17 HARVARD PLACE,  
OPPOSITE OLD SOUTH CHURCH,  
BOSTON, MASS.  
Send for Circular.



**MOSELEY IRON BRIDGE  
AND ROOF CO.**  
**CORRUGATED IRON**  
Buildings, Roofs, Shutters, Doors  
Iron Sashes, Skylights, etc.  
5 Dey Street, New York.

# AMERICAN ARCHITECT AND BUILDING NEWS.

## SUBSCRIPTION PRIZES.

The Publishers will send, postpaid, the following prizes to the draughtsman, student, or regular canvasser, who, complying with the conditions, shall secure subscribers for the *American Architect and Building News*:—

- I. For two new subscribers, a year's subscription to the *American Architect and Building News*..... \$6.00**  
 Or, "Story of a House," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00  
 Or, "Annals of a Fortress," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00
- II. For four new subscribers, a bound volume of the *American Architect and Building News*, vol. I. or II., price..... 9.00**  
 Or, "Examples of Ancient and Modern Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 8.00

- III. For eight new subscribers, both bound volumes of the *American Architect and Building News*, price..... \$18.00**  
 Or, "Gothic Forms applied to Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 15.00  
 Or, "Art Foliage for Sculpture and Decoration," by J. K. Collins, royal quarto, illustrated by 72 plates, price..... 15.00  
 Or, "Examples of Modern Architecture, Ecclesiastical and Domestic," being designs by Messrs. Scott, Street, Liddon, and other noted architects, illustrated by 64 quarto plates, price, 15.00
- IV. For fifteen new subscribers, the "Decoration and Ornamentation of the Nineteenth Century," by Liénard, illustrated by 100 folio plates, price..... 27.00**

In lieu of these books the canvasser may obtain books of equal value selected from our trade list, or may obtain as equivalent the value of the prize in Heliotype engravings, selected from our collection, which numbers over three hundred.

The conditions to be observed are:—

1. The subscribers must in all cases be *new* subscribers.
2. The subscription must be paid *in advance* directly to the Publishers by check or money order; *but in no case to the canvasser.*
3. If canvassers adopt the method of sending to us one subscriber at a time, they must state at such time for which one of the before-mentioned prizes they are canvassing.
4. The prizes will not be delivered until all subscribers have paid in full.

**N.B.**—These prizes are not cumulative; i. e., a canvasser who sends us fifteen new subscribers cannot claim successively the prizes I., II., III., and IV.; or in other words, to obtain all four prizes a canvasser must send us twenty-nine new subscribers.

A canvasser who has stated that he is trying to secure one of the highest prizes may in the case of failure claim such lesser prize as is warranted by the number of subscriptions actually paid.

No claims will be allowed for subscriptions secured before Jan. 1, 1878.

HOUGHTON, OSGOOD & CO., Publishers,  
 WINTHROP SQUARE, BOSTON.

## LABOR MARKET. [REVISED MONTHLY.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa. (Can.)	Philadelphia.	San Francisco.	St. Louis.
1. BRICKLAYER.....	1.75 @ 2.75	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.50	1.50 @ 2.00	2.00 @ 2.50	.....	2.25 @ 2.50
2. BRICK MASON (FRONTS).....	3.00 @ 4.00	2.00 @ 3.00	1.25 @ 1.75	.....	3.50 @ 4.50	3.00	1.75 @ 2.25	2.50 @ 3.00	.....	3.00
3. CARPENTER.....	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.25 @ 2.50	1.25 @ 2.00	1.75 @ 2.25	.....	1.50 @ 2.00
4. CABINET MAKER.....	2.50 @ 3.25	.....	.....	.....	.....	.....	1.50 @ 2.00	.....	.....	.....
5. FINISHER.....	2.00 @ 2.50	.....	1.75 @ 2.00	.....	1.50 @ 2.00	.....	1.25 @ 1.75	.....	.....	1.50 @ 2.00
6. FOUNDRYMAN.....	.....	.....	1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	.....	1.00 @ 1.50	.....	.....	2.25 @ 2.50
7. BLACKSMITH.....	1.50 @ 3.00	1.50 @ 2.75	.....	1.50 @ 2.50	.....	.....	1.25 @ 2.00	.....	.....	1.50 @ 2.50
8. WHITESMITH.....	.....	.....	.....	1.50 @ 2.50	.....	.....	1.25 @ 1.75	.....	.....	.....
9. GALVANIZED IRON WORKER.....	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	2.25	1.50 @ 2.00	.....	.....	.....
10. GAS FITTER.....	2.00 @ 2.50	2.00 @ 3.00	.....	2.50 @ 3.00	1.75 @ 2.25	.....	1.75 @ 2.00	.....	.....	2.00 @ 3.00
11. LABORER.....	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.25 @ 1.50	.80 @ 1.00	1.20 @ 1.50	.....	1.00 @ 2.00
12. PAINTER.....	1.50 @ 2.50	2.25 @ 3.00	2.00 @ 2.50	1.50 @ 2.25	1.75 @ 2.25	2.50	1.00 @ 1.75	2.00 @ 2.50	.....	2.00 @ 2.50
13. GLAZIER.....	.....	2.00 @ 2.50	.....	.....	.....	.....	1.50 @ 1.75	2.00 @ 2.50	.....	.....
14. GRAINER.....	2.50 @ 3.00	3.00 @ 4.00	3.00 @ 4.50	3.50 @ 4.00	No grading.	.....	1.75 @ 2.50	.....	.....	3.50
15. PAPER-HANGER.....	.75 @ 2.50	.....	.....	.....	1.50 @ 2.00	1.50 @ 2.00	1.50 @ 2.00	.....	.....	2.00 @ 3.00
16. PLASTERER.....	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	1.50 @ 2.50	1.50 @ 2.00	2.50	1.25 @ 1.75	1.75 @ 2.00	.....	2.25 @ 2.75
17. STUCCO-WORKER.....	2.00 @ 2.50	2.00 @ 2.50	.....	1.50 @ 2.50	.....	2.50	1.50 @ 2.25	.....	.....	2.25 @ 2.75
18. PLUMBER.....	2.25 @ 3.00	3.00 @ 3.00	.....	2.50 @ 3.50	2.00 @ 2.50	.....	1.50 @ 2.50	.....	.....	2.50 @ 3.50
19. QUARRYMAN.....	.....	3.00 @ 3.50	.....	.....	1.25 @ 1.50	1.75 @ 2.00	1.00 @ 1.50	1.50 @ 1.75	.....	1.50 @ 1.75
20. STONE MASON.....	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	1.50 @ 2.00	2.00 @ 2.50	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25	.....	2.00 @ 2.50
21. CARTER.....	3.00	3.00	2.50 @ 3.00	1.25 @ 1.75	.....	3.00	3.50 @ 6.00	2.75 @ 3.25	.....	.....
22. POLISHERS AND WASHERS.....	.....	2.50 @ 3.00	.....	1.50 @ 1.75	.....	.....	1.00 @ 1.25	2.25 @ 2.50	.....	.....
23. RUBBER.....	1.50 @ 2.00	1.75	1.00 @ 1.25	1.25	1.00 @ 1.25	.....	.80 @ 1.00	1.50 @ 1.75	.....	.....
24. STONE-CUTTER.....	2.25 @ 3.00	2.00 @ 3.00	1.50 @ 2.00	2.00 @ 2.50	2.50	.....	2.00 @ 2.50	2.25 @ 2.75	.....	.....
25. STONE-SETTER.....	3.00	2.50 @ 3.00	2.25 @ 2.50	2.50 @ 3.00	2.75	.....	1.50 @ 2.00	2.25 @ 2.75	.....	2.00 @ 2.50
26. ROOFER (TIN).....	2.00 @ 2.35	2.50 @ 3.00	2.00 @ 2.25	2.00 @ 2.50	1.50 @ 2.00	.....	1.50 @ 1.75	1.75 @ 2.25	.....	.....
27. SLATER.....	.....	2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00	2.00	.....	1.25 @ 2.00	1.75 @ 2.25	.....	.....
28. STAIR BUILDER.....	2.25 @ 3.00	2.00 @ 2.50	.....	.....	1.50 @ 2.00	.....	1.75 @ 2.25	.....	.....	1.50 @ 2.50
29. STEAM FITTER.....	.....	2.50 @ 3.50	.....	2.00 @ 2.50	2.50 @ 3.00	.....	1.50 @ 2.00	.....	.....	2.00 @ 3.00

SEE NOTICE

Of change in prices for binding the ARCHITECT under the Publishers' Department on page ix. of this issue.

**AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-POUT,**  
 MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS.  
 Regular Sizes, 2, 3, 4, 5 & 6 Inch.  
 SPECIAL SIZES MANUFACTURED TO ORDER.  
**AUSTIN, OBDYKE & CO.**  
 SOLE MANUFACTURERS.  
**1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA.**  
 WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH.

PRINCIPAL AGENTS.

- |                        |                       |
|------------------------|-----------------------|
| M. Halliday            | New York City.        |
| Hicks & Badger         | Boston, Mass.         |
| James Berry            | Buffalo, N. Y.        |
| George W. Pitkin & Co. | Chicago, Ill.         |
| Watson & Martin        | Albany, N. Y.         |
| McLeod, Beardon & Co.  | Troy, N. Y.           |
| W. H. Scott            | Portland, Me.         |
| Kitt edge Cornice Co.  | Salem, O.             |
| J. W. Jordan           | Worcester, Mass.      |
| B. G. Carpenter & Co.  | Wilkesbarre, Penn.    |
| T. W. Irwin            | Allentown City, Penn. |
| Seliew & Co.           | Cincinnati, Ohio.     |

**SLATE, TIN, AND CORRUGATED IRON ROOFERS.**

Correspondence solicited.

**GALVANIZED IRON CORNICES.**  
 Send for Illustrated Catalogues. Estimates furnished on application.

**HAYES'S PATENT SKY-LIGHTS.**

All work warranted.

**CORRUGATED IRON CEILINGS.**

Contracts taken in any part of the United States.

Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

**A. KNISELY & CO.** { 72 & 74 West Monroe St. Chicago, Ill.

It should be distinctly understood by our patrons that matters which properly belong to the Business Department of the "American Architect and Building News" will not, under any circumstances, be admitted to the Editorial Columns of the paper.

A SCHEDULE GUIDE.

FOR THE VACATION TOURIST IN EUROPE. Revised Edition for 1878. With Maps. 16mo, flexible cloth, \$2.00. HOUGHTON, OSGOOD & CO.

Many Manufacturers and Dealers find our weekly list of projected Buildings of very great importance. The names of builders of new edifices are there given, and a fresh and convenient directory is thus furnished for business correspondence.



# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the art-workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. PANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist*, Boston.

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courier.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVES. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIENARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11½ X 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOthic FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

## Viollet-le-Duc's Works.

The works of the learned and distinguished French Architect, EUGENE VIOUET-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

**THE STORY OF A HOUSE.** Translated by GEORGE M. TOWLE. Illustrated by the author. 1 vol., 8vo, bevelled boards, red edges, \$5.00.

Has the rare merit of being thoroughly business-like, and, at the same time, not too technical. — *London Standard.*

**HABITATIONS OF MAN IN ALL AGES.** Translated by BENJAMIN BUCKNALL, Architect. Fully illustrated. 1 vol., 8vo, \$5.00.

Nowhere has M. Viollet-le-Duc concentrated more varied knowledge, or illumined it more successfully, by direct human interest and characteristic dialogue, than in the present work, which can be recommended to the general reader. — *British Quarterly Review.*

**DISCOURSES ON ARCHITECTURE.** Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

**ANNALS OF A FORTRESS.** Translated by BENJAMIN BUCKNALL, Architect. Eighty-five illustrations, several in color. 1 vol., 8vo, \$5.00.

He has made of his history of the art of fortification at once a valuable handbook and a very charming romance. A work that combines amusement with instruction in a very rare degree. — *Pall Mall Gazette.*

Those who read the book through carefully by the help of the beautiful illustrations with which it is lavishly embellished, will obtain a better knowledge of the art of fortification, from the earliest ages up to recent times, than could be found in any other way short of the research and study which the author has himself given to the matter. M. Viollet-le-Duc is master of the subject, and imparts his learning in a thoroughly fascinating manner. — *Saturday Review* (London).

## A Valuable Book for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

**The New York Sketch-Book of Architecture.**

3 vols., 4to, \$6.50 each. We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

**The American Architect and Building News.**

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877, bound, 4to, each \$9.00.

\*\* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

[Reported for the American Architect and Building News.]

THE NEW YORK MARKET.

WHOLESALE PRICES.

BRICK. Cargo afloat. Pale... 175 @ \$2.00. Jersey... 175 @ 2.00. Long Island... 175 @ 2.00.

FRONTS. Croton - Brown... \$1.00. Croton - Park... \$1.00. Croton - Red... \$1.00.

CEMENT. Rosendale... \$1.00. Portland (imported)... \$1.00. Portland (Saylor's American)... \$1.00.

FIRE BRICK. Red Welsh... \$35.00 @ \$36.00. Scotch... \$25.00 @ \$26.00. American... \$25.00 @ \$26.00.

DOORS. Raised Panels, two Sides. 2.0 x 6.0... 1 1/2 in. \$1.75. 2.6 x 6.8... 1 1/2 in. 1.10.

Moulded. Size. 1 1/2 in. 1 3/4 in. 1 1/2 in. 2.0 x 6.0... \$1.37. 2.6 x 6.8... \$1.14.

BLINDS - Outside. Per lineal, up to 2.10 wide... \$1.25. Per lineal, up to 3.1 wide... \$1.25.

Inside. Per lineal, 4 folds, Pine... \$0.50. Per lineal, 4 folds, Ash or Chestnut... \$0.50.

WINDOW FRAMES. Up to 8.4 x 7.2, put together... \$2.30. Hair - Duty free. Fattie... \$10.00 @ \$12.00.

LATH. - Cargo rate. \$1.50 @ \$1.00. Lime. State, common, cargo rate... \$60.00 @ \$70.00.

LUMBER. Pine, choice, extra... \$60.00 @ \$70.00. Pine, good... \$45.00 @ \$50.00.

PAINTS AND OILS. Whiting... \$100.00 @ \$85.00. Paris white, English... \$100.00 @ \$85.00.

PAINTS AND OILS. Zinc, white, Am., dry... \$1.75 @ \$1.75. Zinc, white, Am., in oil, pure... \$1.00 @ \$1.00.

PAINTS AND OILS. Vermilion, Am., Quicksilver... \$55.00 @ \$71.00. Vermilion, Trieste... \$80.00 @ \$82.00.

PAINTS AND OILS. Sienna, raw (American)... \$10.00 @ \$10.00. Sienna, burnt (American)... \$10.00 @ \$10.00.

PAINTS AND OILS. Black, Lamp, ordinary... \$10.00 @ \$10.00. Black, Lamp, in oil, keg... \$10.00 @ \$10.00.

PAINTS AND OILS. Black, Lamp, in oil, keg... \$10.00 @ \$10.00. Black, Lamp, in oil, keg... \$10.00 @ \$10.00.

PAINTS AND OILS. Black, Lamp, in oil, keg... \$10.00 @ \$10.00. Black, Lamp, in oil, keg... \$10.00 @ \$10.00.

PAINTS AND OILS. Black, Lamp, in oil, keg... \$10.00 @ \$10.00. Black, Lamp, in oil, keg... \$10.00 @ \$10.00.

PAINTS AND OILS. Black, Lamp, in oil, keg... \$10.00 @ \$10.00. Black, Lamp, in oil, keg... \$10.00 @ \$10.00.

STONE. Cargo rates, delivered at New York.

Amherst freestone, in rough... \$85. Berlin freestone, in rough... \$75. Berea freestone, in rough... \$75.

SLATE. Delivered in New York. Purple roofing slate... \$5.00 @ \$7.00. Green slate... \$6.00 @ 7.00.

TIN PLATES - Duty, 11-10c. 1. C. charcoal, 10 x 14... \$5.50 @ \$6.75. I. C. coke, 10 x 14... \$5.25 @ 6.00.

ZINC - Duty, sheet. Sheet (gold) foreign... \$20.00 @ \$21.00. Lead. Bars... \$9.71. Sheet... \$9.92.

LEAD. Bars... \$9.71. Sheet... \$9.92. Discount 10 per cent to trade.

BOSTON.

Prices to Contractors and Builders.

FIRE BRICK. Waldo Bros Extra... \$45.00. Waldo Bros No. 2... \$35.00.

BUILDING BRICKS. Eastern... \$6.50. Bay State... \$8.00.

BUILDING STONE. Rutland Marble, sawed... \$1.25 @ \$2.00. LUMBER.

LUMBER. Michigan pine - Nos. 1 and 2... \$44.00 @ \$46.00. No. 3... \$35.00 @ 37.00.

LUMBER. Saps... \$30.00 @ 32.00. Black Walnut - Nos. 1 and 2... \$75.00 @ 80.00.

LUMBER. Cherry - Nos. 1 and 2... \$60.00 @ 65.00. White oak - Nos. 1 and 2... \$36.00 @ 40.00.

LUMBER. Spruce - random cargo... \$25.00 @ 28.00. Ring and plank... \$11.00 @ 13.00.

LUMBER. Boards... \$11.00 @ 13.00. Hemlock Boards... \$10.00 @ 11.00.

LUMBER. Laths - Spruce... \$2.00 @ 2.25. Shingles - Spruce... \$2.00 @ 2.75.

LUMBER. Pine shaved... \$6.00 @ 8.00. Sawed extra, 16 and 18 in... \$3.25 @ 3.50.

PAINTS AND OILS. Whiting... \$100.00 @ \$80.00. Paris white, English... \$100.00 @ \$80.00.

PAINTS AND OILS. Zinc, white, Am., dry... \$1.00 @ \$1.00. Zinc, white, Am., in oil, pure... \$1.00 @ \$1.00.

PAINTS AND OILS. Vermilion, Am., Quicksilver... \$55.00 @ \$71.00. Vermilion, Trieste... \$80.00 @ \$82.00.

PAINTS AND OILS. Sienna, raw (American)... \$10.00 @ \$10.00. Sienna, burnt (American)... \$10.00 @ \$10.00.

PAINTS AND OILS. Black, Lamp, ordinary... \$10.00 @ \$10.00. Black, Lamp, in oil, keg... \$10.00 @ \$10.00.

PAINTS AND OILS. Black, Lamp, in oil, keg... \$10.00 @ \$10.00. Black, Lamp, in oil, keg... \$10.00 @ \$10.00.

MORTISE LOCKS - Brass faces and bolts - easy spring.

3/4 to 4 1/2 in... \$3.75 to \$16.00 doz. Do., for front doors... \$3.75 to \$16.00 doz.

DOOR KNOBS. Silvered glass... \$1.00. Cut glass... \$1.00. Nickel plated... \$1.00.

SASH FASTS. Plain brass, self-locking... \$1.75 @ \$2.50. Plain brass, self-locking... \$1.75 @ 2.50.

SCREWS. Round head, nickel plated... \$2.25 @ \$2.90. For window blinds... \$1.75 @ 2.50.

STORE DOOR HANDLES - With mortise latch. Lacquered brass... \$3.50. Bronze metal... \$7.00.

IRON. Wrt-iron I Beams (J. H. Reed & Co.)... \$2.40 @ 2.60. Wrt-iron I Beams... \$2.40 @ 2.60.

IRON. Wrt-iron I Beams... \$2.40 @ 2.60. Wrt-iron Chan'l Beams... \$2.40 @ 2.60.

IRON. Wrought Angle Iron... \$2.40 @ 2.60. Wrought T Iron... \$2.40 @ 2.60.

IRON. Wrought Girder Rivets... \$4.00 @ 5.00. Pipe... \$2.00 @ 2.25.

IRON. Plaster paris, N. Y. p bbl... \$2.00 @ 2.25. Plastering hair, p bush... \$2.50 @ 3.00.

BRICK, LIME, AND CEMENT. Lime, in bulk... \$7.00. Lime, in bbls... \$7.00.

BRICK, LIME, AND CEMENT. Chicago building brick... \$4.50. Sewer brick... \$4.50.

BRICK, LIME, AND CEMENT. Cement, Portland... \$1.75 @ 2.00. Portland, English... \$4.50 @ 5.25.

BRICK, LIME, AND CEMENT. White sand, p bbl... \$1.25 @ 1.50. Plaster paris, N. Y. p bbl... \$2.00 @ 2.25.

BRICK, LIME, AND CEMENT. Plastering hair, p bush... \$2.50 @ 3.00. LUMBER (MICHIGAN PINE).

BRICK, LIME, AND CEMENT. 1st and 2d clear, 1 to 2-in... \$34.00 @ \$35.00. 3d clear, 1-in... \$29.00 @ 30.00.

BRICK, LIME, AND CEMENT. 3d clear, 1 1/2 to 2-in... \$30.00 @ 31.00. Select, 1-in A... \$15.00 @ 16.00.

BRICK, LIME, AND CEMENT. Select, 1 1/2-in A... \$23.00 @ 24.00. Select, 1 1/2-in B... \$18.00 @ 19.00.

BRICK, LIME, AND CEMENT. Wagon box boards, 13-in and upward B... \$27.00 @ 28.00. A stock boards, 10 to 12-in... \$25.00 @ 26.00.

BRICK, LIME, AND CEMENT. B stock boards, 10 to 12-in... \$22.00 @ 23.00. C stock boards, 10 to 12-in... \$17.00 @ 18.00.

BRICK, LIME, AND CEMENT. Common stock boards, 12-in... \$14.00 @ 15.00. Common boards, 12 to 20 ft... \$11.00 @ 12.50.

BRICK, LIME, AND CEMENT. Fencing, 12 to 16 ft... \$10.50 @ 12.00. Round cedar posts... \$1.50 @ 1.60.

BRICK, LIME, AND CEMENT. Joist and scantling, 12 to 18 ft... \$11.00 @ 12.00. Joist and scantling, 22 to 24 ft... \$12.00 @ 20.00.

1 C roofing \* 14 x 20, charcoal... \$6.25

1 X roofing \* 14 x 20, charcoal... \$6.75. 1 C roofing \* 20 x 28, charcoal... \$13.00.

1 C roofing \* 14 x 20, coke... \$6.25. 10 x 20 coke (for gutters), 250 sheets... \$11.00.

Fig tin, large (50 lbs)... \$21.00. Fig tin, small (30 lbs)... \$21.00.

Fig bar tin... \$22.00. \* Roofing tin in Chicago means lead coated, but is not used for the best roofs.

SOLDER. No. 1, 1/4c; extra, 16c. LEAD. Fig. 6c; bar, 7c; lead pipe, 6c.

COPPER. Bottoms, 25c; sheathing copper, 25c. SHEET ZINC. Full casks, 7c; slabs, 8c @ 8c.

SHEET IRON. No. 24, 2c; rates: Russia Iron, Nos. 9 to 12, 13c; do. No. 1, staided, 12c; American planished A, 11c; B, 9c; galvanized iron, No. 26, 14c, with discount of 40 per cent.

WIRE. Nos. 1 to 4, 9c; 5 to 9, 10c; 10 to 11, 11c; 12, 11c; 13 and 14, 12c; 15 and 16, 14c; 17, 18, 16c; 19, 18c; 20, 20c. Discount of 40 per cent.

NAILS. PAINTS AND COLORS. White Lead, strictly pure, \$3.50; fancy brands, \$7.00.

PAINTS AND COLORS. Zinc, French, \$12.50 @ \$13.50. Am. \$11.50. Chrome yellow, in oil... \$15.00 @ 20.00.

PAINTS AND COLORS. Umbers and Siennas... \$9.00 @ 20.00. Chrome green... \$20.00.

PAINTS AND COLORS. Coach black... \$20.00 @ 25.00. Graining colors... \$12.00 @ 25.00.

PAINTS AND COLORS. Mineral paints... \$2.00 @ 3.00. Ven. red, dry... \$2.50 @ 3.00.

PAINTS AND COLORS. Yellow ochre, dry... \$3.50 @ 3.00. OILS. Linseed, raw, 6c; boiled, 6c.

PAINTS AND COLORS. Turpentine, 38c. PHILADELPHIA. WHOLESALE PRICES.

IRON - Duty: Bar 1 to 4c; 5 to 9, 10c; 10 to 11, 11c; 12, 11c; 13 and 14, 12c; 15 and 16, 14c; 17, 18, 16c; 19, 18c; 20, 20c.

IRON - Duty: Bar 1 to 4c; 5 to 9, 10c; 10 to 11, 11c; 12, 11c; 13 and 14, 12c; 15 and 16, 14c; 17, 18, 16c; 19, 18c; 20, 20c.

IRON - Duty: Bar 1 to 4c; 5 to 9, 10c; 10 to 11, 11c; 12, 11c; 13 and 14, 12c; 15 and 16, 14c; 17, 18, 16c; 19, 18c; 20, 20c.

IRON - Duty: Bar 1 to 4c; 5 to 9, 10c; 10 to 11, 11c; 12, 11c; 13 and 14, 12c; 15 and 16, 14c; 17, 18, 16c; 19, 18c; 20, 20c.

IRON - Duty: Bar 1 to 4c; 5 to 9, 10c; 10 to 11, 11c; 12, 11c; 13 and 14, 12c; 15 and 16, 14c; 17, 18, 16c; 19, 18c; 20, 20c.

IRON - Duty: Bar 1 to 4c; 5 to 9, 10c; 10 to 11, 11c; 12, 11c; 13 and 14, 12c; 15 and 16, 14c; 17, 18, 16c; 19, 18c; 20, 20c.

IRON - Duty: Bar 1 to 4c; 5 to 9, 10c; 10 to 11, 11c; 12, 11c; 13 and 14, 12c; 15 and 16, 14c; 17, 18, 16c; 19, 18c; 20, 20c.

IRON - Duty: Bar 1 to 4c; 5 to 9, 10c; 10 to 11, 11c; 12, 11c; 13 and 14, 12c; 15 and 16, 14c; 17, 18, 16c; 19, 18c; 20, 20c.

JARVIS PATENT FURNACE, for setting STEAM BOILERS.

Will save 25 per cent in fuel and make an increase of 25 per cent in Steam Power. Will burn screenings, without a blower. Will guarantee 15 percent increase in evaporation and capacity, where we can have evaporative test before and after setting. Boilers set this way can be seen at B. D. W. Itcomb's, 29 Wareham St., Boston; Jones & Laughlin's, Pittsburgh, Pa.; Allen Print Works, Providence, R.I.; Standard Sugar Refinery, Boston; John Davis & Co.'s, No. 10 Michigan St., Chicago; Mutual Life Ins. Co., Phila.

A. F. UPTON, General Agent, 235 Congress St., Boston. Send for circular.

CREOSOTED WOOD.

PREPARED AT THE Hayford Patent Creosote Wood Preserving Works.

EDWARD R. ANDREWS, Proprietor. OFFICES. No. 4 Post Office Sq., Boston. No. 10 Warren St., N. Y.

WORKS. A Street, South Boston. Elizabethport, N. J.

The wood is perfectly dried by steam, and the sap withdrawn, before the impregnation of the pores with creosote oil, thus rendering decay impossible.

THE ADDISON GRANITE COMPANY

ADDISON, MAINE.

Furnishes the Celebrated Black Granite in any quantity.

This Granite takes precedence over all other for fineness of grain and polish, and is superior to any other Granite in the world for Ornamental and Monumental purposes.

Address JAMES M. COTTON,

LOCK BOX 5305, BOSTON.

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY.

The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, ETC., ETC.

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.  
ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

**METALLIC SHINGLES.**

We call the attention of all parties interested in Roofing, and the owners of large buildings, to the above article. It is superior to Slate, Cheaper, Fire proof, about one fourth the weight, lays much closer therefore is Storm-proof, cannot Crack, etc. Any carpenter can put them on. Send for description and Price List to  
**IRON CLAD MANUFACTURING CO.**  
69 Greenpoint Ave., Brooklyn, E. D.  
P. O. Box 2628, N. Y. City

Architects and Builders will be quick to appreciate the many New and Practical Features possessed by

**THE MAGEE PATENT SINK,**  
which commend themselves at once to every household. The escape of noxious and poisonous sewer gases is prevented by the arrangement of the patent trap, it being immovable, while the strainer, being hinged on brass pins, can be raised for the purpose of cleaning the cesspool. The sink is furnished with an improved galvanized shelf or rack for draining dishes, etc., after washing. It is of extra size, and being made with square corners, saves the carpenter much labor in setting. In smoothness of casting it fully sustains the long-established reputation of the Magee goods. Particular attention is invited to the Magee Standard Furnace, portable and for setting in brick, guaranteed superior to any in the market for economy, durability, and heating capacity. Estimates furnished for heating all sizes of dwelling houses and public buildings. Also a full line of **Brick and Portable Ranges.** Circulars and prices of all the above goods furnished on application.  
**MAGEE FURNACE CO.**  
32 to 38 Union St., Boston

**Brandeis' Seamless Paragon Trap.**  
8-foot, Best, Cheapest, and Non-siphoning.  
Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDIS & WICKERT,** 45 Fulton Street, Brooklyn, N. Y.

**TESSELATED WOOD FLOORS**  
DESIGNS AND ESTIMATES FREE  
**NATIONAL WOOD MFG. CO.**  
950 BROADWAY NEAR 23<sup>rd</sup> ST.  
NEW YORK.

**DORCHESTER UNION FREESTONE CO.**  
NEW BRUNSWICK YELLOW FREESTONE.  
The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order.  
24 Pine St., New York. - G. P. SHERWOOD.

ESTABLISHED, 1836.

**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**  
Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Compositoin Roof known. Also inventors and owners of the following patents:—

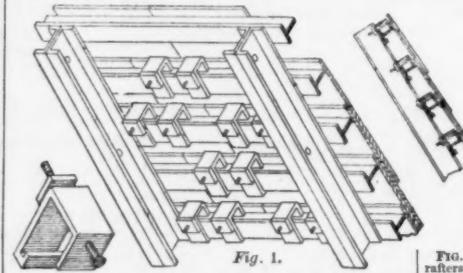


FIG. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the purlin on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

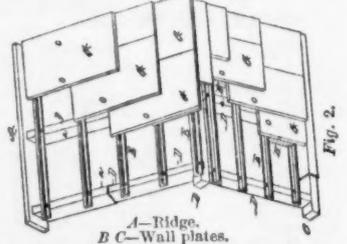


FIG. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (e) or other fire-proof material, and iron purlins (c) or beams, with the slates (G) or other covering secured thereto by clasps, (Fig. 1.) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contact with the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point, avoiding condensation, contraction and expansion of roofs formed wholly of iron.

**MANUFACTURERS OF**  
**Chicago**  
**TERRA COTTA WORKS**

Architectural Work a Specialty.

**Murtangh's Improved Patent Dumb Waiter.**  
ALSO  
**HOISTING MACHINES OF ALL KINDS.**  
**SAFETY ELEVATORS FOR INVALIDS**  
a specialty.  
**PERFECT SAFETY GUARANTEED.**  
On the completion of each SAFETY ELEVATOR we load the platform, and cut the ROPE by which it is suspended. As it never fails to catch, we give a practical demonstration of the certainty of our SAFETY APPARATUS acting in case the rope should break at some future time.  
**ISAAC RICHARDS, 217 CHESTNUT ST., PHILADELPHIA.**

**D. M. MEEKER & SON'S**  
**Malleable Iron Hollow Munten Window Sash.**  
For Innane Hospitals, Fire Proof Buildings, &c.

End view of Muntin for Glazed Sash.  
End view of Muntin for Unglazed Sash.  
Hollow Muntin.

The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architect's and medical superintendents testify to their worth. Manufactured by  
**D. M. MEEKER & SON,**  
Newark, N. J.  
Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

**CRANE, BREED & COMPANY**  
**SAFETY BOILERS**  
**STEAM AND HOT WATER.**  
MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RADIATORS, PIPE COILS, REGISTERS, FITTINGS, STEAM-PUMPS.

**PATENT MINERAL WOOL.**  
ENTIRELY FIRE-PROOF AND UNDECAYING.  
**THE BEST INSULATOR OF HEAT, COLD, AND SOUND.**  
For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc.  
**ALEXANDER D. ELBERS,**  
P. O. Box 4461. 26 1/2 Broadway, New York.

**GAS**  
**SPRINGFIELD GAS MACHINE.**  
Springfield, Mass.; 75 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

**A. L. FAUCHÈRE & CO.**  
OFFICE AND WAREHOUSES  
1319 and 1321 Broadway, New York,  
Importers, Manufacturers, and Dealers in all kinds of foreign and domestic  
**MARBLE FOR INTERIOR WORK.**  
Estimates furnished on application.

The Draft of the Chimney increased.  
Smoking Chimneys Prevented.  
Particularly adapted to Chimneys in exposed positions.  
Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.  
**JOS. W. TAYLOR,**  
70 Grand St., Brooklyn N. Y.

**HOISTING MACHINES**  
EXCLUSIVELY.  
HOTEL STEAM ELEVATORS,  
HYDRAULIC ELEVATORS,  
HAND POWER HOISTS,  
DUMB WAITERS.

**H. J. REEDY, Manufacturer,**  
128 EAST EIGHTH ST., - Cincinnati, O.

**J. & R. LAMB, 59 CARMINE ST., N. Y.**  
**CHURCH FURNISHERS**  
Practical Workers in Sterling Silver, Brass, and Bronze, Carved Wood, Decorations, etc.  
Illustrated Catalogues.  
Furniture, 10c.; Metalwork, 10c.; Decoration, 10c.

**DAVIS PATENT AUTOMATIC AIR VALVE.**  
The only reliable Self-Acting Valve made. Adapted to Steam Coils, Radiators, Pipes, Condensers, and beautiful in design, and finished in brass or nickel. Address  
**G. M. DAVIS & CO., Chicago, Ill.**

**MAKE** GAS GENERATORS FOR LIGHTING Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.  
Send for CIRCULAR **Your own**  
**WALWORTH MANUF. CO.**  
No. 69 Kilby Street.  
BOSTON, MASS. **GAS**

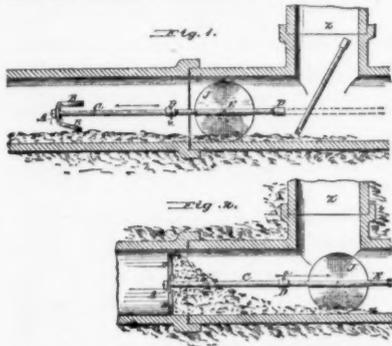
**BUILDING INTELLIGENCE.**

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is credited by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

**BUILDING PATENTS.**

**SEWER-CLEANING DEVICE.**—Erastus M. Chapin, Washington, D. C. This instrument is used in cleaning sewers when it is possible to work in one or both directions from a man-hole in the sewer. It consists of a hoe-head, circular in form, and composed of three layers of sheet steel. This head is divided into two valves, which are hinged to central portion A, to which is attached the first section of the handle, which is made of iron pipe an inch in diameter. The next section of handle is pierced by a slot, in



which is pivoted a wheel J, which, for obvious reasons, is made thin-edged. The handle is made in such lengths that it may easily be screwed together by the workman standing in the man-hole. The manner of using the tool is clearly shown by Fig. 1, which shows the hoe advancing into the uncleaned sewer, and Fig. 2, which shows it scraping up the filth and leaving a clean sewer behind it. For a twelve or fifteen-inch sewer a nine-inch hoe should be used, while a twelve-inch hoe would be large enough for a twenty-inch sewer.

**CARPENTER'S PLANE.**—L. Bailey, Hartford, Conn.  
**BLIND AWNING.**—Charles P. Dearborn, Boston, Mass.  
**BRICK AND TILE MACHINE.**—Phillip H. Kells, Adrian, Mich.

**ROOFING-TILES.**—Henry E. Merrill, Akron, Ohio. An ordinary diamond-shaped tile is constructed as if cut in two by a line joining the side corners, and the lower half pushed slightly to one side of the upper half. A break-joint is thereby made at the corners of two adjacent tiles, preventing the ingress of wind, snow, and rain.

**METAL-LATH MACHINE.**—Wesley M. Parker, Rushville, Ill.  
**WOOD-DRYING APPARATUS.**—Harrison Parker, Winchester, Mass.

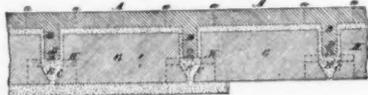
**HINGE.**—Lemuel Patterson, Parker City, Penn.  
**VENTILATOR.**—N. A. Penland, Asheville, N. C.  
**VENTILATOR.**—Samuel Seabury, New York, N. Y.  
**VENTILATOR FOR CHIMNEYS.**—William B. Austin, New York, N. Y.

**SCAFFOLD BRACKET FASTENER.**—R. R. Cooley and A. W. A. Winsor, Williamstown, Conn.

**LATCH.**—Alonzo E. Dietz, Brooklyn, N. Y.  
**CORN-CRIB VENTILATOR.**—R. W. Hazen, Fremont, Neb.  
**OSCILLATING WATER-METER.**—John Heimlich and Louis O. Dehnel, Sandusky, O.

**WATER-CLOSET.**—Matthew Hogan, Hartford, Conn.  
**FIRE-PROOF CEILING.**—Peter B. Wight, Chicago, Ill.

The object of this invention is to provide for a ceiling, of which the structural parts are of iron of varying forms, a fire-proof covering of porous terra-cotta, concrete, or other fire resisting material. The iron-work may be plates A, whose under sides are fortified by flanges B, running parallel to or intersecting one another; or it may be made of T-iron, with the flat side up, as shown at a. To the bottom of these flanges may be attached, after the concrete or other blocks are in place, flat squares of iron H, by



means of the screws D. The fire-proof blocks G are thicker than the projections of the flanges, and their edges are so extended as to partly overlap the lower side of the flanges, and yet to leave between them the dove-tailed openings shown at E, and are so made as to receive the square plates H in special counter-sinkings. When about to be put in place the top and sides of the blocks B are well coated with cement, and are then forced into place; next, the plates H are screwed on; and the protection of the iron is completed by pugging the openings E with plaster. This done, a coating of plaster can be laid on and so conceal the joints.

**FIRE-ESCAPES.**—John S. Shaw, Joplin, Mo. A flexible folding ladder, housed in a hollow window-sill, is secured thereto at its upper end by means of a ring attached to one end of the upper link of the ladder, said ring sliding upon a vertical rod in the sill, and the other end of the link being secured to a chain, which is attached to inside of sill.

**MANUFACTURE OF AUGERS.**—Henry L. Shaler, Deep River, Conn.

**RAIN-WATER FILTER.**—W. H. Thomas and T. H. Carter, Mount Sterling, Ky.

**BLASTING ROCK.**—Thomas J. Wheatley, Wilkesbarre, Penn.

**FIRE-ESCAPE LADDER.**—W. W. Clark, B. A. Bowman, and S. Bowman, Kirksville, Mo.

**KEY FASTENER.**—John W. Johnson, Cincinnati, O.

**COMBINED ANVIL AND VISE.**—Edwin E. Leach, Cedar Rapids, Iowa.

**DISINFECTING ATTACHMENT TO WATER-CLOSETS.**—John F. Naulty, Philadelphia, Penn.

**BRICK MACHINE.**—W. O. Nightengale, Johnstown, Penn.

**DOOR.**—Robert W. Sempie, Toronto, Can.

**MASTER-KEY LOCK.**—Herbert Wadsworth, Hobokus, N. J.

**EXTENSION KEY.**—Herbert Wadsworth, Hobokus, N. J.

**WATER-CLOSET SEAT.**—Alex. Waldron, New York, N. Y.

**SASH-HOLDER.**—Hugo Worthington, Liverpool, Eng.

**COMPLETED BUILDINGS.**

**BOSTON, MASS.**—Hotel Huntington; cost, \$175,000; Woodberry & Leighton, masons; Morton & Chesley, carpenters. The owner is Levi B. Gay, Esq. Mr. Geo. F. Meacham, architect.

**KNOXVILLE, PENN.**—The Presbyterian church, a very pretty little structure built on the old Knox farm, back of Mount Washington, was dedicated June 23d.

**LOUISVILLE, KY.**—On June 9th the Broadway Tabernacle, designed by Mr. John Welch, of Brooklyn, N. Y., was dedicated. The church, which is built of brick and stone, is designed in the Decorated Gothic style. The building is amphitheatrical in plan, and has a gallery 24 feet wide around three sides of the semi-octagon. Work upon the building began in May, 1876.

**MANSFIELD, PENN.**—The new Baptist church was dedicated yesterday.

**SUMMARY OF THE WEEK.**

**Baltimore, Md.**

**HOUSE OF CORRECTION.**—The award of contracts for the new House of Correction has been confirmed, and the work will begin at once.

**STORE.**—Messrs. Weber and Weiskittie are to build a three-story brick and iron store at the corner of Baltimore and Holiday streets. It will cost about \$75,000.

**Boston.**

**HOUSE.**—Mr. G. F. Meacham is building a house for Daniel Chamberlain, Esq., on Commonwealth Avenue; cost, about \$25,000.

**THE LUMBER MARKET.**—The demand for lumber during the last month has been steady, and most of the dealers report a fair trade, but without much prospect for activity during the summer, and some falling off the last week. Stocks are light, and this, with economical management, prevents a depressed feeling, which might otherwise exist. Some who own vacant land propose to build before long, as the present is so favorable a time; should these plans be carried out, it will create some activity before the fall is over. The competition in trade is so great that little profit can be realized, and contracts are made at margins which, with considerable risk, can yield but small gain. The volume of trade is distributed more, and consequently profits are divided among more; but this is not a bad feature, if only business can be transacted by reliable parties. The indications are that prices will be weaker during the summer, and trade quiet, as it usually is in hot weather. Eastern lumber arrivals have been very light for June, and hence prices have been steady. The mills have been in some places short of water, but recent rains have raised the streams. Western lumber, especially hard wood, is quiet; a large amount of ash and black walnut has come in the market, owing to a reduction in freights, and with small demand, prices have declined, so that more is in store than for some time past. Southern lumber is dull. Considerable flooring has come in on the market, and prices are lower, with little prospect of immediate improvement. There is some flooring offering of a medium grade, which by the prices deceives purchasers as to the market for selected stock. Dimensions and timber orders have ruled low, with few in the market.

**WAREHOUSES.**—A brick building is now building on Franklin Street, on the land of H. G. Dorr, Esq. It will be 28 by 79 feet. Another brick building is being put up on Congress Street by the heirs of Geo. Blackburn. It will be four stories high, and will measure 47 by 90 feet.

**Brooklyn, N. Y.**

**BUILDING PERMITS.**—Baltic St., 1 three-story brick store and dwell., 25 x 55; owner, Henry Bornscheuer, Bond St.; architect, C. F. Esenach; builders, P. S. Carlin and P. Convery.—Bridge St., No. 155, 1 three-story brick store and tenement, 28 x 68; owner, Cath. I. Brown, 141 Sands St.; architect, Sam'l Bennett.—Columbus Heights, cor. Clark St., 1 four-story brown stone dwell., 25 x 71; owner, A. A. Low; architect, C. O. Haight; builder, T. B. Rutan.—Front St., No. 178, 1 four-story brick factory, 25 and 29 1/2 x 60; owners, Hall, Bradley & Co.; carpenter, J. Gull-foyle.—Hart St., 3 two-story brown stone dwells., 20 x 40; owner, B. C. Adly; builders, J. softly and B. C. Adly.—Henry St., cor. Degraw St., 1 one-story brick chapel, 100 and 71 x 88; owner, Church of Pilgrims; architect, J. C. Cady; builders, W. & F. Lamb and E. Snedeker.—Stanhope St., No. 22, 1 two-story frame dwell., 18 x 39; owner and builder, E. C. Bauer, 18 Stanhope St.—Withers St., No. 235, 1 two-story frame dwell., 20 x 29; owner, M. Cooney, 259 Devoe St.; carpenter, P. Dibbie; mason, J. J. King.—Sixth St., cor. North Eleventh St., 1 one and two-story frame foundry, 40 x 120; owners, Ross Chemical Co.; builder, N. Graham.—Twenty-first St., 1 three-story brick tenement, 30 x 55; owner, Bernard Menning, Twenty-first St., cor. Fifth Ave.; architect, C. F. Esenach; builders, Thos. Keogh and Wm. Zany.—Flatbush and Atlantic aves., 1 shed, waiting-room, and express office, L. I. R. R., 45 and 29 x 200; owner, Long Island R. R.

**Chicago.**

**DWELLINGS.**—First-class residence, corner Pine and Superior streets, for Mr. C. Watrous, brown stone front and side, three-story and basement high; first and second stories hard wood; to cost about \$40,000.—Three brown stone fronts for C. B. Blair, Michigan Avenue, near Congress Street, three-story, basement, and sub-cellar; to cost \$20,000.—Four houses corner Michigan Avenue and Congress Street, three-story and basement high, Amherst sandstone fronts, for Rice & Friedman; cost, \$16,000. John M. Van Osdel & Co., architects.

**BUILDING PERMITS.**—The Department of Public Works has issued permits for fifty-eight buildings since our last report. The estimated value of those which cost over \$1,000, eighteen in number, is \$85,300. Following are the more important ones:—

John Baber, four-story stone front store and dwell., at 141 Archer Ave.; cost, \$8,000.—Mrs. Theresa Marx, two-story dwell., at 474 Twenty-fifth St.; cost, \$3,000.—The Redemption Fathers of Chicago, three-story school and public hall on North Ave., near Church St.; cost, \$24,000.—Joseph Speight, two-story dwell., Carroll Ave.; cost, \$5,000.—John Z. Furgerson, one-story church, cor. of Indiana and Carpenter; cost, \$6,000.—Hugh Riddle, two-story addition on Indiana Ave.; cost, \$3,000.—W. C. Baker, two-story stone front dwell., at 1150 Michigan Ave.; cost, \$4,500.—Father Morena, three-story dwell., at 1406 Jackson St.; cost, \$3,000.—C. B. Blair, 3 three-story brown stone front dwells., on Michigan Ave., near Congress St.; cost, \$4,500.—William Leahy, three-story store and dwell., at 284 Sedgwick St.; cost, \$3,000.—Muller & Behrens, three-story store and dwell., on Division, near Larabee; cost, \$3,300.

**New York.**

**BUILDING PERMITS.**—Since our last report the following entries of proposed new buildings have been made at the superintendent's office, New York:—

Cor. Monroe and Pelham sts., tenement, 30 x 45; cost, \$8,500; H. Palmer, architect; D. H. King, Jr., builder.—335 East Fifty-ninth St., stable, 25 x 90; cost, \$3,000; Bernard Kolb, owner; Jas. W. Smith, architect; P. Smith, builder.—Eleventh Ave., near One Hundredth St., frame dwell., 20 x 32; cost, \$1,000; Julia Ballard, owner; J. Milman, builder.—2180 Second Ave., 2 tenements and stores, 19 x 50; cost, \$6,000 each; E. Birmingham, architect; A. Spence, builder.—One Hundred and Twenty-seventh St., near Fifth Ave., 3 first-class dwells., 20 x 47; cost, \$9,000 each; Jas. Floy, owner; Theo. Dieterlin, architect; F. A. Thurston, builder.—Cor. Third St. and Avenue D, tenement, 18 x 70; cost, \$8,000; Adam Mosler, owner; J. Bookell, architect.—No. 16 Avenue D, tenement, 18 x 54; cost, \$6,000; Patrick Lilly, owner; J. Bookell, architect.—117 East Forty-fourth St., second-class store, 40 x 90; cost, \$15,000; O'Reilly Bros., owners, architects, etc.—Seventy-sixth St., cor. Second Ave., 8 tenements, 25 x 60; cost, \$9,000 each; Chas. Baxter, architect.

**St. John, N. B.**

**WORK SINCE THE FIRE.**—There are now erected, or in course of erection, 352 stone, brick, and brick-cased buildings, of an aggregate value of \$3,456,200, and 536 wooden buildings, valued at \$739,332, making a total of 888 buildings of all kinds, with a value of \$6,195,532. New buildings worth \$100,000 have also been erected outside the burnt district. Among the churches built or building are St. Andrew's Church, of brown and gray freestone, which will seat 1,000 persons, and is to cost \$60,000; St. David's Presbyterian Church, of pressed brick, to seat 900 persons, and cost \$30,000; The German Street Baptist Church, to seat 800 persons, and cost \$40,000, and many others of less size and cost. The buildings of the Dominion Government, which are being rebuilt, include the Custom-house, which will have a frontage of 200 feet; the Savings Bank, to cost \$35,000; the Post-office and Drill Shed, for which latter building an appropriation of \$10,000 has been made. Among the municipal buildings now under way are the City Hall, to cost \$32,500; the police building, \$25,000; the Ferry House, \$10,000, and several buildings for the fire department. Other notable structures are the Free Masons' and Odd Fellows' Halls, the former costing \$60,000 and the latter, \$25,000.

**St. Louis.**

**BUILDING PERMITS.**—Thirty-two permits have been issued for the week ending June 28, 1878. Six of these are for unimportant frame structures. The rest are for brick buildings, with occasional fronts of Warrensburg sandstone for the more expensive ones. Those worth \$2,500 and over are as follows:—

Owners.	Use.	Stories.	Rooms.	Cost.
Thos. T. Tutt.	Stores.	2	10	\$15,000
M. Flech.	Dwelling.	2	6	2,500
Mrs. M. Holburn.	Medical Bldg.	2	6	3,000
Henry Meier.	Store & dwell.	3	10	11,000
John Pilsb.	Dwelling.	3	24	13,500

**THE CUSTOM-HOUSE.**—It is understood that Mr. Henry G. Isaacs is to be the successor of Mr. Thomas Walsh as Superintendent of the new custom-house and post-office now being erected in this city. The appointment gives great satisfaction among those acquainted with the character and ability of the new incumbent.

**Washington, D. C.**

**BUILDING PERMITS.**—F. Forsyth, to build a two-story brick on First St.; cost, \$400.—L. H. Bride, to build a three-story brick on Pennsylvania Ave.; cost, \$1,800.—H. H. Hurt, President Washington & Georgetown Railroad Co., to build a brick car-house and stables, Bridge St., Georgetown; cost, \$55,000.—Same, to build brick hay storehouse and workshops on Canal St., Georgetown; cost, \$20,000.—Wm. Kenely, to build 2 two-story bricks on F St.; cost, \$900.—John Sherman, to build 2 two-story bricks on cor. of Tenth and O sts.; cost, \$2,800.—J. R. Mullins, to build 4 two-story brick houses and back buildings on P St.; cost, \$6,000.—John Sherman, to build 2 two-story bricks, cor. of Tenth and O sts.; cost, \$1,800.—Ford & Bro., to build a two-story brick on Massachusetts Ave.; cost, \$1,700.—John the Baptist Church, cor. Virginia Ave. and Fourth St., brick addition; cost, \$350.—B. A. Walker, two-story brick, Maryland Ave.; cost, \$330.—P. Hough, two-story brick, Twenty-fifth St.; cost, \$1,200; Jesse Williams, 2 three-story bricks, on Eleventh St.; cost, \$1,800.

**General Notes.**

**BRADFORD, PENN.**—The opera-house on Main and Webster streets is at last under way.—Mr. Kahn's new brick building on Main and Pine streets is progressing. The foundations have been laid and the walls are up two feet. A brick building is a novelty here.

**BURLINGTON, VT.**—A wooden house for O. J. Pratt, Esq., is building here; will cost \$10,000. G. F. Meacham, architect, Boston.

**CAMDEN, N. J.**—The new market on Federal Street rapidly approaches completion, and is handsome and convenient.

**FALMOUTH, MASS.**—The heirs of J. M. Beebe are building a summer-house here at a cost of some \$40,000.

**FOX LAKE, WIS.**—The Fox Lake flouring-mill that was burnt last winter is to be rebuilt on a larger scale.

**FREDERICTON, N. B.**—Plans for the new Exhibition Palace, by Messrs. Croff & Camp, of St. John, have been accepted, and work will begin at once. The main building will be 75 by 200 feet.

**GARDNER, MASS.**—The First Parish is building a church.

**LIMA, O.**—The Presbyterian Mission Society is building a new church on Jackson and Pearl streets. It is a frame building.

**LITTLE FALLS, MINN.**—A grain elevator, with a capacity of 40,000 bushels, is to be built the present season.

**MARLBORO, MASS.**—Work is begun on the strengthening of the Town Hall. Total cost about \$6,000. Mr. W. G. Preston, of Boston, architect.

**MILLBURY, MASS.**—Work on the addition of three stories on the east end of Cordia Mill is to be begun right away. The brick-work is to be under the direction of Mr. James Martin, of Woonsocket.

**MILFORD, CONN.**—The new Masonic Hall will cost about \$4,000.

**NEWPORT, R. I.**—On the 25th ult. the corner-stone of the new Odd Fellows Temple was laid.

**NEWTON, MASS.**—Mr. G. F. Meacham, of Boston, is building houses for Mr. Geo. C. Lorr, Mr. E. T. Holmes, and Mr. H. C. Harlow; all of wood.

**PITTSBURGH, PENN.**—There is talk of building another Bazaar of Nations.

**ST. JOHN, N. B.**—On June 25th the corner-stone of St. James's Church was laid. Messrs. Croff & Camp, architects. The building will be of stone.

**UXBRIDGE, MASS.**—Messrs. Frank Fletcher and John Brown are building two dwelling houses on Capron Street.

**WARRENSVILLE, O.**—Proposals were received July 2d for building a school-house.

**WASHINGTON, D. C.**—The contract for building the new school-house in this place has been awarded to H. E. & W. H. Hibbel, of Osburn, O., at \$6,271.33.

**WAYLAND, MASS.**—The Town Hall is now under way, and is to be completed in October. It is of wood and will

cost about \$10,000. W. B. Stinson, of Malden, is the builder; Mr. Geo. F. Fuller, of Boston, architect.

WESTBOROUGH, MASS.—The National Straw Works, H. O. Barnard & Co., are about erecting a brick building, three stories high, 277 by 44 feet, for their increasing business.

### INDEX OF CURRENT WORK, Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

#### Baltimore, Md.

CHURCH.—The Cummings Memorial Church. Mr. Cassell, architect.

CHURCH.—The Pius IX. Memorial Church. G. A. Frederick, architect. Cost \$100,000.

CHURCH.—Church of St. Michael and All Angels. Cost \$80,000. Wyatt & Sperry, architects.

HOSPITAL.—Johns Hopkins Hospital. J. B. Niernsée, consulting architect.

#### Boston, Mass.

BANK BUILDING.—Tremont Bank Building. Carl Fehmer, architect.

THE MUSEUM OF FINE ARTS.—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.

SCHOOLHOUSE.—High and Latin School. G. A. Clough, architect.

#### Brooklyn, N. Y.

TENEMENT.—A. T. White, owner. William Field & Son, architects.

SOCIETY BUILDING.—The Long Island Historical Society Building. Mr. G. B. Post, architect. Cost \$100,000.

CHURCH.—St. Francis Xavier R. C. Church, West Fifteenth Street. Cost \$150,000. P. Keely, architect.

#### Chicago, Ill.

ARMORY.—Armory for the First Regiment. Messrs. Wheelock & Clay, architects. Cost \$25,000.

STORE.—The Singer Building. Cost \$250,000.

#### Cincinnati, O.

U. S. CUSTOM HOUSE AND POST OFFICE. S. Hannaford, local superintendent.

CHILDREN'S HOME.—J. W. McLaughlin, architect. Cost \$50,000.

NEWSPAPER OFFICE.—The Gazette Building. E. Anderson, architect.

#### Cleveland, O.

BUSINESS BLOCK.—Amasa Stone, owner. J. Ireland, architect. Cost \$70,000.

CHURCH.—Second Presbyterian. J. Ireland, architect. Cost \$70,000.

CONVENT.—Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

PUBLISHING HOUSE.—Evangelical Publishing Association. J. M. Blackburn, architect. Cost \$45,000.

#### Hartford, Conn.

SEMINARY.—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.

CATHEDRAL.—R. C. Cathedral of St. Joseph. P. Keely, architect.

CATHOLIC SCHOOL.—Brown & Stilson, architects, New Haven. Cost about \$25,000.

#### Jersey City.

COLLEGE.—Catholic College. Mr. L. O'Connor, architect.

CONVENT.—Convent of the Sisters of St. Dominick. Cost \$40,000.

#### New York.

THE "FLORENCE." Emile Grewé, architect. Mrs. Matthews, owner. Cost \$500,000.

THE BOREEL BUILDING. S. D. Hatch, architect. Cost \$250,000.

COLLEGE.—Addition to Columbia College. C. C. Haight, architect. Cost \$220,000.

OFFICE BUILDING.—Messrs. Silliman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.

APARTMENT HOUSE.—Mr. H. J. Hardenburgh, architect. Cost \$300,000.

PRIVATE RESIDENCE.—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.

STORE.—Mr. John Duncaan, owner. Mr. G. Thomas, architect. Cost \$60,000.

ARMORY for the Seventh Regiment. Cost \$300,000. C. W. Clinton, architect.

#### Philadelphia.

HOSPITAL.—Presbyterian Hospital. Wilson Bros., arch'ts.

OFFICE BUILDING.—Girard trust

#### Providence, R. I.

DORMITORY for Brown University.—Messrs. Stone & Carpenter, architects.

CITY HALL.—Mr. S. J. F. Thayer, Boston, architect.

HIGH SCHOOL BUILDING. Messrs. Walker & Gould, architects.

#### St. John, N. B.

POST OFFICE, Custom House, and Savings Bank.—Mr. Scott, Chief Architect to the Dominion Government.

BANK.—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.

CHURCH.—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.

CITY HALL.—Messrs. McKean & Fal weather, architects.

CHAPEL.—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.

#### St. Louis.

CHURCH.—Second Baptist Church. Edward Hilsley, contractor. Cost \$100,000.

COURT HOUSE for the new county of St. Louis.—F. Renwick, architect. Cost \$28,000.

COLLEGE.—College for the Christian Brothers. Mr. Jas. McGrath, architect. Cost \$200,000.

CUSTOM HOUSE AND POST OFFICE.—Mr. Jas. G. Hill, Supervising Architect of the Treasury Department.

UNIVERSITY BUILDING.—The Female Department of Washington University. Rev. W. G. Eliot, Chancellor. Cost \$60,000.

#### Washington, D. C.

COLLEGE BUILDING FOR THE DEAF AND DUMB ASYLUM.—F. C. Withers, architect. Cost \$50,000.

CHILDREN'S HOSPITAL.—J. C. Harkness, architect. J. G. Naylor, builder.

#### General.

CAMBRIDGE, ILL.—Court House for Henderson County. Cost \$65,000.

CAMBRIDGE, MASS.—Gymnasium for Harvard College. Messrs. Peabody & Stearns, architects.

CONCORD, N. H.—State Prison. Messrs. Dow & Wheeler, architects. Appropriation, \$200,000.

ELMIRA, N. Y.—Masonic Hall. N. LeBrun, architect, New York. Cost \$60,000.

FARBALUT, MINN.—Deaf, Dumb, and Blind Asylum. J. Babcock & Co., contractors. Cost \$53,750.

GARDEN CITY, I. I.—Stewart Memorial Church. H. G. Harrison, architect.

INDEPENDENCE, IO.—Hospital for the Insane. G. Josselyn, supervising architect. Cost \$850,000.

JACKSONVILLE, FLA.—Store. W. Astor, New York, owner, Geo. Hoover, architect. Cost \$75,000.

JOLIET, ILL.—St. Mary's (Roman Catholic) Church. Mr. Kelly, architect, Brooklyn.

KANEKAKE, ILL.—Insane Asylum. J. R. Willett, architect, Chicago, Ill.

LOWELL, MASS.—Appleton Bank. O. A. Merrill, architect. Cost \$70,000.

NORRISTOWN, PENN.—Insane Asylum. Wilson Bros. & Co., architects, Philadelphia.

OAKLAND, CAL.—First Congregational Church. Mr. L. B. Valk, New York, architect. Cost \$60,000.

OTTAWA, ILL.—Holy Trinity (R. C.) Church. H. C. Furness, architect. Cost \$150,000.

ARMORY. Cost \$35,000. Mr. H. C. Furness, architect.

POUGHKEEPSIE, N. Y.—Hudson River Hospital for the Insane. Mr. F. C. Withers, architect.

SPRINGFIELD, ILL.—Jail. G. H. Helmle, architect. Cost \$65,000.

TOPEKA, KAN.—Insane Asylum. Cost \$76,000. Mr. E. T. Carr, architect, Leavenworth, Kan.

WARREN, IND.—Court House. B. V. Enos & Son, architects. Cost \$100,000.

WAUKEGAN, ILL.—Court House. H. C. Koch, architect. Cost \$40,000.

ZANESVILLE, O.—Hotel. H. E. Myers, architect. Black & Graham, owners. Cost \$75,000.

#### Latest.

ASHLAND, O.—Dunkard German College, \$100,000 or more, G. W. Kramer, architect.

DUBUQUE, IO.—St. John's Church, H. M. Congdon, architect, New York, \$40,000.

PORTLAND, CONN.—Trinity Church, H. M. Congdon, architect, New York, \$50,000.

ST. JOAN, N. B.—St. James's Church, Kirk & Camp, architects, St. John, N. B. St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$60,000.

*A. Hall & Sons*  
Manufacturers of  
*Architectural Terra Cotta*  
Buff and Colored Brick, Fire Brick  
Established 1846, 215th Broadway, N. Y.

Drawings for the American Architect and Building News.

Architects and architectural draughtsmen who desire to contribute drawings for publication will find the following facts of use:—

Only pen-and-ink drawings, without brush-work of any kind, can be reproduced.

The space upon a single page allowed for a drawing is 7" x 11"; therefore drawings should have approximately these proportions.

The reproductions are most satisfactory when they are from one-third to one-half as large as the originals.

The most satisfactory results are obtained from drawings upon Bristol board, or hot-pressed Whatman. Tinted paper should not be used.

Tracing cloth upon the dull side, bank-note paper, or tracing paper, provided it is not of a yellowish tinge, may be used in cases of absolute necessity.

The ink should be black and of uniform strength. The lines should be firm, sharp, not too coarse, and not unintentionally broken.

Shading and hatching lines must not be too close and crowded, especially where a large surface is to be shaded.

It is very desirable that plans should accompany the drawings.

Drawings of details both constructional and ornamental are also desirable.

ARCHITECTURAL IRON WORKS,  
**YOUNGLOVE & CO., Prop's.**  
CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CRESTING, ETC

Estimates promptly furnished.

### Publishers' Department.

## The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY

HOUGHTON, OSGOOD & CO.,

WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year; \$6.00 in advance.

### CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,

WITH

Houghton, Osgood & Co.'s other Periodicals.

THE ARCHITECT and \*ATLANTIC MONTHLY...\$9.00  
THE ARCHITECT and THE REPORTER.....15.00  
THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL.....10.00  
THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE.....7.00  
\* N. B.—The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

### RATES OF ADVERTISING.

PAGES NEXT TO READING MATTER,  
single insertion.....12½ cts. per line.  
One inch (14 lines) one insertion.....\$1.75  
One inch, six insertions.....10.00  
INSIDE PAGES, single insertion.....30 cts. per line.  
One inch, single insertion.....\$1.40  
One inch, six insertions.....7.00  
For larger space, and for a series of more than six insertions, reduced rates, made known on application to the Publishers.

Special rates for first and last pages.

No extra charge for cuts, or for advertisements that occupy more than a column in width.

Payments should be made directly to the Publishers, either by draft or by post office order.

HOUGHTON, OSGOOD & CO., Publishers,

WINTHROP SQUARE, BOSTON

## BOUND VOLUMES.

It has been found advisable to divide the year's issue of the AMERICAN ARCHITECT and BUILDING NEWS into two volumes. These will be furnished at the following rates:—

ONE VOLUME (six months).....\$3 70  
" " If paid in advance.....3 40  
" " bound in cloth.....5 50  
Numbers of 1876 or 1877, without cover or binding... 7 50  
Bound volumes of 1876 or 1877 (each 12 months)... 9 00  
Price of cover, without binding.....1 00  
Cover and binding (for subscribers).....2 00

In sending volumes to be bound it should be stated whether the illustrations are to be bound with their respective numbers, or whether all illustrations are to be placed together at the end of volume.

N. B.—Volumes bound in both styles are kept in stock.

(Established 1848.)

## MARKET ST. ARCHITECTURAL FOUNDRY

AND

### IRON WORKS.

**SNEAD & CO..**

LOUISVILLE, KY.

Makers of every description of Iron Work for Buildings.

## COMPETITIONS IN INTERIOR DECORATION.

The attention of architects, draughtsmen, and decorators is drawn to the series of competitions in interior decoration initiated by the editors, and now in operation.

### REGULATIONS AND CONDITIONS

will be found in Nos. 109 and 114 of the AMERICAN ARCHITECT.

### PROPOSALS.

#### CHANDELIERS AND GAS FIXTURES.

Proposals for Chandeliers and Gas Fixtures for the U. S. Court-House and Post-Office at Parkersburg, W. Va.

OFFICE OF THE SUPERVISING ARCHITECT,  
TREASURY DEPARTMENT,  
WASHINGTON, D. C., June 19, 1878.

Sealed proposals will be received at this office until 12 M., on the 8th day of July, 1878, for supplying, delivering, and fixing in place complete the Chandeliers and Gas Fixtures required for the U. S. Court-House and Post-Office at Parkersburg, W. Va., in accordance with specification and schedule, copies of which and any additional information may be had on application at this office or the office of the Superintendent.

132\*

JAS. G. HILL,  
Supervising Architect.

### SUBSCRIBERS TO THE AMERICAN ARCHITECT AND BUILDING NEWS

Who have not yet paid their subscriptions for 1878 are reminded that the special offer recently made by the Publishers, to accept \$6.00 for subscriptions for the current year, extends only to July 1, and that on and after that date the price will be \$7.50. Those who wish to avail themselves of the reduction offered should therefore remit at once to

HOUGHTON, OSGOOD & CO., Winthrop Square, Boston.

PROPOSALS.

JOINERS' WORK.

Proposals for Manufactured Joiners' Work for the U. S. Court-House and Post-Office at Grand Rapids, Mich.

OFFICE OF THE SUPERINTENDENT, GRAND RAPIDS, MICH., June 22, 1878.

Sealed proposals will be received at this office until 12 m., on the 20th day of July, 1878, for supplying and delivering at the U. S. Court-House and Post-Office at Grand Rapids, Mich., ready for fixing in place, all the Manufactured Joiners' Work required for that building, in accordance with drawings, specification, and schedule. Copies of specification and schedule, form of proposal, and any additional information may be had on application at this office, where detail and other drawings may be seen.

JOHN R. STEWART, Superintendent.

129\*

ELECTRIC CLOCKS. FURNITURE.

Proposals for furnishing Electric Clocks and Furniture for the new Capitol of Michigan, at Lansing, will be received by the Governor and Board of State Auditors at the office of the Board for furnishing the New Capitol of Michigan, in Lansing, until 12 o'clock, noon, on Wednesday, July 31, 1878, and will be opened at said office at 3 o'clock, p. m., on the same day. Persons desiring to submit proposals can obtain schedules of the articles required, instructions to bidders, preliminary bonds, and all necessary information upon application to the Secretary. The Board reserves the right to reject any or all proposals submitted. All proposals must be sealed, indorsed "Proposals for Electric Clocks" or "Furniture for New Capitol," and addressed to A. L. Bours, Secretary of the Board, Lansing, Mich.

CHAS. M. CROSSWELL, Governor. E. G. D. HOLDEN, W. B. MCCREERY, B. F. PARTRIDGE, Board of State Auditors. ALLEN L. BOURS, Secretary.

135

FURNITURE.

Sealed proposals for furnishing the Normal School Hall will be received by the State Board of Education until Monday, July 15, 1878, and will be opened at the Normal School building at 7 30 p. m., on said day, at which time it will be necessary for bidders to be present with samples of the furniture with which they propose to furnish said hall. Persons desiring to submit proposals can obtain all necessary information upon application to Edgar Rexford, Ypsilanti, Mich. The Board reserves the right to reject any or all proposals submitted. By order of State Board of Education.

YPSILANTI, MICH.

132

COURT-HOUSE.

Sealed proposals will be received by the Chairman of the Building Committee of the Sanilac County Court-House until July 15th, at 6 p. m., for the erection and furnishing the materials for the Sanilac County Court-House, according to plans and specifications made by Julius Hess, architect, of Detroit. Plans and specifications can be seen at the architect's office, room 12, Bank Block, Detroit, or the office of the Chairman of the Building Committee, at Port Sanilac, on and after July 1, 1878. All proposals to be accompanied by a bidder's bond to the penal sum of \$5,000, signed by a disinterested party, guaranteeing that the bidder will enter into contract with the Building Committee in case that the contract be awarded to him. The Committee reserves the right to reject any or all proposals.

SANILAC, MICH.

JOHN S. THOMSON, Chairman Building Committee.

132

COURT-HOUSE.

Notice is hereby given by the undersigned Commissioners of Wayne County, in the State of Ohio, that they will receive, until 12 o'clock at noon on the 19th day of July, 1878, sealed proposals, at the office of the Auditor of said county, in the city of Wooster, for furnishing all the materials and the erection and full completion of a new Court-House in the city of Wooster, in accordance with the plans, drafts, and specifications thereof, now on file in the office of the County Surveyor. Persons desiring to compete for the furnishing of the materials and the construction and completion of said building can inspect the plans, drafts, and specifications at said County Surveyor's office, or at the office of Thomas N. Boyd, architect, in the city of Pittsburgh, Pa., and can ascertain at said Surveyor's office, and Mr. Boyd's office, the terms and conditions of the agreement to be entered into with the undersigned for furnishing the materials, erecting and completing said building, and the character and conditions of the bond that will be required of the contractor, and time of completion of the work and mode of payment therefor. A bond for two thousand dollars must accompany each proposal, payable to the Treasurer of Wayne County, and State of Ohio, with at least two sufficient sureties, conditioned that in the event of that person's bid being accepted by the undersigned, that he will enter into bond as required by the undersigned for the faithful performance of his contract. The undersigned reserve the right to reject any or all bids.

WOOSTER, O.

HENRY GOUDY, PETER STAIR, BENJ. WEYGANDT, Commissioners of Wayne County, Ohio.

133

COURT-HOUSE.

The undersigned having been appointed Commissioners by the County Court of Montgomery County, Tennessee, to superintend the erection of a Court-House, hereby invite architects desiring to offer plans for the same to do so on or before the 31 day of August, 1878.

CLARKSVILLE, TENN., June 3, 1878.

Architects submitting plans will be governed by the following specifications: Drawings to consist of Floor Plans, Elevations, Transverse and Longitudinal Sections.

A written statement explanatory of the same, together with an itemized estimate of the cost to execute, must accompany each design submitted.

No appropriation has as yet been made, but a good building is desired, and plans are necessary in order to know what amount will be required.

For further information apply to the Chairman of the Commissioners.

CHARLES W. TYLER, Chairman, G. H. SLAUGHTER, W. S. MALLORY, G. ORGAIN, CHAS. G. SMITH, Commissioners.

135

PROPOSALS

COURT-HOUSE.

Tenders (in duplicate) indorsed, "Tenders for Court-House," will be received until noon on the 12th of August, 1878, from persons willing to construct a new Court-House and Public Offices in the town of Belize. Persons desirous to compete for the work can inspect plans and sections and specifications, forms of tender and agreements and other particulars, on application at the office of the undersigned, at Belize, and at the office of the Crown Agents for the Colonies, Downing Street, London, or Messrs. A. E. Outerbridge & Co., 29 Broadway, New York. No tender will be received except on the prescribed form, nor unless two efficient sureties are provided for the due performance of the work in accordance with the terms of the specification. Tenders must be addressed to the Honorable the Colonial Secretary, Belize, British Honduras, care of A. E. Outerbridge & Co., 29 Broadway, New York. The government do not bind themselves to accept the lowest or any tender. By order of His Excellency the Lieutenant-Governor.

BELIZE, HONDURAS.

GUSTAV VON OHLAFEN, Colonial Engineer

136

SCHOOL-HOUSE.

To Contractors.—Sealed proposals will be received at the office of the Clerk of the Board of Education until 12 m., Monday, July 8, 1878, for the construction of a public-school building to be erected on Walton Avenue, in the Twelfth Ward, in the city of Cleveland. Plans, specifications, and detailed drawings may be seen and blank proposals can be obtained on and after Monday, June 24, 1878, at the office of Levi T. Scofield, architect, No. 22 Case Block, Cleveland, Ohio.

CLEVELAND, O.

No proposals will be entertained unless made on the blanks furnished by the Board. The bid for labor and material must be separately stated, with the price thereof.

Each proposal must be accompanied by a bond of \$1,000, signed by responsible and disinterested parties, that if the same is accepted a contract will be entered into at the price contained in the proposal, the same disinterested parties to become sureties for the faithful performance of the contract.

The Board reserves the right to reject any or all bids, to accept or decline to close a contract as in their discretion they shall deem it their duty to do.

Bids must be sealed and indorsed thereon, "Clerk of Board of Education. Proposal for Twelfth Ward School Building."

THOMAS R. WHITEHEAD, Clerk.

137

POST-OFFICE SCREEN.

Proposals for Post-Office Screen for the U. S. Custom House, etc., at Evansville, Ind.

OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., June 28, 1878.

Sealed proposals will be received at this office until 12 m., on the 8th day of July, 1878, for furnishing, delivering, and putting in place complete the Post-Office Screen required for the U. S. Custom-House, etc., at Evansville, Ind., in accordance with drawing and specification, copies of which and any additional information may be had on application at this office, or the office of the Superintendent.

JAS. G. HILL, Supervising Architect.

132\*

CHANDELIERS AND GAS FIXTURES.

Proposals for Chandeliers and Gas Fixtures for the U. S. Court-House and Post-Office, at Raleigh, N. C.

OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., June 19, 1878.

Sealed proposals will be received at this office until 12 m., on the 8th day of July, 1878, for supplying, delivering, and fixing in place complete the Chandeliers and Gas Fixtures required for the U. S. Court-House and Post-Office at Raleigh, N. C., in accordance with specification and schedule, copies of which and any additional information may be had on application at this office.

JAS. G. HILL, Supervising Architect.

132\*

PIERS AND WING-WALLS.

Sealed proposals, indorsed "Proposals for Building a New Pier, New Abutments, and Wing-Walls for Dartmouth Street Bridge," will be received at the office of the Superintendent of Streets, City Hall, Boston, until 12 o'clock, m., of July 8, 1878.

Each bid must be signed by the bidder, and accompanied by a bond for \$1,000, conditioned for the execution of the contract (with satisfactory sureties for its performance), within the time specified in this advertisement, in case the bid be accepted.

No bid will be considered which has not responsible sureties on its accompanying bond.

Specifications may be obtained and the plans may be seen at the office of the City Engineer, City Hall, Boston.

The Committee on Paving reserves the right to reject any or all bids should it deem it to be for the interest of the city of Boston to do so.

THOMAS J. WHIDDEN, Chairman Committee on Paving.

132

COUNTY OFFICE BUILDING.

Sealed proposals will be received until 12 m., July 8, 1878, for erecting a new building for county offices, and for repairing and enlarging the present one, in Morrison, Whiteside County, Ill., such construction to be in either case strictly in accordance with plans and specifications, which can be seen at the County Clerk's office in Morrison, also at the office of G. R. Randall, architect, at 602 West Washington Street, Chicago.

Bids to be for the entire job, including masonry, carpenter work, and for the iron work for the fire-proof vaults. Good security will be required of the contractor. Proposals to be placed in the hands of the County Clerk for action of the County Board at its session beginning July 8, 1878. The right is reserved to reject any or all bids.

P. B. REYNOLDS, J. L. MARVEL, WARREN BOND, TYLER McWHORTER, C. C. JOHNSON, D. S. SPAFFORD, Committee

131

NEW BOOKS

PUBLISHED BY

HOUGHTON, OSGOOD & CO.,

Winthrop Square, Boston.

DRIFT FROM TWO SHORES.

By BERT HARTE. "Little Classic" style. \$1.25.

Like "The Luck of Roaring Camp" and "Tales of the Argonauts," this book contains a variety of stories and sketches; and it is characterized by the same dramatic felicity of narration and the same exquisite charm of style which made those earlier books famous in both America and Europe.

GREEK VIGNETTES.

A Sall in Greek Seas, Summer of 1877. By JAMES ALBERT HARRISON. "Little Classic" style. \$1.25.

An attractive book of travel, observations, and impressions. Professor Harrison describes not only the scenery, but, especially in Athens, the antiquities, architecture, art, people, customs, institutions, and folk-lore.

THE POLITICAL ECONOMY

Of Great Britain, the United States, and France, in the Use of Money. A New Science of Production and Exchange. By J. B. HOWE. 1 vol., 8vo, \$3.50.

An elaborate work on a topic that just now challenges the attention of financiers, legislators, and all thoughtful citizens. Judge Howe has devoted the researches of years to this subject, and is confident that his reasonings lead to conclusions which will be accepted by candid and intelligent men, and which, if acted upon, will greatly promote the prosperity of the country.

MONETARY AND INDUSTRIAL FALLACIES.

A Dialogue. By J. B. HOWE. 1 vol., 8vo, \$1.50.

In the form of a dialogue Judge Howe sets forth various opinions held concerning money and labor, emphasizing certain current fallacies and, as in an informal conversation, showing the delusive character of these fallacious opinions and maintaining correct ones.

THE DHAMMAPADA.

Translated from the Chinese, by REV. SAMUEL BEAL, B. A. Vol. XII. of the English and Foreign Philosophical Library. 8vo. \$2.50.

An excellent translation of an important work, and one of peculiar value to students of comparative religion.

\*\* For sale by all Booksellers. Sent, post-paid, on receipt of price by the Publishers.

HOUGHTON, OSGOOD & CO., Boston.



NONESUCH Self-Locking AND Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.

Patented July 10th, 1877.

A BUILDER.

40 years of age, having had 8 years' experience at contracting in America, and trained as a general foreman in all branches of the building trade in England, can prepare drawings, estimate, and wishing to get out of the contracting business, wishes a situation as manager or superintendent; would be willing to go South for the winter. Address "T. W. B.," American Architect and Building News, Boston.

IMPROVED DOOR THRESHOLDS.

(Patented Oct. 13, 1874.)



A substitute for the wide, unsightly threshold, in the form of A ROD, Metal or Wood, placed on the floor directly under the door, secured in such a manner as to be removable at will. The new thresholds are warmly indorsed by those who have used them, and their neat, compact appearance will be recognized at once.

For Nickel, Silver-plated, or Polished Brass, and Price-List, apply to ENOCB ROBINSON, 21 Brattle Street, Boston.

For Mahogany, Black Walnut, Hard Pine, etc., apply to J. F. PAUL & CO., or J. J. McNUTT, Boston.

A rare chance for active and enterprising salesmen, local or travelling. For terms, address

IMPROVED THRESHOLD, 33 School Street, Room 20, Boston.

MARSHALL'S AMERICAN



LEADED SHEETS. Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Represented in New England States by C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

BUHRE'S INFALLIBLE SEWER GAS TRAP.



The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (E) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.

S. BUHRE, Inventor and Manufacturer, Cleveland, Ohio.

WHOLESALE AGENTS.

W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O. L. WOLFF Mfg Co., 109 & 111 West Lake St., Chicago, Ill. HAMBLEN & MATHEWS, 82 & 84 North St., Boston, Mass. C. A. BLESSING, 41 North Fifth St., Philadelphia, Pa. THE J. L. MOTT IRON WORKS, 88 & 90 Beekman St., N. Y. Please send for Circular.

GALVANIZED IRON CORNICES.

For the very best in all particulars, send to the undersigned. Our advantages are: Steam Power Machinery, the largest business and the most extensive experience, the ablest corps of workmen ever gotten together, and all known improvements in manipulation and construction.

OVER FOUR THOUSAND CONTRACTS satisfactorily executed attest our success. Specimens of our work may be seen in every State in the Union.

Architects will find it to the interest of their clients to obtain our estimates.

Fire-Proof Construction, and Pressed Zinc Ornamentation, are specialties.

Tracings of designs are solicited; but within reasonable limits (on large jobs) visits will be made. Correspondence promptly answered.

The Kittredge Cornice and Ornament Co., Salem, Ohio. MENEELY & KIMBERLY, Bell Founders, Troy, N. Y., Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT HOUSE BELLS. Illustrated Catalogue sent free.



NATIONAL TUBE WORKS CO.

PATENT Indestructible Enamelled Wrought Iron LAP-WELDED PIPE, From 1/4 inch to 15 inches diameter.

Now extensively used for

Water, Gas, Sewerage, and Mining.

It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at offices of

National Tube Works Co.,

8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.



D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

Terra Cotta Chimney Tops, Akron Land Tile

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free.

HENRY McSHANE & CO., Baltimore, Md.

The Useful

is issued monthly—consists of Perspectives of Interiors, Ornaments of Buildings, Fresco Painting, Furniture, etc., and is accompanied with full-size working-drawings—for direct use—Price to Subscriber One dollar per number.

Office 28 Pemberton Square, Boston, Mass

TO ARCHITECTS.

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the

Scagliola and Marezzo Marble,

Which closely imitates the rarest and most costly Marble. Columns, Pilasters, Pedestals, Wainscoting, Wall and Altar Work.

JAS. T. ALLEN & CO.,

25 North 17th Street, Philadelphia.



THE "AIR SPACE"

STEAM and BOILER COVERINGS

Save 10 to 20 per cent in fuel.

See Am. Architect and Building News, Dec. 15, 1877.

THE CHALMERS-SPENCE COMPANY.

140 Congress Street, Boston. Foot 24 St., E. R., New York.

CLASSIFIED ADVERTISEMENTS.

Table listing various categories of advertisements such as ARCHITECTS, ARCHITECTURAL BOOKS, ASPHALT, ASPHALT AND OTHER (FELT) ROOFING, BELL FOUNDERS, BRICK, BRONZE DECORATIONS, CEMENT, CHURCH FURNITURE, CLOCKERS FOR PUBLIC BUILDINGS, DECORATORS, and others.

Table listing various categories of advertisements such as HOISTING MACHINES, INTERIOR FINISHING WOOD, IRON BRIDGES, IRON WORK FOR BUILDINGS, LEADED SHEETS, LOCK AND BRASS HARDWARE, MARBLE, MARBLE WORKERS, PAINT, PAPER HANGINGS, PAPER MACHINE DECORATIONS, PATENT MINERAL WOOL, PATENT TRASSON LIFTER, PIPE (LAP WELDED), PLASTER, PUMPS, ROOFS, and others.

Table listing various categories of advertisements such as ASPHALT and other (Felt), Wagon Chemical and Manure Co., SCAGLIOLA AND MAREZZO MARBLE, SEWER GAS TRAP, SEWER PIPE, SHUTTERS (STEEL), SKYLIGHTS, STAINED GLASS, STEAM PUMPS, KNOWLES' PATENT, STEEL (BUILDING), THERMIDORS (IMPROVED DOOR), TILE, and others.

Table listing various categories of advertisements such as ASPHALT and other (Felt), Wagon Chemical and Manure Co., SCAGLIOLA AND MAREZZO MARBLE, SEWER GAS TRAP, SEWER PIPE, SHUTTERS (STEEL), SKYLIGHTS, STAINED GLASS, STEAM PUMPS, KNOWLES' PATENT, STEEL (BUILDING), THERMIDORS (IMPROVED DOOR), TILE, and others.

**ETNA IRON CO.**

Manufacturers of every description of Wrought and Cast

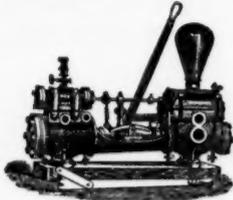
**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**

Patent



Steam

**PUMP**

**THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a speciality.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

**KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES, { 14 & 16 Federal St., } Boston.  
{ 113 & 115 Congress St., }  
{ 92 & 94 Liberty St., } New York.

Send for Illustrated Catalogue.

**THE**

**Plumber & Sanitary Engineer,**

A Monthly Journal devoted to

**WATER SUPPLY,**

**DRAINAGE,**

**HEATING & LIGHTING.**

It contains no paid puffs.

Its technical articles are written by experts.

It is a manual of the best practice in Plumbing.

It illustrates the latest improvements in House Drainage.

It is indispensable to every Architect and Builder.

Terms, \$1.50 a year. Single Copies, 15 cents.

Address

AM. PLUMBER PUBLISHING CO.

Box 3087 P. O. 297 Pearl St., New York.

**"ZODTCHY" (BUILDER).**

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1872 by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

M. JEROME KÜTTNER,

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from EIGHT to SIXTEEN pages of letterpress, gr. quarto, with cuts, and at least FIVE autographic chroco-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.

The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address.

JOURNAL "ZODTCHY,"

18 OFFICER STREET, ST. PETERSBURG, RUSSIA.



**Carson's Kitchen Sink**

Is an improvement in this fixture that must meet with the approval of every house-keeper as it retains every particle of grease, and prevents the waste of pipes from filling up; besides being better trapped than any other sink in use.

Bignall Mfg. Co., Medina, N. Y., or J. M. Carson, Louisville, Ky., Man'rs.

**NATIONAL**

**FINE ART FOUNDRY,**

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze. TO ARCHITECTS AND BUILDERS.

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

**GEO. DWIGHT, JR., & CO.,**

Builders in Iron, and Engineers in Fire-Proof Construction,

SPRINGFIELD, MASS.

HAVE for many years given their exclusive attention to FIRE-PROOF CONSTRUCTION; and they now invite the correspondence of Architects to the following specialties which hereafter will constitute the leading items of their business: FIRE-PROOF FLOORS. The only floors that have stood fire in this country.

FIRE-PROOF ROOFS. Refer to Equitable Life Insurance Company's Building at Boston.

FIRE-PROOF SHUTTERS. Have stood many fires in all parts of the country. Over 6000 pairs put up in Boston after the fire. Saved the city of Springfield last year.

FIRE-PROOF LATH. In the words of one of the best-known architects of this country, "Minimum of metal, maximum of stiffness, maximum of strength; the best lath ever made, either wood or iron." See New York Post-Office; State Department, Washington; Equitable Life Insurance Company's Buildings, and many others.

Mr. HOTT will be pleased to wait upon Architects, when desired, to explain our methods, and to present for inspection construction plans and estimates for any specific work.

**BURDITT & WILLIAMS,**

DEALERS IN

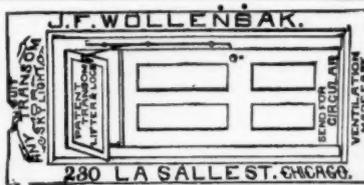
**FINE HARDWARE**

of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



**CATALOGUE OF Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO.,

ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.

**BICKELHOUP BROS.,**  
829 West 37th St., New York.



**BEEHIVE BRAND. FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**ASAHEL WHEELER'S PAINT PRESERVER**

Is the most remarkable Wood and Paint Protector known against the hot sun's rays and storms. A trial of more than three years' constant exposure has demonstrated this fact. A perfect glossy surface yet remains without signs of perishing. ASAHEL WHEELER, 145 Milk St., Boston



**BALTIMORE PRESSED TILES,**  
FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases,

DRAIN AND SEWER PIPE, FIRE-BRICK, LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

WALDO BROTHERS,

No. 94 WATER STREET, BOSTON.

**PEERLESS BRICKS.**

THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK

ARCHITECTURAL SHAPES (80 kinds).

ALSO

RED Pressed Fronts.

Extra fine in color and quality

**BROWN,** Colored throughout  
More beautiful than Brown Stone DURABLE

**CHOCOLATE,**

Same as above; difference in color

**FLESH COLOR,**

A very popular color.

**BUFF,** very fine.

Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F. ADAMS,

JOSEPH WOOD, JR.,

PRESIDENT.

TREASURER



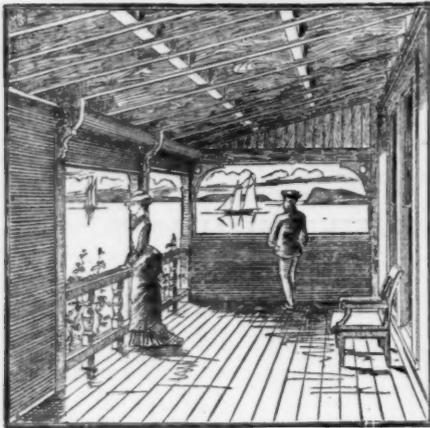
**DOLIVET, CUTTER, & CO.,**  
ARTISTIC

**Papier Maché Decorations,**

106 West 28th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING VENETIAN BLINDS.**  
**WILSON'S PATENT.**  
 These blinds can be fitted to any kind of Window or Piazza. They require no winding machinery or balance weights, and run up and down as easily as an ordinary spring shade. For Bay Windows they are found invaluable.  
 They are simple, durable, and handsomely finished. They were exhibited at Philadelphia in competition with the Rolling Venetian Shutters of English manufacture, and received the only award of Medal and Diploma.  
 Price reduced to 50 cents per foot super, in hard wood. We also manufacture Wilson's patent Rolling **STEEL SHUTTERS**, the best and cheapest fire and burglar-proof Shutters in the market.  
**WILSON & JAMES,**  
 68 Beekman St., NEW YORK.

**PRIZE MEDALLISTS.**  
 1862; 1865; 1867; 1872; 1873; AND ONLY AWARD and MEDAL FOR SELF-COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**  
 ORIGINAL INVENTORS AND SOLE PATENTEES OF  
**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**  
 Fire and Burglar Proof. Also, improved Rolling Wood Shutters

OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable & Co., and Park & Tilford's new Buildings, &c., &c., and are endorsed by the leading architects of the world.  
 OFFICE AND MANUFACTORY.  
 162 & 164 West 27th Street, New York.

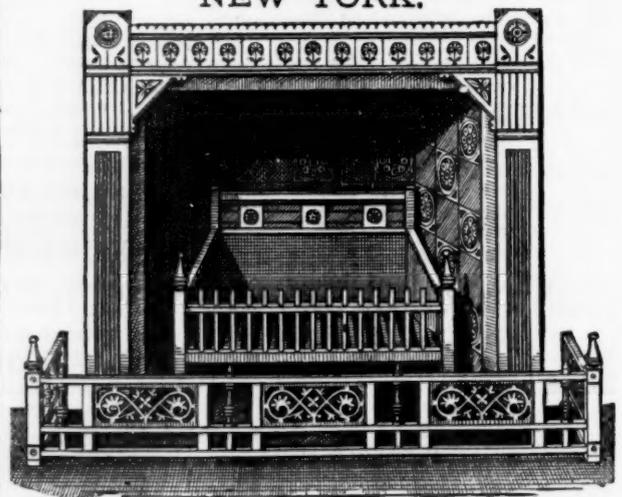
**HOPKINS & DICKINSON MANUF'G CO.**  
 76 READE STREET, NEW YORK,  
 WORKS, DARLINGTON, N. J.

*Lock and Hardware Manufacturers,*  
 DESIGNERS, FOUNDERS, AND WORKERS  
 IN  
**BRONZE AND BRASS.**

*Architects' Designs truthfully executed.*  
 Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)  
 Union Sq., 2d door from Broadway, (17th St. side),  
**NEW YORK.**



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile.  
 HAVE NO OTHER WAREHOUSES.

**VALUABLE ART PUBLICATIONS.**

**ALLONGÉ'S** (Auguste) Charcoal Drawing. With an Introduction by C. C. PERKINS, and a Heliotype Frontispiece. Small 4to. \$1.00.  
**BAKER'S** (W. S.) Origin and Antiquity of Engraving, with 23 Heliotype Illustrations from Dürer, Van Dyck, Raphael, Guido, etc. 8vo. \$5.00.  
**HUNT'S** (William M.) Talks on Art. 8vo. Paper. \$1.  
**CLEMENT'S** (Clara Erskine) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a complete Index. Cr. 8vo. Cloth, red edges. \$3.25.  
 Palaters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges. \$3.25.  
**MURRAY'S** (Mrs. Elizabeth) The Modern System of Painting in Water-Colors from the living model. 12mo, paper, 50 cents.  
**HOUGHTON, OSGOOD AND COMPANY, Boston.**

**ARCHITECTS,**

IN SPECIFYING OUR

**LOCKS AND BRONZE HARDWARE,**

Have the assurance that they will receive just what they have selected. We make no second grade work, "brass-plated" or otherwise, to be substituted, at the expense of owners, in order to economize on unprofitable contracts.

**YALE LOCK MANUFACTURING CO., STAMFORD, CONN.**  
 New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,

**SP. CIALTIES** 94 BEEKMAN STREET,  
 IN NEW YORK.  
**PLUMBING GOODS.** JENNINGS' NEW CLOSET, WITH New Valve  
 Having for their especial object Cleanliness, Durability, and the exclusion of Sewer Gas. With non-corrosive Valve Seating and Solid Plunger.

**BOWER'S PATENT SEWER-GAS TRAP.**

Patented in U. S. Apr. 24 & Aug. 14, 1877.  
 The most PERFECT BARRIER against SEWER GAS that has yet been invented.  
 The only trap that has been FULLY INDORSED by the LEADING SANITARIANS throughout the WORLD.  
**IT IS A POSITIVE SEAL**  
 Against sewer-gas under pressure, absorbed gases, and back water.  
 Seal is not broken by siphonage or evaporation.  
 Self-Scouring, not injured by freezing, It has many other good points that  
 No other Trap possesses.

It can be readily attached to old work, in a very short time, and at very little expense.  
**SIMPLE, CHEAP, DURABLE, AND EFFECTIVE.**  
 A sample Trap FREE to Architects on application. Send for full descriptive Circulars to the Manufacturers,  
**B. P. BOWER & CO.**  
 104 & 106 St. Clair St., Cleveland, O.

**STEWART'S HARD WOOD SLATE, MARBLE AND MANTELS, MIRRORS, ART-FILES, G. MANTELS, HEARTHS &c.**  
 MASOTIC Temple 23<sup>rd</sup> St & 6<sup>th</sup> Ave N.Y.

**Sewer Pipe, Fire Brick, Terra Cotta, Chimney Tops, Garden Vases, Art Pottery for Decoration.**  
 The strongest and smoothest pipe in the country. Send for lists and Catalogue. Prices as low as any other manufacturer.  
**Portland Stone Ware Co.**  
 GEO. C. DUNN, Gen'l Ag't,  
 59 Kilby Street, Boston.  
 400 Federal Street, Boston.

**LIMMER ROCK ASPHALT CO.**  
 111 Broadway, Room 105, New York.  
 Rock Asphalt is a natural product, and the ideal material for Paving Roadways, Streets, Yards, and Stables, and for Flooring Cellars in Breweries and other establishments.



**SAYLOR'S PORTLAND CEMENT.**  
 Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R., U. S. Government Works (Forts and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally.  
 For Sale by all dealers in Building Materials. **Johnson & Wilson, Gen'l Agts.,**  
 Send for circular. 93 Liberty Street, New York.

**Automatic Signal Telegraph Co., CITY OF BOSTON,**

OFFICE, 178 DEVONSHIRE STREET, ROOM 20,  
 Is prepared to make contracts for the protection of buildings against fire.  
 DIRECTORS.  
 CHARLES E. GUILD, President. WILLIAM ENDICOTT, Jun  
 JOHN D. W. JOY. WILLIAM B. WATKINS.  
 PATRICK T. JACKSON, Treasurer.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

Theatrical Fresco only. Prices moderate. Refer once first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.  
 LAFAYETTE W. SEAVEY,  
 Established 1865. NO. 8 LAFAYETTE PLACE, NEW YORK

**THE WELLINGTON PATENT OVERFLOW BASIN**  
 No sewer gas. No overflow. No leakage around the top of the basin. This thoroughly reliable basin is rapidly taking the place of the ordinary one.  
 It gives perfect satisfaction in every instance.  
 Manufactured by  
**L. S. MOORE & CO.,**  
 40 Oliver St., Boston.  
 Send for Circulars.

# AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

Vol. IV. No. 133.]

SATURDAY, JULY 13, 1878.

[PRICE 15 CENTS

### BUILDERS' SUPPLIES.

#### OTIS BROTHERS & CO.

SAFETY STEAM AND HYDRAULIC ELEVATORS.

A specialty for a quarter of a century.

BUILDERS OF THE HALE HYDRAULIC ELEVATOR.

No. 348 Broadway, New York.

#### WALWORTH MANUFACTURING CO.,

69 KILBY ST., BOSTON.

PUBLIC BUILDINGS,

PRIVATE RESIDENCES,

GREENHOUSES, ETC.

Warmed and ventilated by

STEAM OR HOT WATER.

Correspondence solicited. Plans and estimates furnished on application.

#### "HOTCHKISS" TOWER CLOCKS,

MANUFACTURED BY

SETH THOMAS CLOCK CO., THOMASTON, CONN.

Prices \$100 to \$6,000.

WARRANTED ACCURATE, STRONG, DURABLE.

OFFICE, 581 BROADWAY, NEW YORK.

Send for Illustrated Catalogue.

#### "MINTON'S ART AND ENAMELED TILES."

(China Works, Stoke-Upou Trent.) Also, The Campbell Brick and Tile Co.'s

ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS, ETC.

For Churches, Banks, Halls, Vestibules, and Hearths; Outside Decorations, Flower Boxes, Etc.

TILOS, ASPINWALL & SON, 604 BROADWAY, NEW YORK.

The only representatives in the United States for the above firms.

#### ASPHALT (FELT) ROOFING.

WARREN'S NEW PATENT FELT AND GRAVEL ROOFING,

Substitutes NATIVE ASPHALT for Coal-Tar materials for these roofs.

The very best and most durable material for flat roofs.

Also, Native Asphalt and Asphaltic Cement for Concrete Walks and Pavements.

Roofers and pavers supplied with the above, and with Warren's original Coal Tar Roofing and Paving Materials.

Send for circulars and samples.

WARREN CHEMICAL AND MANUFACTURING CO., 121 STATE STREET, BOSTON.

#### THE MITCHELL GRANITE WORKS,

QUINCY, MASS.

Has abundant facilities for furnishing the very best work, and all the most celebrated Granites of the New England States, for

MONUMENTAL, CEMETERY, AND BUILDING PURPOSES.

WORK PROMPTLY DONE, AND AT REASONABLE RATES.

Polishing a specialty. Orders solicited.

Address G. H. MITCHELL, Agent.

#### TILES FROM ALL PARTS OF THE WORLD,

FOR BANKS, PUBLIC BUILDINGS, AND PRIVATE HOUSES

References given to Tile Work throughout the United States and British Provinces.

AGENT FOR THE AMERICAN ROOFING TILE

Contracts Solicited.

C. A. WELLINGTON, Household Art Rooms,

No. 171 TREMONT STREET, BOSTON.

#### E. HOWARD & CO.

MANUFACTURERS OF CLOCKS AND WATCHES

CLOCKS FOR PUBLIC BUILDINGS.

114 Tremont Street, Boston, and 692 Broadway, New York

#### GOLD'S WROUGHT IRON HEATERS.

THE "HEALTH" AND "TUBULAR"

Manufactured by the

GOLD'S HEATER MANUFACTURING CO.

114 LEONARD ST., NEW YORK.

Send for Pamphlet.

E. E. GOLD, Pres't WYLLIS H. WARNER, Treas.

### BUILDERS' SUPPLIES.

#### THE FIRE-PROOF BUILDING CO. OF NEW YORK.

Hollow Blocks of any pattern, unting strength, and resistance to fire and water. The Hydraulic Lime of Teil (France), one of the strongest cements known, is largely used in this manufacture. The blocks do not conduct heat, cold, or sound, and weigh sixty per cent less than brick.

Fire-proof partitions, floor arches between iron beams, ceilings under wooden or iron beams, in the following buildings:—

Western Union Telegraph, Orient & Queens Insurance, Del. and Hudson Canal Co., Museum of Natural History, Equitable, Staats-Zeitung, Hudson R. R. Freight Depot, Woburn Savings Bank, Cluny & Young's Hotels, Boston, Wind-or Westm'n's Hotel, New York Hospital, Drexel, Columbia College, Tribune, West Point Military Hospital, Baltimore Safe Deposit Co., Lenox Library, Bennett, Peabody Museum, New Westmoreland Flats, Haven, Peabody Institute, Baltimore, Insurance on Wooden Mansards reduced ninety cents per \$100. Sidewalks laid at Lenox Library, Tribune, etc. Hollow Bricks of all kinds. Our Fire-Proof work is the only one approved by the New York Board of Fire Underwriters, and the Superintendent of Buildings, after several public tests. LEONARD F. BECKWITH, President, Office, Room 54 Coal and Iron Exchange, New York.

#### MINTON'S TILES.

PLAIN AND ENCAUSTIC

FOR PUBLIC BUILDINGS AND DWELLINGS,

As laid by us in

THE CAPITOL AT WASHINGTON,

And in numerous Churches, Banks, and Dwellings in every part of the Country.

Glazed and Enamelled Tiles for Mantels, Hearths, Wainscoting, &c., and for Exterior Decoration.

MILLER & COATES,

279 PEARL STREET, NEW YORK.

#### BARTLETT, ROBBINS & CO.

HEATING AND VENTILATING OF PUBLIC AND PRIVATE BUILDINGS

A SPECIALTY

PLANS AND SPECIFICATIONS FURNISHED.

FOUNDERS, AND MANUFACTURERS OF GAS WORKS,

ETC., ETC.

24 LIGHT STREET, BALTIMORE.

#### ELEVATORS.—COOKE & BEGGS.

No. 4 COURTLAND ST., NEW YORK.

Works at Paterson, N.J.

PATENT SAFETY STEAM ELEVATORS

for Public and Bank Buildings, Hotels, Private Dwellings, etc.

SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP GUARANTEED.

Send for Circular.

#### THE NEW ENGLAND GRANITE WORKS,

HARTFORD, CONN., and 1321 BROADWAY, N.Y.

Quarries at Westbury, R.I.

MONUMENTAL AND BUILDING WORK

of every description, all the varieties of AMERICAN AND FOREIGN GRANITE.

UNRIVALLED FACILITIES OFFERED TO THE TRADE.

J. G. BATTERSON, Pres't. H. R. BATTERSON, Sec'y.

DIRECTORS: J. G. BATTERSON, C. B. CANFIELD, H. A. BATTERSON,

G. T. BATTERSON,

CARL CORNARDS, Sculptor.

#### WHITTIER MACHINE CO.

Manufacturers of Steam and Hydraulic

ELEVATORS,

STEAM ENGINES, BOILERS, AND MACHINERY.

No. 1176 Tremont Street, Boston.

Office in the New England Mutual Life Insurance Co's

Building, Post Office Square,

and 120 Broadway, New York

CHARLES WHITTIER, Pres't. A. C. WHITTIER, Treas.

#### ART PAINTED TILES

FOR MANTELS, CABINETS, ETC.

SHARPLESS & WATTS,

225 MARKET STREET, PHILADELPHIA,

Agents for

MINTON'S TILES,

AND TERRELLATED PAVEMENTS.

HAWTHORNE & TUCKER, PLUMBERS, 16 PROVINCE STREET, BOSTON. Estimates for Plumbing made, and work done in any part of the United States or Provinces.

### BUILDERS' SUPPLIES.

#### NICHOLL & MILLER,

OHIO BUILDING STONE.

GRIND AND SCYTHE STONE.

From our FLORENCE and AMHERST QUARRIES.

Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS

111 Broadway, NEW YORK, and AMHERST, O.

#### MITCHELL, VANCE, & CO.,

Designers and Manufacturers of

GAS FIXTURES,

ORNAMENTAL METAL WORK, CLOCKS AND BROMES

ARCHITECTS' ORDERS SOLICITED.

Special designs submitted on application.

WAREHOUSES, 836 AND 838 BROADWAY, NEW YORK.

MANUFACTORY, 24th AND 25th Sts., AND 10th AVENUE, N. Y.

#### FISHER & BIRD,

Workers in all kinds of Foreign and Domestic

MARBLE.

97 to 103 EAST HOUSTON ST., NEW YORK.

Established 1830.

Among our notable decorations are: The Illinois New State House; Palace Hotel, San Francisco; Baldwin's Hotel, San Francisco; Insurance Building, 10th and Chestnut Streets, Philadelphia; Mutual Life Insurance Building, Boston; Orient Mutual Insurance Building, New York; Union College, Schenectady; and numerous Churches, Private Residences, etc., etc., throughout the country. We solicit the opportunity to estimate upon all classes of work, viz., Tiling, Wainscoting, Staircases, Mantels, etc. Cemetery work and marble work of every description.

WILSON & HUGHES STONE CO.

Are ready to estimate on contracts of any size for furnishing their celebrated Amherst, Ohio,

BUFF AND LIGHT DRAB SANDSTONE,

IN BLOCKS, OR CUT AND SET.

We are prepared to fill promptly all orders for Amherst and Independence grindstones.

OFFICE, 170 SUPERIOR ST., CLEVELAND, OHIO.

SPANISH FLOOR TILES. "NOLLA MOSAICS." Floor Tiles, beautiful in color and design, for Dwellings, Churches, and Public Buildings.

SPANISH WALL TILES. White, Glazed, Valencia, Tiles for Walls and for decorative painting.

PRINTED FIGURED TILES of Spanish designs, for Wainscoting, Mantels, Jardines, etc.

Floors of "Nolla Mosaics" can be seen at the "Rockingham," corner of Broadway and 66th Street. Imported and for sale by JOHN CLADWICK, Sole Ag't for U. S., 49 Broadway, N. Y.

C. E. PARKER, Agent, 14 Exchange Place, Boston.

#### TUFTS' ELEVATOR WORKS,

MANUFACTURERS OF "TUFTS' PATENT" COMBINATION ROPE ELEVATOR.

TO BE OPERATED EITHER BY STEAM OR WATER.

The only safe and reliable machine made for Passenger use in Public Buildings and Hotels, and for business purposes in Warehouses, Stores, &c.

37 FOUNDRY STREET, SOUTH BOSTON.

OFFICE, 243 Broadway, New York.

OTIS TUFTS, L. A. HIGLOW,

President. Treas'r and Gen'l Manager.

#### STEAM WARMING APPARATUS.

HIGH AND LOW PRESSURE.

HOUSE WARMING A SPECIALTY.

Pamphlet with more than 1,000 references sent on application.

WYLLIS H. WARNER,

114 LEONARD STREET, NEW YORK,

and 33 West Railroad Street, Syracuse.

#### OHIO VALLEY PRESS BRICK CO.

Challenge the world for fine stock Brick; also manufacturers of all kinds of Bricks, octagon and square. Office 63

3d St., Yard Preston and Knapp Sts.

LOUISVILLE, KY.

#### GAS FIXTURES

OF EVERY DESCRIPTION.

SPECIAL RATES TO BUILDERS.

R. HOLLINGS & CO., 547 Washington St., BOSTON

**BUILDERS' SUPPLIES.****HUGH SISSON & SON,**Importers, Dealers, and Manufacturers of  
**MARBLE.**INTERIOR MARBLE WORK AND MONUMENTAL  
WORK A SPECIALTY.Salesrooms, No. 140 W. Baltimore St.: Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.**ELECTRIC BELL, AND ANNUNCIATORS,  
SPEAKING TUBES,  
AND BURGLAR ALARMS,  
For Public and Private Buildings.**

THE BEST IN USE.

**S. W. FULLER,**

63 Devonshire Street, Boston.

**TOWER CLOCKS.**FOR CHURCHES,  
PUBLIC AND PRIVATE BUILDINGS,  
**G. M. STEVENS & CO., MANUFACTURERS,**

50 SUDBURY ST., BOSTON, MASS.

**JOHN MACK, Plain and Ornamental Plasterer.**

41 Cambridge Street, Boston.

**J. H. BURT & CO., Carpenters and Builders,**

Blue Hill Avenue, Mattapan (Ward 24), Boston.

**THE EUREKA VENTILATION CO.**

OFFICE AND MANUFACTORY,

74 CHARLESTOWN STREET,  
BOSTON, MASS.**PRESSED BRICK,  
STOCK AND COMMON**

MANUFACTURED BY

**FLETCHER & THOMAS,**

Indianapolis, Ind

All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY

**GILLIS & GEOGHEGAN,**

Nos. 116 &amp; 118 Wooster St., New York.

See our work at the Cathedral, 50th St. and 5th Av.:  
Drexel Building, cor Wall and Broad; Bennett Building,  
Fulton and Nassau, etc.Architects and owners promptly furnished with speci-  
fications and estimates.**BUILDING MARBLE.**Branch yard of the RUTLAND MARBLE CO., 198 Cause-  
way Street, Boston. JOHN D. ALLAN, Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Rut-  
land and Continental Marble, furnished at low prices.**ARCHITECTS.****P. B. WIGHT,**

CONSULTING ARCHITECT,

73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.

Consultations on matters pertaining to Fire-Proof Con-  
struction, Foundations, Drainage, Sanitary Work, Ventila-  
tion, Machinery, Valuations, Interior Decorations, and  
Furniture. Manager of the Meaker Hatchway Protectors.**RICHARD M. HUNT,**

ARCHITECT,

COAL AND IRON EXCHANGE,  
NEW YORK CITY.**W. W. GOODRICH, C. E., ARCHITECT  
AND SANITARY ENGINEER.**

KINGSTON, N. Y.

Plans, Specifications, and Estimates furnished for all classes  
of Public or Private Buildings, Monumental Design, etc.**CHARLES E. ILLSLEY, A.M., C.E.,  
ARCHITECT,**Room 17, Life Insurance Building,  
ST. LOUIS, MO.Special attention to Churches, Schools, and other  
public buildings.**WALTER DICKSON, ARCHITECT, PERRY BUILDING,  
Albany, N. Y.****GEO. E. WARING, JR.,**

CONSULTING ENGINEER,

FOR SANITARY AND AGRICULTURAL WORKS,  
NEWPORT, R.I.**SANITARY ENGINEERING.****EDWARD S. PHILBRICK, C. E.,**

12 WEST ST., BOSTON, MASS.

Offers advice and superintendence in

CONSTRUCTION OF WORKS,

IN PLUMBING, DRAINAGE, AND VENTILATION,  
And has no interest in any patent right.**FRANK HILL SMITH,**

174 TREMONT STREET,

BOSTON ..... MASS.

**BUILDERS' SUPPLIES.****E. VAN NOORDEN,**887 HARRISON AVENUE . . . . . BOSTON,  
SHEET METAL CORNICES, HAYES'S PAT-  
ENT VENTILATING SKY-LIGHTS,  
WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.**MANTELS AND GRATES.****RANKIN'S PATENT** makes the Cleanest, Cheap-  
est, and Hottest Fire. Avoid infringements, and send for  
Circular to**C. S. RANKIN & CO.,  
ARCHITECTURAL IRON WORKS,**  
Manufacturers of all kinds of Iron Work for  
BUILDINGS, JAILS, ETC.

187 W. PEARL ST., CINCINNATI, O.

**EXCELSIOR  
ROOF PAINT.**This paint has been thoroughly tested throughout the  
Eastern States, and has been found to be a perfect tin or  
metallic preserver. We warrant it neither to crack nor  
blister by **HEAT or COLD**, and to last**IN ANY CLIMATE TEN YEARS.**Those desiring to use this valuable preparation upon  
their buildings, can secure the same by addressing**C. M. WHEELER, J. M. ROOT,**

Toledo, Ohio.

**ARCHITECTURAL IRON AND JAIL WORKS.****M. CLEMENTS,**

MANUFACTURER OF

Iron Railing, Bank Vaults, and Jail Cells,  
Iron Stairs, Fire-proof Buildings, Wrought Iron Columns  
and Girders; Iron Arches, Plain and Corrugated;  
Fire-proof Shutters, Doors, etc.BAYMILLER STREET, near Sixth and C. H. & D. R. R.  
Depot, CINCINNATI, OHIO.**DECORATORS.****W. J. MCPHERSON,**

(Established A.D. 1845.)

**MURAL PAINTER,****DESIGNER,****Ecclesiastical Decorator,**

AND

**ART STAINED GLASS MANUFACTURER,**

440 TREMONT STREET,

BOSTON, MASS.

(Established 1845.)

**L. HABERSTROH & SON,  
FRESCO PAINTERS,  
and INTERIOR DECORATORS,**

No. 13 SCHOOL STREET, BOSTON.

**PEIRCE & LORING.**

ARTISTIC DECORATION AND FURNITURE.

No. 5 PARK STREET, BOSTON.

H. H. D. PEIRCE.

E. F. LORING.

**PHILIP A. BUTLER,**

DECORATOR AND DESIGNER,

No. 17 FEMBERTON SQUARE,  
BOSTON.**COOK, REDDING & CO.**

149 CONGRESS ST., BOSTON,

**Ornamental, Stained, and Cut Glass,**

FOR

**Churches, Public Buildings, and  
Private Residences.****HENRY B. JONES & CO.**

IMPORTERS, JOBBERS, AND RETAILERS OF

PAPER HANGINGS.

612 WASHINGTON STREET, BOSTON.

**STAINED GLASS.**Thirty years' experience in Stained Glass enables the  
subscriber to produce Modern and Medieval styles of work  
equal to any European examples, for **Churches, Pri-  
vate Residences, Halls, etc.**The value of the work is attained by a careful selection  
of colors in Cathedral and French Glass of his own impor-  
tation.Designs in accord with architects' plans furnished at  
short notice. Reference of work at office.**SAMUEL WEST, 115 Eliot St., Boston.****DECORATORS.****JOHN LAFARGE,****MURAL DECORATION,  
51 W. Tenth St., New York, and Newport, R. I.****SOCIETY OF DECORATIVE ART.**4 East 20th Street,  
NEW YORK.Architects' designs for panels, tiles and plaques for inser-  
tion in Cabinet Work, and other decorative uses, and for  
Art Steel-work applied to curtains, hangings, portieres,  
screens, table-covers, etc., carefully executed. Original  
designs for any of the above, subject to approval, will be  
gladly received, and paid for by the Society when used.Orders are earnestly solicited.  
The Society has arranged with Mr. RUSSELL STURGIS,  
Architect, for the Exhibition and Sale of his well-known  
Wall Papers. Some of these are faithful reproductions of  
Japanese decorative papers; some are taken from Oriental  
and other stuffs; some are of original design. New pat-  
terns will be added from time to time.**Fresco Decoration.****EMMART & QUARTLEY,**

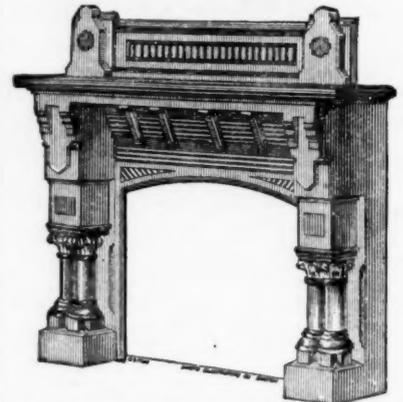
Designers, Decorators, and Painters,

32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made  
and executed in harmony with the plans of Architects.**SLATE MANTELS**Of the latest and most beautiful designs, and all other Slate  
work on hand or made to order. No. 1210 Ridge Avenue.  
JOSEPH S. MILLER, successor to Wilson & Miller, Philadel-  
phia, Pa. Send for Illustrated Price-List.**Donald MacDonald,****GLASS STAINER AND DECORATOR,**

No. 6 Hayward Place,

BOSTON.

**MANTELS.**IN WALNUT, OAK, ASH, OR OTHER WOODS.  
On hand, made to order, shipped to and set up

IN ANY PART OF THE COUNTRY.

**CALDWELL MANUFACTURING CO.,**

17 HARVARD PLACE,

OPPOSITE OLD SOUTH CHURCH,

BOSTON, MASS.

Send for Circular.

**MOSELEY IRON BRIDGE  
AND ROOF CO.  
CORRUATED IRON**  
Buildings, Roofs, Shutters, Doors  
Iron Sashes, Skylights, etc.  
5 Dey Street, New York.

LABOR MARKET.  
[REVISED MONTHLY.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa. (Can.)	Philadelphia.	San Francisco	St. Louis.
1. BRICKLAYER.....	1.75 @ 2.75	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.50	1.50 @ 2.00	2.00 @ 2.50	.....	2.25 @ 2.50
2. Brick Mason (Fronts).....	3.00 @ 4.00	2.00 @ 3.00	1.25 @ 1.75	.....	3.50 @ 4.50	3.00	1.75 @ 2.25	2.50 @ 3.00	.....	3.00
3. CARPENTER.....	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.25 @ 2.50	1.25 @ 2.00	1.75 @ 2.25	.....	1.50 @ 2.00
4. Cabinet Maker.....	2.50 @ 3.25	.....	.....	.....	.....	.....	.....	.....	.....	.....
5. Finisher.....	2.00 @ 2.50	.....	1.75 @ 2.00	.....	1.50 @ 2.00	.....	1.25 @ 1.75	.....	.....	.....
6. FOUNDRYMAN.....	.....	.....	1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	.....	1.00 @ 1.50	.....	.....	2.25 @ 2.50
7. Blacksmith.....	1.50 @ 3.00	1.50 @ 2.75	.....	1.50 @ 2.50	.....	.....	1.25 @ 2.00	.....	.....	1.50 @ 2.00
8. Whitesmith.....	.....	.....	.....	1.50 @ 2.50	.....	.....	1.25 @ 1.75	.....	.....	2.25 @ 2.50
9. Galvanized Iron Worker.....	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 2.50	1.50 @ 2.00	2.25	1.50 @ 2.00	.....	.....	1.50 @ 2.00
10. GAS FITTER.....	2.00 @ 2.50	2.00 @ 3.00	.....	2.50 @ 3.00	1.75 @ 2.25	.....	1.75 @ 2.00	.....	.....	2.00 @ 3.00
11. LABORER.....	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.25 @ 1.50	.80 @ 1.00	1.20 @ 1.50	.....	1.00 @ 2.00
12. PAINTER.....	1.50 @ 2.30	2.25 @ 3.00	2.00 @ 2.50	1.50 @ 2.25	1.75 @ 2.25	2.50	1.00 @ 1.75	2.00 @ 2.50	.....	2.00 @ 2.50
13. Glazier.....	2.50 @ 3.00	3.00 @ 4.00	3.00 @ 4.50	3.50 @ 4.00	No graining.	.....	1.50 @ 1.75	2.00 @ 2.50	.....	.....
14. Grainer.....	.....	.....	.....	1.50 pr. roll.	.....	.....	1.75 @ 2.50	.....	.....	.....
15. Paper-Hanger.....	.75 @ 2.50	.....	.....	.....	.....	.....	1.50 @ 2.00	.....	.....	.....
16. PLASTERER.....	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	1.50 @ 2.50	1.50 @ 2.00	2.50	1.25 @ 1.75	1.75 @ 2.00	.....	2.25 @ 2.75
17. Stucco-Worker.....	2.00 @ 2.50	2.00 @ 2.50	.....	1.50 @ 2.50	.....	2.50	1.50 @ 2.25	.....	.....	2.25 @ 2.75
18. PLUMBER.....	2.25 @ 3.00	2.00 @ 3.00	.....	2.50 @ 3.50	2.00 @ 2.50	.....	1.50 @ 2.50	.....	.....	2.50 @ 3.50
19. QUARRYMAN.....	.....	3.00 @ 3.50	.....	1.25 @ 1.50	1.25 @ 1.50	1.75 @ 2.00	1.00 @ 1.50	1.50 @ 1.75	.....	1.50 @ 1.75
20. Stone Mason.....	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	1.50 @ 2.00	2.00 @ 2.50	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25	.....	2.00 @ 2.50
21. Carver.....	3.00	3.00	2.50 @ 3.00	1.25 @ 1.75	8.00	.....	3.50 @ 6.00	2.75 @ 3.25	.....	2.00 @ 2.50
22. Painters and Washers.....	.....	2.50 @ 3.00	.....	1.50 @ 1.75	.....	.....	1.00 @ 1.25	2.25 @ 2.50	.....	.....
23. Rubber.....	1.50 @ 2.00	1.75	1.00 @ 1.25	1.25	1.00 @ 1.25	.....	.80 @ 1.00	1.50 @ 1.75	.....	.....
24. Stone-Cutter.....	2.25 @ 3.00	2.00 @ 3.00	1.50 @ 2.00	2.00 @ 2.50	2.50	.....	2.00 @ 2.50	2.25 @ 2.75	.....	.....
25. Stone-Setter.....	3.00	2.50 @ 3.00	2.25 @ 2.50	2.50 @ 3.00	2.75	.....	1.50 @ 2.00	2.25 @ 2.75	.....	.....
26. ROOFER (Tin).....	2.00 @ 2.35	2.50 @ 3.00	.....	2.00 @ 2.50	1.50 @ 2.00	.....	1.50 @ 1.75	1.75 @ 2.25	.....	2.00 @ 2.50
27. Slatro.....	2.50 @ 3.00	2.00 @ 3.00	2.00 @ 2.25	3.50 @ 4.00	.....	.....	1.25 @ 2.00	1.75 @ 2.25	.....	.....
28. STAIR BUILDER.....	2.25 @ 3.00	2.00 @ 2.50	.....	.....	1.50 @ 2.00	.....	1.75 @ 2.25	.....	.....	1.50 @ 2.50
29. STEAM FITTER.....	.....	2.50 @ 3.50	.....	2.00 @ 2.50	2.50 @ 3.00	.....	1.50 @ 2.00	.....	.....	2.00 @ 3.00



ARCHITECTS AND BUILDERS

WILL ADD MUCH TO THE BEAUTY OF THEIR BUILDINGS BY USING

GARDNER'S PERFORATED THREE-PLY VENEER SEATING,

Which is Ornamental, Durable, and Cleanly.

We refer to the following new and elegant buildings fitted up with our goods:—

- Morris Plains, N. J., Insane Asylum.
- New York Hospital.
- American Museum of Natural History, New York.
- Institution for Feeble-minded Children, Lincoln, Ill.
- Insane Asylum, Oshkosh, Wis.
- Opera Chairs in new Music Halls, Lewiston, Me., Providence, R. I., and Brooklyn, N. Y.
- Seats in Depots of the Pennsylvania Railroad, at Philadelphia, Pittsburgh, etc.

Please send for Illustrated Catalogue.

GARDNER & COMPANY,

Patentees and Manufacturers,

376 PEARL STREET.....NEW YORK.

SUBSCRIBERS TO THE AMERICAN ARCHITECT AND BUILDING NEWS

Who have not yet paid their subscriptions for 1878 are reminded that the special offer recently made by the Publishers, to accept \$6.00 for subscriptions for the current year, extends only to July 1, and that on and after that date the price will be \$7.50. Those who wish to avail themselves of the reduction offered should therefore remit at once to HOUGHTON, OSGOOD & CO., Winthrop Square, Boston.

TO ADVERTISERS.

The following letter from an architect of Des Moines, Iowa, explains itself:—

"The American Architect is especially invaluable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."



A BUILDER,

40 years of age, having had 8 years' experience at contracting in America, and trained as a general foreman in all branches of the building trade in England, can prepare drawings, estimate, and wishing to get out of the contracting business, wishes a situation as manager or superintendent; would be willing to go South for the winter. Address "T. W. B.," American Architect and Building News, Boston.

A Word to Manufacturing Firms.

Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms. They recommend, on their own account, and for the sake of the public, that such firms advertise in this paper.



NONESUCH  
Self-Locking  
AND  
Burglar-Proof  
Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT,  
Patented July 10th, 1877. 733 Broadway, N. Y.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

GALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States.

Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO. 72 & 74 West Monroe St. Chicago, Ill.

"AUSTIN'S" PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT. MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS. Regular Sizes, 2, 3, 4, 5 & 6 Inch. SPECIAL SIZES MANUFACTURED TO ORDER. AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS. 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA. WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH.

PRINCIPAL AGENTS

- M. Halliday . . . . . New York City.
- Hicks & Badger . . . . . Boston, Mass.
- James Berry . . . . . Buffalo, N. Y.
- George W. Fitch & Co. . . . . Chicago, Ill.
- Wasson & Martin . . . . . Albany, N. Y.
- McLeod, Reardon & Co. . . . . Troy, N. Y.
- W. H. Scott . . . . . Portland, Me.
- Kittredge Corneice Co. . . . . Salem, O.
- J. W. Jordan . . . . . Worcester, Mass.
- H. G. Carpenter & Co. . . . . Wilkesbarre, Penn.
- T. W. Irwin . . . . . Allentown City, Penn.
- Schlew & Co. . . . . Cincinnati, Ohio.

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the art-workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Mediæval Foliage.

**EXAMPLES OF ENGLISH MEDIÆVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Helio-type Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. PANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist, Boston.*

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courier.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVES. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIÉNARD. Reproduced in facsimile by the Helio-type Process. Folio, boards, (size of page 11½ X 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior—clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOthic FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

## Viollet-le-Duc's Works.

The works of the learned and distinguished French Architect, EUGENE VIOUET-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

**THE STORY OF A HOUSE.** Translated by GEORGE M. TOWLE. Illustrated by the author. 1 vol., 8vo, bevelled boards, red edges, \$5.00.

Has the rare merit of being thoroughly business-like, and, at the same time, not too technical. — *London Standard.*

**HABITATIONS OF MAN IN ALL AGES.** Translated by BENJAMIN BUCKNALL, Architect. Fully illustrated 1 vol., 8vo, \$5.00.

Nowhere has M. Viollet-le-Duc concentrated more varied knowledge, or illumined it more successfully, by direct human interest and characteristic dialogue, than in the present work, which can be recommended to the general reader. — *British Quarterly Review.*

**DISCOURSES ON ARCHITECTURE.** Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

**ANNALS OF A FORTRESS.** Translated by BENJAMIN BUCKNALL, Architect. Eighty-five illustrations, several in color. 1 vol., 8vo, \$5.00.

He has made of his history of the art of fortification at once a valuable handbook and a very charming romance. A work that combines amusement with instruction in a very rare degree. — *Pall Mall Gazette.*

Those who read the book through carefully by the help of the beautiful illustrations with which it is lavishly embellished, will obtain a better knowledge of the art of fortification, from the earliest ages up to recent times, than could be found in any other way short of the research and study which the author has himself given to the matter. M. Viollet-le-Duc is master of the subject, and imparts his learning in a thoroughly fascinating manner. — *Saturday Review (London).*

## A Valuable Book for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

## The New York Sketch-Book of Architecture.

3 vols., 4to, \$6.50 each. We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

## The American Architect and Building News.

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\*.\* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

[Reported for the American Architect and Building News.]

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, FRONTS, CEMENT, and FIRE BRICK. Includes items like Pale, Jersey, Long Island, and various sizes of bricks.

DOORS.

Table listing prices for DOORS, including raised panels and moulded doors in various sizes.

Table listing prices for BLINDS—Outside and Inside, including various materials and finishes.

Table listing prices for WINDOW FRAMES, HAIR, LATH, and LIME.

Table listing prices for LIME, including state common and rockland grades.

Table listing prices for LUMBER, including pine, spruce, and other types.

Table listing prices for PAINTS AND OILS, including various colors and brands.

Table listing prices for PAINTS AND OILS, including white, zinc, and lead.

Table listing prices for PAINTS AND OILS, including vermilion and other pigments.

Table listing prices for PAINTS AND OILS, including vermilion and other pigments.

JARVIS PATENT FURNACE, for setting STEAM BOILERS. Will save 25 per cent in fuel and make an increase of 25 per cent in Steam Power.

STONE. Cargo rates, delivered at New York. Amherst freestone, Berlin freestone, Brown stone, etc.

SLATE. Delivered in New York. Purple roofing slate, Green slate, Red slate, etc.

TIN PLATES—Duty, 1-10c. L. C. charcoal, I. C. charcoal, etc.

ZINC—Duty, sheet, 7c. Sheet (gold) foreign, Lead, Pipe, etc.

BOSTON.

Prices to Contractors and Builders.

Table listing prices for FIRE BRICK, BUILDING BRICKS, BUILDING STONE, and LUMBER.

Table listing prices for PAINTS AND OILS, including white, zinc, and lead.

Table listing prices for PAINTS AND OILS, including vermilion and other pigments.

Table listing prices for PAINTS AND OILS, including vermilion and other pigments.

Table listing prices for PAINTS AND OILS, including vermilion and other pigments.

Table listing prices for PAINTS AND OILS, including vermilion and other pigments.

Table listing prices for PAINTS AND OILS, including vermilion and other pigments.

Table listing prices for PAINTS AND OILS, including vermilion and other pigments.

Table listing prices for PAINTS AND OILS, including vermilion and other pigments.

MORTISE LOCKS—Brass face and bolt—do. for spring. Factory make, plain front, etc.

DOOR KNOBS. Solid brass, silver plated, nickel plated, etc.

SASH FASTS. Plain brass, self-locking, nickel plated, etc.

SCREWS. Round head, nickel plated, for window beads, etc.

STORE DOOR HANDLES—With mortise latch, lacquered brass, etc.

IRON. Wrt-iron I Beams, Wrt-iron I Beams, etc.

CHICAGO. Prices to Contractors and Builders. BRICK, LIME, AND CEMENT.

Table listing prices for BRICK, LIME, AND CEMENT, including various grades and types.

Table listing prices for LUMBER (MICHIGAN PINE), including 1st and 2d clear, etc.

Table listing prices for LUMBER (MICHIGAN PINE), including 1st and 2d clear, etc.

Table listing prices for LUMBER (MICHIGAN PINE), including 1st and 2d clear, etc.

Table listing prices for LUMBER (MICHIGAN PINE), including 1st and 2d clear, etc.

Table listing prices for LUMBER (MICHIGAN PINE), including 1st and 2d clear, etc.

Table listing prices for LUMBER (MICHIGAN PINE), including 1st and 2d clear, etc.

Table listing prices for LUMBER (MICHIGAN PINE), including 1st and 2d clear, etc.

Table listing prices for LUMBER (MICHIGAN PINE), including 1st and 2d clear, etc.

Table listing prices for LUMBER (MICHIGAN PINE), including 1st and 2d clear, etc.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

Table listing prices for various roofing materials, including charcoal and galvanized iron.

CREOSOTED WOOD. PREPARED AT THE Hayford Patent Creosote Wood Preserving Works. EDWARD R. ANDREWS, Proprietor.

THE ADDISON GRANITE COMPANY. ADDISON, MAINE. Furnishes the Celebrated Black Granite in any quantity. This Granite takes precedence over all other for fineness of grain and polish, and is superior to any other Granite in the world for Ornamental and Monumental purposes.

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY.



The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, ETC., ETC.

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.  
ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

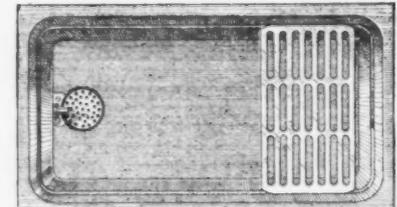


**METALLIC SHINGLES.**

We call the attention of all parties interested in Roofing, and the owners of large buildings, to the above article. It is superior to Slate, cheaper, fire proof, about one fourth the weight, lays much closer therefore is Storm-proof, cannot crack, etc. Any carpenter can put them on. Send for description and Price List to

**IRON CLAD MANUFACTURING CO.**  
69 Greenpoint Ave., Brooklyn, E. D.  
P O Box 2528, N. Y. City

Architects and Builders will be quick to appreciate the many New and Practical Features possessed by



**THE MAGEE PATENT SINK,** which commend themselves at once to every household. The escape of noxious and poisonous sewer gases is prevented by the arrangement of the patent trap, it being immovable, while the strainer, being hinged on brass pins, can be raised for the purpose of cleaning the cesspool.

The sink is furnished with an improved galvanized shelf or rack for draining dishes, etc., after washing. It is of extra size, and being made with square corners, saves the carpenter much labor in setting. In smoothness of casting it fully sustains the long-established reputation of the Magee goods.

Particular attention is invited to the **Magee Standard Furnace**, portable and for setting in brick, guaranteed superior to any in the market for economy, durability, and heating capacity. Estimates furnished for heating all sizes of dwelling-houses and public buildings.

Also a full line of **Brick and Portable Ranges**. Circulars and prices of all the above goods furnished on application.

**MAGEE FURNACE CO.**  
32 to 38 Union St., Boston



**Brandeis' Seamless Paragon Trap.**  
Safest, Best, Cheapest, and Non-siphoning.

Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage.

**BRANDIS & WICKERT, 46 Fulton Street, Brooklyn, N. Y.**

**TESSELATED WOOD FLOORS**  
DESIGNS AND ESTIMATES FREE  
**NATIONAL WOOD MFG CO**  
850 BROADWAY NEAR 23<sup>RD</sup> ST.  
NEW YORK.

**DORCHESTER UNION FREESTONE CO.**  
NEW BRUNSWICK YELLOW FREESTONE.  
The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order.  
34 Pine St., New York. - G. P. SHERWOOD.

ESTABLISHED, 1836.

**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Compositoin Roof known. Also inventors and owners of the following patents:—

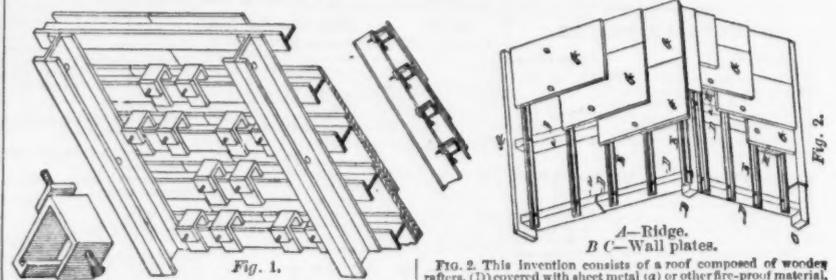
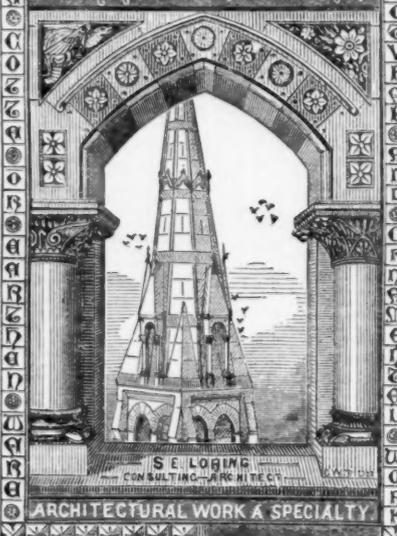


Fig. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the purlins on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

Fig. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or other fire-proof material, and iron purlins (c) or beams, with the slates (G) or other covering secured thereto by clamps, (Fig. 1.) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contact with the slates or a covering of the roof, by which construction the roof boards are displaced with, and a roof is produced thoroughly fire-proof at every point, avoiding condensation, contraction and expansion of roofs formed wholly of iron.

**MANUFACTURERS**  
**CHICAGO**  
**TERRA COTTA WORKS**



**ARCHITECTURAL WORK A SPECIALTY**

**Murtangh's Improved Patent Dumb Waiter.**  
ALSO  
**HOISTING MACHINES OF ALL KINDS.**  
**SAFETY ELEVATORS FOR INVALIDS**  
a specialty.  
**PERFECT SAFETY GUARANTEED.**

On the completion of each SAFETY ELEVATOR we load the platform, and cut the ROPE by which it is suspended. As it never fails to catch, we give a practical demonstration of the certainty of our SAFETY APPARATUS acting in case the rope should break at some future time.

**ISAAC RICHARDS, 2217 CHESTNUT ST., PHILADELPHIA.**

**D. M. MEEKER & SON'S**  
**Malleable Iron Hollow Munten Window Sash.**  
For Innane Hospitals, Fire Proof Buildings, &c.



End view of Munten for Glazed Sash.  
End view of Munten for Unglazed Sash.  
Hollow Munten.

The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

**D. M. MEEKER & SON,**  
Newark, N.J.  
Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

**CRANE BREED & COMPANY**  
**SAFETY BOILERS**  
**STEAM AND HOT WATER.**  
MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RADIATORS, PIPE COILS, REGISTERS, FITTINGS, STEAM PUMPS.

**PATENT MINERAL WOOL.**  
ENTIRELY FIRE-PROOF AND UNDECAYING.  
**THE BEST INSULATOR OF HEAT, COLD, AND SOUND.**  
For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc.  
**ALEXANDER D. ELBERS,**  
P. O. Box 4461. 26 1/2 Broadway, New York.

**GAS**

**SPRINGFIELD GAS MACHINE.**  
Springfield, Mass.; 75 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

**A. L. FAUCHÈRE & CO.**  
OFFICE AND WAREHOUSES  
1319 and 1321 Broadway, New York,  
Importers, Manufacturers, and Dealers in all kinds of foreign and domestic

**MARBLE FOR INTERIOR WORK.**  
Estimates furnished on application.

**The Draft of the Chimney increased.**  
Smoking Chimneys Prevented.  
Particularly adapted to Chimneys in exposed positions.  
Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.  
**JOS. W. TAYLOR,**  
70 Grand St., Brooklyn N. Y.

**HOISTING MACHINES**  
EXCLUSIVELY.  
HOTEL STEAM ELEVATORS,  
HYDRAULIC ELEVATORS,  
HAND POWER HOISTS,  
DUMB WAITERS.

**H. J. REEDY, Manufacturer,**  
128 EAST EIGHTH ST., - Cincinnati, O.

**J. & R. LAMB, 59 CARMINE ST., N. Y.**  
**CHURCH FURNISHERS**  
Practical Workers in Sterling Silver, Brass, and Bronze, Carved Wood, Decorations, etc.  
Illustrated Catalogues.  
Furniture, etc.; Metalwork, etc.; Decoration, etc.

**DAVIS PATENT AUTOMATIC AIR VALVE.**  
The only reliable Self-Acting Valve made. Adapted to Steam Coils, Radiators, Pipes, Condensers, and beautiful in design, and finished in brass or nickel. Address  
**G. M. DAVIS & CO., Chicago, Ill.**

**MAKE** **GAS GENERATORS,**  
FOR LIGHTING  
Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.

Send for **your own** CIRCULAR

**WALWORTH MANUF. CO.**  
No. 63 Kilby Street.  
BOSTON, MASS. **GAS**



**WORK OF THE MONTH.**—During the past month the Building Inspectors issued 336 permits, as follows: Dwelling-houses, two-story, 65; do., three-story, 82; do., four-story, 1; stores and dwellings, two-story, 7; do., three-story, 11; stores, three-story, 1; store-houses, 2; stables, 8; shops, 3; factories, 6; market-house, 1; depot, 1; offices, 4; slaughter-houses, 2; lumber-house, 1; bank building. The total number of permits issued from January 1st up to date for the erection and improvement of new structures was 2,393, a decrease of 787 from the number issued during the corresponding period of 1877, when it was 3,080. Of the 2,229 permits thus far issued this year, 1,697 were for new buildings, 165 for back buildings, and 487 for alterations and additions.

#### St. Louis.

**BUILDING PERMITS.**—Eighteen permits have been issued for the week ending July 5, 1878. Five of these were for unimportant frame structures. The rest are for brick buildings, all small, however. Those worth over \$2,500 are as follows:—

Owners.	Use.	Stories.	Rooms.	Cost.
John Nicolscho.	Dwelling.	2	9	\$2,800
T. Gallagher.	Dwelling.	2	8	3,100
E. G. Tall.	Dwelling.	2	7	3,200

**HOTEL.**—A meeting of property-holders in the vicinity of the Southern Hotel, burned last year, was held a few days ago, and a subscription was started to raise a few dollars to secure the rebuilding of the hotel without delay. Its destruction has proved a serious detriment to the interest of landlords and traders in that section of the city, but its owner, Col. Robert Campbell, seems indisposed to rebuild entirely at his own expense.

**THEATRE.**—Subscriptions are being raised to build a theatre in the neighborhood of Eleventh Street and Washington Avenue. Two hundred and fifty thousand dollars is said to be the limit of cost. Mr. O. O. Hall has the enterprise in hand.

#### Washington, D. C.

**BUILDING PERMITS.**—Since our last report Building Inspector Entwistle has issued the following permit: Adolf Cline, architect, to build a three-story brick building on Massachusetts Ave.; cost, \$10,000.

**THE WORK OF THE MONTH.**—The monthly report of the Inspector of Buildings shows sixty-three new buildings erected, seventy-three repaired, twelve awning permits, and fifty-two and a half feet of vaulting inspected during the past month. The amount realized was \$314.

**GOVERNMENT BUILDING.**—The new building of engraving and printing, and a construction of which Congress has appropriated \$300,000, will be located between the Smithsonian Institution and the Agricultural Department Building.

#### General Notes.

**ALBINO, ILL.**—The soldiers' monument was dedicated July 4th.

**ANTHONY, R. I.**—Mr. Winfield T. Lewis has just raised a new two-story dwelling on his lot near the school-house.

**ASBURY, N. J.**—The corner-stone of the House of the Good Shepherd was laid on July 9th. The building will be three stories in height, and will contain accommodations for fifty children and adults.

**AUBURN, O.**—Charles Bauer will soon commence the erection of a two-story brick business building on Second Street, and Maylin Brothers have contracted for another two-story brick business building, with iron front, to be built at once on their lot on Second Street, opposite the bank building.

**BARABOO, WIS.**—A new hotel is to be built shortly.

**CAPE HENRY, VA.**—Among the items appropriated by the Sundry Civil Act for extending and improving the light-house service are the following for Maryland and vicinity: For rebuilding light-house in Hooper's Straits, Md., \$20,000; rebuilding light-house at Cape Henry, Va., \$75,000; for light-house at Laurel Point, Albemarle Sound, \$25,000. The sum of \$20,000 is appropriated for beacon lights in North Landing, Currituck Sound, and North River, N. C., on the line of Atlantic inland navigation, and Edenton Harbor, Albemarle Sound.

**CLEVELAND, O.**—The plans of Mr. Samuel Lane for the new Orphans' Asylum have been accepted. It will be a four-story brick building 123 by 86 feet. The cost is limited to \$40,000.

**DEDHAM, MASS.**—A house is building for Mr. Frank C. Van Horn. The first story is of Dedham granite, the upper part of wood. Cost, \$12,000. Mr. F. Pope, of Boston, architect.

**DOLESTOWN, PENN.**—The new court-house will soon be completed.

**EATON, O.**—The corner-stone of the new Catholic church was laid June 23d.

**FALL RIVER, MASS.**—The contracts for the three new school-houses have been awarded to Daniel Cunningham.

**FOLSOM, CAL.**—On July 13th proposals will be received for finishing the Branch State Prison, at the office of the State Prison Directors at St. Quentin, Cal.

**GLoucester, MASS.**—The R. C. church is nearly completed. It is of Rockport granite. Cost, \$50,000. Mr. J. H. Beswick, of Boston, architect.

**NEWPORT, O.**—Building permits have been issued to F. M. Gosney, two-story frame dwell., cor. Brighton and Liberty sts.; cost, \$700.—C. Nichmann, two-story brick addition, Monmouth St.; cost, \$300.

**NICHOLASVILLE, KY.**—The new court-house is building from the designs of Mr. Thomas Boyd, of Pittsburgh, Penn.

**PITTSBURGH, PENN.**—The city property committee instructed the controller to advertise for bids for roofing the inner square of the market-house, and for repairing the front of the Lincoln engine-house.

**PROVIDENCE, R. I.**—The following notices of intention to build have been received at the City Engineer's office lately: George F. Wilson, on Arnold St.—Stillman White, on Bark St.—H. A. Boyce, on Baker St.—John

Meyers, on Sutton St.—Matthew Flynn, cor. of O'Connell and Camm sts.

**RALEIGH, N. C.**—The post-office is nearly finished and ready for furnishing.

**RICHMOND, VA.**—A row of three three-story tenement houses is being built on the corner of Fourth and Main streets. One of them is being built by Jarvis & Glinn, one by Powers & Crump, and one by John Enders, Esq.—Work is progressing rapidly on the new tobacco warehouse of Messrs. Hill, Skinker & Watkins, on Cary Street. When finished it will be among the largest buildings of its kind in the State.

**TOWNSONTOWN, MD.**—The contract for putting an addition to the High School Building was awarded to John C. Cross for \$2,667.

**TUCSON, ARIZ.**—The Presbyterians are building a handsome church.

**WALKUT HILLS, O.**—Thirty-two houses have been built in our neighborhood this summer.

**WHEATSVILLE, MASS.**—The plans for a new school-house, prepared by Messrs. Fuller & Delano, of Worcester, have been accepted. The building is to be of wood, two stories high, and is to cost about \$10,000.

**WILMINGTON, DEL.**—During the month of June, thirty-five permits were issued from the Engineering and Surveying Department for the erection of buildings. In the corresponding month last year nineteen permits were issued. Those for last month are as follows: George H. Leach, 1 house, cor. of Linden and Connell sts.—Thomas Mayne, 1 house, cor. Twelfth and West sts.—George M. Brinton, 2 houses, Wawaset St.—Sophia J. Quinn, 1 house, cor. Second and Parish sts.—John Kaiser, 1 house, Sixth St.—George H. Tindall, 10 houses, Poplar St.—G. W. & W. H. Pierson, 6 houses, Van Buren St.—Frederick Price, 1 house, cor. Seventh and Dupont sts.—Robert S. Smith, 1 house, King St.—Frederick Hoch, 1 house, cor. Adams and Linden sts.—Francis Duncan, 1 house, Wright St.—George M. Brinton, 1 house, West St.—Hugh Lynch, 1 house, cor. Eleventh and Walnut sts.—Edward W. Jackson, 7 houses, Eighth and Monroe sts.

### INDEX OF CURRENT WORK,

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

#### General.

**CAMBRIDGE, ILL.**—Court House for Henderson County. Cost \$65,000.

**CAMBRIDGE, MASS.**—Gymnasium for Harvard College. Messrs. Peabody & Stearns, architects.

**CONCORD, N. H.**—State Prison. Messrs. Dow & Wheeler, architects. Appropriation, \$200,000.

**ELMIRA, N. Y.**—Masonic Hall. N. LeBrun, architect. New York. Cost \$60,000.

**FARIBAUT, MINN.**—Deaf, Dumb, and Blind Asylum. J. Babcock & Co., contractors. Cost \$53,730.

**GARDEN CITY, L. I.**—Stewart Memorial Church. H. G. Harrison, architect.

**INDEPENDENCE, IO.**—Hospital for the Insane. G. Joseph, supervising architect. Cost \$850,000.

**JACKSONVILLE, FLA.**—Store. W. Astor, New York, owner. Geo. Hoover, architect. Cost \$75,000.

**JOLIET, ILL.**—St. Mary's (Roman Catholic) Church. Mr. Kelly, architect, Brooklyn.

**KANKAKEE, ILL.**—Insane Asylum. J. B. Willett, architect, Chicago, Ill.

**LOWELL, MASS.**—Appleton Bank. O. A. Merrill, architect. Cost \$70,000.

**NORRISTOWN, PENN.**—Insane Asylum. Wilson Bros. & Co., architects, Philadelphia.

**OAKLAND, CAL.**—First Congregational Church. Mr. L. B. Valk, New York, architect. Cost \$60,000.

**OTTAWA, ILL.**—Holy Trinity (R. C.) Church. H. C. Furness, architect. Cost \$150,000.

**ARMORY.** Cost \$35,000. Mr. H. C. Furness, architect.

**POUGHKEEPSIE, N. Y.**—Hudson River Hospital for the Insane. Mr. F. C. Withers, architect.

**SPRINGFIELD, ILL.**—Jail. G. H. Healsie, architect. Cost \$65,000.

### COMPETITIONS IN INTERIOR DECORATION.

The attention of architects, draughtsmen, and decorators is drawn to the series of competitions in interior decoration initiated by the editors, and now in operation.

#### REGULATIONS AND CONDITIONS

will be found in Nos. 109 and 114 of the AMERICAN ARCHITECT.

The programme of the FIFTH COMPETITION, which closes August 20th, will be found in No. 132.

(Established 1848.)

### MARKET ST. ARCHITECTURAL FOUNDRY

AND

#### IRON WORKS.

**SNEAD & CO..**

LOUISVILLE, KY.

Makers of every description of Iron Work for Buildings.

### Publishers' Department.

## The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY

HOUGHTON, OSGOOD & CO.,

WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year; \$6.00 in advance.

### CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,

WITH

Houghton, Osgood & Co.'s other Periodicals.

THE ARCHITECT and ATLANTIC MONTHLY...\$9.00  
THE ARCHITECT and THE REPORTER...15.00  
THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL...10.00  
THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE...7.00  
\* N. E. — The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

#### RATES OF ADVERTISING.

PAGES NEXT TO READING MATTER.  
single insertion...12½ cts. per line.  
One inch (14 lines) one insertion...\$1.75  
One inch, six insertions...10.00  
INSIDE PAGES, single insertion...10 cts. per line.  
One inch, single insertion...\$1.40  
One inch, six insertions...7.00  
For larger space, and for a series of more than six insertions, reduced rates, made known on application to the Publishers.

Special rates for first and last pages.

No extra charge for cuts, or for advertisements that occupy more than a column in width.

Payments should be made directly to the Publishers, either by draft or by post office order.

HOUGHTON, OSGOOD & CO., Publishers,  
WINTHROP SQUARE, BOSTON.

### BUILDING SPECIALTIES, Etc.

The contract for furnishing the tiles for the new City Hall at Providence has been awarded to John Chadwick, of 49 Broadway, New York City. He will furnish the "Spanish Mosaic Floor Tiles," for which he accepted the sole agency for this country a few months since. The Boston agent is Mr. C. E. Parker, 14 Exchange Place, where specimens of the tiles can be seen.

A Baltimore paper has this item concerning an enterprising firm in that city: It is a somewhat refreshing sight, after so much talk about hard times and nothing to do, to look in upon the bell-furnishing establishment of Messrs. Henry McShane & Co., which is giving employment to four hundred hands, and the men have been allowed to work into the night, so as to make a quarter of a day extra in every ten hours. The many orders received by this firm have rendered this absolutely necessary, that none may be disappointed. Among the orders more recently received has been one for a bell of two tons' weight for the new cathedral at Norwich, Conn.; another for a Catholic church at Sidney, O., which will weigh thirteen hundred pounds, and one for the Church Home for Children, in Philadelphia, to weigh seven hundred pounds.

Messrs. Johnson & Wilson have made an extensive enlargement of their works for the manufacture of American Portland Cement, and are enabled to reduce the price, as will be seen by market quotations. The demand is largely increased over last year, a proof that the article has thus far given great satisfaction, as indeed the manufacturers are assured by those who use it. The amount used is said to be four times greater than last year. Messrs. Johnson & Wilson are now shipping to South America, the West Indies, and to distant Western and Southern ports in this country.

### BOUND VOLUMES.

It has been found advisable to divide the year's issue of the AMERICAN ARCHITECT AND BUILDING NEWS into two volumes. These will be furnished at the following rates:—

ONE VOLUME (six months)...\$3.70  
" " If paid in advance...3.00  
" " bound in cloth...5.50  
Numbers of 1876 or 1877, without cover or binding...7.50  
Bound volumes of 1876 or 1877 (each 12 months)...9.00  
Price of cover, without binding...1.00  
Cover and binding (for subscribers)...2.00

In sending volumes to be bound it should be stated whether the illustrations are to be bound with their respective numbers, or whether all illustrations are to be placed together at the end of volume.

N. B. — Volumes bound in both styles are kept in stock.

*A. Hall & Sons*  
Manufacturers of  
*Architectural Terra Cotta,*  
*Buff and Colored Brick, Fire Brick,*  
*Established 1846, South Amboy, N. J.*

#### ARCHITECTURAL IRON WORKS.

**YOUNGLOVE & CO., Prop'r's.**

CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, IRONS, GRIDDERS, STAIRS, IRONS AND SHUTTERS, TILE LIGHT, CRISTING, ETC.

Estimates promptly furnished.

### SUBSCRIBERS TO THE AMERICAN ARCHITECT AND BUILDING NEWS

Who have not yet paid their subscriptions for 1878 are reminded that the special offer recently made by the Publishers, to accept \$6.00 for subscriptions for the current year, extends only to July 1, and that on and after that date the price will be \$7.50. Those who wish to avail themselves of the reduction offered should therefore remit at once to

HOUGHTON, OSGOOD & CO., Winthrop Square, Boston.

Drawings for the American Architect and Building News.

Architects and architectural draughtsmen who desire to contribute drawings for publication will find the following facts of use:

Only pen-and-ink drawings, without brush-work of any kind, can be reproduced.

The space upon a single page allowed for a drawing is 7 1/2 x 11 1/2; therefore drawings should have approximately these proportions.

The reproductions are most satisfactory when they are from one-third to one-half as large as the originals.

The most satisfactory results are obtained from drawings upon Bristol board, or hot-pressed Whatman.

Tinted paper should not be used. Tracing cloth upon the dull side, bank-note paper, or tracing paper, provided it is not of a yellowish tinge, may be used in cases of absolute necessity.

The ink should be black and of uniform strength. The lines should be firm, sharp, not too coarse, and not unintentionally broken.

Shading and hatching lines must not be too close and crowded, especially where a large surface is to be shaded.

It is very desirable that plans should accompany the drawings. Drawings of details both constructional and ornamental are also desirable.

PROPOSALS.

JOINERS' WORK.

Proposals for Manufactured Joiners' Work for the U. S. Court-House and Post-Office at Grand Rapids, Mich.

OFFICE OF THE SUPERINTENDENT, GRAND RAPIDS, MICH., June 22, 1878.

Sealed proposals will be received at this office until 12 m., on the 20th day of July, 1878, for supplying and delivering at the U. S. Court-House and Post-Office at Grand Rapids, Mich., ready for fixing in place, all the Manufactured Joiners' Work required for that building, in accordance with drawings, specification, and schedule.

Copies of specification and schedule, forms of proposal, and any additional information may be had on application at this office, where detail and other drawings may be seen.

JOHN H. STEWART, Superintendent.

SCHOOL-HOUSE.

JACKSON, MICH. Sealed proposals will be received up to and including 12 o'clock, m., of Thursday, July 15th, by the School Board of Union School District No. 1, at Jackson, Mich., for the building of a School-House according to plans and specifications on file in the Secretary's office, Jackson, Mich.

Bids must be accompanied by a bond in ten per cent of the amount of the bid, conditioned that if the bid be accepted the bidder will enter into a contract with two good and sufficient sureties (whose names, signed by themselves, shall accompany said bond) to complete the work within one year from the award of the contract.

Every person bidding is required to make two bids, as follows:—

First—A bid in which he shall provide that the old brick building now on the ground shall be removed by the District.

Second—A bid which shall provide that the contractors may use such portions of the old building as conform to the specifications and are suitable, and shall remove the balance of the old building from the premises.

The Board reserve the right to reject any or all bids. Proposals should be addressed to:

HOLLIS F. KNAPP, Secretary of the School Board, Union School District No. 1, Jackson, Mich.

SEWER.

CITY COMMISSIONER'S OFFICE, BALTIMORE, July 4, 1878.

Sealed proposals will be received at this office until Monday, 15th instant, at 1 p. m., to furnish the materials for and construct a sewer under North Avenue, at or near Harford Run, as per plan and specifications to be seen at this office. Bond, with approved security, will be required that the work shall be done according to specifications.

No bid will be entertained unless accompanied by an obligation, over the signatures of two responsible sureties, for the amount of the bond required. The bids will be opened on the same day in the Mayor's office, and the right is reserved to reject any and all bids offered.

JOHN E. TOOLE, Clerk to City Commissioner.

CUT STONE.

Proposals for the Cut Stone Trimmings required for the superstructure of the U. S. Court-House and Post-Office at Utica, N. Y.

OFFICE OF SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., July 8, 1878.

Sealed proposals will be received at this office until 12 m., on the 29th day of July, 1878, for all of the Stone Trimmings, cut, leveled, and delivered at the site of the building, ready for setting, required for the superstructure of the U. S. Court-House and Post-Office at Utica, N. Y., in accordance with drawings and specification, copies of which and any additional information may be had on application at this office or the office of the Superintendent.

JAS. G. HILL, Supervising Architect.

JAIL.

NEW BRAUNFELS, TEXAS. Sealed proposals will be received until 11 o'clock, a. m., Tuesday, July 23, 1878, for the erection and completion of a Jail at New Braunfels, Comal County, Texas.

Bids will be received for the entire work and for the several trades separately, and for the different classes of materials for the cells, etc., but the Commissioner's Court reserves the right to reject any or all bids. All bids must be addressed to the County Judge, and indorsed "Bids for Comal County Jail," and all bids must be accompanied by a certified bond in the sum of \$1,000, conditioned that the bidder will enter into contract and give sufficient bond for its faithful performance.

Payments will be made in cash on monthly estimates, as the work progresses; the building to be finished within six months after date of contract. Plans and specifications can be seen at the County Clerk's office at New Braunfels, and at the office of F. E. Ruffini, Architect, Austin, Texas.

For further information, address GEO PFEUFFER, County Judge Comal County, New Braunfels, Texas.

PROPOSALS.

PROPOSALS.

ELECTRIC CLOCKS. FURNITURE.

LANSING, MICH. Proposals for furnishing Electric Clocks and Furniture for the new Capitol of Michigan, at Lansing, will be received by the Governor and Board of State Auditors at the office of the Board for furnishing the New Capitol of Michigan, in Lansing, until 12 o'clock, noon, on Wednesday, July 31, 1878, and will be opened at said office at 3 o'clock, p. m., on the same day.

Persons desiring to submit proposals can obtain schedules of the articles required, instructions to bidders, preliminary bonds, and all necessary information upon application to the Secretary. The Board reserves the right to reject any or all proposals submitted.

All proposals must be sealed, indorsed "Proposals for 'Electric Clocks' " or "Furniture for New Capitol," and addressed to A. L. BOURN, Secretary of the Board, Lansing, Mich.

CHAS. M. CROSSWELL, Governor. E. G. D. HOLDEN, W. B. McCREERY, B. F. PARTRIDGE, Board of State Auditors.

ALLEN L. BOURN, Secretary.

COURT-HOUSE.

BELEIZE, HONDURAS. Tenders (in duplicate) indorsed, "Tenders for Court-House," will be received until noon on the 12th of August, 1878, from persons willing to construct a new Court-House and Public Offices in the town of Belize.

Persons desirous to compete for the work can inspect plans and sections and specifications, forms of tender and agreements and other particulars, on application at the office of the undersigned, at Belize, and at the office of the Crown Agents for the Colonies, Downing Street, London, or Messrs. A. E. Outbridge & Co., 29 Broadway, New York.

No tender will be noticed except on the prescribed form, nor unless two efficient sureties are provided for the due performance of the work in accordance with the terms of the specification.

Tenders must be addressed to the Honorable the Colonial Secretary, Belize, British Honduras, care of A. E. Outbridge & Co., 29 Broadway, New York. The government do not bind themselves to accept the lowest or any tender.

By order of His Excellency the Lieutenant-Governor. GUSTAV VON OHLAFEN, Colonial Engineer.

DREDGING.

UNITED STATES ENGINEER OFFICE, No. 1907 PENNSYLVANIA AVENUE, WASHINGTON, D. C., June 29, 1878.

Sealed proposals for the improvement of the following rivers and harbors will be received at this office until 12 m., of Monday, July 22, 1878, and opened immediately thereafter.

- 1. Dredging in Harbors of Washington and Georgetown, D. C.
2. Dredging in Ocoquan River, Va.
3. Dredging in Aquia Creek, Va.
4. Constructing Dike in Rappahannock River Va.
5. Dredging in Leesmouth Harbor, Md.
6. Dredging in Hampton River, Va.

Specifications and blank forms for proposals can be obtained on application at this office. S. T. ALBERT, United States Civil Engineer.

SCHOOL-HOUSE.

WILLOUGHBY, OHIO. Sealed proposals will be received at the office of the Clerk of the Board of Education of Willoughby Township, in Lake County, Ohio, until 12 o'clock at noon, on the 20th day of July, 1878, for building a School-House on the lot situated in Sub-District No. 8.

Plans and specifications can be seen at said office after June 25, 1878. Each bid must contain the name of every person interested in the same, and be accompanied by a sufficient guaranty of some disinterested person, that if the bid is accepted a contract will be entered into and the performance of it properly secured. The bid for each kind of material called for by the specifications must be stated separately, and the price of each given, and the price of labor must also be separately stated.

None but the lowest responsible bid will be accepted, and the Board may reject all bids.

By order of the Board of Education. C. C. JENKINS, Clerk.

COURT-HOUSE.

WOOSTER, O. Notice is hereby given by the undersigned Commissioners of Wayne County, in the State of Ohio, that they will receive, until 12 o'clock at noon on the 19th day of July, 1878, sealed proposals, at the office of the Auditor of said county, in the city of Wooster, for furnishing all the materials and the erection and full completion of a new Court-House in the city of Wooster, in accordance with the plans, drafts, and specifications thereof, now on file in the office of the County Surveyor.

Persons desiring to compete for the furnishing of the materials and the construction and completion of said building can inspect the plans, drafts, and specifications at said County Surveyor's office, or at the office of Thomas N. Boyd, architect, in the city of Pittsburgh, Pa., and can ascertain at said Surveyor's office, and Mr. Boyd's office, the terms and conditions of the agreement to be entered into with the undersigned for furnishing the materials, erecting and completing said building, and the character and conditions of the bond that will be required of the contractor, and time of completion of the work and mode of payment therefor.

A bond for two thousand dollars must accompany each proposal, payable to the Treasurer of Wayne County, and State of Ohio, with at least two sufficient sureties, conditioned that in the event of that person's bid being accepted by the undersigned, that he will enter into bond as required by the undersigned for the faithful performance of his contract.

The undersigned reserve the right to reject any or all bids. HENRY GOUDY, PETER STARB, BENJ. WEGANDT, Commissioners of Wayne County, Ohio.

PROPOSALS.

COMPETITIONS.

JAIL.

TEXANA, TEXAS. Sealed proposals, with plans and specifications for building a Jail in Texana, Texas, cost, \$2,000 cash, will be received at this office until August 1, 1878.

By order of the County Commissioner's Court for Jackson County, Texas. JOHN R. SANFORD, C. C. C., J. C. T. By R. C. BRONAUGH, Deputy.

COURT-HOUSE.

CLARKSVILLE, TENN., June 8, 1878. The undersigned having been appointed Commissioners by the County Court of Montgomery County, Tennessee, to superintend the erection of a Court-House, hereby invite architects desiring to offer plans for the same to do so on or before the 3d day of August, 1878.

Architects submitting plans will be governed by the following specifications: Drawings to consist of Floor Plans, Elevations, Transverse and Longitudinal Sections.

A written statement explanatory of the same, together with an itemized estimate of the cost to execute, must accompany each design submitted.

No appropriation has as yet been made, but a good building is desired, and plans are necessary in order to know what amount will be required.

For further information apply to the Chairman of the Commissioners. CHARLES W. TYLER, Chairman, G. H. SLAUGHTER, W. S. MALLORY, G. ORGAIN, CHAS. G. SMITH, Commissioners.

C. BUTCHER, PATENT MARQUETRY FLOORING.

107 Devonshire St. BOSTON. Specimens at Lawrence, Wilde & Co.'s, 42 Cornhill, Boston.

NEW BOOKS.

PUBLISHED BY HOUGHTON, OSGOOD & CO., Winthrop Square, Boston.

DRIFT FROM TWO SHORES.

By BRET HARTE. "Little Classic" style. \$1.25. Like "The Luck of Roaring Camp" and "Tales of the Argonauts," this book contains a variety of stories and sketches; and it is characterized by the same dramatic felicity of narration and the same exquisite charm of style which made those earlier books famous in both America and Europe.

GREEK VIGNETTES.

A Sall in Greek Seas, Summer of 1877. By JAMES ALBERT HARRISON. "Little Classic" style. \$1.25. An attractive book of travel, observations, and impressions. Professor Harrison describes not only the scenery, but, especially in Athens, the antiquities, architecture, art, people, customs, institutions, and folk-lore.

THE POLITICAL ECONOMY.

Of Great Britain, the United States, and France, in the Use of Money. A New Science of Production and Exchange. By J. B. HOWE. 1 vol., 8vo, \$3.50. An elaborate work on a topic that just now challenges the attention of financiers, legislators, and all thoughtful citizens. Judge Howe has devoted the researches of years to this subject, and is confident that his reasonings lead to conclusions which will be accepted by candid and intelligent men, and which, if acted upon, will greatly promote the prosperity of the country.

MONETARY AND INDUSTRIAL FALLACIES.

A Dialogue. By J. B. HOWE. 1 vol., 8vo, \$1.50. In the form of a dialogue Judge Howe sets forth various opinions held concerning money and labor, emphasizing certain current fallacies and, as in an informal conversation, showing the delusive character of these fallacious opinions and maintaining correct ones.

THE DHAMMAPADA.

Translated from the Chinese, by REV. SAMUEL BEAL, B. A. Vol. XII. of the English and Foreign Philosophical Library. 8vo. \$2.50. An excellent translation of an important work, and one of peculiar value to students of comparative religion.

\* For sale by all Booksellers. Sent, post-paid, on receipt of price by the Publishers, HOUGHTON, OSGOOD & CO., Boston.

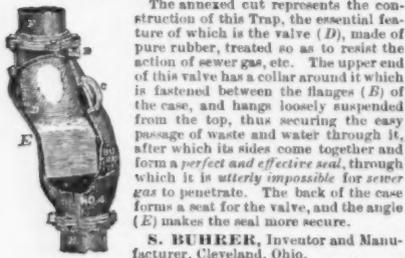
BIBB'S Celebrated Original Baltimore Fire Place Heaters Mantels and Registers. B. C. BIBB & SON, Baltimore, Md. Best workmanship. Lowest prices guaranteed. Send for circulars.

MARSHALL'S AMERICAN



LEADED SHEETS. Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Represented in New England States by C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

BUHRER'S INFALLIBLE SEWER GAS TRAP.



The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (B) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure. S. BUHRER, Inventor and Manufacturer, Cleveland, Ohio.

WHOLESALE AGENTS. W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O. L. WOLFF M'g Co., 109 & 111 West Lake St., Chicago, Ill. HAMBLEN & MATHEWS, 82 & 84 North St., Boston, Mass. C. A. BLESSING, 44 North Fifth St., Philadelphia, Pa. THE J. L. MOTT IRON WORKS, 88 & 90 Beekman St., N. Y. Please send for Circular.

GALVANIZED IRON CORNICES.

For the very best in all particulars, send to the undersigned. Our advantages are: Steam Power Machinery, the largest business and the most extensive experience, the ablest corps of workmen ever gotten together, and all known improvements in manipulation and construction.

OVER FOUR THOUSAND CONTRACTS satisfactorily executed attest our success. Specimens of our work may be seen in every State in the Union. Architects will find it to the interest of their clients to obtain our estimates.

Fire-Proof Construction, and Pressed Zinc Ornamentation, are specialties.

Tracings of designs are solicited; but within reasonable limits (on large jobs) visits will be made. Correspondence promptly answered.

The Kittredge Cornice and Ornament Co., Salem, Ohio.

MENEELY & KIMBERLY, Bell Founders, Troy, N. Y.,

Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT HOUSE BELLS. Illustrated Catalogue sent free.

NATIONAL TUBE WORKS CO. PATENT Indestructible Enamelled Wrought Iron LAP-WELDED PIPE, From 1/4 inch to 15 inches diameter. Now extensively used for Water, Gas, Sewerage, and Mining. It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS prevent all leakage. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making joints, supplied to Plumbers, Steam, and Gas Fitters, etc. Specimens can be seen and obtained at offices of National Tube Works Co., 8 Pemberton Square, Boston; 116 Lake Street, Chicago; 108 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

Akron Ohio DRAIN PIPE. ALL SIZES. Terra Cotta Chimney Tops, Akron Land Tile. D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free.

HENRY McSHANE & CO., Baltimore, Md.

The Useful

is issued monthly—consists of Perspectives of Interiors, Ornaments of Buildings, Fresco Painting, Furniture, etc., and is accompanied with full-size working-drawings—for direct use—Price to Subscriber One dollar per number.

Office 28 Pemberton Square, Boston, Mass.

TO ARCHITECTS.

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the

Seagliola and Marezzo Marble,

Which closely imitates the rarest and most costly Marbles Columns, Pilasters, Pedestals, Wainscoting, Wall and Altar Work.

JAS. T. ALLEN & CO., 25 North 17th Street, Philadelphia.

LUX-FECIT THE HELIOTYPE PRINTING COMPANY 220 DEVONSHIRE ST. BOSTON COR FRANKLIN ST HELIOTYPE PHOTOGRAPHS in Printers Ink HELIOTYPE LITHOGRAPHS printed by Steam HELIOTYPE CUTS to print with Type HELIOTYPE FACSIMILE LETTERS, SHOW CARDS, etc.

THE "AIR SPACE" BOILER COVERINGS

Save 10 to 20 per cent in fuel.

See Am. Architect and Building News, Dec. 15, 1877. THE CHALMERS-SPENCE COMPANY. 140 Congress Street, Boston. Foot 8th St., E. R. New York

CLASSIFIED ADVERTISEMENTS.

ARCHITECTS. Frank Hill Smith, Boston. W. W. Goodrich, Kingston, N. Y. Charles E. Hiley, St. Louis. Walter Dickson, Albany, N. Y. Richard M. Hunt, New York. P. B. Wight, Chicago. ARCHITECTURAL BOOKS, ETC. A. J. Ricknell & Co., New York. The Useful, Boston. Houghton, Osgood & Co., Boston. American Plumber Publishing Co., New York. ARCHITECTURAL IRON WORK. Youdelove & Co., Cleveland, O. M. Clements, Cincinnati. Shead & Co., Louisville, Ky. ASPHALT. Lumber Rock Asphalt Co., New York. ASPHALT AND OTHER (FELT) ROOFING. Warren Chemical and Manufacturing Co., Boston and New York. BELL FOUNDERS. Meneely & Kimberly, Troy, N. Y. BOILER SETTING, JARVIS FURBERG CO. BOILER COVERING. The Chalmers-Spence Co. BRICK. (ORNAMENTAL) Peckers Brick Co., Phila. (FIRE) Waldo Brothers, Boston. Ohio Valley Press Brick Co., Louisville. (PRESS) Fletcher & Thomas. A. Hall & Sons. BRONZE DECORATIONS. National Fine Art Foundry, New York. CARPENTERS. J. H. Bart & Co., Boston. CEMENT. Johnson & Wilson, New York. CHURCH FURNITURE. J. & R. Lamb, New York. CLOCKS FOR PUBLIC BUILDINGS. Seth Thomas Clock Co. G. M. Stevens & Co., Boston. CONDUCTORS (IRON). Austin, Obelcke & Co., Philadelphia. CORRODED WOOD. Edward R. Andrews, Boston. DECORATORS. Edmund & Quarley, Baltimore. Collamore & Young, Baltimore.

Philip A. Butler, Boston. L. Haberstroh & Son, Boston. W. J. McPherson, Boston. Peires & Loring, Boston. Wm. H. Jackson & Co., New York. Donald MacDonald, Boston. Society of Decorative Art, New York. John Lafarge, New York. DESIGNING AND WOOD ENGRAVING. W. J. Dana, Boston. DRAIN PIPE. D. W. Lewis, Boston. Portland Stone Ware Co., Boston. Wald Brothers, Boston. DUMPS WATERS. Isaac Richards, Philadelphia. ELECTRIC BELLS, ANNUNCIATORS, ETC. S. W. Fuller, Boston. ELEVATORS, STEAM ENGINES, ETC. Whittier Machine Co., Boston. Tufts Elevator Works, Boston. Cooke & Bezza. (Oris Brothers & Co.) ENGINEER (SANITARY) Geo. E. Waring, Jr., Newport, R. I. E. S. Philbrick, Boston. FIRE-PROOF BUILDINGS. Fire-Proof Building Co., New York. FREESTONE. Dorchester Union Freestone Co., New York. GALVANIZED IRON CORNICES. The Kittredge Cornice and Ornament Co., Salem, O. GAS FIXTURES. R. Hollings & Co., Boston. Mitchell, Vance & Co., New York. GAS MACHINES. Denny Bros. & Co., New York. Springfield Gas Machine, Springfield, Mass. Walworth Manufacturing Co., Boston. GRANITE. The New England Granite Works. The Addison Granite Co. Y. HARDWARE. Burditt & Williams, Boston. HEATING APPARATUS. Crane, Reed, & Co., Cincinnati, O. Gold's Heater Manufacturing Co., New York. G. M. Davis & Co., New York. Gillis & Geochagan, New York. Walworth Manufacturing Co. Wyllys H. Warner, New York and Syracuse. HELIOTYPES. The Heliotype Printing Co., Boston.

HOISTING MACHINES. H. J. Reedy, Cincinnati. Palmer, Parker & Co., Boston. IRON BRIDGES. Moseley Iron Bridge and Roof Co., N. Y. LEAD WORK FOR BUILDINGS. Alna Iron Co. George Dwight, Jr. & Co. Bartlett, Robbins & Co., Baltimore. Foulton & Eger, Brooklyn, N. Y. Mungrave & Co., Belfast, Ireland. IRON WINDOW SASHES. D. M. Mosher & Son, Newark, N. J. LEADED SHEETS. Marshall Bros & Co. MARSH AND BRONZE HARDWARE. Yale Lock Manufacturing Co. Hopkins & Dickinson Manufacturing Co., New York. MANTELS. Caldwell Manufacturing Co., Boston. Stewart's, Boston. C. S. Rankin & Co., Cincinnati, O. Joseph S. Miller, Philadelphia. MARBLE. Rutland Marble Co. MARBLE WORKERS. S. Kisher & Co., New York. A. L. Fauchère & Co. Fisher & Bird. Hugh Sisson & Son, Baltimore. MARQUET FLOORING (PAPER). C. Butcher, Boston. PAINT. Ashbel Wheeler, Boston. C. M. Wheeler, and J. M. Bond, Toledo, O. PAPER HANGINGS. H. B. Jones & Co., Boston. PAPER MACHE DECORATIONS. Dolivet, Cutter & Co. PATENT MINERAL WOOL. A. D. Elbers, New York. PATENT TRAVELER LITER. J. F. Wollensak. PIPE (LAP WELDED). National Tube Works Co. PLASTER. John Mack, Boston. PLUMBERS. Hathorne & Tucker, Boston. PLUMBERS' SUPPLIES. Jennings Sanitary Depot, New York. ROLLING VENETIAN BLINDS. Wilson & James, New York. ROOFS. Phoenixville Bridge Works. John Farquhar's Sons. A. Knisely & Co., Chicago.

ROOFING FELT. N. E. Felt Roofing Co., Boston. Asphalt and other (Felt). Warren Chemical and Man'g Co., Boston and New York. SCAGLIOLA AND MAREZZO MARBLE. James T. Allen & Co., Philadelphia. SEATING (PERFORATED). Gardner & Co., New York. SEWER GAS TRAP. R. P. Joser & Co., Cleveland, O. S. Buhrer, Cleveland, O. Fred. Adce, New York. Brundie & Wickert, Brooklyn, N. Y. SEWER PIPE. Fluke & Coleman. SHINGLES (METALLIC). Iron Clad Mfg. Co., Brooklyn, N. Y. SHUTTERS (STEEL). Clark & Co., New York. Wilson & James, New York. SIZES. Bignall Manufacturing Co. Mace Furnace Co., Boston. J. M. Carson, Louisville. SKYLIGHTS. Hinkelbaupt Bros., New York. G. Hayes, New York. E. Van Norden, Boston. STAINED GLASS. Kelley & Holland. W. J. McPherson, Boston. Samuel West, Boston. Cook, Redding & Co., Boston. STEAM PUMP, KNOWLES PATENT. Knowles Steam Pump Works. Stone (Building). Nicholl & Miller. Worthington & Sons, No. Amherst, O. Wilson & Hughes Stone Co., Cleveland, O. TELEGRAPH CO. (AUTOMATIC SIGNAL). TERRA COTTA. S. E. Loring, Chicago. THEATRICAL SCENERY. Lafayette W. Seavey, New York. Tiles. John Chadwick. Miller & Coates, New York. T. Aspinwall, New York. Waldo Brothers, Boston. C. A. Wellington, Boston. Sharpless & Watts, Philadelphia. VENTILATORS. Eureka Ventilation Co., Boston. WELLINGTON'S PATENT WASH BOWL. L. S. Moore & Co., Boston. WINDOW LOCKS. F. J. Hoyt, New York. WOOD CARPETING. National Wood Manufacturing Co.

**ETNA IRON CO.**

Manufacturers of every description of Wrought and Cast

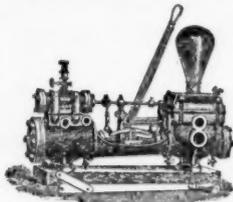
**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**

Patent



Steam

**PUMP**

**THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

**KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES, { 14 & 16 Federal St., } Boston.  
 { 113 & 115 Congress St., }  
 { 82 & 94 Liberty St., } New York.

Send for Illustrated Catalogue.

**THE**

**Plumber & Sanitary Engineer,**

A Monthly Journal devoted to

**WATER SUPPLY, DRAINAGE, HEATING & LIGHTING.**

It contains no paid puffs.

Its technical articles are written by experts.

It is a manual of the best practice in Plumbing.

It illustrates the latest improvements in House Drainage.

It is indispensable to every Architect and Builder.

Terms, \$1.50 a year. Single Copies, 15 cents.

Address

**AM. PLUMBER PUBLISHING CO.**

Box 3037 P. O. 297 Pearl St., New York

**"ZODTCHY" (BUILDER).**

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

**M. JEROME KÜTTNER,**

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from eight to sixteen pages of letterpress, gr. quarto, with cuts, and at least five autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICES FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.

The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address.

**JOURNAL "ZODTCHY,"**

18 OFFICE STREET, ST. PETERSBURG, RUSSIA.



**Carson's Kitchen Sink**

Is an improvement in this fixture that must meet with the approval of every house keeper as it retains every particle of grease, and prevents the waste of water from filling up, besides being better trapped than any other sink in use.

Pat'd JAN. 24 1877. Bignall Mfg. Co., Medina, N. Y., or J. M. Carson, Louisville, Ky. Man'g.

**NATIONAL**

**FINE ART FOUNDRY,**

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze TO ARCHITECTS AND BUILDERS.

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET. BOSTON.

**GEO. DWIGHT, JR., & CO.,**

Builders in Iron, and Engineers in Fire-Proof Construction,

SPRINGFIELD, MASS.

HAVE for many years given their exclusive attention to FIRE-PROOF CONSTRUCTION; and they now invite the correspondence of Architects to the following specialties which hereafter will constitute the leading items of their business: FIRE-PROOF FLOORS. The only floors that have stood fire in this country.

FIRE-PROOF ROOFS. Refer to Equitable Life Insurance Company's Building at Boston.

FIRE-PROOF SHUTTERS. Have stood many fires in all parts of the country. Over 2000 pairs put up in Boston after the fire. Saved the city of Springfield last year.

FIRE-PROOF LATH. In the words of one of the best-known architects of this country, "Minimum of metal, maximum of stiffness, maximum of clinch; the best lath ever made, either wood or iron." See New York Post-Office; State Department, Washington; Equitable Life Insurance Company's Buildings, and many others.

Mr. HOTT will be pleased to wait upon Architects, when desired, to explain our methods, and to present for inspection construction plans and estimates for any specific work.

**BURDITT & WILLIAMS,**

DEALERS IN

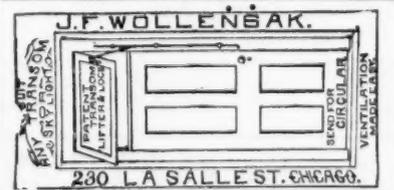
**FINE HARDWARE**

of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



**CATALOGUE OF**

**Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO., ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.

**BICKELHOUP BROS.,**  
 329 West 37th St., New York.

No Leak.



No Entry.

**PATENT METALLIC SKY-LIGHTS.**

**BEEHIVE BRAND. FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**ASAHEL WHEELER'S PAINT PRESERVER**

Is the most remarkable Wood and Paint Protector known against the hot sun's rays and storms. A trial of more than three years' constant exposure has demonstrated this fact. A perfect glossy surface yet remains without signs of perishing. ASAHEL WHEELER, 145 Milk St., Boston



**BALTIMORE PRESSED TILES,**  
 FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases,  
 DRAIN AND SEWER PIPE, FIRE-BRICK,  
 LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

**WALDO BROTHERS,**  
 No. 94 WATER STREET, BOSTON.

**PEERLESS BRICKS.**

**THE PEERLESS BRICK COMPANY,**  
 OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK

ARCHITECTURAL SHAPES (80 kinds).

ALSO

**RED** Pressed Fronts.

Extra fine in color and quality

**BROWN,** Colored throughout

More beautiful than Brown Stone DURABLE

**CHOCOLATE,**

Same as above; difference in color

**FLESH COLOR,**

A very popular color.

**BUFF,** very fine.

Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

**NORTHEAST COR. FIFTH & CHESTNUT STS.**

THOMAS F ADAMS, JOSEPH WOOD, JR.,  
 PRESIDENT. TREASURER



**DOLIVET, CUTTER, & CO.,**

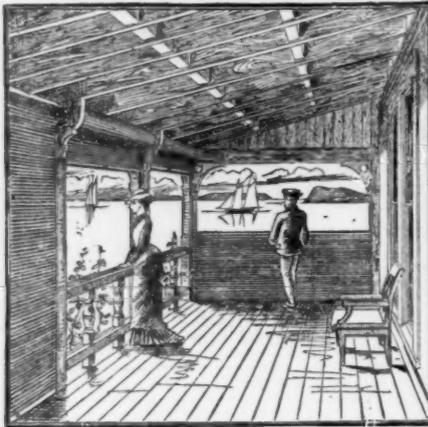
ARTISTIC

**Papier Maché Decorations,**

108 West 28th St., New York.

House, Theatre, and Church Work. Architects' drawing strictly followed. Special designs and details furnished on application. Work shipped to any distance





**ROLLING VENETIAN BLINDS.**

WILSON'S PATENT.

These blinds can be fitted to any kind of Window or Piazza. They require no winding machinery or balance weights, and run up and down as easily as an ordinary spring shade. For Bay Windows they are found invaluable.

They are simple, durable, and handsomely finished.

They were exhibited at Philadelphia in competition with the Rolling Venetian Shutters of English manufacture, and received the only award of Medal and Diploma.

Prices reduced to 80 cents per foot super, in hard wood. We also manufacture Wilson's patent Rolling

**STEEL SHUTTERS,** the best and cheapest fire and burglar-proof Shutters in the market.

**WILSON & JAMES,**  
68 Beekman St.,  
NEW YORK.

**PRIZE MEDALLISTS.**  
1863; 1865; 1867; 1872; 1873; AND ONLY AWARD and MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**  
ORIGINAL INVENTORS AND SOLE PATENTEES OF  
**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Tilford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.

OFFICE AND MANUFACTORY,  
162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**  
76 READE STREET, NEW YORK,  
WORKS, DARLINGTON, N. J.

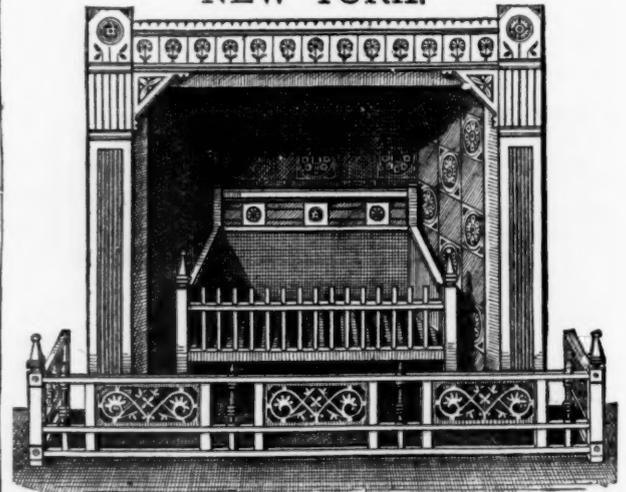
*Lock and Hardware Manufacturers,*  
DESIGNERS, FOUNDERS, AND WORKERS

IN  
**BRONZE AND BRASS.**

*Architects' Designs truthfully executed.*  
Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**  
(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side),  
NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile.  
HAVE NO OTHER WAREHOUSES.

**VALUABLE ART PUBLICATIONS.**

**ALLONGE'S** (Auguste) Charcoal Drawing. With an Introduction by C. C. PERKINS, and a Heliotype Frontispiece. Small 4to. \$1.00.

**BAKER'S** (W. S.) Origin and Antiquity of Engraving, with 23 Heliotype Illustrations from Dürer, Van Dyck, Raphael, Guido, etc. 8vo. \$5.00.

**HUNT'S** (William M.) Talks on Art. 8vo. Paper. \$1.

**CLEMENT'S** (Clara Erskine) A Handbook of Legendary and Mythological Art Profusely Illustrated, and with a complete Index. Cr. 8vo. Cloth, red edges, \$3.25.

Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.

**MURRAY'S** (Mrs. Elizabeth) The Modern System of Painting in Water-Colors from the living model. 12mo, paper, 50 cents.

HOUGHTON, OSGOOD AND COMPANY, Boston.

**ARCHITECTS,**

IN SPECIFYING OUR

**LOCKS AND BRONZE HARDWARE,**

Have the assurance that they will receive just what they have selected. We make us second grade work, "brass-plated" or otherwise, to be substituted, at the expense of owners, in order to economize on unprofitable contracts.

**YALE LOCK MANUFACTURING CO., STAMFORD, CONN.**

New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,

SPECIALTIES

94 BEEKMAN STREET,

NEW YORK.

IN  
**PLUMBING GOODS.**



WARING'S  
SEWER GAS & BACK-VALVE.  
Made entirely of Brass.

Having for their especial object  
*Cleanliness,  
Durability,  
And the exclusion  
of Sewer Gas.*

**JENNINGS' NEW CLOSET,**  
WITH  
**New Valve**

With non-corrosive Valve Seating and Solid Planer.



**BOWER'S PATENT**

**SEWER-GAS TRAP.**

Patented in U. S. Apr. 24 & Aug. 14, 1877.

The most PERFECT BARRIER against SEWER GAS that has yet been invented.

The only trap that has been FULLY INDORSED by the LEADING SANITARIANS throughout the WORLD.

**IT IS A POSITIVE SEAL**

Against sewer-gas under pressure, absorbed gases, and back water.

Seal is not broken by siphonage or evaporation.

*Self-Scouring, not injured by freezing,*  
It has many other good points that

*No other Trap possesses.*

It can be readily attached to old work, in a very short time, and at very little expense.

**SIMPLE, CHEAP, DURABLE, AND EFFECTIVE.**

A sample Trap FREE to Architects on application. Send for full descriptive Circulars to the Manufacturers,

**B. P. BOWER & CO.**

104 & 106 St. Clair St., Cleveland, O.

**STEWART'S**  
SLATE, MARBLE AND HARD WOOD  
**MANTELS,**  
MIRRORS, ART-TILES  
FOR  
MANTELS, HEARTHES &c.  
Masonic Temple 23<sup>d</sup> St & 6<sup>th</sup> Ave. N.Y.



Sewer Pipes, Fire Brick, Terra Cotta, Chimney Tops, Garden Vases, Art Pottery for Decoration. The strongest and smoothest pipe in the country. Send for lists and Catalogue. Prices as low as any other manufacturer.

Portland Stone Ware Co.  
GEO. C. DENNE, Gen'l Ag't,  
80 Kilby Street,  
400 Federal Street, Boston.

**LIMMER ROCK ASPHALT CO.**

111 Broadway, Room 105, New York.

Rock Asphalt is a natural product, and the ideal material for Paving Roadways, Streets, Yards, and Stables, and for Flooring Cellars in Breweries and other establishments.



**SAYLOR'S PORTLAND CEMENT.**

Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R., U. S. Government Works (Forts and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally. For Sale by all Dealers in Building Materials. Johnson & Wilson, Gen'l Agts. Send for circulars. 32 Liberty Street, New York.

**Automatic Signal Telegraph Co.,**  
CITY OF BOSTON,

OFFICE, 178 DEVONSHIRE STREET, ROOM 20,  
Is prepared to make contracts for the protection of buildings against fire.

DIRECTORS.  
CHARLES E. GUILD, President. WILLIAM ENDICOTT, JUN  
JOHN D. W. JOY. WILLIAM B. WATKINS.  
PATRICK T. JACKSON, Treasurer.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

Theatrical Fresco only. Prices moderate. References first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.

LAFAYETTE W. REAVEY,  
Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK.

THE  
**WELLINGTON**  
**PATENT OVERFLOW BASIN.**

No sewer gas. No overflow. No leakage around the top of the basin. This thoroughly reliable basin is rapidly taking the place of the ordinary one.

It gives perfect satisfaction in every instance.

Manufactured by  
**L. S. MOORE & CO.,**  
40 Oliver St., Boston.

Send for Circulars.

# THE AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 134.]

SATURDAY, JULY 20, 1878.

[PRICE 15 CENTS

### BUILDERS' SUPPLIES.

#### OTIS BROTHERS & CO.

SAFETY STEAM AND HYDRAULIC ELEVATORS.

A specialty for a quarter of a century.

BUILDERS OF THE HALE HYDRAULIC ELEVATOR. No. 348 Broadway, New York.

#### WALWORTH MANUFACTURING CO., 60 KILBY ST., BOSTON.

PUBLIC BUILDINGS, PRIVATE RESIDENCES, GREENHOUSES, ETC. Warmed and ventilated by STEAM OR HOT WATER. Correspondence solicited. Plans and estimates furnished on application.

#### "HOTCHKISS" TOWER CLOCKS,

MANUFACTURED BY

SETH THOMAS CLOCK CO., THOMASTON, CONN.

Prices \$100 to \$6,000.

WARRANTED ACCURATE, STRONG, DURABLE.

OFFICE, 581 BROADWAY, NEW YORK.

Send for Illustrated Catalogue.

#### "MINTON'S ART AND ENAMELLED TILES."

(China Works, Stoke-Up-on-Trent.) Also, The Campbell Brick and Tile Co.'s ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS, ETC. For Churches, Banks, Halls, Vestibules, and Hearths; Outside Decorations, Flower Boxes, Etc. THOS. ASPINWALL & SON, 604 Broadway, New York. The only representatives in the United States for the above firms.

#### ASPHALT (FELT) ROOFING.

WARREN'S NEW PATENT FELT AND GRAVEL ROOFING,

Substitutes NATIVE ASPHALT for Coal-Tar materials for these roofs. The very best and most durable material for flat roofs. Also, Native Asphalt and Asphaltic Cement for Concrete Walks and Pavements. Roofers and pavers supplied with the above, and with Warren's original Coal Tar Roofing and Paving Materials. Send for circulars and samples.

WARREN CHEMICAL AND MANUFACTURING CO., MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

#### THE MITCHELL GRANITE WORKS, QUINCY, MASS.

Has abundant facilities for furnishing the very best work and all the most celebrated Granites of the New England States, for MONUMENTAL, CEMETERY, AND BUILDING PURPOSES. WORK PROMPTLY DONE, AND AT REASONABLE RATES. Polishing a specialty. Orders solicited. Address G. H. MITCHELL, Agent.

#### TILES FROM ALL PARTS OF THE WORLD,

FOR BANKS, PUBLIC BUILDINGS, AND PRIVATE HOUSES. References given to Tile Work throughout the United States and British Provinces.

AGENT FOR THE AMERICAN ROOFING TILE. Contracts Solicited.

C. A. WELLINGTON, HOUSEHOLD ART ROOMS, No. 171 TREMONT STREET, BOSTON.

#### E. HOWARD & CO.

MANUFACTURERS OF CLOCKS AND WATCHES. CLOCKS FOR PUBLIC BUILDINGS. 114 Tremont Street, Boston, and 602 Broadway, New York.

#### GOLD'S WROUGHT IRON HEATERS.

THE "HEALTH" AND "TUBULAR"

Manufactured by the

GOLD'S HEATER MANUFACTURING CO.

114 LEONARD ST., NEW YORK.

Send for Pamphlet.

E. E. GOLD, Pres't

WYLLYS H. WARNER, Treas.

### BUILDERS' SUPPLIES.

#### THE FIRE-PROOF BUILDING CO. OF NEW YORK.

Hollow Blocks of any pattern, uniting strength, and resistance to fire and water. The Hydraulic Lime of Teil (France), one of the strongest cements known, is largely used in this manufacture. The blocks do not conduct heat, cold, or sound, and weigh sixty per cent less than brick. Fire-proof partitions, floor arches between iron beams, ceilings under wooden or iron beams, in the following buildings:— Western Union Telegraph, Orient & Queens Insurance, Del. and Hudson Canal Co., Museum of Natural History, Equitable, Staats-Zeitung, Hudson R. R. Freight Depot, Winesburgh Savings Bank, Cluny & Young's Hotels, Boston, Wind-or Westm'n'r Hotel, New York Hospital, Drexel, Syracuse Savings Bank, Columbia College, Tribune, West Point Military Hospital, Baltimore Safe Deposit Co., Lenox Library, Bennett, Peabody Museum, New Westmoreland Flats, Haven, Peabody Institute, Baltimore. Insurance on Wooden Mansards reduced ninety cents per sq. ft. Sidewalks laid at Lenox Library, Tribune, etc. Hollow Bricks of all kinds. Our Fire-proof work is the only one approved by the New York Board of Fire Underwriters, and the Superintendent of Buildings, after severe public tests. LEONARD F. BECKWITH, President, Office, Room 54 Coal and Iron Exchange, New York.

#### MINTON'S TILES.

PLAIN AND ENCAUSTIC

FOR PUBLIC BUILDINGS AND DWELLINGS.

As laid by us in THE CAPITOL AT WASHINGTON, And in numerous Churches, Banks, and Dwellings in every part of the Country. Glazed and Enamelled Tiles for Mantels, Hearths, Wainscoting, &c., and for Exterior Decoration. MILLER & COATES, 279 PEARL STREET, NEW YORK.

#### BARTLETT, ROBBINS & CO.

HEATING AND VENTILATING OF PUBLIC AND PRIVATE BUILDINGS A SPECIALTY. PLANS AND SPECIFICATIONS FURNISHED. FOUNDERS, AND MANUFACTURERS OF GAS WORKS, ETC., ETC. 24 LIGHT STREET, BALTIMORE.

#### ELEVATORS.—COOKE & BEGGS.

No. 6 COURTLAND ST., NEW YORK. Works at Paterson, N.J. PATENT SAFETY STEAM ELEVATORS for Public and Bank Buildings, Hotels, Private Dwellings, etc. SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP GUARANTEED. Send for Circular.

#### THE NEW ENGLAND GRANITE WORKS,

HARTFORD, CONN., and 1321 BROADWAY, N.Y. Quarries at Westbury, R.I. MONUMENTAL AND BUILDING WORK of every description, all the varieties of AMERICAN AND FOREIGN GRANITE. UNEQUALLED FACILITIES OFFERED TO THE TRADE. J. G. BATTERSON, Pres't. H. R. BATTERSON, Sec'y. DIRECTORS: J. G. BATTERSON, C. B. CANFIELD, H. A. BATTERSON, G. T. BATTERSON, CARL CORNARD, Sculptor.

#### WHITTIER MACHINE CO.

Manufacturers of Steam and Hydraulic ELEVATORS, STEAM ENGINES, BOILERS, AND MACHINERY. No. 1176 Tremont Street, Boston. Office in the New England Mutual Life Insurance Co's Building, Post Office Square, and 120 Broadway, New York. CHARLES WHITTIER, Pres't. A. C. WHITTIER, Treas.

#### ART PAINTED TILES

FOR MANTELS, CABINETS, ETC.

SHARPLESS & WATTS,

225 MARKET STREET, PHILADELPHIA.

Agents for

MINTON'S TILES,

AND TERRELLATED PATENTWORK.

#### HAWTHORNE & TUCKER,

PLUMBERS,

18 PROVINCE STREET, BOSTON

Estimates for Plumbing made, and work done in any part of the United States or Provinces.

### BUILDERS' SUPPLIES.

#### NICHOLL & MILLER,

OHIO BUILDING STONE.

GRIND AND SUTHER STONE.

From our FLORENCE and AMHERST QUARRIES.

Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS

111 Broadway, NEW YORK, and AMHERST, O.

#### MITCHELL, VANCE, & CO.,

Designers and Manufacturers of

GAS FIXTURES.

ORNAMENTAL METAL WORK, CLOCKS AND BRONZE ARCHITECTS' ORDERS SOLICITED.

Special designs submitted on application.

WAREHOUSES, 535 AND 538 BROADWAY, NEW YORK.

MANUFACTORY, 24th AND 25th Sts., AND 10th AVENUE, N. Y.

#### FISHER & BIRD,

Workers in all kinds of Foreign and Domestic

MARBLES,

97 to 108 East Houston St., New York.

Established 1830.

Among our notable decorations are: The Illinois new State House; Palace Hotel, San Francisco; Baldwin's Hotel, San Francisco; Insurance Building, 10th and Chestnut Streets, Philadelphia; Mutual Life Insurance Building, Boston; Orient Mutual Insurance Building, New York; Union College, Schenectady; and numerous Churches, Private Residences, etc., etc., throughout the country. We solicit the opportunity to estimate upon all classes of work, viz., Tiling, Wainscoting, Staircases, Mantels, etc. Cemetery work and marble work of every description.

#### WILSON & HUGHES STONE CO.

Are ready to estimate on contracts of any size for furnishing their celebrated Amherst, Ohio,

BUFF AND LIGHT DRAB SANDSTONE,

IN BLOCKS, OR CUT AND SET.

We are prepared to fill promptly all orders for Amherst and Independence grindstones.

OFFICE, 170 SUPERIOR ST., CLEVELAND, OHIO.

#### SPANISH FLOOR TILES. "NOLLA MOSAICS."

Floor Tiles, beautiful in color and design, for Dwellings, Churches, and Public Buildings. SPANISH WALL TILES. White, Glazed, Valencia, Tiles for Walls and for decorative painting. PRINTED FIGURED TILES of Spanish designs, for Wainscoting, Mantels, Jardinieres, etc. Floors of "Nolla Mosaics" can be seen at the "Rockingham," corner of Broadway and 56th Street. Imported and for sale by JOHN CHADWICK, Sole Ag't for U. S., 49 Broadway, N. Y. C. E. PARKER, Agent, 14 Exchange Place, Boston.

#### TUFTS' ELEVATOR WORKS,

MANUFACTURERS OF "TUFTS' PATENT" COMBINATION ROPE ELEVATOR.

TO BE OPERATED EITHER BY STEAM OR WATER.

The only safe and reliable machine made for passenger use in Public Buildings and Hotels, and for business purposes in

Warehouses, Stores, &c.

37 FOUNDRY STREET, SOUTH BOSTON.

OFFICE, 243 Broadway, New York.

OTIS TUFTS, President.

L. A. BIGHLOW, Treas'r and Gen'l Manager.

#### STEAM WARMING APPARATUS.

HIGH AND LOW PRESSURE.

HOUSE WARMING A SPECIALTY.

Pamphlet with more than 1,000 references sent on application.

WYLLYS H. WARNER,

114 LEONARD STREET, NEW YORK,

and 33 West Railroad Street, Syracuse.

#### OHIO VALLEY PRESS BRICK CO.

Challenge the world for fine stock Brick; also manufacturers of all kinds of Bricks, octagon and square. Office 63 3d St., Yard Preston and Knapp Sts. LOUISVILLE, KY.

#### GAS FIXTURES

OF EVERY DESCRIPTION. SPECIAL RATES TO BUILDERS.

R. HOLLINGS & CO., 347 Washington St., BOSTON

**BUILDERS' SUPPLIES.**

**HUGH SISSON & SON,**  
Importers, Dealers, and Manufacturers of  
**MARBLE.**  
INTERIOR MARBLE WORK AND MONUMENTAL  
WORK A SPECIALTY.  
Salesrooms, No. 140 W. Baltimore St.: Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,**  
SPEAKING TUBES,  
AND BURGLAR ALARMS,  
For Public and Private Buildings.  
THE BEST IN USE.  
S. W. FULLER,  
63 Devonshire Street, Boston.

**TOWER CLOCKS.**  
FOR CHURCHES,  
PUBLIC AND PRIVATE BUILDINGS,  
G. M. STEVENS & CO., MANUFACTURERS,  
50 SUDBURY ST., BOSTON, MASS.

**JOHN MACK,** Plain and Ornamental Plasterer.  
41 Cambridge Street, Boston.

**J. H. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue, Mattapan (Ward 24), Boston.

**THE EUREKA VENTILATION CO.**  
OFFICE AND MANUFACTORY,  
74 CHARLESTOWN STREET,  
BOSTON, MASS.

**PRESSED BRICK,**  
STOCK AND COMMON  
MANUFACTURED BY  
**FLETCHER & THOMAS,**  
Indianapolis, Ind  
All brick warranted. Send for price list and samples.

**STEAM HEATING**  
BY  
**GILLIS & GEOGHEGAN,**  
Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 60th St. and 5th Av.;  
Drexel Building, cor Wall and Broad; Bennett Building,  
Fulton and Nassau, etc.  
Architects and owners promptly furnished with specifications and estimates.

**BUILDING MARBLE.**  
Branch yard of the RUTLAND MARBLE CO., 198 Causeway  
Street, Boston. JOHN D. ALLAN, Agent.  
Wall Copings, Sills, Lintels, Steps, Tiles, etc., in Rutland  
and Continental Marble, furnished at low prices.

**ARCHITECTS.**

**P. B. WIGHT,**  
CONSULTING ARCHITECT,  
73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.  
Consultations on matters pertaining to Fire-Proof Construction,  
Foundations, Drainage, Sanitary Work, Ventilation,  
Machinery, Valuations, Interior Decorations, and  
Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**  
ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E.,** ARCHITECT  
AND SANITARY ENGINEER.  
KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes  
of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,**  
ARCHITECT,  
Room 17, Life Insurance Building,  
ST. LOUIS, MO.  
Special attention to Churches, Schools, and other  
public buildings.

**WALTER DICKSON,** ARCHITECT. **PERRY BUILDING,**  
Albany, N. Y.

**GEO. E. WARING, JR.,**  
CONSULTING ENGINEER,  
FOR SANITARY AND AGRICULTURAL WORKS,  
NEWPORT, R.I.

**SANITARY ENGINEERING.**  
**EDWARD S. PHILBRICK, C. E.,**  
12 WEST ST., BOSTON, MASS.  
Offers advice and superintendence in  
CONSTRUCTION OF WORKS,  
IN PLUMBING, DRAINAGE, AND VENTILATION,  
And has no interest in any patent right.

**FRANK HILL SMITH,**  
1111 TREMONT STREET,  
BOSTON.....MASS.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
387 HARRISON AVENUE . . . . . BOSTON,  
SHEET METAL CORNICES, HAYES' PATENT  
VENTILATING SKY-LIGHTS,  
WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

**MANTELS AND GRATES.**

**RANKIN'S PATENT** makes the Cleanest, Cheapest,  
and Hottest Fire. Avoid infringements, and send for  
Circular to  
**C. S. RANKIN & CO.,**  
**ARCHITECTURAL IRON WORKS,**  
Manufacturers of all kinds of Iron Work for  
BUILDINGS, JAILS, ETC.  
187 W. PEARL ST., CINCINNATI, O.

**EXCELSIOR  
ROOF PAINT.**

This paint has been thoroughly tested throughout the  
Eastern States, and has been found to be a perfect tin or  
metallic preserver. We warrant it neither to crack nor  
blister by **HEAT or COLD**, and to last  
**IN ANY CLIMATE TEN YEARS.**

Those desiring to use this valuable preparation upon  
their buildings, can secure the same by addressing  
**C. M. WHEELER, J. M. ROOT,**  
Toledo, Ohio.

**ARCHITECTURAL IRON AND JAIL WORKS.**  
**M. CLEMENTS,**  
MANUFACTURER OF  
Iron Railing, Bank Vaults, and Jail Cells,  
Iron Stairs, Fire-proof Buildings, Wrought Iron Columns  
and Girders; Iron Arches, Plain and Corrugated;  
Fire-proof Shutters, Doors, etc.  
BAYMILLER STREET, near Sixth and C. H. & D. R. R.  
Depot, CINCINNATI, OHIO.

**DECORATORS.**

**W. J. MCPHERSON,**  
(Established A.D. 1845.)

**MURAL PAINTER,  
DESIGNER,  
Ecclesiastical Decorator,  
AND  
ART STAINED GLASS MANUFACTURER,**  
440 TREMONT STREET,  
BOSTON, MASS.

(Established 1843.)  
**L. HABERSTROH & SON,**  
FRESCO PAINTERS,  
AND INTERIOR DECORATORS.  
No. 12 SCHOOL STREET, BOSTON.

**PEIRCE & LORING.**  
ARTISTIC DECORATION AND FURNITURE.  
No. 5 PARK STREET, BOSTON.  
H. H. D. PEIRCE. R. F. LORING.

**PHILIP A. BUTLER,**  
DECORATOR AND DESIGNER,  
No. 17 PENNINGTON SQUARE,  
BOSTON.

**COOK, REDDING & CO.**  
149 CONGRESS ST., BOSTON,  
Ornamental, Stained, and Cut Glass,  
FOR  
Churches, Public Buildings, and  
Private Residences.

**HENRY B. JONES & CO.**  
IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS.  
612 WASHINGTON STREET, BOSTON.

**STAINED GLASS.**  
Thirty years' experience in Stained Glass enables the  
subscriber to produce Modern and Medieval styles of work  
equal to any European examples, for Churches, Private  
Residences, Halls, etc.  
The value of the work is attained by a careful selection  
of colors in Cathedral and French Glass of his own im-  
portation.  
Designs in accord with architects' plans furnished at  
short notice. Reference of work at office.  
**SAMUEL WEST, 115 Eliot St., Boston.**

**DECORATORS.**

**JOHN LAFARGE,**  
**MURAL DECORATION,**  
51 W. Tenth St., New York, and Newport, R. I.

**SOCIETY OF DECORATIVE ART.**  
4 East 20th Street,  
NEW YORK.

Architects' designs for panels, tiles and plaques for inser-  
tion in Cabinet Work, and other decorative uses, and for  
Art Needlework applied to curtains, hangings, portieres,  
screens, table-covers, etc., carefully executed. Original  
designs for any of the above, subject to approval, will be  
gladly received, and paid for by the Society when used.  
Orders are earnestly solicited.  
The Society has arranged with Mr. RUSSELL STURGIS,  
Architect, for the Exhibition and Sale of his well-known  
Wall Papers. Some of these are faithful reproductions of  
Japanese decorative papers; some are taken from Oriental  
and other stuffs; some are of original design. New pat-  
terns will be added from time to time.

**Fresco Decoration.**

**EMMART & QUARTLEY,**  
Designers, Decorators, and Painters,  
32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made  
and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate  
work on hand or made to order. No. 1210 Ridge Avenue,  
JOSEPH S. MILLER, successor to Wilson & Miller, Philadel-  
phia, Pa. Send for Illustrated Price-List

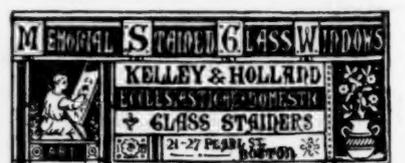
**Donald MacDonald,**  
**GLASS STAINER AND DECORATOR**  
No. 6 Hayward Place,  
BOSTON.

**MANTELS.**



IN WALNUT, OAK, ASH, OR OTHER WOODS.  
On hand, made to order, shipped to and set up  
IN ANY PART OF THE COUNTRY.  
**CALDWELL MANUFACTURING CO.,**

**17 HARVARD PLACE,**  
OPPOSITE OLD SOUTH CHURCH,  
BOSTON, MASS.  
Send for Circular.



**INLAID WOOD FLOORS.**  
ORNAMENTAL WOOD BORDERS.  
Designs and Estimates free.  
**National Wood Manuf'g Co.,**  
950 Broadway, near 23d St., New York.

AMERICAN ARCHITECT AND BUILDING NEWS.

SUBSCRIPTION PRIZES.

The Publishers will send, postpaid, the following prizes to the draughtsman, student, or regular canvasser, who, complying with the conditions, shall secure subscribers for the American Architect and Building News:—

- I. For two new subscribers, a year's subscription to the American Architect and Building News... \$6.00
Or, "Story of a House," translated from the French of M. Viollet-le-Duc, illustrated, price... 5.00
Or, "Annals of a Fortress," translated from the French of M. Viollet-le-Duc, illustrated, price... 5.00
II. For four new subscribers, a bound volume of the American Architect and Building News, vol. i. or ii., price... 0.00
Or, "Examples of Ancient and Modern Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price... 8.00

- III. For eight new subscribers, both bound volumes of the American Architect and Building News, price... \$18.00
Or, "Gothic Forms applied to Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price... 15.00
Or, "Art Foliage for Sculpture and Decoration," by J. K. Collins, royal quarto, illustrated by 72 plates, price... 15.00
Or, "Examples of Modern Architecture, Ecclesiastical and Domestic," being designs by Messrs. Scott, Street, Liddon, and other noted architects, illustrated by 64 quarto plates, price, 15.00
IV. For fifteen new subscribers, the "Decoration and Ornamentation of the Nineteenth Century," by Liénard, illustrated by 100 folio plates, price... 27.00

In lieu of these books the canvasser may obtain books of equal value selected from our trade list, or may obtain as equivalent the value of the prize in Heliotype engravings, selected from our collection, which numbers over three hundred.

The conditions to be observed are:—

- 1. The subscribers must in all cases be new subscribers.
2. The subscription must be paid in advance directly to the Publishers by check or money order; but in no case to the canvasser.
3. If canvassers adopt the method of sending to us one subscriber at a time, they must state at such time for which one of the before-mentioned prizes they are canvassing.
4. The prizes will not be delivered until all subscribers have paid in full.

N.B.—These prizes are not cumulative; i. e., a canvasser who sends us fifteen new subscribers cannot claim successively the prizes I., II., III., and IV.; or in other words, to obtain all four prizes a canvasser must send us twenty-nine new subscribers.

A canvasser who has stated that he is trying to secure one of the highest prizes may in the case of failure claim such lesser prize as is warranted by the number of subscriptions actually paid.

No claims will be allowed for subscriptions secured before Jan. 1, 1878.

HOUGHTON, OSGOOD & CO., Publishers, WINTHROP SQUARE, BOSTON.

LABOR MARKET.

[REPORTED EXPRESSLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

Table with columns for Trades, Baltimore, Boston, Chicago, Cincinnati, Indianapolis, New York, Ottawa (Can.), Philadelphia, San Francisco, and St. Louis. Lists various trades like Bricklayer, Carpenter, etc., with their respective rates in different cities.

SEE NOTICE

Of change in prices for binding the ARCHITECT under the Publishers' Department on page ix. of this issue.

TO SUBSCRIBERS.

In sending the numbers of Vol. III. of the ARCHITECT for binding, care should be taken to include the Index to Vol. III., printed with No. 132.

A BUILDER, Car, enter by trade.

40 years of age, having had 8 years' experience in contracting in America, and trained as a general Foreman in all branches of the building trade in England, can prepare drawings, estimate, and wishing to get out of the contracting business, wishes a situation as manager or superintendent; would be willing to go South for the winter. Address "T. W. B.," American Architect and Building News, Boston.

A SATCHEL GUIDE.

FOR THE VACATION TOURIST IN EUROPE. Revised Edition for 1878. With Maps. 16mo, flexible cloth, \$2.00. HOUGHTON, OSGOOD & CO.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited. GALVANIZED IRON CORNICES. Send for Illustrated Catalogues. Estimates furnished on application. HAYES'S PATENT SKY-LIGHTS. All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States. Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled. A. KNISELY & CO., 72 & 74 West Monroe St. Chicago, Ill.

AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT. MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS. Regular Sizes, 2, 3, 4, 5 & 6 Inch. SPECIAL SIZES MANUFACTURED TO ORDER. AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS. 1705 & 1725 CHESTNUT STREET, PHILADELPHIA, PENNA. WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH.

- PRINCIPAL AGENTS. M. Halliday, Boston, Mass. James Berry, Buffalo, N. Y. George W. Pitkin & Co., Chicago, Ill. Wasson & Martin, Albany, N. Y. McLeod, Reardon & Co., Troy, N. Y. W. H. Scott, Portland, Me. Kittredge Cornice Co., Salem, O. J. W. Jordan, Worcester, Mass. H. G. Carpenter & Co., Wilkesbarre, Penn. T. W. Irwin, Alleghany City, Penn. Sells & Co., Cincinnati, Ohio.

NONESUCH Self-Locking and Burglar-Proof Window Locks. Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted. FRED. J. HOYT, Patented July 10th, 1877. 733 Broadway, N. Y.

BIBB'S Celebrated Original Baltimore Fire Place Heaters. Mantels and Registers. B. C. BIBB & SON, Baltimore, Md. Best workmanship. Lowest prices guaranteed. Send for circulars.

IMPERIAL GAS MACHINE. SEND FOR CIRCULAR. ARCHITECTS AND ENGINEERS. SIMPLICITY & RELIABILITY. DENNY BROS. & CO.

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the art-workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. PANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist*, Boston.

**ILLUSTRATED HOMES.** Describing Real Homes, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courant.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVIS. 16mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIÉNARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11½ x 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOTHIC FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

## Viollet-le-Duc's Works.

The works of the learned and distinguished French Architect, EUGENE VIOLLET-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

**THE STORY OF A HOUSE.** Translated by GEORGE M. TOWLE. Illustrated by the author. 1 vol., 8vo, bevelled boards, red edges, \$5.00.

Has the rare merit of being thoroughly business-like, and, at the same time, not too technical. — *London Standard.*

**HABITATIONS OF MAN IN ALL AGES.** Translated by BENJAMIN BUCKNALL, Architect. Fully illustrated. 1 vol., 8vo, \$5.00.

Nowhere has M. Viollet-le-Duc concentrated more varied knowledge, or illumined it more successfully, by direct human interest and characteristic dialogue, than in the present work, which can be recommended to the general reader. — *British Quarterly Review.*

**DISCOURSES ON ARCHITECTURE.** Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

**ANNALS OF A FORTRESS.** Translated by BENJAMIN BUCKNALL, Architect. Eighty-five illustrations, several in color. 1 vol., 8vo, \$5.00.

He has made of his history of the art of fortification at once a valuable handbook and a very charming romance. A work that combines amusement with instruction in a very rare degree. — *Pall Mall Gazette.*

Those who read the book through carefully by the help of the beautiful illustrations with which it is lavishly embellished, will obtain a better knowledge of the art of fortification, from the earliest ages up to recent times, than could be found in any other way short of the research and study which the author has himself given to the matter. M. Viollet-le-Duc is master of the subject, and imparts his learning in a thoroughly fascinating manner. — *Saturday Review* (London).

## A Valuable Book for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

## The New York Sketch-Book of Architecture.

3 vols., 4to, \$6.50 each. We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

## The American Architect and Building News.

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound 4to, each \$9.00.

\*\* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

[Reported for the American Architect and Building News.]

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, FRONTS, CEMENT, and FIRE BRICK. Includes items like Pale, Jersey, Long Island, and various cement brands.

Table listing prices for DOORS, including sizes like 2.0 x 6.0 and 2.4 x 6.0.

Table listing prices for BLINDS, including sizes like 2.0 x 6.0 and 2.4 x 6.0.

Table listing prices for WINDOW FRAMES, including sizes like 2.0 x 6.0 and 2.4 x 6.0.

Table listing prices for HAIR, including types like Cattle and Goat.

Table listing prices for LATH, including types like State, common and Rockland.

Table listing prices for LIME, including types like State, common and Rockland.

Table listing prices for PAINTS AND OILS, including types like Paris white and Zinc white.

Table listing prices for PAINTS AND OILS, including types like Ochre and Vermilion.

Table listing prices for PAINTS AND OILS, including types like Paris white and Zinc white.

Table listing prices for PAINTS AND OILS, including types like Ochre and Vermilion.

Table listing prices for PAINTS AND OILS, including types like Paris white and Zinc white.

Table listing prices for PAINTS AND OILS, including types like Ochre and Vermilion.

Table listing prices for PAINTS AND OILS, including types like Paris white and Zinc white.

Table listing prices for PAINTS AND OILS, including types like Ochre and Vermilion.

Table listing prices for PAINTS AND OILS, including types like Paris white and Zinc white.

Table listing prices for PAINTS AND OILS, including types like Ochre and Vermilion.

Table listing prices for PAINTS AND OILS, including types like Paris white and Zinc white.

Table listing prices for PAINTS AND OILS, including types like Ochre and Vermilion.

Table listing prices for STONE, including types like Berlin freestone and Brown stone.

Table listing prices for SLATE, including types like Purple roofing slate and Green slate.

Table listing prices for TIN PLATES, including types like I. C. charcoal and I. C. coke.

Table listing prices for ZINC, including types like Sheet (gold) foreign and LEAD.

Table listing prices for LEAD, including types like Sheet and Pipe.

Table listing prices for BOSTON, including types like Waldo Bros. Extra and Waldo Bros. No. 2.

Table listing prices for BOSTON, including types like BUILDING BRICKS and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for BOSTON, including types like LUMBER and BUILDING STONE.

Table listing prices for MORTISE LOCKS, including types like Brass face and Factory make.

Table listing prices for DOOR KNOBS, including types like Solid glass and Silvered glass.

Table listing prices for RASH FASTS, including types like Plain brass and Nickel plated.

Table listing prices for STORE DOOR HANDLES, including types like With mortise latch and Locomotive brass.

Table listing prices for IRON, including types like Wt-iron I Beams and Wt-iron II Beams.

Table listing prices for IRON, including types like Wt-iron III Beams and Wt-iron IV Beams.

Table listing prices for IRON, including types like Wt-iron V Beams and Wt-iron VI Beams.

Table listing prices for IRON, including types like Wt-iron VII Beams and Wt-iron VIII Beams.

Table listing prices for IRON, including types like Wt-iron IX Beams and Wt-iron X Beams.

Table listing prices for IRON, including types like Wt-iron XI Beams and Wt-iron XII Beams.

Table listing prices for IRON, including types like Wt-iron XIII Beams and Wt-iron XIV Beams.

Table listing prices for IRON, including types like Wt-iron XV Beams and Wt-iron XVI Beams.

Table listing prices for IRON, including types like Wt-iron XVII Beams and Wt-iron XVIII Beams.

Table listing prices for IRON, including types like Wt-iron XIX Beams and Wt-iron XX Beams.

Table listing prices for IRON, including types like Wt-iron XXI Beams and Wt-iron XXII Beams.

Table listing prices for IRON, including types like Wt-iron XXIII Beams and Wt-iron XXIV Beams.

Table listing prices for IRON, including types like Wt-iron XXV Beams and Wt-iron XXVI Beams.

Table listing prices for IRON, including types like Wt-iron XXVII Beams and Wt-iron XXVIII Beams.

Table listing prices for IRON, including types like Wt-iron XXIX Beams and Wt-iron XXX Beams.

Table listing prices for IRON, including types like Wt-iron XXXI Beams and Wt-iron XXXII Beams.

Table listing prices for IRON, including types like Wt-iron XXXIII Beams and Wt-iron XXXIV Beams.

Table listing prices for IRON, including types like Wt-iron XXXV Beams and Wt-iron XXXVI Beams.

Table listing prices for IRON, including types like Wt-iron XXXVII Beams and Wt-iron XXXVIII Beams.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

Table listing prices for IRON, including types like I C roofing and I X roofing.

CREOSOTED WOOD.

Prepared at the Hayford Patent Creosote Wood Preserving Works. EDWARD R. ANDREWS, Proprietor.

OFFICES: No. 4 Post Office Sq., Boston. No. 10 Warren St., N. Y. WORKS: Elizabethport, N. J. The wood is perfectly dried by steam, and the sap withdrawn, before the impregnation of the pores with creosote oil, thus rendering decay impossible.

TO ADVERTISERS.

The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially invaluable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

A Word to Manufacturing Firms.

Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms. They recommend, on their own account, and for the sake of the public, that such firms advertise in this paper.

**FISKE & COLEMAN,**

New England Agents for



**AKRON**

SEWER PIPE COMPANY.

The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**

AKRON ROOFING TILES, VITRIFIED BUILDING BLOCKS, OHIO SAWED FLAGGING, ENAMELED BRICK, CHIMNEY TOPS, CEMENT, ETC., ETC.

OFFICE, 72 WATER STREET, BOSTON. YARD AT BERKELEY STREET

**S. KLABER & CO.**

**STEAM MARBLE WORKS,**

217 to 223 W. 51st St., New York.

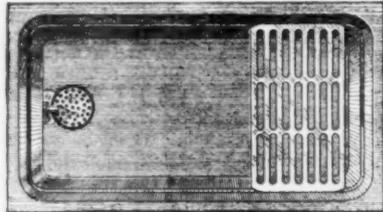
ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.



**METALLIC SHINGLES.**

We call the attention of all parties interested in Roofing, and the owner of large buildings, to the above article. It is superior to Slate, Cheaper, Fire-proof, about one fourth the weight, lays much closer therefore is Storm-proof, cannot Crack, etc. Any carpenter can put them on. Send for description and Price List to IRON CLAD MANUFACTURING CO., 69 Greenpoint Ave., Brooklyn, E. D. P. O. Box 2528, N. Y. City

Architects and Builders will be quick to appreciate the many New and Practical Features possessed by



**THE MAGEE PATENT SINK,** which commend themselves at once to every householder. The escape of noxious and poisonous sewer gases is prevented by the arrangement of the patent trap, it being immovable, while the strainer, being hinged on brass pins, can be raised for the purpose of cleaning the cesspool. The sink is furnished with an improved galvanized shelf or rack for draining dishes, etc., after washing. It is of extra size, and being made with square corners, saves the carpenter much labor in setting. In smoothness of casting it fully sustains the long-established reputation of the Magee goods.

Particular attention is invited to the **Magee Standard Furnace**, portable and for setting in brick, guaranteed superior in any in the market for economy, durability, and heating capacity. Estimates furnished for heating all sizes of dwelling-houses and public buildings. Also a full line of **Brick and Portable Ranges**. Circulars and prices of all the above goods furnished on application. **MAGEE FURNACE CO.** 32 to 38 Union St., Boston



**Brandeis' Seamless Paragon Trap.**

*Safest, Best, Cheapest, and Non-siphoning.* Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDEIS & WICKERT,** 46 Fulton Street, Brooklyn, N. Y.

**C. BUTCHER,**  
107  
Devonshire St.  
BOSTON.

**PATENT MARQUETRY FLOORING.**

Specimens at Lawrence, Wilde & Co.'s, 42 Cornhill, Boston.

**DORCHESTER UNION FREESTONE CO.**  
**NEW BRUNSWICK YELLOW FREESTONE.**  
The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order.  
44 Pine St., New York. - G. P. SHERWOOD.

ESTABLISHED, 1836.

**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Composition Roof known. Also inventors and owners of the following patents:—

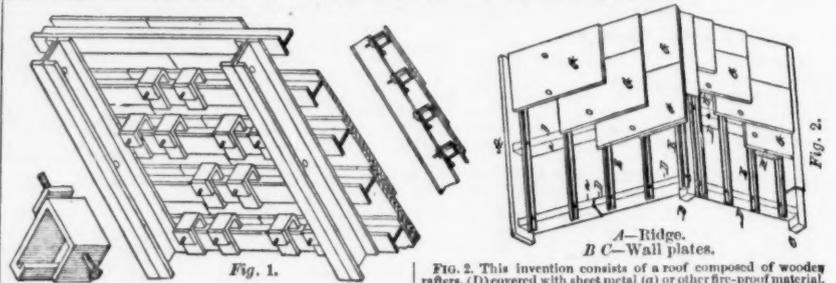
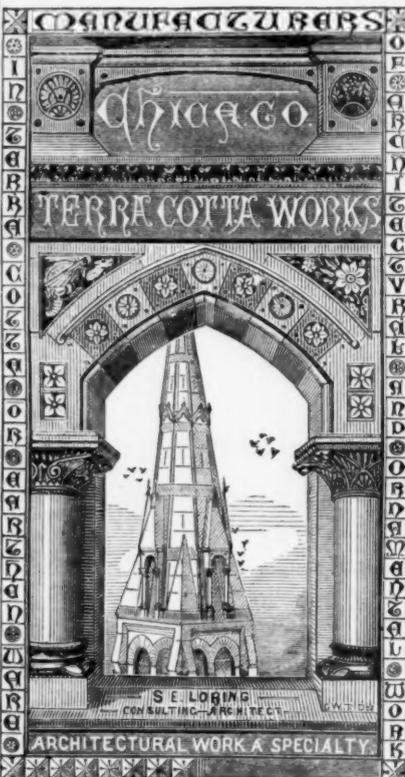


FIG. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the purlin on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

FIG. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or other fire-proof material, and iron purlins (c) or beams, with the slates (G) or other covering secured thereto by claps, (Fig. 1) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contact with the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point, avoiding condensation, contraction and expansion of roofs formed wholly of iron.



**Murtaugh's Improved Patent Dumb Waiter.**

ALSO  
**HOISTING MACHINES OF ALL KINDS.**  
**SAFETY ELEVATORS FOR INVALIDS**  
a specialty.

**PERFECT SAFETY GUARANTEED.**  
On the completion of each SAFETY ELEVATOR we load the platform, and cut the ROPE by which it is suspended. As it never fails to catch, we give a practical demonstration of the certainty of our SAFETY APPARATUS acting in case the rope should break at some future time.  
**ISAAC RICHARDS,** 217 CHESTNUT ST., PHILADELPHIA.

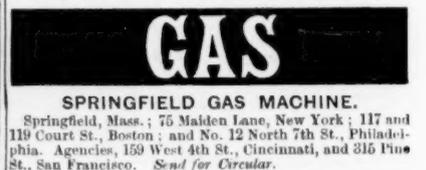
**D. M. MEEKER & SON'S**  
**Malleable Iron Hollow Munten Window Sash.**



For Invalid Hospitals, Fire Proof Buildings, &c.  
The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by  
**D. M. MEEKER & SON,**  
Newark, N. J.  
Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.



**CRANE, BREED & COMPANY**  
**SAFETY BOILERS**  
**STEAM AND HOT WATER.**  
MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RA DIATORS, PIPE COILS, REGISTERS, FITTINGS, STEAM PUMPS.  
**PATENT MINERAL WOOL.**  
ENTIRELY FIRE-PROOF AND UNDECAYING.  
**THE BEST INSULATOR OF HEAT, COLD, AND SOUND.**  
For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc.  
**ALEXANDER D. ELBERS,**  
P. O. Box 4461. 26 1/2 Broadway, New York.



**GAS**  
**SPRINGFIELD GAS MACHINE.**  
Springfield, Mass.; 75 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

**A. L. FAUCHÉRE & CO.**  
OFFICE AND WAREHOUSES  
1319 and 1321 Broadway, New York,  
Importers, Manufacturers, and Dealers in all kinds of foreign and domestic  
**MARBLE FOR INTERIOR WORK.**  
Estimates furnished on application.



**HOISTING MACHINES**  
EXCLUSIVELY.  
HOTEL STEAM ELEVATORS,  
HYDRAULIC ELEVATORS,  
HAND POWER HOISTS,  
DUMB WAITERS.  
**H. J. REEDY, Manufacturer,**  
128 EAST EIGHTH ST., - Cincinnati, O.

**J. & B. LAMB, 59 CARMINE ST., N. Y.**  
**CHURCH FURNISHERS**  
Practical Workers in Sterling Silver, Brass, and Bronze. Carved Wood, Decorations, etc.  
Illustrated Catalogues.  
Furniture, Dec. Metalwork, Dec. Decoration, etc.  
**DAVIS PATENT AUTOMATIC AIR VALVE.**  
The only reliable Self-Acting Valve made. Adapted to Steam Coils, Radiators, Pipes, Condensers, and beautiful in design, and finished in brass or nickel. Address  
**G. M. DAVIS & CO., Chicago, Ill.**

**MAKE** your own **GAS**  
Send for CIRCULAR  
**WALWORTH MANUF. CO.**  
No. 61 Kilby Street,  
BOSTON, MASS.



WOODBURY, CONN.—The Roman Catholics are raising money to build a church.

YONKERS, N. Y.—Arrangements are being made to erect and run cotton mills at Yonkers, a plot of ground on the Saw Mill River, 350 by 1,500 feet, and fronting on Nonerhan Avenue, having been selected as the site.

#### The Light-House Service.

The following sums are appropriated by the Sundry Civil Act for additional light-houses, beacons, and fog-signals:—

Romer Shoals Beacon, New York, protecting foundation	\$25,000
Barnegat Light-house, New Jersey, protecting site	10,000
Absecon Light-house, New Jersey, protecting site	15,000
For new light-house near American Shoals, Florida Reef	75,000
Thirty-mile Point Light-station, Lake Ontario, protecting site	5,000
Establishment of lake coast light and fog-signal station, Racine Point, Lake Michigan	40,000
Erection of light-house at Fort Point, Galveston Harbor	15,000
Stannard's Rock Light-house, Michigan, to continue erection of	100,000
Erecting first-class light on Tillamook Head, Oregon	50,000
Erecting light-house on Fort Ripley Shoals, Charleston Harbor, S. C.	5,000
Construction of range light on Paris Island, Port Royal Harbor, S. C.	20,000
Erection of pier-head lights on northern lakes	15,000
Rebuilding light-house at Hooper's Straits, Maryland	20,000
Rebuilding light-house at Cape Henry, Virginia	75,000
Light-house at Laurel Point, Albemarle Sound	25,000
Beacon lights in North Landing River, Currituck Sound, and North River, North Carolina	20,000
Day beacon at Anita Rock, California	1,500
Great Beds Light-house, Haritan Bay, New Jersey	34,000
Light-house and fog-signal at Point Wilson, Puget Sound	8,000
Beacon lights at Lake Memphremagog	5,000
Lights to guide past Cherry Island Flats, Delaware River	10,000

The above items are in addition to the appropriations made for the light-house establishment.

#### INDEX OF CURRENT WORK,

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

#### Baltimore, Md.

CHURCH.—The Cummings Memorial Church. Mr. Cassell, architect.

CHURCH.—The Pius IX. Memorial Church. G. A. Frederick, architect. Cost \$100,000.

CHURCH.—Church of St. Michael and All Angels. Cost \$80,000. Wyatt & Sperry, architects.

HOSPITAL.—Johns Hopkins Hospital. J. E. Niernsée, consulting architect.

#### Boston, Mass.

BANK BUILDING.—Tremont Bank Building. Carl Fehner, architect.

THE MUSEUM OF FINE ARTS.—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.

SCHOOLHOUSE.—High and Latin School. G. A. Clough, architect.

#### Brooklyn, N. Y.

TENEMENT.—A. T. White, owner. William Field & Son, architects.

SOCIETY BUILDING.—The Long Island Historical Society Building. Mr. G. B. Post, architect. Cost \$100,000.

CHURCH.—St. Francis Xavier R. C. Church, West Fifteenth Street. Cost \$150,000. P. Keely, architect.

#### Chicago, Ill.

ARMORY.—Armory for the First Regiment. Messrs. Wheeler & Clay, architects. Cost \$25,000.

STORE.—The Singer Building. Cost \$250,000.

#### Cincinnati, O.

U. S. CUSTOM HOUSE AND POST OFFICE. S. Hannaford, local superintendent.

CHILDREN'S HOME.—J. W. McLaughlin, architect. Cost \$50,000.

NEWSPAPER OFFICE.—The Gazette Building. E. Anderson, architect.

#### Cleveland, O.

BUSINESS BLOCK.—Amasa Stone, owner. J. Ireland, architect. Cost \$70,000.

CHURCH.—Second Presbyterian. J. Ireland, architect. Cost \$70,000.

CONVENT.—Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

PUBLISHING HOUSE.—Evangelical Publishing Association. J. M. Blackburn, architect. Cost \$45,000.

#### Hartford, Conn.

SEMINARY.—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.

CATHEDRAL.—R. C. Cathedral of St. Joseph. P. Keely, architect.

CATHOLIC SCHOOL.—Brown & Stilson, architects, New Haven. Cost about \$25,000.

#### Jersey City.

COLLEGE.—Catholic College. Mr. L. O'Connor, architect.

CONVENT.—Convent of the Sisters of St. Dominick. Cost \$40,000.

#### New York.

THE "FLORENCE." Emile Grewé, architect. Mrs. Matthews, owner. Cost \$500,000.

THE BOREEL BUILDING. S. D. Hatch, architect. Cost \$250,000.

COLLEGE.—Addition to Columbia College. C. C. Haight, architect. Cost \$200,000.

OFFICE BUILDING.—Messrs. Silliman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.

APARTMENT HOUSE.—Mr. H. J. Hardenburgh, architect. Cost \$300,000.

PRIVATE RESIDENCE.—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.

STORE.—Mr. John Duncan, owner. Mr. G. Thomas, architect. Cost \$90,000.

ARMORY for the Seventh Regiment. Cost \$300,000. C. W. Clinton, architect.

#### Philadelphia.

HOSPITAL.—Presbyterian Hospital. Wilson Bros., arch'ts.

OFFICE BUILDING.—Girard trust.

#### Providence, R. I.

DORMITORY for Brown University.—Messrs. Stone & Carpenter, architects.

CITY HALL.—Mr. S. J. F. Thayer, Boston, architect.

HIGH SCHOOL BUILDING. Messrs. Walker & Gould, architects.

#### St. John, N. B.

POST OFFICE, Custom House, and Savings Bank.—Mr. Scott, Chief Architect to the Dominion Government.

BANK.—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.

CHURCH.—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.

CITY HALL.—Messrs. McKean & Fabweather, architects.

CHAPEL.—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.

CHURCH.—St. James's Church, Croft & Camp, architects, St. John, N. B. St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$30,000.

#### St. Louis.

CHURCH.—Second Baptist Church. Edward Hlaley, contractor. Cost \$100,000.

COURT HOUSE for the new county of St. Louis.—F. Renwick, architect. Cost \$28,000.

COLLEGE.—College for the Christian Brothers. Mr. Jas. McGrath, architect. Cost \$200,000.

CUSTOM HOUSE AND POST OFFICE.—Mr. Jas. G. Hill, Supervising Architect of the Treasury Department.

UNIVERSITY BUILDING.—The Female Department of Washington University. Rev. W. G. Elliot, Chancellor. Cost \$60,000.

#### Washington, D. C.

COLLEGE BUILDING FOR THE DEAF AND DUMB ASYLUM.—F. C. Wip's, architect. Cost \$50,000.

CHILDREN'S HOSPITAL.—J. C. Harkness, architect. J. G. Naylor, builder.

#### General.

ASHLAND, O.—Dunkard German College, \$10,000 or more, G. W. Kramer, architect.

CAMBRIDGE, ILL.—Court House for Henderson County. Cost \$65,000.

CAMBRIDGE, MASS.—Gymnasium for Harvard College. Messrs. Peabody & Stearns, architects.

CONCORD, N. H.—State Prison. Messrs. Dow & Wheeler, architects. Appropriation, \$200,000.

DURQUE, IO.—St. John's Church, H. M. Congdon, architect, New York, \$40,000.

ELMIRA, N. Y.—Masonic Hall. N. LeBrun, architect. New York. Cost \$60,000.

FARIBAULT, MINN.—Deaf, Dumb, and Blind Asylum. J. Babcock & Co., contractors. Cost \$53,750.

GARDEN CITY, L. I.—Stewart Memorial Church. H. G. Harrison, architect.

INDEPENDENCE, IO.—Hospital for the Insane. G. Joselyn, supervising architect. Cost \$850,000.

JACKSONVILLE, FLA.—Store. W. Astor, New York, owner, Geo. Hoover, architect. Cost \$75,000.

JOLIET, ILL.—St. Mary's (Roman Catholic) Church. Mr. Kelly, architect, Brooklyn.

KANKAKEE, ILL.—Insane Asylum. J. R. Willett, architect, Chicago, Ill.

LOWELL, MASS.—Appleton Bank. O. A. Merrill, architect. Cost \$70,000.

NORRISTOWNS, PENN.—Insane Asylum. Wilson Bros. & Co., architects, Philadelphia.

OAKLAND, CAL.—First Congregational Church. Mr. L. B. Valk, New York, architect. Cost \$60,000.

OTTAWA, ILL.—Holy Trinity (R. C.) Church. H. C. Furness, architect. Cost \$150,000.

ARMORY. Cost \$35,000. Mr. H. C. Furness, architect.

PORTLAND, CONN.—Trinity Church, H. M. Congdon, architect, New York, \$50,000.

POUGHKEEPSIE, N. Y.—Hudson River Hospital for the Insane. Mr. F. C. Withers, architect.

SPRINGFIELD, ILL.—Jail. G. H. Helmle, architect. Cost \$65,000.

TOPEKA, KAN.—Insane Asylum. Cost \$76,000. Mr. E. T. Carr, architect, Leavenworth, Kan.

WABASH, IND.—Court House. B. V. Enos & Son, architects. Cost \$100,000.

WAUKEGAN, ILL.—Court House. H. C. Koch, architect. Cost \$40,000.

ZANESVILLE, O.—Hotel. H. E. Myers, architect Black & Graham, owners. Cost \$75,000.

#### Latest.

BOSTON, MASS.—Family hotel. Cost, \$150,000. Mr. S. D. Kelley, architect.—Asylum for Aged People, C. J. Bateman, architect. Cost, \$54,000.

BROOKLYN, N. Y.—St. John's Hospital, N. L. Derby, New York, architect.

CINCINNATI, O.—Church of St. Francis de Sales.

#### Publishers' Department.

### The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY  
HOUGHTON, OSGOOD & CO.,  
WINTHROP SQUARE, BOSTON.  
NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art,  
devoted to the Interests of Architects,  
Builders, Decorators, etc.

15 cents per copy; \$7.50 per year; \$6.00 in advance.

#### CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,

WITH  
Houghton, Osgood & Co.'s other Periodicals.  
THE ARCHITECT and ATLANTIC MONTHLY...\$9.00  
THE ARCHITECT and THE REPORTER...15.00  
THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL...10.00  
THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE...7.00  
\* N. B.—The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

#### RATES OF ADVERTISING.

PAGES NEXT TO READING MATTER,  
single insertion...12½ cts. per line  
One inch (14 lines) one insertion...\$1.75  
One inch, six insertions...10.00  
INSIDE PAGES, single insertion...10 cts. per line.  
One inch, single insertion...\$1.40  
One inch, six insertions...7.00  
For larger space, and for a series of more than six insertions, reduced rates, made known on application to the Publishers.

#### Special rates for first and last pages.

No extra charge for cuts, or for advertisements that occupy more than a column in width.

Payments should be made directly to the Publishers, either by draft or by post office order.

HOUGHTON, OSGOOD & CO., Publishers,

WINTHROP SQUARE, BOSTON.

#### BUILDING SPECIALTIES, Etc.

—We furnish with this issue a cut illustrating the Rolling Venetian Wood Blinds, made by Wilson & James of 68 Beekman Street, N.Y. We take pleasure in calling the attention of our readers to these blinds. Architects will not fail to see the many advantages they possess over a hinged blind, especially in bay and mullioned windows. It is claimed for them that they are cheaper than the ordinary blinds, and much handsomer and more convenient to use.

Among the many residences where they have recently been fitted are the following:—

Cyrus W. Field, Esq., Irvington-on-Hudson; Dr. Dodd, Orange Mountain; T. W. Phenix, Esq., Newport; J. H. Jones, Esq., Barton, Westchester; R. W. Cameron, Esq., Clifton, S.I.; T. W. Crane, Esq., Elmira, N.Y.; Stewart Hartshorn, Esq., Milburn, N.J.; Hamlin Mansion, Montrose, N.J.; Mr. Eugene Blackford, Bedford Avenue, Brooklyn; R. Thomas, Esq., Rochester, N.Y.; R. Rubsam, Esq., Stapleton, S.I.

They are now being fitted to an apartment house on East Twenty-first Street, near Broadway, and to several fine residences in the vicinity of Newark. The Rolling Steel Shutters made by this firm are fast becoming recognized as one of the very best fire and burglar-proof protections; they are so easily handled, and are now quite inexpensive. They recently fitted them to all the first-floor windows of C. B. Wesley's country-house at Portchester, and to residence of Mrs. Sterne, 614 Fifth Avenue; also on new business block of Daniels & Boyd, St. John, N.B.; on a new store on Broadway, near Grand, N.Y.; the new Queen's Insurance building, Wall Street; Armstrong, Cator & Co.'s building, Baltimore; and many others less prominent. They are just now very full of work, as, besides a large number of orders for wood blinds in hand, they are busy on contracts for fitting steel shutters to Court House, Worcester, Mass.; on a large block in Cleveland, owned by Messrs. Hay & Stone; and upon the Cook County Court House, Chicago, in which there will be fitted, on windows and doorways, about three hundred shutters.

We understand that the Wilson Venetian Blind is being introduced into railroad-cars and steamboats for closing the windows, for which it is said they are admirably suited. Illustrated catalogues and price-lists are furnished by the manufacturers on application.

*A. Hall & Sons*  
Manufacturers of  
*Architectural Terra Cotta,  
Buff and Colored Brick, Fire Brick  
Established 1846, Perth Amboy, N.J.*

#### ARCHITECTURAL IRON WORKS.

YOUNGLOVE & CO., Prop'r's.  
CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CRESTING, ETC.

Estimates promptly furnished.

(Established 1848.)

MARKET ST. ARCHITECTURAL FOUNDRY

AND  
IRON WORKS.

SNEAD & CO.,

LOUISVILLE, KY

Makers of every description of Iron Work for Buildings.

#### SUBSCRIBERS TO THE AMERICAN ARCHITECT AND BUILDING NEWS

Who have not yet paid their subscriptions for 1878 are reminded that the special offer recently made by the Publishers, to accept \$6.00 for subscriptions for the current year, extends only to July 1, and that on and after that date the price will be \$7.50. Those who wish to avail themselves of the reduction offered should therefore remit at once to

HOUGHTON, OSGOOD & CO., Winthrop Square, Boston.

**Drawings for the American Architect and Building News.**

Architects and architectural draughtsmen who desire to contribute drawings for publication will find the following facts of use:—

Only pen-and-ink drawings, without brush-work of any kind, can be reproduced.

The space upon a single page allowed for a drawing is 7" x 11"; therefore drawings should have approximately these proportions.

The reproductions are most satisfactory when they are from one-third to one-half as large as the originals.

The most satisfactory results are obtained from drawings upon Bristol board, or hot-pressed Whatman. Tracing paper should not be used.

Tracing cloth upon the dull side, bank-note paper, or tracing paper, provided it is not of a yellowish tinge, may be used in cases of absolute necessity.

The ink should be black and of uniform strength. The lines should be firm, sharp, not too coarse, and not unintentionally broken.

Shading and hatching lines must not be too close and crowded, especially where a large surface is to be shaded.

It is very desirable that plans should accompany the drawings.

Drawings of details both constructional and ornamental are also desirable.

**PROPOSALS.**

**DREDGING.**

DUBUQUE, IOWA. U. S. ENGINEER OFFICE, ROCK ISLAND, ILL., July 10, 1878. Duplicate sealed proposals will be received by the undersigned until 2 P. M., August 10, 1878, for dredging a bar in the Mississippi River, opposite Dubuque, Iowa. For all information apply to F. U. FARQUHAR, Major of Engineers. 135

**STONE.**

BURLINGTON, IOWA. U. S. ENGINEER OFFICE, ROCK ISLAND, ILL., July 10, 1878. Duplicate sealed proposals will be received by the undersigned until 2 P. M., August 10, 1878, for furnishing stone at Rush Chute, near Burlington, Iowa. For all information apply to F. U. FARQUHAR, Major of Engineers. 136

**STONE.**

FORT MADISON, IOWA. U. S. ENGINEER OFFICE, ROCK ISLAND, ILL., July 10, 1878. Duplicate sealed proposals will be received by the undersigned until 2 P. M., August 10, 1878, for furnishing stone at Niota Chute, near Fort Madison, Iowa. For all information apply to F. U. FARQUHAR, Major of Engineers. 136

**SCHOOL FURNITURE.**

CINCINNATI, O. Sealed proposals will be received at the office of Public Schools, Public Library Building, until Monday, August 5, 1878, at 12 M., for supplying furniture for the Public Schools of Cincinnati for one year, and also for repairs of furniture, according to specifications on file in said office.

Each bid must contain the name of every person interested therein, and must be accompanied by a guaranty of some disinterested person, that if the bid is accepted a contract will be entered, and the performance of it properly secured.

The right is reserved to reject any and all bids. A sample desk must be delivered at said office by each bidder, to remain in the case of the successful bidder until the expiration of his contract.

By order of the Committee on Furniture. F. PUTTMANN, Chairman. 135

**IRON AND TIMBER.**

LEWES, DEL. U. S. ENGINEER OFFICE, No. 1328 CHESTNUT STREET, PHILADELPHIA, July 12, 1878. Sealed proposals in duplicate will be received until 12 o'clock, M., Saturday, the 27th day of July, 1878, for Iron (first class of material) and Sawed Timber (second class of material) for this work. Parties may bid on either or both classes. Drawings can be examined and further information obtained at this office. J. N. MACOMB, Colonel of Engineers, U. S. A. 134

**CUT STONE.**

Proposals for the Cut Stone Trimmings required for the superstructure of the U. S. Court-House and Post-Office at Utica, N. Y.

OFFICE OF SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., July 3, 1878.

Sealed proposals will be received at this office until 12 M., on the 29th day of July, 1878, for all of the Stone Trimmings, cut, leaved, and delivered at the site of the building, ready for setting, required for the superstructure of the U. S. Court-House and Post-Office at Utica, N. Y., in accordance with drawings and specification, copies of which and any additional information may be had on application at this office or the office of the Superintendent.

JAS. G. HILL, Supervising Architect. 134\*

**JAIL.**

NEW BRAUNFELS, TEXAS. Sealed proposals will be received until 11 o'clock, A. M., Tuesday, July 23, 1878, for the erection and completion of a Jail at New Braunfels, Comal County, Texas. Bids will be received for the entire work and for the several trades separately, and for the different classes of materials for the cells, etc., but the Commissioner's Court reserves the right to reject any or all bids. All bids must be addressed to the County Judge, and indorsed "Bids for Comal County Jail," and all bids must be accompanied by a certified bond in the sum of \$1,000, conditioned that the bidder will enter into contract and give sufficient bond for his faithful performance. Payments will be made in cash on monthly estimates, as the work progresses; the building to be finished within six months after date of contract. Plans and specifications can be seen at the County Clerk's office at New Braunfels, and at the office of F. E. Kuffni, Architect, Austin, Texas. For further information, address GEO. PFEUFFER, County Judge Comal County, New Braunfels, Texas. 134

**PROPOSALS.**

**ASYLUM.**

Sealed proposals will be received until Monday, August 5, 1878, at 12 o'clock, M., by the Trustees of the Ohio Institution for the Education of Idiotic and Imbecile Youth, at the office of the Superintendent, for furnishing materials and doing the work required by the plans and specifications for building two new wings.

Separate proposals will be received for furnishing the materials or doing the work, or both, for each separate, distinct business represented in the construction of such buildings.

All proposals must be accompanied by proper bond and security, and directed to John A. Shank, President of the Board of Trustees, and left at the office of the Superintendent.

Plans and specifications can be seen at said office from this date.

JOHN A. SHANK, J. M. MONTGOMERY, J. K. RUKENBROD, Trustees.

135

**HARBOR IMPROVEMENTS.**

U. S. ENGINEER OFFICE, ROOMS 55 and 56 MOPPAT BLOCK, DETROIT, MICH., July 5, 1878.

Sealed proposals will be received until 12 M., of Friday, July 26, 1878, for the following harbor improvements on Lake Michigan:

1. CHARLEVOIX HARBOR, MICH. — Five (5) Cribs, with superstructure, and for such repairs to existing work as may be required.
2. FRANKFORT HARBOR, MICH. — Two (2) Cribs, some refilling of old work, and other repairs as may be required.
3. MANISTEE HARBOR, MICH. — Four (4) Cribs, and for such repairs to existing work as may be required.
4. LUDINGTON HARBOR, MICH. — Three (3) Cribs, some refilling of old work, and such repairs as may be required.
5. PENTWATER HARBOR, MICH. — Six hundred (600) feet, more or less, Pile reatment; dredging about 14,000 cubic yards, sand, slabs, etc., and repairs as may be required.
6. WHITE RIVER HARBOR, MICH. — One (1) Crib, and for brush-matting work.
7. MUSKOGON HARBOR, MICH. — Repairing Piers.
8. GRAND HAVEN HARBOR, MICH. — Three (3) Cribs, without superstructure, and repairs to old work as may be required.
9. BLACK LAKE HARBOR, MICH. — Three (3) Cribs, and repairs as may be required.
10. SOUTH HAVEN HARBOR, MICH. — Four hundred and fifty (450) feet, more or less, of Plank beam reatment; dredging about 30,000 cubic yards sand, logs, slabs, piles, brush, etc., and repairs to old work as may be required.
11. St. JOSEPH HARBOR, MICH. — Two (2) Cribs, refilling old work, and such repairs as may be required.

For information and blanks necessary to bid apply to this office.

S. M. MANSFIELD, Major of Engineers. 134

**REFORMATORY.**

TORONTO, ONT. Sealed tenders, addressed to the Commissioner of Public Works, will be received at the Department of Public Works, in Toronto, Ontario, up to noon, on Saturday, the 20th of July, for the erection of the Andrew Mercer Reformatory for Females in the city of Toronto. Plans and specifications are now ready for inspection at said department, where forms of tender and all necessary information may be obtained. The bona fide signatures of two sureties must be attached to each tender. The lowest of any tender will not of necessity be accepted. WM. EDWARDS, Secretary. 134

**ELECTRIC CLOCKS. FURNITURE.**

LANSING, MICH. Proposals for furnishing Electric Clocks and Furniture for the new Capitol of Michigan, at Lansing, will be received by the Governor and Board of State Auditors at the office of the Board for furnishing the New Capitol of Michigan, in Lansing, until 12 o'clock, noon, on Wednesday, July 31, 1878, and will be opened at said office at 3 o'clock, P. M., on the same day. Persons desiring to submit proposals can obtain schedules of the articles required, instructions to bidders, preliminary bonds, and all necessary information upon application to the Secretary. The Board reserves the right to reject any or all proposals submitted. All proposals must be sealed, indorsed "Proposals for 'Electric Clocks' or 'Furniture for New Capitol,'" and addressed to A. L. Bours, Secretary of the Board, Lansing, Mich.

CHAS. M. CROSSWELL, Governor. E. G. D. HOLDEN, W. B. MCCREERY, B. F. PARTRIDGE, Board of State Auditors. ALLEN L. BOURS, Secretary. 135

**COURT-HOUSE.**

BELIZE, HONDURAS. Tenders (in duplicate) indorsed, "Tenders for Court-House," will be received until noon on the 12th of August, 1878, from persons willing to construct a new Court-House and Public Offices in the town of Belize. Persons desiring to compete for the work can inspect plans and sections and specifications, forms of tender and agreements and other particulars, on application at the office of the undersigned, at Belize, and at the office of the Crown Agents for the Colonies, Downing Street, London, or Messrs. A. E. Outbridge & Co., 29 Broadway, New York. No tender will be noticed except on the prescribed form, nor unless two efficient sureties are provided for the due performance of the work in accordance with the terms of the specification. Tenders must be addressed to the Honorable the Colonial Secretary, Belize, British Honduras, care of A. E. Outbridge & Co., 29 Broadway, New York. The government do not bind themselves to accept the lowest or any tender. By order of His Excellency the Lieutenant-Governor. GUSTAV VON OHLAFEN, Colonial Engineer. 136

**Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms. They recommend, on their own account and for the sake of the public, that such firms advertise in this paper.**

**COMPETITIONS.**

**JAIL.**

TEXANA, TEXAS. Sealed proposals, with plans and specifications for building a Jail in Texana, Texas, cost, \$2,000 cash, will be received at this office until August 1, 1878. By order of the County Commissioner's Court for Jackson County, Texas. JOHN R. SANFORD, C. C. C., J. C. T. By R. C. BROSAUGH, Deputy. 134

**COURT-HOUSE.**

CLARKSVILLE, TENN., June 3, 1878. The undersigned having been appointed Commissioners by the County Court of Montgomery County, Tennessee, to superintend the erection of a Court-House, hereby invite architects desiring to offer plans for the same to do so on or before the 31st day of August, 1878.

Architects submitting plans will be governed by the following specifications:

Drawings to consist of Floor Plans, Elevations, Transverse and Longitudinal Sections. A written statement explanatory of the same, together with an itemized estimate of the cost to execute, must accompany each design submitted.

No appropriation has as yet been made, but a good building is desired, and plans are necessary in order to know what amount will be required.

For further information apply to the Chairman of the Commissioners. CHARLES W. TYLER, Chairman, G. H. SLAUGHTER, W. S. MALLORY, G. ORGAIN, CHAS. G. SMITH, Commissioners. 135

**WANTED.**

QUARRY FOREMAN. A competent and reliable man to take charge of our White Limestone Quarries, situated on Louisville and Nashville Railroad. Apply at once to BEEKNAP & DUMESNIL, Corner 10th and Chestnut Streets, Louisville, Ky.

**NEW BOOKS**

PUBLISHED BY HOUGHTON, OSGOOD & CO., Winthrop Square, Boston.

**DRIFT FROM TWO SHORES.**

By BRET HARTE. "Little Classic" style. \$1.25. Like "The Luck of Roaring Camp" and "Tales of the Argonauts," this book contains a variety of stories and sketches; and it is characterized by the same dramatic felicity of narration and the same exquisite charm of style which made those earlier books famous in both America and Europe.

**MEMORIAL AND BIOGRAPHICAL SKETCHES.**

By JAMES FREEMAN CLARKE, author of "Ten Great Religions," etc. 1 vol., 12mo, \$2.00.

A most interesting book, containing chapters on Gov. Andrew, Dr. Channing, Charles Sumner, Theodore Parker, Dr. Howe, Dr. Gannett, and other distinguished persons.

A careful estimate of the character of these men by one who knew them intimately in public and private life, and who writes with candor and judgment, warmed but not warped by personal friendship, is of great value, and Dr. Clarke's literary skill would make his sketches interesting if his subjects had not so strong an interest of their own. — Worcester Spy.

**THE POLITICAL ECONOMY**

Of Great Britain, the United States, and France, in the Use of Money. A New Science of Production and Exchange. By J. B. HOWE. 1 vol., 8vo, \$3.50

An elaborate work on a topic that just now challenges the attention of financiers, legislators, and all thoughtful citizens. Judge Howe has devoted the resources of years to this subject, and is confident that his reasonings lead to conclusions which will be accepted by candid and intelligent men, and which, if acted upon, will greatly promote the prosperity of the country.

**MONETARY AND INDUSTRIAL FALLACIES.**

A Dialogue. By J. B. Howe. 1 v. 1., 8vo, \$1.50. In the form of a dialogue Judge Howe sets forth various opinions held concerning money and labor, emphasizing certain current fallacies and, as in an informal conversation, showing the delusive character of these fallacious opinions and maintaining correct ones.

**THE DHAMMAPADA.**

Translated from the Chinese, by Rev. SAMUEL BEAL, B. A. Vol. XII. of the English and Foreign Philosophical Library 8vo. \$2.50.

An excellent translation of an important work, and one of peculiar value to students of comparative religion.

\* \* \* For sale by all Booksellers. Sent, post-paid on receipt of price by the Publishers.

HOUGHTON, OSGOOD & CO., Boston.

MARSHALL'S AMERICAN



LEADED SHEETS. Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Represented in New England States by C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

BUHRER'S INFALLIBLE SEWER GAS TRAP.



The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (E) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.

S. BUHRER, Inventor and Manufacturer, Cleveland, Ohio. WHOLESALERS AGENTS.

W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O. L. WOLFF MFG CO., 109 & 111 West Lake St., Chicago, Ill. HAMBLEN & MATHEWS, 82 & 84 North St., Boston, Mass. C. A. BLESSING, 44 North Fifth St., Philadelphia, Pa. THE J. L. MOTT IRON WORKS, 88 & 90 Beekman St., N. Y. Please send for Circular.

GALVANIZED IRON CORNICES.

For the very best in all particulars, send to the undersigned. Our advantages are: Steam Power Machinery, the largest business and the most extensive experience, the ablest corps of workmen ever gotten together, and all known improvements in manipulation and construction.

OVER FOUR THOUSAND CONTRACTS satisfactorily executed attest our success. Specimens of our work may be seen in every State in the Union. Architects will find it to the interest of their clients to obtain our estimates.

Fire-Proof Construction, and Pressed Zinc Ornamentation, are specialties.

Tracings of designs are solicited; but within reasonable limits (on large jobs) visits will be made. Correspondence promptly answered.

The Kittredge Cornice and Ornament Co., Salem, Ohio.

MENEELY & KIMBERLY, Bell Founders, Troy, N. Y.

Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT HOUSE BELLS. Illustrated Catalogue sent free.



NATIONAL TUBE WORKS CO.

Indestructible Enamelled Wrought Iron LAP-WELDED PIPE, From 1/4 inch to 15 inches diameter. Now extensively used for

Water, Gas, Sewerage, and Mining.

It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making Joints, supplied to Pumps, Steam and Gas Filters, etc. Specimens can be seen and obtained at offices of

National Tube Works Co., 8 Pemberton Square, Boston; 116 Lake Street, Chicago; 108 John Street, N. Y.; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.



D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

Terra Cotta Chimney Tops, Akron Land Tile

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free.

HENRY McSHANE & CO., Baltimore, Md.

The Useful

is issued monthly—consists of Perspectives of Interiors, Ornaments of Buildings, Fresco Painting, Furniture, etc., and is accompanied with full-size working-drawings—for direct use—Price to Subscriber One dollar per number.

Office 23 Pemberton Square, Boston, Mass.

TO ARCHITECTS:

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the

Seagliola and Marezzo Marble,

Which closely imitates the rarest and most costly Marble Columns, Pilasters, Pedestals, Wainscoting, Wall and Altar Work.

JAS. T. ALLEN & CO., 25 North 17th Street, Philadelphia.

Advertisement for THE HELIOTYPE PRINTING COMPANY, featuring a central illustration of a printing press and text: 'LUX-FECIT THE HELIOTYPE PRINTING COMPANY 220 DEVONSHIRE ST BOSTON COR FRANKLIN ST HELIOTYPE PHOTOGRAPHS in Printers Ink HELIOTYPE PHOTOGRAPHS printed by Steam HELIOTYPE CUTS to print with Type HELIOTYPE FACSIMILE LETTERS, SHOW CARDS, etc.'

THE "AIR SPACE" STEAM and PIPE BOILER COVERINGS

Save 10 to 20 per cent in fuel.

See Am. Architect and Building News, Dec. 18, 1877.

THE CHALMERS-SPENCE COMPANY.

140 Congress Street, Boston Foot 19th St., E. R., New York.

CLASSIFIED ADVERTISEMENTS.

Table listing various categories of advertisements such as ARCHITECTS, BELLS, BOILER COVERING, BRICK, CARPENTERS, etc., with corresponding page numbers.

Table listing various categories of advertisements such as DRAIN PIPE, ELEVATORS, GALVANIZED IRON CORNICES, GAS FIXTURES, etc., with corresponding page numbers.

Table listing various categories of advertisements such as HOISTING MACHINES, LEADED SHEETS, MARBLE WORKERS, PAINT, etc., with corresponding page numbers.

Table listing various categories of advertisements such as ROOFING FELT, SCAGLIOLA AND MAREZZO MARBLE, SEWER GAS TRAP, etc., with corresponding page numbers.

**ETNA IRON CO.**

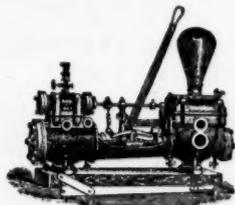
Manufacturers of every description of Wrought and Cast

**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**



Patent

Steam

**PUMP**

**THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

**KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES, { 14 & 16 Federal St., } Boston.  
 { 113 & 115 Congress St., }  
 { 92 & 94 Liberty St., } New York.

Send for Illustrated Catalogue.

**THE**

**Plumber & Sanitary Engineer,**

A Monthly Journal devoted to

**WATER SUPPLY,**

**DRAINAGE,**

**HEATING & LIGHTING.**

It contains no paid papers.

Its technical articles are written by experts.

It is a manual of the best practice in Plumbing.

It illustrates the latest improvements in House Drainage.

It is indispensable to every Architect and Builder.

Terms, \$1.50 a year. Single Copies, 15 cents.

Address

AM. PLUMBER PUBLISHING CO.

Box 3037 P. O. 297 Pearl St, New York.

**"ZODTCHY" (BUILDER).**

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

M. JEROME KÜTTNER,

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from eight to sixteen pages of letterpress, gr. quarto, with cuts, and at least five autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.

The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address.

JOURNAL "ZODTCHY,"

18 OFFICER STREET, ST. PETERSBURG, RUSSIA.



**Carson's Kitchen Sink**

Is an improvement in this fixture that must meet with the approval of every house keeper as it retains every particle of grease, and prevents the waste of pipes from filling up; besides being better trapped than any other sink in use.

Biggall Mfg. Co., Medina, N. Y., or J. M. Carson, Louisville, Ky., Man'rs.

**NATIONAL**

**FINE ART FOUNDRY,**

318 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze TO ARCHITECTS AND BUILDERS.

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

**GEO. DWIGHT, JR., & CO.,**

Builders in Iron, and Engineers in Fire-Proof Construction,

SPRINGFIELD, MASS.

HAVE for many years given their exclusive attention to FIRE-PROOF CONSTRUCTION; and they now invite the correspondence of Architects to the following specialties which hereafter will constitute the leading items of their business:

**FIRE-PROOF FLOORS.** The only floors that have stood fire in this country.

**FIRE-PROOF ROOFS.** Refer to Equitable Life Insurance Company's Building at Boston.

**FIRE-PROOF SHUTTERS.** Have stood many fires in all parts of the country. Over 8000 pairs put up in Boston after the fire. Saved the city of Springfield last year.

**FIRE-PROOF LATH.** In the words of one of the best-known architects of this country, "Minimum of metal, maximum of stiffness, maximum of clinch; the best lath ever made, either wood or iron." See New York Post-Office; State Department, Washington; Equitable Life Insurance Company's Buildings, and many others.

Mr. HOTT will be pleased to wait upon Architects, when desired, to explain our methods, and to present for inspection construction plans and estimates for any specific work.

**BURDITT & WILLIAMS,**

DEALERS IN

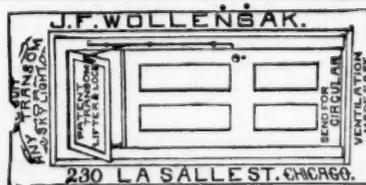
**FINE HARDWARE**

of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



**CATALOGUE OF**

**Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

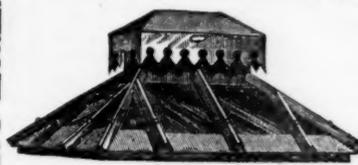
A. J. BICKNELL & CO.,

ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.



**BICKELHOUP BROS.,**  
829 West 37th St., New York.

NO LEAK.



NO FURTHER.

**PATENT METALLIC SKY-LIGHTS.**

**BEEHIVE BRAND.**

**FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**ASAHEL WHEELER'S PAINT PRESERVER**

Is the most remarkable Wood and Paint Protector known against the hot sun's rays and storms. A trial of more than three years' constant exposure has demonstrated this fact. A perfect glossy surface yet remains without signs of perishing. ASAHEL WHEELER, 145 Milk St., Boston



**BALTIMORE PRESSED TILES,**

FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases,

DRAIN AND SEWER PIPE, FIRE-BRICK, LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

WALDO BROTHERS,

No. 94 WATER STREET, BOSTON.

**PEERLESS BRICKS.**

**THE PEERLESS BRICK COMPANY,**

OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK

ARCHITECTURAL SHAPES (80 kinds).

ALSO

**RED** Pressed Fronts.

Extra fine in color and quality

**BROWN,** Colored throughout

More beautiful than Brown Stone DURABLE

**CHOCOLATE,**

Same as above; difference in color

**FLESH COLOR,**

A very popular color.

**BUFF,** very fine.

Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F. ADAMS,

JOSEPH WOOD, JR.,

PRESIDENT.

TREASURER



**DOLIVET, CUTTER, & CO.,**

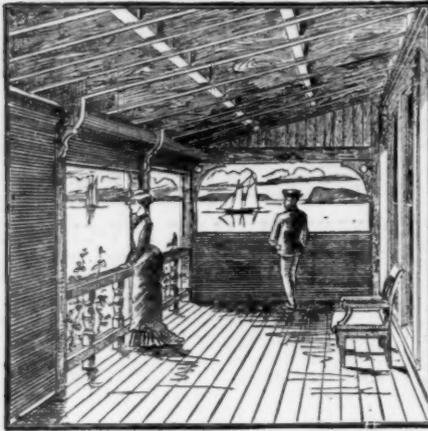
ARTISTIC

**Papier Mache Decorations,**

108 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING VENETIAN BLINDS.**

**WILSON'S PATENT.**  
Three blinds can be fitted to any kind of Window or Piazza. They require no winding machinery or balance weights, and run up and down as easily as an ordinary spring shade. For Bay Windows they are found invaluable.

They are simple, durable, and handsomely finished. They were exhibited at Philadelphia in competition with the Rolling Venetian Shutters of English manufacture, and received the only award of Medal and Diploma.

Price reduced to 50 cents per foot super, in hard wood. We also manufacture Wilson's patent Rolling

**STEEL SHUTTERS,** the best and cheapest fire and burglar-proof Shutters in the market.

**WILSON & JAMES,**  
68 Beekman St.,  
NEW YORK.

**VALUABLE ART PUBLICATIONS.**

**ALLONGE'S** (Auguste) Charcoal Drawing. With an Introduction by C. C. PERKINS, and a Heliotype Frontispiece. Small 4to. \$1.00.  
**BAKER'S** (W. S.) Origin and Antiquity of Engraving, with 23 Heliotype Illustrations from Dürer, Van Dyck, Raphael, Guido, etc. 8vo. \$5.00.  
**HUNT'S** (William M.) Talks on Art. 8vo. Paper. \$1.  
**CLEMENT'S** (Clara Eschine) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a complete Index. Cr. 8vo. Cloth, red edges, \$3.25.  
**MURRAY'S** (Mrs. Elizabeth) The Modern System of Painting in Water-Colors from the living model. 12mo, paper, 50 cents.

**HOUGHTON, OSGOOD AND COMPANY,** Boston.

**A NOVELTY.**

**THE YALE PATENT ANTI-FRICTION ROLLER STRIKE.**

Applicable for use with all Mortise Locks, old and new.

IT ENABLES THE DOOR TO BE SHUT WITHOUT SLAMMING.  
IT PREVENTS ALL JAR AND NOISE.  
IT SAVES WEAR OF THE LOCK AND DOOR.  
IT CAN BE EASILY APPLIED.  
ITS COST IS BUT TRIFLING.

Architects can obtain a sample strike free by addressing

**YALE LOCK MANUFACTURING CO., STAMFORD, CONN.**  
New York Sal-room, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,

94 BEEKMAN STREET,  
NEW YORK.



**SPECIALTIES**  
IN  
**PLUMBING**  
**GOODS.**

Having for their special object  
*Cleanliness,*  
*Durability,*  
And the exclusion of Sewer Gas.

**JENNINGS' NEW CLOSET,**  
WITH  
**New Valve**

With non-corrosive Valve Seating and Solid Plunger.

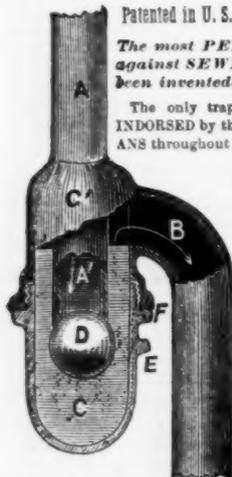


**BOWER'S PATENT SEWER-GAS TRAP.**

Patented in U. S. Apr. 24 & Aug. 14, 1877.

The most PERFECT BARRIER against SEWER GAS that has yet been invented.

The only trap that has been FULLY INDORSED by the LEADING SANITARIANS throughout the WORLD.



**IT IS A POSITIVE SEAL**

Against sewer-gas under pressure, absorbed gases, and back water.

Seal is not broken by siphonage or evaporation.

Self-Scouring, not injured by freezing.

It has many other good points that  
**No other Trap possesses.**

It can be readily attached to old work, in a very short time, and at very little expense.

**SIMPLE, CHEAP, DURABLE, AND EFFECTIVE.**

A sample Trap FREE to Architects on application. Send for full descriptive Circulars to the Manufacturers,

**B. P. BOWER & CO.**  
104 & 106 St. Clair St., Cleveland, O.

**STEWART'S HARD WOOD MANTELS.**  
SLATE, MARBLE AND HARD WOOD  
MIRRORS, ART-TILES FOR MANTELS, HEARTH'S &c.  
Masonic Temple 23<sup>d</sup> St & 6<sup>th</sup> Ave N.Y.



Sewer Pipe, Fire Brick, Terra Cotta, Chimney Tops, Garden Vases, Art Pottery for Decoration. The strongest and smoothest pipe in the country. Send for lists and Catalogue. Prices as low as any other manufacturer.

Portland Stone Ware Co.  
Geo. C. DUNN, Gen'l Ag't,  
50 Kilby Street,  
400 Federal Street, Boston.

**LIMMER ROCK ASPHALT CO.**

111 Broadway, Room 105, New York.  
Rock Asphalt is a natural product, and the ideal material for Paving Roadways, Streets, Yards, and Stables, and for Flooring Cellars in Breweries and other establishments.



**SAYLOR'S PORTLAND CEMENT.**

Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R. U. S. Government Works (Fortis and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally. For Sale by all dealers in Building Materials. **Johnson & Wilson, Gen'l Ag'ts.** Send for circulars. 33 Liberty Street, New York.

**PRIZE MEDALLISTS.**

1862; 1865; 1867; 1872; 1873; AND ONLY AWARD AND MEDAL FOR SELF COILING STEEL SHUTTERS AT CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**

ORIGINAL INVENTORS AND SOLE PATENTEES OF

**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, Improved Rolling Wood Shutters

OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Conable, & Co., and Park & Titford's new Buildings, &c., &c. and are indorsed by the leading architects of the world.

OFFICE AND MANUFACTORY.

162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**

76 READE STREET, NEW YORK,

WORKS, DARLINGTON, N. J.

*Lock and Hardware Manufacturers,*

DESIGNERS, FOUNDERS, AND WORKERS

**BRONZE AND BRASS.**

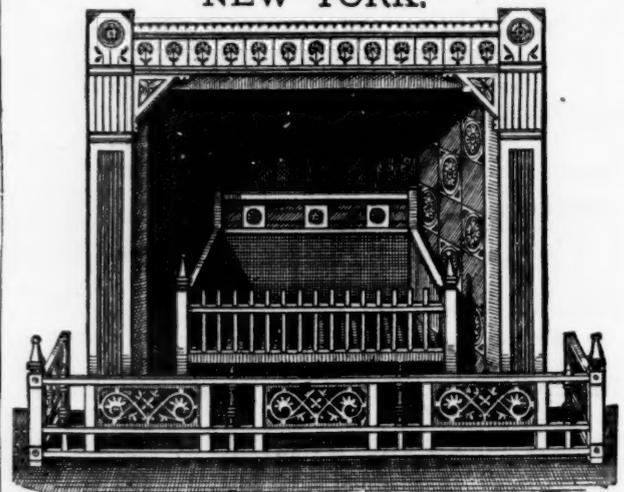
Architects' Designs faithfully executed.

Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side),  
NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile.

HAVE NO OTHER WAREHOUSES.

**Automatic Signal Telegraph Co.,**  
CITY OF BOSTON,

OFFICE, 178 DEVONSHIRE STREET, ROOM 20,  
Is prepared to make contracts for the protection of buildings against fire.

DIRECTORS.

CHARLES E. GUILD, President. WILLIAM ENDICOTT, Jun  
JOHN D. W. JOY. WILLIAM B. WATKINS.  
PATRICK T. JACKSON, Treasurer.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

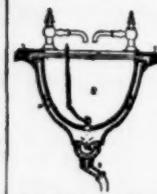
Theatrical Fresco only. Prices moderate. References first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.

LAFAYETTE W. SEAVEY.  
Established 1865. NO. 8 LAFAYETTE PLACE, NEW YORK

**THE WELLINGTON PATENT OVERFLOW BASIN.**

No sewer gas. No overflow. No leakage around the top of the basin. This thoroughly reliable basin is rapidly taking the place of the ordinary one. It gives perfect satisfaction in every instance.

Manufactured by  
**L. S. MOORE & CO.,**  
40 Oliver St., Boston.



Send for Circulars.

# THE AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

Vol. IV. No. 135.]

SATURDAY, JULY 27, 1878.

[PRICE 15 CENTS.

### BUILDERS' SUPPLIES.

#### OTIS BROTHERS & CO.

SAFETY STEAM AND HYDRAULIC  
ELEVATORS.

A specialty for a quarter of a century.

BUILDERS OF THE HALE HYDRAULIC ELEVATOR.  
No. 348 Broadway, New York.

#### WALWORTH MANUFACTURING CO.,

69 KILBY ST., BOSTON.

PUBLIC BUILDINGS,  
PRIVATE RESIDENCES,  
GREENHOUSES, ETC.,  
Warmed and ventilated by  
STEAM OR HOT WATER.  
Correspondence solicited. Plans and estimates furnished  
on application.

#### "HOTCHKISS" TOWER CLOCKS,

MANUFACTURED BY  
SETH THOMAS CLOCK CO., THOMASTON, CONN.  
Prices \$100 to \$6,000.  
WARRANTED ACCURATE, STRONG, DURABLE.  
OFFICE, 581 BROADWAY, NEW YORK.  
Send for Illustrated Catalogue.

#### "MINTON'S ART AND ENAMELLED TILES."

(China Works, Stoke-Upon Trent.) Also, The Campbell  
Brick and Tile Co.'s  
ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS,  
ETC.  
For Churches, Banks, Halls, Vestibules, and Hearths;  
Outside Decorations, Flower Boxes, Etc.  
THOS. ASPINWALL & SON,  
604 BROADWAY, NEW YORK.  
The only representatives in the United States for the  
above firms.

#### ASPHALT (FELT) ROOFING.

WARREN'S NEW PATENT  
FELT AND GRAVEL ROOFING,  
Substitutes NATIVE ASPHALT for Coal-Tar materials for  
these roofs.  
The very best and most durable material for flat roofs.  
Also, Native Asphalt and Asphaltic Cement for Concrete  
Walks and Pavements.  
Roofers and pavers supplied with the above, and with War-  
ren's original Coal Tar Roofing and Paving Materials.  
Send for circulars and samples.  
WARREN CHEMICAL AND MANUFACTURING CO.,  
88 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

#### THE MITCHELL GRANITE WORKS,

QUINCY, MASS.,  
Has abundant facilities for furnishing the very best work,  
and all the most celebrated Granites of the New England  
States, for  
MONUMENTAL, CEMETERY, AND BUILDING  
PURPOSES.  
WORK PROMPTLY DONE, AND AT REASONABLE RATES.  
Polishing a specialty. Orders solicited.  
Address G. H. MITCHELL, Agent.

#### TILES FROM ALL PARTS OF THE

WORLD,  
FOR  
BANKS, PUBLIC BUILDINGS, AND PRIVATE HOUSES  
References given to Tile Work throughout the United  
States and British Provinces  
AGENT FOR THE AMERICAN ROOFING TILE  
Contracts Solicited  
G. A. WELLINGTON, HOUSEHOLD ART ROOMS,  
No. 171 TREMONT STREET, BOSTON.

#### E. HOWARD & CO.

MANUFACTURERS OF CLOCKS AND WATCHES  
CLOCKS FOR PUBLIC BUILDINGS  
114 Tremont Street, Boston, and 692 Broadway, New York

#### GOLD'S WROUGHT IRON HEATERS.

THE "HEALTH" AND "TUBULAR"  
Manufactured by the  
GOLD'S HEATER MANUFACTURING CO.  
114 LEONARD ST., NEW YORK.  
Send for Pamphlet.  
E. E. GOLD, Pres't WYLLIS H. WARNER, Treasr.

### BUILDERS' SUPPLIES.

#### THE FIRE-PROOF BUILDING CO. OF

NEW YORK. Hollow Blocks of any pattern, uniting  
strength and resistance to fire and water. The Hydraulic  
Lime of Toul (France), one of the strongest cements kn. wh. is  
largely used in this manufacture. The blocks do not conduct  
heat, cold, or sound, and weigh sixty per cent less than brick.  
Fire-proof partitions, floor arches between iron beams,  
ceilings under wooden or iron beams, in the following  
buildings:—  
Western Union Telegraph, Orient & Queens Insurance,  
Del. and Hudson Canal Co., Museum of Natural History,  
Equitable, Staats-Zeitung, Hudson R. R. Fr'ght Depot,  
Winsburgh Savings Bank, Cluny & Young's Hotels, Bos-  
ton.  
Windsor Vestm'n'g Hotel, New York Hospital, Drexel,  
Syracuse Savings Bank, Columbia College, Tribune, West Point Military Hospital,  
Baltimore Safe Deposit Co., Lenox Library, Bennett,  
Peabody Museum, New Westmoreland Flats,  
Peabody Institute, Baltimore.  
Insurance on Wooden Mansards reduced ninety cents per  
\$100. Sidewalks laid at Lenox Library, Tribune, etc. Hollow  
Bricks of all kinds. Our Fire-Proof work is the only  
one approved by the New York Board of Fire Underwriters,  
and the Superintendent of Buildings, after severe public  
tests.  
LEONARD F. BECKWITH, President.  
Office, Room 54 Coal and Iron Exchange, New York.

#### MINTON'S TILES.

PLAIN AND ENCAUSTIC  
FOR PUBLIC BUILDINGS AND DWELLINGS,  
As laid by us in:  
THE CAPITOL AT WASHINGTON,  
And in numerous Churches, Banks, and Dwellings in every  
part of the Country.  
Glazed and Enamelled Tiles for Mantels, Hearths, Wain-  
scoting, &c., and for Exterior Decoration.  
MILLER & COATES,  
279 N. BROAD STREET NEW YORK.

#### BARTLETT, ROBBINS & CO.

HEATING AND VENTILATING OF PUBLIC AND  
PRIVATE BUILDINGS  
A SPECIALTY  
PLANS AND SPECIFICATIONS FURNISHED.  
FOUNDERS, AND MANUFACTURERS OF GAS WORKS,  
ETC., ETC.  
24 LIGHT STREET, BALTIMORE.

#### ELEVATORS.—COOKE & BEGGS.

No. 6 COURTLAND ST., NEW YORK.  
Works at Paterson, N.J.  
PATENT SAFETY STEAM ELEVATORS  
for Public and Bank Buildings, Hotels, Private Dwell-  
ings, etc.  
SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP  
GUARANTEED.  
Send for Circular.

#### THE NEW ENGLAND GRANITE WORKS,

HARTFORD, CONN., and 1321 BROADWAY, N.Y.  
Quarries at Westervy, R.I.  
MONUMENTAL AND BUILDING WORK  
of every description, all the varieties of  
AMERICAN AND FOREIGN GRANITE.  
UNEQUALLED FACILITIES OFFERED TO THE TRADE.  
J. G. BATTERSON, Treas'r. H. E. BATTERSON, Sec'y.  
DIRECTORS:  
J. G. BATTERSON, C. B. CANFIELD, H. A. BATTERSON,  
G. T. BATTERSON,  
CARL CORNAD, Sculptor.

#### WHITTIER MACHINE CO.

Manufacturers of Steam and Hydraulic  
ELEVATORS,  
STEAM ENGINES, BOILERS, AND MACHINERY.  
No. 1176 Tremont Street, Boston.  
Office in the New England Mutual Life Insurance Co.'s  
Building, Post Office Square,  
and 120 Broadway, New York.  
CHARLES WHITTIER, Treas. A. C. WHITTIER, Treasr.

#### ART PAINTED TILES

FOR MANTELS, CABINETS, ETC.  
SHARPLESS & WATTS,  
225 MARKET STREET, PHILADELPHIA,  
Agents for  
MINTON'S TILES,  
AND TERRELLATED PAVEMENTS.

#### HAWTHORNE & TUCKER,

PLUMBERS,  
16 PROVINCE STREET, BOSTON.  
Estimates for Plumbing made, and work done in any part  
of the United States or Provinces.

### BUILDERS' SUPPLIES.

#### NICHOLL & MILLER,

OHIO BUILDING STONE.  
GRIND AND SOTTE STONE.  
From our FLORENCE and AMHERST QUARRIES.  
Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS  
111 Broadway, NEW YORK, and AMHERST, O.

#### MITCHELL, VANCE, & CO.,

Designers and Manufacturers of  
GAS FIXTURES,  
ORNAMENTAL METAL WORK, CLOCKS AND BROWNS  
ARCHITECTS' ORDERS SOLICITED.  
Special designs submitted on application.  
WAREHOUSES, 535 AND 538 BROADWAY, NEW YORK.  
MANUFACTORY, 24th and 25th Sts., and 10th Avenue, N. Y.

#### FISHER & BIRD,

Workers in all kinds of Foreign and Domestic  
MARBLES,  
97 to 108 EAST HOUSTON ST., NEW YORK.  
Established 1830.

Among our notable decorations are: The Illinois new  
State House; Palace Hotel, San Francisco; Baldwin's Ho-  
tel, San Francisco; Insurance Building, 10th and Chestnut  
Streets, Philadelphia; Mutual Life Insurance Building,  
Boston; Orient Mutual Insurance Building, New York;  
Union College, Schenectady; and numerous Churches,  
Private Residences, etc., etc., throughout the country. We  
solicit the opportunity to estimate upon all classes of work,  
viz., Tiling, Wainscoting, Staircases, Mantels, etc. Ceme-  
tery work and marble work of every description.

#### WILSON & HUGHES STONE CO.

Are ready to estimate on contracts of any size for furnish-  
ing their celebrated Amherst, Ohio,  
BUFF AND LIGHT DRAB SANDSTONE,  
IN BLOCKS, OR CUT AND SET.  
We are prepared to fill promptly all orders for Amherst  
and Independence grindstones.  
OFFICE, 170 SUPERIOR ST., CLEVELAND, OHIO.

#### SPANISH FLOOR TILES. "NOLLA MO-

SAICS." Floor Tiles, beautiful in color and design, for  
Dwellings, Churches, and Public Buildings.  
SPANISH WALL TILES. White, Glazed, Valencia,  
Tiles for Walls and for decorative painting.  
PRINTED ENGRAVED TILES of Spanish designs, for  
Wainscoting, Mantels, Jardinières, etc.  
Floors of "Nolla Mosaics" can be seen at the "Rock-  
ingham," corner of Broadway and 56th Street. Imported  
and for sale by JOHN CHADWICK, Sole Ag't for U. S.,  
49 Broadway, N. Y.  
C. E. PARKER, Agent, 14 Exchange Place, Boston.

#### TUFTS' ELEVATOR WORKS,

MANUFACTURERS OF "TUFTS' PATENT" COMBI-  
NATION ROPE ELEVATOR.  
TO BE OPERATED EITHER BY STEAM OR WATER.  
The only safe and reliable machine made for passenger use  
in Public Buildings and Hotels, and for business purposes in  
Warehouses, Stores, &c.  
37 FOUNDRY STREET, SOUTH BOSTON.  
OFFICE, 243 Broadway, New York.  
L. A. BIGELOW,  
President. Treas'r and Gen'l Manager.

#### STEAM WARMING APPARATUS.

HIGH AND LOW PRESSURE.  
HOUSE WARMING A SPECIALTY.  
Pamphlet with more than 1,000 references sent on appli-  
cation.  
WYLLIS H. WARNER,  
114 LEONARD STREET, NEW YORK,  
and 33 West Railroad Street, Syracuse.

#### OHIO VALLEY PRESS BRICK CO.

Challenge the world for fine stock Brick; also manufac-  
turers of all kinds of Bricks, octagon and square. Office 62  
3d St., Yard Preston and Knapp Sts. LOUISVILLE, KY.

#### GAS FIXTURES

OF EVERY DESCRIPTION.  
SPECIAL RATES TO BUILDERS.  
R. HOLLINGS & CO., 547 Washington St., BOSTON.

**BUILDERS' SUPPLIES.**

**HUGH SISSON & SON,**  
Importers, Dealers, and Manufacturers of  
**MARBLE.**  
INTERIOR MARBLE WORK AND MONUMENTAL  
WORK A SPECIALTY.  
Salesrooms, No. 140 W. Baltimore St.; Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,  
SPEAKING TUBES,  
AND BUCOLAR ALARMS,**  
For Public and Private Buildings.  
THE BEST IN USE.  
S. W. FULLER,  
63 Devonshire Street, Boston.

**TOWER CLOCKS.**  
FOR CHURCHES,  
PUBLIC AND PRIVATE BUILDINGS,  
G. M. STEVENS & CO., MANUFACTURERS,  
90 SUDBURY ST., BOSTON, MASS.

**JOHN MACK,** Plain and Ornamental Plasterer.  
41 Cambridge Street, Boston.

**J. N. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue, Mattapan (Ward 24), Boston.

**THE EUREKA VENTILATION CO.**  
OFFICE AND MANUFACTORY,  
74 CHARLESTOWN STREET,  
BOSTON, MASS.

**PRESSED BRICK,  
STOCK AND COMMON**  
MANUFACTURED BY  
**FLETCHER & THOMAS,**  
Indianapolis, Ind.  
All brick warranted. Send for price list and samples.

**STEAM HEATING**  
BY  
**GILLIS & GEOGHEGAN,**  
Nos. 116 & 118 Wooster St., New York.  
See our work at the Cathedral, 50th St. and 5th Av.;  
Drexel Building, cor Wall and Broad; Bennett Building,  
Fulton and Nassau, etc.  
Architects and owners promptly furnished with speci-  
fications and estimates.

**BUILDING MARBLE.**  
Branch yard of the RUTLAND MARBLE CO., 198 Cause-  
way Street, Boston. JOHN D. ALLAN, Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Rut-  
land and Continental Marble, furnished at low prices.

**ARCHITECTS.**

**P. B. WIGHT,**  
CONSULTING ARCHITECT,  
73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.  
Consultations on matters pertaining to Fire-Proof Con-  
struction, Foundations, Drainage, Sanitary Work, Ventila-  
tion, Machinery, Valuations, Interior Decorations, and  
Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**  
ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E.,** ARCHITECT  
AND SANITARY ENGINEER,  
KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes  
of Public or Private Buildings, Monumental Designs, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,**  
ARCHITECT,  
Room 17, Life Insurance Building,  
ST. LOUIS, MO.  
Special attention to Churches, Schools, and other  
public buildings.

**WALTER DICKSON, ARCHITECT, PERRY BUILDING,  
Albany, N. Y.**

**GEO. E. WARING, JR.,**  
CONSULTING ENGINEER,  
FOR SANITARY AND AGRICULTURAL WORKS,  
NEWPORT, R.I.

**SANITARY ENGINEERING.**  
EDWARD S. PHILBRICK, C. E.,  
12 West St., Boston, Mass.,  
Offers advice and superintendence in  
CONSTRUCTION OF WORKS,  
IN PLUMBING, DRAINAGE, AND VENTILATION,  
And has no interest in any patent right.

**FRANK HILL SMITH,**  
171 1/2 TREMONT STREET,  
BOSTON . . . . . MASS.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
877 HARRISON AVENUE . . . . . BOSTON,  
SHEET METAL CORNICES, HAYES' PAT-  
ENT VENTILATING SKY-LIGHTS,  
WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

**MANTELS AND GRATES.**  
RANKIN'S PATENT makes the Cleanest, Cheap-  
est, and Hottest Fire. Avoid infringements, and send for  
Circular to  
**C. S. RANKIN & CO.,**  
ARCHITECTURAL IRON WORKS,  
Manufacturers of all kinds of Iron Work for  
BUILDINGS, JAILS, ETC.  
187 W. PEARL ST., CINCINNATI, O.

**EXCELSIOR  
ROOF PAINT.**  
This paint has been thoroughly tested throughout the  
Eastern States, and has been found to be a perfect tin or  
metallic preserver. We warrant it neither to crack nor  
blister by **HEAT or COLD,** and to last  
**IN ANY CLIMATE TEN YEARS.**  
Those desiring to use this valuable preparation upon  
their buildings, can secure the same by addressing  
C. M. WHEELER, J. M. ROOT,  
Toledo, Ohio.

**ARCHITECTURAL IRON AND JAIL WORKS.**  
**M. CLEMENTS,**  
MANUFACTURER OF  
Iron Railing, Bank Vaults, and Jail Cells,  
Iron Stairs, Fire-proof Buildings, Wrought Iron Columns  
and Girders; Iron Arches, Plain and Corrugated;  
Fire-proof Shutters, Doors, etc.  
BAYMILLER STREET, near Sixth and C. H. & D. R. R.  
Depot, CINCINNATI, OHIO.

**DECORATORS.**

**W. J. MCPHERSON,**  
(Established A.D. 1845.)  
MURAL PAINTER,  
DESIGNER,  
Ecclesiastical Decorator,  
AND  
ART STAINED GLASS MANUFACTURER,  
440 TREMONT STREET,  
BOSTON, MASS.

(Established 1845.)  
**L. HABERSTROH & SON,**  
FRESCO PAINTERS,  
and INTERIOR DECORATORS,  
No. 12 SCHOOL STREET, BOSTON.

**PEIRCE & LORING.**  
ARTISTIC DECORATION AND FURNITURE.  
No. 5 PARK STREET, BOSTON.  
H. H. D. PEIRCE. R. F. LORING.

**PHILIP A. BUTLER,**  
DECORATOR AND DESIGNER,  
No. 17 FENNER STREET, BOSTON.

**COOK, REDDING & CO.**  
149 CONGRESS ST., BOSTON,  
Ornamental, Stained, and Cut Glass,  
FOR  
Churches, Public Buildings, and  
Private Residences.

**HENRY B. JONES & CO.**  
IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS.  
612 WASHINGTON STREET, BOSTON.

**STAINED GLASS.**  
Thirty years' experience in Stained Glass enables the  
subscriber to produce Modern and Medieval styles of work  
equal to any European examples, for Churches, Pri-  
vate Residences, Halls, etc.  
The value of the work is attained by a careful selection  
of colors in Cathedral and French Glass of his own impor-  
tation.  
Designs in accord with architects' plans furnished at  
short notice. Reference of work at office  
**SAMUEL WEST, 115 Eliot St., Boston.**

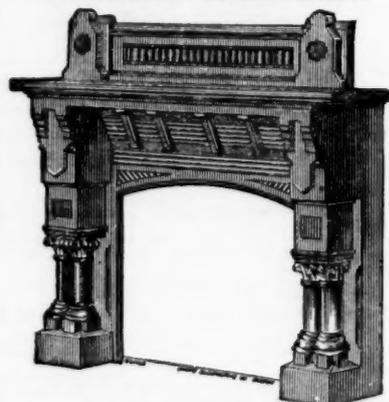
**DECORATORS.**

**JOHN LAFARGE,**  
MURAL DECORATION,  
51 W. Tenth St., New York, and Newport, R. I.

**SOCIETY OF DECORATIVE ART.**  
4 East 20th Street,  
NEW YORK.  
Architects' designs for panels, tiles and plaques for inser-  
tion in Cabinet Work, and other decorative uses, and for  
Art Needlework applied to curtains, hangings, portieres,  
screens, table-covers, etc., carefully executed. Original  
designs for any of the above, subject to approval, will be  
gladly received, and paid for by the society when used.  
Orders are earnestly solicited.  
The Society has arranged with Mr. RUSSELL STURGIS,  
Architect, for the Exhibition and Sale of his well-known  
Wall Papers. Some of these are faithful reproductions of  
Japanese decorative papers; some are taken from Oriental  
and other stuffs; some are of original design. New pat-  
terns will be added from time to time.

**Fresco Decoration.**  
**EMMART & QUARTLEY,**  
Designers, Decorators, and Painters,  
32 PARK AVENUE, BALTIMORE, MD.  
Designs for Halls, Churches, Theatres, and Private Mansions made  
and executed in harmony with the plans of Architects.

**SLATE MANTELS**  
Of the latest and most beautiful designs, and all other Slate  
work on hand or made to order. No. 1210 Ridge Avenue.  
JOSEPH S. MILLER, successor to Wilson & Miller, Philadel-  
phia, Pa. Send for Illustrated Price-List  
**Donald MacDonald,**  
GLASS STAINER AND DECORATOR,  
No. 6 Hayward Place,  
BOSTON.

**MANTELS.**  
  
IN WALNUT, OAK, ASH, OR OTHER WOODS.  
On hand, made to order, shipped to and set up  
IN ANY PART OF THE COUNTRY.  
**CALDWELL MANUFACTURING CO.,**  
17 HARVARD PLACE,  
OPPOSITE OLD SOUTH CHURCH,  
BOSTON, MASS.  
Send for Circular.

**MEMORIAL STAINED GLASS WINDOWS**  
  
**KELLEY & HOLLAND**  
EXCELSIOR STAINED GLASS  
GLASS STAINERS  
24-27 FERRY ST. BOSTON

 **INLAID WOOD FLOORS.**  
ORNAMENTAL WOOD BORDERS.  
Designs and Estimates free.  
National Wood Manuf'g Co.,  
950 Broadway, near 33d St., New York.

LABOR MARKET.

[REPORTED EXPRESSLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa (Can.)	Philadelphia.	San Francisco	St. Louis.
1. BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.50	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2. Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	1.25 @ 1.75		3.50 @ 4.50	3.00	1.75 @ 2.25	2.50 @ 3.00		3.00
3. CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.25 @ 2.50	1.25 @ 2.00	1.75 @ 2.25		1.50 @ 2.00
4. Cabinet Maker	2.50 @ 3.25						1.50 @ 2.00			
5. Finisher	2.00 @ 2.50		1.75 @ 2.00		1.50 @ 2.00		1.25 @ 1.75			1.50 @ 2.00
6. FOUNDRYMAN			1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75		1.00 @ 1.50			2.25 @ 2.50
7. Blacksmith	1.50 @ 3.00	1.50 @ 2.75		1.50 @ 2.50			1.25 @ 2.00			1.50 @ 2.50
8. Whitesmith				1.50 @ 2.50			1.25 @ 1.75			1.00 @ 1.50
9. Galvanized Iron Worker	2.00 @ 2.25	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	2.25	1.50 @ 2.00			
10. GAS FITTER	2.00 @ 2.50	2.00 @ 3.00		2.50 @ 3.00	1.75 @ 2.25		1.75 @ 2.00			2.00 @ 3.00
11. LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.25 @ 1.50	1.00 @ 1.75	1.00 @ 1.50		1.00 @ 2.00
12. PAINTER	1.50 @ 2.50	2.25 @ 3.00	2.00 @ 2.50	1.50 @ 2.25	1.75 @ 2.25	2.50	1.00 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13. Glazier		2.00 @ 2.50					1.50 @ 1.75	2.00 @ 2.50		
14. Grainer	2.50 @ 3.00	3.00 @ 4.00	3.00 @ 4.50	3.50 @ 4.00	No graining.		1.75 @ 2.50			3.50
15. Paper-Hanger	.75 @ 2.50				10c. pr. roll.		1.50 @ 2.00			2.00 @ 3.00
16. PLASTERER	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	1.50 @ 2.50	1.50 @ 2.00	2.50	1.25 @ 1.75	1.75 @ 2.00		2.25 @ 2.75
17. Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50		1.50 @ 2.50		2.50	1.50 @ 2.25			2.25 @ 2.75
18. PLUMBER	2.25 @ 3.00	2.00 @ 3.00		2.50 @ 3.50	2.00 @ 2.50		1.50 @ 2.50			2.50 @ 3.50
19. QUARRYMAN		3.00 @ 3.50			1.25 @ 1.50	1.75 @ 2.00	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20. Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	1.50 @ 2.00	2.00 @ 2.50	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21. Carver		3.00	2.50 @ 3.00	1.25 @ 1.75		3.00	3.50 @ 6.00	2.75 @ 3.25		2.25 @ 2.75
22. Pointers and Washers		2.50 @ 3.00		1.50 @ 1.75			1.00 @ 1.25	2.25 @ 2.50		
23. Rubber	1.50 @ 2.00	1.75	1.00 @ 1.25	1.25	1.00 @ 1.25		1.00 @ 1.00	1.50 @ 1.75		
24. Stone-Cutter	2.25 @ 3.00	2.00 @ 3.00	1.50 @ 2.00	2.00 @ 2.50	2.50		2.00 @ 2.50	2.25 @ 2.75		
25. Stone-Setter	3.00	2.50 @ 3.00	2.25 @ 2.50	2.50 @ 3.00	2.75		1.50 @ 2.00	2.25 @ 2.75		2.00 @ 2.50
26. ROOFER (Tin)	2.00 @ 2.25	2.50 @ 3.00		2.00 @ 2.50	2.00 @ 2.00		1.50 @ 1.75	1.75 @ 2.25		
27. Slater	2.50 @ 3.00	2.00 @ 2.50	2.00 @ 2.25	3.50 @ 4.50	2.00		1.25 @ 2.00	1.75 @ 2.25		
28. STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50			1.50 @ 2.00		1.75 @ 2.25			1.50 @ 2.00
29. STEAM FITTER		2.50 @ 3.50		2.00 @ 2.50	2.50 @ 3.00		1.50 @ 2.00			2.00 @ 3.00



ARCHITECTS AND BUILDERS

WILL ADD MUCH TO THE BEAUTY OF THEIR BUILDINGS BY USING

GARDNER'S PERFORATED THREE-PLY VENEER SEATING,

Which is Ornamental, Durable, and Cleanly.

We refer to the following new and elegant buildings fitted up with our goods:—

Morris Plains, N. J., Insane Asylum.  
New York Hospital.  
American Museum of Natural History, New York.  
Institution for Feeble-minded Children, Lincoln, Ill.  
Insane Asylum, Oshkosh, Wis.

Opera Chairs in new Music Halls, Lewiston, Me., Providence, R. I., and Brooklyn, N. Y.  
Settees in Depots of the Pennsylvania Railroad, at Philadelphia, Pittsburgh, etc.

Please send for Illustrated Catalogue.

GARDNER & COMPANY,

Patentees and Manufacturers,

376 PEARL STREET.....NEW YORK.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

GALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States.

Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO. 72 & 74 West Monroe St. Chicago, Ill.

TO SUBSCRIBERS.

In sending the numbers of Vol. III. of the ARCHITECT for binding, care should be taken to include the Index to Vol. III., printed with No. 132.



NONESUCH Self-Locking AND Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.

Patented July 19th, 1877



BIBB'S Celebrated Original Baltimore Fire Place Heaters

Mantels and Registers. B. C. BIBB & SON, Baltimore, Md. Best workmanship. Lowest prices guaranteed. Send for circulars.



THE BEST PORTRAIT

OF

William Cullen Bryant

Is the ATLANTIC PORTRAIT, which was published last year expressly for subscribers to the ATLANTIC MONTHLY, and which is unquestionably the best large portrait ever made of him. To show how it is regarded by excellent judges, we append the following extracts:—

I think the picture admirable in its rare and commanding lines, and shall gladly give it the best place I can find in my limited collection. —RALPH WALDO EMERSON.

I hesitate to bestow any praise upon it, for the reason that I should use stronger terms than, as a mere unskilled lover of art, I should have any right to employ. I shall be disappointed, however, if the best judges do not unite in considering it a masterpiece of portraiture and execution. —DR. OLIVER WENDELL HOLMES.

Mr. Baker was singularly fortunate in his subject; he has produced a marvelous likeness of Bryant, and a very noble work of art. If a head like this, in bronze or marble, were found in some Greek or Roman ruin, it would be worth its weight in gold. —T. B. ALDRICH.

This portrait is life-size, on paper 24 x 30. The retail price is \$2.00. With the ATLANTIC MONTHLY for a year, \$5.00; six months, \$3.00.

ATLANTIC PORTRAITS.

Henry Wadsworth Longfellow. It is one of the most admirable likenesses I have ever seen, and I can scarcely imagine a better representation of the poet and the man. —BAYARD TAYLOR.

John Greenleaf Whittier. It is very fine; it is the ideal Whittier. —J. T. TROWBRIDGE.

The above portraits are life-size, and the dimensions of each picture are 24 x 30. Subscribers to the ATLANTIC MONTHLY can obtain either portrait, with the magazine for a year, by remitting \$5.00 to the publishers; for \$6.00 the magazine and two portraits, and for \$7.00 the magazine and all three portraits will be sent. The subscription price of the ATLANTIC alone is \$4.00.

The portraits are sent by mail, carefully rolled, so as to avoid all danger of injury, and will be forwarded to any address on receipt of the price and subscription by the Publishers; they can be obtained through newsdealers and booksellers generally.

HOUGHTON, OSGOOD AND COMPANY, BOSTON, MASS.

AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT. MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS. Regular Sizes, 2, 3, 4, 5 & 6 Inch. SPECIAL SIZES MANUFACTURED TO ORDER. AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS. 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA. WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH.

- PRINCIPAL AGENTS.
- M. Halliday, New York City.
  - Hicks & Budget, Boston, Mass.
  - James Berry, Buffalo, N. Y.
  - George W. Pitkin & Co., Chicago, Ill.
  - Wasson & Martin, Albany, N. Y.
  - McLeod, Heardon & Co., Troy, N. Y.
  - W. H. Scott, Portland, Me.
  - Kittredge Cornece Co., Salem, O.
  - J. W. Jordan, Worcester, Mass.
  - H. G. Carpenter & Co., Wilkesbarre, Penn.
  - T. W. Irwin, Alleghany City, Penn.
  - Sellew & Co., Cincinnati, Ohio.

## VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

*Art Foliage.*

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the art-workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

*Medieval Foliage.*

**EXAMPLES OF ENGLISH MEDIEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

*American Interiors.*

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and not-worthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

*Examples of Modern Architecture.*

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. PANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

*Home-Making Books.*

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1 50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist, Boston.*

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-cats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

*Architecture for Students.*

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courant.*

*The Art Idea.*

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVES. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

*Decoration and Ornamentation.*

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIENARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11½ X 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

*Newport Cottages.*

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

*Sketches of European Architecture.*

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

*Gothic Forms.*

**GOthic FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

*Gothic Forms. (Second Series.)*

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

*Picturesque Swiss Architecture.*

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

*Viollet-le-Duc's Works.*

The works of the learned and distinguished French Architect, EUGENE VIOUET-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

**THE STORY OF A HOUSE.** Translated by GEORGE M. TOWLE. Illustrated by the author. 1 vol., 8vo, bevelled boards, red edges, \$5.00.

Has the rare merit of being thoroughly business-like, and, at the same time, not too technical. — *London Standard.*

**HABITATIONS OF MAN IN ALL AGES.** Translated by BENJAMIN BUCKNALL, Architect. Fully illustrated 1 vol., 8vo, \$5.00.

Nowhere has M. Viollet-le-Duc concentrated more varied knowledge, or illumined it more successfully, by direct human interest and characteristic dialogue, than in the present work, which can be recommended to the general reader. — *British Quarterly Review.*

**DISCOURSES ON ARCHITECTURE.** Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

**ANNALS OF A FORTRESS.** Translated by BENJAMIN BUCKNALL, Architect. Eighty-five illustrations, several in color. 1 vol., 8vo, \$5.00.

He has made of his history of the art of fortification at once a valuable handbook and a very charming romance. A work that combines amusement with instruction in a very rare degree. — *Pall Mall Gazette.*

Those who read the book through carefully by the help of the beautiful illustrations with which it is lavishly embellished, will obtain a better knowledge of the art of fortification, from the earliest ages up to recent times, than could be found in any other way short of the research and study which the author has himself given to the matter. M. Viollet-le-Duc is master of the subject, and imparts his learning in a thoroughly fascinating manner. — *Saturday Review (London).*

*A Valuable Book for Architects.*

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

*The Architectural Sketch-Book.*

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

*The New York Sketch-Book of Architecture.*

3 vols., 4to, \$6.50 each.  
We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

*The American Architect and Building News.*

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound 4to, each \$9.00.

\*\* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

[Reported for the American Architect and Building News.]

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, FROSTS, and CEMENT. Includes items like Red Welsh, American, and various sizes of bricks and frost-resistant materials.

Table listing prices for FIRE BRICK and DOORS. Includes items like Red Welsh, American, and various door styles and materials.

Table listing prices for RAISED PANELS, two Sides. Includes various sizes and materials for raised panels.

Table listing prices for BLINDS, Outside. Includes various sizes and materials for exterior blinds.

Table listing prices for WINDOW FRAMES. Includes various sizes and materials for window frames.

Table listing prices for HAIR, Duty free. Includes various types of hair and their prices.

Table listing prices for LATH, Cargo rate. Includes various types of lath and their prices.

Table listing prices for LIME. Includes various types of lime and their prices.

Table listing prices for LUMBER. Includes various types of lumber and their prices.

Table listing prices for PAINTS AND OILS. Includes various types of paints and oils and their prices.

Table listing prices for CEMENT. Includes various types of cement and their prices.

Table listing prices for NAILS. Includes various types of nails and their prices.

Table listing prices for AXLE PULLEYS, Steel. Includes various types of axle pulleys and their prices.

Table listing prices for SASH WEIGHTS, SASH LINE, and DOOR BUTTS. Includes various types of sash weights, sash lines, and door butts.

Table listing prices for STONE. Includes various types of stone and their prices.

Table listing prices for SLATE. Includes various types of slate and their prices.

Table listing prices for TIN PLATES, Duty, 1-10c. Includes various types of tin plates and their prices.

Table listing prices for ZINC, LEAD, and SHEET. Includes various types of zinc, lead, and sheet materials.

Table listing prices for BOSTON. Includes various types of materials and their prices.

Table listing prices for FIRE BRICK. Includes various types of fire bricks and their prices.

Table listing prices for BUILDING BRICKS. Includes various types of building bricks and their prices.

Table listing prices for BUILDING STONE. Includes various types of building stone and their prices.

Table listing prices for LUMBER. Includes various types of lumber and their prices.

Table listing prices for PAINTS AND OILS. Includes various types of paints and oils and their prices.

Table listing prices for LIME. Includes various types of lime and their prices.

Table listing prices for CEMENT. Includes various types of cement and their prices.

Table listing prices for NAILS. Includes various types of nails and their prices.

Table listing prices for AXLE PULLEYS, Steel. Includes various types of axle pulleys and their prices.

Table listing prices for SASH WEIGHTS, SASH LINE, and DOOR BUTTS. Includes various types of sash weights, sash lines, and door butts.

Table listing prices for MORTISE LOCKS, Brass face and bolt. Includes various types of mortise locks and their prices.

Table listing prices for DOOR KNOBS. Includes various types of door knobs and their prices.

Table listing prices for SASH FASTS. Includes various types of sash fasts and their prices.

Table listing prices for SCREWS. Includes various types of screws and their prices.

Table listing prices for STORE DOOR HANDLES, With mortise latch. Includes various types of store door handles and their prices.

Table listing prices for IRON. Includes various types of iron and their prices.

Table listing prices for CHICAGO. Includes various types of materials and their prices.

Table listing prices for BRICK, LIME, AND CEMENT. Includes various types of bricks, lime, and cement.

Table listing prices for LUMBER (MICHIGAN PINE). Includes various types of Michigan pine lumber.

Table listing prices for HARDWOOD LUMBER. Includes various types of hardwood lumber.

Table listing prices for PAINTS AND OILS. Includes various types of paints and oils.

Table listing prices for CEMENT. Includes various types of cement.

Table listing prices for NAILS. Includes various types of nails.

Table listing prices for AXLE PULLEYS, Steel. Includes various types of axle pulleys.

Table listing prices for SASH WEIGHTS, SASH LINE, and DOOR BUTTS. Includes various types of sash weights, sash lines, and door butts.

Table listing prices for C ROOFING, 14 x 20, charcoal. Includes various types of roofing materials.

Table listing prices for SHEET ZINC. Includes various types of sheet zinc.

Table listing prices for SHEET IRON. Includes various types of sheet iron.

Table listing prices for WIRE. Includes various types of wire.

Table listing prices for NAILS. Includes various types of nails.

Table listing prices for PAINTS AND COLORS. Includes various types of paints and colors.

Table listing prices for OILS. Includes various types of oils.

Table listing prices for PHILADELPHIA. Includes various types of materials and their prices.

Table listing prices for WHOLESALE PRICES. Includes various types of materials and their prices.

Table listing prices for LUMBER. Includes various types of lumber.

Table listing prices for PAINTS AND OILS. Includes various types of paints and oils.

Table listing prices for PLASTER, Duty. Includes various types of plaster.

Table listing prices for PAINTS AND OILS. Includes various types of paints and oils.

Table listing prices for TIN, Duty. Includes various types of tin.

Table listing prices for ZINC, Duty. Includes various types of zinc.

CREOSOTED WOOD. PREPARED AT THE Hayford Patent Creosote Wood Preserving Works. EDWARD R. ANDREWS, Proprietor. OFFICES: No. 4 Post Office Sq., Boston. No. 10 Warren St., N. Y.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms. They recommend, on their own account, and for the sake of the public, that such firms advertise in this paper.

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY.



The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, etc., etc.

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

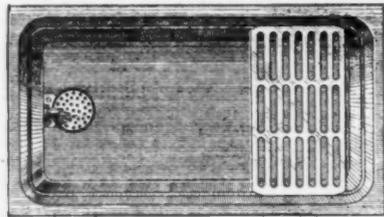
**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.  
ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.



**METALLIC SHINGLES.**

We call the attention of all parties interested in Roofing, and the owners of large buildings, to the above article. It is superior to Slate, Cheaper, Fire proof, about one fourth the weight, lays much closer therefore is Storm-proof, cannot Crack, etc. Any carpenter can put them on. Send for description and Price List to  
**IRON CLAD MANUFACTURING CO.**  
69 Greenpoint Ave., Brooklyn, E. D.  
P. O. Box 2528, N. Y. City

Architects and Builders will be quick to appreciate the many New and Practical Features possessed by



**THE MAGEE PATENT SINK,** which commend themselves at once to every householder. The escape of noxious and poisonous sewer gases is prevented by the arrangement of the patent trap, it being immovable, while the strainer, being hinged on brass pins, can be raised for the purpose of cleaning the cesspool. The sink is furnished with an improved galvanized shelf or rack for draining dishes, etc., after washing. It is of extra size, and being made with square corners, saves the carpenter much labor in setting. In smoothness of casting it fully sustains the long-established reputation of the Magee goods. Particular attention is invited to the **Magee Standard Furnace**, portable and for setting in brick, guaranteed superior to any in the market for economy, durability, and heating capacity. Estimates furnished for heating all sizes of dwelling houses and public buildings. Also a full line of **Brick and Portable Ranges**. Circulars and prices of all the above goods furnished on application.  
**MAGEE FURNACE CO.**  
32 to 38 Union St., Boston



**Brandeis' Seamless Paragon Trap.**  
Safest, Best, Cheapest, and Non-siphoning.  
Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDIS & WICKERT**, 45 Fulton Street, Brooklyn, N. Y.

**C. BUTCHER,**  
107  
Devonshire St.  
BOSTON.

Send for Illustrated Catalogue.

**PATENT MARQUETRY FLOORING.**  
Specimens at Lawrence, Wilds & Co.'s, 42 Cornhill, Boston.

**DORCHESTER UNION FREESTONE CO.**  
NEW BRUNSWICK YELLOW FREESTONE.  
The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order.  
24 Pine St., New York. - G. P. SHERWOOD.

ESTABLISHED, 1836.

**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Compositoin Roof known. Also inventors and owners of the following patents:—

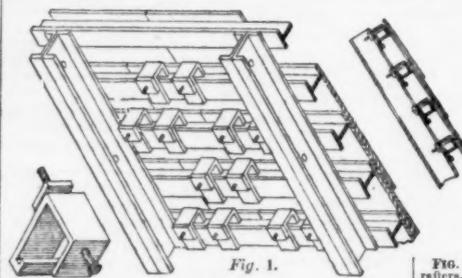


FIG. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the pulleys in which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

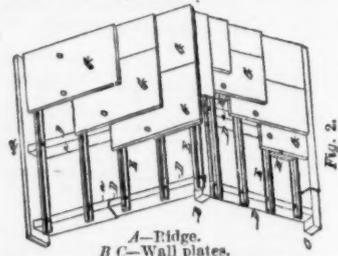
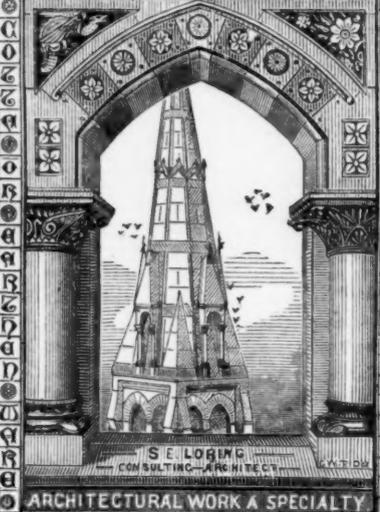


FIG. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or other fire-proof material, and iron purlins (c) or beams, with the slates (b) or other covering secured thereto by clips, (Fig. 1) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contact with the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point, avoiding condensation, contraction and expansion of roofs formed wholly of iron.

**MANUFACTURERS OF**  
**Chicago**  
**TERRA COTTA WORKS**



**ARCHITECTURAL WORK A SPECIALTY**

**Murtaugh's Improved Patent Dumb Waiter.**  
ALSO  
**HOISTING MACHINES OF ALL KINDS.**  
**SAFETY ELEVATORS FOR INVALIDS**  
a specialty.  
**PERFECT SAFETY GUARANTEED.**  
On the completion of each SAFETY ELEVATOR we load the platform, and cut the rope by which it is suspended. As it never fails to catch, we give a practical demonstration of the certainty of our SAFETY APPARATUS acting in case the rope should break at some future time.  
**ISAAC RICHARDS, 2317 CHESTNUT ST., PHILADELPHIA.**

**D. M. MEEKER & SON'S**  
**Malleable Iron Hollow Munten Window Sash.**  
For Insane Hospitals, Fire Proof Buildings, &c.



End view of Munten for Glazed Sash.  
End view of Munten for Oiled Sash.  
Hollow Munten.

The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by  
**D. M. MEEKER & SON,**  
Newark, N.J.  
Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

**CRANE-BREED & COMPANY**  
**SAFETY BOILERS**  
**FOR HEATING**  
**STEAM AND HOT WATER.**  
MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RADIATORS, PIPE COILS, REGISTERS, FITTINGS, STEAM-PUMPS.

**PATENT MINERAL WOOL.**  
ENTIRELY FIRE-PROOF AND UNDECAYING.  
**THE BEST INSULATOR OF HEAT, COLD, AND SOUND.**  
For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc.  
**ALEXANDER D. ELBERS,**  
P. O. Box 4461. 26 1/2 Broadway, New York.

**GAS**  
**SPRINGFIELD GAS MACHINE.**  
Springfield, Mass.; 75 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

**A. L. FAUCHÈRE & CO.**  
OFFICE AND WAREHOUSES  
1319 and 1321 Broadway, New York,  
Importers, Manufacturers, and Dealers in all kinds of foreign and domestic  
**MARBLE FOR INTERIOR WORK.**  
Estimates furnished on application.



The Draft of the Chimney increased.  
Smoking Chimneys Prevented.  
Particularly adapted to Chimneys in exposed positions.  
Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.  
**JOS. W. TAYLOR,**  
70 Grand St., Brooklyn, N. Y.

**HOISTING MACHINES EXCLUSIVELY.**  
HOTEL STEAM ELEVATORS,  
HYDRAULIC ELEVATORS,  
HAND POWER HOISTS,  
DUMB WAITERS.

**H. J. REEDY, Manufacturer,**  
128 EAST EIGHTH ST., - Cincinnati, O.

**J. & R. LAMB, 59 CARMINE ST., N. Y.**  
**CHURCH FURNISHERS**  
Practical Workers in Sterling Silver, Brass, and Bronze. Carved Wood, Decorations, etc. Illustrated Catalogues. Furniture, 10c.; Metalwork, 10c.; Decoration, 10c.

**DAVIS PATENT AUTOMATIC AIR VALVE.**  
The only reliable Self-Acting Valve made. Adapted to Steam Coils, Radiators, Pipes, Condensers, and beautiful in design, and finished in brass or nickel. Address  
**G. M. DAVIS & CO., Chicago, Ill.**

**MAKE GAS GENERATORS FOR LIGHTING**  
Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.  
Send for CIRCULAR **YOUR OWN**  
**WALWORTH MANUF. CO.**  
No. 69 Kilby Street,  
BOSTON, MASS. **GAS**

**BUILDING INTELLIGENCE.**

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

**BUILDING PATENTS.**

**AWNING.**—Joseph Koenig, Indianapolis, Ind.  
**STONE POLISHING MACHINE.**—Peter Pitkin and John B. Dougherty.  
**EARTH CLOSET.**—Richard W. Riddle, Minneapolis, Minn.  
**SHUTTER BOWER AND FASTENER.**—Thomas B. Rogers, Jr., Brooklyn, N. Y. A rod connected with the shutter near the lower hinge passes through a pivotal stud set in a plate on the window sill. The shutter may be retained in any position by means of a thumb-screw in the stud. A hook attached to the lower rail engages with the rod when in a closed position, and locks the shutter.  
**FIRE-PROOF COLUMN.**—Peter B. Wight, Chicago, Ill. An iron column is rendered fire-proof by a casing of terra-cotta or fire-brick laid in courses, rabbeted at their upper, outer, and lower inner edges, and secured together by wire thongs or bands set into and concealed and protected by the overlapping brick.

**WAGON DERICK.**—John D. Winter, Grand Island, Cal.  
**CURTAIN ROLLER AND BRACKET.**—C. Buckley and L. L. Sawyer, Meriden, Conn.  
**WATER PIPE JOINT.**—Frederick P. Holberg, Green Point, N. Y.  
**FLUSHING TANK.**—William G. Rhoads, Philadelphia, Penn. This invention provides a means of automatically flushing a water-closet at regular intervals, the frequency of the flushing, the amount of water used, and the rapidity and volume of the flushing stream depending respectively on the volume of the supply stream, the size of the flushing-tank, and the size of the siphon. The apparatus is shown in several forms. In Fig. 1, c is a supply pipe

constantly delivering water into a tipping basin, A, hung on a pivot, and so enlarged at the top, on its outer side, that when filled with water the water on the outer side of the axis overbalances the other side, and the water is discharged, then the basin thus relieved rights itself to receive more water. In Fig. 2 the tank B is gradually filled by repeated

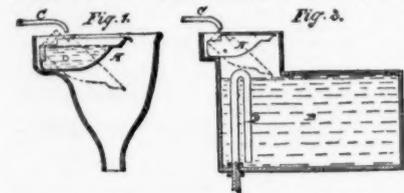
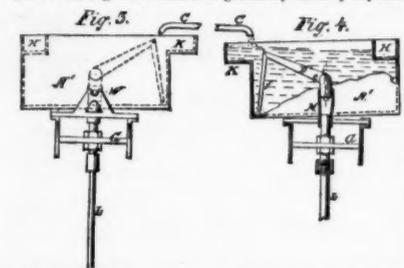


Fig. 3 and Fig. 4 diagrams showing tipping basin mechanisms with siphons.



discharges of the contents of the basin A, filled as in the first case, until the water reaches the level of the lower side of the bend in the siphon D; when this level is reached, the next discharge from the basin, happening as it does with some suddenness, brings the siphon into action, and this flows steadily until the whole tank has been emptied, the process of refilling the tank continuing all the time. Figs. 3 and 4 show the outside and inside of a tipping tank which is hung on pivots at W. Water is constantly supplied by the stream c. At the top on one side is built a compartment H, intruding on the interior capacity of the tank; on the opposite side the capacity of the tank is increased by a projection of corresponding size. The effect of this is that when the water rises above the level of these projections the volume of water on one side of the axial line is so much greater than the volume on the other as to cause the whole tank to tilt suddenly to that side and thus cause the water to flow down the longer leg c of the siphon D. The flow will continue till the tank has been emptied, when that will right itself and the process will recommence.

**MACHINE FOR MAKING PAVING AND BUILDING TILES.**—Adrian H. Austin, Gutesberg, N. J.  
**PUMP.**—James S. Beal, Poland, Me.  
**WINDOW SASH.**—Isaac T. Dyer, Quincy, Ill.  
**MACHINE FOR INSERTING RIVETS.**—Thomas Boardman, Charlottetown, P. E. I., Canada.  
**DRIVE-WELL POINT.**—Martin J. Eich, Plymouth, Ind.  
**WASTE-TRAP.**—David Healy, Los Angeles, Cal.  
**UNDER-DRAINS.**—Wm. B. Henning, Waterloo, Ind. A square upright tube or box serves as a sediment-receptacle and turn-chamber for under-drains. Near the top are large holes for the ends of tile-drains, and smaller ones for surface-drainage. A grating near the bottom prevents muskrats, etc., from getting up into the box. The top has a hinged lid so that the box may be examined and cleaned.

**COMPLETED BUILDINGS.**

**COLLINGSWOOD, O.**—The new Disciple Chapel was dedicated July 14th.  
**PLAINVILLE, Conn.**—The Wood River Chapel was dedicated July 14th.

**SUMMARY OF THE WEEK.**

**Baltimore, Md.**

**BUILDING PAST AND PRESENT.**—An examination of the records of the Appeal Tax Court shows that in 1874 the number of permits granted was 2,611, of which 1,900 were for new buildings. In 1875 the number fell to 2,113 (1,600 being for new buildings). In 1876 it fell again, the

permits numbering only 1,729. Last year the number of permits issued aggregated 1,601 in all, of which 1,160 were for new buildings. The present indications point, however, to an improvement for this year.

**CHURCH.**—Father Dausch's new Church of St. Andrew is expected to be ready for dedication about the first Sunday in October. The work is being pushed forward. A pastoral residence is to be erected also. For the present the church and school building will be united.

**Boston.**

**HOUSES.**—A block of seven four-story houses, each measuring 22 by 60 feet, is building on Albion Street, from plans prepared by Mr. H. Graves, architect.—Judge Abbott is the owner of a house now building on Commonwealth Avenue; J. H. Tobey, contractor; Mr. O. F. Smith is the architect.—Messrs. G. B. and H. G. Shaw, architects, are building a house on Marlboro Street; Standish & Woodberry, contractors; cost, \$14,000.

**STORE.**—Mr. S. Woodcock, architect, is building a store on Pearl Place, for Mr. H. B. Taylor.

**THIS YEAR'S WORK.**—The number of permits issued for brick and stone buildings from January 1st to July 23d is 128; for wood and frame buildings, 206; for repairs and alterations, 2,501.

**Brooklyn, N. Y.**

**BUILDING PERMITS.**—Baltic St., No. 428, 1 two-sty brick dwell., 25 x 20; owner, M. Briody, 410 Baltic St.; builder, W. Johnston.—Bond St., 3 four-sty brick stores and dwells., 50' x 80' and 45'; owner, S. N. Benedict, 441 Pacific St.; architect, Carl F. Eisenach; builder, Owen Nolan.—Broadway, No. 776, 1 three-sty brick store and dwell., 25' x 40'; owner, Fred. Herr, 778 Broadway; builder, John Ewe.—Floyd St., 1 two-sty frame dwell., 25' x 40'; owner and builder, George Loeffler, 144 Floyd St.—Monroe St., 1 two-sty and basement brown stone dwell., 22' x 40'; owner, W. W. Watson; architect, Isaac D. Reynolds; builder, Wm. Reynolds.—Partition St., 1 two-sty brick dwell., 25' x 25'; owner, Jeremiah Bottom, Partition St.; mason, Peter Kelley; carpenter, L. Cornell.—President St., 6 two-sty brown stone dwells., 16' x 45'; owner and builder, Chester Bedell, 357 Smith St.—Cass Ave., 2 two-sty brown stone dwells., 19' 9" x 42'; owner and builder, M. Byrne, 301 Greene Ave.—De Kalb Ave., 1 one-sty frame depot, 82' x 33'; owner, Brooklyn & Newtown R. Co.; builder, G. W. Williams.—Franklin Ave., cor. Monroe St., 6 three-story brown stone dwells., 16' 8" x 45'; owner, William Robertson; architect, I. D. Reynolds; builders, M. J. Reynolds and W. Robertson.—Myrtle Ave., 3 three-story brown stone stores and dwells., 18' 4" x 60'; owner, Benj. Morgan, 300 Lexington Ave.; builders, J. M. Brown and E. J. Van Wagner.—Van Cott Ave., No. 91, 1 three-sty frame store and dwell., 25' x 50'; owner, H. H. W. Moeller, 18 Newel St.; builders, Sammis & Bedford.—Fifth Ave., cor. Twentieth St., 2 three-sty brick stores and tenements, 20' x 35'; owner, Bernard Smith, Fifth Ave., cor. Twenty-first St.; architect, C. H. Byrne; builders, J. Shurrock, and McNulty & McGuire

**Cincinnati.**

**BUILDING PERMITS.**—Since our last report the following building permits have been issued:—

M. Goldsmith, 3-sty brick, Vine St., between Fourteenth and Fifteenth, \$5,000; F. D. Callendorf, 3-sty brick, Melancton St., \$2,000; Mary Lilling, 2-sty brick, 24 East Sixth St., \$1,800; Wm. Miller, 2-sty brick, Bremen St., \$6,000; H. H. Moorman, 3-sty brick, Fifth St., between Park and Stone sts., \$2,400; Fred Luecke, 2-sty brick, 41 Mulberry St., \$1,800; J. G. Jackson, brick, Sixth and Lock sts., \$2,000; C. C. Crofton, 2-sty brick, Sycamore and Gilbert Avenue, \$4,000; Jas. Cotteral & Son, 5-sty brick, Canal and Elm, \$13,500; Harrison & Co., 3-sty brick, Eighth and John sts., \$3,000; W. A. Megrue, two 2-sty brick, Evans and Auburn, \$15,000; Aug. Hauer, 2-sty brick, Colerain and Pike, \$2,000.

There were eleven permits issued for repairs, at a total cost of \$5,400. Total number of permits, 24. Total cost, \$95,100.

Mr. Samuel Hannaford, who built the east wing some three years ago, is now at work on the plans for the centre building of the Cincinnati University. The present building will be about 90 x 130 and will have a hall ten feet wide running the entire length of building, with entrance and staircase halls outside of this corridor. The building is to be of brick, with freestone trimmings of very neat design, and will cost about \$50,000.

**CHURCH REPAIRS.**—The United Presbyterian, the Popular Street, and the Central Presbyterian churches are undergoing repairs. The first-named is receiving the most thorough overhauling. In the season some repairs and improvements are to be made upon St. Paul's P. E. Church.

**CLUB HOUSE.**—The old buildings have been torn down and the foundations have been commenced for the new Allemania Club House to be erected corner Fourth St. and Central Avenue.

**ELPHANT HOUSE.**—Mr. George W. Rapp is preparing plans for the new elephant house for the Zoological Gardens.

**HOUSE.**—Mr. Robert N. Jones has commenced the erection of an eight-room frame dwelling-house, on one of our hill-tops, from plans prepared by Charles Craspey, architect.

**Cleveland, O.**

**ORPHAN ASYLUM.**—A new building is to be erected for the Cleveland Protestant Orphan Asylum upon St. Clair Street. It is about 200 feet front, and contains about five and a half acres. The building is to be of brick, with stone finish, and will be fire-proof, three stories and a basement in height, with a tall tower in front. The St. Clair Street front will be 130 feet, with a depth of 91 feet. It will cost from \$50,000 to \$60,000. The expense of the building will be borne by Mr. J. H. Wade. The architect is Mr. Samuel Lane.

**HOSPITAL.**—The Homeopathic Hospital Society are about to erect a new building on Huron Street. It will be of brick, with stone caps, bands, etc.; partially fire-proof; about 110 feet long by 60 feet wide at the front part, and 72 feet wide at the rear; three stories in height, with a high basement and attic. The building will, when completed, afford abundant accommodation for seventy-five patients. The amphitheatre, laundry, mortuary, and other rooms are situated in a semicircular building in the rear. About \$25,000 will be expended at present. Messrs. Coburn & Barnum are the architects, A. Xetell the contractor for carpenter work, and Dautel & Meinecke contractors for mason work.

**STORES.**—A fine brick building is being erected on the site of the old Atwater Block. It is to be built of pressed brick, with stone-colored tile and black brick finish. The viaduct front will be 127 feet long, and will have a tower 100 feet high. Mr. Joseph Ireland is the architect.—A block is to be built upon the site of the old Second Presbyterian Church. It will have a frontage of 11 feet on Superior Street. Four stories and basement. A. Koehler, architect.—Also a brick block, relieved with stone, for Mr. T. J. Carran, on corner Case and Payne avenues, to cost \$6,353. Walter Blythe, architect; Cain & Jaques, contractors.

**DWELLING HOUSES.**—Two-story brick and stone dwelling on Woodland Avenue, opposite Vine Street, to cost about \$12,000. Cudell & Richardson, architects; King & Son, carpenters; Dautel & Meinecke, masons.—Messrs. Coburn & Barnum are building a residence for C. Hayward, Esq., upon Madison Avenue. This was incorrectly reported in this journal of May 11th as being upon Willson Avenue.

**Louisville, Ky.**

**BUILDING PERMITS.**—The following building permits have been issued from the Mayor's office since our last report:—

Wm. Patterson, frame cottage, Fifteenth St., \$1,000; Wm. Underdunk, two-sty brick dwell., Kentucky St., \$1,800; H. Ebersale, frame warehouse, Preston St., \$250; Mrs. Mary Hikes, brick cottage, Kentucky St., \$700; Mrs. M. McFarland, two frame cottages, Fulton St., \$2,400; Frederick Forst, three-sty brick store and dwell., Market St., \$2,500; Morris Brouse, brick cottage, Oldham St., \$500; John Coniff, frame cottage, Baird St., \$500; Wm. Cornwall, brick business house, Fourth St., \$1,200; F. Drexler, brick store and dwell., cor. of Seventh and Grayson, \$3,700.

**New York.**

**BUILDING PERMITS.**—Cor. Fifth Ave. and Fifth-sixth St., two first-class dwellings, one 32' x 85', one 19' x 74'; brick fronts; entire cost, \$60,000; owner, Geo. Kemp; architect, R. C. Jones; builder, Wm. B. Pettit.—Fifth Ave., between One Hundred and Twenty-fourth and One Hundred and Twenty-fifth Sts., eleven first-class brown stone dwells., 19' x 50'; three stories; cost, \$9,000 each; builder and owner, Chas. Welde; architects, W. & J. Jardine.—Cor. Sixth Ave. and Fifty-sixth St., seven flats and stores, 24' x 80'; cost, \$10,000 each; owners and builders, Smith & Bannan; architect, J. B. Snook.—Cor. Madison Ave. and Sixty-eighth St., five first-class dwells., 20' x 55'; brown-stone fronts; cost, \$16,000 each; owner and builder, B. Muldoon.—Eightieth St., near Second Ave., five flats, brown-stone fronts, 25' x 55'; cost, \$9,000; owner, P. V. Quade; architect, J. C. Burns.—13 East St., second-class store, 25' x 72'; cost, \$9,000; owner, C. Smith & Son; architect, P. Tosterno; builder, Geo. Varrar.—241 and 243 Madison St., two tenements, brown stone fronts, 25' x 70'; cost, \$10,000 each; owners, M. Fuchs and E. Ward; architect, Wm. Jose.—345 East Seventy-seventh St., second-class store, 25' x 52'; cost, \$2,000; owner, Peter Scanlon; builder, Jos. H. Magrath.—156 and 160 West Seventeenth St., three second-class stores, 17' x 28'; cost, \$1,150 each; owner, John McNeile; builder, J. H. Hoert.—Fifty-third St., near Madison Ave., three first-class dwells., 13' x 62'; brown stone fronts; cost, \$11,000; owner, John Davidson; architect, A. B. Ogden.

**NEW BUILDINGS.**—There are unmistakable signs of a revival in new building enterprises in this city. It is stated on competent authority that a larger number of dwellings are in course of erection at this moment north of Forty-second Street than has been the case in seven years.

**BANKRUPT BUILDERS.**—The list of failures in this city for the first six months of the present year is greatly swollen by carpenters, builders, and others closely connected with building and real estate interests, viz.: carpenters and builders, fourteen failures, with liabilities of \$3,518,047; lumber dealers, seven failures, with liabilities of \$2,147,928; real estate agents, four failures, with debts amounting to \$1,567,500; total, \$7,233,475.

**Philadelphia.**

**BUILDING PERMITS.**—Richard Winnals, three-sty dwell., 17' x 40', Orchard St., Frankford.—Richard Winnals, two-sty dwell., 38' x 49', cor. Orthodox and Worth, Frankford.—John M. Glasser, two-sty dwell., 16' x 58', No. 2716 Jefferson St.—John Bell, two-sty shop, 20' x 28', Clementine St.—Jas. Kinnear & Sons, two-sty building, 21' x 34', Adams St., Germantown.—Mrs. Thos. Waddington, two-sty dwell., 19' x 30', cor. Nineteenth and Poplar.—Kever & Schultz, 2 two-sty dwells., 17' x 36', cor. Delhi and Tenth sts.—Benj. Walker, three-sty store and dwell., 18' x 34', Germantown Ave.—Michael Daly, two-sty stable, 17' x 48', Warnock St.—Jos. K. Lippincott, three-sty factory, 28' x 50', cor. Carlisle and Oxford sts.—H. Schmidt, two-sty dwell., 14' x 40', Mascher St.—Wm. Laverell, three-sty dwell., 18' x 28', No. 1727, No. Twentieth St.—J. L. Carre, 6 three-sty stores and dwells., 15' x 45', Twenty-fourth St.—Charles Weiss, two-sty fire engine house, 27' x 71', No. 20 E. Chelton Ave.—John Mann, two-sty dwell., 16' x 32', Lombard St.—A. A. Casanach, two-story stable, 25' x 40', Lattimer St.—James Kelly, two-sty dwell., 16' x 50', Eighteenth St.—Thomas Little, 4 two-sty dwells., 12' 6" x 28', No. 1234, 1236, 1238 and 1240 S. Seventh St.—Bernard Tucker, three-sty dwell., 14' x 50', Greenwich St.—H. Buehler, 4 two-sty dwells., 15' x 32', Seventieth and Greenway Ave.

**CHURCH.**—The new Church of Saint Agatha, at Thirty-eighth and Spring Garden sts., is rapidly approaching completion. It is constructed of stone, having a frontage of 80 feet and a depth of 16 feet, and is in the Gothic style. There will be a steeple, the height of which will be 150 feet from the foundation, and on either side of the building there will be two ornamental pinnacles. The seating capacity will be 1,500, although 3,000 persons can be accommodated. The corner-stone was laid October 18, 1874, and it is presumed that the building will be ready for dedication about October 20th of the present year. The cost of the building will be \$120,000, of which amount over \$100,000 has been already contributed.

**St. Louis.**

**BUILDING PERMITS.**—Sixteen permits have been issued for the week ending July 19, 1878. Six of these are for unimportant frame structures, the rest for brick buildings. Those worth \$2,000 and over are as follows:—

Owners.	Use.	Stories.	Rooms.	Cost.
H. M. Heilmeyer.	Store & dwell.	3	13	\$3,000
Mrs. E. Wilson.	Dwelling.	2	6	2,000
Otto Kunz.	Dwelling.	3	8	2,000

**CONDITION OF BUILDINGS NOW IN PROGRESS.**—Of the more important buildings in progress in this city, the Second Baptist Church is nearly ready for plastering. No ties are to be used in this church. The Female Department of Washington University is to be ready for occupancy early in September. Dr. Brookes's church is nearly ready for the roof. The outer walls of the new Custom-House are three full stories high, and much of the main stone cornice is set.

**BRICK BUILDINGS.**—It is stated that there have been built of brick houses in this city since 1870, as follows: 1870, 1,159; 1871, 1,508; 1872, 1,506; 1873, 1,492; 1874, 1,801; 1875, 1,775; 1876, 1,825; 1877, 2,115; and our builders say they have laid up more brick so far this year than up to this time last year.

**Washington, D. C.**

**BUILDING PERMITS.**—Inspector Entwistle has issued permits to the following persons since our last report:—W. T. Walker, to build 2 two-sty brick houses in the alley between Thirteen and a half, Fourteenth, and C and D sts. southwest; cost, \$1,000.—C. Reynolds, to build a

two-story brick house and store, cor. Seventeenth and Sampson sts.; cost, \$1,200.—Washington Chariot Co., to build a frame shed on Eighth St.—Dennis Haggerty, to build 3 two-story brick houses on High St., Georgetown, \$3,840.

**General Notes.**

**BELLOWS FALLS, VT.**—Work has begun upon a new Catholic church. The building will cost about \$30,000.

**BROOKLINE, MASS.**—Mr. O. F. Smith, architect, Boston, has designed a house for Mr. Henry N. Clarke, who will build the house himself.

**CANTON, MD.**—There are in course of erection two large rolling mills on a lot (455 by 294) between Eighth and Ninth avenues and Second and Third streets, about three squares east of Fannell's furnace, and is of easy access to the line of the Union Railroad and to the Northern Central Railway wharves near that point. The new enterprise is owned by Anderson Brothers & Co.

**CLARKSVILLE, TENN.**—St. Peter's chapel (colored Methodist), on Franklin street, which has been for several years in an unfinished condition, is now being finished off with a tower and front ornaments.

The St. John's (colored) Baptist society began their new church building, on Main street, by laying the cornerstone Thursday, July 25th.

**COLLEGE HILL, O.**—There are more buildings going up and under repair at this time than for many years past. The work on the Presbyterian parsonage is being pushed rapidly forward, and from present indications it will be ready for occupancy by the middle of September next.

Mr. Flam's large two-story brick is under roof. Mr. Dixon's residence, on Knight's avenue, will soon be completed.

Mr. Davey is building a two-story frame on Maple ave. **COLUMBUS, O.**—The corner-stone of the County Children's House was laid July 18th.

**COLUSA, C. H., CAL.** Mr. A. A. Cook, of Sacramento, is building the new county jail, for which the contract price is \$18,250 in gold. It will be a two-story brick building, and will measure 46' x 64'. Mr. Cook is also building a large brick church, which will cost about \$20,000.

**HANOVER, MASS.**—The Soldiers' Monument was dedicated July 18th.

**HOLBROOK, MASS.**—Mr. S. S. Woodcock, architect, Boston, is building a house for C. H. Paine, Esq. Cost, \$8,000. Sidney Washburn, of Brockton, builder.

**INDIANAPOLIS, IND.**—The architect of the State House has been directed by the Board of Commissioners to direct in his specifications that the stone used in its construction shall be taken from Indiana quarries, the foundation from Deatur, Shelby, Jennings, and Jefferson counties, and Putnamville, and the superstructure from Owen, Lawrence, Monroe, Washington, and Harrison counties. The commissioners say the native stone is the best that they have been able to find, and can be had twenty-five per cent cheaper than any other.

**ISLIP, L. I.**—Mr. R. M. Hunt, of New York, architect, is to build a country-house here for Mr. Vanderbilt. The cost will be about \$30,000.

**LEMA, O.**—The corner-stone of Christ Protestant Episcopal Church, at the corner of West and West North streets, was laid on July 11th with appropriate ceremonies.

**LYNSBURG, VA.**—The work on the new Catholic church is going on rapidly. The second story is well up.

**MALDEN, MASS.**—Jordan & Grant, carpenters, are building a house for Mr. F. J. Foss. Cost \$5,000. Mr. S. S. Woodcock, architect.

**NEWARK, N. J.**—Work has been begun at South Orange ave. and South Seventh st., for the chapel of the Memorial Presbyterian Church. The structure will be 40' x 60' feet, and will be built of brick.

**NEW MILFORD, CONN.**—Anthony & McMahon, stove dealers, have contracted with T. Soule & Bro. for the erection of a two-story building. It will be 60 feet front and 75 feet deep. The price is \$3,000.

**NEWPORT, O.**—The following building permits have been issued since our last report: H. Ritter, two-story brick addition, 40' x 25', Columbia St.—Knecht & Schriver, two-story frame shop, 28' x 32', Goodman and Isabella Sts.—Wm. Cottingham, two-story frame addition, 18' x 21', corner Bellevue and Isabella Sts.

**PALMER, MASS.**—A new church is soon to be built by the Universalists.

**PROVIDENCE, R. I.**—The following notices of intention to build have been received at the City Engineer's Office since our last report: John Murray, cor. Foster's Avenue and Brattle Street.—N. B. Horton, Ship Street, opp. Barrett Street.—Sarah Blanding, Hanover Street.—I. A. Sherman, Lockwood Street.

**READING, MASS.**—Mr. S. S. Woodcock, of Boston, is the architect of a house for J. B. Lewis, Esq. Cost \$7,000. Burnham & Callahan, builders.

**Public Buildings.**

**APPROPRIATIONS.**—The House Committee on Public Buildings has recommended the following appropriations to be made for government buildings: Scranton, Penn., \$50,000; Erie, Penn., \$175,000; Augusta, Ga., \$100,000; Key West, Fla., \$100,000; Oxford, Miss., \$50,000; Lynchburg, Va., \$75,000; Montgomery, Ala., \$150,000; Topeka, Kan., \$150,000; Greensboro, N. C., \$50,000; La Crosse, Wis., \$65,000; Council Bluffs, Ia., \$75,000.

**APPROACHING COMPLETION.**—At present the work on all the public buildings is in full progress. Those which will be completed during the present year are at Evansville, Ind.; Covington, Ky.; Grand Rapids, Wis.; Dover, Del.; Raleigh, N. C.; Charleston, S. C., and the Appraiser's Store at San Francisco.

**INDEX OF CURRENT WORK,**

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

**Baltimore, Md.**

**CHURCH.**—The Cummings Memorial Church. Mr. Cassell, architect.

**CHURCH.**—The Pius IX Memorial Church. G. A. Frederick, architect. Cost \$100,000.

**CHURCH.**—Church of St. Michael and All Angels. Cost \$80,000. Wyatt & Sperry, architects.

**HOSPITAL.**—Johns Hopkins Hospital. J. R. Niernsée, consulting architect.

**Boston, Mass.**

**BANK BUILDING.**—Tremont Bank Building. Carl Fehmer, architect.

**THE MUSEUM OF FINE ARTS.**—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.

**SCHOOLHOUSE.**—High and Latin School. G. A. Clough, architect.

**Brooklyn, N. Y.**

**TENEMENT.**—A. T. White, owner. William Field & Son, architects.

**SOCIETY BUILDING.**—The Long Island Historical Society Building, Mr. G. B. Post, architect. Cost \$100,000.

**CHURCH.**—St. Francis Xavier B. C. Church, West Fifteenth Street. Cost \$150,000. P. Keely, architect.

**Chicago, Ill.**

**ARMORY.**—Armory for the First Regiment. Messrs. Wheelock & Clay, architects. Cost \$25,000.

**STORE.**—The Singer Building. Cost \$250,000.

**Cincinnati, O.**

**U. S. CUSTOM HOUSE AND POST OFFICE.** S. Hannaford, local superintendent.

**CHILDREN'S HOME.**—J. W. McLaughlin, architect. Cost \$50,000.

**NEWSPAPER OFFICE.**—The Gazette Building. E. Anderson, architect.

**Cleveland, O.**

**BUSINESS BLOCK.**—Amasa Stone, owner. J. Ireland, architect. Cost \$70,000.

**CHURCH.**—Second Presbyterian. J. Ireland, architect. Cost \$70,000.

**CONVENT.**—Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

**PUBLISHING HOUSE.**—Evangelical Publishing Association. J. M. Blackburn, architect. Cost \$45,000.

**Hartford, Conn.**

**SEMINARY.**—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.

**CATHEDRAL.**—R. C. Cathedral of St. Joseph. P. Keely, architect.

**CATHOLIC SCHOOL.**—Brown & Stilson, architects, New Haven. Cost about \$25,000.

**Jersey City.**

**CONVENT.**—Convent of the Sisters of St. Dominick. Cost \$40,000.

**New York.**

**THE "FLORENCE."** Emile Grewé, architect. Mrs. Matthews, owner. Cost \$500,000.

**THE BOBBEL BUILDING.** S. D. Hatch, architect. Cost \$250,000.

**COLLEGE.**—Addition to Columbia College. C. C. Haight, architect. Cost \$200,000.

**OFFICE BUILDING.**—Messrs. Silliman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.

**APARTMENT HOUSE.**—Mr. H. J. Hardenburgh, architect. Cost \$300,000.

**PRIVATE RESIDENCE.**—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.

**STORE.**—Mr. John Duncan, owner. Mr. G. Thomas, architect. Cost \$60,000.

**ARMORY FOR THE SEVENTH REGIMENT.** Cost \$300,000. C. W. Clinton, architect.

**Philadelphia.**

**HOSPITAL.**—Presbyterian Hospital. Wilson Bros., arch'ts.

**OFFICE BUILDING.**—Girard trust.

**Providence, R. I.**

**DORMITORY FOR BROWN UNIVERSITY.**—Messrs. Stone & Carpenter, architects.

**CITY HALL.**—Mr. S. J. F. Thayer, Boston, architect.

**HIGH SCHOOL BUILDING.** Messrs. Walker & Gould, architects.

**St. John, N. B.**

**POST OFFICE, CUSTOM HOUSE, AND SAVINGS BANK.**—Mr. Scott Chief Architect to the Dominion Government.

**BANK.**—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.

**CHURCH.**—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.

**CITY HALL.**—Messrs. McKean & Fai weather, architects.

**CHAPEL.**—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.

**CHURCH.**—St. James's Church, Croft & Camp, architects, St. John, N. B.—St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$60,000.

**St. Louis.**

**CHURCH.**—Second Baptist Church. Edward Hilsley, contractor. Cost \$100,000.

**COURT HOUSE.**—For the new county of St. Louis.—F. Renwick, architect. Cost \$28,000.

**COLLEGE.**—College for the Christian Brothers. Mr. Jas. McGrath, architect. Cost \$200,000.

**CUSTOM HOUSE AND POST OFFICE.**—Mr. Jas. G. Hill, Supervising Architect of the Treasury Department.

**UNIVERSITY BUILDING.**—The Female Department of Washington University. Rev. W. G. Elliot, Chancellor. Cost \$60,000.

**Washington, D. C.**

**COLLEGE BUILDING FOR THE DEAF AND DUMB ASYLUM.**—F. C. Withers, architect. Cost \$50,000.

**CHILDREN'S HOSPITAL.**—J. C. Harkness, architect. J. G. Naylor, builder

**General.**

**ASRLAND, O.**—Dunkard German College, \$10,000 or more, G. W. Kramer, architect.

**CAMBRIDGE, ILL.**—Court House for Henderson County. Cost \$65,000.

**CAMBRIDGE, MASS.**—Gymnasium for Harvard College. Messrs. Peabody & Stearns, architects.

**CONCORD, N. H.**—State Prison. Messrs. Dow & Wheeler, architects. Appropriation, \$200,000.

**DUBUQUE, IO.**—St. John's Church, H. M. Congdon, architect, New York, \$40,000.

**ELMIRA, N. Y.**—Masonic Hall. N. LeBrun, architect. New York. Cost \$60,000.

**FARIBAULT, MINN.**—Deaf, Dumb, and Blind Asylum. J. Babcock & Co., contractors. Cost \$53,730.

**GARDEN CITY, L. I.**—Stewart Memorial Church. H. G. Hutton, architect.

**INDEPENDENCE, IO.**—Hospital for the Insane. G. Josephlyn, supervising architect. Cost \$350,000.

**Latest.**

**BOSTON, MASS.**—Family hotel. Cost, \$150,000. Mr. S. D. Kelley, architect.—Asylum for Aged People, C. J. Bate-man, architect, Cost, \$5,000.

**BROOKLYN, N. Y.**—St. John's Hospital, N. L. Derby, New York, architect.

**CINCINNATI, O.**—Church of St. Francis de Sales.

**Publishers' Department.**

*The American Architect and Building News.*

PUBLISHED EVERY SATURDAY BY HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year; \$6.00 in advance.

**CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,**

WITH *Houghton, Osgood & Co.'s other Periodicals.*  
 THE ARCHITECT and \*ATLANTIC MONTHLY...\$9 00  
 THE ARCHITECT and THE REPORTER...15 00  
 THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL...10 00  
 THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE...7 00  
 \* N. E.—The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

**RATES OF ADVERTISING.**

PAGES NEXT TO READING MATTER.  
 single insertion...12½ cts. per line.  
 One inch (14 lines) one insertion...\$1.75  
 One inch, six insertions...10 00  
 INSIDE PAGES, single insertion...10 cts. per line.  
 One inch, single insertion...\$1.40  
 One inch, six insertions...7 00  
 For larger space, and for a series of more than six insertions, reduced rates, made known on application to the Publishers.

Special rates for first and last pages.  
 No extra charge for cuts, or for advertisements that occupy more than a column in width.  
 Payments should be made directly to the Publishers, either by draft or by post office order.

HOUGHTON, OSGOOD & CO., Publishers, WINTHROP SQUARE, BOSTON.

**COMPETITIONS IN INTERIOR DECORATION.**

The attention of architects, draughtsmen, and decorators is drawn to the series of competitions in interior decoration initiated by the editors, and now in operation.

**REGULATIONS AND CONDITIONS** will be found in Nos. 109 and 114 of the AMERICAN ARCHITECT.

The programme of the FIFTH COMPETITION, which closes August 20th, will be found in No. 132.

**ARCHITECTURAL IRON WORKS.**

**YOUNGLOVE & CO., Propr's.**  
 CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CRESTING, ETC.  
 Estimates promptly furnished.

(Established 1848.)  
**MARKET ST. ARCHITECTURAL FOUNDRY**

AND  
**IRON WORKS.**  
**SNEAD & CO.**

LOUISVILLE, KY.  
 Makers of every description of Iron Work for Buildings.

**PROPOSALS.**

**CUT MARBLE.**  
 Proposals for cut marble work for the United States Custom-House and Post-Office at Memphis, Tenn.  
 OFFICE OF SUPERVISING ARCHITECT,  
 TREASURY DEPARTMENT,  
 WASHINGTON, D. C., July 20, 1878.

Sealed proposals will be received at this office until 12 o'clock, m., on the 12th day of August, 1878, for furnishing and delivering, and for cutting on the site of the building all the stone work (Tennessee marble) required for the superstructure of the U. S. Custom-House and Post-Office at Memphis, Tenn. Copies of drawings and specification, blank form of bond, conditions of submitting bids, and any additional information, may be had on application at this office or the office of the Superintendent.

JAS. G. HILL,  
 Supervising Architect.

**PLUMBING, GAS-FITTING, ETC.**

**OFFICE OF GUARDIANS OF THE POOR.**  
 PITTSBURG, July 8, 1878.  
 Sealed proposals will be received at this office until August 1, 12 m., for the plumbing and gas-fitting, and for the steam heating and ventilating separately, for the Insane Building at the City Farm. Plans and specifications can be seen at the office of the architect, T. D. Evans, No. 56 Fifth Avenue. The Committee reserve the right to reject any or all bids. All bids to be addressed to Jos. S. Finch, Chairman Building Committee. By order of the Committee,  
 JAMES S. TODD, Secretary.



PROPOSALS.

LIFE SAVING STATIONS.

TREASURY DEPARTMENT, OFFICE OF THE GEN. SUPT. U. S. LIFE SAVING SERVICE, WASHINGTON, D. C. July 10, 1878. Sealed proposals will be received at this office until 12 o'clock, noon, of Wednesday, July 31, 1878, for the construction of thirteen complete Life Saving Stations on the coasts of Virginia and North Carolina; ten of said stations to be erected at intermediate points between existing stations, and three between Little Kinnakeet, North Carolina, and Hatteras Inlet. The seven northern and six southern stations will be bid for separately, and both contracts will not be awarded to the same party. The buildings must be completed, ready for occupancy, on or before the 15th day of November, 1878. Each bid must be accompanied by a bond in the sum of \$1,000, with two good and sufficient sureties, conditional that the bidder will enter into contract without delay if his bid be accepted. All proposals must be indorsed "Proposals for the Construction of Seven Life Saving Stations on the Coasts of Virginia and North Carolina;" or, "Proposals for the Construction of Six Life Saving Stations on the Coast of North Carolina," as the case may be, and addressed to the General Superintendent, United States Life Saving Service, Treasury Department, Washington, D. C. Specifications and plans, and forms of proposal and bond, can be obtained at the office of the Collectors of Customs at Norfolk, Va., and Wilmington and Newbern, N. C.; of Captain J. H. Merryman, Inspector of Life Saving Stations, No. 16 Broadway, New York, and of Lieutenant Walter Walton, Assistant Inspector of Life Saving Stations, Elizabeth City, N. C.; also, upon application to this office. The right to reject any or all bids, or to waive defects, if it is deemed for the interest of the Government to do so, is reserved. S. J. KIMBALL, Gen'l Supt. L. S. S.

135

DREDGING CHEBOYGAN HARBOR, MICH. UNITED STATES ENGINEER OFFICE, ROOM No. 57 MOFFAT BLOCK, DETROIT, MICH., July 10, 1878. Sealed proposals, in duplicate, addressed to the undersigned, and indorsed on envelope "Proposals for dredging Cheboygan Harbor, Mich.," will be received at this office until 12 o'clock, noon, August 10, 1878. Dredging to be paid for by the cubic yard, snow measurement. For all further information, specifications, instructions, and blank forms upon which bids must be made, apply to this office. F. HARWOOD, Major of Engineers.

136

STONE. BURLINGTON, IOWA. U. S. ENGINEER OFFICE, ROCK ISLAND, ILL., July 10, 1878. Duplicate sealed proposals will be received by the undersigned until 2 P. M., August 10, 1878, for furnishing stone at Rush Chute, near Burlington, Iowa. For all information apply to F. U. FAIRQUHAR, Major of Engineers.

136

STONE. FORT MADISON, IOWA. U. S. ENGINEER OFFICE, ROCK ISLAND, ILL., July 10, 1878. Duplicate sealed proposals will be received by the undersigned until 2 P. M., August 10, 1878, for furnishing stone at Niota Chute, near Fort Madison, Iowa. For all information apply to F. U. FAIRQUHAR, Major of Engineers.

136

COURT-HOUSE. BELIZE, HONDURAS. Tenders (in duplicate) indorsed "Tenders for Court-House," will be received until noon on the 12th of August, 1878, from persons willing to construct a new Court-House and Public Offices in the town of Belize. Persons desirous to compete for the work can inspect plans and sections and specifications, forms of tender and agreements and other particulars, on application at the office of the undersigned, at Belize, and at the office of the Crown Agents for the Colonies, Downing Street, London, or Messrs. A. E. Outbridge & Co., 29 Broadway, New York. No tender will be noticed except on the prescribed form, nor unless two efficient sureties are provided for the due performance of the work in accordance with the terms of the specification. Tenders must be addressed to the Honorable the Colonial Secretary, Belize, British Honduras, care of A. E. Outbridge & Co., 29 Broadway, New York. The government do not bind themselves to accept the lowest or any tender. By order of His Excellency the Lieutenant-Governor GUSTAV VON OHLAFEN, Colonial Engineer.

136

ASYLUM. Sealed proposals will be received until Monday, August 5, 1878, at 12 o'clock, M., by the Trustees of the Ohio Institution for the Education of Idiotic and Imbecile Youth, at the office of the Superintendent, for furnishing materials and doing the work required by the plans and specifications for building two new wings. Separate proposals will be received for furnishing the materials or doing the work, or both, for each separate, distinct business represented in the construction of such buildings. All proposals must be accompanied by proper bond and security, and directed to John A. Shank, President of the Board of Trustees, and left at the office of the Superintendent. Plans and specifications can be seen at said office from this date. JOHN A. SHANK, J. M. MONTGOMERY, J. K. RUKENBROD, Trustees.

135

SCHOOL FURNITURE. CINCINNATI, O. Sealed proposals will be received at the office of Public Schools, Public Library Building, until Monday, August 5, 1878, at 12 M., for supplying furniture for the Public Schools of Cincinnati for one year, and also for repairs of furniture, according to specifications on file in said office. Each bid must contain the name of every person interested therein, and must be accompanied by a guaranty of some disinterested person, that if the bid is accepted a contract will be entered, and the performance of it properly secured. The right is reserved to reject any and all bids. A sample desk must be delivered at said office by each bidder, to remain in the case of the successful bidder until the expiration of his contract. By order of the Committee on Furniture. F. PUTTMANN, Chairman.

135

DREDGING, ETC. ENGINEER OFFICE, U. S. A., No. 91 STATE STREET, NEW LONDON, CONN., July 6, 1878. Proposals will be received at this office until 11 A. M., on the 6th day of August, 1878. I. For dredging at the following places: 1. Thames River, near Norwich, Conn. 2. New Haven Harbor, Conn. 3. Milford Harbor, Conn. 4. Bridgeport Harbor, Conn. 5. Norwalk Harbor, Conn. II. For delivering rip-rap granite for breakwaters at 1. Stonington Harbor, Conn. 2. Port Jefferson Harbor, N. Y. Specifications and blank forms for proposals and guarantee can be obtained on application to this office. J. W. BARLOW, Major of Engineers.

136

DREDGING AND PILING SAGINAW RIVER, MICH. UNITED STATES ENGINEER OFFICE, ROOM No. 57 MOFFAT BLOCK, DETROIT, MICH., July 10, 1878. Sealed proposals in duplicate, for the improvement of the Saginaw River, will be received at this office until 12 o'clock, noon, August 10, 1878, and opened immediately thereafter. Three sections of work, two comprising pile piling, and one dredging, are contemplated. Proposals addressed to the undersigned are invited for any or every section. For all further information, specifications, instructions, and blank forms upon which bids must be made, apply to this office. F. HARWOOD, Major of Engineers.

136

BROKEN STONE, CEMENT, AND SAND. Proposals for Concrete Stone, Cement, and Sand, for the U. S. Bureau of Engraving and Printing, Washington, D. C. OFFICE OF SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., July 17, 1878. Sealed proposals will be received at this office until 12 M., on the 24 day of August, 1878, for furnishing and delivering at the site of the building to be erected for the Bureau of Engraving and Printing, Square 221, Washington, D. C., all the broken stone required for the concrete foundations, 990 yards, more or less; also for all the cement and sand required for the building, 12,000 barrels, more or less, of cement, and 3,000 cubic yards, more or less, clean sharp sand. Copies of specification, blank form of bond, and any additional information may be had on application at this office. JAS. G. HILL, Supervising Architect.

135\*

BRICK, CEMENT, AND SAND. Proposals for Brick, Cement, and Sand, for the U. S. Court House and Post Office, at Utica, N. Y. OFFICE OF SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., July 17, 1878. Sealed proposals will be received at this office until 12 M., on the 24 day of August, 1878, for furnishing and delivering at the site of the U. S. Court House and Post Office, at Utica, N. Y., all the brick, cement and sand, required for the superstructure of the building, say 1,130,000, more or less, hard burned, common bricks, 67,000 more or less pressed facing bricks, 1,880 barrels, more or less, of cement, and 450 cubic yards, more or less, of clean, sharp sand. Copies of specification, blank form of bond, and any additional information may be had on application at this office or the office of the Superintendent. JAS. G. HILL, Supervising Architect.

135\*

HARBOR IMPROVEMENTS. U. S. ENGINEER OFFICE, 427 MILWAUKEE STREET, MILWAUKEE, WIS., July 11, 1878. Sealed proposals in duplicate will be received at this office until 10 o'clock A. M., on Tuesday the 30th day of July, 1878, for the improvement of the following harbors, except Eagle Harbor, Michigan, for which proposals as above will be received until Saturday the 13th day of August, 1878, at 10 o'clock A. M., viz.: Ontonagon Harbor, Mich., Crib-work. Eagle Harbor, Mich., Crib-work. Menomonee Harbor, Mich., and Wis., Crib-work. Green Bay Harbor, Wis., Dredging. Manitowee Harbor, Wis., Crib-work. Harbor of Refuge, entrance at Sturgeon Bay Canal, Crib-work. For information apply at this office. Parties proposing to bid must furnish satisfactory evidence of capacity and good faith. Proposals will be indorsed on the envelope "Proposals for Harbor" (naming the Harbor), and addressed to HENRY M. ROBERT, Major of Engineers.

135

ELECTRIC CLOCKS. FURNITURE. LANSING, MICH. Proposals for furnishing Electric Clocks and Furniture for the new Capitol of Michigan, at Lansing, will be received by the Governor and Board of State Auditors at the office of the Board for furnishing the New Capitol of Michigan, in Lansing, until 12 o'clock, noon, on Wednesday, July 31, 1878, and will be opened at said office at 3 o'clock, P. M., on the same day. Persons desiring to submit proposals can obtain schedules of the articles required, instructions to bidders, preliminary bonds, and all necessary information upon application to the Secretary. The Board reserves the right to reject any or all proposals submitted. All proposals must be sealed, indorsed "Proposals for Electric Clocks" or "Furniture for New Capitol," and addressed to A. L. Bours, Secretary of the Board, Lansing, Mich. CHAS. M. CROSSWELL, Governor. E. G. D. BOLDEN, W. B. McREERY, B. F. PATRIDGE, Board of State Auditors. ALLEN L. BOURS, Secretary.

135

PROPOSALS.

DREDGING, ETC. ENGINEER OFFICE, U. S. A., No. 91 STATE STREET, NEW LONDON, CONN., July 6, 1878. Proposals will be received at this office until 11 A. M., on the 6th day of August, 1878. I. For dredging at the following places: 1. Thames River, near Norwich, Conn. 2. New Haven Harbor, Conn. 3. Milford Harbor, Conn. 4. Bridgeport Harbor, Conn. 5. Norwalk Harbor, Conn. II. For delivering rip-rap granite for breakwaters at 1. Stonington Harbor, Conn. 2. Port Jefferson Harbor, N. Y. Specifications and blank forms for proposals and guarantee can be obtained on application to this office. J. W. BARLOW, Major of Engineers.

136

DREDGING AND PILING SAGINAW RIVER, MICH. UNITED STATES ENGINEER OFFICE, ROOM No. 57 MOFFAT BLOCK, DETROIT, MICH., July 10, 1878. Sealed proposals in duplicate, for the improvement of the Saginaw River, will be received at this office until 12 o'clock, noon, August 10, 1878, and opened immediately thereafter. Three sections of work, two comprising pile piling, and one dredging, are contemplated. Proposals addressed to the undersigned are invited for any or every section. For all further information, specifications, instructions, and blank forms upon which bids must be made, apply to this office. F. HARWOOD, Major of Engineers.

136

BROKEN STONE, CEMENT, AND SAND. Proposals for Concrete Stone, Cement, and Sand, for the U. S. Bureau of Engraving and Printing, Washington, D. C. OFFICE OF SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., July 17, 1878. Sealed proposals will be received at this office until 12 M., on the 24 day of August, 1878, for furnishing and delivering at the site of the building to be erected for the Bureau of Engraving and Printing, Square 221, Washington, D. C., all the broken stone required for the concrete foundations, 990 yards, more or less; also for all the cement and sand required for the building, 12,000 barrels, more or less, of cement, and 3,000 cubic yards, more or less, clean sharp sand. Copies of specification, blank form of bond, and any additional information may be had on application at this office. JAS. G. HILL, Supervising Architect.

135\*

BRICK, CEMENT, AND SAND. Proposals for Brick, Cement, and Sand, for the U. S. Court House and Post Office, at Utica, N. Y. OFFICE OF SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., July 17, 1878. Sealed proposals will be received at this office until 12 M., on the 24 day of August, 1878, for furnishing and delivering at the site of the U. S. Court House and Post Office, at Utica, N. Y., all the brick, cement and sand, required for the superstructure of the building, say 1,130,000, more or less, hard burned, common bricks, 67,000 more or less pressed facing bricks, 1,880 barrels, more or less, of cement, and 450 cubic yards, more or less, of clean, sharp sand. Copies of specification, blank form of bond, and any additional information may be had on application at this office or the office of the Superintendent. JAS. G. HILL, Supervising Architect.

135\*

HARBOR IMPROVEMENTS. U. S. ENGINEER OFFICE, 427 MILWAUKEE STREET, MILWAUKEE, WIS., July 11, 1878. Sealed proposals in duplicate will be received at this office until 10 o'clock A. M., on Tuesday the 30th day of July, 1878, for the improvement of the following harbors, except Eagle Harbor, Michigan, for which proposals as above will be received until Saturday the 13th day of August, 1878, at 10 o'clock A. M., viz.: Ontonagon Harbor, Mich., Crib-work. Eagle Harbor, Mich., Crib-work. Menomonee Harbor, Mich., and Wis., Crib-work. Green Bay Harbor, Wis., Dredging. Manitowee Harbor, Wis., Crib-work. Harbor of Refuge, entrance at Sturgeon Bay Canal, Crib-work. For information apply at this office. Parties proposing to bid must furnish satisfactory evidence of capacity and good faith. Proposals will be indorsed on the envelope "Proposals for Harbor" (naming the Harbor), and addressed to HENRY M. ROBERT, Major of Engineers.

135

ELECTRIC CLOCKS. FURNITURE. LANSING, MICH. Proposals for furnishing Electric Clocks and Furniture for the new Capitol of Michigan, at Lansing, will be received by the Governor and Board of State Auditors at the office of the Board for furnishing the New Capitol of Michigan, in Lansing, until 12 o'clock, noon, on Wednesday, July 31, 1878, and will be opened at said office at 3 o'clock, P. M., on the same day. Persons desiring to submit proposals can obtain schedules of the articles required, instructions to bidders, preliminary bonds, and all necessary information upon application to the Secretary. The Board reserves the right to reject any or all proposals submitted. All proposals must be sealed, indorsed "Proposals for Electric Clocks" or "Furniture for New Capitol," and addressed to A. L. Bours, Secretary of the Board, Lansing, Mich. CHAS. M. CROSSWELL, Governor. E. G. D. BOLDEN, W. B. McREERY, B. F. PATRIDGE, Board of State Auditors. ALLEN L. BOURS, Secretary.

135

CUSTOM-HOUSE. St. JOHN, N. B. Sealed tenders addressed to the undersigned and indorsed "Tender for Custom-House, St. John, N. B.," will be received at this office, until Monday, the 12th day of August next, at noon, for the erection and completion of the above building. Plans, specifications, etc., can be seen at the office of the Department of Public Works in Ottawa, Ont., and at the office of Messrs. McKean and Fairweather, Architects, St. John, N. B., where form of tender, etc., and all necessary information can also be obtained. By order, F. BRAUN, Secretary.

137

JAIL. JONESBORO, GA. Sealed bids for the construction of a Jail and Jailers Residence combined, in Jonesboro, Clayton County, Georgia, will be received by me until 12 o'clock M., July 30, 1878, when the contract will be let to the lowest bidder. Drawing of plan and specifications on file in my office; notice and specifications in the Jonesboro "News." J. A. McCONNELL, Ordinary, Clayton County, Ga.

135

PLUMBING AND GAS-FITTING. OFFICE OF THE CHIEF CLERK, SENATE OF PENNSYLVANIA, HARRISBURG, July 22, 1878. In compliance with the provisions of section 12, article 3, of the Constitution of the Commonwealth, and of an act of the General Assembly, entitled "An act to carry out the provisions of section 12, article 3, of the Constitution relative to contracts for supplies for the Legislature and the various departments of the State Government," approved the 16th day of March, A. D. 1874, and of the supplement thereto, approved the 4th day of May, 1876, I hereby invite sealed proposals to 12 o'clock M., of the 21 day of August, A. D. 1878, at prices below maximum rates hereto fixed, for contracts to do all the necessary plumbing, gas-fitting, and steam-fitting for the Senate Chamber, Committee Rooms, Wash-Rooms, Water-Closets, and Heaters and Boilers in basement of same, and furnishing all new material and labor for same for the Senate of Pennsylvania, for the year ending the first Monday of June, A. D. 1879. Proposals to be indorsed "Proposals for plumbing, gas-fitting, and steam-fitting for the Senate of Pennsylvania." Maximum price per year, \$2,500. Full information as to what work is to be done and material furnished by calling on S. S. Child, Librarian of the Senate, Harrisburg, Penn. Also, at the same time and place, proposals will be received to furnish the Senate with brooms, buckets, soap, etc., etc., for the year ending the first Monday of June, A. D. 1879, as per schedule of the articles, with the maximum price of each. The schedule, with the maximum prices, will be furnished by S. S. Child, Librarian of the Senate, Harrisburg, Penn., on application of any bidder. Proposals to be indorsed "Proposals for brooms, buckets, soap, etc., for the Senate of Pennsylvania." The foregoing articles are to be furnished in such quantities, more or less, as is therein specified, and at such times as may be required by the Chief Clerk. No proposals will be considered or accepted unless accompanied by bond of the person or persons offering the same in double the amount of the bid, with at least two sureties approved by the President Judge of the Court of Common Pleas of the county in which the person or persons making such proposals reside, conditioned for the faithful performance of the conditions of the contract. The proposals to be opened in the Executive Chamber at Harrisburg, at 12 o'clock M., on the 24 day of August, A. D. 1878, and the several contracts awarded to the lowest responsible bidders at a per centum under the maximum prices set forth in this advertisement and in the schedule. Bidders are invited to be present. The foregoing proposals will be received at the time of opening by THOS. B. COCHRAN, Chief Clerk of Senate of Pennsylvania. Or may be directed in the care of SULLIVAN S. CHILD, Librarian, Senate, Harrisburg, Penn.

135

COMPETITIONS. CLARKSVILLE, TENN., June 3, 1878. The undersigned having been appointed Commissioners by the County Court of Montgomery County, Tennessee, to superintend the erection of a Court-House, hereby invite architects desiring to offer plans for the same to do so on or before the 3d day of August, 1878. Architects submitting plans will be governed by the following specifications: Drawings to consist of Floor Plans, Elevations, Transverse and Longitudinal Sections. A written statement explanatory of the same, together with an itemized estimate of the cost to execute, must accompany each design submitted. No appropriation has as yet been made, but a good building is desired, and plans are necessary in order to know what amount will be required. For further information apply to the Chairman of the Commissioners. CHARLES W. TYLER, Chairman, G. H. SLAUGHTER, W. S. MALLORY, G. ORGAIN, CHAS. G. SMITH, Commissioners.

135

A DRAUGHTSMAN (Architectural) of Designs, Detail, Iron-Work Construction, etc., wants a situation. Address, THOS. DANT, Post-Office, New York.

WANTED. A situation by an architectural draughtsman, 18 years of age. Salary not so much an object as a permanent situation. Address A. B. C., 1267 Broadway, New York, Room 25.

WANTED. QUARRY FOREMAN. A competent and reliable man to take charge of our White Limestone Quarries, situated on Louisville and Nashville Railroad. Apply at once to BEEKNAP & DUMENIL, Corner 10th and Chestnut Streets, Louisville, Ky

135

135

135

135

PROPOSALS.

CUSTOM-HOUSE. St. JOHN, N. B. Sealed tenders addressed to the undersigned and indorsed "Tender for Custom-House, St. John, N. B.," will be received at this office, until Monday, the 12th day of August next, at noon, for the erection and completion of the above building. Plans, specifications, etc., can be seen at the office of the Department of Public Works in Ottawa, Ont., and at the office of Messrs. McKean and Fairweather, Architects, St. John, N. B., where form of tender, etc., and all necessary information can also be obtained. By order, F. BRAUN, Secretary.

137

JAIL. JONESBORO, GA. Sealed bids for the construction of a Jail and Jailers Residence combined, in Jonesboro, Clayton County, Georgia, will be received by me until 12 o'clock M., July 30, 1878, when the contract will be let to the lowest bidder. Drawing of plan and specifications on file in my office; notice and specifications in the Jonesboro "News." J. A. McCONNELL, Ordinary, Clayton County, Ga.

135

PLUMBING AND GAS-FITTING. OFFICE OF THE CHIEF CLERK, SENATE OF PENNSYLVANIA, HARRISBURG, July 22, 1878. In compliance with the provisions of section 12, article 3, of the Constitution of the Commonwealth, and of an act of the General Assembly, entitled "An act to carry out the provisions of section 12, article 3, of the Constitution relative to contracts for supplies for the Legislature and the various departments of the State Government," approved the 16th day of March, A. D. 1874, and of the supplement thereto, approved the 4th day of May, 1876, I hereby invite sealed proposals to 12 o'clock M., of the 21 day of August, A. D. 1878, at prices below maximum rates hereto fixed, for contracts to do all the necessary plumbing, gas-fitting, and steam-fitting for the Senate Chamber, Committee Rooms, Wash-Rooms, Water-Closets, and Heaters and Boilers in basement of same, and furnishing all new material and labor for same for the Senate of Pennsylvania, for the year ending the first Monday of June, A. D. 1879. Proposals to be indorsed "Proposals for plumbing, gas-fitting, and steam-fitting for the Senate of Pennsylvania." Maximum price per year, \$2,500. Full information as to what work is to be done and material furnished by calling on S. S. Child, Librarian of the Senate, Harrisburg, Penn. Also, at the same time and place, proposals will be received to furnish the Senate with brooms, buckets, soap, etc., etc., for the year ending the first Monday of June, A. D. 1879, as per schedule of the articles, with the maximum price of each. The schedule, with the maximum prices, will be furnished by S. S. Child, Librarian of the Senate, Harrisburg, Penn., on application of any bidder. Proposals to be indorsed "Proposals for brooms, buckets, soap, etc., for the Senate of Pennsylvania." The foregoing articles are to be furnished in such quantities, more or less, as is therein specified, and at such times as may be required by the Chief Clerk. No proposals will be considered or accepted unless accompanied by bond of the person or persons offering the same in double the amount of the bid, with at least two sureties approved by the President Judge of the Court of Common Pleas of the county in which the person or persons making such proposals reside, conditioned for the faithful performance of the conditions of the contract. The proposals to be opened in the Executive Chamber at Harrisburg, at 12 o'clock M., on the 24 day of August, A. D. 1878, and the several contracts awarded to the lowest responsible bidders at a per centum under the maximum prices set forth in this advertisement and in the schedule. Bidders are invited to be present. The foregoing proposals will be received at the time of opening by THOS. B. COCHRAN, Chief Clerk of Senate of Pennsylvania. Or may be directed in the care of SULLIVAN S. CHILD, Librarian, Senate, Harrisburg, Penn.

135

COMPETITIONS. CLARKSVILLE, TENN., June 3, 1878. The undersigned having been appointed Commissioners by the County Court of Montgomery County, Tennessee, to superintend the erection of a Court-House, hereby invite architects desiring to offer plans for the same to do so on or before the 3d day of August, 1878. Architects submitting plans will be governed by the following specifications: Drawings to consist of Floor Plans, Elevations, Transverse and Longitudinal Sections. A written statement explanatory of the same, together with an itemized estimate of the cost to execute, must accompany each design submitted. No appropriation has as yet been made, but a good building is desired, and plans are necessary in order to know what amount will be required. For further information apply to the Chairman of the Commissioners. CHARLES W. TYLER, Chairman, G. H. SLAUGHTER, W. S. MALLORY, G. ORGAIN, CHAS. G. SMITH, Commissioners.

135

A DRAUGHTSMAN (Architectural) of Designs, Detail, Iron-Work Construction, etc., wants a situation. Address, THOS. DANT, Post-Office, New York.

WANTED. A situation by an architectural draughtsman, 18 years of age. Salary not so much an object as a permanent situation. Address A. B. C., 1267 Broadway, New York, Room 25.

WANTED. QUARRY FOREMAN. A competent and reliable man to take charge of our White Limestone Quarries, situated on Louisville and Nashville Railroad. Apply at once to BEEKNAP & DUMENIL, Corner 10th and Chestnut Streets, Louisville, Ky

135

135

135

135

135

135

135

135

135

135

135

135

135

135

MARSHALL'S AMERICAN



LEADED SHEETS.

Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Represented in New England States by C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

BUHRER'S INFALLIBLE SEWER GAS TRAP.



The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (B) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.

S. BUHRER, Inventor and Manufacturer, Cleveland, Ohio.

WHOLESALE AGENTS.

- W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O. L. WOLFF M'FG Co., 109 & 111 West Lake St., Chicago, Ill. HAMBLEN & MATHEWS, 82 & 84 North St., Boston, Mass. C. A. BLESSING, 44 North Fifth St., Philadelphia, Pa. THE J. L. MOTT IRON WORKS, 88 & 90 Beekman St., N. Y.

Please send for Circular.

GALVANIZED IRON CORNICES.

For the very best in all particulars, send to the undersigned. Our advantages are: Steam Power Machinery, the largest business and the most extensive experience, the ablest corps of workmen ever gotten together, and all known improvements in manipulation and construction.

OVER FOUR THOUSAND CONTRACTS satisfactorily executed attest our success. Specimens of our work may be seen in every State in the Union.

Architects will find it to the interest of their clients to obtain our estimates.

Fire-Proof Construction, and Pressed Zinc Ornamentation, are specialties.

Tracings of designs are solicited; but within reasonable limits (on large jobs) visits will be made. Correspondence promptly answered.

The Kittredge Cornice and Ornament Co., Salem, Ohio.

MENEELY & KIMBERLY, Bell Founders, Troy, N. Y.,

Manufacture a superior quality of BELLS. Special attention given to CHURCH, SCHOOL, and COURT HOUSE BELLS. Illustrated Catalogue sent free.



NATIONAL TUBE WORKS CO.

PATENT Indestructible Enamelled Wrought Iron

LAP-WELDED PIPE,

From 1/4 inch to 15 inches diameter.

Now extensively used for

Water, Gas, Sewerage, and Mining.

It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making joints, supplied to Pumps, Steam and Gas Pipers, etc. Specimens can be seen and obtained at offices of

National Tube Works Co.,

8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 115 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.



D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free

HENRY McSHANE & CO.,

Baltimore, Md.

The Useful

is issued monthly—consists of Perspectives of Interiors, Ornaments of Buildings, Fresco Painting, Furniture, etc., and is accompanied with full-size working-drawings—for direct use—Price to Subscriber One dollar per number.

Office 28 Pemberton Square,

Boston, Mass.

TO ARCHITECTS.

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the

Seagliola and Marezzo Marble,

Which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall and Altar Work.

JAS. T. ALLEN & CO.,

25 North 17th Street, Philadelphia.

Advertisement for THE HELIOTYPE PRINTING COMPANY, featuring a central illustration of a person operating a heliotype machine. Text includes 'LUX-FECIT', '220 DEVONSHIRE ST. BOSTON', and 'COR FRANKLIN ST'. It lists services like 'HELIOGRAPHY PHOTOGRAPHS in Printers Ink', 'HELIOGRAPHY PHOTOGRAPHS printed by Steam', 'HELIOGRAPHY CUTS to print with Type', and 'HELIOGRAPHY FACSIMILE LETTERS, SHOW CARDS, &c.'.

THE "AIR SPACE"

STEAM and PIPE

BOILER COVERINGS

Save 10 to 20 per cent in fuel.

THE CHALMERS-SPENCE COMPANY.

See Am. Architect and Building News, Dec. 18, 1877.

140 Congress Street, Boston, 5 Foot St., E. H. New York.

CLASSIFIED ADVERTISEMENTS.

ARCHITECTS.

- Frank Hill Smith, Boston. W. W. Goodrich, Kingston, N. Y. Charles E. Halsey, St. Louis. Walter Dickson, Albany, N. Y. Richard M. Hunt, New York. P. B. Wight, Chicago. ARCHITECTURAL BOOKS, ETC. A. J. Hicknell & Co., New York. The Useful, Boston. Houghton, Osgood & Co., Boston. American Plumber Publishing Co., New York. Zottely, St. Petersburg. ARCHITECTURAL IRON WORK. Younglove & Co., Cleveland, O. M. Clements, Cincinnati. Sneed & Co., Louisville, Ky. ASPHALT. Limmer Rock Asphalt Co., New York. ASPHALT AND OTHER (FKLT) ROOFING. Warren Chemical and Manufacturing Co., Boston and New York. BELL FOUNDRIES. Meneely & Kimberly, Troy, N. Y. Henry McShane & Co., Baltimore. THE CHALMERS-SPENCE CO. BRICK. (ORNAMENTAL) Peerless Brick Co., Phil. (FINE) Waldo Brothers, Boston. Ohio Valley Press Brick Co., Lehighville. (PRESSED) Fletcher & Thomas. A. Hall & Sons. BRONZE DECORATIONS. National Fine Art Foundry, New York. CARPENTERS. J. H. Burt & Co., Boston. CEMENT. Johnson & Wilson, New York. CHURCH FURNITURE. J. & R. Lamb, New York. CLOCKS FOR PUBLIC BUILDINGS. Seth Thomas Clock Co. E. Howard & Co., Boston. G. M. Stevens & Co., Boston. CONDUCTORS (IRON). Austin, Oblyke & Co., Philadelphia. CHROMATED WOOD. Wyllys H. Warner, New York and Syracuse. DECORATORS. Edmund & Quartley, Baltimore. Collamore & Young, Baltimore.

- Philip A. Butler, Boston. L. Haberstroh & Son, Boston. W. J. McPherson, Boston. Pierce & Loring, Boston. Wm. H. Jackson & Co., New York. Donald MacDonald, Boston. Society of Decorative Art, New York. John Lafarge, New York. DESIGNING AND WOOD ENGRAVING. D. W. Dana, Boston. DRAIN PIPE. D. W. Lewis, Boston. Portland Stone Ware Co., Boston. Waldo Brothers, Boston. DUMPS AND WATERS. Isaac Richards, Philadelphia. ELECTRIC BELLS, ANNUNCIATORS, ETC. S. W. Fuller, Boston. ELEVATORS, STEAM ENGINES, ETC. Whittier Machine Co., Boston. Tutts' Elevator Works, Boston. Cooke & Bequa. Otis Brothers & Co. ENGINEER (SANITARY). Geo. E. Waring, Jr., Newport, R. I. E. S. Philbrick, Boston. FIRE-PROOF BUILDINGS. Fire-Proof Building Co., New York. FRESTONES. Dovesletter Union Frestone Co., New York. GALVANIZED IRON CORNICES. The Kittredge Cornice and Ornament Co., Salem, O. GAS FITTINGS. R. Hollings & Co., Boston. Mitchell, Vance & Co., New York. GAS MACHINES. Denny Bros. & Co., New York. Springfield Gas Machine, Springfield, Mass. Walworth Manufacturing Co., Boston. GEMSTONES. The New England Granite Works. The Mitchell Granite Works, Quincy. GRATES, ETC. W. H. Jackson & Co., New York. C. S. Rankin & Co., Cincinnati. HARDWARE. Burdick & Williams, Boston. HEATING APPARATUS. Crane, Reed & Co., Cincinnati. Gold's Heater Manufacturing Co., New York. G. M. Davis & Co. Gillis & Geoghegan, New York. Walworth Manufacturing Co. Wyllys H. Warner, New York and Syracuse. B. C. Bibb & Son, Baltimore. HELIOTYPES. The Heliotype Printing Co., Boston.

- HOISTING MACHINES. H. J. Reedy, Cincinnati. INTERIOR FINISHING WOOD. Palmer, Parker & Co., Boston. IRON WORK FOR BUILDINGS. Etina Iron Co. George Dwight, Jr. & Co. Bartlett, Robbins & Co., Baltimore, Md. Poulson & Eger, Brooklyn, N. Y. Musgrave & Co., Belfast, Ireland. IRON WINDOW SASHES. D. M. Meeker & Son, Newark, N. J. LEADED SHEETS. Marshall Bros. & Co. LOCKS AND BUZZER KEYS. Hopkins & Dickinson Manufacturing Co., New York. Yale Lock Manufacturing Co., Stamford, Ct. MANTLES. Caldwell Manufacturing Co., Boston. Stewart's, Boston. C. S. Rankin & Co., Cincinnati. Joseph S. Miller, Philadelphia. MARBLE. Rutland Marble Co. MARBLE WORKERS. S. Kisher & Co., New York. A. L. Fauchère & Co. Fisher & Bird. Hugh Sisson & Son, Baltimore. MARGUERY FLOORING (PATENT). C. Hutcher, Boston. PAINT. Ashbel Wheeler, Boston. C. M. Wheeler, and J. M. Root, Toledo, O. PAPER HANGINGS. H. B. Jones & Co., Boston. PAPER MACHE DECORATIONS. Dolivet, Cutler & Co. PATENT MISERAL WOOL. A. D. Elbers, New York. PATENT TRASSON LIFTER. J. F. Wolleusk. PLASTER. National Tube Works Co. PLUMBERS. John Mack, Boston. PLUMBERS. Hawthorne & Tucker, Boston. PLUMBERS' SUPPLIES. Jennings Sanitary Depot, New York. ROLLING VENETIAN BLINDS. Wilson & James, New York. ROOFS. Phoenixville Bridge Works. John Farquhar's Sons. A. Knisely & Co., Chicago. ROOFING FELT. N. E. Felt Roofing Co., Boston.

- Asphalt and other (Felt). Warren Chemical and Man'g Co., Boston and New York. SCAGLIOLA AND MAREZZO MARBLE. James T. Allen & Co., Philadelphia. SEATING (PREPARED). Grindler & Co., New York. SEWER GAS TRAP. B. P. Bower & Co., Cleveland, O. S. Buhrer, Cleveland, O. Fred. Adler, New York. Brandels & Wicker, Brooklyn, N. Y. SEWER PIPE. Fiske & Coleman. SHIELDS (METALLIC). Iron Cast Mfg. Co., Brooklyn, N. Y. SHUTTERS (STEEL). Clark & Co., New York. Wilson & James, New York. SIKES. Bignall Manufacturing Co. Maceo Furnace Co., Boston. J. M. Carson, Louisville. SKYLIGHTS. Rickett & Bro., New York. G. Hayes, New York. E. Van Noorden, Boston. STAINED GLASS. Kelley & Holland. W. J. McPherson, Boston. Samuel West, Boston. Cook, Redding & Co., Boston. STEAM PUMP, KNOWLES PATENT. Knowles Steam Pump Works. STONE (BUILDING). Nichol & Miller. Worthington & Sons, No. Amherst, O. Wilson & Hughes Stone Co., Cleveland, O. TELEGRAPH CO. (AUTOMATIC SIGNAL). TERRA COTTA. S. E. Loring, Chicago. THEATRICAL SCENERY. Lafayette W. Seavey, New York. TILES. John Chadwick. Miller & Coates, New York. T. Aspinwall, New York. Waldo Brothers, Boston. C. A. Wellington, Boston. Sharpless & Watts, Philadelphia. VENTILATION. Eureka Ventilation Co., Boston. WELLINGTON'S PATENT WASH BOWL. L. S. Moore & Co., Boston. WINDOW LOCKS. F. J. Hoyt, New York. WOOD CARPETING. National Wood Manufacturing Co.

**ETNA IRON CO.**

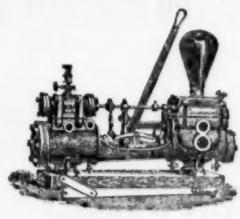
Manufacturers of every description of Wrought and Cast

**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**



Patent Steam

**PUMP**

**THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.  
Noiseless Pumps for Water Elevators.

ALSO,  
Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.  
The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE  
**KNOWLES STEAM PUMP WORKS,**  
WARREN, MASS.  
WAREHOUSES: { 11 & 16 Federal St., } Boston.  
                  { 113 & 115 Congress St., }  
                  { 92 & 94 Liberty St., } New York.  
Send for Illustrated Catalogue.

**THE**

**Plumber & Sanitary Engineer,**

A Monthly Journal devoted to

**WATER SUPPLY,**  
**DRAINAGE,**  
**HEATING & LIGHTING.**

It contains no paid puffs.  
Its technical articles are written by experts.  
It is a manual of the best practice in Plumbing.  
It illustrates the latest improvements in House Drainage.  
It is indispensable to every Architect and Builder.

Terms, \$1.50 a year. Single Copies, 15 cents.  
Address  
**AM. PLUMBER PUBLISHING CO.**  
Box 2037 P. O. 297 Pearl St., New York.

**"ZODTCHY" (BUILDER).**

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING,  
Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

**M. JEROME KÜTTNER,**  
Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.  
Each number contains from eight to sixteen pages of letterpress, gr. quarto, with cuts, and at least five autographic chromo-lithographic plates, the titles in both Russian and French.

The "Zodtchy" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.  
The "Zodtchy" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address.  
**JOURNAL "ZODTCHY,"**  
18 OFFICER STREET, ST. PETERSBURG, RUSSIA.



**Carson's Kitchen Sink**  
Is an improvement in this fixture that must meet with the approval of every house keeper as it retains every particle of grease, and prevents the waste of pipes from filling up; besides being better trapped than any other sink in use.

PAT'D JAN. 23 1877.  
Signal Mfg. Co., Medina, N. Y., or J. M. Carson, Louisville, Ky. Man'rs.

**NATIONAL**  
**FINE ART FOUNDRY,**  
218 East 25th Street, New York.  
Artistic Bronze Decoration for Buildings, Monuments, and Altars.  
Architects' Designs executed, and designs furnished for special subjects.  
Artistic Monuments in Granite and Bronze.  
**TO ARCHITECTS AND BUILDERS.**

**MAHOGANY,**  
(all thicknesses) for Doors and Interior Finish.  
**FIGURED WALNUTS,**  
(1-4 inch thick), for Doors, etc.  
**VENEERS,**  
from all varieties of Domestic and Foreign Woods.  
**PALMER, PARKER, & CO.,**  
**10 TRAVERS STREET, BOSTON.**  
**GEO. DWIGHT, JR., & CO.,**  
Builders in Iron, and Engineers in Fire-Proof Construction,  
**SPRINGFIELD, MASS.**

HAVE for many years given their exclusive attention to FIRE-PROOF CONSTRUCTION; and they now invite the correspondence of Architects to the following specialties which hereafter will constitute the leading items of their business:  
**FIRE-PROOF FLOORS.** The only floors that have stood fire in this country.  
**FIRE-PROOF ROOFS.** Refer to Equitable Life Insurance Company's Building at Boston.  
**FIRE-PROOF SHUTTERS.** Have stood many fires in all parts of the country. Over 6000 pairs put up in Boston after the fire. Saved the city of Springfield last year.  
**FIRE-PROOF LATH.** In the words of one of the best-known architects of this country, "Minimum of metal, maximum of stiffness, maximum of clench; the best lath ever made, either wood or iron." See New York Post-Office; State Department, Washington; Equitable Life Insurance Company's Buildings, and many others.  
Mr. HOTT will be pleased to wait upon Architects, when desired, to explain our methods, and to present for inspection construction plans and estimates for any specific work.

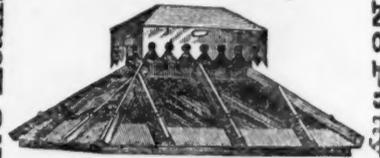
**BURDITT & WILLIAMS,**  
DEALERS IN  
**FINE HARDWARE**  
of every material. A specially complete stock of  
**PLAIN AND ORNAMENTAL BRONZE HARDWARE**  
of the latest patterns.  
A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc.  
Estimates furnished to Architects and Contractors.  
Samples sent to any address.  
**20 DICK SQUARE, BOSTON.**



**J.F. WOLLENBAK.**  
280 LA SALLE ST. CHICAGO.

**CATALOGUE OF**  
**Architectural Books**  
Mailed free to any address.  
All architectural and Scientific Books supplied at publishers' prices.  
**A. J. BICKNELL & CO.,**  
**ARCHITECTURAL BOOK PUBLISHERS,**  
27 WARREN STREET, NEW YORK.

**BICKELHOUP BROS.,**  
829 West 37th St., New York.



**PATENT METALLIC SKY-LIGHTS.**

No Leak. No Fault.

**BEEHIVE BRAND.**  
**FELT ROOFING.**  
Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**ASAHEL WHEELER'S PAINT PRESERVER**  
Is the most remarkable Wood and Paint Protector known against the hot sun's rays and storms. A trial of more than three years' constant exposure has demonstrated this fact. A perfect glossy surface yet remains without signs of perishing. **ASAHEL WHEELER, 145 Milk St., Boston**



**BALTIMORE PRESSED TILES,**  
**FOR HEARTHES, FLOORS, ETC.**  
Chimney Tops and Garden Vases,  
**DRAIN AND SEWER PIPE, FIRE-BRICK,**  
**LAND TILE,**  
**ENGLISH ROMAN, AND PORTLAND CEMENT.**  
**WALDO BROTHERS,**  
No. 94 WATER STREET, BOSTON.

**PEERLESS**  
**BRICKS.**

**THE PEERLESS BRICK COMPANY,**  
OF PHILADELPHIA,  
MANUFACTURES AND KEEPS IN STOCK  
**ARCHITECTURAL SHAPES (80 kinds).**

ALSO  
**RED** Pressed Fronts.  
Extra fine in color and quality  
**BROWN,** Colored throughout  
More beautiful than Brown Stone **DURABLE**  
**CHOCOLATE,**  
Same as above; difference in color  
**FLESH COLOR,**  
A very popular color.  
**BUFF,** very fine.  
Harmonizes beautifully with Brown or Black  
**GRAY,** A pleasing shade.  
**BLACK,** Velvety jet face.  
The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks.  
OFFICE:  
**NORTHEAST COR. FIFTH & CHESTNUT STS.**  
**THOMAS F. ADAMS,** **JOSEPH WOOD, JR.,**  
PRESIDENT. TREASURER



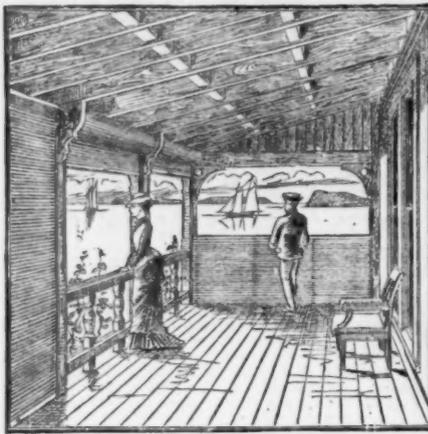
**DESIGNING AND**  
**WOOD ENGRAVING**  
30 FRAZEE ST. BOSTON

**DOLIVET, CUTTER, & CO.,**  
ARTISTIC  
**Papier Maché Decorations,**  
106 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawing strictly followed. Special designs and details furnished on application. Work shipped to any distance.



**PERFORATED METALLIC BLINDS**  
**SKYLIGHTS**  
**G. HAYES**  
**71 EIGHTH AVE.**  
**PERFORATED SHEET METALS**



**ROLLING VENETIAN BLINDS.**

WILSON'S PATENT.  
These blinds can be fitted to any kind of Window or Piazza. They require no winding machinery or balance weights, and run up and down as easily as an ordinary spring shade. For Bay Windows they are found invaluable.

They are simple, durable, and handsomely finished. They were exhibited at Philadelphia in competition with the Rolling Venetian Shutters of English manufacture, and received the only award of Medal and Diploma.

Price reduced to 31 cents per foot super, in hard wood. We also manufacture Wilson's patent Rolling

**STEEL SHUTTERS,** the best and cheapest fire and burglar-proof shutters in the market.

**WILSON & JAMES,**  
68 Bookman St.,  
NEW YORK.

**VALUABLE ART PUBLICATIONS.**

- ALLONGE'S** (Auguste) Charecoal Drawing. With an Introduction by C. C. PERKINS, and a Helotype Frontispiece. Small 4to \$1.00.
- BAKER'S** (W. S.) Origin and Antiquity of Engraving, with 23 Helotype Illustrations from Dürer, Van Dyck, Raphael, Guido, etc. 8vo. \$5.00.
- HUNT'S** (William M.) Talks on Art. 8vo. Paper. \$1.
- CLEMENT'S** (Clara Erskine) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a complete Index. Cr. 8vo. Cloth, red edges, \$3.25.
- Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.
- MURRAY'S** (Mrs. Elizabeth) The Modern System of Painting in Water-Colors from the living model. 12mo, paper, 50 cents.

**HOUGHTON, OSGOOD AND COMPANY, Boston.**

**A NOVELTY.**

**THE YALE PATENT ANTI-FRICTION ROLLER STRIKE.**

Applicable for use with all Mortise Locks, old and new.

- IT ENABLES THE DOOR TO BE SHUT WITHOUT SLAMMING.
- IT PREVENTS ALL JAR AND NOISE.
- IT SAVES WEAR OF THE LOCK AND DOOR.
- IT CAN BE EASILY APPLIED.
- ITS COST IS BUT TRIFLING.

Architects can obtain a sample strike free by addressing

**YALE LOCK MANUFACTURING CO., STAMFORD, CONN.**  
New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,

**SPECIALTIES** IN **PLUMBING GOODS.** 94 BEEKMAN STREET, NEW YORK.



Having for their especial object **Cleanliness, Durability,** And the exclusion of Sewer Gas.

**JENNINGS' NEW CLOSET,** WITH **New Valve**

With non-corrosive Valve Seating and Solid Plunger.



**PRIZE MEDALLISTS.**  
1862; 1865; 1867; 1872; 1873; AND ONLY AWARD and MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**  
ORIGINAL INVENTORS AND SOLE PATENTEES OF  
**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters  
OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Tilden's new Buildings, &c., &c., and are honored by the leading architects of the world.

OFFICE AND MANUFACTORY:  
**162 & 164 West 27th Street, New York.**

**HOPKINS & DICKINSON MANUF'G CO.**

76 READE STREET, NEW YORK,  
WORKS, DARLINGTON, N. J.

*Lock and Hardware Manufacturers,*  
DESIGNERS, FOUNDERS, AND WORKERS

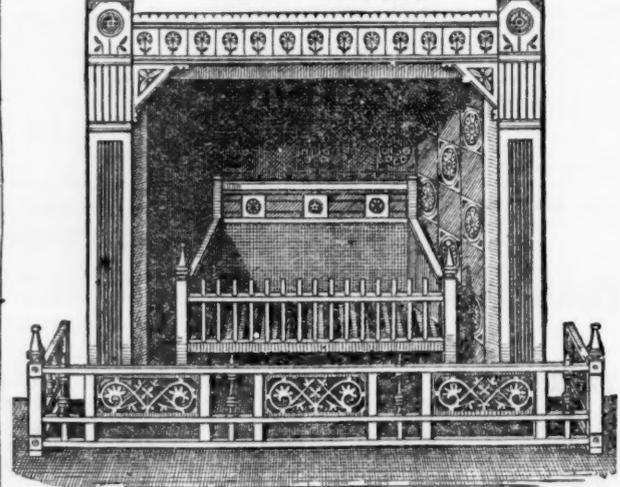
**IN BRONZE AND BRASS.**

Architects' Designs faithfully executed.  
Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT).

Union Sq., 2d door from Broadway, (17th St. side),  
NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tin.  
HAVE NO OTHER WAREHOUSES.

**BOWER'S PATENT SEWER-GAS TRAP.**



Patented in U. S. Apr. 24 & Aug. 14, 1877.  
**The most PERFECT BARRIER** against SEWER GAS that has yet been invented.  
The only trap that has been FULLY INDORSED by the LEADING SANITARIANS throughout the WORLD.  
**IT IS A POSITIVE SEAL**  
Against sewer-gas under pressure, absorbed gases, and back water.  
Seal is not broken by siphonage or evaporation.  
**Self-Scouring, not injured by freezing.**  
It has many other good points that  
**No other Trap possesses.**

It can be readily attached to old work, in a very short time, and at very little expense.  
**SIMPLE, CHEAP, DURABLE, AND EFFECTIVE.**  
A sample Trap FREE to Architects on application. Send for full descriptive Circulars to the Manufacturers,  
**B. P. BOWER & CO.**  
104 & 106 St. Clair St., Cleveland, O.

**STEWART'S SLATE, MARBLE AND HARD WOOD MANTELS.**  
MIRRORS, ART-TILES, HEARTH'S & MANTELS.  
Masonic Temple—23<sup>d</sup> St & 6<sup>th</sup> Ave N.Y.



Sewer Pipe, Fire Brick, Terra Cotta, Chimney Tops, Garden Vases, Art Pottery for Decoration.  
The strongest and smoothest pipe in the country. Send for tests and Catalogue. Prices as low as any other manufacturer.  
Portland Stone Ware Co.  
Geo. C. DUNN, Gen'l Ag't,  
60 Kilby Street,  
400 Federal Street, Boston.

**LIMMER ROCK ASPHALT CO.**

111 Broadway, Room 105, New York.  
Rock Asphalt is a natural product, and the ideal material for Paving Roadways, Streets, Yards, and Stables, and for Flooring Cellars in Breweries and other establishments.

**Automatic Signal Telegraph Co.,**  
CITY OF BOSTON,

OFFICE, 178 DEVONSHIRE STREET, ROOM 20,  
Is prepared to make contracts for the protection of buildings against fire.  
DIRECTORS:  
CHARLES E. GUILD, President. WILLIAM ENDICOTT, JUN  
JOHN D. W. JOY. WILLIAM B. WATKINS.  
PATRICK T. JACKSON, Treasurer.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

Theatrical Fresco only. Prices moderate. Refer ences first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.  
LAFAYETTE W. SEAVEY,  
Established 1865. NO. 8 LAFAYETTE PLACE, NEW YORK

**THE WELLINGTON PATENT OVERFLOW BASIN**

No sewer gas. No overflow. No leakage around the top of the basin. This thoroughly reliable basin is rapidly taking the place of the ordinary one.  
It gives perfect satisfaction in every instance.  
Manufactured by  
**L. S. MOORE & CO.,**  
40 Oliver St., Boston.  
Send for Circulars.



**SAYLOR'S PORTLAND CEMENT.**

Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R., U. S. Government Works (Forts and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally.  
For Sale by all dealers in Building Materials. **Johnson & Wilson, Gen'l Agts.,**  
Send for circular. 93 Liberty Street, New York.

89890

# AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 186.]

SATURDAY, AUGUST 3, 1878.

[PRICE 15 CENTS

### BUILDERS' SUPPLIES.

**OTIS BROTHERS & CO.**  
SAFETY STEAM AND HYDRAULIC ELEVATORS.  
A specialty for a quarter of a century.  
BUILDERS OF THE HALE HYDRAULIC ELEVATOR.  
No. 348 Broadway, New York.

**WALWORTH MANUFACTURING CO.,**  
69 KILBY ST., BOSTON.  
PUBLIC BUILDINGS, PRIVATE RESIDENCES, GREENHOUSES, ETC.,  
Warmed and ventilated by STEAM OR HOT WATER.  
Correspondence solicited. Plans and estimates furnished on application.

**"HOTCHKISS" TOWER CLOCKS,**  
MANUFACTURED BY  
SETH THOMAS CLOCK CO., THOMASTON, CONN.  
Prices \$100 to \$6,000.  
WARRANTED ACCURATE, STRONG, DURABLE.  
OFFICE, 581 BROADWAY, NEW YORK.  
Send for Illustrated Catalogue.

**"MINTON'S ART AND ENAMELLED TILES."**  
(China Works, Stoke-Upon Trent.) Also, The Campbell Brick and Tile Co.'s  
ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS, ETC.  
For Churches, Banks, Halls, Vestibules, and Hearths; Outside Decorations, Flower Boxes, Etc.  
THOS. ASPLIN WALL & SON,  
604 Broadway, NEW YORK.  
The only representatives in the United States for the above firms.

**ASPHALT (FELT) ROOFING.**  
WARREN'S NEW PATENT FELT AND GRAVEL ROOFING,  
Substitutes NATIVE ASPHALT for Coal-Tar materials for these roofs.  
The very best and most durable material for flat roofs.  
Also, Native Asphalt and Asphaltic Cement for Concrete Walks and Pavements.  
Roofers and pavers supplied with the above, and with Warren's original Coal Tar Roofing and Paving Materials.  
Send for circulars and samples.  
WARREN CHEMICAL AND MANUF'G CO.,  
28 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**THE MITCHELL GRANITE WORKS,**  
QUINCY, MASS.,  
Has abundant facilities for furnishing the very best work, and all the most celebrated Granites of the New England States, for  
MONUMENTAL, CEMETERY AND BUILDING PURPOSES,  
WORK PROMPTLY DONE, AND AT REASONABLE RATES.  
Polishing a specialty. Orders solicited.  
Address G. H. MITCHELL, Agent.

**TILES FROM ALL PARTS OF THE WORLD,**  
FOR BANKS, PUBLIC BUILDINGS, AND PRIVATE HOUSES.  
References given to Tile Work throughout the United States and British Provinces  
AGENT FOR THE AMERICAN ROOFING TILE  
Contracts Solicited  
C. A. WELLINGTON, HOUSEHOLD ART ROOMS,  
No. 171 TREMONT STREET, BOSTON.

**E. HOWARD & CO.**  
MANUFACTURERS OF CLOCKS AND WATCHES  
CLOCKS FOR PUBLIC BUILDINGS  
114 Tremont Street, Boston, and 692 Broadway, New York

**GOLD'S WROUGHT IRON HEATERS.**  
THE "HEALTH" AND "TUBULAR"  
Manufactured by the  
GOLD'S HEATER MANUFACTURING CO.  
114 LEONARD ST., NEW YORK.  
Send for Pamphlet  
W. E. GOLD, Pres't WYLLIS H. WARNER, Treas.

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING CO. OF NEW YORK.** Hollow Blocks of any pattern, uniting strength, and resistance to fire and water. The Hydraulic Lime of Teil (France), one of the strongest cements known, is largely used in this manufacture. The blocks do not conduct heat, cold, or sound, and weigh sixty per cent less than brick.  
Fire-proof partitions, floor arches between iron beams, ceilings under wooden or iron beams, in the following buildings:—  
Western Union Telegraph, Orient & Queens Insurance, Del. and Hudson Canal Co., Museum of Natural History, Equitable, Staats-Zeitung, Hudson R. R. Freight Depot, Winburgh Savings Bank, Cluny & Young's Hotels, Boston Windsor Westm'n'r Hotel, New York Hospital, Drexel, Syracuse Savings Bank, Columbia College, Tribune, West Point Military Hospital, Baltimore Safe Deposit Co., Lenox Library, Bennett, Peabody Museum, New Westmoreland Flats.  
Haven, Peabody Institute, Baltimore.  
Insurance on Wooden Mansards reduced ninety cents per \$100. Sidewalks laid at Lenox Library, Tribune, etc. Hollow Bricks of all kinds. Our Fire-Proof work is the only one approved by the New York Board of Fire Underwriters, and the Superintendent of Buildings, after severe public tests.  
LEONARD P. BECKWITH, President, Office, Room 54 Coal and Iron Exchange, New York.

**MINTON'S TILES.**  
PLAIN AND ENCAUSTIC FOR PUBLIC BUILDINGS AND DWELLINGS,  
As laid by us in  
THE CAPITOL AT WASHINGTON,  
And in numerous Churches, Banks, and Dwellings in every part of the Country,  
Glazed and Enamelled Tiles for Mantels, Hearths, Wainscoting, &c., and for Exterior Decoration.  
MILLER & COATES,  
279 PEARL STREET NEW YORK.

**BARTLETT, ROBBINS & CO.**  
HEATING AND VENTILATING OF PUBLIC AND PRIVATE BUILDINGS  
A SPECIALTY  
PLANS AND SPECIFICATIONS FURNISHED.  
FOUNDERS, AND MANUFACTURERS OF GAS WORKS, ETC., ETC.  
24 LIGHT STREET, BALTIMORE.

**ELEVATORS.—COOKE & BEGGS.**  
No. 6 COURTLAND ST., NEW YORK.  
Works at Paterson, N.J.  
PATENT SAFETY STEAM ELEVATORS  
for Public and Bank Buildings, Hotels, Private Dwellings, etc.  
SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP GUARANTEED.  
Send for Circular.

**THE NEW ENGLAND GRANITE WORKS,**  
HARTFORD, CONN., and 1321 BROADWAY, N.Y.  
Quarries at Westbury, R.I.  
MONUMENTAL AND BUILDING WORK  
of every description in all the varieties of AMERICAN AND FOREIGN GRANITE.  
UNEQUALLED FACILITIES OFFERED TO THE TRADE.  
J. G. BATTERSON, Pres't. H. B. BATTERSON, Sec'y.  
DIRECTORS:  
J. G. BATTERSON, C. B. CANNFIELD, H. A. BATTERSON,  
G. T. BATTERSON,  
CARL CONRADS, Sculptor.

**WHITTIER MACHINE CO.**  
Manufacturers of Steam and Hydraulic ELEVATORS,  
STEAM ENGINES, BOILERS, AND MACHINERY.  
No. 1175 Tremont Street, Boston.  
Office in the New England Mutual Life Insurance Co.'s Building, Post Office Square, and 120 Broadway, New York  
CHARLES WHITTIER, Pres't. A. C. WHITTIER, Treas.

**ART PAINTED TILES**  
FOR MANTELS, CABINETS, ETC.  
SHARPLESS & WATTS,  
725 MARKET STREET, PHILADELPHIA.  
Agents for  
MINTON'S TILES,  
AND TERRELLATED PAVEMENTS.

**HAWTHORNE & TUCKER,**  
PLUMBERS,  
16 PROVINCE STREET, BOSTON  
Estimates for Plumbing made, and work done in any part of the United States or Provinces.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
OHIO BUILDING STONE.  
GRIND AND BUTTER STONE.  
From our FLORENCE and AMHERST QUARRIES.  
Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS  
111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
Designers and Manufacturers of GAS FIXTURES,  
ORNAMENTAL METAL WORK, CLOCKS AND BRONZE ARCHITECTS' ORDERS SOLICITED.  
Special designs submitted on application.  
WAREHOUSES, 536 AND 538 BROADWAY, NEW YORK.  
MANUFACTORY, 24th AND 25th Sts., AND 10th AVENUE, N. Y.

**FISHER & BIRD,**  
Workers in all kinds of Foreign and Domestic MARBLES,  
97 to 108 East Houston St., NEW YORK.  
Established 1830.

Among our notable decorations are: The Illinois New State House; Palace Hotel, San Francisco; Baldwin's Hotel, San Francisco; Insurance Building, 10th and Chestnut Streets, Philadelphia; Mutual Life Insurance Building, Boston; Orient Mutual Insurance Building, New York; Union College, Schenectady; and numerous Churches, Private Residences, etc., etc., throughout the country. We solicit the opportunity to estimate upon all classes of work, viz., Tiling, Wainscoting, Staircases, Mantels, etc. Cemetery work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
Are ready to estimate on contracts of any size for furnishing their celebrated Amherst, Ohio, BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS OR CUT AND SET.  
Also,  
AMHERST AND INDEPENDENCE GRINDSTONES,  
AND OHIO MINERAL AND STONE PAINTS  
Fire-Proof Stove Cement and Stove Putty ground in Oil  
OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES.** "NOLLA MOSAICS." Floor Tiles, beautiful in color and design, for DWELLINGS, CHURCHES, and Public Buildings.  
SPANISH WALL TILES. White, Glazed, Valencia, Tiles for Walls and for decorative painting.  
PRINTED FIGURED TILES of Spanish designs, for Wainscoting, Mantels, Jardinieres, etc.  
Floors of "Nolla Mosaics" can be seen at the "Rockingham," corner of Broadway and 56th Street. Imported and for sale by JOHN CHADWICK, Sole Ag't for U. S., 49 Broadway, N. Y.  
C. E. PARKER, Agent, 14 Exchange Place, Boston.

**TUFTS' ELEVATOR WORKS,**  
MANUFACTURERS OF "TUFTS' PATENT" COMBINATION ROPE ELEVATOR.  
TO BE OPERATED EITHER BY STEAM OR WATER.  
The only safe and reliable machine made for Passenger use in Public Buildings and Hotels, and for business purposes in Warehouses, Stores, &c.  
37 FOUNDRY STREET, SOUTH BOSTON  
OFFICE, 242 Broadway, New York.  
L. A. BIGELOW,  
President. Treas'r and Gen'l Manager.

**STEAM WARMING APPARATUS.**  
HIGH AND LOW PRESSURE.  
HOUSE WARMING A SPECIALTY.  
Pamphlet with more than 1,000 references sent on application.  
WYLLIS H. WARNER,  
114 LEONARD STREET, NEW YORK,  
and 33 West Railroad Street, Syracuse.

**OHIO VALLEY PRESS BRICK CO.**  
Challenge the world for fine stock Brick; also manufacturers of all kinds of Bricks, octagon and square. Office 63 3d St., Yard Preston and Knapp Sts. LOUISVILLE, KY.

**GAS FIXTURES**  
OF EVERY DESCRIPTION.  
SPECIAL RATES TO BUILDERS.  
R. HOLLINGS & CO., 67 Washington St., BOSTON.

**BUILDERS' SUPPLIES.**

**HUGH SISSON & SON,**  
Importers, Dealers, and Manufacturers of  
**MARBLE.**  
INTERIOR MARBLE WORK AND MONUMENTAL  
WORK A SPECIALTY.  
Salesrooms, No. 140 W. Baltimore St.; Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,  
SPEAKING TUBES,  
AND BURGLAR ALARMS,**  
For Public and Private Buildings.  
THE BEST IN USE.  
**S. W. FULLER,**  
63 Devonshire Street, Boston.

**TOWER CLOCKS.**  
FOR CHURCHES,  
PUBLIC AND PRIVATE BUILDINGS,  
**G. M. STEVENS & CO., MANUFACTURERS,**  
90 SUDBURY ST., BOSTON, MASS.

**JOHN MACK, Plain and Ornamental Plasterer.**  
41 Cambridge Street, Boston.

**J. H. BURT & CO., Carpenters and Builders,**  
Blue Hill Avenue, Mattapan (Ward 24), Boston.

**THE EUREKA VENTILATION CO.**  
OFFICE AND MANUFACTORY,  
74 CHARLESTOWN STREET,  
BOSTON, MASS.

**PRESSED BRICK,  
STOCK AND COMMON**  
MANUFACTURED BY  
**FLETCHER & THOMAS,**  
Indianapolis, Ind  
All brick warranted. Send for price list and samples.

**STEAM HEATING**  
BY  
**GILLIS & GEOGHEGAN,**  
Nos. 116 & 118 Wooster St., New York.  
See our work at the Cathedral, 50th St. and 5th Av.;  
Drexel Building, cor Wall and Broad; Bennett Building,  
Fulton and Nassau, etc.  
Architects and owners promptly furnished with specifications and estimates.

**BUILDING MARBLE.**  
Branch yard of the RUTLAND MARBLE CO., 198 Causeway  
Street, Boston. JOHN D. ALLAN, Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Rutland  
and Continental Marble, furnished at low prices.

**ARCHITECTS.**

**P. B. WIGHT,**  
CONSULTING ARCHITECT,  
73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.  
Consultations on matters pertaining to Fire-Proof Construction,  
Foundations, Drainage, Sanitary Work, Ventilation,  
Machinery, Valuations, Interior Decorations, and  
Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**  
ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E., ARCHITECT  
AND SANITARY ENGINEER,**  
KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes  
of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,  
ARCHITECT,**  
Room 17, Life Insurance Building,  
ST. LOUIS, MO.  
Special attention to Churches, Schools, and other  
public buildings.

**WALTER DICKSON, ARCHITECT, PERRY BUILDING,  
Albany, N. Y.**

**GEO. E. WARING, JR.,  
CONSULTING ENGINEER,  
FOR SANITARY AND AGRICULTURAL WORKS,  
NEWPORT, R.I.**

**SANITARY ENGINEERING.**  
**EDWARD S. PHILBRICK, C. E.,**  
12 WEST ST., BOSTON, MASS.  
Offers advice and superintendence in  
CONSTRUCTION OF WORKS,  
IN PLUMBING, DRAINAGE, AND VENTILATION,  
And has no interest in any patent right.

**FRANK HILL SMITH,  
111 W. TREMONT STREET,  
BOSTON . . . . . MASS.**

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
887 HARRISON AVENUE . . . . . BOSTON,  
**SHEET METAL CORNICES, HAYES'S PATENT  
VENTILATING SKY-LIGHTS,  
WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.**

**MANTELS AND GRATES.**  
**RANKIN'S PATENT** makes the Cleanest, Cheapest,  
and Hottest Fire. Avoid infringements, and send for  
Circular to  
**C. S. RANKIN & CO.,  
ARCHITECTURAL IRON WORKS,**  
Manufacturers of all kinds of Iron Work for  
BUILDINGS, JAILS, ETC.  
187 W. PEARL ST., CINCINNATI, O.

**EXCELSIOR  
ROOF PAINT.**  
This paint has been thoroughly tested throughout the  
Eastern States, and has been found to be a perfect tin or  
metallic preserver. We warrant it neither to crack nor  
blister by **HEAT or COLD,** and to last  
**IN ANY CLIMATE TEN YEARS.**  
Those desiring to use this valuable preparation upon  
their buildings, can secure the same by addressing  
**C. M. WHEELER, J. M. ROOT,  
Toledo, Ohio.**

**ARCHITECTURAL IRON AND JAIL WORKS.**  
**M. CLEMENTS,**  
MANUFACTURER OF  
Iron Railing, Bank Vaults, and Jail Cells,  
Iron Stairs, Fire-proof Buildings, Wrought Iron Columns  
and Girders; Iron Arches, Plain and Corrugated;  
Fire-proof Shutters, Doors, etc.  
BAYMILLER STREET, near Sixth and C. H. & D. E. R.  
Depot, CINCINNATI, OHIO.

**DECORATORS.**

**W. J. MCPHERSON,**  
(Established A. D. 1845.)  
**MURAL PAINTER,  
DESIGNER,  
Ecclesiastical Decorator,  
AND  
ART STAINED GLASS MANUFACTURER,**  
440 TREMONT STREET,  
BOSTON, MASS.  
(Established 1848.)  
**L. HABERSTROH & SON,  
PRESSED PAINTERS,  
and INTERIOR DECORATORS,  
No. 12 SCHOOL STREET, BOSTON.**

**PEIRCE & LORING.**  
ARTISTIC DECORATION AND FURNITURE  
No. 5 PARK STREET, BOSTON.  
H. H. D. PRING. R. F. LORING.

**PHILIP A. BUTLER,  
DECORATOR AND DESIGNER,  
No. 17 FRENCHTON SQUARE,  
BOSTON.**

**COOK, REDDING & CO.**  
149 CONGRESS ST., BOSTON,  
Ornamental, Stained, and Cut Glass,  
FOR  
Churches, Public Buildings, and  
Private Residences.

**HENRY B. JONES & CO.**  
IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS.  
612 WASHINGTON STREET, BOSTON.

**STAINED GLASS.**  
Thirty years' experience in Stained Glass enables the  
subscriber to produce Modern and Medieval styles of work  
equal to any European examples, for Churches, Private  
Residences, Halls, etc.  
The value of the work is attained by a careful selection  
of colors in Cathedral and French Glass of his own importation.  
Designs in accord with architects' plans furnished at  
short notice. Reference of work at office  
**SAMUEL WEST, 115 Eliot St., Boston.**

**DECORATORS.**

**JOHN LAFARGE,  
MURAL DECORATION,  
51 W. Tenth St., New York, and Newport, R. I.**

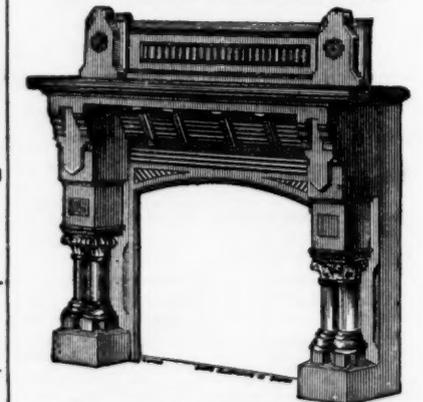
**SOCIETY OF DECORATIVE ART.  
4 East 20th Street,  
NEW YORK.**  
Architects' designs for panels, tiles and plaques for insertion  
in Cabinet Work, and other decorative uses, and for  
Art Needlework applied to curtains, hangings, portieres,  
screens, table-covers, etc., carefully executed. Original  
designs for any of the above, subject to approval, will be  
gladly received, and paid for by the Society when used.  
Orders are earnestly solicited.  
The Society has arranged with Mr. RUSSELL STURGIS,  
Architect, for the Exhibition and Sale of his well-known  
Wall Papers. Some of these are faithful reproductions of  
Japanese decorative papers; some are taken from Oriental  
and other stuffs; some are of original design. New pat-  
terns will be added from time to time.

**Fresco Decoration.**  
**EMMART & QUARTLEY,  
Designers, Decorators, and Painters,  
32 PARK AVENUE, BALTIMORE, MD.**  
Designs for Halls, Churches, Theatres, and Private Mansions made  
and executed in harmony with the plans of Architects.

**SLATE MANTELS**  
Of the latest and most beautiful designs, and all other Slate  
work on hand or made to order. No. 1210 Ridge Avenue.  
JOSEPH S. MILLER, successor to Wilson & Miller, Philadel-  
phia, Pa. Send for Illustrated Price-List

**Donald MacDonald,  
GLASS STAINER AND DECORATOR  
No. 6 Hayward Place,  
BOSTON.**

**MANTELS.**



IN WALNUT, OAK, ASH, OR OTHER WOODS.  
On hand, made to order, shipped to and set up  
IN ANY PART OF THE COUNTRY.  
**CALDWELL MANUFACTURING CO.,**

17 HARVARD PLACE,  
OPPOSITE OLD SOUTH CHURCH,  
BOSTON, MASS.  
Send for Circular.



**INLAID WOOD FLOORS.  
ORNAMENTAL WOOD BORDERS.**  
Designs and Estimates free.  
**National Wood Manufg Co.,**  
950 Broadway, near 23d St., New York.

LABOR MARKET.

[REPORTED EXPRESSLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa. (Can.)	Philadelphia.	San Francisco	St. Louis.
1. BRICKLAYER.....	1.75 @ 2.75	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.50	1.50 @ 2.00	2.00 @ 2.50	.....	2.25 @ 2.50
2. Brick Mason (Fronts).....	3.00 @ 4.00	2.00 @ 3.00	1.25 @ 1.75	1.50 @ 2.50	3.50 @ 4.50	3.00	1.75 @ 2.25	2.50 @ 3.00	.....	3.00
3. CARPENTER.....	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.25 @ 2.50	1.25 @ 2.00	1.75 @ 2.25	.....	1.50 @ 2.00
4. Cabinet Maker.....	2.50 @ 3.25	.....	.....	.....	.....	.....	1.50 @ 2.00	.....	.....	.....
5. Finisher.....	2.00 @ 2.50	.....	1.75 @ 2.00	.....	1.50 @ 2.00	.....	1.25 @ 1.75	.....	.....	1.50 @ 2.00
6. FOUNDRYMAN.....	.....	.....	1.25 @ 1.50	.....	1.50 @ 2.50	.....	1.00 @ 1.50	.....	.....	2.25 @ 2.50
7. Blacksmith.....	1.50 @ 3.00	1.50 @ 2.75	.....	.....	1.50 @ 2.50	.....	1.25 @ 2.00	.....	.....	1.50 @ 2.50
8. Whitesmith.....	.....	.....	.....	.....	1.50 @ 2.50	.....	1.25 @ 1.75	.....	.....	.....
9. Galvanized Iron Worker.....	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	2.25	1.50 @ 2.00	.....	.....	.....
10. GAS FITTER.....	2.00 @ 2.50	2.00 @ 3.00	.....	2.50 @ 3.00	1.75 @ 2.25	.....	1.75 @ 2.00	.....	.....	2.00 @ 3.00
11. LABORER.....	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.25	1.00 @ 1.25	1.25 @ 1.50	.80 @ 1.00	1.20 @ 1.50	.....	1.00 @ 2.00
12. PAINTER.....	1.50 @ 2.50	2.25 @ 3.00	2.00 @ 2.50	1.50 @ 2.25	1.75 @ 2.25	2.50	1.00 @ 1.75	2.00 @ 2.50	.....	2.00 @ 2.50
13. Glazier.....	.....	2.00 @ 2.50	.....	.....	.....	.....	1.50 @ 1.75	2.00 @ 2.50	.....	.....
14. Grainer.....	2.50 @ 3.00	3.00 @ 4.00	3.00 @ 4.00	3.50 @ 4.00	No graining.	.....	1.75 @ 2.50	.....	.....	3.50
15. Paper-Hanger.....	.75 @ 2.50	.....	.....	.....	16¢ pr. roll.	.....	1.50 @ 2.00	.....	.....	2.00 @ 3.00
16. PLASTERER.....	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	1.50 @ 2.50	1.50 @ 2.00	2.50	1.25 @ 1.75	1.75 @ 2.00	.....	2.25 @ 2.75
17. Stucco-Worker.....	2.00 @ 2.50	2.00 @ 2.50	.....	1.50 @ 2.50	2.00 @ 2.50	2.50	1.50 @ 2.25	.....	.....	2.25 @ 2.75
18. PLUMBER.....	2.25 @ 3.00	2.00 @ 3.00	.....	2.50 @ 3.50	2.00 @ 2.50	.....	1.50 @ 2.50	.....	.....	2.50 @ 3.50
19. QUARRYMAN.....	.....	3.00 @ 3.50	.....	.....	1.25 @ 1.50	.....	1.00 @ 1.75	.....	.....	1.50 @ 1.75
20. Stone Mason.....	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	1.50 @ 2.00	2.00 @ 2.50	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25	.....	2.00 @ 2.50
21. Carver.....	.....	3.00	2.50 @ 3.00	1.25 @ 1.75	.....	.....	3.50 @ 6.00	2.75 @ 3.25	.....	.....
22. Painters and Washers.....	.....	2.50 @ 3.00	.....	1.50 @ 1.75	.....	.....	1.00 @ 1.25	2.25 @ 2.50	.....	.....
23. Rubber.....	1.50 @ 2.00	.....	1.00 @ 1.25	1.25	1.00 @ 1.25	.....	.80 @ 1.00	1.50 @ 1.75	.....	.....
24. Stone-Cutter.....	2.25 @ 3.00	2.00 @ 3.00	1.50 @ 2.00	2.00 @ 2.50	2.50	.....	2.00 @ 2.50	2.25 @ 2.75	.....	.....
25. Stone-Setter.....	.....	2.50 @ 3.00	2.25 @ 2.50	2.50 @ 3.00	2.75	.....	1.50 @ 2.00	2.25 @ 2.75	.....	2.00 @ 2.50
26. ROOFER (Tin).....	2.00 @ 2.35	2.50 @ 3.00	.....	2.00 @ 2.50	.....	.....	1.50 @ 1.75	1.75 @ 2.25	.....	.....
27. Slater.....	.....	2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00	.....	.....	1.25 @ 2.00	1.75 @ 2.25	.....	.....
28. STAIR BUILDER.....	2.25 @ 3.00	2.00 @ 2.50	.....	.....	1.50 @ 2.00	.....	1.75 @ 2.25	.....	.....	1.50 @ 2.50
29. STEAM FITTER.....	.....	2.50 @ 3.50	.....	2.00 @ 2.50	2.50 @ 3.00	.....	1.50 @ 2.00	.....	.....	2.00 @ 3.00

AMERICAN ARCHITECT AND BUILDING NEWS.

PRIZES.

The attention of draughtsmen and architectural students is directed to the following announcement of a way in which valuable and useful books can be added to their professional library.

SUBSCRIPTION PRIZES.

The Publishers will send, postpaid, the following prizes to the draughtsman, student, or regular canvasser, who, complying with the conditions, shall secure subscribers for the American Architect and Building News:—

- I. For two new subscribers, a year's subscription to the American Architect and Building News..... \$6.00
- Or, "Story of a House," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00
- Or, "Annals of a Fortress," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00
- II. For four new subscribers, a bound volume of the American Architect and Building News, vol. i. or ii., price..... 9.00
- Or, "Examples of Ancient and Modern Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 8.00
- Or, "Discourses on Architecture," translated from the French of M. Viollet-le-Duc, illustrated, price..... 8.00
- III. For eight new subscribers, both bound volumes of the American Architect and Building News, price..... \$18.00
- Or, "Gothic Forms applied to Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 15.00
- Or, "Art Foliage for Sculpture and Decoration," by J. K. Collins, royal quarto, illustrated by 72 plates, price..... 15.00
- Or, "Examples of Modern Architecture, Ecclesiastical and Domestic," being designs by Messrs. Scott, Street, Liddon, and other noted architects, illustrated by 64 quarto plates, price, 15.00
- IV. For fifteen new subscribers, the "Decoration and Ornamentation of the Nineteenth Century," by Lignard, illustrated by 100 folio plates, price..... 27.00

In lieu of these books the canvasser may obtain books of equal value selected from our trade list, or may obtain as equivalent the value of the prize in Heliotype engravings, selected from our collection, which numbers over three hundred.

The conditions to be observed are:—

1. The subscribers must in all cases be new subscribers.
2. The subscription must be paid in advance directly to the Publishers by check or money order; but in no case to the canvasser.
3. If canvassers adopt the method of sending to us one subscriber at a time, they must state at such time for which one of the before-mentioned prizes they are canvassing.
4. The prizes will not be delivered until all subscribers have paid in full

N.B.—These prizes are not cumulative; i. e., a canvasser who sends us fifteen new subscribers cannot claim successively the prizes I, II, III, and IV; or in other words, to obtain all four prizes a canvasser must send us twenty-nine new subscribers.

A canvasser who has stated that he is trying to secure one of the highest prizes may in the case of failure claim such lesser prize as is warranted by the number of subscriptions actually paid.

No claims will be allowed for subscriptions secured before Jan. 1, 1878.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

GALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILING.

Contracts taken in any part of the United States.

Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO. 72 & 74 West Monroe St. Chicago, Ill.

A SACHEL GUIDE.

FOR THE VACATION TOURIST IN EUROPE. Revised Edition for 1878. With Maps. 16mo, flexible cloth, \$2.00. HOUGHTON, OSGOOD & CO.



NONESUCH Self-Locking AND Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.

Patented July 10th, 1877

**AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT.**  
 MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS.  
 Regular Sizes, 2, 3, 4, 5 & 6 Inch.  
 SPECIAL SIZES MANUFACTURED TO ORDER.  
**AUSTIN, OBDYKE & CO.**  
 SOLE MANUFACTURERS.  
 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA.  
 WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS. AND WILL BE TREATED AS SUCH.

- PRINCIPAL AGENTS.
- M. Halliday New York City.
  - Hicks & Badger Boston, Mass.
  - James Berry Buffalo, N. Y.
  - George W. Pitkin & Co. Chicago, Ill.
  - Wasson & Martin Albany, N. Y.
  - McLeod, Beardon & Co. Troy, N. Y.
  - W. H. Scott Portland, Me.
  - Kittredge Cornice Co. Salem, O.
  - J. W. Jordan Worcester, Mass.
  - B. G. Carpenter & Co. Wilkesbarre, Penn.
  - T. W. Irwin Alleghany City, Penn.
  - Sellew & Co. Cincinnati, Ohio.



**BIBB'S**  
 Celebrated Original Baltimore Fire Place Heaters  
 Mantels and Registers.  
**B. C. BIBB & SON,**  
 Baltimore, Md.  
 Best workmanship. Lowest prices guaranteed. Send for circulars.

# MOORE'S ANTI-FRICTION SLIDING DOOR SHEAVE.

The cut shows exact size of the 4-inch wheel.



The hub of the wheel revolves within a set of case-hardened iron rollers. The parts are all accurately fitted by lathe work, insuring an easy and noiseless motion, with great strength. The friction being that of rolling surfaces only, the sheave requires no oiling. It is very simple in its construction, and there is no tendency to get out of order. It is strongly made and handsomely finished, and is greatly superior to any anti-friction sheave in the market.

Parlor Door Hangers, Moore's Anti-Friction.  
Dumb Waiter Pulleys, Moore's Anti-Friction.  
Baggage Car Door Hangers, Moore's Anti-Friction.

ALSO MANUFACTURERS OF

"Climax" Barn Door Hangers.  
"Acme" Barn Door Hangers.  
Folant Barn Door Catches.

Hay Fork Pulleys, Moore's Anti-Friction.

Send for Illustrated Price Lists.

S. H. & E. Y. MOORE, 68 Lake Street, Chicago.

## VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

### Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the art-workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

### Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

**THE STORY OF A HOUSE.** Translated by GEORGE M. TOWLE. Illustrated by the author. 1 vol., 8vo, bevelled boards, red edges, \$5.00.

Has the rare merit of being thoroughly business-like, and, at the same time, not too technical. — *London Standard.*

### American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

### Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. L'ANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

### Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courier.*

### Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist, Boston.*

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

### The American Architect and Building News.

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number: 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877, bound 4to, each \$9.00.

\* \* \* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Boston.

BUILDING MATERIALS.

[Reported for the American Architect and Building News.]

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for various building materials including brick, fire brick, doors, and slates.

Table listing stone materials such as Amherst freestone, Berlin freestone, and granite.

Table listing slate materials including purple roofing slate and green slate.

Table listing tin plates in various sizes and weights.

Table listing zinc materials including zinc duty sheet and sheet gold.

Table listing lead materials including lead and sheet lead.

BOSTON.

Prices to Contractors and Builders.

Table listing fire brick prices in Boston.

Table listing building bricks in Boston.

Table listing building stone in Boston.

Table listing lumber in Boston.

Table listing various types of lumber including Michigan pine and spruce.

Table listing paint and oil prices in Boston.

Table listing lime prices in Boston.

Table listing cement prices in Boston.

Table listing nails in Boston.

Table listing axle pulleys in Boston.

Table listing sash weights in Boston.

Table listing sash lines in Boston.

Table listing door butts in Boston.

Table listing mortise locks in Boston.

Table listing door knobs in Boston.

Table listing sash fasts in Boston.

Table listing store door handles in Boston.

Table listing iron materials in Boston.

CHICAGO.

Prices to Contractors and Builders.

Table listing brick, lime, and cement prices in Chicago.

Table listing lumber prices in Chicago.

Table listing various types of lumber including Michigan pine.

Table listing various types of lumber including Michigan pine.

Table listing various types of lumber including Michigan pine.

Table listing various types of lumber including Michigan pine.

Table listing various types of lumber including Michigan pine.

Table listing various types of lumber including Michigan pine.

Table listing various types of lumber including Michigan pine.

Table listing various types of lumber including Michigan pine.

Table listing various types of lumber including Michigan pine.

Table listing various types of lumber including Michigan pine.

Table listing various types of lumber including Michigan pine.

Table listing various types of lumber including Michigan pine.

Table listing roofing materials in Chicago.

PHILADELPHIA.

WHOLESALE PRICES.

Table listing iron materials in Philadelphia.

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms.

CREOSOTED WOOD. PREPARED AT THE Hayford Patent Creosote Wood Preserving Works. EDWARD R. ANDREWS, Proprietor.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY.

The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, ETC., ETC.

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.  
ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

**ESTABLISHED, 1836.**  
**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Compositoin Roof known. Also inventors and owners of the following patents:—

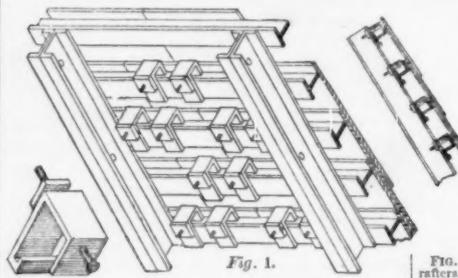


Fig. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a best plate of suitable metal, which hooks around or under the purlins on which the slate rests, and is provided with a bolt passing through it and the best plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

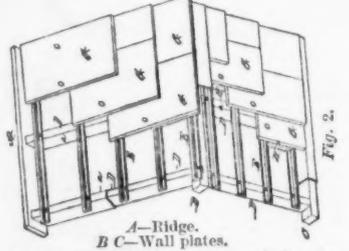


Fig. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or other fire-proof material, and iron purlins (c) or beams, with the slates (G) or other covering secured thereto by clips, (Fig. 1.) or in any other suitable manner, in connection with a fire-proof cement, (B) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contact with the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point, avoiding condensation, contraction and expansion of roofs formed wholly of iron.

**WARMING AND VENTILATION.**  
**FIRE ON THE HEARTH.**  
**FIRE-PLACE HEATERS AND STOVES.**  
VENTILATION of a Fire-Place. RESERVE FORCE of a Close Stove. CIRCULATION of a Furnace.  
*Adapted for any kind of Fuel,*  
And the only FIRE-PLACE HEATER PERFECTLY ADAPTED for SOFT COAL and WOOD.  
Send for our testimonials from all parts of the United States.

**OPEN STOVE VENTILATING COMPANY,**  
115 Fulton and 54 Ann Streets, New York.

**GAS**  
**SPRINGFIELD GAS MACHINE.**  
Springfield, Mass.: 75 Maiden Lane, New York: 117 and 119 Court St., Boston: and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

**BUHRER'S INFALLIBLE SEWER GAS TRAP.**  
The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (E) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.

**S. BUHRER,** Inventor and Manufacturer, Cleveland, Ohio.  
WHOLESALE AGENTS.  
W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O.  
L. WOLFF Mfg Co., 109 & 111 West Lake St., Chicago, Ill.  
HAMBLEN & MATHEWS, 82 & 84 North St., Boston, Mass.  
C. A. BLESSING, 44 North Fifth St., Philadelphia, Pa.  
THE J. L. MOTT IRON WORKS, 88 & 90 Beekman St., N. Y.  
Please send for Circular.

**Brandeis' Seamless Paragon Trap.**  
*Softest, Best, Cheapest, and Non-siphoning.*  
Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily hanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDEIS & WICKER,** 46 Fulton Street, Brooklyn, N. Y.

**C. BUTCHER,**  
107  
Devonshire St.  
BOSTON.  
Send for  
Illustrated  
Catalogue.

**PATENT MARQUETRY FLOORING.**  
Specimens at Lawrence, Wilde & Co.'s, 42 Cornhill, Boston.

**DORCHESTER UNION FREESTONE CO.**  
**NEW BRUNSWICK YELLOW FREESTONE.**  
The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order.  
84 Pine St., New York. - G. P. SHERWOOD.

**MENEELY & KIMBERLY,**  
Bell Founders, Troy, N. Y.,  
Manufacture a superior quality of Bells. Special attention given to **CHURCH, SCHOOL, and COURT HOUSE BELLS.** Illustrated Catalogue sent free.

Architects and Builders will be quick to appreciate the many New and Practical Features possessed by

**THE MAGEE PATENT SINK,**  
which commend themselves at once to every household. The escape of noxious and poisonous sewer gases is prevented by the arrangement of the patent trap, it being immovable, while the strainer, being hinged on brass pins, can be raised for the purpose of cleaning the cesspool. The sink is furnished with an improved galvanized shelf or rack for draining dishes, etc., after washing. It is of extra size, and being made with square corners, saves the carpenter much labor in setting. In smoothness of casting it fully sustains the long-established reputation of the Magee goods. Particular attention is invited to the **Magee Standard Furnace,** portable and for setting in brick, guaranteed superior to any in the market for economy, durability, and heating capacity. Estimates furnished for heating all sizes of dwelling-houses and public buildings. Also a full line of **Brick and Portable Ranges.** Circulars and prices of all the above goods furnished on application.  
**MAGEE FURNACE CO.,**  
32 to 38 Union St., Boston

**D. M. MEEKER & SON'S**  
**Malleable Iron Hollow Munten Window Sash.**  
For Insane Hospitals, Fire Proof Buildings, &c.

The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by  
**D. M. MEEKER & SON,**  
Newark, N. J.  
Fine Castings of Malleable and Gray Iron, German Silver and Composition: also Patterns a specialty.

**MAKE your own GAS**  
Send for CIRCULAR.  
**WALWORTH MANUF. CO.**  
No. 69 Kilby Street,  
BOSTON, MASS.

**GAS GENERATORS, FOR LIGHTING**  
Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.

**J. & R. LAMB, 59 CARMINE ST., N. Y.**  
**CHURCH FURNISHERS**  
Practical Workers in Sterling Silver, Brass, and Bronze. Carved Wood, Decorations, etc.  
Illustrated Catalogues.  
Furniture, etc.; Metalwork, etc.; Decoration, etc.

**HOISTING MACHINES**  
EXCLUSIVELY.  
HOTEL STEAM ELEVATORS,  
HYDRAULIC ELEVATORS,  
HAND POWER HOISTS,  
DUMB WAITERS.

**H. J. REEDY, Manufacturer,**  
128 EAST EIGHTH ST., - Cincinnati, O.

**CRANE BREED & COMPANY**  
**SAFETY BOILERS**  
FOR  
**HEATING**  
STEAM AND HOT WATER.  
MOST ECONOMICAL & RELIABLE METHOD WITH  
AUTOMATIC APPLIANCES, RADIATORS, PIPE  
COILS, REGISTERS, FITTING GS, STEAM PUMPS.

**NATIONAL TUBE WORKS CO.**  
PATENT  
Indestructible Enamelled Wrought Iron  
**LAP-WELDED PIPE,**  
From 1/4 inch to 15 inches diameter.  
Now extensively used for  
Water, Gas, Sewerage, and Mining.  
It is not affected by heat or acid, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage.  
**MALLEABLE IRON FITTINGS** (enamelled), and **COMPOSITE ENAMEL** for making joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at 6¢ each.

**National Tube Works Co.,**  
8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

BUILDING INTELLIGENCE.

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

MACHINE FOR CUTTING SHEET METAL.—H. B. and M. C. Asher, Trenton, Mo.

RIF-STOCK.—Quimby S. Bockus, Holyoke, Mass.

RIVETING-MACHINE FOR TUBING.—W. E. Brooks, Trenton, N. J.

TRAY-SQUARE, BEVEL, AND MITRE.—Elijah H. Eaton, Philadelphia, Penn.

DOOR-SILL AND WEATHER-STRIP.—Eli Handley, Perry, and Thomas G. Orwig, Des Moines, Iowa.

CHISEL.—William King, London, England.

WALL-PAPER.—James S. Munroe, Lexington, Mass.

FIRE-ESCAPES.—James Ames, Rosemount, Ontario, Canada.

TURNING-CHISEL.—Homer C. Emery, Union, Oreg.

STENCH-VALVE FOR WASH-BASINS.—Alexander Levery, Bridgeport, Conn.

REPAIRS AND ALTERATIONS ACTIVE.

LIBERTY SQ. BUILDING.—The foundations of the Liberty Sq. building are being brought up to the level of the sidewalk, preparatory to continuing the work in the spring.

BROOKLYN, N. Y. BUILDING PERMITS.—Butler St., No. 110, 1 three-story brick tenement, 22 1/2 x 38; owner and builder, M. H. Murphy, 110 Butler St.—Jackson St., 1 two-story frame dwelling, 18 x 25; owner, John Scofield.—Stockton St., 1 three-story brick tenement, 23 x 42; owner and builder, Patrick Sheridan, 775 Myrtle Ave.—Union St., 1 three-story brown stone dwelling, 25 x 45; owner, Eugene Douglas, Fourth Ave.; architect, J. Turner, builders, Williams and J. Turner.—Fifth St., 1 three-story frame tenement, 25 x 50; owner, Christian Hartman, Fifth St.; builders, John Fuchs and Jno. Rueger.—Twentieth St., No. 320, 1 three-story frame tenement, 25 x 40; owner, Patrick Gray, 5 Wall St., New York; builder, Peter Morris.—Central Ave., 1 three-story frame tenement, 25 x 50; owner, John Hartman, Central Ave., near Myrtle St.; architect, Jno. Platte; builder, H. Loeffler.—Grand Ave., 1 four-story brick stable, 30 1/2 x 43 and 48; owner, N. Ludlan; architect, S. C. Whitehead.—Thorp Ave., 1 three-story Conn. brown stone tenement, 10 1/2 x 45; owner, H. Nass, 100 Wallabout Ave.; architect, C. F. Eisenach.—Thorp Ave., cor. Halsey St., 2 three-story Conn. brown stone stores and dwellings, 10 1/2 x 50 and 45; owner, H. Nass; architect, C. F. Eisenach.—Yates Ave., 5 three-story brown stone dwellings, 20 x 42; owner, Wm. H. Doughty, 340 Hart St.; builder, not selected.—Yates Ave., cor. Hart St., 1 three-story brown stone store and flat, 20 x 60; owner, J. M. Phelps, De Kalb and Yates avs.; architect, W. H. Doughty.

WAREHOUSE.—Mr. J. P. Robinson is building a five-story brick warehouse, 53 by 150, on Warren Street.

CHICAGO. BUILDING PERMITS.—The Building Department has issued permits for thirty-six buildings. The cost of thirteen of the more important ones will be \$40,000. Following are some of the principal buildings:—

Marshall Field, two-story dwelling, on Indiana Ave.; cost, \$8,000.—M. C. Johnson, three-story store and flat, 348 West Indiana St.; cost, \$4,500.—J. J. Droyer, two-story stone-front dwelling, Michigan Ave.; cost, \$5,000.—W. L. Wood, two-story dwelling, 504 Calumet Ave.; cost, \$2,500.—C. H. Ross, two-story dwelling, 1 Fowler St.; cost, \$3,000.—D. V. Mandeville, two-story dwelling, 1182 Indiana Ave.; cost, \$1,500.—L. H. Boldenwick, two-story stone-front dwelling, Chicago Ave.; cost, \$5,000.—W. E. Hale, sixth story to 79 and 81 State St.; cost, \$4,000.—M. Kobler, two-story dwelling, 686 South Jefferson St.; cost, \$1,500.

INDIANAPOLIS, IND. THE STATE-HOUSE.—The specifications for the State-House, Mr. Edwin May, architect, have been finally adopted by the Commissioners. Bids for the various contracts will be opened on the 25th of next month, and the series of schedules for the use of the contractors are now preparing. The classification of contracts is as follows: Excavation, filling in, and entire mason-work required for the foundation, stone-work, brick-work, iron-work, plastering, roofing, carpenters' and joiners' work, glass and painting, plumbing and gas-fitting, steam-heating and ventilating, marble and tile work, and furnishing. The Commissioners will reserve the right of letting in whole or part. Several firms have taken offices in Indianapolis, and will enter upon the competition.

NEW YORK. BUILDING PERMITS.—Cor. Elton Ave. and One Hundred and Fifty-eighth St., brick chapel, 34 x 60; cost, \$7,500; German M. E. Church, owners, John Rogers, architect.—Cor. Madison Ave. and Thirty-third St., combined dwelling, 75 x 49; brown stone fronts; cost, \$65,000; Egerton L. Winthrod and Frederic Bronson, owners; Richard M. Hunt, architect; A. J. Felter, builder.—One Hundred and Fiftieth St., near Mott Ave., 4 frame dwellings, 16 x 30; cost, \$2,500 each; H. L. Morris, owner; J. B. Van Tassel, architect; Wm. Hargrave, builder.—216 Centre St., second-class dwelling, 25 x 33; cost, \$6,000; J. Borrelhoef, owner; L. Boeckel, architect; H. Weiles, builder.—223 Pearl St., second-class store, 17 x 82; cost, \$6,500; Estate Geo. Bruce, owner; J. B. Snook, architect.—92 New

Church St., carpenter shop, 22 x 22; cost, \$200; J. Geeson, owner and builder.—Forty-fourth St., near Eleventh Ave., 4 tenements, 25 x 65 each; total cost, \$35,000; A. Totten, owner; C. F. Ridder, Jr., architect; J. Totten, builder.—Eleventh Ave., near Thirtieth St., storage, 25 x 101; cost, \$1,200; J. R. Graham, owner; R. Mook, architect.—236 Spring St., tenement, 25 x 25; cost, \$3,500; Dr. Greenhut, owner; Lochman & Brandon, builders.—Fourteenth St., near Eleventh Ave., office building, 16 x 18; cost, \$1,000; Buckie & Herch, owners; D. McEnerny, builder.

CAR HOUSE.—The Dry Dock and Battery Railroad is building, at the cost of some \$50,000, a car house on Fourteenth Street.

STORE.—Mr. James Stroud is the architect of the new store now building at the corner of Broadway and Thirty-second Street for George Sloane. It is to be a five-story brick building, measuring 54 by 123, and will cost about \$100,000.

APARTMENT HOUSE.—A large apartment house is now building, by Mr. Edward Clark, on Seventh Avenue, between Fifty-fifth and Fifty-sixth streets, at a cost of some \$300,000.

FACTORY.—Mr. Joseph Brown is building, on Thirtieth Street, a factory which will cost about \$50,000.

PHILADELPHIA. BUILDING PERMITS.—John Holton, three-story dwelling, 28 x 28, cor. Philadelphia and Cumberland sts.—O. Shoemaker, two-story dwelling, 14 x 28, cor. Nineteenth and Allegheny sts.—George Glaine, two-story dwelling, 14 x 32, Janney St.—C. W. Coulston, 6 three-story dwellings, 14 x 30, Nos. 1834 to 1844 Woodstock St.—Frank Krewson, 2 two-story dwellings, 14 x 40, Ruan, cor. Franklin, Frankford.—Geo. W. Payne, two-story dwelling, 15 x 28, Stockie St.—Ellen Pullin, three-story dwelling, 20 x 40, cor. Margaretta and Takawana, Frankford.—McLaughlin & McNamara, three-story store and dwelling, 10 x 62, No. 3924 Germantown Ave.—Charles Spoerl, 2 two-story dwellings, 14 x 40, Richmond St.—S. R. Stewart, two-story dwelling, 16 x 40, cor. Allegheny and White sts.—Einwechter & Son, three-story dwelling, 16 x 30, Craven St.—Einswechter & Son, two-story stable, 17 x 40, Craven St.—W. S. Kimball, 8 three-story dwellings, 20 x 64, Walnut St.—L. C. Smith, three-story store and dwelling, 20 x 65, Lancaster Ave.—Williams & McNichol, one-story chapel, 35 x 64, Tasker St.—E. Hopper, one-story storehouse, 44 x 63, No. 1326 Washington Ave.—W. R. Mather, 14 two-story dwellings, 16 x 32, Tasker St.—Robert Connely, 2 two-story dwellings, 16 x 28, Garrett St.—C. T. Iseninger, 2 two-story dwellings, 16 x 28, Woodbine St.—Charles J. Crosson, three-story store and dwelling, 20 x 30, No. 744 Passyunk Ave.—Patrick Golden, two-story stable, 17 x 25, No. 2242 Moyamensing Ave.

ST. LOUIS. BUILDING PERMITS.—Forty-three permits have been issued for the week ending July 26, 1878. Fifteen of these are for frame structures, only one of any importance, viz., a frame dwelling of two stories, five rooms, for Rev. Father O'Reilly, at cost \$1,500. Of the brick buildings those worth \$2,500 and over are as follows:—

OWNERS. USE. STORIES. ROOMS. COST.

Wm. Barr. Dwellings. 3. 27. \$10,400

J. Hanmann. Dwellings. 2. 8. 4,000

G. Conzmann. Stores. 2. 12. 8,000

M. Reilly. Dwelling. 2. 8. 2,500

H. Kayser. Dwelling. 3. 10. 5,000

Chas. Schieter. Dwelling. 3. 10. 3,500

Maurice Bros. Dwelling. 3. 6. 4,750

C. Farris. Dwelling. 3. 6. 3,500

Juline Jaeger. Store. 2. 6. 2,000

GENERAL NOTES. BADGER HILL, IA.—Mr. F. M. Ellis is the architect of the M. E. church now building. It will cost about \$4,000.

BRISTOL, R. I.—Mr. N. N. Cole is erecting a one-and-a-half-story cottage on Catherine Street, and Mr. David A. Cott is erecting a similar cottage on a new street just opened from High to Wood streets, between Union and Burton streets. Mr. Alonzo Cary is building a two-story house on Union Street.—On Lincoln Avenue, Mr. Rufus Smith, Mr. Jonathan Adcock, and Mr. Benjamin Benson have each commenced to build, and Mr. Patrick Scanlan has laid the foundation for a dwelling house on Bradford Street.

BUFFALO, N. Y.—Mr. M. E. Beebe, architect, has the following work in hand: Post-Office Block, 90 x 100; brick; Seneca St.; Messrs. Bush, Schoellkopf, and Strong, owners; Charles Berrick, contractor; cost, \$30,000.—Two stores, 30 x 70; brick; Wm. H. Glenn, Jr., owner; Rumrill & Rupp, contractors; cost, \$8,000.—Police station building for No. 3 precinct; brick; Rumrill & Rupp, contractors; cost, \$15,000.—Buffalo Orphan Asylum extension; brick; Rumrill & Rupp, contractors; cost, \$14,500.—Brick house, Wm. A. Wheelock, Delaware Ave.; B. C. Dean, contractor; cost, \$10,700.—Brick house, D. B. Castle, Delaware Ave.; Henry Schaeffer, contractor; cost, \$7,500.—Brick house, Geo. F. Haysford, Delaware Ave.; John Briggs, contractor; cost, \$7,000.

CENTRAL PARK, ILL.—The corner-stone of the Catholic church was laid July 28th.

CHURCH HILL, MD.—Work is progressing on the Catholic church.

COLORADO, CAL.—Work on the new jail is now in progress.

COVINGTON, KY.—The corner-stone of the Union Protestant Church, West Covington, has been laid.—The question of the site of the new jail is still undecided.

DES MOINES, IA.—The hod-carriers at work on the new Capitol have struck for \$1.50 per day. They were discharged, and their places will be filled at \$1.25.

FOLSOM, CAL.—Six bids for building the new State Prison were received, and that of Dennis Jordan, amounting to \$161,590 was accepted.

FREDERICTON, N. B.—Messrs. Croff & Camp are the architects of the new Exhibition Palace.

HACKENSACK, N. J.—The Asbury Methodist Episcopal congregation are building a chapel in State Street, near Passaic Street, to take the place of their church which was burned a few years ago.—A large public school building in the lower district is approaching completion. It is three stories in height, and is of brick, with granite facings.

HARTFORD, CONN.—The Water Commissioners have been authorized to build a new reservoir, which is to hold 6,000,000 gallons, about as much as is held by the three existing reservoirs. Work will probably begin early in the spring.

JACKSON, MICH.—A new school-house is to be built from the design of Mr. L. D. Grosvenor, architect. W. H. Myers, contractor. The cost will be \$25,500.

JAMAICA PLAIN, MASS.—Mr. F. W. Weston, architect, is building a house for Mr. Wm. Lawrence. Charles F. Barton, of Boston, contractor. Cost, \$6,000.

JAMESTOWN, N. Y.—Mr. M. E. Beebe, of Buffalo, is the architect of the brick church now building for the First Presbyterian Society. It is to cost \$25,000.

COMPLETED BUILDINGS.

BLOOMINGTON, ILL.—On July 21st the new Roman Catholic church was dedicated. It is 213 feet in length, 80 feet in width, and 68 feet in the clear. It has cost about \$150,000.

CEGAR CREEK, VA.—The new Presbyterian church at Cedar Creek, twelve miles from Winchester, was formally dedicated on Sunday, the 28th inst.

DOYLESTOWN, PENN.—The new court-house is of gray sandstone, two stories in height, with a massive Gothic tower. The entrance is surmounted by a ponderous archway, beneath which and over the doorway is the coat-of-arms of Pennsylvania. There are offices on the first floor at the front for the post-office, prothonotary, recorder, clerk, etc. The court-room is of semicircular shape. On either side of it are retiring rooms for counsel, witnesses, and jurors. The stairways are of iron, cased with rubber. Rooms on the second floor will be occupied by the commissioners.

SUMMARY OF THE WEEK.

Baltimore, Md.

COLLEGE BUILDING.—At St. Joseph's College, near Loudon Park Cemetery a new wing is now building which will probably cost about \$9,000.

Boston.

BUILDING PERMITS.—The following permits have been issued since our last report:—

IRON BUILDINGS.

Table with 5 columns: Mechanic, No., Stories, Class, Size. Row 1: E. T. Dobbin, 1, 1, Exhibition, 10 1/2 x 14 1/2.

WOODEN BUILDINGS.

Table with 5 columns: Mechanic, No., Stories, Class, Size. Rows include: Beal & Spear, 1, 2, Dwelling, 23 1/2 x 34 1/2; Leonard Pickering, 1, 3, Dwelling & store, 21 1/2 x 43; Chas. Simming, 1, 2, Dwelling, 22 x 30; W. J. McLenn, 1, 1, Coshed, 10 1/2 x 35; Wm. H. Kynn, 1, 1, Storage, 70 x 60; John C. Nichols, 1, 2, Storage, 330 x 52; Patrick Kenney, 1, 1, Wagon-shed, 14 x 22.

Repairs and alterations active. LIBERTY SQ. BUILDING.—The foundations of the Liberty Sq. building are being brought up to the level of the sidewalk, preparatory to continuing the work in the spring. Ivory Bean, contractor; Mr. W. G. Preston, architect.

Brooklyn, N. Y.

BUILDING PERMITS.—Butler St., No. 110, 1 three-story brick tenement, 22 1/2 x 38; owner and builder, M. H. Murphy, 110 Butler St.—Jackson St., 1 two-story frame dwelling, 18 x 25; owner, John Scofield.—Stockton St., 1 three-story brick tenement, 23 x 42; owner and builder, Patrick Sheridan, 775 Myrtle Ave.—Union St., 1 three-story brown stone dwelling, 25 x 45; owner, Eugene Douglas, Fourth Ave.; architect, J. Turner, builders, Williams and J. Turner.—Fifth St., 1 three-story frame tenement, 25 x 50; owner, Christian Hartman, Fifth St.; builders, John Fuchs and Jno. Rueger.—Twentieth St., No. 320, 1 three-story frame tenement, 25 x 40; owner, Patrick Gray, 5 Wall St., New York; builder, Peter Morris.—Central Ave., 1 three-story frame tenement, 25 x 50; owner, John Hartman, Central Ave., near Myrtle St.; architect, Jno. Platte; builder, H. Loeffler.—Grand Ave., 1 four-story brick stable, 30 1/2 x 43 and 48; owner, N. Ludlan; architect, S. C. Whitehead.—Thorp Ave., 1 three-story Conn. brown stone tenement, 10 1/2 x 45; owner, H. Nass, 100 Wallabout Ave.; architect, C. F. Eisenach.—Thorp Ave., cor. Halsey St., 2 three-story Conn. brown stone stores and dwellings, 10 1/2 x 50 and 45; owner, H. Nass; architect, C. F. Eisenach.—Yates Ave., 5 three-story brown stone dwellings, 20 x 42; owner, Wm. H. Doughty, 340 Hart St.; builder, not selected.—Yates Ave., cor. Hart St., 1 three-story brown stone store and flat, 20 x 60; owner, J. M. Phelps, De Kalb and Yates avs.; architect, W. H. Doughty.

Chicago.

BUILDING PERMITS.—The Building Department has issued permits for thirty-six buildings. The cost of thirteen of the more important ones will be \$40,000. Following are some of the principal buildings:—

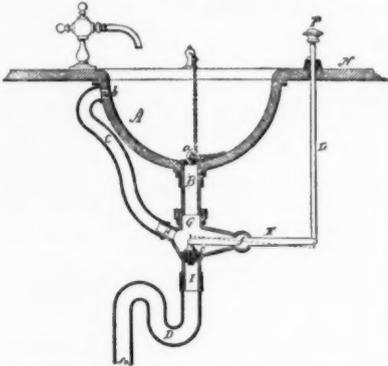
Marshall Field, two-story dwelling, on Indiana Ave.; cost, \$8,000.—M. C. Johnson, three-story store and flat, 348 West Indiana St.; cost, \$4,500.—J. J. Droyer, two-story stone-front dwelling, Michigan Ave.; cost, \$5,000.—W. L. Wood, two-story dwelling, 504 Calumet Ave.; cost, \$2,500.—C. H. Ross, two-story dwelling, 1 Fowler St.; cost, \$3,000.—D. V. Mandeville, two-story dwelling, 1182 Indiana Ave.; cost, \$1,500.—L. H. Boldenwick, two-story stone-front dwelling, Chicago Ave.; cost, \$5,000.—W. E. Hale, sixth story to 79 and 81 State St.; cost, \$4,000.—M. Kobler, two-story dwelling, 686 South Jefferson St.; cost, \$1,500.

Indianapolis, Ind.

THE STATE-HOUSE.—The specifications for the State-House, Mr. Edwin May, architect, have been finally adopted by the Commissioners. Bids for the various contracts will be opened on the 25th of next month, and the series of schedules for the use of the contractors are now preparing. The classification of contracts is as follows: Excavation, filling in, and entire mason-work required for the foundation, stone-work, brick-work, iron-work, plastering, roofing, carpenters' and joiners' work, glass and painting, plumbing and gas-fitting, steam-heating and ventilating, marble and tile work, and furnishing. The Commissioners will reserve the right of letting in whole or part. Several firms have taken offices in Indianapolis, and will enter upon the competition.

New York.

BUILDING PERMITS.—Cor. Elton Ave. and One Hundred and Fifty-eighth St., brick chapel, 34 x 60; cost, \$7,500; German M. E. Church, owners, John Rogers, architect.—Cor. Madison Ave. and Thirty-third St., combined dwelling, 75 x 49; brown stone fronts; cost, \$65,000; Egerton L. Winthrod and Frederic Bronson, owners; Richard M. Hunt, architect; A. J. Felter, builder.—One Hundred and Fiftieth St., near Mott Ave., 4 frame dwellings, 16 x 30; cost, \$2,500 each; H. L. Morris, owner; J. B. Van Tassel, architect; Wm. Hargrave, builder.—216 Centre St., second-class dwelling, 25 x 33; cost, \$6,000; J. Borrelhoef, owner; L. Boeckel, architect; H. Weiles, builder.—223 Pearl St., second-class store, 17 x 82; cost, \$6,500; Estate Geo. Bruce, owner; J. B. Snook, architect.—92 New



point below its junction with the overflow, a valve e, which is ground to fit tightly in its seat. This valve works in a shell or chamber G, and is raised from, or lowered upon, its seat by means of the lever E, which has its fulcrum at f, and is actuated by the rod L, which ends in the knob P above the marble top of the basin. Ordinarily the valve e is raised, as shown by the dotted line, and water is free to pass from the basin either by the waste-pipe or by the overflow. But at night, or in the summer, when the house is left unoccupied, the knob P is pulled up and the valve e is forced down upon its seat, thus preventing the passage of gas.

MORTISING-MACHINES.—David E. Henderson, Leetown, W. Va. The work to be operated upon is placed upon a slotted table arranged to reciprocate upon rollers mounted on the main frame, while the mortise is formed by a vertically-moving auger fed to its work by a lever, upon which its lower end rests, and suitable operating mechanism. A gauge having its upper end graduated and moving vertically in suitable guides is placed upon the same lever as the auger-shank, so that it can be moved at the same time with the auger, to enable the operator at all times to see the distance the auger has entered the wood.

FIRE-ESCAPE.—J. G. Kurtz and T. J. Kister, Milton, Penn.

MACHINE FOR SAWING AND JOINTING SHINGLES.—Joseph A. Mumford, Avondale, Nova Scotia. The shingles are being sawed from the bolt, are placed upon two inclined supports arranged over the journal-boxes of the saw-arbor, and near the fly-wheel, and their butts held against ribs upon the supports while being jointed by suitable knives secured in diagonal slots in the fly-wheel, which is mounted upon the inner end of the saw-arbor. Upon each side of the mandrel are boards or other covering for confining the shavings as they are removed by the jointing-knives.

MANUFACTURE OF HYDRAULIC CEMENT.—Walter J. Budington, Hudson, N. Y. This method of making cement from fossiliferous stone and blue clay consists essentially in reducing the stone and clay separately to an impalpable powder, then mixing the same and adding water, moulding the mass, drying it, and finally burning it sufficiently to produce semi-vitrification.

MACHINE FOR BORING BLIND SLATS.—E. Cather, Baltimore, Md.

RAIL-EXTRACTOR.—John C. Chapman, Boston, Mass. SHINGLES.—Herby S. Gardner, Rosedale, N. C. A shingle is constructed with rabbeted edges, the part cut away being less than half the thickness of the shingle, so that ten lapping spaces are left between the different layers.

MORRISON, ILL.—The contract has been let for an addition to the court building for \$8,555.

NASHVILLE, ILL.—Washington County will vote next fall on the question of building a \$29,000 court-house.

NEW BEDFORD, MASS.—The new church of St. James is building from the plans of W. C. Brocklesby, architect, Hartford, Conn.

NIAGARA FALLS, N. Y.—A very large flouring mill is building.

NORTON, MASS.—A large addition to the Wheaton Seminary for ladies is building, at the cost of \$12,000. Creesy & Noyes, contractors. Mr. G. J. F. Bryant, architect, of Boston.

NORWOOD PARK, ILL.—The residence formerly occupied by Mr. Eberhart has been purchased by parties who will convert it into a first-class summer hotel. Work will commence at once.

OLD POINT COMFORT, VA.—It is said that Mr. C. C. Willard, proprietor of the Ebbitt House, Washington, D. C., is to build a large hotel here.

SACRAMENTO, CAL.—The daily papers have published lately a long list of buildings now in course of construction. They are almost without exception small wooden buildings, to be occupied as dwellings.

SAN FRANCISCO, CAL.—The preliminary work of excavating for the great college to be founded by the Jesuit Fathers in this city has begun, on the block bounded by Van Ness Avenue, Hayes, Franklin, and Grove streets. The property is 400' by 275', and upon it is to be placed a large block of brick buildings, the cost of which is estimated at \$500,000. It will comprise a college, a church, and a theatre capable of seating five thousand persons. Brick, stone, and iron are to be the principal materials used. It is estimated that nearly five hundred men will be given employment upon the building, and for several months. It is not improbable that when the building is completed the Fathers will remodel their Market-street property by tearing down the present buildings and erecting in their stead stores and an hotel.

STORM LAKE, IOWA.—A \$10,000 hotel is to be built.

WEST ROXBURY, MASS.—A house is building for Mr. G. K. Gould. Cost \$6,000. Mr. F. W. Weston, of Boston, architect.

WICOMICO, VA.—The work on the court-house is progressing finely, and some of the sandstone is being laid on the foundation.

WILLMANTIC, CONN.—Mr. Thomas B. Congdon has broken the ground for his new block.

YENIA, O.—Our School-Board, at their last meeting, decided to build a new school building on Spring Hill, in the Fifth Ward.

YORK, ONT.—The Council have agreed upon the proposed terms for defraying the expenses of a Court-House. The city will pay two thirds and the county one third.

**INDEX OF CURRENT WORK,**  
Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

- Baltimore, Md.**
- CHURCH.—The Cummings Memorial Church. Mr. Cassell, architect.
- CHURCH.—The Pius IX. Memorial Church. G. A. Fredrick, architect. Cost \$100,000.
- CHURCH.—Church of St. Michael and All Angels. Cost \$80,000. Wyatt & Sperry, architects.
- HOSPITAL.—Johns Hopkins Hospital. J. R. Niernsee, consulting architect.
- Boston, Mass.**
- BANK BUILDING.—Tremont Bank Building. Carl Fehmer, architect.
- HOTEL.—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.
- THE MUSEUM OF FINE ARTS.—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.
- SCHOOL-HOUSE.—High and Latin School. G. A. Clough, architect.
- ASYLUM.—Asylum for Aged People, C. J. Bateman, architect. Cost \$54,000.
- Brooklyn, N. Y.**
- TENEMENT.—A. T. White, owner. William Field & Son, architects.
- SOCIETY BUILDING.—The Long Island Historical Society Building. Mr. G. B. Post, architect. Cost \$100,000.
- CHURCH.—St. Francis Xavier R. C. Church, West Fifteenth Street. Cost \$150,000. P. Keely, architect.
- HOSPITAL.—St. John's Hospital, N. L. Derby, New York, architect.
- Chicago, Ill.**
- ARMORY.—Armory for the First Regiment. Messrs. Whelock & Clay, architects. Cost \$25,000.
- STORE.—The Singer Building. Cost \$250,000.
- Cincinnati, O.**
- U. S. CUSTOM HOUSE AND POST OFFICE. S. Hannaford, local superintendent.
- CHILDREN'S HOME.—J. W. McLaughlin, architect. Cost \$50,000.
- NEWSPAPER OFFICE.—The Gazette Building. E. Anderson, architect.
- CHURCH.—Church of St. Francis de Sales.
- Cleveland, O.**
- BUSINESS BLOCK.—Anas Stone, owner. J. Ireland, architect. Cost \$70,000.
- CHURCH.—Second Presbyterian. J. Ireland, architect. Cost \$70,000.
- CONVENT.—Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

**Hartford, Conn.**

SEMINARY.—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.

CATHEDRAL.—R. C. Cathedral of St. Joseph. P. Keely, architect.

CATHOLIC SCHOOL.—Brown & Stillson, architects, New Haven. Cost about \$25,000.

**Jersey City.**

CONVENT.—Convent of the Sisters of St. Dominick. Cost \$40,000.

**New York.**

THE "FLORENCE." Emile Greuvé, architect. Mrs. Matthews, owner. Cost \$500,000.

THE BORELL BUILDING. S. D. Hatch, architect. Cost \$250,000.

COLLEGE.—Addition to Columbia College. C. C. Haight, architect. Cost \$200,000.

OFFICE BUILDING.—Messrs. Silliman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.

APARTMENT HOUSE.—Mr. H. J. Hardenburgh, architect. Cost \$300,000.

PRIVATE RESIDENCE.—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.

ARMORY for the Seventh Regiment. Cost \$300,000. C. W. Clinton, architect.

**Philadelphia.**

HOSPITAL.—Presbyterian Hospital. Wilson Bros., architects. Office Building.—Girard trust.

**Providence, R. I.**

DORMITORY for Brown University.—Messrs. Stone & Carpenter, architects.

CITY HALL.—Mr. S. J. F. Thayer, Boston, architect.

HIGH SCHOOL BUILDING. Messrs. Walker & Gould, architects.

**St. John, N. B.**

POST OFFICE, Custom House, and Savings Bank.—Mr. Scott Chief Architect to the Dominion Government.

BANK.—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.

CHURCH.—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.

CITY HALL.—Messrs. McKean & Fairweather, architects.

CHAPEL.—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.

CHURCH.—St. James's Church, Croff & Camp, architects, St. John, N. B.—St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$60,000.

**St. Louis.**

CHURCH.—Second Baptist Church. Edward Hilsley, contractor. Cost \$10,000.

COURT HOUSE for the new county of St. Louis.—F. Renwick, architect. Cost \$28,000.

COLLEGE.—College for the Christian Brothers. Mr. Jas. McGrath, architect. Cost \$200,000.

CUSTOM HOUSE AND POST OFFICE.—Mr. Jas. G. Hill, Supervising Architect of the Treasury Department.

UNIVERSITY BUILDING.—The Female Department of Washington University. Rev. W. G. Eliot, Chancellor. Cost \$60,000.

**General.**

CAMBRIDGE, ILL.—Court House for Henderson County. Cost \$65,000.

CAMBRIDGE, MASS.—Gymnasium for Harvard College. Messrs. Peabody & Stearns, architects.

CONCORD, N. H.—State Prison. Messrs. Dow & Wheeler, architects. Appropriation, \$200,000.

DURQUEE, IO.—St. John's Church, H. M. Congdon, architect, New York, \$40,000.

ELMIRA, N. Y.—Masonic Hall. N. LeFrun, architect. New York. Cost \$60,000.

FARIBAULT, MINN.—Deaf, Dumb, and Blind Asylum. J. Babcock & Co., contractors. Cost \$53,730.

INDEPENDENCE, IO.—Hospital for the Insane. G. Josselyn, supervising architect. Cost \$850,000.

JACKSONVILLE, FLA.—Store. W. Astor, New York, owner, Geo. Hoover, architect. Cost \$75,000.

JOLIET, ILL.—St. Mary's (Roman Catholic) Church. Mr. Kelly, architect, Brooklyn.

KANKAKEE, ILL.—Insane Asylum. J. R. Willett, architect, Chicago, Ill.

LOWELL, MASS.—Appleton Bank. O. A. Merrill, architect. Cost \$70,000.

NORRISTOWN, PENN.—Insane Asylum. Wilson Bros. & Co., architects, Philadelphia.

OAKLAND, CAL.—First Congregational Church. Mr. L. B. Valk, New York, architect. Cost \$60,000.

OTTAWA, ILL.—Holy Trinity (R. C.) Church. H. C. Furness, architect. Cost \$150,000.

ATROTY.—Cost \$35,000. Mr. H. C. Furness, architect.

PORTLAND, CONN.—Trinity Church, H. M. Congdon, architect, New York, \$50,000.

POUGKEEPSIE, N. Y.—Hudson River Hospital for the Insane. Mr. F. C. Withers, architect.

SPRINGFIELD, ILL.—Jail. G. H. Heilmle, architect. Cost \$65,000.

TOPEKA, KAN.—Insane Asylum. Cost \$76,000. Mr. E. T. Carr, architect, Leavenworth, Kan.

WABASH, IND.—Court House. B. V. Enos & Son, architects. Cost \$100,000.

WAUKEGAN, ILL.—Court House. H. C. Koch, architect. Cost \$40,000.

ZANESVILLE, O.—Hotel. H. E. Myers, architect. Black & Graham, owners. Cost \$75,000.

**The Latest.**

CINCINNATI, O.—Allemania Club-House. J. W. McLaughlin, architect. Cost \$60,000.—Cincinnati University Building. S. Hannaford, architect. Cost \$50,000.

SAN FRANCISCO, CAL.—College of the Jesuit Fathers. Cost \$500,000.

CROWNS POINT, IND.—Court-House. J. C. Cochrane, architect, Chicago. Cost \$45,000.

**Publishers' Department.**  
*The American Architect and Building News.*

PUBLISHED EVERY SATURDAY BY  
**HOUGHTON, OSGOOD & CO.,**  
WINTHROP SQUARE, BOSTON.  
NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc.  
15 cents per copy; \$7.50 per year, \$6.00 in advance.

**CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,**  
WITH  
*Houghton, Osgood & Co.'s other Periodicals.*

THE ARCHITECT and \*ATLANTIC MONTHLY...\$9.00  
THE ARCHITECT and THE REPORTER.....15.00  
THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL.....10.00  
THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE.....7.00  
\* N. B.—The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

**RATES OF ADVERTISING.**  
PAGES NEXT TO READING MATTER,  
single insertion.....12½ cts. per line.  
One inch (14 lines) one insertion.....\$1.75  
One inch, six insertions.....10.00  
INSIDE PAGES, single insertion.....10 cts. per line.  
One inch, single insertion.....\$1.40  
One inch, six insertions.....7.00  
For larger space, and for a series of more than six insertions, reduced rates, made known on application to the Publishers.

Special rates for first and last pages.  
No extra charge for cuts, or for advertisements that occupy more than a column in width.  
Payments should be made directly to the Publishers, either by draft or by post office order.

**HOUGHTON, OSGOOD & CO., Publishers,**  
WINTHROP SQUARE, BOSTON.

*St. Hall & Sons*  
Manufacturers of  
*Architectural Terra Cotta,*  
*Buff and Colored Brick, Fire Brick*  
*Established 1846, South Amboy, N. J.*

**COMPETITIONS IN INTERIOR DECORATION.**

The attention of architects, draughtsmen, and decorators is drawn to the series of competitions in interior decoration initiated by the editors, and now in operation.

**REGULATIONS AND CONDITIONS** will be found in Nos. 109 and 114 of the AMERICAN ARCHITECT.

The programme of the FIFTH COMPETITION, which closes August 20th, will be found in No. 132.

**ARCHITECTURAL IRON WORKS.**  
**YOUNGLOVE & CO., Propr's.**  
CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SECTIONS, TIES, LIGHT, CRIBBING, ETC.  
Estimates promptly furnished.

(Established 1848.)  
**MARKET ST. ARCHITECTURAL FOUNDRY**  
AND  
**IRON WORKS.**  
**SNEAD & CO.**  
LOUISVILLE, KY.  
Makers of every description of Iron Work for Buildings.

**PROPOSALS.**

**CUT MARBLE.**  
Proposals for cut marble work for the United States Custom-House and Post-Office at Memphis, Tenn.  
OFFICE OF SUPERVISING ARCHITECT,  
TREASURY DEPARTMENT,  
WASHINGTON, D. C., July 20, 1878.  
Sealed proposals will be received at this office until 12 o'clock, m., on the 12th day of August, 1878, for furnishing and delivering, and for cutting on the site of the building all the stone work (Tennessee marble) required for the superstructure of the U. S. Custom-House and Post-Office at Memphis, Tenn. Copies of drawings and specification, blank form of bond, conditions of submitting bids, and any additional information, may be had on application at this office or the office of the Superintendent.  
JAS. G. HILL,  
Supervising Architect.

**OUR ADVERTISERS** and others who are in the habit of using business circulars, will find in our columns of "Building Intelligence" a continually new directory of names and addresses of those persons who, being at present actively engaged in building, are the ones who are most desirous of receiving circulars setting forth the advantages and qualities of all classes of building appliances.

An hour spent in mailing circulars to the persons mentioned above cannot fail of being profitable to the business man.



**MARSHALL'S AMERICAN**



**LEADED SHEETS.**  
Cheapest and most durable Metal for Cornice and Roofing.  
**MARSHALL BROS. & CO.,**  
Front and Girard Ave., Phila.  
Represented in New England States by  
**C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.**

**A. L. FAUCHÈRE & CO.**  
OFFICE AND WAREHOUSES  
1319 and 1321 Broadway, New York,  
Importers, Manufacturers, and Dealers in all kinds of foreign  
and domestic  
**MARBLE FOR INTERIOR WORK.**  
Estimates furnished on application.

**McSHANE BELL FOUNDRY**

Manufacture those celebrated *Bells for Churches, Academies, etc.* Price-List and Circulars sent free  
**HENRY McSHANE & CO.,**  
Baltimore, Md.

**The Useful**

is issued monthly—consists of Perspectives of Interiors, Ornaments of Buildings, Fresco Painting, Furniture, etc., and is accompanied with full-size working-drawings—for direct use—  
Price to Subscriber  
One dollar per number.  
Office 28 Pemberton Square,  
**Boston, Mass.**

**Akron, Ohio.**  
**DRAIN PIPE.**  
ALL SIZES.  
Terra Cotta Chimney Tops, Akron Land Tile  
**D. W. LEWIS, 80 Water Street, Boston,**  
Manufacturers' Agent.

**LUX-FECIT**  
**THE HELIOTYPE PRINTING COMPANY**  
220 DEVONSHIRE ST. BOSTON  
COR FRANKLIN ST  
HELIOTYPE PHOTOGRAPHS in Printers Ink  
HELIOTYPE LITHOGRAPHS printed by Steam  
HELIOTYPE CUTS to print with Type  
HELIOTYPE FACSIMILE LETTERS, SHOW CARDS, &c.

**THE "AIR SPACE"**  
**STEAM PIPE and BOILER COVERINGS**  
Save 10 to 20 per cent in fuel.  
**THE CHALMERS-SPENCE COMPANY.** 140 Congress Street, Boston. Foot 9th St., E. H., New York.

**CLASSIFIED ADVERTISEMENTS.**

**ARCHITECTS.**  
Frank Hill Smith, Boston.....ii  
W. W. Goodrich, Kingston, N. Y.....ii  
Charles E. Hibley, St. Louis.....ii  
Walter Dickson, Albany, N. Y.....ii  
Richard M. Hunt, New York.....ii  
P. B. Wight, Chicago.....ii  
**ARCHITECTURAL BOOKS, ETC.**  
A. J. Ricknell & Co., New York.....xi  
The Useful, Boston.....xi  
Houghton, Osgood & Co., Boston, Ill., iv, ix, xii  
American Plumber Publishing Co., New York.....xi  
Zoditch, St. Petersburg.....xi  
**ARCHITECTURAL IRON WORK.**  
Younglove & Co., Cleveland, O.....viii  
M. Clements, Cincinnati.....viii  
Sneed & Co., Louisville, Ky.....viii  
**ASPHALT.**  
Lumber Rock Asphalt Co., New York.....xii  
**ASPHALT AND OTHER (FELT) ROOFING.**  
Warren Chemical and Manufacturing Co., Boston and New York.....i  
**CELL FOUNDRIES.**  
Menely & Kimberly, Troy, N. Y.....vi  
Henry McShane & Co., Baltimore.....vi  
**BOILER COVERINGS.**  
The Chalmers-Spence Co.....x  
**BRICK.**  
(ORNAMENTAL) Peerless Brick Co., Phila., xi  
(FIRE.) Walden, Boston.....xi  
Ohio Valley Press Brick Co., Louisville.....xi  
(PRESSED) Fletcher & Thomas.....xi  
A. Hall & Son.....xi  
**BRONZE DECORATIONS.**  
National Fine Art Foundry, New York.....xi  
**CARPENTERS.**  
J. H. Bart & Co., Boston.....xii  
**CEMENT.**  
Johnson & Wilson, New York.....xii  
**CHURCH FURNITURE.**  
J. & R. Lamb, New York.....vi  
**CLOCKS FOR PUBLIC BUILDINGS.**  
Seth Thomas Clock Co.....i  
E. Howard & Co., Boston.....i  
G. M. Stevens & Co., Boston.....i  
**CONDUCTORS (IRON).**  
Austin, Obdyke & Co., Philadelphia.....iii  
**CRISTOPHER WOOD.**  
Edward R. Andrews, Boston.....v  
**DECORATORS.**  
Edmund & Quartley, Baltimore.....ii  
Collamore & Young, Baltimore.....ii  
Philip A. Butler, Boston.....ii  
L. Haberstroh & Son, Boston.....ii  
W. J. McPherson, Boston.....ii  
Worce & Loring, Boston.....ii  
Wm. H. Jackson & Co., New York.....xii  
Donald MacDonald, Boston.....ii  
Society of Decorative Art, New York.....ii  
John Lafarge, New York.....ii  
**DESIGNING AND WOOD ENGRAVING.**  
W. J. Dana, Boston.....xi  
**DOME SHEETS (ANTI-FRICTION SLIDING).**  
S. H. & E. Y. Moor, Chicago.....iv  
**DRAIN PIPE.**  
D. W. Lewis, Boston.....x  
Portland Stone Ware Co., Boston.....xii  
Waldo Brothers, Boston.....xii  
**ELECTRIC BELLS, ANNUNCIATORS, ETC.**  
S. W. Fuller, Boston.....ii  
**ELEVATORS, STEAM ENGINES, ETC.**  
Whittier Machine Co., Boston.....i  
Tuff's Elevator Works, Boston.....i  
Cooke & Begg, Boston.....i  
Otis Brothers & Co.....i  
**ENGINEER (SANITARY).**  
Gen. E. Waring, Jr., Newport, R. I.....ii  
E. S. Philbrick, Boston.....ii  
**FIRE-PROOF BUILDINGS.**  
Fire-Proof Building Co., New York.....i  
**FREESTONE.**  
Dorchester Union Freestone Co., New York vi  
R. Hollings & Co., Boston.....i  
Mitchell, Vance & Co., New York.....i  
**GAS MACHINES.**  
Denny Bros. & Co., New York.....iii  
Springfield Gas Machine, Springfield, Mass., v  
Walworth Manufacturing Co., Boston, i and v  
**GRANITE.**  
The New England Granite Works.....i  
The Mitchell Granite Works, Quincy.....i  
**GRATES, ETC.**  
W. H. Jackson & Co., New York.....xii  
C. S. Bankin & Co., Cincinnati, O.....xi

**HARDWARE.**  
Burdett & Williams, Boston.....xi  
**HEATING APPARATUS.**  
Crane, Reed, & Co., Cincinnati, O.....vi  
Gold's Heater Manufacturing Co., New York.....vi  
Gillis & Geesegan, New York.....ii  
Walworth Manufacturing Co.....ii  
Wyllye H. Warner, New York and Syracuse.....iii  
B. C. Hibb & Son, Baltimore.....iii  
Open Stove Ventilating Co., New York.....vi  
**HELIOTYPE.**  
The Heliotype Printing Co., Boston.....x  
**HOISTING MACHINES.**  
H. J. Reedy, Cincinnati.....vi  
**ICEBERG FISHING WOOD.**  
Palmer, Parker & Co., Boston.....xi  
**IRON WORK FOR BUILDINGS.**  
Etna Iron Co.....xi  
George Dwight, Jr., & Co.....xi  
Bartlett, Robbins & Co., Baltimore, Md.....xi  
Poulson & Eger, Brooklyn, N. Y.....ii  
**IRON WINDOW SASHES.**  
D. M. Meeker & Son, Newark, N. J.....vi  
**LEADED SHEETS.**  
Marshall Bros. & Co.....x  
**LOCKS AND BRONZE HARDWARE.**  
Hopkins & Dickinson Manufacturing Co., New York.....xii  
Yale Lock Manufacturing Co., Stamford, Ct.....xii  
**MARBLE.**  
Sawdell Manufacturing Co., Boston.....ii  
Stewart's, Boston.....xii  
C. S. Bankin & Co., Cincinnati, O.....ii  
Joseph S. Miller, Philadelphia.....ii  
**MARBLE.**  
Rutland Marble Co.....ii  
**MARBLE WORKERS.**  
S. Kisher & Co., New York.....vi  
A. L. Fauchère & Co.....x  
Fisher & Bird.....x  
Hugh Sisson & Son, Baltimore.....ii  
**MARQUETRY FLOORS (PARKER).**  
C. Butcher, Boston.....vi  
**PAINT.**  
Ashbel Wheeler, Boston.....xi  
C. M. Wheeler, and J. M. Root, Toledo, O.....ii  
**PAPER HANGINGS.**  
H. B. Jones & Co., Boston.....ii  
**PAPER MACHINES, DECORATIONS.**  
Dolivet, Cutter & Co.....xii  
**PATENT MINERAL WOOL.**  
A. D. Edwards, New York.....ix  
**PATENT TRANSPARENT LATH.**  
J. P. Wollensak.....xi  
**PIPE (LAP WELDED).**  
National Tube Works Co.....vi  
**PLASTERER.**  
John Mack, Boston.....ii  
**PLUMBERS.**  
Hewthorne & Tucker, Boston.....i  
**PLUMBERS' SUPPLIES.**  
Jennings' Sanitary Depot, New York.....xii  
**ROLLING MASTIFF BLINDS.**  
Wilson & James, New York.....xii  
**ROOFS.**  
Phenixville Bridge Works.....ii  
John Faughn's Sons.....vi  
A. Knisely & Co., Chicago.....iii  
**ROOFING FELT.**  
N. E. Felt Roofing Co., Boston.....xi  
Asphalt and other (Felt), Warren Chemical and Man'g Co., Boston and New York.....i  
**SCAGLIOLA AND MARAZZO MARBLE.**  
James T. Allen & Co., Philadelphia.....ix  
**SEWER GAS TRAP.**  
B. P. Bower & Co., Cleveland, O.....xii  
S. Buhner, Cleveland, O.....vi  
Brands & Wickert, Brooklyn, N. Y.....vi  
**SEWER PIPE.**  
Fiske & Coleman.....vi  
**SHINGLES (METALLIC).**  
Iron clad Mfg. Co., Brooklyn, N. Y.....ix  
**SHUTTERS (STEEL).**  
Clark & Co., New York.....xii  
Wilson & James, New York.....xii  
**SIXES.**  
Burnall Manufacturing Co.....xi  
Macee Furnace Co., Boston.....vi  
J. M. Carson, Louisville.....xi  
**SKYLIGHTS.**  
Ricklehous Bros., New York.....xi  
G. Hayes, New York.....xi  
E. Van Norderen, Boston.....xi  
**STAINED GLASS.**  
Kelley & Holland.....ii  
W. J. McPherson, Boston.....ii  
Samuel West, Boston.....ii  
Cook, Redding & Co., Boston.....ii  
**STEAM PUMP, KNOWLES PATENT.**  
Knowles Steam Pump Works.....xi  
**STEEL RIBBON SASH LINE.**  
McCoy & Co., New York.....x

**STEEL RIBBON SASH LINE, HOOKHAM'S PATENT**  
No. 1 for Sashes up to 40 lbs  
No. 2 for Sashes up to 700 lbs  
No. 3 for Sashes up to 2 cwt  
No. 4 for Sashes up to 2 cwt

**DIRECTIONS FOR FIXING.**  
To fix the Sash, pass the line through the Sash, in the middle, then in the loop of the line, round one of the Wooden Pulleys, and the loop tightly together with Copper Wire across the pulley from the Sashes, securing it firmly in the loop, to which an inch from the end of the line, then bend the free end back over the pulley, the pulley already being, and bend securely over of the line, knot in shown at A. The same knot is to be used for attaching the Line to the Sash frame.

**ADVANTAGES.**  
This Line, which is formed of several bands of wash-spring steel covered with a coating of copper wire, and on prepared as to resist corrosion, supplies a vast long run material for hanging safely all kinds of, but more especially heavy, Sashes.  
It can be used with the ordinary Pulleys, and fixed in the ordinary way.  
It is very neat in appearance, perfectly flexible, almost frictionless, does not stretch, and being practically indestructible, is in the end  
**Much Cheaper than the ordinary Lines and Chains.**

Send for samples and list of places where it is in use five years, with other particulars.  
**McCOY & CO., Sole Agents,**  
134 AND 136 DUANE STREET,  
NEW YORK.

**STONE (BUILDING.)**  
Nicholl & Miller.....i  
Worthington & Sons, No. Amherst, O.....i  
Wilson & Hughes Stone Co., Cleveland, O.....i  
Rochester Free-Stone Co.....i  
**TELEGRAPH CO. (AUTOMATIC SIGNALS).....xi**  
**THEATRICAL SCENERY.**  
Lafayette W. Scavay, New York.....xii  
**TILES.**  
John Chadwick.....i  
Miller & Conter, New York.....i  
American Encaustic Tiling Co., New York.....ix  
**T. Aspinwall, New York.....i**  
Waldo Brothers, Boston.....ii  
C. A. Wellington, Boston.....ii  
Sharpless & Watts, Philadelphia.....i  
**VENTILATION.**  
Eureka Ventilation Co., Boston.....ii  
WELLINGTON'S PATENT WASH BOWL.....ii  
J. S. Moore & Co., Boston.....ii  
**WINDOW LOCKS.**  
F. J. Hoyt, New York.....iii  
Wood Carrying.....ii  
National Wood Manufacturing Co.....ii

# ETNA IRON CO.

Manufacturers of every description of Wrought and Cast

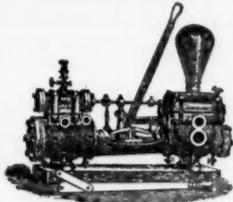
## ARCHITECTURAL IRON WORK FOR BUILDINGS.

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

### KNOWLES

Patent



Steam

### PUMP

### THE STANDARD.

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

KNOWLES STEAM PUMP WORKS, WARREN, MASS.

WAREHOUSES: { 14 & 16 Federal St., } Boston.  
{ 113 & 115 Congress St., }  
{ 92 & 94 Liberty St., } New York.

Send for Illustrated Catalogue.

### THE

## Plumber & Sanitary Engineer,

A Monthly Journal devoted to

### WATER SUPPLY, DRAINAGE, HEATING & LIGHTING.

It contains no paid puff.

Its technical articles are written by experts.

It is a manual of the best practice in Plumbing.

It illustrates the latest improvements in House Drainage.

It is indispensable to every Architect and Builder.

Terms, \$1.50 a year. Single Copies, 15 cents.

Address

AM. PLUMBER PUBLISHING CO.

Box 3087 P. O. 297 Pearl St., New York.

### "ZODTCHY" (BUILDER).

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

M. JEROME KÜTTNER,

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from EIGHT to SIXTEEN pages of letterpress, gr. quarto, with cuts, and at least FIVE autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.

The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address.

JOURNAL "ZODTCHY,"

18 OFFICER STREET, ST. PETERSBURG, RUSSIA.



### Carson's Kitchen Sink

Is an improvement in this fixture that must meet with the approval of every house-keeper as it retains every particle of grease, and prevents the waste of pipes from filling up; besides being better trapped than any other sink in use.

Signal Mfg. Co., Medina, N. Y., or J. M. Carson, Louisville, Ky. Man'rs.

### NATIONAL

## FINE ART FOUNDRY,

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze. TO ARCHITECTS AND BUILDERS.

## MAHOGANY, FIGURED WALNUTS,

(all thicknesses) for Doors and Interior Finish.

(1-4 inch thick), for Doors, etc.

### VENEERS,

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

### GEO. DWIGHT, JR., & CO.,

Builders in Iron, and Engineers in Fire-Proof Construction,

SPRINGFIELD, MASS.

HAVE for many years given their exclusive attention to FIRE-PROOF CONSTRUCTION; and they now invite the correspondence of Architects to the following specialities which hereafter will constitute the leading items of their business: FIRE-PROOF FLOORS. The only floors that have stood fire in this country.

FIRE-PROOF ROOFS. Refer to Equitable Life Insurance Company's Building at Boston.

FIRE-PROOF SHUTTERS. Have stood many fires in all parts of the country. Over 6000 pairs put up in Boston after the fire. Saved the city of Springfield last year.

FIRE-PROOF LATH. In the words of one of the best-known architects of this country, "Minimum of metal, maximum of stiffness, maximum of clinch; the best lath ever made, either wood or iron." See New York Post-Office, State Department, Washington; Equitable Life Insurance Company's Buildings, and many others.

Mr. HOYT will be pleased to wait upon Architects, when desired, to explain our methods, and to present for inspection construction plans and estimates for any specific work.

## BURDITT & WILLIAMS,

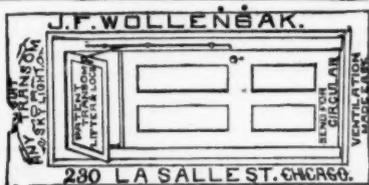
DEALERS IN

## FINE HARDWARE

of every material. A specially complete stock of PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



### CATALOGUE OF Architectural Books

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices. A. J. BICKNELL & CO., ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.

BICKELHOPT BROS., 329 West 37th St., New York.

NO Leak.



NO Entry.

### PATENT METALLIC SKY-LIGHTS.

## BEEHIVE BRAND. FELT ROOFING.

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

ASAHEL WHEELER'S PAINT PRESERVER Is the most remarkable Wood and Paint Protector known against the hot sun's rays and storms. A trial of more than three years' constant exposure has demonstrated this fact. A perfect glossy surface yet remains without signs of perishing. ASAHEL WHEELER, 145 Milk St., Boston



### BALTIMORE PRESSED TILES, FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases, DRAIN AND SEWER PIPE, FIRE-BRICK, LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

WALDO BROTHERS, No. 94 WATER STREET, BOSTON.

## PEERLESS BRICKS.

### THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK

ARCHITECTURAL SHAPES (80 kinds).

ALSO

RED Pressed Fronts.

Extra fine in color and quality

BROWN, Colored throughout More beautiful than Brown Stone DURABLE

CHOCOLATE,

Same as above; difference in color

FLESH COLOR,

A very popular color.

BUFF, very fine.

Harmonizes beautifully with Brown or Black

GRAY, A pleasing shade.

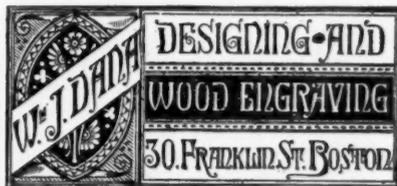
BLACK, Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F. ADAMS, JOSEPH WOOD, JR., PRESIDENT. TREASURER



DOLIVET, CUTTER, & CO.,

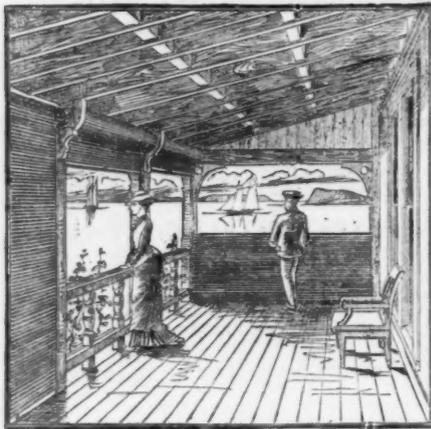
ARTISTIC

## Papier Maché Decorations,

106 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING VENETIAN BLINDS.**  
**WILSON'S PATENT.**

These blinds can be fitted to any kind of window or piazza. They require no winding machinery or balance weights, and run up and down as easily as an ordinary spring shade. For Bay Windows they are found invaluable. They are simple, durable, and handsomely finished. They were exhibited at Philadelphia in competition with the Rolling Venetian Shutters of English manufacture, and received the only award of Medal and Diploma.

Price reduced to 30 cents per foot super, in hard wood. We also manufacture Wilson's patent Rolling **STEEL SHUTTERS**, the best and cheapest fire and burglar-proof shutters in the market.  
**WILSON & JAMES,**  
68 Beekman St., NEW YORK.

**PRIZE MEDALLISTS.**  
1862; 1865; 1867; 1872; 1873; AND ONLY AWARD AND MEDAL FOR SELF-COILING STEEL SHUTTERS AT CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**  
ORIGINAL INVENTORS AND SOLE PATENTEES OF  
**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

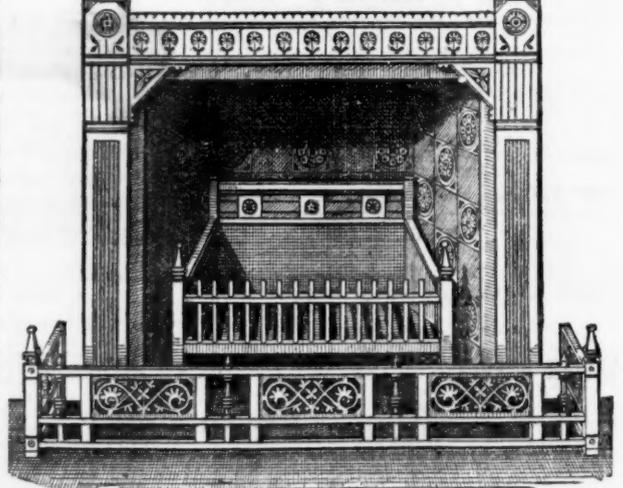
Fire and Burglar Proof. Also, improved Rolling Wood Shutters OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable & Co., and Park & Tilford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.  
OFFICE AND MANUFACTORY.  
162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**  
76 READE STREET, NEW YORK,  
WORKS, DARLINGTON, N. J.

*Lock and Hardware Manufacturers,*  
DESIGNERS, FOUNDERS, AND WORKERS  
IN  
**BRONZE AND BRASS.**

*Architects' Designs faithfully executed.*  
Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**  
(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)  
Union Sq., 2d door from Broadway, (17th St. side,) NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile.  
HAVE NO OTHER WAREROOMS.

**VALUABLE ART PUBLICATIONS.**

**ALLONGE'S** (Auguste) Charcoal Drawing. With an Introduction by C. C. PERKINS, and a Heliotype Frontispiece. Small 4to. \$1.00.  
**BAKER'S** (W. E.) Origin and Antiquity of Engraving, with 23 Heliotype Illustrations from Dürer, Van Dyck, Raphael, Guido, etc. 8vo. \$5.00.  
**HUNT'S** (William M.) Talks on Art. 8vo. Paper. \$1.  
**CLEMENT'S** (Clara Erskine) A Handbook of Legendary and Mythological Art Profusely Illustrated, and with a complete Index. Cr. 8vo. Cloth, red edges, \$3.25. Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.  
**MURRAY'S** (Mrs. Elisabeth) The Modern System of Painting in Water-Colors from the living model. 12mo, paper, 50 cents.  
**HOUGHTON, OSGOOD AND COMPANY,** Boston.

**A NOVELTY.**  
**THE YALE PATENT**  
**ANTI-FRICTION ROLLER STRIKE.**

Applicable for use with all Mortise Locks, old and new.  
IT ENABLES THE DOOR TO BE SHUT WITHOUT SLAMMING.  
IT PREVENTS ALL JAR AND NOISE.  
IT SAVES WEAR OF THE LOCK AND DOOR.  
IT CAN BE EASILY APPLIED.  
ITS COST IS BUT TRIFLING.  
Architects can obtain a sample strike free by addressing  
**YALE LOCK MANUFACTURING CO., STAMFORD, CONN.**  
New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,  
94 BEEKMAN STREET,  
NEW YORK.



**SPECIALTIES**  
IN  
**PLUMBING**  
**GOODS.**

Having for their especial object  
**Cleanliness,**  
**Durability,**  
And the exclusion of Sewer Gas.

**JENNINGS' NEW CLOSET,**  
WITH  
New Valve



With non-corrosive Valve Seating and Solid Plunger.

**BOWER'S PATENT**  
**SEWER-GAS TRAP.**



Patented in U. S. Apr. 24 & Aug. 14, 1877.  
The most **PERFECT BARRIER** against **SEWER GAS** that has yet been invented.

The only trap that has been **FULLY** INDORSED by the **LEADING SANITARIANS** throughout the **WORLD.**

**IT IS A POSITIVE SEAL**

Against sewer-gas under pressure, absorbed gases, and back water.

Seal is not broken by siphonage or evaporation.

**Self-Scouring,** not injured by freezing.

It has many other good points that

It can be readily attached to old work, in a very short time, and at very little expense.

**SIMPLE, CHEAP, DURABLE, AND EFFECTIVE.**

A sample Trap FREE to Architects on application. Send for full descriptive Circulars to the Manufacturers,

**B. P. BOWER & CO.**  
104 & 106 St. Clair St., Cleveland, O.

**STEWART'S HARD WOOD**  
**SLATE, MARBLE AND MANTELS,**  
**MIRRORS, ART-TILES, HEARTHS & C.**  
FOR MANTELS, HEARTHS & C.  
Masonic Temple 23rd St & 6th Ave N.Y.



Sewer Pipe, Fire Brick, Terra Cotta, Chimney Tops, Garden Vases, Art Pottery for Decoration. The strongest and smoothest pipe in the country. Send for lists and Catalogue. Prices as low as any other manufacturer.  
**Portland Stone Ware Co.**  
Geo. C. DEWEY, Gen'l Ag't,  
60 Killy Street, Boston.

**LIMMER ROCK ASPHALT CO.**  
111 Broadway, Room 105, New York.

Rock Asphalt is a natural product, and the ideal material for Paving Roadways, Streets, Yards, and Stables, and for Flooring Cellars in Breweries and other establishments.



**SAYLOR'S PORTLAND CEMENT.**

Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R., U. S. Government Works (Forts and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally. For Sale by all dealers in Building Materials. **Johnson & Wilson, Gen'l Agts.**  
Send for circular. 93 Liberty Street, New York.

**Automatic Signal Telegraph Co.,**  
CITY OF BOSTON,

OFFICE, 178 DEVONSHIRE STREET, ROOM 20,  
Is prepared to make contracts for the protection of buildings against fire.

**DIRECTORS.**  
CHARLES E. GUILD, President. WILLIAM ENDICOTT, Jun  
JOHN D. W. JOY. WILLIAM B. WATKINS.  
PATRICK T. JACKSON, Treasurer.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

Theatrical Fresco only. Prices moderate. References first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.  
**LAFAYETTE W. SEAVEY,**  
Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK.

**THE WELLINGTON**  
**PATENT OVERFLOW BASIN.**

No sewer gas. No overflow. No leakage around the top of the basin. This thoroughly reliable basin is rapidly taking the place of the ordinary one.

It gives perfect satisfaction in every instance.  
Manufactured by  
**L. S. MOORE & CO.,**

Send for Circulars. 40 Oliver St., Boston.



# AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 137.] SATURDAY, AUGUST 10, 1878. [PRICE 15 CENTS

### BUILDERS' SUPPLIES.

**AMERICAN ENCAUSTIC TILE,**  
Acknowledged by experts to be  
**THE BEST IN THE WORLD.**  
Manufactured by the  
**AMERICAN ENCAUSTIC TILING CO.**  
OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.  
Designs and estimates for Public Buildings, Halls, Churches, Vestibules, and for External Decoration, furnished on application.

**WALWORTH MANUFACTURING CO.,**  
69 KILBY ST., BOSTON.  
**PUBLIC BUILDINGS,**  
**PRIVATE RESIDENCES,**  
**GREENHOUSES, ETC.,**  
Warmed and ventilated by  
**STEAM OR HOT WATER.**  
Correspondence solicited. Plans and estimates furnished on application.

**"HOTCHKISS" TOWER CLOCKS,**  
MANUFACTURED BY  
**SETH THOMAS CLOCK CO., THOMASTON, CONN.**  
Prices \$100 to \$6,000.  
WARRANTED ACCURATE, STRONG, DURABLE.  
OFFICE, 581 BROADWAY, NEW YORK.  
Send for Illustrated Catalogue.

**"MINTON'S ART AND ENAMELLED TILES."**  
(China Works, Stoke-Upen Trent.) Also, The Campbell Brick and Tile Co.'s  
**ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS, ETC.**  
For Churches, Banks, Halls, Vestibules, and Hearths; Outside Decorations, Flower Boxes, Etc.  
**THOS. ASPINWALL & SON,**  
604 Broadway, NEW YORK.  
The only representatives in the United States for the above firms.

**ASPHALT (FELT) ROOFING.**  
**WARREN'S NEW PATENT FELT AND GRAVEL ROOFING,**  
Substitutes NATIVE ASPHALT for Coal-Tar materials for these roofs.  
The very best and most durable material for flat roofs. Also, Native Asphalt and Asphaltic Cement for Concrete Works and Pavements.  
Roofers and pavers supplied with the above, and with Warren's original Coal Tar Roofing and Paving Materials.  
Send for circulars and samples.  
**WARREN CHEMICAL AND MANUFACTURING CO.,**  
25 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**THE MITCHELL GRANITE WORKS,**  
QUINCY, MASS.,  
Has abundant facilities for furnishing the very best work, and all the most celebrated Granites of the New England States, for  
**MONUMENTAL, CEMETERY, AND BUILDING PURPOSES,**  
WORK PROMPTLY DONE, AND AT REASONABLE RATES.  
Polishing a specialty. Orders solicited.  
Address G. H. MITCHELL, Agent.

**TILES FROM ALL PARTS OF THE WORLD,**  
FOR  
**BANKS, PUBLIC BUILDINGS, AND PRIVATE HOUSES.**  
References given to Tile Work throughout the United States and British Provinces.  
AGENT FOR THE AMERICAN ROOFING TILE  
Contracts Solicited  
**C. A. WELLINGTON, HOUSEHOLD ART ROOMS,**  
No. 171 Tremont Street, Boston.

**E. HOWARD & CO.**  
MANUFACTURERS OF CLOCKS AND WATCHES  
**CLOCKS FOR PUBLIC BUILDINGS**  
114 Tremont Street, Boston, and 692 Broadway, New York

**GOLD'S WROUGHT IRON HEATERS.**  
THE "HEALTH" AND "TUBULAR"  
Manufactured by the  
**GOLD'S HEATER MANUFACTURING CO.**  
114 LEONARD ST., NEW YORK.  
Send for Pamphlet.  
E. E. GOLD, Pres. WYLLYS H. WARNER, Treas.

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING CO. OF NEW YORK.** Hollow Blocks of any pattern, uniting strength, and resistance to fire and water. The Hydraulic Lime of Teil (France), one of the strongest cements known, is largely used in this manufacture. The blocks do not conduct heat, cold, or sound, and weigh sixty per cent less than brick.  
Fire-proof partitions, floor arches between iron beams, ceilings under wooden or iron beams, in the following buildings:—  
Western Union Telegraph, Orient & Queens Insurance, Del. and Hudson Canal Co., Museum of Natural History, Equitable, Staats-Zeitung, Hudson R. R. Fr'ght Depot, Winsburgh Savings Bank, Cluny & Young's Hotels, Bow-Windsor Westm'n'r Hotel, ton, New York Hospital, Drexel, Syracuse Savings Bank, West Point Military Hospital, Columbia College, Tribune, West Point Military Hospital, Baltimore Safe Deposit Co., Lenox Library, Bennett, Peabody Museum, New Westmoreland Flats, Haven, Peabody Institute, Baltimore.  
Insurance on Wooden Mansards reduced ninety cents per \$100. Sidewalks laid at Lenox Library, Tribune, etc. Hollow Bricks of all kinds. Our Fire-Proof work is the only one approved by the New York Board of Fire Underwriters, and the Superintendent of Buildings, after severe public tests.  
LEONARD F. BECKWITH, President, Office, Room 64 Coal and Iron Exchange, New York.

**MINTON'S TILES.**  
**PLAIN AND ENCAUSTIC FOR PUBLIC BUILDINGS AND DWELLINGS,**  
As laid by us in  
**THE CAPITOL AT WASHINGTON,**  
And in numerous Churches, Banks, and Dwellings in every part of the Country,  
Glazed and Enamelled Tiles for Mantels, Hearths, Wainscoting, &c., and for Exterior Decoration.  
**MILLER & COATES,**  
79 PEARL STREET NEW YORK.

**BARTLETT, ROBBINS & CO.**  
**HEATING AND VENTILATING OF PUBLIC AND PRIVATE BUILDINGS**  
A SPECIALTY  
PLANS AND SPECIFICATIONS FURNISHED.  
FOUNDERS, AND MANUFACTURERS OF GAS WORKS, ETC., ETC.  
24 LIGHT STREET, BALTIMORE.

**ELEVATORS. — COOKE & BEGGS.**  
No. 6 COURTLAND ST., NEW YORK.  
Works at Paterson, N.J.  
**PATENT SAFETY STEAM ELEVATORS**  
for Public and Bank Buildings, Hotels, Private Dwellings, etc.  
**SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP GUARANTEED.**  
Send for Circular.

**THE NEW ENGLAND GRANITE WORKS,**  
HARTFORD, CONN., and 1271 BROADWAY, N.Y.  
Quarries at Westerly, R.I.  
**MONUMENTAL AND BUILDING WORK**  
of every description, in all the varieties of AMERICAN AND FOREIGN GRANITE.  
UNRIVALLED FACILITIES OFFERED TO THE TRADE.  
J. G. BATTERSON, Pres't. H. B. BATTERSON, Sec'y.  
DIRECTORS, C. B. CARFIELD, H. A. BATTERSON, G. T. BATTERSON, CARL CONRADS, Sculptor.

**WHITTIER MACHINE CO.**  
Manufacturers of Steam and Hydraulic  
**ELEVATORS,**  
**STEAM ENGINES, BOILERS, AND MACHINERY.**  
No. 117 1/2 Tremont Street, Boston.  
Office in the New England Mutual Life Insurance Co's Building, Post Office Square, and 120 Broadway, New York  
**CHARLES WHITTIER, Pres. A. C. WHITTIER, Treas.**

**OTIS BROTHERS & CO.**  
**SAFETY STEAM AND HYDRAULIC ELEVATORS.**  
A specialty for a quarter of a century.  
**BUILDERS OF THE HALE HYDRAULIC ELEVATOR.**  
No. 348 Broadway, New York.

**HAWTHORNE & TUCKER,**  
PLUMBERS,  
16 PROVINCE STREET, BOSTON  
Estimates for Plumbing made, and work done in any part of the United States or Provinces.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
**OHIO BUILDING STONE.**  
GRIND AND SCYTH STONE,  
From our FLORENCE and AMHERST QUARRIES.  
Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS  
111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
Designers and Manufacturers of  
**GAS FIXTURES,**  
**ORNAMENTAL METAL WORK, CLOCKS AND BONGERS**  
**ARCHITECTS' ORDERS SOLICITED.**  
Special designs submitted on application.  
WAREHOUSES, 236 AND 238 BROADWAY, NEW YORK.  
MANUFACTORY, 24th AND 25th Sts., AND 10th AVENUE, N. Y.

**FISHER & BIRD,**  
Workers in all kinds of Foreign and Domestic  
**MARBLES,**  
97 to 103 EAST HOUSTON ST., NEW YORK.  
Established 1830.  
Among our notable decorations are: The Illinois new State House; Palace Hotel, San Francisco; Baldwin's Hotel, San Francisco; Insurance Building, 10th and Chestnut Streets, Philadelphia; Mutual Life Insurance Building Boston; Orient Mutual Insurance Building, New York; Union College, Schenectady; and numerous Churches, Private Residences, etc., etc., throughout the country. We solicit the opportunity to estimate upon all classes of work, viz., Tiling, Wainscoting, Staircases, Mantels, etc. Cemetery work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
Are ready to estimate on contracts of any size for furnishing their celebrated Amherst, Ohio, BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS OR CUT AND SET.  
Also,  
AMHERST AND INDEPENDENCE GRINDSTONES, AND OHIO MINERAL AND STONE PAINTS  
Fire-Proof Stove Cement and Stove Putty ground in Oil  
OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MOSAICS"**  
Floor Tiles, beautiful in color and design, for Dwellings, Churches, and Public Buildings.  
**SPANISH WALL TILES.** White, Glazed, Valencia, Tiles for Walls and for decorative painting.  
**PRINTED FIGURED TILES** of Spanish designs, for Wainscoting, Mantels, Jardinières, etc.  
Floors of "Nolla Mosaics" can be seen at the "Rockingham," corner of Broadway and 56th Street. Imported and for sale by **JOHN CHADWICK, Sole Ag't for U. S.**  
49 Broadway, N. Y.  
C. E. PARKER, Agent, 14 Exchange Place, Boston.

**TUFTS' ELEVATOR WORKS,**  
MANUFACTURERS OF "TUFTS' PATENT" COMBINATION ROPE ELEVATOR.  
TO BE OPERATED EITHER BY STEAM OR WATER.  
The only safe and reliable machine made for passenger use in Public Buildings and Hotels, and for business purposes in Warehouses, Stores, &c.  
37 FOUNDRY STREET, SOUTH BOSTON.  
Office, 243 Broadway, New York.  
**OTIS TUFTS,** L. A. BIGELOW, President. Treas'r and Gen'l Manager.

**STEAM WARMING APPARATUS.**  
**HIGH AND LOW PRESSURE.**  
**HOUSE WARMING A SPECIALTY.**  
Pamphlet with more than 1,000 references sent on application.  
**WYLLYS H. WARNER,**  
114 LEONARD STREET, NEW YORK,  
and 33 West Railroad Street, Syracuse.

**OHIO VALLEY PRESS BRICK CO.**  
Challenge the world for fine stock brick; also manufacturers of all kinds of Bricks, octagon and square. Office 24 St. Yard Preston and Knapp Sts. LOUISVILLE, KY.

**GAS FIXTURES**  
OF EVERY DESCRIPTION.  
SPECIAL RATES TO BUILDERS.  
**B. HOLLINGS & CO.,** 541 Washington St., BOSTON

**BUILDERS' SUPPLIES.**

**HUGH SISSON & SON,**  
Importers, Dealers, and Manufacturers of  
**MARBLE.**  
INTERIOR MARBLE WORK AND MONUMENTAL  
WORK A SPECIALTY.  
Salesrooms, No. 140 W. Baltimore St.; Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,**  
SPEAKING TUBES,  
AND BURGLAR ALARMS,  
For Public and Private Buildings.  
THE BEST IN USE.  
S. W. FULLER,  
63 Devonshire Street, Boston.

**TOWER CLOCKS.**  
FOR CHURCHES,  
PUBLIC AND PRIVATE BUILDINGS,  
G. M. STEVENS & CO., MANUFACTURERS,  
90 SUDBURY ST., BOSTON, MASS.

**ART PAINTED TILES**  
FOR MANTELS, CABINETS, ETC.  
SHARPLESS & WATTS,  
325 MARKET STREET, PHILADELPHIA.  
Agents for  
MINTON'S TILES,  
AND TRESSELLATED PAVEMENTS.

**JOHN MACK,** Plain and Ornamental Plasterer,  
41 Cambridge Street, Boston.

**J. H. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue, Mattapan (Ward 24), Boston.

**THE EUREKA VENTILATION CO.,**  
OFFICE AND MANUFACTORY,  
74 CHARLESTOWN STREET,  
BOSTON, MASS.

**PRESSED BRICK,**  
STOCK AND COMMON  
MANUFACTURED BY  
**FLETCHER & THOMAS,**  
Indianapolis, Ind.  
All brick warranted. Send for price list and samples.

**STEAM HEATING**  
BY  
**GILLIS & GEOGHEGAN,**  
Nos. 116 & 118 Wooster St., New York.  
See our work at the Cathedral, 50th St. and 5th Av.;  
Drexel Building, cor Wall and Broad; Bennett Building,  
Fulton and Nassau, etc.  
Architects and owners promptly furnished with speci-  
fications and estimates.

**ARCHITECTS.**

**P. B. WIGHT,**  
CONSULTING ARCHITECT,  
73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.  
Consultations on matters pertaining to Fire-Proof Con-  
struction, Foundations, Drainage, Sanitary Work, Ventila-  
tion, Machinery, Valuations, Interior Decorations, and  
Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**  
ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E.,** ARCHITECT  
AND SANITARY ENGINEER,  
KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes  
of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,**  
ARCHITECT,  
Room 17, Life Insurance Building,  
ST. LOUIS, MO.  
Special attention to Churches, Schools, and other  
public buildings.

WALTER DICKSON, ARCHITECT, PERRY BUILDING,  
Albany, N. Y.

**GEO. E. WARING, JR.,**  
CONSULTING ENGINEER,  
FOR SANITARY AND AGRICULTURAL WORKS,  
NEWPORT, R.I.

**SANITARY ENGINEERING.**  
EDWARD S. PHILBRICK, C. E.,  
12 WEST ST., BOSTON, MASS.,  
Offers advice and superintendence in  
CONSTRUCTION OF WORKS,  
IN PLUMBING, DRAINAGE, AND VENTILATION,  
And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
387 HARRISON AVENUE . . . . . BOSTON,  
SHEET METAL CORNICES, HAYES'S PAT-  
ENT VENTILATING SKY-LIGHTS,  
WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

**MANTELS AND GRATES.**  
RANKIN'S PATENT makes the Cleanest, Cheap-  
est, and Hottest Fire. Avoid infringements, and send for  
Circular to  
**C. S. RANKIN & CO.,**  
**ARCHITECTURAL IRON WORKS,**  
Manufacturers of all kinds of Iron Work for  
BUILDINGS, JAILS, ETC.  
187 W. PEARL ST., CINCINNATI, O.

**EXCELSIOR**  
**ROOF PAINT.**  
This paint has been thoroughly tested throughout the  
Eastern States, and has been found to be a perfect tin or  
metallic preserver. We warrant it neither to crack nor  
bilister by **HEAT or COLD,** and to last  
**IN ANY CLIMATE TEN YEARS.**  
Those desiring to use this valuable preparation upon  
their buildings, can secure the same by addressing  
C. M. WHEELER, J. M. ROOT,  
Toledo, Ohio.

**ARCHITECTURAL IRON AND JAIL WORKS.**  
**M. CLEMENTS,**  
MANUFACTURER OF  
Iron Railing, Bank Vaults, and Jail Cells,  
Iron Stairs, Fire-proof Buildings, Wrought Iron Columns  
and Girders; Iron Arches, Plain and Corrugated;  
Fire-proof Shutters, Doors, etc.  
BAYMILLER STREET, near Sixth and C. H. & D. R. R.  
Depot, CINCINNATI, OHIO.

**DECORATORS.**

**W. J. MCPHERSON,**  
(Established A.D. 1845.)  
**MURAL PAINTER,**  
**DESIGNER,**  
**Ecclesiastical Decorator,**  
AND  
**ART STAINED GLASS MANUFACTURER,**  
440 TREMONT STREET,  
BOSTON, MASS.

(Established 1848.)  
**L. HABERSTROH & SON,**  
FRESCO PAINTERS,  
and INTERIOR DECORATORS,  
No. 12 SCHOOL STREET, BOSTON.

**FRANK HILL SMITH,**  
1717 TREMONT STREET,  
BOSTON . . . . . MASS.

**PHILIP A. BUTLER,**  
DECORATOR AND DESIGNER,  
No. 17 FENBROTON SQUARE,  
BOSTON.

**COOK, REDDING & CO.**  
149 CONGRESS ST., BOSTON,  
**Ornamental, Stained, and Cut Glass,**  
FOR  
**Churches, Public Buildings, and**  
**Private Residences.**

**HENRY B. JONES & CO.**  
IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS.  
612 WASHINGTON STREET, BOSTON.

**STAINED GLASS.**  
Thirty years' experience in Stained Glass enables the  
subscriber to produce Modern and Medieval styles of work  
equal to any European examples, for Churches, Pri-  
vate Residences, Halls, etc.  
The value of the work is attained by a careful selection  
of colors in Cathedral and French Glass of his own impor-  
tation.  
Designs in accord with architects' plans furnished at  
short notice. Reference of work at office  
**SAMUEL WEST, 115 Elliot St., Boston.**

**DECORATORS.**

**JOHN LAFARGE,**  
**MURAL DECORATION,**  
51 W. Tenth St., New York, and Newport, R. I.

**SOCIETY OF DECORATIVE ART.**  
4 East 20th Street,  
NEW YORK.

Architects' designs for panels, tiles and plaques for inser-  
tion in Cabinet Work, and other decorative uses, and for  
Art Needlework applied to curtains, hangings, portieres,  
screens, table-covers, etc., carefully executed. Original  
designs for any of the above, subject to approval, will be  
gladly received, and paid for by the Society when used.  
Orders are earnestly solicited.  
The Society has arranged with Mr. RUSSELL STURGIS,  
Architect, for the Exhibition and Sale of his well-known  
Wall Papers. Some of these are faithful reproductions of  
Japanese decorative papers; some are taken from Oriental  
and other stuffs; some are of original design. New pat-  
terns will be added from time to time.

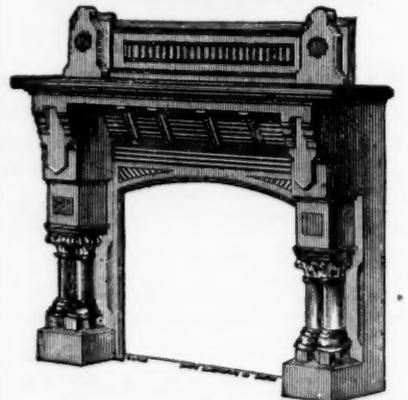
**Fresco Decoration.**  
**EMMART & QUARTLEY,**  
Designers, Decorators, and Painters,  
32 PARK AVENUE, BALTIMORE, MD.  
Designs for Halls, Churches, Theatres, and Private Mansions made  
and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate  
work on hand or made to order. No. 1210 Ridge Avenue.  
JOSEPH S. MILLER, successor to Wilson & Miller, Philadel-  
phia, Pa. Send for Illustrated Price-List

**Donald MacDonald,**  
**GLASS STAINER AND DECORATOR**  
No. 6 Hayward Place,  
BOSTON.

**MANTELS.**



IN WALNUT, OAK, ASH, OR OTHER WOODS.  
On hand, made to order, shipped to and set up  
IN ANY PART OF THE COUNTRY.

**CALDWELL MANUFACTURING CO.,**  
17 HARVARD PLACE,  
OPPOSITE OLD SOUTH CHURCH,  
BOSTON, MASS.  
Send for Circular.



**INLAID WOOD FLOORS.**  
**ORNAMENTAL WOOD BORDERS.**  
Designs and Estimates free.  
National Wood Manuf'g Co.,  
950 Broadway, near 23d St., New York

LABOR MARKET.

[REPORTED EXPRESSLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa (Can.)	Philadelphia.	San Francisco	St. Louis.
1. BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.50	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2. Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	1.25 @ 1.75		3.50 @ 4.50	3.00	1.75 @ 2.25	2.50 @ 3.00		3.00
3. CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		1.50 @ 2.00
4. Cabinet Maker	2.50 @ 3.25						1.50 @ 2.00			
5. Finisher	2.00 @ 2.50		1.75 @ 2.00		1.50 @ 2.00		1.25 @ 1.75			1.50 @ 2.00
6. FOUNDRYMAN			1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75		1.00 @ 1.50			2.25 @ 2.50
7. Blacksmith	1.50 @ 3.00	1.50 @ 2.75		1.50 @ 2.50			1.25 @ 2.00			1.50 @ 2.50
8. Whitesmith				1.50 @ 2.50			1.25 @ 1.75			
9. Galvanized Iron Worker	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	2.25	1.50 @ 2.00			
10. GAS FITTER	2.00 @ 2.50	2.00 @ 3.00		2.50 @ 3.00	1.75 @ 2.25		1.75 @ 2.00			2.00 @ 3.00
11. LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.25 @ 1.50	.80 @ 1.00	1.20 @ 1.50		1.00 @ 2.00
12. PAINTER	1.50 @ 2.50	2.25 @ 3.00	2.00 @ 2.50	1.50 @ 2.25	1.75 @ 2.25	2.50	1.00 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13. Glazier		2.00 @ 2.50					1.75 @ 2.50			3.50
14. Grainer	2.50 @ 3.00	3.00 @ 4.00	3.00 @ 4.50	3.50 @ 4.00	No graining.		1.50 @ 2.00			
15. Paper-Hanger	.75 @ 2.50				15c. pr. roll.		1.50 @ 2.00			2.00 @ 3.00
16. PLASTERER	1.50 @ 2.50	2.00 @ 2.50	1.75 @ 2.00	1.50 @ 2.50	1.50 @ 2.00	2.50	1.25 @ 1.75	1.75 @ 2.00		2.25 @ 2.75
17. Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50		1.50 @ 2.50		2.50	1.50 @ 2.25			2.25 @ 2.75
18. PLUMBER	2.25 @ 3.00	3.00 @ 3.00		2.50 @ 3.50	2.00 @ 2.50		1.50 @ 2.50			2.50 @ 3.50
19. QUARRYMAN		3.00 @ 3.50		1.25 @ 1.50	1.25 @ 1.50	1.75 @ 2.00	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20. Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	1.50 @ 2.00	2.00 @ 2.50	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21. Carver	3.00	3.00	2.50 @ 3.00	1.25 @ 1.75	3.00		3.50 @ 6.00	2.75 @ 3.25		
22. Painters and Washers		2.50 @ 3.00		1.50 @ 1.75			1.00 @ 1.25	2.25 @ 2.50		
23. Rubber	1.50 @ 2.00	1.75	1.00 @ 1.25	1.25	1.00 @ 1.25		.80 @ 1.00	1.50 @ 1.75		
24. Stone-Cutter	2.25 @ 3.00	2.00 @ 3.00	1.50 @ 2.00	2.00 @ 2.50	2.50		2.00 @ 2.50	2.25 @ 2.75		
25. Stone-Setter	3.00	2.50 @ 3.00	2.25 @ 2.50	*.50 @ 3.00	2.75		1.50 @ 2.00	2.25 @ 2.75		2.00 @ 2.50
26. ROOFER (Tin)	2.00 @ 2.35	2.50 @ 3.00		2.00 @ 2.50	1.50 @ 2.00		1.50 @ 1.75	1.75 @ 2.25		
27. Slat-er		2.50 @ 3.00	2.00 @ 2.25	*.50 @ 4.00	2.00		1.25 @ 2.00	1.75 @ 2.25		
28. STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50			1.50 @ 2.00		1.75 @ 2.25			1.50 @ 2.00
29. STEAM FITTER		2.50 @ 3.50		2.00 @ 2.50	2.50 @ 3.00		1.50 @ 2.00			2.00 @ 3.00



ARCHITECTS AND BUILDERS

WILL ADD MUCH TO THE BEAUTY OF THEIR BUILDINGS BY USING

GARDNER'S PERFORATED THREE-PLY VENEER SEATING,

Which is Ornamental, Durable, and Cleanly.

We refer to the following new and elegant buildings fitted up with our goods:—

Morris Plains, N. J., Insane Asylum.  
New York Hospital.  
American Museum of Natural History, New York.  
Institution for Feeble-minded Children, Lincoln, Ill.  
Insane Asylum, Oshkosh, Wis.

Opera Chairs in new Music Halls, Lewiston, Me., Providence, R. I., and Brooklyn, N. Y.  
Seats in Depots of the Pennsylvania Railroad, at Philadelphia, Pittsburgh, etc.

Please send for Illustrated Catalogue.

GARDNER & COMPANY,

Patentees and Manufacturers,

376 PEARL STREET.....NEW YORK.

THE BEST PORTRAIT OF William Cullen Bryant

is the ATLANTIC PORTRAIT, which was published last year expressly for subscribers to the ATLANTIC MONTHLY, and which is unquestionably the best large portrait ever made of him. To show how it is regarded by excellent judges, we append the following extracts:—

I think the picture admirable in its rare and commanding lines, and shall gladly give it the best place I can find in my limited collection. — RALPH WALDO EMERSON.

I hesitate to bestow any praise upon it, for the reason that I should use stronger terms than, as a mere unskilled lover of art, I should have any right to employ. I shall be disappointed, however, if the best judges do not unite in considering it a masterpiece of portraiture and execution. — DR. OLIVER WENDELL HOLMES.

Mr. Baker was singularly fortunate in his subject; he has produced a marvelous likeness of Bryant, and a very noble work of art. If a head like this, in bronze or marble, were found in some Greek or Roman ruin, it would be worth its weight in gold. — T. B. ALDRICH.

This portrait is life size, on paper 24 x 30. The retail price is \$2.00. With the ATLANTIC MONTHLY for a year, \$5.00; six months, \$3.00.

ATLANTIC PORTRAITS.

Henry Wadsworth Longfellow. It is one of the most admirable likenesses I have ever seen, and I can scarcely imagine a better representation of the poet and the man. — BATAARD TAYLOR.

John Greenleaf Whittier. It is very fine; it is the ideal Whittier. — J. T. TROWBRIDGE.

The above portraits are life-size, and the dimensions of each picture are 24 x 30. Subscribers to the ATLANTIC MONTHLY can obtain either portrait, with the magazine for a year, by remitting \$5.00 to the publishers; for \$6.00 the magazine and two portraits, and for \$7.00 the magazine and all three portraits will be sent. The subscription price of the ATLANTIC alone is \$4.00.

The portraits are sent by mail, carefully rolled, so as to avoid all danger of injury, and will be forwarded to any address on receipt of the price and subscription by the Publishers; they can be obtained through newsdealers and booksellers generally.

HOUGHTON, OSGOOD AND COMPANY, BOSTON, MASS.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

GALVANIZED IRON CORNICES. Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS. All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States. Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO. 72 & 74 West Monroe St. Chicago, Ill.

A SATCHEL GUIDE.

FOR THE VACATION TOURIST IN EUROPE. Revised Edition for 1873. With Maps. 16mo, flexible cloth, \$2.00. HOUGHTON, OSGOOD & CO.



NONESUCH Self-Locking AND Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.

Patented July 10th, 1877

AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT. MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS. Regular Sizes, 2, 3, 4, 5 & 6 inch. SPECIAL SIZES MANUFACTURED TO ORDER. AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS. 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA. WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH.

- PRINCIPAL AGENTS.
- M. Halliday New York City.
  - Hicks & Badger Boston, Mass.
  - James Berry Buffalo, N. Y.
  - George W. Pitkin & Co. Chicago, Ill.
  - Wasson & Martin Albany, N. Y.
  - McLeod, Reardon & Co. Troy, N. Y.
  - W. H. Scott Portland, Me.
  - Kittredge Cornice Co. Salem, O.
  - J. W. Jordan Worcester, Mass.
  - B. G. Carpenter & Co. Wilkesbarre, Penn.
  - T. W. Irwin Alleghany City, Penn.
  - Selw & Co. Cincinnati, Ohio.

RECOMMENDED SEND FOR DESCRIPTION IMPERIAL GAS MACHINE. ARCHITECTS ENGINEERS SIMPLICITY & RELIABILITY. DENNY BROS & CO.



BIBB'S Celebrated Original Baltimore Fire Place Heaters. Mantels and Registers. B. C. BIBB & SON, Baltimore, Md. Best workmanship. Lowest prices guaranteed. Send for circulars.

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Mediæval Foliage.

**EXAMPLES OF ENGLISH MEDIÆVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURNE, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. P'ANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist, Boston.*

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courant.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVES. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIÉNARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11½ X 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOTHIC FORMS (First Series), applied to Furniture, Metal Work, and Decoration for Domestic Purposes.** By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series), Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c.** By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOLETTÉ-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

The works of the learned and distinguished French Architect, EUGÈNE VIOLETTÉ-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

## Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — *EUGÈNE BEXSON, in The College Courant.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

## The New York Sketch-Book of Architecture.

3 vols., 4to, \$6.50 each.  
We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

## The American Architect and Building News.

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\* \* \* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

[Reported for the American Architect and Building News.]

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for various building materials including BRICK, CEMENT, and FIRE BRICK.

Table listing prices for DOORS, including raised panels and moulded doors.

Table listing prices for LUMBER, including various types of pine, spruce, and fir.

Table listing prices for PAINTS AND OILS, including Paris white, lead, and zinc.

Table listing prices for AXLE PULLEYS, SASH WEIGHTS, SASH LINES, and DOOR BUTTS.

Table listing prices for STONE, including freestone and granite.

Table listing prices for SLATE, including roofing and building slate.

Table listing prices for TIN PLATES and ZINC.

BOSTON.

Table listing prices for FIRE BRICK and BUILDING BRICKS in Boston.

Table listing prices for BUILDING STONE and LUMBER in Boston.

Table listing prices for PAINTS AND OILS in Boston.

Table listing prices for CEMENT and other materials in Boston.

Table listing prices for MORTISE LOCKS and DOOR KNOBS.

Table listing prices for SASH FASTS and SCREWS.

Table listing prices for STORE DOOR HANDLES and IRON.

CHICAGO.

Table listing prices for BRICK, LIME, AND CEMENT in Chicago.

Table listing prices for LUMBER (MICHIGAN PINE) in Chicago.

Table listing prices for HARDWOOD LUMBER in Chicago.

Table listing prices for TINNERS' STOCK in Chicago.

Table listing prices for roofing materials and sheet iron.

Table listing prices for PAINTS AND COLORS in Philadelphia.

Table listing prices for WHOLESALE PRICES in Philadelphia.

Table listing prices for LUMBER in Philadelphia.

Table listing prices for PAINTS AND OILS in Philadelphia.

Table listing prices for PLASTER in Philadelphia.

Table listing prices for TIN in Philadelphia.

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms.

CREOSOTED WOOD. PREPARED AT THE Hayford Patent Creosote Wood Preserving Works. EDWARD R. ANDREWS, Proprietor.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially invaluable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY.



The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, ETC., ETC.

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.  
ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

**ESTABLISHED, 1836.**  
**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Compositoin Roof known. Also inventors and owners of the following patents:—

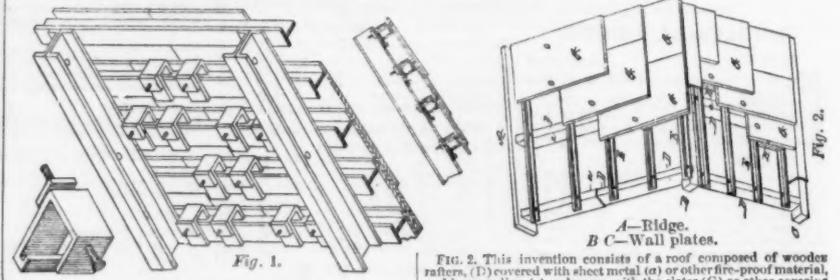


FIG. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the puline on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

FIG. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or other fire-proof material, and iron purins (c) or beams, with the slates (G) or other covering secured thereto by clasps, (Fig. 1) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purins immediately under and in contact with the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point avoiding condensation, contraction and expansion of roofs formed wholly of iron.

**WARMING AND VENTILATION.**  
**FIRE ON THE HEARTH.**  
**FIRE-PLACE HEATERS AND STOVES.**  
VENTILATION of a Fire-Place. RESERVE FORCE of a Close Stove. CIRCULATION of a Furnace.  
Adapted for any kind of Fuel,  
And the only FIRE-PLACE HEATER PERFECTLY ADAPTED for SOFT COAL and WOOD.



Send for our testimonials from all parts of the United States. **OPEN STOVE VENTILATING COMPANY,**  
115 Fulton and 54 Ann Streets, New York.

**GAS**  
SPRINGFIELD GAS MACHINE.  
Springfield, Mass.: 75 Maiden Lane, New York: 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 316 Pine St., San Francisco. Send for Circular.

**BUHRER'S INFALLIBLE SEWER GAS TRAP.**  
The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (B) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.



**S. BUHRER,** Inventor and Manufacturer, Cleveland, Ohio.  
WHOLESALE AGENTS.  
W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O.  
L. WOLFF M'fg Co., 109 & 111 West Lake St., Chicago, Ill.  
HAMBLEN & MATHEWS, 82 & 84 North St., Boston, Mass.  
C. A. BLESSING, 44 North Fifth St., Philadelphia, Pa.  
THE J. L. MOTT IRON WORKS, 88 & 90 Beckman St., N. Y.  
Please send for Circular.

**Brandeis' Seamless Paragon Trap.**  
Simplest, Best, Cheapest, and Non-siphoning.  
Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDEIS & WICKERT,** 46 Fulton Street, Brooklyn, N. Y.



**C. BUTCHER,**  
107  
Devonshire St.  
BOSTON.  
Send for  
Illustrated  
Catalogue.

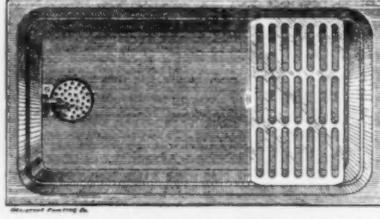
**PATENT MARQUETRY FLOORING.**  
Specimens at Lawrence, Wilde & Co.'s, 42 Cornhill, Boston.

**DORCHESTER UNION FREESTONE CO.**  
NEW BRUNSWICK YELLOW FREESTONE.  
The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order.  
24 Pine St., New York. - C. P. SHERWOOD.

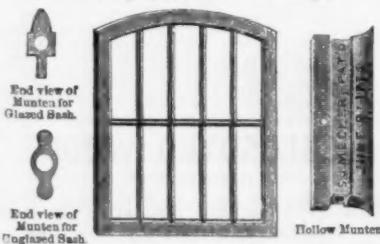
**MENEELY & KIMBERLY,**  
Bell Founders, Troy, N. Y.,  
Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT HOUSE BELLS. Illustrated Catalogue sent free.

Architects and Builders will be quick to appreciate the many New and Practical Features possessed by

**THE MAGEE PATENT SINK,**  
which commend themselves at once to every householder. The escape of noxious and poisonous sewer gases is prevented by the arrangement of the patent trap, it being immovable, while the strainer, being hinged on brass pins, can be raised for the purpose of cleaning the cesspool. The sink is furnished with an improved galvanized shelf or rack for draining dishes, etc., after washing. It is of extra size, and being made with square corners, saves the carpenter much labor in setting. In smoothness of casting it fully sustains the long-established reputation of the Magee goods. Particular attention is invited to the Magee Standard Furnace, portable and for setting in brick, guaranteed superior to any in the market for economy, durability, and heating capacity. Estimates furnished for heating all sizes of dwelling-houses and public buildings. Also a full line of Brick and Portable Ranges, circulars and prices of all the above goods furnished on application. **MAGEE FURNACE CO.,**  
32 to 38 Union St., Boston



**D. M. MEEKER & SON'S**  
Malleable Iron Hollow Munten Window Sash.  
For Insane Hospitals, Fire Proof Buildings, &c.



The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by **D. M. MEEKER & SON,**  
Newark, N.J.  
Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

**MAKE YOUR OWN GAS**  
GAS GENERATORS, FOR LIGHTING Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.  
Send for CIRCULAR  
**WALWORTH MANUF. CO.**  
No. 69 Kilby Street, BOSTON, MASS.

**J. & R. LAMB, 59 CARMINE ST., N. Y.**  
**CHURCH FURNISHERS**  
Practical Workers in Sterling Silver, Brass, and Bronze, Carved Wood, Decorations, etc. Illustrated Catalogues. Furniture, Etc.; Metalwork, Etc.; Decoration, Etc.

**HOISTING MACHINES EXCLUSIVELY.**  
HOTEL STEAM ELEVATORS, HYDRAULIC ELEVATORS, HAND POWER HOISTS, DUMB WAITERS.  
**H. J. REEDY, Manufacturer,**  
128 EAST EIGHTH ST., - Cincinnati, O.

**CRANE, BREED & COMPANY**  
**SAFETY BOILERS**  
FOR HEATING  
STEAM AND HOT WATER.  
MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RADIATORS, PIPE BOILS, REGISTERS, FITTINGS, STEAM-PUMPS

**NATIONAL TUBE WORKS CO.**  
PATENT  
Indestructible Enamelled Wrought Iron  
**LAP-WELDED PIPE,**  
From 1/4 inch to 15 inches diameter.  
Now extensively used for  
Water, Gas, Sewerage, and Mining.  
It is not affected by heat or acid, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage.  
MALEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at offices of  
**National Tube Works Co.,**  
8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.



**BUILDING INTELLIGENCE.**

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

**BUILDING PATENTS.**

**WEATHER-STRIPS.**—Dinsmore Austin, Murray, Iowa. An elastic strip is attached by one edge to a groove in the bottom of the door. A hinged strip is caught up by a hook in the side of the door, and presses against the yielding strip.

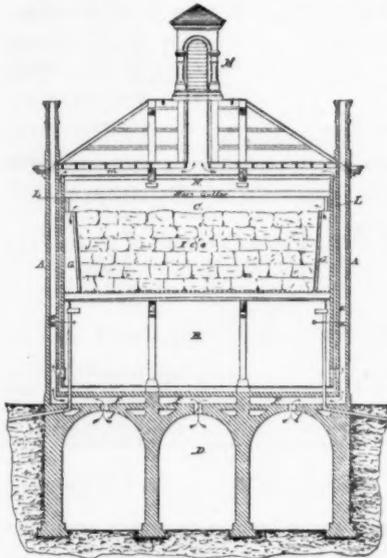
**APPARATUS FOR WARMING AND VENTILATING.**—Lyman Bennet, Amsterdam, N. Y. This is a species of ventilating stove which draws fresh air from without the building.

**MOULDING PATENTS IN METAL CASTING.**—Norman Burdick and James Baxterly, Albany, N. Y.

**METAL TUBING.**—Bolivar C. Converse, Springfield, O. The tube is formed by bending until they meet the flanges of a T-shaped piece of metal. The vertical flange forms a central internal rib.

**LOCK.**—Charles C. Dickerman, Boston, Mass.

**ICE-HOUSE.**—John Schneider, Indianapolis, Ind. This invention is applicable chiefly to the fermenting-rooms of breweries. In the illustration this room is represented by B, while C is the ice-room, and D the cellar. Below its floor are horizontal ducts for carrying off the foul air of the cellar, while the vertical flues E are provided with suitable regulating valves near the top of the fermenting-room; and by opening the ventilators b, near the bottom, the carbonic acid is allowed to drain off. The ice-room above has a slatted floor, below which and between the joists are metal gutters, so inclined that the water drains to one end and passes through small pipes, which project up to the gutters, so that about one and a half in. of ice-water is always in each gutter. This arrangement is repeated with



the main gutters, and their outlets. It may be noticed in passing that the melted ice is used in cooling the beer before it runs to waste. As moisture is always condensing on the under-side of these gutters, small auxiliary gutters, of wood, are arranged below them and empty into the main gutters. As the ceiling of the ice-room is of corrugated iron, similar provision is made for carrying off the water of condensation. The ice-room is separated from the main walls by a space which, on two sides, is connected with flues which descend into the fermenting-room, below the tops of the fermenting tubs. These flues are provided with traps and doors. The ice-room connects with the space surrounding it by doors at different levels, the object being that as the ice melts the doors may be opened in succession, so that the air ascending from the fermenting-room may always be cooled off by direct contact with the ice before it descends again into the room below by the ventilating ducts.

**WELL-DRILLING APPARATUS.**—J. B. and G. E. Elliott, Moncton N. B.

**DRAUGHT-PIPE FOR HEATERS.**—Morrill A. Shepard, Lebanon, Ill.

**BRICK KILN.**—Edwin F. Andrews, St. Louis, Mo.

**STEP-LADDER.**—John J. Brady, Long Island City, N. Y.

**METAL-DRILLING MACHINE.**—David W. Poud, Worcester, Mass.

**VENTILATOR.**—Salathiel S. Thompson, Sacramento, Cal.

**GATE-LATCH.**—Hiram Unger, Germantown, Penn.

**PUMP.**—Allen S. Baker, Evansville, Wis.

**LUMBER RULES.**—Arontram J. Colburn, Greenville, Mich.

**LADDER.**—Frederick A. Copeland, La Crosse, Wis. The sides are of rope, to which the tubular rods are fixed by eyelets entering them with right and left-hand threads, and clamped to the ropes.

**COATING LEAD ARTICLES WITH TIN.**—John J. Crooke, Southfield, and Louis Crooke New York, N. Y. A deposit of tin is formed without the aid of a battery.

**FIRE ESCAPE.**—Ira D. Cross, San Francisco, Cal.

**STAND-PIPE.**—E. Lewis and W. A. Maloney, Oil City, Penn.

**WIND ENGINE.**—J. Longyear and D. W. Clark, Grass Lake, Mich.

**LIGHTNING ROD.**—David Munson, Indianapolis, Ind.

**SAWS.**—Robert E. Poindecker, Anderson, Ind. The saw is provided with three cutting-teeth having a concave on their cutting sides, so as to draw the point toward its proper set, and forming cutting-edges on each side of the concavity. The diamond-pointed, tapering cutting-teeth are arranged between clearing-teeth, wider at the top than at the base, and having two cutters each. The chip-chambers between all the teeth are of equal depth.

**SAW-BALANCE AND LOCK.**—John B. Rayner and Eugene G. Burr, Springfield, Mass. The saw is raised or lowered by means of rack and pinion. The shaft is square, and may be locked in any position by a spring-bolt operated by a sliding spring-plate. The bolt is retained in a retracted position by a pin which engages with the plate.

**WINDOW-SCREENS.**—George L. Reynolds, Oakland Town-

ship, Alameda County, Cal. Screens secured at one end to the window-frame wind upon rollers journaled in grooved meeting sash-rails. The sashes are balanced and the rollers operated by balance cord and weight, winding upon the roller-pulley on one side and connected to the sash on the other.

**WRECH.**—J. H. Sievers and H. T. Winkler, Valparaiso, Ind.

**SAW-SHARPENER.**—William Medd Watson, Tonica, Ill.

**MACHINE FOR PLANING OR SAWING WOOD.**—W. H. Webb, Concord, N. C.

**LIFTING-JACK.**—Thomas J. Woods, Westery, R. I.

**COMPLETED BUILDINGS.**

**ROXBOROUGH, PENN.**—On August 1st the new building erected for the Roxborough Baptist Church was formally dedicated. The building known as the Old Baptist Church of Roxborough was destroyed by fire April 10, 1876. The new edifice stands on Ridge Avenue, near Lyceum Avenue. The building is of brown stone, and cost less than \$30,000. It is one story in height, the audience-room being in front, with a seating capacity for 700 persons. The Sunday-school room is in the rear and will accommodate 400 persons. Between the audience-room and the Sunday-school room are the library and dressing-rooms. The building is surmounted by a spire 200 feet from the ground.

**PORT HURON, MICH.**—The new government building, which contains the custom-house and post-office, stands at last complete, even to sodded grounds, stone walks, and a fountain. It has cost \$249,000.

**CORONA, N. J.**—The new Methodist church is ready for dedication.

**SUMMARY OF THE WEEK.**

**Boston.**

**BUILDING PERMITS.**—The following permits have been issued since our last issue:—

**BRICK BUILDINGS.**

Mechanic.	No.	Stories.	Class.	Size.
Wm. H. Sayward.	1	1	Boiler-house.	71' x 23'.

**WOODEN BUILDINGS.**

Mechanic.	No.	Stories.	Class.	Size.
Arthur Dandy.	1	1	Green-house.	39' x 17'.
Samuel Kautz.	1	2	Stable.	32' x 24'.
G. W. Hamilton.	1	2	Dwelling.	20' x 33'.
Hudson, Pratt & Co.	1	1	Storage.	60' x 16'.
D. H. McKay.	1	1	Dwelling.	16' x 23'.

Repairs and alterations still continue active.

**LUMBER MARKET.**—There has been rather a downward tendency in the lumber trade the last month. Prices have not been so certain, and the demand is at present too light to anticipate any immediate improvement. We have to report light arrivals from all directions during July, and this is likely to continue until fall; whether any change for the better in prices will then occur cannot now be safely predicted. The probabilities are that there will be little change. There is still a large amount of Western lumber on storage, especially ash, and little encouragement is offered for shipment except on orders. Eastern arrivals have been equal to the demand. Hemlock boards are very dull. A fair inquiry for good white spruce, but at low prices. Southern lumber remains quiet. There has been some concession in the prices of flooring, owing more to competition than any other cause. Timber orders are very scarce.

**EXHIBITION BUILDING.**—Mr. J. F. Zimmerman is the owner of the large exhibition building soon to be set in place corner Ferdinand Street and Columbus Avenue. It is of wrought iron frames covered with corrugated iron. It is a circular building with conical roof, 400 feet in circumference and 60 feet high. The original cost of the structure was \$30,000. Its transportation from Philadelphia, together with its accompanying panorama of the "Siege of Paris," will cost about \$15,000.

**Brooklyn.**

**BUILDING PERMITS.**—Bergen St., two-story brown stone dwell., 20' x 40'; owner and builder, John Monas, 187 Bergen St.—Eckford St., 1 one-story frame hall, 8 1/2' x 62'; owner, J. Kuntz, Calyer, cor. Eckford St.; architect, F. Weber; builders, Ja. Rooney and C. Schoering.—Hanson Place, 1 one-story brick freight-house, 30' x 72'; owner, Long Island R. R.—Mason St., 11 two-story brown stone dwell., 18' x 44'; owner and builder, Benj. T. Robins.—Nassau St., cor. Nassau Ave., 7 two-story frame dwell., 19' x 24'; owner, S. Self; architect, F. Weber; builders, Walling & Fenwick.—Park Place, 5 two-story brown stone dwell., 20' x 45'; owner, Isabella Gordon, 2 Willow St.; architect, R. Dixon; builder, J. B. Gordon.—Prospect Place, 2 three-story brown stone flats, 21' 6" x 70'; owner and builder, Wm. Gubbins, 109 Sixth Ave.; architect, R. Dixon.—Stanhope St., 1 two-story frame dwell., 25' x 30'; owner, Joseph Davis, Hudson Ave.; architect, A. McKnight; builders, J. Brillman and A. McKnight.—Ten Eyck St., No. 147, 1 three-story frame store and tenement, 25' x 50'; owner, John Gebst; architect, N. Herbert; builders, Hoepfer & Maurer.—Bedford Ave., 2 two-story frame stores and dwell., 15' 6" x 45'; owner, Wm. Pitman, on premises; architect, I. D. Reynold, ida.—Lafayette Ave., 1 two-story brick school, 56' x 10 1/2'; owner, Board of Education, Brooklyn; architect, S. B. Leonard; builders, H. Vall and R. Ferguson.—Lafayette Ave., 4 two-story brick dwell., 14' 2" x 42'; trustee, J. Hegeman, Pearl, cor. Willoughby St.; builders, Mr. Rider and T. A. Reusen.—Manhattan Ave., 1 three-story brick store and dwell., 25' x 50'; owner, Kate L. Valentine, 164 Meserole Ave.; architect, Fred. Weber; builder, G. L. Roberts.—Patchen Ave., cor. Lexington Ave., 1 two-story frame dwell., 22' x 39'; owner, Smith Cox, on premises; architect, J. J. Clyde.—Putnam Ave., 2 two-story brown stone stores and dwell., 25' x 50'; owner, M. E. Kingman; architect, I. J. Walker; builders, Hart & Boyd.—Rogers Ave., 1 three-story frame tenement, 21' x 35'; owner, Michael Mulvihill, 26 Rogers Ave.—builder, Thomas Donnelly.—St. Mark's Ave., 4 two-story brown stone dwell., 16' 3" x 40'; owner, Benjamin Estes; architect, John Mumford; builder, J. H. Stevenson.—Foot of Elizabeth and Ferris sts., 3 one-story brick warehouses, 80' x 210'; owner, H. D. Brookman, 113 Renssen St.; architect, Thos. Stone.—Same location, 4 two-story brick warehouses, 121 and 101' x 149'; owner, H. D. Brookman, 113 Renssen St.; architect, Thos. Stone.

**CHAPEL.**—A portion of the new R. C. cathedral on Vanderbilt, Clermont, Greene, and Lafayette avenues, on which work was stopped several years ago on account of insufficient funds, is to be completed as a chapel, and services are to be held in it, commencing next October. The chapel will hold about eight hundred worshippers.

**Chicago.**

**BUILDING PERMITS.**—The Building Department has issued, since our last report, permits for fifty-one buildings. Following are the more important ones:—

The Newberry Estate, three-story trunk factory, 161 Superior St.; cost, \$3,600.—Ludwig Wolf, two-story building, Fulton St.; cost, \$3,900.—Frederick Kollman, 2 two-story stone front flats, cor. of Madison and Leavitt sts.; cost, \$5,000.—John Ahrens, two-story flat, 436 West Indiana St.; cost, \$3,000.—Ferdinand Walker, two-story flat, 588 South Halsted St.; cost, \$3,000.—C. H. McCormick, barn, Huron St.; cost, \$9,000.—George Conrad, two-story dwell., 164 Aberdeen St.; cost, \$2,600.—Ernst Stock, three-story flat, 189 Sedgwick St.—P. C. Welch, 3 two-story stone front dwell., 328 to 333 Warren Ave.; cost, \$9,000.—Ira A. Heath, two-story dwell., Prairie Ave.; cost, \$3,200.

**CHURCH.**—On July 28th the corner-stone of a small brick church was laid. The church, which is to be known as the Union Tabernacle, is to be built at the corner of Ashland Avenue and Twentieth Street.

**St. PHILIP'S CHURCH.**—A small Roman Catholic church is to be built near the Northwestern Railroad car shops. J. L. Conborg has taken the contract at \$4,000.

**CHURCH.**—President Blanchard, of Wheaton College, has obtained \$14,000 in subscriptions towards his new church scheme. Nineteen thousand dollars is the amount required.

**Louisville, Ky.**

**BUILDING PERMITS.**—The following permits to build have been issued since our last report:—

M. J. Dooly, one-and-one-half-story frame stable, alley between Twenty-second and Twenty-third and Jefferson and Green sts.; cost, \$50.—F. R. Walker, two-story brick dwell., Breckinridge St.; cost, \$2,300.—H. L. Surrman, one-story brick dwell., Market St.; cost, \$900.—Kentucky Stone Company, one-story brick foundry, Fourteenth and Delaware sts.; cost, \$1,200.—Mrs. Stoll, two-story brick dwell., Green St.; cost, \$250.—John Miller, one-story frame dwell., Dumesnil St.; cost, \$500.—John Buchter, one-story brick dwell., Brownsboro Road; cost, \$500.

**New York.**

**BUILDING PERMITS.**—One Hundred and Fifteenth St., 5 tenements, 25' x 52' each; cost, \$7,000; R. C. John, builder; Cook & Higgins, owners.—Sixtieth St., stable, 7' x 10'; cost, \$4,800; G. W. Tollman, owner; Ed. Ware, architect.—Sixty-ninth St., 6 second-class dwell., 16' x 45'; cost, \$4,000; Jas. E. Ray, owner; Chas. Baxter, architect.—773 Second Ave., tenement, 25' x 60'; five stories; cost, \$9,000; Chas. Baxter, architect.—One Hundred and Twenty-sixth St., 4 first-class dwell., brown stone fronts, 18' x 50'; cost, \$5,500; A. T. Tullipson, owner; W. P. Birdsall, builder.—One Hundred and Fifth St., 3 second-class dwell., 13' x 45'; cost, \$4,500; John Herria, owner; Chas. Baxter, architect.—Cor. Tenth Ave. and Thirty-sixth St., 2 tenements, 24' x 52'; cost, \$11,500; Geo. C. Phelan, owner; J. M. Dunn, architect; Jas. Smith, builder.—Sixty-fourth St., 5 first-class dwell., 20' x 60'; four stories; brown stone fronts; cost, \$15,000; E. Kilpatrick, owner and builder; D. & J. Jardine, architects.—North-east cor. Walton Ave. and One Hundred and Fiftieth St., frame dwell., 22' x 40'; cost, \$5,000; C. E. Van Tassel, owner; Wm. Hargrave, builder.—Cor. Eighth Ave. and Fifty-seventh St., flat, 25' x 100', five stories; cost, \$21,000; R. Lawrence, owner; Thos. McAvoy, architect; W. G. Persen, builder.—431 Seventh Ave., tenement, 24' x 35'; four stories; cost, \$4,000; Caroline Jagg, owner; A. Hunt, architect.—241 Monroe St., stable, 47' x 14'; cost, \$1,500; And. O'Donnell, owner; John Ross, architect; P. Hyland, builder.—8 Downing St., tenement, 25' x 75'; cost, \$10,000; Chas. H. Phillips, owner; A. Fountain, builder.—Sixty-seventh St., near Madison Ave., first-class dwell., 25' x 60'; four stories; brown stone front; cost, \$18,000; Breen & Nason, owners; G. W. Hughes, builder.—One Hundred and thirty-eighth St., cor. Madison Ave., frame saloon, 18' x 95'; cost, \$1,350; Mrs. Hopkins, owner, Louis Falk, architect; Geo. Marsel, builder.

**ADDITION.**—New wings are to be built to the Tiffany Building and to the adjoining Springler House.

**THE CUSTOM-HOUSE.**—A rumor has been started about insecurity in the galleries of the Custom-House. It is looked upon as a move towards a contractor's job, and laughed at.

**STORE.**—Messrs. Schultz, Southwick & Co. are to build a new three-story brick building on Cliff Street.

**Philadelphia.**

**THE CITY'S GROWTH.**—The Building Inspectors, during July, issued 419 building permits, as follows: Dwelling-houses, two-story, 161; do., three-story, 96; store and dwelling, two-story, 1; do., three-story, 12; store, one-story, 1; do., three-story, 1; alterations and additions, 91; back buildings, 28; stables, 9; fire engine houses, 2; shops, 4; factories, 2; carriage-house, 1; shed, 1; offices, 3; pke-house, 1; storeroom, 1; chapel, 1; market-house, 1.

**BUILDING PERMITS.**—Mrs. Ree Murray, two-story dwell., 16' x 28', Croskey St.—John B. Geix, three-story front building, 18' x 32', No. 1927 North Second St.—Geo. M. Miller, three-story dwell., 32' x 38', Alleghany Ave.—David Young, 5 two-story dwells, 14' x 40', Orianna St.—J. L. Carre, 6 three-story dwells, 15' x 46', Twenty-fifth St.—T. Uhlman, three-story dwell., 18' x 32', Hope St.—Simon Oher, two-story dwell., 17' x 48', Otis St.—Benjamin Walker, three-story dwell., 14' x 30', Franklin St.—Chas. Martin, three-story dwell., 16' x 57', Cumberland St.—Michael Sammon, 2 two-story dwells, 12' x 28', Union St.—Daniel O'Leary, two-story dwell., 18' x 35', Terrace St., Manyunk St.—Samuel Hart, one-story market-house, 60' x 10', South St.—Sturgis & Co., two-story dwell., 18' x 44', New Chestnut St., Manyunk.—T. Hargadon, three-story dwell., 16' x 35', No. 522 South Fifth St.

**St. Louis.**

**BUILDING PERMITS.**—Thirty-nine permits have been issued for the week ending August 2, 1878. Six of these are for unimportant frame structures. The rest are for brick buildings, with occasional fronts of sandstone ashlar. Those worth \$2,500 and over are as follows:—

Owners.	Use.	Stories.	Rooms.	Cost.
John Barker.	Store & dwell.	2	24	\$6,000
B. F. Young.	Dwelling.	5	20	6,000
M. J. Mahony.	Dwelling.	2	8	3,400
Michael Wright.	Market-house.	2	8	2,500
M. Lindeberg.	Dwelling.	2	8	3,000
John Hewitt.	Dwelling.	2	8	2,500
F. C. Pauley.	Store & dwell.	2	9	3,000

**Washington, D. C.**

**BUILDING PERMITS.**—B. H. Duval, to enlarge brick back-building at 546 Fifth St.; cost, \$3,000.—William Taylor, two-story brick house, L St.; cost, \$500.—J. W. Walling, two-story brick house, cor. Eighteenth and Boundary sts. northwest; cost, \$850.—T. P. Hess, two-story brick house, Fayette St., Georgetown; cost, \$450.—Martha Wheelock, two-story brick house, Ninth St.; cost, \$1,500.—North Presbyterian Church, to repair church on N St.; cost, \$3,200.—David Murphy, 2 two-story and basement brick

houses, Virginia Ave.; cost, \$1,500.—F. Widdows, two-story brick stable, 1111 S St.; cost, \$750.—Laura Banes, two-story brick house, Massa hussets Ave.; cost, \$2,000.—John Ruppert, two-story brick house, cor. of Seventh and O sts.; cost, \$4,000.—M. A. Degeer, 1 three-story brick house, Connecticut Ave.; cost, \$4,000.—Wheatley Bros., two-story on Q St.; cost, \$2,000.

**THE WORK OF THE MONTH.**—The report of Building Inspector Entwisle for the month of July shows permits issued for 67 new buildings, 108 repairs, 11 awnings, and 140 lineal feet of sidewalk vaulting. The receipts of the office were \$452.

#### General Notes.

**BATH, ME.**—The \$10,000 contract for the steam-heating and ventilating apparatus for the Soldiers' Home has been awarded to E. H. Cook & Company, of Rochester, N. Y. We learn that this firm has also contracts for the Orleans County Poor-house and the Osborne House, of Auburn, N. Y.

**BELKENSBRIDGE, TEX.**—Mr. T. H. Conner is building the court-house. The estimated cost is \$10,000.

**BUFFALO, N. Y.**—Mr. J. H. Van Vleck is to build a \$25,000 brick house on Delaware Avenue. Mr. M. E. Beebe, architect.

**CAMDEN, N. J.**—The work of erecting another market-house at Third and Market streets has begun. Several old buildings will have to be torn down.

**CANTON, MASS.**—Work is begun on the Town Hall, for which an appropriation of \$24,000 has been granted. Mr. S. C. Earle, architect, Boston.

**CONCORD, N. H.**—The building at St. Paul's School, which was destroyed on July 21st, is to be rebuilt immediately.

**COVINGTON, KY.**—The corner-stone of the Union Church of West Covington, was laid on Tuesday evening, July 30th.

**DEERING, ME.**—Chas. H. Kimball, architect, Portland, Me., has just completed plans for a new primary school-house at "Allen's Corner." It will be 32 by 46 feet, and will cost \$2,000.

**DETROIT, MICH.**—Alderman Youngblood is about to build a three-story brick business block at the corner of Gratiot and St. Antoinette. The new factory building by the Berry Brothers is receiving its corrugated iron roof.

**DIGHT, NOVA SCOTIA.**—Mr. S. C. Earle, of Boston, is the architect of the Trinity Church; cost, \$8,000.

**DORCHESTER, MASS.**—Mr. J. H. Besarick, architect, is building a house for Mr. James Tucker, on School Street; cost, \$7,000.

**GERMANTOWN, PENN.**—The Philadelphia and Reading Railroad Company is building a new station-house between Church and Show-maker's lanes, Germantown branch, so as to consolidate the two stations.

**LAFARGE, IND.**—The foundation for the new court-house is completed.

**MANCHESTER, VA.**—At the granite works below the city seventy-one cutters and nine laborers are regularly employed, with a prospective increase in the number of both classes of operatives. The stone used comes from Green's Quarry, near Granite, and there is now a full supply on hand. The completed work all goes to the new State, Navy, and War Department, at Washington. Some of the pieces are so ponderous that it takes one workman several months to get through dressing one piece.

**MEDINA, O.**—The proposition of Manger, Clark & Grueninger to build the Town Hall for \$2,750,000 has been accepted.—O. N. Leach has broken ground for his new block, and preparations are being made to have the building put up immediately.

**MINNEAPOLIS, MINN.**—Hon. C. C. Washburn has advertised for proposals for rebuilding the Washburn A Mill destroyed in the late explosion. The size of that mill was 100 by 138 feet. Mr. Washburn proposes to replace it by a mill 100 by 210 feet.

**MOOREHEAD, MINN.**—The foundation of the new elevator cost \$3,000. It is constructed by driving piles in clusters.

**MENARD, WIS.**—H. C. Koch & Co., architects, of Milwaukee, are preparing plans for the new school-house, which is to cost \$14,000.

**NEW ALBANY, IND.**—The building committee of the Baptist church have purchased the Robinson property on Fourth Street, adjoining their lots. This will give the new church 75 feet front by 120 feet deep. Work will be rapidly pushed forward.—Mr. E. W. Fawcett is building a fine house on Upper Spring Street.

**NEW LONDON, CONN.**—The first story of the new Race Rock Lighthouse, off New London Harbor, is nearly finished, and the work will be finished before the autumnal storms set in.

**NEWPORT, KY.**—The contract for the erection of the bolt works of L. M. Dayton has been awarded to Messrs. Harris & Venables. The site has been surveyed and the work will be carried on as expeditiously as possible, and it is expected that in forty days the works will be in operation.—A paper factory is to be built by Eastern capitalists.

**NORFOLK, VA.**—Awards of contracts for the construction of thirteen complete life-saving stations on the coast of North Carolina and Virginia have been made as follows: James H. Calron, of Norfolk, Va., seven life-saving stations on the coast of North Carolina and Virginia, \$2,310 each. Allen A. McCullough, Norfolk, Va., six life-saving stations on the coast of North Carolina, at \$2,240 each. These stations are to be completed and turned over to the Government by the 15th of November.

**OTTAWA, O.**—Mr. Maas has torn down the walls of his building, which the fire had spared, for the purpose of building a new and larger business house.

**OWEN CITY, IND.**—On the 16th inst. bids for building the county poor-house will be opened.

**PITTSBURGH, PENN.**—Captain F. A. Mahan is to superintend the building of the new movable dam below the city. It will cost about half a million of dollars, and is to be larger than any other similar dam in the country.

**PLYMOUTH, MASS.**—The immense statue of Morality for the Pilgrim Monument has arrived here in perfect order.

**PORTSMOUTH, N. H.**—The foundation for the fog-horn tower at the Wh le's Back entrance to this harbor has been finished. The workmen have already set in place the first section, 10 feet in length, of the iron tower.

**PROVIDENCE, R. I.**—The following notices of intention to build have been received lately at the office of the City Engineer: Mrs. Josephine Fenner, on corner Cranston and Knight sts.—William Hancock, on Sutton St.—Benjamin A. Souza, on corner Richmond and Pine sts.—Ursuline Convent and Academy, on Broadway.—Martin Larvin, on Oakland Ave., Sweet Brier and Florence sts.—St. Peter's and St. Paul's Church of Providence, on High, Fenner, and Pond sts.—Miley & Son, on Day St.—It is said that the Infantry Building Association, Wm. Whitaker, president, has secured all but about \$12,000 of the sum it needs.

**REVERE, MASS.**—Thomas F. Greene and John H. Putnam are building dwelling houses on Winthrop Street and Dehon Street respectively.

**RIO JANEIRO, BRAZIL.**—Mr. J. C. Kip Hopper is the owner of an exhibition building, 300 by 175 feet, which is to be built as a mart for goods from merchants producing them in the Unit d States. The building will be divided into sections to be 14 feet each of which will have a yearly rental of about \$500. Plans have also been made for a spacious annex or agricultural implements. The building will be framed in Maine, and transported in sections to Brazil, where

it will be raised and thoroughly cased in wrought iron. The facade, which is of the Renaissance type, has, as a central feature, two towers, which inclose the main entrance. The lower story of the building is well protected by a veranda, which terminates in large, octagonal pavilions, used for the incidental purposes of such an exhibition. Mr. W. G. Preston, of Boston, is the architect.

**SUZEREN'S LANDING, N. Y.**—Mr. H. H. Holly, architect, is building for H. E. Lawrence, Esq., a house which will cost about \$50,000.

**SOUTH PARIS, ME.**—The Odd Fellows of this place are building a new hall. The building will be 77 by 45 feet. The first story will be used for stores, the second story for a public hall, and the third story for the Odd Fellows Hall. Cost, \$5,000. Chas. H. Kimball, architect, Portland, Me., furnished the plans.—The Unitarian Church is undergoing repairs. There will be added a vestry, and the architecture of the building will be materially changed. Chas. H. Kimball is the architect.

**STRAITSBURGH, N. Y.**—A stone house is now building for Mr. J. Lawrence Lee, of New York. It will cost about \$31,000.

**SULLIVAN, IND.**—The new theatre just finished is the largest one in Sullivan County.

**TAMA CT., ILL.**—The Gilman Terra Cotta Works of Tama County have filed their articles of incorporation at the State Secretary's office, with a capital of \$100,000.

**WESTERLY, R. I.**—Smith & Hetsell, of Middletown, Conn., contractors for the brickwork for Price's new block on Main Street, have commenced operations and are doing rapid work. The brickwork of Langworthy's storehouse, on the rear of his lot, is up one story, and the foundation of the block on the street is nearly ready for the brick-layers. S. A. Champlin, directly south, is rapidly completing the foundation for his new building, and the burnt district presents a very lively appearance.

**WHITINSVILLE, MASS.**—Mr. H. C. Carr is erecting a large two-story house, 25 by 23 feet, with wings on all sides 15 by 21 feet. The house contains twenty-four rooms. George G. Thompson, of Uxbridge, has the contract about the foundation.—Mr. Thompson is also building a large two-story house, 30 by 42 feet, for John Harrington, which is nearly completed.—Thomas Noyes is erecting a two-story tenement house for Mr. O. B. Moulton, 22 by 23 feet.—Mr. Lewis Hopkins has a four-tenement house well under way, 30 by 44 feet, two stories high, with a French roof.—Mr. Geo. M. Blanchard has the foundation of the new school-house nearly completed.

**WINTHROP, MASS.**—The B. W. & P. S. Railroad are building a small depot on the beach.

**WORTHINGTON, IND.**—A town-hall is now building.

**WOOSTER, O.**—William M. Kelsor, of New Brighton, Penn., has taken the contract for building the new court-house. The price is \$24,975.

### INDEX OF CURRENT WORK,

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

#### Baltimore, Md.

CHURCH.—The Cummings Memorial Church. Mr. Caswell, architect.

CHURCH.—The Pius IX. Memorial Church. G. A. Frederick, architect. Cost \$100,000.

CHURCH.—Church of St. Michael and All Angels. Cost \$80,000. Wyatt & Sperry, architects.

HOSPITAL.—Johns Hopkins Hospital. J. R. Niernsée, consulting architect.

#### Boston, Mass.

BANK BUILDING.—Tremont Bank Building. Carl Fehmer, architect.

HOTEL.—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.

THE MUSEUM OF FINE ARTS.—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.

SCHOOL-HOUSE.—High and Latin School. G. A. Clough, architect.

ASYLUM.—Asylum for Aged People, C. J. Bateman, architect. Cost \$50,000.

#### Brooklyn, N. Y.

TEASEMENT.—A. T. White, owner. William Field & Son, architects.

SOCIETY BUILDING.—The Long Island Historical Society Building, Mr. G. B. Root, architect. Cost \$100,000.

CHURCH.—St. Francis Xavier R. C. Church, West Fifteenth Street. Cost \$150,000. P. Keely, architect.

HOSPITAL.—St. John's Hospital, N. L. Derby, New York, architect.

#### Chicago, Ill.

ARMORY.—Armory for the First Regiment. Messrs. Wheelock & Clay, architects. Cost \$25,000.

STORE.—The Singer Building. Cost \$250,000.

#### Cincinnati, O.

U. S. CUSTOM HOUSE AND POST OFFICE.—S. Hannaford, local superintendent.

CHILDREN'S HOME.—J. W. McLaughlin, architect. Cost \$50,000.

NEWSPAPER OFFICE.—The Gazette Building. E. Anderson, architect.

CHURCH.—Church of St. Francis de Sales.

#### Cleveland, O.

BUSINESS BLOCK.—Amasa Stone, owner. J. Ireland, architect. Cost \$70,000.

CHURCH.—Second Presbyterian. J. Ireland, architect. Cost \$70,000.

CONVENT.—Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

#### Hartford, Conn.

SEMINARY.—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.

CATHEDRAL.—R. C. Cathedral of St. Joseph. P. Keely, architect.

CATHOLIC SCHOOL.—Brown & Stilson, architects, New Haven. Cost about \$25,000.

#### Jersey City.

CONVENT.—Convent of the Sisters of St. Dominick. Cost \$40,000.

#### New York.

THE "FLORENCE."—Emile Grewé, architect. Mrs. Matthews, owner. Cost \$500,000.

THE BOREAL BUILDING.—S. D. Haich, architect. Cost \$250,000.

COLLEGE.—Addition to Columbia College. C. C. Haight, architect. Cost \$200,000.

OFFICE BUILDING.—Messrs. Silliman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.

APARTMENT HOUSE.—Mr. H. J. Hardenburgh, architect. Cost \$300,000.

PRIVATE RESIDENCE.—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.

ARMORY for the Seventh Regiment.—Cost \$300,000. C. W. Clifton, architect.

#### Philadelphia.

HOSPITAL.—Presbyterian Hospital. Wilson Bros., arch'ts. OFFICE BUILDING.—Girard trust.

#### Providence, R. I.

DORMITORY for Brown University.—Messrs. Stone & Carpenter, architects.

CITY HALL.—Mr. S. J. F. Thayer, Boston, architect.

HIGH SCHOOL BUILDING.—Messrs. Walker & Gould, architects.

#### St. John, N. B.

POST OFFICE, Custom House, and Savings Bank.—Mr. Scott, Chief Architect to the Dominion Government.

BANK.—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.

CHURCH.—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.

CITY HALL.—Messrs. McKean & Fairweather, architects.

CHAPEL.—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.

CHURCH.—St. James's Church, Croft & Camp, architects, St. John, N. B.—St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$60,000.

#### St. Louis.

CHURCH.—Second Baptist Church. Edward Hildley, contractor. Cost \$100,000.

COURT HOUSE for the new county of St. Louis.—F. Renwick, architect. Cost \$28,000.

COLLEGE.—College for the Christian Brothers. Mr. Jas. McGrath, architect. Cost \$20,000.

CUSTOM HOUSE AND POST OFFICE.—Mr. Jas. G. Hill, Supervising Architect of the Treasury Department.

UNIVERSITY BUILDING.—The Female Department of Washington University. Rev. W. G. Eliot, Chancellor. Cost \$60,000.

#### General.

CAMBRIDGE, ILL.—Court House for Henderson County. Cost \$65,000.

CAMBRIDGE, MASS.—Gymnasium for Harvard College. Messrs. Peabody & Stearns, architects.

CONCORD, N. H.—State Prison. Messrs. Dow & Wheeler, architects. Appropriation, \$200,000.

DEBUQUE, IO.—St. John's Church, H. M. Congdon, architect, New York, \$40,000.

ELMIRA, N. Y.—Masonic Hall. N. LeBrun, architect, New York. Cost \$60,000.

### Publishers' Department.

## The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY

HOUGHTON, OSGOOD & CO.,

WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year, \$6.00 in advance.

### CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,

WITH

Houghton, Osgood & Co.'s other Periodicals.

THE ARCHITECT and ATLANTIC MONTHLY...\$9.00  
THE ARCHITECT and THE REPORTER...15.00  
THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL...10.00  
THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE...7.00  
\* N. B.—The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

### RATES OF ADVERTISING.

PAGES NEXT TO READING MATTER, single insertion...12½ cts. per line.  
One inch (14 lines) one insertion...\$1.75  
One inch, six insertions...10.00  
INSIDE PAGES, single insertion...10 cts. per line.  
One inch, single insertion...\$1.40  
One inch, six insertions...7.00  
For larger space, and for a series of more than six insertions, reduced rates, made known on application to the Publishers.

Special rates for first and last pages.

No extra charge for cuts, or for advertisements that occupy more than a column in width.

Payments should be made directly to the Publishers, either by draft or by post office order.

HOUGHTON, OSGOOD & CO., Publishers,  
WINTHROP SQUARE, BOSTON.

*St. Hall & Sons*  
Manufacturers of  
*Architectural Terra Cotta*  
*Buff and Colored Brick Fire Brick*  
*Established 1846 South Amboy, N. J.*

(Established 1848.)

MARKET ST. ARCHITECTURAL FOUNDRY

AND

IRON WORKS.

SNEAD & CO.,

LOUISVILLE, KY.

Makers of every description of Iron Work for Buildings.

PROPOSALS.

TIMBER.

PUEBLO, COL.
Proposals will be received at the Engineer's office of the New Mexico & Southern Pacific R. R. Co., in Pueblo, Col., until noon of August 20, 1878, for the delivery of 300,000 railroad cross-ties, 3,400 telegraph poles, 60,000 lineal feet of piling, and for 1,000,000 feet, B. M., of bridge timber, all to be delivered on or before March 1, 1879, to the New Mexico and Southern Pacific Railroad along its located line between Willow Springs and Las Vegas, New Mexico. Specifications, bills for the mat-rial, conditions for delivery of same, and forms for bids will be on exhibition at Pueblo and Trinidad, Colorado, on and after August 1, 1878. Copies of these may be had on application in person or by letter, at this office. A good and sufficient bond will be required for the fulfillment of the contract and for the protection of the railroad company.

DAM.

CARILLON CANAL, CAN.
Sealed tenders, addressed to the Secretary of Public Works, and indorsed "Tender for the Carillon Canal, Dam, etc.", will be received at the office of the Department of Public Works, Ottawa, Ontario, until the arrival of the eastern and western mails, on Thursday, the 15th day of August, next, for the construction of a dam, completion of a timber slide, and a canal, with two lift-locks, at and in the vicinity of Carillon Rapids. Plans and specifications of the works can be seen at said office, and at the Resident Engineer's office, Carillon, on and after Friday, the 2d day of August next, at either of which places printed forms of tender can be had. Tenders will not be considered unless made strictly in accordance with the printed forms, and—in the case of firms—except there are attached the actual signatures, the nature of the occupation, and place of residence of each member of the same; and further, an accepted bank check for the sum of three thousand dollars must accompany the tender, which sum shall be forfeited if the party tendering declines entering into contract for the works at the rates stated in the offer submitted. The check thus sent will be returned to the respective parties whose tenders are not accepted. For the due fulfillment of the contract satisfactory security will be required by the deposit of money to the amount of five per cent. on the bulk sum of the contract, of which the sum sent in with the tender will be considered a part. Ninety per cent. only of the progress estimates will be paid until the completion of the work. To each tender must be attached the actual signatures of two responsible and solvent persons, residents of the Dominion, willing to become sureties for the carrying out of these conditions, as well as for the due performance of the works embraced in the contract. This department does not, however, bind itself to accept the lowest or any tender. By order,

WHITE MARBLE MANTELS.

Proposals for White Marble Mantels for the U. S. Custom-House at Charleston, S. C.
OFFICE OF SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., August 1, 1878.
Sealed proposals will be received at this office until 12 m., on the 19th day of August, 1878, for nine White Marble Mantels for the U. S. Custom-House at Charleston, S. C., in accordance with drawing and specification, copies of which and any additional information may be had on application at this office or the office of the Superintendent.

GLASS AND WOOD MANTELS.

Proposals for Glass and Wood Mantels for the U. S. Court-House and Post-Office at Lincoln, Neb.
OFFICE OF THE SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., August 1, 1878.
Sealed proposals will be received at this office until 12 m., on the 19th day of August, 1878, for the Glass required for the U. S. Court-House and Post-Office at Lincoln, Neb., in accordance with diagrams, specifications, and schedule. Sealed proposals will also be received until that time for the Wood Mantels required for that building, in accordance with drawing and specifications. Copies of drawings, specification, etc., and any additional information may be had on application at this office or the office of the Superintendent.

MARBLE MANTELS, STONE AND IRON WORK FOR FENCE.

Proposals for Marble Mantels, Stone and Iron Work for Fence, of the U. S. Court-House and Post-Office at Parkersburg, W. Va.
OFFICE OF THE SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., August 1, 1878.
Sealed proposals will be received at this office until 12 m., on the 19th day of August, 1878, as follows: First for nineteen Marble Mantels for the U. S. Court-House and Post-Office at Parkersburg, W. Va. Second, for Stone-Work for Fence for same building. Third, for Iron-Work for Fence. Copies of drawings and specifications of all of the above, and any additional information, may be had on application at this office or the office of the Superintendent.

DREDGING.

U. S. ENGINEER OFFICE,
NORFOLK, VA., July 31, 1878.
Proposals for the improvement of the following named localities in Virginia will be received at this office until noon of August 30, 1878, and opened immediately thereafter.
1. Dredging in the Norfolk Harbor, Va., and its approaches.
2. Dredging in the South Branch of the Elizabeth River. The right to reject any bid is reserved.
Blank forms, specifications, and any desired information can be had on application at this office.

DREDGING.

UNITED STATES ENGINEER OFFICE,
ROOM 25, HONOR BUILDING,
CHICAGO, July 31, 1878.
Sealed proposals, in duplicate, will be received at this office until 12 o'clock m., Tuesday, August 20, 1878, for dredging at Chicago Harbor, Ill. For blanks for proposals, and all information, apply at this office.

PROPOSALS.

IRON BEAMS.

ROCK ISLAND ARSENAL, ILL., July 31, 1878.
Sealed proposals, to be opened at 10 A. M., August 20, 1878, are hereby invited to furnish, delivered on cars at this Arsenal, about 1,643,000 pounds of 15-inch Wrought-Iron I Beams, to weigh 200 pounds per yard, about 754,000 pounds of 12 or 12 1/2-inch Wrought-Iron I Beams, to weigh 25 pounds per yard, and about 8,100 pounds of Angle Pieces, 3 1/2 inches by 3 1/2 inches by 3/4 inches.
The beams must be straight, out of wind, cut square at the ends, free from flaws, blisters, and ragged edges, and contain good iron, and the bid should be accompanied by the manufacturer's published tables or formula, giving the guaranteed strength and stiffness of beams.
Nearly all the beams will be required in lengths of from 16 to 20 feet, and two thirds of them in such exact lengths that they must be cut cold.
Bids must be addressed to the undersigned, indorsed on the outside, "Proposals to furnish Beams." The successful bidder will be required to enter into contract, and to give good and sufficient bonds for the faithful performance of the contract.
About one fifth of the beams must be delivered within two months, and the remainder within five months of the date of contract.
The United States reserves the right to reject all bids which are not deemed satisfactory.

BRASS STOP-COCKS, ETC.

BOARD OF PUBLIC WORKS OFFICE,
CINCINNATI, July 20, 1878.
Sealed proposals will be received at this office until 12 m. of Tuesday, August 20, 1878, for the following materials required for the Water-Works Department for the year ending September 1, 1879:
600 1/2-inch round-flow regulation screw ferrules.
250 1/2-inch round-flow regulation screw ferrules.
60 1/2-inch round-flow regulation brass stop-cocks.
250 1/2-inch round-flow regulation brass stop-cocks.
100 1/2-inch round-flow regulation brass stop-cocks.
25 1/2-inch round-flow regulation brass stop-cocks.
20 1/2-inch round-flow regulation brass stop-cocks.
10 2-inch round-flow regulation brass stop-cocks.
For hydrant service (all more or less).
Also, all machine brass castings, machine iron castings, sheet-valves and valve-boxes, hydrants, stop-boxes, lead pipe, pig lead, hemp packing, cast-iron water pipe and special castings required for connections (all more or less), specifications and samples to be seen at this office.
The Board reserves the right to reject any or all bids. Each bid to be accompanied by two disinterested sureties.
By order of the Board.

STEAM-HEATING APPARATUS.

XENIA, O.
Sealed proposals will be received by the Board of Trustees of the Ohio Soldiers' and Sailors' Orphans' Home, at Home Buildings, Xenia, Ohio, up to one o'clock P. M., on Friday, August 23, 1878.
For furnishing in place and completing a Steam-Heating Apparatus for State School Building, now being erected at the Home, according to plans and specifications now on file at the office of the Auditor of State, Columbus, Ohio, a copy of which may be seen at the Home, Xenia, Ohio. Steam fitters and contractors may submit plans and specifications of boiler, other than specified, should they so desire, providing same capacity as specified, for inspection of the Trustees, at the above named time.
All proposals must be accompanied with an approved guarantee bond, in a sum equal to one half the amount of contract, specifying that if bid is accepted the completion of contract in accordance with plans and specifications and to the entire satisfaction of the Board of Trustees and Supervising Architect.
The Board of Trustees reserve the right to reject any or all bids.
By order of the Board of Trustees of the Ohio Soldiers' and Sailors' Orphans' Home, Xenia, Ohio.

CUT STONE, BRICK, CEMENT, AND SAND.

Proposals for Cut Stone Work, Bricks, Cement, and Sand for the superstructure of the U. S. Court-House and Post-Office at Austin, Texas.
OFFICE OF THE SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., July 30, 1878.
Sealed proposals will be received at this office until 12 m., on the 19th day of August, 1878, for all of the Stone Work cut and laid, delivered at the site of the building ready for setting; 700,000, more or less, common Bricks; 1,100 bbls., more or less, Cement; and 200 cubic yards, more or less, of clean, sharp Sand, required for the superstructure of the U. S. Court-House and Post-Office at Austin, Texas, in accordance with drawings and specification, copies of which and any additional information may be had on application at this office or the office of the Superintendent.

COMPETITION.

DESIGNS FOR ENCLOSURE OF ARMY AND NAVY MONUMENT.

CITY OF BOSTON,
CITY HALL, July 16, 1878.
The Joint Standing Committee on Common and Public Grounds hereby offer a premium of Fifty Dollars for the best design for a Bronze Fence, to be erected around the Army and Navy Monument on Boston Common.
The total cost of the fence, including cost of foundation and erection, not to exceed the sum of Two Thousand Dollars.
Each design to be marked with some motto or device, which is to be repeated on the outside of a sealed envelope containing the author's name.
The design which is accepted will become the property of the City of Boston; all others will be at the disposal of their respective authors. The Committee reserve the right to reject any or all designs received.
All designs to be sent to the office of the Clerk of Committees, City Hall, on or before the 14th day of September, 1878, at 1 o'clock P. M.
For the Committee.

PROPOSALS.

STONE AND IRON WORK.

Proposals for Stone and Iron Work for Fence, etc., for the U. S. Court-House and Post-Office at Raleigh, N. C.
OFFICE OF THE SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., August 1, 1878.
Sealed proposals will be received at this office until 12 m., on the 19th day of August, 1878, for the Stone-Work for Fence, etc., of the U. S. Court-House and Post-Office at Raleigh, N. C., in accordance with drawings and specifications. Proposals will also be received until that time for the Iron-Work for Fence, etc., for same building, in accordance with drawings and specification. Copies of the drawings and specifications, and any additional information, may be had on application at this office or the office of the Superintendent.

ASPHALT PAVEMENT.

ENGINEER DEPARTMENT,
DISTRICT OF COLUMBIA,
WASHINGTON, D. C., August 5, 1878.
By direction of the Board of Commissioners, sealed proposals will be received at this office until 12 o'clock m., Thursday, August 15, 1878, for furnishing and laying about thirty-three thousand eight hundred and ninety-one (33,891) square yards, more or less, asphaltum pavement upon the carriage ways of Fourteenth Street and East Capitol Street, in the city of Washington, D. C. Blank forms of proposals and specifications may be obtained from this office, together with all necessary information, upon application therefor; and bids upon these forms will alone be considered. The right is reserved to reject any or all bids, or parts of bids.
By order of the Engineer Commissioner, etc.

LIGHT-HOUSE.

OFFICE OF LIGHT-HOUSE ENGINEER,
TENTH DISTRICT,
OSWEGO, N. Y., July 29, 1878.
Sealed proposals will be received at this office until eleven (11) o'clock A. M., on Thursday, August 15, 1878. First, for furnishing and erecting the Iron-Work of the Sandusky Bay Ranges, Ohio. Second, for completing the Keeper's Dwelling. The right to reject any or all bids, or to waive defects, if it be deemed for the interest of the Government to do so, is reserved. All bids should be sealed and indorsed, "Proposals for Iron-Work, etc., for the Sandusky Bay Ranges, Ohio," and inclosed in another envelope, addressed to the undersigned, prepaid if sent by mail. Each bid should contain a copy of this advertisement. Plans and specifications may be seen at this office.

CUSTOM-HOUSE.

St. JOHN, N. B.
Sealed tenders addressed to the undersigned and indorsed "Tender for Custom-House, St. John, N. B.," will be received at this office, until Monday, the 12th day of August next, at noon, for the erection and completion of the above building. Plans, specifications, etc., can be seen at the office of the Department of Public Works in Ottawa, Ont., and at the office of Messrs. McKean and Fairweather, Architects, St. John, N. B., where form of tender, etc., and all necessary information can also be obtained.

A. L. FAUCHÈRE & CO.

OFFICE AND WAREHOUSES
1319 and 1321 Broadway, New York.
Importers, Manufacturers, and Dealers in all kinds of foreign and domestic
MARBLE FOR INTERIOR WORK.
Estimates furnished on application.

COMPETITIONS IN INTERIOR DECORATION.

The attention of architects, draughtsmen, and decorators is drawn to the series of competitions in interior decoration initiated by the editors, and now in operation.
REGULATIONS AND CONDITIONS
will be found in Nos. 109 and 114 of the AMERICAN ARCHITECT.
The programme of the FIFTH COMPETITION, which closes August 20th, will be found in No. 132.

The Useful

is issued monthly—consists of Perspectives of Interior Ornaments of Buildings, Fresco Painting, Furniture, etc., and is accompanied with full-size working-drawings—for direct use—
Price to Subscriber
One dollar per number.
Office 28 Pemberton Square,
Boston, Mass.

AN ARCHITECT,

aged 33, of 16 years' experience, is desirous of making an engagement as manager or superintendent; has had charge of several important public and private buildings, and the management of men. Can prepare drawings, specifications, estimates, bill of quantities, etc. Would prefer to go either South or West. Address "ARCHITECT," office of the AMERICAN ARCHITECT AND BUILDING NEWS, Boston, Mass.

A DRAUGHTSMAN (Architectural) of Designs, Detail, Iron-Work Construction, etc., wants a situation. Address, THOS. DANT, Post-Office, New York.

MARSHALL'S AMERICAN



LEADED SHEETS. Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Represented in New England States by C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

TO ARCHITECTS.

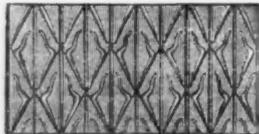
The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the

Scagliola & Marezzo Marble,

Which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall and Altar Work

JAS. T. ALLEN & CO.,

25 North 17th Street, Philadelphia.



METALLIC SHINGLES.

We call the attention of all parties interested in Roofing, and the owners of large buildings, to the above article. It is superior to Slate, Cheaper, Fire proof, about one fourth the weight, lays much closer therefore is Storm-proof, cannot Crack, etc. Any carpenter can put them on. Send for description and Price List to IRON CLAD MANUFACTURING CO., 59 Greenpoint Ave., Brooklyn, E. D. P. O. Box 2528, N. Y. City



D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

BUILDING MARBLE.

Branch yard of the RUTLAND MARBLE CO., 196 Causeway Street, Boston. JOHN D. ALLAN, Agent. Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Rutland and Continental Marble, furnished at low prices.



The Draft of the Chimney Increased.

Smoking Chimneys Prevented. Particularly adapted to Chimneys in exposed positions.

Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR, 70 Grand St., Brooklyn N. Y.

PATENT MINERAL WOOL.

ENTIRELY FIRE-PROOF AND UNDECAYING.

THE BEST INSULATOR OF HEAT, COLD, AND SOUND.

For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc.

ALEXANDER D. ELBERS, P. O. Box 4461. 26 1/2 Broadway, New York

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free

HENRY McSHANE & CO.,

Baltimore, Md.

THE ROCHESTER, N. Y.

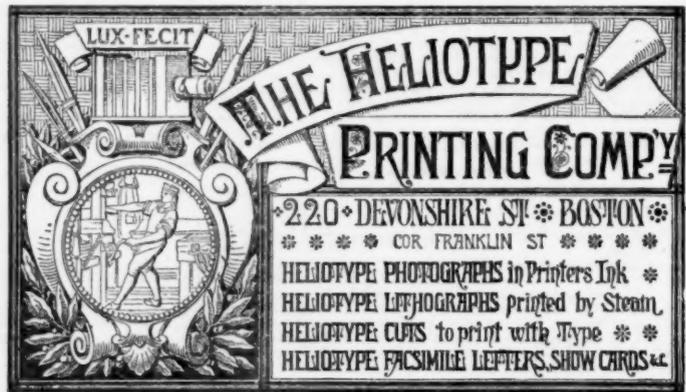
FREAR-STONE COMPANY,

ESTABLISHED IN 1870,

Continues to manufacture a superior quality of Sandstone, equal in all respects to the best cut stone, at about one half the price. It is adapted to all work where sandstone is admissible. The Safe Deposit Co.'s Building, San Francisco, estimated value, \$2,000,000, and hundreds of first-class buildings all over the country, are referred to. Frost and fire proof. Circulars sent on application. P. H. CURTIS, Sec. AND TREAS.

OUR ADVERTISERS and others who are in the habit of using business circulars, will find in our columns of "Building Intelligence" a continually new directory of names and addresses of those persons who, being at present actively engaged in building, are the ones who are most desirous of receiving circulars setting forth the advantages and qualities of all classes of building appliances.

An hour spent in mailing circulars to the persons mentioned above cannot fail of being profitable to the business man.



220 DEVONSHIRE ST. BOSTON

COR FRANKLIN ST

HELIOTYPE PHOTOGRAPHS in Printers Ink

HELIOTYPE PHOTOGRAPHS printed by Steam

HELIOTYPE CUTS to print with Type

HELIOTYPE FACSIMILE LETTERS, SHOW CARDS, etc.

THE "AIR SPACE"

STEAM PIPE and BOILER COVERINGS

Save 10 to 20 per cent in fuel.

See Am. Architect and Building News, Dec. 13, 1877.

THE CHALMERS-SPENCE COMPANY.

140 Congress Street, Boston, Football St., E. R., New York.

CLASSIFIED ADVERTISEMENTS.

ARCHITECTS.

Table listing architects and their locations, including Frank Hill Smith, Boston; W. W. Goodrich, Kingston, N. Y.; Charles E. Hiley, St. Louis; Walter Dickson, Albany, N. Y.; Richard M. Hunt, New York; P. B. Wight, Chicago; A. J. Hicknell & Co., New York; The Useful, Boston; Houghton, Osgood & Co., Boston; American Plumber Publishing Co., New York; Zodichey, St. Petersburg; Architectural Iron Work; Younglove & Co., Cleveland, O.; M. Clements, Cincinnati; Sneed & Co., Louisville, Ky.; Asphalt; Lumber Rock Asphalt Co., New York; Bell Foundries; Henry & Kimberly, Troy, N. Y.; Henry McShane & Co., Baltimore; Boiler Covering; The Chalmers-Spence Co.; Brick; (Ornamental) Peerless Brick Co., Phila.; (Fire) Waldo Brothers, Boston; Ohio Valley Press Brick Co., Louisville; (Pressed) Fletcher & Thomas; A. Hall & Sons; Bronze Decorations; National Fine Art Foundry, New York; Carpenters; J. H. Burr & Co., Boston; Chess; Johnson & Wilson, New York; Chimney Tops; Joseph W. Taylor, Brooklyn; Church Fixtures; J. & R. Lamb, New York; Clocks for Public Buildings; Seth Thomas Clock Co.; E. Howard & Co., Boston; G. M. Stevens & Co., Boston; Conductors (Iron); Austin, Oberler & Co., Philadelphia; Crossed Wood; Edward B. Andrews, Boston.

Table listing various building materials and services, including Decorators; Drain Pipe; Electric Bells, Annunciators, etc.; Elevators, Steam Engines, etc.; Whittier Machine Co.; Tufts' Elevator Works; Cooke & Bees; Ohio Brothers & Co.; Engineer (Sanitary); Geo. E. Waring, Jr., Newport, R. I.; E. S. Philbrick, Boston; Fire-Proof Buildings; Fire-Proof Building Co.; Freestone; Dorchester Union Freestone Co.; Gas Fixtures; Mitchell, Vance & Co.; Gas Machines; Denny Bros. & Co.; Springfield Gas Machine; Walworth Manufacturing Co.; Granite; The New England Granite Works; The Mitchell Granite Works; Gates, etc.; W. H. Jackson & Co.; C. S. Rankin & Co.; Hardware; Burditt & Williams; Heating Apparatus; Crane, Breed & Co.; Gold's Heater Manufacturing Co.; National Tube Works Co.; Gillis & Geoghegan; Walworth Manufacturing Co.; W. C. Bibb & Sons; Open Stone Ventilating Co.; Heliotypes; The Heliotype Printing Co.; Hoisting Machines; H. J. Reedy, Cincinnati.

Table listing interior finishing and other services, including Interior Finishing Wood; Palmer, Parker & Co.; Iron Work for Buildings; Edin Iron Co.; George Dwight, Jr. & Co.; Bartlett, Robbins & Co.; Paulson & Ezer; D. M. Mosker & Son; Leaded Sheets; Marshall Bros. & Co.; Locks and Bronze Hardware; Hopkins & Dickinson Manufacturing Co.; Yale Lock Manufacturing Co.; Mantels; Caldwell Manufacturing Co.; Stewart's; C. S. Rankin & Co.; Joseph S. Miller; Marble; Rutland Marble Co.; Marble Workers; S. Klaber & Co.; Fisher & Bird; Hugh Sisson & Sons; Marquetry Flooring (Patent); C. Butcher; Paint; Ashbel Wheeler; C. M. Wheeler; Paper Hangings; H. B. Jones & Co.; Paper Mache Decorations; Dolivet, Cutter & Co.; Patent Mineral Wool; A. D. Elbers; Patent Transom Lifter; J. F. Wollensak; Felt (Laid Welled); National Tube Works Co.; Plastering; John Mack; Plumber's Supplies; Jennings' Sanitary Depot; Rolling Venetian Blinds; Wilson & James; Phoenixville Bridge Works; John Farquhar's Sons; A. Knisely & Co.; Roofing Felt; The Felt Roofing Co.; Asphalt and other (Felt); Warren Chemical and Man'g Co.

Table listing Scagliola and Marezzo Marble, Sewer Gas Trap, Sewer Pipe, Shingles (Metallic), Shuttees (Steel), Sinks, Skylights, Stained Glass, Steam Pump, Knuckles Patent, Stove (Building), Tiles, and Ventilators, including James T. Allen & Co., Philadelphia; Gardiner & Co., New York; B. P. Bower & Co., Cleveland, O.; S. Hubner, Cleveland, O.; Brandeis & Wickert, Brooklyn, N. Y.; B. P. Bower & Co.; Iron Clad Mfg. Co., Brooklyn, N. Y.; Bickelhaupt Bros., New York; E. Van Noorden, Boston; Kelly & Holland; W. J. McPherson, Boston; Samuel West, Boston; Cook, Redding & Co., Boston; Knuckles Steam Pump Works; Nichol & Miller; Worthington & Sons, No. Amherst, O.; Wilson & Hughes Stone Co., Cleveland, O.; Rochester Frear-Stone Co.; Telegraph Co. (Automatic Signal); Theatrical Scenekey; Lafayette W. Seavey, New York; John Chadwick; Miller & Gades, New York; American Encaustic Tiling Co., New York; T. Aspinwall, New York; Waldo Brothers, Boston; C. A. Wellington, Boston; Sharpless & Watts, Philadelphia; Eureka Ventilation Co., Boston; Wellington's Patent Wash Bowl; L. S. Moore & Co., Boston; F. J. Hoyt, New York; National Wood Manufacturing Co.

# ETNA IRON CO.

Manufacturers of every description of Wrought and Cast

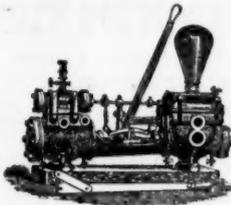
## ARCHITECTURAL IRON WORK FOR BUILDINGS.

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

### KNOWLES

Patent



Steam

## PUMP THE STANDARD.

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a speciality.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

KNOWLES STEAM PUMP WORKS, WARREN, MASS.

WAREHOUSES, { 14 & 16 Federal St., Boston. }  
{ 113 & 115 Congress St., Boston. }  
{ 92 & 94 Liberty St., New York. }

Send for Illustrated Catalogue.

### THE

## Plumber & Sanitary Engineer,

A Monthly Journal devoted to

## WATER SUPPLY, DRAINAGE, HEATING & LIGHTING.

It contains no paid puff.

Its technical articles are written by experts.

It is a manual of the best practice in Plumbing.

It illustrates the latest improvements in House Drainage.

It is indispensable to every Architect and Builder.

Terms, \$1.50 a year. Single Copies, 15 cents.

Address

AM. PLUMBER PUBLISHING CO.

Box 3087 P. O. 297 Pearl St., New York.

## "ZODTCHY" (BUILDER).

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

M. JEROME KÜTTNER,

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from EIGHT to SIXTEEN pages of letterpress, gr. quarto, with cuts, and at least FIVE autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICES FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.

The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address.

JOURNAL "ZODTCHY,"

18 OFFICER STREET, ST. PETERSBURG, RUSSIA.



### Carson's Kitchen Sink.

Is an improvement in this fixture that must meet with the approval of every house-keeper as it retains every particle of grease, and prevents the waste of pipes from filling up; besides being better trapped than any other sink in use.

Pat'd JAN. 24 1877.  
Signal Mfg. Co., Medina, N. Y., or J. M. Carson, Louisville, Ky., Man'rs.

### NATIONAL

## FINE ART FOUNDRY,

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze TO ARCHITECTS AND BUILDERS.

## MAHOGANY, FIGURED WALNUTS,

(all thicknesses) for Doors and Interior Finish.

(1-4 inch thick), for Doors, etc.

## VENEERS,

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

## GEO. DWIGHT, JR., & CO.,

Builders in Iron, and Engineers in Fire-Proof Construction,

SPRINGFIELD, MASS.,

HAVE for many years given their exclusive attention to FIRE-PROOF CONSTRUCTION; and they now invite the correspondence of Architects to the following specialties which hereafter will constitute the leading items of their business: FIRE-PROOF FLOORS. The only floors that have stood fire in this country.

FIRE-PROOF ROOFS. Refer to Equitable Life Insurance Company's Building at Boston.

FIRE-PROOF SHUTTERS. Have stood many fires in all parts of the country. Over 6000 pairs put up in Boston after the fire. Saved the city of Springfield last year.

FIRE-PROOF LATH. In the words of one of the best-known architects of this country, "Minimum of metal, maximum of stiffness, maximum of strength; the best lath ever made, either wood or iron." See New York Post-Office; State Department, Washington; Equitable Life Insurance Company's Buildings, and many others.

Mr. HOYT will be pleased to wait upon Architects, when desired, to explain our methods, and to present for inspection construction plans and estimates for any specific work.

## BURDITT & WILLIAMS,

DEALERS IN

## FINE HARDWARE

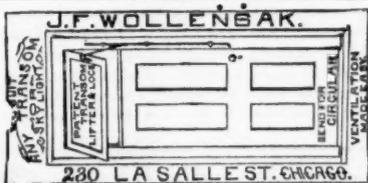
of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE

of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



## CATALOGUE OF Architectural Books

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO.,

ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.

## BICKELHOUP BROS.,

329 West 37th St., New York.

No Leak.



No Putty.

## PATENT METALLIC SKY-LIGHTS.

BEEHIVE BRAND.

## FELT ROOFING.

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

### ASAHEL WHEELER'S PAINT PRESERVER

Is the most remarkable Wood and Paint Protector known against the hot sun's rays and storms. A trial of more than three years' constant exposure has demonstrated this fact. A perfect glossy surface yet remains without signs of perishing. ASAHEL WHEELER, 145 Milk St., Boston



BALTIMORE PRESSED TILES, FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases, DRAIN AND SEWER PIPE, FIRE-BRICK, LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

WALDO BROTHERS, No. 94 WATER STREET, BOSTON.

## PEERLESS BRICKS.

THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK

ARCHITECTURAL SHAPES (80 kinds).

ALSO

RED Pressed Fronts.

Extra fine in color and quality

BROWN, Colored throughout

More beautiful than Brown Stone DURABLE

CHOCOLATE,

Same as above; difference in color

FLESH COLOR,

A very popular color.

BUFF, very fine.

Harmonizes beautifully with Brown or Black

GRAY, A pleasing shade.

BLACK, Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F ADAMS, JOSEPH WOOD, JR., PRESIDENT, TREASURER



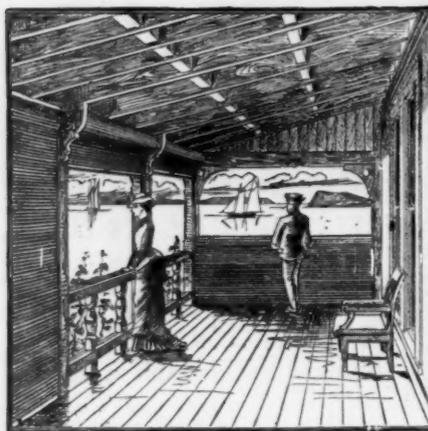
DOLIVET, CUTTER, & CO., ARTISTIC

## Papier Maché Decorations,

106 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING VENETIAN BLINDS.**  
**WILSON'S PATENT.**  
 These blinds can be fitted to any kind of Window or Piazza. They require no winding machinery or balance weights, and run up and down as easily as an ordinary spring shade. For Bay Windows they are found invaluable.  
 They are simple, durable, and handsomely finished. They were exhibited at Philadelphia in competition with the Rolling Venetian Shutters of English manufacture, and received the only award of Medal and Diploma.  
 Price reduced to 50 cents per foot super, in hard wood. We also manufacture Wilson's patent Rolling **STEEL SHUTTERS**, the best and cheapest fire and burglar-proof Shutters in the market.  
**WILSON & JAMES,**  
 68 Beekman St., NEW YORK.

**VALUABLE ART PUBLICATIONS.**

**ALLONGE'S** (Auguste) Charcoal Drawing. With an Introduction by C. C. PERKINS, and a Heliotype Frontispiece. Small 4to. \$1.00.  
**BAKER'S** (W. S.) Origin and Antiquity of Engraving, with 23 Heliotype Illustrations from Dürer, Van Dyck, Raphael, Guido, etc. 8vo. \$5.00.  
**HUNT'S** (William M.) Talks on Art. 8vo. Paper. \$1.  
**CLEMENT'S** (Clara Erskine) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a complete Index. Cr. 8vo. Cloth, red edges, \$3.25.  
 Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.  
**MURRAY'S** (Mrs. Elizabeth) The Modern System of Painting in Water-Colors from the living model. 12mo, paper, 60 cents.

**HOUGHTON, OSGOOD AND COMPANY, Boston.**

**A NOVELTY.**  
**THE YALE PATENT**  
**ANTI-FRICTION ROLLER STRIKE.**

Applicable for use with all Mortise Locks, old and new.  
**IT ENABLES THE DOOR TO BE SHUT WITHOUT SLAMMING.**  
**IT PREVENTS ALL JAR AND NOISE.**  
**IT SAVES WEAR OF THE LOCK AND DOOR.**  
**IT CAN BE EASILY APPLIED.**  
**ITS COST IS BUT TRIFLING.**  
 Architects can obtain a sample strike free by addressing  
**YALE LOCK MANUFACTURING CO., STAMFORD, CONN.**  
 New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

**A. G. MYERS, Manager,**  
 94 BEEKMAN STREET,  
 NEW YORK.

**SPECIALTIES**  
 IN  
**PLUMBING**  
**GOODS.**  
 Having for their special object  
*Cleanliness,*  
*Durability,*  
 And the exclusion of Sewer Gas.

**WARING'S**  
 SEWER GAS CHECK-VALVE.  
 Made entirely of Brass.

**JENNINGS' NEW CLOSET,**  
 WITH  
**New Valve**  
 With non-corrosive Valve Seating and Solid Plunger.

**BOWER'S PATENT**  
**SEWER-GAS TRAP.**

Patented in U. S. Apr. 24 & Aug. 14, 1877.  
**The most PERFECT BARRIER**  
 against SEWER GAS that has yet been invented.  
 The only trap that has been FULLY INDORSED by the LEADING SANITARIANS throughout the WORLD.  
**IT IS A POSITIVE SEAL**  
 Against sewer-gas under pressure, absorbed gases, and back water.  
 Seal is not broken by siphonage or evaporation.  
**Self-Scouring, not injured by freezing,**  
 It has many other good points that  
**No other Trap possesses.**

It can be readily attached to old work, in a very short time, and at very little expense.  
**SIMPLE, CHEAP, DURABLE, AND EFFECTIVE.**  
 A sample Trap FREE to Architects on application. Send for full descriptive Circulars to the Manufacturers,  
**B. P. BOWER & CO.**  
 104 & 106 St. Clair St., Cleveland, O.

**STEWART'S HARD WOOD**  
**SLATE, MARBLE AND MANTELS.**  
**MIRRORS, ART-TILES,**  
**MANTELS, HEARTHES &c.**  
 Masonic Temple 23<sup>d</sup> St & 6<sup>th</sup> Ave N.Y.

**Sewer Pipe, Fire Brick,**  
 Terra Cotta, Chimney Tops, Garden Vases, Art Pottery for Decoration. The strongest and smoothest pipe in the country. Send for tests and Catalogue. Prices as low as any other manufacturer.  
**Portland Stone Ware Co.**  
 Geo. C. DUNN, Gen'l Ag't,  
 50 Kilby Street, Boston.  
 400 Federal Street, Boston.

**LIMMER ROCK ASPHALT CO.**  
 111 Broadway, Room 105, New York.  
 Rock Asphalt is a natural product, and the ideal material for Paving Roadways, Streets, Yards, and Stables, and for Flooring Cellars in Breweries and other establishments.



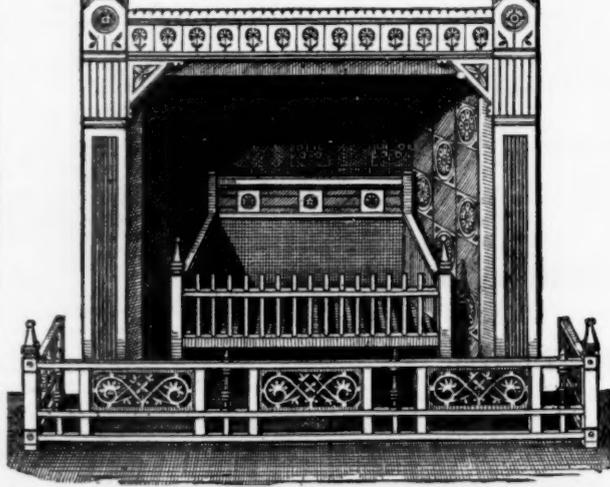
**PRIZE MEDALLISTS.**  
 1862; 1865; 1867; 1872; 1873; AND ONLY AWARD and MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.  
**CLARK & COMPANY,**  
 ORIGINAL INVENTORS AND SOLE PATENTEES OF  
**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, Improved Rolling Wood Shutters  
 OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Tilford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.  
 OFFICE AND MANUFACTORY,  
**162 & 164 West 27th Street, New York.**

**HOPKINS & DICKINSON MANUF'G CO.**  
 76 READE STREET, NEW YORK,  
 WORKS, DARLINGTON, N. J.  
*Lock and Hardware Manufacturers,*  
**DESIGNERS, FOUNDERS, AND WORKERS**  
 IN  
**BRONZE AND BRASS.**

*Architects' Designs faithfully executed.*  
 Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**  
 (NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)  
 Union Sq., 2d door from Broadway, (17th St. side),  
 NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile. HAVE NO OTHER WAREHOUSES.

**Automatic Signal Telegraph Co.,**  
 CITY OF BOSTON,  
 OFFICE, 178 DEVONSHIRE STREET, ROOM 20,  
 Is prepared to make contracts for the protection of buildings against fire.  
 DIRECTORS.  
 CHARLES E. GUILD, President. WILLIAM ENDICOTT, Jun  
 JOHN D. W. JOY, WILLIAM B. WATKINS.  
 PATRICK T. JACKSON, Treasurer.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**  
**Theatrical Fresco only.** Prices moderate. Refer to our first-class Scenery and Supplies delivered at any point, however distant. Correspondence solicited.  
**LAFAYETTE W. SEAVEY.**  
 Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK

**THE WELLINGTON**  
**PATENT OVERFLOW BASIN**  
 No sewer gas. No overflow. No leakage around the top of the basin. This thoroughly reliable basin is rapidly taking the place of the ordinary one. It gives perfect satisfaction in every instance.  
 Manufactured by  
**L. S. MOORE & CO.,**  
 40 Oliver St., Boston.  
 Send for Circulars.

**SAYLOR'S PORTLAND CEMENT.**  
 Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R., U. S. Government Works (Forts and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally.  
**For Sale by all dealers in Building Materials. Johnson & Wilson, Gen'l Agts.,**  
 93 Liberty Street, New York.

# AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 138.]

SATURDAY, AUGUST 17, 1878.

[PRICE 15 CENTS

### BUILDERS' SUPPLIES.

**AMERICAN ENCAUSTIC TILE,**  
Acknowledged by experts to be  
**THE BEST IN THE WORLD.**  
Manufactured by the  
**AMERICAN ENCAUSTIC TILING CO. (Limited.)**  
OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.  
Designs and estimates for Public Buildings, Halls,  
Churches, Vestibules, and for External Decoration, fur-  
nished on application.

**WALWORTH MANUFACTURING CO.,**  
69 KILDY ST., BOSTON.  
**PUBLIC BUILDINGS,**  
**PRIVATE RESIDENCES,**  
**GREENHOUSES, ETC.,**  
Warmed and ventilated by  
**STEAM OR HOT WATER.**  
Correspondence solicited. Plans and estimates furnished  
on application.

**"HOTCHKISS" TOWER CLOCKS,**  
MANUFACTURED BY  
**SETH THOMAS CLOCK CO., THOMASTON, CONN.**  
Prices \$100 to \$6,000.  
WARRANTED ACCURATE, STRONG, DURABLE.  
OFFICE, 581 BROADWAY, NEW YORK.  
Send for Illustrated Catalogue.

**"MINTON'S ART AND ENAMELED TILES."**  
(China Works, Stoke-Upon Trent.) Also, The Campbell  
Brick and Tile Co.'s  
**ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS,**  
ETC.  
For Churches, Banks, Halls, Vestibules, and Hearths;  
Outside Decorations, Flower Boxes, Etc.  
**THOS. ASPINWALL & SON,**  
604 Broadway, New York.  
The only representatives in the United States for the  
above firms.

**ASPHALT (FELT) ROOFING.**  
**WARREN'S NEW PATENT**  
**FELT AND GRAVEL ROOFING,**  
Substitutes NATIVE ASPHALT for Coal-Tar materials for  
these roofs.  
The very best and most durable material for flat roofs.  
Also, Native Asphalt and Asphaltic Cement for Concrete  
Walks and Pavements.  
Roofers and pavers supplied with the above, and with War-  
ren's original Coal Tar Roofing and Paving Materials.  
Send for circulars and samples.  
**WARREN CHEMICAL AND MANUFACTURING CO.,**  
80 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**THE MITCHELL GRANITE WORKS,**  
QUINCY, MASS.  
Has abundant facilities for furnishing the very best work,  
and all the most celebrated Granites of the New England  
States, for  
**MONUMENTAL, CEMETERY, AND BUILDING**  
**PURPOSES,**  
WORK PROMPTLY DONE, AND AT REASONABLE RATES.  
Polishing a specialty. Orders solicited.  
Address G. H. MITCHELL, Agent.

**TILES FROM ALL PARTS OF THE**  
WORLD,  
FOR  
**BANKS, PUBLIC BUILDINGS, AND PRIVATE HOUSES.**  
References given to Tile Work throughout the United  
States and British Provinces  
AGENT FOR THE AMERICAN ROOFING TILE  
Contracts Solicited  
**C. A. WELLINGTON, HOUSEHOLD ART ROOMS,**  
No. 171 TREMONT STREET, BOSTON.

**OHIO VALLEY PRESS BRICK CO.**  
Challenge the world for fine stock brick; also manufac-  
turers of all kinds of Bricks, octagon and square. Office at  
3d St., Yard Preston and Knapp Sts.  
LOUISVILLE, KY.

**HAWTHORNE & TUCKER,**  
PLUMBERS,  
16 PROVIDENCE STREET, BOSTON  
Estimates for Plumbing made, and work done in any part  
of the United States or Province.

**J. H. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue Mattapan (Ward 24), Boston.

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY**  
OF NEW YORK.

LEONARD F. BECKWITH, Pres't. E. GILLET, Vice-Pres't.  
Hollow Blocks of any pattern, uniting strength and re-  
sistance to fire and water. The Hydraulic Lime of Teil  
(France), one of the strongest cements known, is largely  
used in this manufacture. The blocks do not conduct  
heat, cold, or sound, and weigh 60 per cent less than brick.  
Fire-proof Partitions, Floor Arches between iron or wooden  
beams, and ceilings under iron or wooden beams, erected  
in following buildings:  
Western Union Telegraph, Orient, and Queens' Ins.  
Coal and Iron Exchange, Museum of Natural Hist.  
Equitable, Staats Zeitung, Hudson R. R. Fr. Depot.  
Windsor Savings Bank, N. Y. Hospital, Drexel,  
Windsor, & W'tm'ster Hotels, Cluny, & Young's Hotel, Bos'n,  
Syracuse Savings Bank, West Point Military Hosp.  
Columbia College, Tribune, Corryell, & Vancorlear Flats,  
Baltimore Safe Deposit Co. Peabody Inst., Baltimore,  
Peabody Museum, N. Haven, Westmoreland, & Elise Flats,  
Sidewalks laid at Lenox Library, Tribune, etc.  
Hollow Burnt Clay Bricks, for flat and curved arches,  
partitions, etc., and Skewbricks for brick arches.  
Sole agents for the U. S. for HYDRAULIC LIME OF TIEL,  
and LAFARGE PORTLAND CEMENT.  
Sole agents for the U. S. for METTLACH ENCAUSTIC TILES,  
laid in Tribune, Staats Zeitung, Mineral Spa, Central Park,  
Belvidere Hotel, etc.  
Sole agents for the Atlantic States for WIGHT'S FIRE-  
PROOF COLUMNS.  
Our Fire-proof work is the only one approved by the  
New York Board of Fire Underwriters and the Superin-  
tendent of Buildings, after severe public tests.  
Office Room 54 COAL AND IRON EXCHANGE, 21 Courtlandt  
Street, New York.  
BOORMAN & Co., Agents, Boston, 5 Duane St.

**E. HOWARD & CO.**  
MANUFACTURERS OF CLOCKS AND WATCHES  
**CLOCKS FOR PUBLIC BUILDINGS**  
114 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**  
PLAIN AND ENCAUSTIC  
FOR PUBLIC BUILDINGS AND DWELLINGS,  
As laid by us in  
**THE CAPITOL AT WASHINGTON,**  
And in numerous Churches, Banks, and Dwellings in every  
part of the Country,  
Glazed and Enamelled Tiles for Mantels, Hearths, Wain-  
scoting, &c., and for Exterior Decoration.  
**MILLER & COATES,**  
279 PEARL STREET, NEW YORK.

**BARTLETT, ROBBINS & CO.**  
HEATING AND VENTILATING OF PUBLIC AND  
PRIVATE BUILDINGS  
A SPECIALTY  
PLANS AND SPECIFICATIONS FURNISHED.  
FOUNDERS, AND MANUFACTURERS OF GAS WORKS,  
ETC., ETC.  
24 LIGHT STREET, BALTIMORE.

**THE NEW ENGLAND GRANITE WORKS**  
HARTFORD, CONN., and 121 BROADWAY, N.Y.  
Quarries at Westerly, R.I.  
**MONUMENTAL AND BUILDING WORK**  
of every description, all the varieties of  
**AMERICAN AND FOREIGN GRANITE.**  
UNEQUALLED FACILITIES OFFERED TO THE TRADE.  
**J. G. BATTERSON, Pres't. H. R. BATTERSON, Sec'y.**  
DIRECTORS:  
**J. G. BATTERSON, O. B. CANFIELD, H. A. BATTERSON**  
**G. T. BATTERSON,**  
**CARL CORNARD, Sculptor.**

**WHITTIER MACHINE CO.**  
Manufacturers of Steam and Hydraulic  
**ELEVATORS,**  
**STEAM ENGINES, BOILERS, AND MACHINERY.**  
No. 117 Tremont Street, Boston.  
Office in the New England Mutual Life Insurance Co's  
Building, Post Office Square,  
and 120 Broadway, New York  
**CHARLES WHITTIER, Pres. A. C. WHITTIER, Treas.**

**OTIS BROTHERS & CO.**  
SAFETY STEAM AND HYDRAULIC  
**ELEVATORS.**  
A specialty for a quarter of a century.  
**BUILDERS OF THE HALE HYDRAULIC ELEVATOR.**  
No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
**OHIO BUILDING STONE.**  
GRIND AND SOYER STONE,  
From our FLORENCE and AMHERST QUARRIES.  
Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS  
111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
Designers and Manufacturers of  
**GAS FIXTURES,**  
**ORNAMENTAL METAL WORK, CLOCKS AND BRONZES**  
**ARCHITECTS' ORDERS SOLICITED.**  
Special designs submitted on application.  
WAREROOMS, 636 and 638 BROADWAY, NEW YORK.  
MANUFACTORY, 24th and 25th Sts., and 10th AVENUE, N. Y.

**FISHER & BIRD,**  
Workers in all kinds of Foreign and Domestic  
**MARBLES,**  
97 to 103 EAST HOUSTON ST., NEW YORK.  
Established 1830.  
Among our notable decorations are: The Illinois new  
State House; Palace Hotel, San Francisco; Baldwin's Ho-  
tel, San Francisco; Insurance Building, 10th and Chestnut  
Streets, Philadelphia; Mutual Life Insurance Building  
Boston; Orient Mutual Insurance Building, New York;  
Union College, Schenectady; and numerous Churches,  
Private Residences, etc., etc., throughout the country. We  
solicit the opportunity to estimate upon all classes of work,  
viz., Tiling, Wainscoting, Staircases, Mantels, etc. Ceme-  
tery work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
Are ready to estimate on contracts of any size for  
furnishing their celebrated Amherst, Ohio,  
**BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS-**  
**OR CUT AND SET.**  
Also,  
**AMHERST AND INDEPENDENCE GRINDSTONES,**  
AND OHIO MINERAL AND STONE PAINTS.  
Fire-Proof Store Cement and Store Putty ground in Oil  
OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MO-**  
**SAICS."** Floor Tiles, beautiful in color and design, for  
Dwellings, Churches, and Public Buildings.  
**SPANISH WALL TILES.** White, Glazed, Valencia,  
Tiles for Walls and for decorative painting.  
**PRINTED FIGURED TILES** of Spanish designs, for  
Wainscoting, Mantels, Jardinières, etc.  
Floors of "Nolla Mosaics" can be seen at the "Rock-  
ingham," corner of Broadway and 56th Street. Imported  
and for sale by **JOHN CHADWICK, Sole Ag't for U. S.,**  
62 Broadway, N. Y.  
**C. E. PARKER, Agent, 14 Exchange Place, Boston.**

**TUFTS' ELEVATOR WORKS,**  
MANUFACTURERS OF "TUFTS' PATENT" COMBI-  
NATION ROPE ELEVATOR.  
TO BE OPERATED EITHER BY STEAM OR WATER.  
The only safe and reliable machine made for passenger use  
in Public Buildings and Hotels, and for business purposes in  
Warehouses, Stores, &c.  
37 FOUNDRY STREET, SOUTH BOSTON.  
OFFICE, 243 Broadway, New York.  
**OTIS TUFTS,** President.  
**L. A. BIGELOW,** Treas'r and Gen'l Manager.

**STEAM WARMING APPARATUS.**  
HIGH AND LOW PRESSURE.  
**HOUSE WARMING A SPECIALTY.**  
Pamphlet with more than 1,000 references sent on appli-  
cation.  
**WYLLYS H. WARNER,**  
114 LEONARD STREET, NEW YORK,  
and 33 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**  
No. 6 COURTLAND ST., NEW YORK.  
Works at Paterson, N.J.  
**PATENT SAFETY STEAM ELEVATORS**  
for Public and Bank Buildings, Hotels, Private Dwell-  
ings, etc.  
**SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP**  
**GUARANTEED.**  
Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "HEALTH" AND "TUBULAR"  
Manufactured by the  
**GOLD'S HEATER MANUFACTURING CO.**  
114 LEONARD ST., NEW YORK.

Send for Pamphlet.  
W. E. GOLD, Pres't WYLLIS H. WANNER, Treas.

**HUGH SISSON & SON,**

Importers, Dealers, and Manufacturers of  
**MARBLE.**

INTERIOR MARBLE WORK AND MONUMENTAL  
WORK A SPECIALTY.

Salesrooms, No. 140 W. Baltimore St.; Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,  
SPEAKING TUBES,  
AND BURGLAR ALARMS,**

For Public and Private Buildings.  
THE BEST IN USE.

**S. W. FULLER,**  
63 Devonshire Street, Boston.

**TOWER CLOCKS.**

FOR CHURCHES,  
PUBLIC AND PRIVATE BUILDINGS.

**G. M. STEVENS & CO., MANUFACTURERS,**  
90 SUDBURY ST., BOSTON, MASS.

**ART PAINTED TILES**

FOR MANTELS, CABINETS, ETC.

**SHARPLESS & WATTS,**  
225 MARKET STREET, PHILADELPHIA.

Agents for  
**MINTON'S TILES,**  
AND TERAZZOLATED PAVEMENTS.

**JOHN MACK, Plain and Ornamental Plasterer.**

41 Cambridge Street, Boston.

**PRESSED BRICK,  
STOCK AND COMMON**

MANUFACTURED BY  
**FLETCHER & THOMAS,**  
Indianapolis, Ind.

All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY  
**GILLIS & GEOGHEGAN,**  
Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 50th St. and 5th Av.;  
Drexel Building, cor Wall and Broad; Bennett Building,  
Fulton and Nassau, etc.

Architects and owners promptly furnished with specifications and estimates.

**ARCHITECTS.**

**P. B. WIGHT,**

CONSULTING ARCHITECT,

73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.

Consultations on matters pertaining to Fire-Proof Construction, Foundations, Drainage, Sanitary Work, Ventilation, Machinery, Valuations, Interior Decorations, and Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**

ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E., ARCHITECT  
AND SANITARY ENGINEER.**

KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,  
ARCHITECT,**

Room 17, Life Insurance Building,  
ST. LOUIS, MO.

Special attention to Churches, Schools, and other public buildings.

WALTER DICKSON, ARCHITECT, ALBANY, N. Y. PERRY BUILDING.

**GEO. E. WARING, JR.,**

CONSULTING ENGINEER,

FOR SANITARY AND AGRICULTURAL WORKS.  
NEWPORT, R. I.

**SANITARY ENGINEERING.**

**EDWARD S. PHILBRICK, C. E.,**

12 WEST ST., BOSTON, MASS.

Offers advice and superintendence in  
CONSTRUCTION OF WORKS,

IN PLUMBING, DRAINAGE, AND VENTILATION,  
And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
387 HARRISON AVENUE . . . . . BOSTON,  
SHEET METAL CORNICES, HAYES'S PATENT VENTILATING SKY-LIGHTS, WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

**MANTELS AND GRATES.**

RANKIN'S PATENT makes the Cleanest, Cheapest, and Hottest Fire. Avoid infringements, and send for Circular to

**C. S. RANKIN & CO.,  
ARCHITECTURAL IRON WORKS,**  
Manufacturers of all kinds of Iron Work for BUILDINGS, JAILS, ETC.

187 W. PEARL ST., CINCINNATI, O.

**EXCELSIOR  
ROOF PAINT.**

This paint has been thoroughly tested throughout the Eastern States, and has been found to be a perfect tin or metallic preserver. We warrant it neither to crack nor blister by **HEAT or COLD**, and to last

**IN ANY CLIMATE TEN YEARS.**

Those desiring to use this valuable preparation upon their buildings, can secure the same by addressing

**C. M. WHEELER, J. M. ROOT,**  
Toledo, Ohio.

**ARCHITECTURAL IRON AND JAIL WORKS.**

**M. CLEMENTS,**

MANUFACTURER OF  
Iron Railing, Bank Vaults, and Jail Cells,  
Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc.

BAYMILLER STREET, near Sixth and C. H. & D. E. R. Depot, CINCINNATI, OHIO.

**DECORATORS.**

**W. J. MCPHERSON,**

(Established A.D. 1845.)

**MURAL PAINTER,  
DESIGNER,**

**Ecclesiastical Decorator,**

AND  
**ART STAINED GLASS MANUFACTURER,**

440 TREMONT STREET,

**BOSTON, MASS.**

(Established 1848.)

**L. HABERSTROH & SON,  
FRESCO PAINTERS,  
and INTERIOR DECORATORS,**

No. 12 SCHOOL STREET, BOSTON.

**FRANK HILL SMITH,**

1714 TREMONT STREET,

**BOSTON . . . . . MASS.**

**PHILIP A. BUTLER,**

DECORATOR AND DESIGNER,

No. 17 PEMBERTON SQUARE,  
**BOSTON.**

**COOK, REDDING & CO.**

149 CONGRESS ST., BOSTON,

**Ornamental, Stained, and Cut Glass,**

FOR  
**Churches, Public Buildings, and  
Private Residences.**

**HENRY B. JONES & CO.**

IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS,

612 WASHINGTON STREET, BOSTON.

**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the subscriber to produce Modern and Medieval styles of work equal to any European examples, for **Churches, Private Residences, Halls, etc.**

The value of the work is attained by a careful selection of colors in Cathedral and French Glass of his own importation.

Designs in accord with architects' plans furnished at short notice. Reference of work at office

**SAMUEL WEST, 115 Elliot St., Boston.**

**DECORATORS.**

**JOHN LAFARGE,  
MURAL DECORATION,**  
51 W. Tenth St., New York, and Newport, R. I.

**SOCIETY OF DECORATIVE ART.**

4 East 20th Street,  
NEW YORK.

Architects' designs for panels, tiles and plaques for insertion in Cabinet Work, and other decorative uses, and for Art Needlework applied to curtains, hangings, portieres, screens, table-covers, etc., carefully executed. Original designs for any of the above, subject to approval, will be gladly received, and paid for by the Society when used. Orders are earnestly solicited.

The Society has arranged with Mr. RUSSELL STURGIS, Architect, for the Exhibition and Sale of his well-known Wall Papers. Some of these are faithful reproductions of Japanese decorative papers; some are taken from Oriental and other stuffs; some are of original design. New patterns will be added from time to time.

**Fresco Decoration.**

**EMMART & QUARTLEY,**

Designers, Decorators, and Painters,

32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate work on hand or made to order. No. 1210 Ridge Avenue. JOSEPH S. MILLER, successor to Wilson & Miller, Philadelphia, Pa. Send for Illustrated Price-List

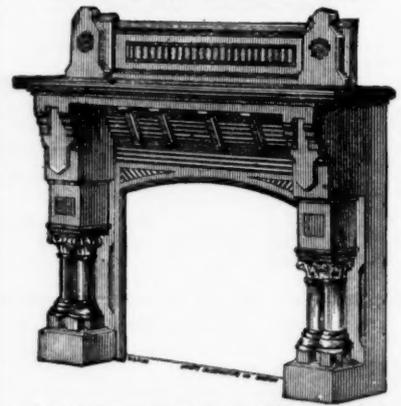
**Donald MacDonald,**

**GLASS STAINER AND DECORATOR**

No. 6 Hayward Place,

**BOSTON.**

**MANTELS.**



IN WALNUT, OAK, ASH, OR OTHER WOODS.  
On hand, made to order, shipped to and set up

IN ANY PART OF THE COUNTRY.

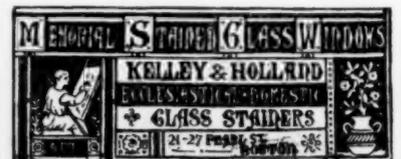
**CALDWELL MANUFACTURING CO.,**

17 HARVARD PLACE,

OPPOSITE OLD SOUTH CHURCH,

**BOSTON, MASS.**

Send for Circular.



**INLAID WOOD FLOORS.**

ORNAMENTAL WOOD BORDERS.

Designs and Estimates free.

**National Wood Manuf'g Co.,**  
950 Broadway, near 23d St., New York

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa (Can.)	Philadelphia.	San Francisco.	St. Louis.
1. BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2. Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50		3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00		3.00
3. CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25		1.50 @ 2.00
4. Cabinet Maker	2.50 @ 3.25		1.75 @ 2.25			1.50 @ 3.00	1.60 @ 2.00			
5. Finisher	2.00 @ 2.50		1.50 @ 2.00			1.50 @ 3.00	1.25 @ 1.75			1.50 @ 2.00
6. FOUNDRYMAN			1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50			2.25 @ 2.50
7. Blacksmith	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 2.00			1.50 @ 2.50
8. Whitesmith			1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.75			
9. Galvanized Iron Worker	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00			2.25 @ 2.50
10. GAS FITTER	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00			2.00 @ 3.00
11. LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50		1.00 @ 2.00
12. PAINTER	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.50 @ 2.25	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13. Glassier		2.00 @ 2.50	1.75 @ 2.00			1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50		
14. Grainer	2.50 @ 3.00	3.00 @ 4.00	1.50 @ 3.00	3.50 @ 4.00		2.00 @ 3.00	1.75 @ 2.50			
15. Paper-Hanger	.75 @ 2.50		per roll.		15c. pr. roll.	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00
16. PLASTERER	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	1.50 @ 2.50	1.50 @ 2.00	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00		2.25 @ 2.75
17. Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	1.50 @ 2.50		2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
18. PLUMBER	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.50	2.50 @ 3.50	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50			2.50 @ 3.50
19. QUARRYMAN		3.00 @ 3.50	1.10 @ 1.25		1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20. Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	1.50 @ 2.00	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21. Carver	3.00	3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75	3.00	2.00 @ 2.50	3.50 @ 6.00	2.75 @ 3.25		
22. Painters and Washers		2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75		1.50 @ 2.50	1.00 @ 1.25	2.25 @ 2.50		
23. Rubber	1.50 @ 2.00	1.75	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75		
24. Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	2.50	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.75		2.00 @ 2.50
25. Stone-Setter		2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	2.75	2.00 @ 2.50	1.50 @ 2.00	2.25 @ 2.75		2.00 @ 2.50
26. ROOFER (Tin)	2.00 @ 2.35	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25		2.00 @ 2.25
27. Slatier		2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00	2.00	2.00 @ 2.25	1.25 @ 2.00	1.75 @ 2.25		3.00
28. STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75		1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25			1.50 @ 2.50
29. STEAM FITTER		2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 2.50

AMERICAN ARCHITECT AND BUILDING NEWS.

PRIZES.

The attention of draughtsmen and architectural students is directed to the following announcement of a way in which valuable and useful books can be added to their professional library.

SUBSCRIPTION PRIZES.

The Publishers will send, postpaid, the following prizes to the draughtsman, student, or regular canvasser, who, complying with the conditions, shall secure subscribers for the American Architect and Building News:—

- I. For two new subscribers, a year's subscription to the American Architect and Building News..... \$6.00
- Or, "Story of a House," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00
- Or, "Annals of a Fortress," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00
- II. For four new subscribers, a bound volume of the American Architect and Building News, vol. i. or ii., price..... 9.00
- Or, "Examples of Ancient and Modern Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 8.00
- Or, "Discourses on Architecture," translated from the French of M. Viollet-le-Duc, illustrated, price..... 8.00

- III. For eight new subscribers, both bound volumes of the American Architect and Building News, price..... \$18.00
- Or, "Gothic Forms applied to Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 15.00
- Or, "Art Foliage for Sculpture and Decoration," by J. K. Collins, royal quarto, illustrated by 72 plates, price..... 15.00
- Or, "Examples of Modern Architecture, Ecclesiastical and Domestic," being designs by Messrs. Scott, Street, Liddon, and other noted architects, illustrated by 64 quarto plates, price, 15.00
- IV. For fifteen new subscribers, the "Decoration and Ornamentation of the Nineteenth Century," by Liénard, illustrated by 100 folio plates, price..... 27.00

In lieu of these books the canvasser may obtain books of equal value selected from our trade list, or may obtain as equivalent the value of the prize in Heliotype engravings, selected from our collection, which numbers over three hundred.

The conditions to be observed are:—

1. The subscribers must in all cases be new subscribers.
2. The subscription must be paid in advance directly to the Publishers by check or money order; but in no case to the canvasser.
3. If canvassers adopt the method of sending to us one subscriber at a time, they must state at such time for which one of the before-mentioned prizes they are canvassing.
4. The prizes will not be delivered until all subscribers have paid in full

N.B. — These prizes are not cumulative; i. e., a canvasser who sends us fifteen new subscribers cannot claim successively the prizes I., II., III., and IV.; or in other words, to obtain all four prizes a canvasser must send us twenty-nine new subscribers.

A canvasser who has stated that he is trying to secure one of the highest prizes may in the case of failure claim such lesser prize as is warranted by the number of subscriptions actually paid.

No claims will be allowed for subscriptions secured before Jan. 1, 1878.

HOUGHTON, OSGOOD AND COMPANY, Publishers, Boston.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited. GALVANIZED IRON CORNICES. Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS. All work warranted. CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States. Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled. A. KNISELY & CO. 72 & 74 West Monroe St. Chicago, Ill.

A SACHEL GUIDE. FOR THE VACATION TOURIST IN EUROPE. Revised Edition for 1878. With Maps. 16mo, flexible cloth, \$2.00. HOUGHTON, OSGOOD & CO.



NONESUCH Self-Locking AND Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted. FRED. J. HOYT, 733 Broadway, N. Y.

Patented July 10th, 1877

"AUSTIN'S" PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT. MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS. Regular Sizes, 2, 3, 4, 5 & 6 In. SPECIAL SIZES MANUFACTURED TO ORDER. AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS. 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA. WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH.

- PRINCIPAL AGENTS.
- M. Halliday New York City.
  - Hicks & Butler Boston, Mass.
  - James Berry Buffalo, N. Y.
  - George W. Pitkin & Co. Chicago, Ill.
  - Wasson & Martin Albany, N. Y.
  - McLeod, Reardon & Co. Troy, N. Y.
  - W. H. Scott Portland, Me.
  - Kittredge Cornice Co. Salem, O.
  - J. W. Jordan Worcester, Mass.
  - B. G. Carpenter & Co. Wilkesbarre, Penn.
  - T. W. Irwin Alleghany City, Penn.
  - Sellew & Co. Cincinnati, Ohio.

IMPERIAL GAS MACHINE. SEND FOR CIRCULARS. ARCHITECTS AND ENGINEERS. SIMPLICITY & RELIABILITY. DENNY & CO.



BIBB'S Celebrated Original Baltimore Fire Place Heaters. Mantels and Registers. B. C. BIBB & SON, Baltimore, Md. Best workmanship. Lowest prices guaranteed. Send for circulars.

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. PANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist*, Boston.

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and castings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courant.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVES. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIENARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11 $\frac{1}{4}$  X 15 $\frac{1}{4}$  inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOTHIC FORMS** (First Series), applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE** (Second Series), Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND**, containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VALLIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOULET-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

The works of the learned and distinguished French Architect, EUGENE VIOULET-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

## Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — *EUGENE BENSON, in The College Courant.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

**The New York Sketch-Book of Architecture.**

3 vols., 4to, \$6.50 each.

We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

**The American Architect and Building News.**

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\* \* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers.

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

[Reported for the American Architect and Building News.]

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for various building materials including Bricks, Fronts, and Cements.

Table listing prices for various types of Fire Bricks.

Table listing prices for various types of Doors.

Table listing prices for various types of Blinds.

Table listing prices for various types of Laths.

Table listing prices for various types of Limes.

Table listing prices for various types of Lumber.

Table listing prices for various types of Paints and Oils.

Table listing prices for various types of Nails.

Table listing prices for various types of Axle Pulleys.

Table listing prices for various types of Sash Weights.

Table listing prices for various types of Sash Lines.

Table listing prices for various types of Door Butts.

Table listing prices for various types of Mortise Locks.

Table listing prices for various types of Door Knobs.

Table listing prices for various types of Sash Fasteners.

Table listing prices for various types of Screws.

Table listing prices for various types of Store Door Handles.

Table listing prices for various types of Iron.

Table listing prices for various types of Cast Iron.

Table listing prices for various types of Sheet Metal.

Table listing prices for various types of Lead.

Table listing prices for various types of Zinc.

Table listing prices for various types of Wire.

Table listing prices for various types of Nails.

Table listing prices for various types of Paints and Colors.

Table listing prices for various types of Stone.

Table listing prices for various types of Slate.

Table listing prices for various types of Tin Plates.

Table listing prices for various types of Zinc.

Table listing prices for various types of Lead.

Table listing prices for various types of Sheet Metal.

Table listing prices for various types of Lumber.

Table listing prices for various types of Building Bricks.

Table listing prices for various types of Building Stone.

Table listing prices for various types of Lumber.

Table listing prices for various types of Mortise Locks.

Table listing prices for various types of Door Knobs.

Table listing prices for various types of Sash Fasteners.

Table listing prices for various types of Screws.

Table listing prices for various types of Store Door Handles.

Table listing prices for various types of Iron.

Table listing prices for various types of Cast Iron.

Table listing prices for various types of Sheet Metal.

Table listing prices for various types of Lead.

Table listing prices for various types of Zinc.

Table listing prices for various types of Wire.

Table listing prices for various types of Nails.

Table listing prices for various types of Paints and Colors.

Table listing prices for various types of Oils.

Table listing prices for various types of Lumber.

Table listing prices for various types of Roofing.

Table listing prices for various types of Solder.

Table listing prices for various types of Lead.

Table listing prices for various types of Copper.

Table listing prices for various types of Sheet Zinc.

Table listing prices for various types of Sheet Iron.

Table listing prices for various types of Wire.

Table listing prices for various types of Nails.

Table listing prices for various types of Paints and Colors.

Table listing prices for various types of Oils.

Table listing prices for various types of Lumber.

BOSTON.

Prices to Contractors and Builders.

Table listing prices for various types of Fire Bricks.

Table listing prices for various types of Building Bricks.

Table listing prices for various types of Building Stone.

Table listing prices for various types of Lumber.

CHICAGO.

Prices to Contractors and Builders.

Table listing prices for various types of Brick, Lime, and Cement.

Table listing prices for various types of Lumber.

PHILADELPHIA.

WHOLESALE PRICES.

Table listing prices for various types of Iron.

Table listing prices for various types of Nails.

Table listing prices for various types of Paints and Colors.

Table listing prices for various types of Oils.

Table listing prices for various types of Lumber.

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms.

CREOSOTED WOOD. PREPARED AT THE Hayford Patent Creosote Wood Preserving Works. EDWARD R. ANDREWS, Proprietor.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to us many times the cost of the paper."

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY.

The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING,  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, ETC., ETC.

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.  
ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

**ESTABLISHED, 1836.**  
**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Composition Roof known. Also inventors and owners of the following patents:—

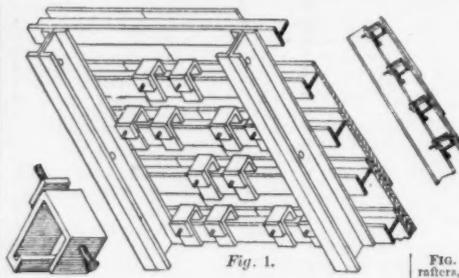


FIG. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the purlins on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

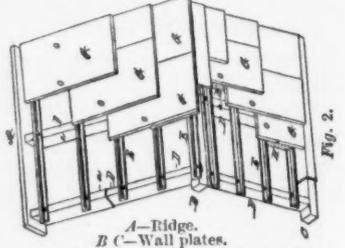


FIG. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or other fire-proof material, and iron purlins (c) or beams, with the slates (G) or other covering secured thereto by clasps, (Fig. 1) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in conformity with the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point, avoiding condensation, contraction and expansion of roofs formed wholly of iron.



Section of Fire-Place Heater.

**WARMING AND VENTILATION.**

**FIRE ON THE HEARTH.**

**FIRE-PLACE HEATERS AND STOVES.**

VENTILATION of a Fire-Place. RESERVE FORCE of a Close Stove. CIRCULATION of a Furnace.

Adapted for any kind of Fuel,

And the only FIRE-PLACE HEATER PERFECTLY ADAPTED for SOFT COAL and WOOD.

Send for our testimonials from all parts of the United States.

**OPEN STOVE VENTILATING COMPANY,**

115 Fulton and 54 Ann Streets, New York.



Section of Stove.

**GAS**

**SPRINGFIELD GAS MACHINE.**  
Springfield, Mass.; 75 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

**BUHRER'S INFALLIBLE SEWER GAS TRAP.**

The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (E) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.

**S. BUHRER,** Inventor and Manufacturer, Cleveland, Ohio.  
WHOLESALE AGENTS.

W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O.  
L. WOLFF MFG Co., 109 & 111 West Lake St., Chicago, Ill.  
HAMBLER & MATHERS, 82 & 84 North St., Boston, Mass.  
C. A. BLESSING, 44 North Fifth St., Philadelphia, Pa.  
THE J. L. MOTT IRON WORKS, 85 & 90 Beekman St., N. Y.  
Please send for Circular.

**Brandeis' Seamless Paragon Trap.**  
Simplest, Best, Cheapest, and Non-siphoning.  
Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily hanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDIS & WICKER,** 45 Fulton Street, Brooklyn, N. Y.

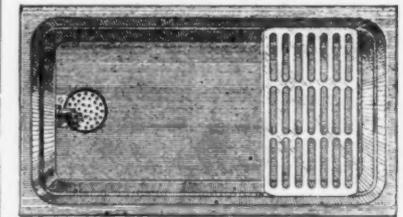
**C. BUTCHER,**  
107  
Devonshire St.  
BOSTON.

**PATENT MARQUETRY FLOORING.**  
Specimens at Lawrence, Wilde & Co.'s, 42 Cornhill, Boston.

**DORCHESTER UNION FREESTONE CO.**  
**NEW BRUNSWICK YELLOW FREESTONE.**  
The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order.  
24 Pine St., New York. - G. P. SHERWOOD.

**MENEELY & KIMBERLY,**  
Bell Founders, Troy, N. Y.,  
Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT HOUSE BELLS. Illustrated Catalogue sent free.

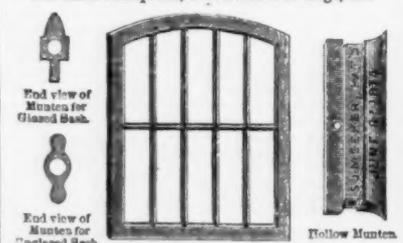
Architects and Builders will be quick to appreciate the many New and Practical Features possessed by



**THE MAGEE PATENT SINK,** which commend themselves at once to every household. The escape of noxious and poisonous sewer gases is prevented by the arrangement of the patent trap, it being immovable, while the strainer, being hinged on brass pins, can be raised for the purpose of cleaning the cesspool. The sink is furnished with an improved galvanized shelf or rack for draining dishes, etc., after washing. It is of extra size, and being made with square corners, saves the carpenter much labor in setting. In smoothness of casting it fully sustains the long-established reputation of the Magee goods.

Particular attention is invited to the **Magee Standard Furnace,** portable and for setting in brick, guaranteed superior to any in the market for economy, durability, and heating capacity. Estimates furnished for heating all sizes of dwelling-houses and public buildings. Also a full line of **Brick and Portable Ranges.** Circulars and prices of all the above goods furnished on application.  
**MAGEE FURNACE CO.,**  
32 to 38 Union St., Boston

**D. M. MEEKER & SON'S**  
**Malleable Iron Hollow Muntin Window Sash.**  
For Innane Hospitals, Fire Proof Buildings, &c.



The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

**D. M. MEEKER & SON,**  
Newark, N. J.  
Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

**MAKE** GAS GENERATORS, FOR LIGHTING Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.

Send for CIRCULAR **your own**

**WALWORTH MANUF. CO.**  
No. 69 Kilby Street,  
BOSTON, MASS.

**J. & R. LAMB, 59 CARMINE ST., N. Y.**  
**CHURCH FURNISHERS**  
Practical Workers in Sterling Silver, Brass, and Bronze, Carved Wood, Decorations, etc.  
Illustrated Catalogues.  
Furniture, 10c.; Metalwork, 10c.; Decoration, 10c.

**HOISTING MACHINES**  
EXCLUSIVELY.  
HOTEL STEAM ELEVATORS,  
HYDRAULIC ELEVATORS,  
HAND POWER HOISTS,  
DUMB WAITERS.

**H. J. REEDY, Manufacturer,**  
128 EAST EIGHTH ST., - Cincinnati, O.

**CRANE, BREED & COMPANY**  
**SAFETY BOILERS**  
FOR HEATING  
**STEAM AND HOT WATER.**  
MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RA DIATORS, PIPES, COILS, REGISTERS, FITTINGS, STEAM-PUMPS.

**NATIONAL TUBE WORKS CO.**  
PATENT  
Indestructible Enamelled Wrought Iron  
**LAP-WELDED PIPE,**  
From 1/4 inch to 15 inches diameter.  
Now extensively used for  
Water, Gas, Sewerage, and Mining.  
It is not affected by heat or acid, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COP PLAN, preventing all leakage.  
MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at 6¢ each.

**National Tube Works Co.,**  
8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

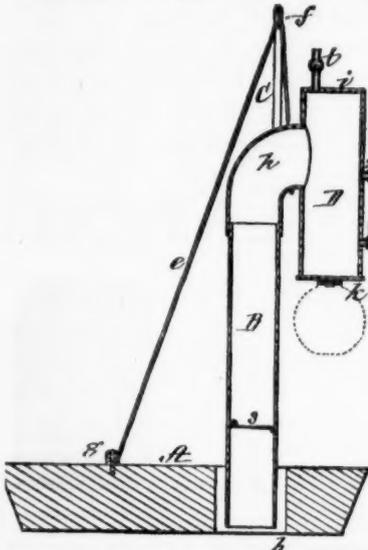
BUILDING INTELLIGENCE.

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

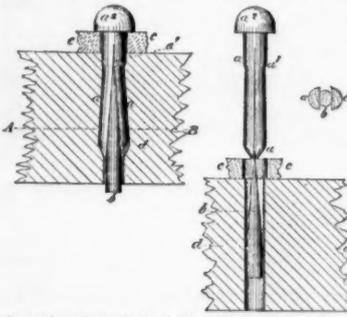
BUILDING PATENTS.

VACUUM DREDGER.—Augustine Crosby, Benton, Me. This invention is an improvement on the ordinary vacuum dredgers, which, when filled with mud or gravel, have to be drawn up bodily before they can be emptied. A is the scow or platform on which the apparatus is supported, hanging as it does from the frame C, and raised or lowered by the rope e. B is a tubular receiver made of iron which passes through b, a hole in the scow or platform. Attached to it by an elbow A, is a vertical cylinder D which is closed by a tight head f at its upper end, and at its lower by a



hinged cover k, which closes with an air-tight joint, and is kept in position by a suitable catch. Into this chamber D steam is introduced through a flexible tube attached at p, in order to drive out all the air in both the cylinders, the air escaping by the snifting-valve t. As soon as steam begins to escape at t the supply is cut off, and a stream of cold water is introduced through z, the effect of which is to condense the steam instantly and so to produce a vacuum in the receiver B and cylinder D, which is immediately filled with mud or gravel, forced up from below by the atmospheric pressure on the surface of the water. The cover k is now opened, and the contents of D is discharged, while the mud in B is prevented from dropping back by the self-closing valve s. After closing k the process can be repeated.

CATCH-BASIN COVER.—George G. Campbell, Milwaukee, Wis. KNOB ATTACHMENT.—Evan St. John, Leland, Ill. TRAP FOR DRAIN WASTE AND SEWER-PIPE.—George E. Waring, Jr., Newport, R. I. This trap has already been described in these pages. BRICK AND TILE MACHINE.—Emile Durand, La Bastide Roudroux, France. FIRE-ESCAPE LADDERS.—Solomon Davis, New York, N. Y. Tubular ladder sections are coupled by inclined sockets, which have tapering openings on the upper end of one section of the ladder, and laterally adjustable tubular sections at the lower ends of the next section, whereby, when the last-named section is raised above the upper end of its supporting section and allowed to settle down, the adjustable sections enter the other, and water-connection is established. The tubular ladder is provided with toothed segments, braces from the tubes to the segments, and operating-gear. IMPROVEMENT IN SPIKES.—Edward Lawrence, Hyde Park, England. The main difference between this and other sim-



ilar inventions is that the hole, which receives the wedge and spike, is continued through the timber to which an object is to be secured. The cuts sufficiently explain the manner of using the spike. ADJUSTABLE LADDER-TRUSSES.—George H. Fox, Boston, Mass. The detachable ladder-truss consists of a rope hooked to a round at one end of the ladder, a V-shaped rod or strut hooked to the middle round and through the eye of which a rope is passed, and a V-shaped rod hooked to a round at the other end, the rope passing through it and being lashed about a pin on the ladder rail. The ends of the hooks of the strut are bent at right angles, to spring over the rails and steady the strut. DOUBLE-ACTING PUMP.—H. J. Humphrey, Grundy Centre, Io., and L. C. Humphrey, Augusta, Wis. LOCK HINGE.—Ben-on Lent, Peekskill, N. Y. BLIND-SLAT ADJUSTER.—Rudolph Loth, Bridgeport, Conn. SASH-HOLDER.—Samuel Spear, South Weymouth, Mass. LATCH.—Frederick W. Brock-leper, New Haven, Conn. SAW-TEETH.—William E. Brooks, Freeton, N. J. FURNACE FOR HEATING SOLDERING IRONS.—Joseph Burgess, Zanesville, O. This is an adaptation of the oil stove.

STOVE DAMPER.—Eck Busey, Troy, N. Y. CURTAIN-FIXTURE.—James Gillmore, Detroit, Mich. PIPE-WRENCH.—John Hartman, Jr., Philadelphia, Penn. HINGES FOR AWNING BLINDS.—Cyrus L. Hasbrouck, Syracuse, N. Y. WINDOW-SASHES.—Joseph L. Joyce, New Haven, Conn. The sash is related for the glass, and has a groove contiguous to the glass, in which is inserted the flange of a metallic lead. A rubber packing in the hollow of the lead presses against the glass. The lead, in sections, respectively, to the sides of the sash, has mitered joints at the corners, and on one side is divided, one of the parts being secured by a pin passing into the sash and through the flange. The several parts of the lead are inserted in place, and the part secured by the pin last retains the others. AUGER-HANDLE.—William A. Ives, New Haven, Conn. WIRE-CUTTER.—Sylvanus D. Locke, Hoosick Falls, N. Y. ROOFING.—Lewis Peirce, Salem, Mass. A thick coating of bituminous cement is covered by a layer of prepared cloth, and itself covers a layer of tar-paper and prepared cloth. SATURATED SHEATHING FOR ROOFING.—W. H. Rankin, Elizabeth, N. J. Roofing paper or felt is saturated with a compound of one hundred pounds rosin, eighteen gallons lead oil, three pounds sugar of lead, two ounces (1 quid) sulphuric acid, and one hundred and fifty pounds mineral sulphur, as Lehigh metallic, or Prince's metallic paint. VENTILATOR AND CHIMNEY-TOP.—William F. Rossman, Hudson, N. Y. SASH-FASTENER.—John F. Zimmermann, Newcastle, Me.

SUMMARY OF THE WEEK.

Albany. GOVERNMENT BUILDING.—The post-office progresses slowly, its basement not yet appearing above ground. DWELLINGS.—Several neat villas are to be built in the vicinity of the Park. Wm. L. Woollett, architect. HOTEL.—A very fine hotel, to be called the "Kenmare," of brick and Ohio stone, about one hundred feet square, and costing about \$70,000, is to be erected by heirs of the late Dr. James McNaughton, corner of North Pearl and Columbia streets. BRIDGES.—Two new wooden bridges over N. Y. S. Basin, costing \$5,000 each. Charles Hilton, Esq., Engineer. PROSPECTIVE BUILDING.—Much building is talked of in the neighborhood of Van Rensselaer Park, one of the prettiest parks of its size in the country.

Boston. BUILDING PERMITS.—The following permits have been issued since our last issue:—

Table with columns: Mechanic, No., Stories, Class, Size. Rows include Silas W. Merrill (Dwelling, 22' 6" x 43'), I. & H. M. Harmon (Mercantile, 25' x 100'), Asahel H. Glover (Pass. Station, 12' x 43').

Table with columns: Mechanic, No., Stories, Class, Size. Rows include Adoniram Burrell (Store, 20' x 30'), Wm. C. Sutherland (Store, 18' x 24'), John G. Allbright (Dwelling, 22' x 32'), John H. Burt & Co. (Dwelling, 32' x 41'), Jacob Jacobs (Store, 20' x 20'), John J. Shaw (Stable, 20' x 32').

Repairs and alterations still continue active. SPECIAL INSPECTION.—The Board of Assistant Inspectors is still busily engaged in the examination of buildings in regard to insufficient egress and fire-escapes on tenement houses and operative buildings. HOUSE.—Mr. J. P. Putnam, architect, is building a house on Marlboro Street for Mrs. Charles Gordon. H. McLaughlin, mason. OFFICE BUILDINGS.—Mr. Carl Fehmer is the architect of an office building to be built on Kingston Street. Mr. S. B. Fayson is the owner. I. & H. M. Harmon, contractors. Mr. David Nevins, Jr., is the owner of the office building now in process of erection on Congress Street. Norcross Bros. furnish the freestone; W. M. Rumery, mason; Crescy & Noyes, carpenters. Mr. N. J. Bradlee is the architect. STORE.—Mr. Bradlee is also building a store on Morton Court for Mr. Wm. Sohler, trustee; Ivory Bean, mason.

Brooklyn. BUILDING PERMITS.—Grand St., No. 311, 1 three-story brick store and dwell., 25' x 70' and 50'; owner, E. W. Bourdette, Amityville, L. I.; architect, W. H. Gaylor; builders, T. Gibbons and S. M. Weekes.—Hart St., 1 two-story brown stone dwell., 20' x 40'; owner and builder, R. C. Addy, 167 Hart St.—Hicks St., 2 two-story brick stables, 25' x 70' and 12' x 12'; owner, G. S. Hutchinson; architect, C. Werner; builders, J. J. Beuzen and C. Dietricks.—Hops St., 1 three-story brick tenement, 25' x 50'; owner, E. W. Bourdette, Amityville, L. I.; architect, W. H. Gaylor; builders, T. Gibbons and S. M. Weekes.—McDougal St., 2 two-story frame dwell., 16' x 25'; owner, John Quinn, 238 Macdon St.; architect, I. D. Hoels.—Sackett St., 3 three-story St.; architect, I. D. Hoels.—South Second St., cor. Union Ave., 1 three-story brick factory, 25' x 50'; owners, E. Ketchum & Co., on premises; builders, S. Burrows and P. S. Kirchner.—North Tenth St., 1 three-story frame shop, 25' x 35'; owner, J. T. Briggs, North Eighth, near Second St.; architect, O. Do Little; builders, J. Baldwin and W. H. Devoe.—Fifteenth St., 8 three-story brick dwell., 18' x 36'; owner, James A. Van Runt, Seventh St.; builders, McCormick & Woods.—Carlton Ave., 1 two-story brick school, 22' x 52'; owner, St. Lucas Church; builder, C. L. Johnson.—Central Ave., 1 two-story frame dwell., 25' x 40'; owner, Henry Kataman, Central Ave., cor. Starr St.; builder, Henry Loeffler.—Grand Ave., cor. Lafayette Ave., 1 three-story brown stone store and dwell., 20' x 45'; owner,

C. E. Donnellon, 2 Jefferson Park; architect, R. Dixon; builder, C. E. Donnellon.—Lafayette Ave. 1 two-story brick stable, 25' x 50'; owner, S. Birdsall, cor. Lafayette and Bedford aves.; builder, J. N. Smith.—Marey Ave., cor. Hart St., 1 three-story frame store and dwell., 25' x 48'; owner, John Nieber; architect, D. I. Reynolds; builder, Thomas E. Greenland.—St. Marks Ave., 1 two-story brick school-house, 40' x 30'; owner, Board of Education, Brooklyn; architect, S. B. Leonard; builders, J. Ashfield & Son, and P. F. O'Brien.—Fifth Ave., 1 three-story brick dwell., 20' 4/2' x 50'; owner, F. Molcaey, 511 Fifth Ave.; architect, W. B. Ditmars; builder, M. Ryan. CATHOLIC CHURCH.—On Sunday last the corner-stone of the new Catholic church, the Church of the Holy Name, at the corner of Nineteenth Street and Ninth Avenue, was laid. Work on the building began some months ago. The walls of the basement are now built. The new building will be of brick, 90 feet square, 61 feet high, and will seat about 1,000 people. There will be two vestries, and the basement will be used for Sunday and day school. Mr. M. J. Lowery is the architect.

Chicago. BUILDING PERMITS.—George Keller, 2 three-story brown stone dwell., 20' x 50' each, Ontario St. cor. t., \$6,000 each.—Ferdinand Miller, two-story dwell., 215 Larrabee St.; cost, \$3,000.—David Kelly, three and two story dwell., Michigan Ave.; cost, \$24,500.—Rev. John Waldron, stone-front church, cor. Clark and Eighteenth sts.; cost, \$100,000.—Jacob Gertel, two-story dwell., 82 Flournoy St.; cost, \$4,000.—Jacob Alt, two-story dwell., Fourth Ave.; cost, \$3,000.—Matilda Eickenberg, three-story stone-front store and flat, 147 Wells St.; cost, \$3,000.—C. P. Kimball, two-story dwell. and two-story barn, Indiana Ave.; cost, \$10,000.—C. C. Clark, 2 three-story dwells., 202 and 204 Third Ave.; cost, \$2,600 each.

DETAILED STATEMENT OF NEW BUILDINGS FOR WHICH PERMITS HAVE BEEN ISSUED DURING THE MONTH OF JULY, 1878. Table with columns: Date, Classification of Buildings (Sheds, Basements, etc.), Materials of Fronts (Stone, Brick), No. of Buildings, No. of feet Street Frontage, Cost. Includes a summary table at the bottom with columns: Date, No. of Buildings, No. of feet Street Frontage, Cost.

Cincinnati. BUILDING PERMITS have been issued by the Board of Public Works, as follows:—John Schroth, two-story brick; cost, \$2,000.—Schaller & Gerke, ice cellar; cost, \$12,000.—Chris Diza, two-story brick; cost, \$2,700.—August Bole, three-story brick; cost, \$2,500.—Wm. Miller, two-story brick; cost, \$2,500; John Stearns, three-story brick; cost, \$5,300.—F. Kuschman, two-story brick; cost, \$3,000.—John Flinker, two-story brick; cost, \$1,500.—John Stemen, two-story brick; cost, \$2,200.—There have been twenty-two permits issued for repairs at a total cost of \$10,633.—Total number of permits, 31.—Total cost, \$44,393.—Total number of permits to date, 475.—Total cost to date, \$1,017,808. SCHOOL-HOUSE.—An eighteen-room school-house is to be built on Eighth Street. Forty-five thousand dollars have been appropriated as the building fund. EXCHANGE BUILDING.—The Merchants Exchange is already negotiating for the purchase of a building site whereon to build its new Exchange.

Indianapolis. THE STATE HOUSE.—Contractors are busily engaged making their estimates for the State House, one firm from Chicago having seven men employed. Three firms from this city are competing. The time will not be extended as rumored, but the work will positively be awarded on the 15th. The excavation will be completed by the 20th. CURRENT WORK.—Mr. D. A. Bohlen, architect, is building the Institute for the Little Sisters of the Poor, and a brewery for P. Lieber & Co. which will cost \$30,000.—Mr. H. B. Huebner, architect, is building an ice-house for C. E. Smith; cost, \$10,000; a store for J. Pyle; cost, \$10,000; and a German Catholic school-house, which will cost about \$15,000.

New York. BUILDING PERMITS.—211 Hester St., tenement, 25' x 75'; five stories; cost, \$10,000; Jacob Weeks, owner; John Correja, architect; D. T. Kennedy, builder.—One Hundred and Twenty-fourth St., near Second Ave., 3 flats, 20' x 60'; brown stone fronts; cost, \$14,000; J. E. Wright, owner; J. W. Valentin, architect; J. Gardner, builder.—Thomas Ave., near Kingsbridge Road, frame club house, 25' x 65'; cost, \$3,000; H. D. Furror, owner; W. McManan, architect; Wm. Coogan, builder.—Fifty-sixth St., near Second Ave., 3 flats, 25' x 64', brown stone fronts; cost, \$12,000 each.—Seventy-seventh St., near Second Ave., 3 tenements, 2 1/2' x 60'; cost, \$9,000 each; R. Burug, owner; T. G. Smith, architect.—26 Fourth Ave., second-class store; brick; 19' x 31'; cost, \$4,500; M. Wilk, owner; D. Leman, architect; F. Bloodgood, builder.—238 West Fifty-fourth St., brick stable, 50' x 100'; three stories; cost, \$15,000; P. M. Bean, owner and builder.—First Ave., cor. Seventy-ninth St., 3 third-class stores, 16' x 60'; one story; cost, \$1,100 each; John Gilsey, owner; And. Spence, architect; John C. Henry, builder.—Eighty-sixth St., near Fourth Ave., first-class dwell., 17' x 45'; brown stone front; cost, \$8,000; A. M. Peffers, owner; John McIntyre, architect.—81 South Fifth Ave., tenement, 21' x 68'; five stories; cost, \$10,000; F. H. Gross, owner; Marc Eidlitz, builder.

Philadelphia.

BUILDING PERMITS.—Wm. Dickson & Bro., three-sty store and dwell, 18' x 47', Front St.—W. T. B. Roberts, Supt., 3 three-sty dwells, 18' x 56', Twenty-second St.—John Kiebs, three-sty dwell, 16' x 24', No. 932 Perry St.—J. L. Carr, 2 three-sty dwells, 14' x 32', Redmo St.—J. Mander, one-sty chapel, 64' x 72', cor. Mascher and Davis sts.—Jos. Neely, three-sty store and dwell, 16' x 36', No. 811 York St.—H. K. Thomas, two-sty back building, 16' x 50, No. 4956 Germantown Ave.—Shegog & Quigley, 2 three-sty dwells, 18' x 30', Hope St.—Mary Black, three-sty dwell, 18' x 29', Huntingdon St.—A. T. Richards, 3 two-sty dwells, 13' x 44', Dickerson St.—Thos. McCarty, four-sty store and dwell, 17' x 47', No. 522 West Girard Ave.—Eldridge & Stewart, two-sty factory, 59' x 150', cor. Emerald and Adams sts.—S. Heim, three-sty shop, 18' x 29', No. 3275 Richmond St.—J. & W. Steel, three-sty back building, 16' x 28', cor. Ella and Amber sts.—Thos. Murray, three-sty store and dwell, 18' x 60', Woodland Ave.—W. E. Grigg, two-sty stable, 20' x 30', No. 3821 Warren St.—Balderson & Hutton, two-sty stable, 33' x 34', Nos. 635 and 537 China sts.—J. S. Benson, 10 two-sty dwells, 16' x 41', Nineteenth St.—Alex. Russell, 2 dwells, 22' x 35', Sevil, between Creston and Aley sts., Manayunk—Jas. Harper, 2 two-sty dwells, 17' x 22', Hermit St., Manayunk.—W. J. Rainor, 2 two-sty dwells, 16' x 32', Pechin St., Manayunk. Daniel McKenna, three-sty dwell, 17' x 42', No. 1465 South Tenth St.—W. Rafferty, 2 three-sty dwells, 16' x 59', No. 1463 and 1465 South Twelfth St.—L. E. Smith, two-sty slaughter-house, 29' x 40', cor. Forty-eighth and Oregon sts.—L. E. Smith, two-sty dwell, 20' x 44', cor. Forty eighth and Oregon sts.

St. Louis.

BUILDING PERMITS.—Thirty-five permits have been issued for the week ending August 9, 1878. Nine of these are for unimportant frame structures. The rest are for brick buildings, with occasional fronts of sandstone ashlar. Those worth \$2,500 and over are as follows:—

Table with 5 columns: Owners, Use, Stories, Rooms, Cost. Lists various building permits with details on owner names, building types, and costs.

General Notes.

ANAPOLIS, Md.—The mission chapel of St. Anne's Episcopal Church, at the intersection of East and Prince George's streets, is in course of erection. Prof. or Oliver, head of the Department of Drawing, Naval Academy, made the plans of the building.
AVONDALE, O.—Dr. Scudder is to build a house at the corner of Main and Ridgeway avenues.
BEDFORD, PENN.—The Gas works are to be erected in Bedford, Bedford County.
BELFAST, ME.—The Methodists are about to purchase or build a parsonage.
CAMBRIDGE, Me.—The Methodists are about to build a new parsonage.
CHARLESTON, O.—On August 15th bids were opened for building the town-hall.
CONCORD, N. H.—Mr. G. H. Young, of Boston, is the architect of a building for an auditorium, gymnasium, etc., for St. Paul's school. It is to be of brick, and will measure 42 by 87 feet. Jas. Smith, builder.
Messes Sturges & Brigham, of Boston, are to be the architects of the new dormitory building for St. Paul's School. It will cost some \$40,000.
EAST PROVIDENCE, R. I.—Mr. Galen Pierce has begun to build a building at the junction of School and Peck street and Taunton Pike. It will be of triangular form, the two acute angles being cut off. A tower is to be placed at the east end. The front on Taunton Pike will be about sixty feet, and the greatest depth about fifty feet. It is to be two stories in height, surmounted by a French roof. The total height of the tower is to be fifty-five feet above the ground. The first and second stories will be occupied by the owner in his business. The third floor is to contain a hall, with a seating capacity for three hundred or more persons. The structure is to be of wood, and will cost nearly \$10,000. Mr. Gilbert Brown is the architect.
EMLETON, PENN.—The foundation for Joseph Weller's brick house, on Water Street, is almost completed.—James Bennett's new house, on Lower Main Street, is under way.
GREENCASTLE, IND.—Mr. L. H. Gibson, architect Indian apolis, is building a store for C. C. Burns, at a cost of \$7,500.
HOLDEN, MASS.—On August 14th, the selectmen received proposal for building the new school-house in the Chaffinville District.
LENSBURG, ILL.—The corner-stone of a new Lutheran church was laid on August 11th.
MEMPHIS, TENN.—At a meeting of the merchants and citizens, August 5th, steps were taken for the erection of a freight and grain elevator at the foot of Washington Street, to replace that owned by the Anchor Line, recently destroyed by fire.
MILFORD, CONN.—The corner-stone of a new Masonic temple was laid on Tuesday, August 6th, by the officers of Annapolis Lodge, No. 89, which is to occupy the building when it is finished in the fall. The corner-stone is of vermicular from the Milford quarry, and is highly polished.
NEWARK, O.—The new court-house will be completed by the 1st of October next. The basement is of red sandstone, and the building proper of limestone with white sandstone finish. The structure has four entrances, and is very substantial. The architect is J. E. Myers, of Cleveland, Ohio. The cost of the building will be in the neighborhood of \$175,000.
PITTSBURGH, PENN.—The work on the reservoir at the city poor-farm has begun. It is to be on the hill at the rear of the building, about 3,000 feet from the poor-house, and at a height of fifty feet above the top of the tower. Its dimensions will be 100 by 24 feet, 12 feet deep, and its capacity 25,000 barrels.
PITTSFIELD, MASS.—Elizabeth Lewis proposes to build a house on a lot near the Colt Homestead on North Street.
RIVERTON, MD.—The corner-stone of the Calvary Presbyterian Church was laid lately.
SALISBURY, Md.—The new Catholic church is nearly completed.
SNEEDEN'S LANDING, N. Y.—The house now building for Mr. H. E. Lawrence should have been credited in our last issue. Mr. Holly says, to Mr. J. C. Cady, architect, of New York.
SPRINGFIELD, O.—The working plans for the new court-house have been received and give good satisfaction. The architecture is solid, and the design different from buildings of this class generally erected. It is generally desired that the material be Waverly sandstone. The cost will be but little more than for pressed brick, as now designed.
ST. JOHN, N. B.—Mr. H. P. Fowler is the architect of

the new Odd Fellows' Hall and building. It will cost about \$35,000.
St. MICHAEL'S, Md.—The Episcopalians are building a church. The material used is stone.
TRAPPE, PENN.—St. August's Lutheran Church is to be repaired at a cost of over \$3,000. The main audience room is to be placed over the basement, which will be used for Sunday-School purposes. The church is said to be the oldest Lutheran church in America.
At the plate mill of the Pottstown Iron Company last week four plates of iron were made, each being 62 inches wide and 210 inches long, the thickness being five eighths of an inch.
VINCENNES, IND.—Mr. J. H. Stem, architect, Indianapolis, is building a three-story iron-fronted store, 60 by 90 feet, which will be known as the Bayard Block.
WOOD'S HOLL, MASS.—E. E. Swift has the contract to build the new Hall. The basement work is all done, and the erection of the building will commence soon.
WOOSTER, O.—Mr. Thos. Boyd, of Pittsburgh, is the architect of the new court-house for Wayne County, now building. It will cost about \$75,000.

INDEX OF CURRENT WORK,

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

Baltimore, Md.

CHURCH.—The Cummings Memorial Church. Mr. Cassell, architect.
CHURCH.—The Pius IX. Memorial Church. G. A. Fredrick, architect. Cost \$100,000
CHURCH.—Church of St. Michael and All Angels. Cost \$80,000. Wyatt & Sperry, architects.
HOSPITAL.—Johns Hopkins Hospital. J. E. Niernseis, consulting architect.

Boston, Mass.

BANK BUILDING.—Tremont Bank Building. Carl Fehmer, architect.
HOTEL.—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.
THE MUSEUM OF FINE ARTS.—Messrs. Sturges & Brigham, architects. Present appropriation \$100,000.
SCHOOL-HOUSE.—High and Latin School. G. A. Clough, architect.
ASYLUM.—Asylum for Aged People, C. J. Bateman, architect. Cost \$54,000.

Brooklyn, N. Y.

TENEMENT.—A. T. White, owner. William Field & Son, architects.
SOCIETY BUILDING.—The Long Island Historical Society Building, Mr. G. B. Post, architect. Cost \$100,000.
CHURCH.—St. Francis Xavier R. C. Church, West Fifteenth Street. Cost \$150,000. P. Keely, architect.
HOSPITAL.—St. John's Hospital, N. L. Derby, New York, architect.

Chicago, Ill.

ARMORY.—Armory for the First Regiment. Messrs. Wheelock & Clay, architects. Cost \$25,000.
STORE.—The Singer Building. Cost \$250,000.

Cincinnati, O.

U. S. CUSTOM HOUSE AND POST OFFICE.—S. Hannaford, local superintendent.
CHILDREN'S HOME.—J. W. McLaughlin, architect. Cost \$50,000.
NEWSPAPER OFFICE.—The Gazette Building. E. Anderson, architect.
CHURCH.—Church of St. Francis de Sales.
CLUB-HOUSE.—Allemania Club-House. J. W. McLaughlin, architect. Cost \$60,000.
UNIVERSITY BUILDING.—Cincinnati University Building. S. Hannaford, architect. Cost \$54,000.

Cleveland, O.

BUSINESS BLOCK.—Amos Stone, owner. J. Ireland, architect. Cost \$70,000.
CHURCH.—Second Presbyterian. J. Ireland, architect. Cost \$70,000.
CONVENT.—Cresline Academy. L. A. Heard, architect. Cost \$120,000.

Hartford, Conn.

SEMINARY.—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.
CATHEDRAL.—R. C. Cathedral of St. Joseph. P. Keely, architect.
CATHOLIC SCHOOL.—Brown & Stilson, architects, New Haven. Cost about \$25,000.

Jersey City.

CONVENT.—Convent of the Sisters of St. Dominick. Cost \$40,000.

New York.

THE "FLORENCE."—Emile Gréwé, architect. Mrs. Matthews, owner. Cost \$500,000.
THE BOREAL BUILDING.—S. D. Hatch, architect. Cost \$250,000.
COLLEGE.—Addition to Columbia College. C. C. Haight, architect. Cost \$200,000.
OFFICE BUILDING.—Messrs. Silliman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.
APARTMENT HOUSE.—Mr. H. J. Hardenburgh, architect. Cost \$200,000.
PRIVATE RESIDENCE.—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.
ARMORY for the Seventh Regiment.—Cost \$300,000. C. W. Clinton, architect.

Philadelphia.

HOSPITAL.—Presbyterian Hospital. Wilson Bros., arch'ts
OFFICE BUILDING.—Girard trust.

Providence, R. I.

DORMITORY for Brown University.—Messrs. Stone & Carpenter, architects.
CITY HALL.—Mr. S. J. F. Thayer, Boston, architect.
HIGH SCHOOL BUILDING.—Messrs. Walker & Gould, architects.

St. John, N. B.

POST OFFICE, Custom House, and Savings Bank.—Mr. Scott, Chief Architect to the Dominion Government.
BANK.—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.
CHURCH.—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.
CITY HALL.—Messrs. McKean & Fairweather, architects.
CHAPEL.—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York, Cost \$100,000.
CHURCH.—St. James's Church, Croff & Camp, architects, St. John N. B.—St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$60,000.

St. Louis.

CHURCH.—Second Baptist Church. Edward Hilsley, contractor. Cost \$100,000.
COURT HOUSE for the new county of St. Louis.—F. Renwick, architect. Cost \$28,000.
COLLEGE.—College for the Christian Brothers. Mr. Jas. McGrath, architect. Cost \$210,000.
CUSTOM HOUSE AND POST OFFICE.—Mr. Jas. G. Hill, Supervising Architect of the Treasury Department.
UNIVERSITY BUILDING.—The Female Department of Washington University. Rev. W. G. Eliot, Chancellor. Cost \$60,000.

General.

CAMBRIDGE, ILL.—Court House for Henderson County. Cost \$65,000.
CAMBRIDGE, MASS.—Gymnasium for Harvard College. Messrs. Peabody & Stearns, architects.
CONCORD, N. H.—State Prison. Messrs. Dow & Wheeler, architects. Appropriation, \$200,000.
CROWN POINT, IND.—Court-House. J. C. Cochrane, architect, Chicago. Cost \$45,000.
DUBUQUE, Io.—St. John's Church, H. M. Congdon, architect, New York. Cost \$40,000.
ELMIRA, N. Y.—Masonic Hall. N. LeBrun, architect, New York. Cost \$60,000.
FAIRBAULT, MINN.—Deaf, Dumb, and Blind Asylum. J. Babcock & Co., contractors. Cost \$53,730.
INDEPENDENCE, Io.—Hospital for the Insane. G. Josselyn, supervising architect. Cost \$850,000.
JACKSONVILLE, FLA.—Store. W. Astor, New York, owner, Geo. Hoover, architect. Cost \$75,000.
JOLIET, ILL.—St. Mary's (Roman Catholic) Church. Mr. Kelly, architect, Brooklyn.
KANKAKEE, ILL.—Insane Asylum. J. R. Willett, architect, Chicago, Ill.
LOWELL, MASS.—Appleton Bank. O. A. Merrill, architect. Cost \$70,000.
NORRISTOWN, PENN.—Insane Asylum. Wilson Bros. & Co., architects, Philadelphia.
OAKLAND, CAL.—First Congregational Church. Mr. L. B. Valk, New York, architect. Cost \$60,000.
OTTAWA, ILL.—Holy Trinity (R. C.) Church. H. C. Furness, architect. Cost \$150,000.
ARMORY. Cost \$35,000. Mr. H. C. Furness, architect.
PORTLAND, CONN.—Trinity Church, H. M. Congdon, architect, New York, \$50,000.
POUGHKEEPSIE, N. Y.—Hudson River Hospital for the Insane. Mr. F. C. Withers, architect.
SAN FRANCISCO, CAL.—College of the Jesuit Fathers. Cost \$500,000.
SPRINGFIELD, ILL.—Jail. G. H. Helmle, architect. Cost \$65,000.
TOPEKA, KAN.—Insane Asylum. Cost \$76,000. Mr. E. T. Carr, architect, Leavenworth, Kan.
WABASH, IND.—Court House. B. V. Enos & Son, architects. Cost \$100,000.
WABEGON, ILL.—Court House. H. C. Koch, architect. Cost \$40,000.
ZANESVILLE, O.—Hotel. H. E. Myers, architect. Black & Graham, owners. Cost \$75,000.

Publishers' Department.

The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON.
NEW YORK OFFICE, 21 ASTOR PLACE.
An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc.
15 cents per copy; \$7.50 per year, \$6.00 in advance.

CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,

WITH Houghton, Osgood & Co.'s other Periodicals.
THE ARCHITECT and ATLANTIC MONTHLY...\$9.00
THE ARCHITECT and THE REPORTER...15.00
THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL...10.00
THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE...7.00
\*N. B.—The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

RATES OF ADVERTISING.

PAGES NEXT TO READING MATTER, single insertion...12 1/2 cts. per line.
One inch (14 lines) one insertion...1.75
One inch, six insertions...10.00
INSIDE PAGES, single insertion...10 cts. per line
One inch, single insertion...1.40
One inch, six insertions...7.00
For larger space, and for a series of more than six insertions, reduced rates, made known on application to the Publishers.

Special rates for first and last pages
No extra charge for cuts, or for advertisements that occupy more than a column in width
Payments should be made directly to the Publishers, either by draft or by post office order.

HOUGHTON, OSGOOD & CO., Publishers, WINTHROP SQUARE, BOSTON.

BUILDING SPECIALTIES, Etc.

—The New York Seventh Regiment Armory is to be covered with Warren's Patent Natural Ashphalt Roofing, with which a large number of the newest first-class commercial buildings of Boston have been covered.

St. Hall & Sons
Manufacturers of
Architectural Terra Cotta,
Buff and Colored Brick, Fire Brick
Established 1845, South Amboy, N. J.

GAS FIXTURES
OF EVERY DESCRIPTION.
SPECIAL RATES TO BUILDERS.
R. HOLLINGS & CO 247 Washington St., BOSTON.

PROPOSALS.

IRON WORK.

Proposals for Wrought and Cast-Iron Work for the U. S. Court-House and Post-Office at Little Rock, Ark. OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., August 8, 1878. Sealed proposals will be received at this office until 12 m., on the 24th day of August, 1878, for furnishing, delivering, fitting, and putting in place complete the Rolled Iron Beams, etc., required for the third story floor of the U. S. Court-House and Post-Office at Little Rock, Ark., in accordance with drawing, specification, and schedule, copies of which, and any additional information, may be had on application at this office or the office of the Superintendent. H. G. JACOBS, Acting Supervising Architect.

DREDGING AND RIP-RAP GRANITE.

ENGINEER OFFICE, U. S. A., NEWPORT, R. I., August 5, 1878. Sealed proposals will be received at this office until 10:30 o'clock, A. M., on the 20th of August, 1878, for Dredging in Providence River, R. I., Little Narragansett Bay, R. I. and Conn., Salmon River, Conn. For Rip-Rap Granite for Hyannis Breakwater, Mass., Jetty at Saybrook Bar, mouth of Connecticut River. Specifications in regard to the work, and blank forms for proposals and guaranty, upon which all bids must be made, will be sent on application to this office. G. K. WARREN, Major of Engineers, Bvt. Major-General, U. S. A.

TIMBER.

PUEBLO, COL. PROPOSALS will be received at the Engineer's office of the New Mexico & Southern Pacific R. R. Co., in Pueblo, Col., until noon of August 2, 1878, for the delivery of 300,000 railroad cross-ties, 3,400 telegraph poles, 60,000 lineal feet of piling, and for 1,900,000 feet, B. M., of bridge timber, all to be delivered on or before March 1, 1879, to the New Mexico and Southern Pacific Railroad along its located line between Willow Springs and Las Vegas, New Mexico. Specifications, bills for the material, conditions for delivery of same, and forms for bids will be on exhibition at Pueblo and Trinidad, Colorado, on and after August 1, 1878. Copies of these may be had on application in person or by letter, at this office. A good and sufficient bond will be required for the fulfillment of the contract and for the protection of the railroad company. A. A. ROBINSON, Chief Engineer.

DREDGING.

UNITED STATES ENGINEER OFFICE, ROOM 25, HONOR BUILDING, CHICAGO, July 31, 1878. Sealed proposals, in duplicate, will be received at this office until 12 o'clock M., Tuesday, August 20, 1878, for dredging at Chicago Harbor, Ill. For blanks for proposals, and all information, apply at this office. G. J. LYDECKER, Captain of Engineers.

GLASS AND WOOD MANTELS.

Proposals for Glass and Wood Mantels for the U. S. Court-House and Post-Office at Lincoln, Neb. OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., August 1, 1878. Sealed proposals will be received at this office until 12 m., on the 19th day of August, 1878, for the Glass required for the U. S. Court-House and Post-Office at Lincoln, Neb., in accordance with diagrams, specifications, and schedule. Sealed proposals will also be received until that time for the Wood Mantels required for that building, in accordance with drawing and specifications. Copies of drawings, specification, etc., and any additional information may be had on application at this office or the office of the Superintendent. H. G. JACOBS, Acting Supervising Architect.

MARBLE MANTELS, STONE AND IRON WORK FOR FENCE.

Proposals for Marble Mantels, Stone and Iron Work for Fence, of the U. S. Court-House and Post-Office at Parkersburg, W. Va. OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., August 1, 1878. Sealed proposals will be received at this office until 12 m., on the 19th day of August, 1878, as follows: First for nineteen Marble Mantels for the U. S. Court-House and Post-Office at Parkersburg, W. Va. Second, for Stone-Work for Fence for same building. Third, for Iron-Work for Fence. Copies of drawings and specifications of all of the above, and any additional information, may be had on application at this office or the office of the Superintendent. H. G. JACOBS, Acting Supervising Architect.

DREDGING.

U. S. ENGINEER OFFICE, NORFOLK, VA., July 31, 1878. Proposals for the improvement of the following named localities in Virginia will be received at this office until noon of August 30, 1878, and opened immediately thereafter. 1. Dredging in the Norfolk Harbor, Va., and its approaches. 2. Dredging in the South Branch of the Elizabeth River. The right to reject any bid is reserved. Blank forms, specifications, and any desired information can be had on application at this office. CHAS. B. PHILLIPS, Captain of Engineers.

CISTERNS.

LEAVENWORTH, KAN. Sealed proposals will be received at the City Clerk's Office, in Leavenworth, Kansas, until Wednesday, August 21, 1878, at 12 o'clock M., for the construction of three public cisterns: one at the junction of Cherokee Street and Lawrence and Leecompton avenues, and one at the corner of Tenth and Ottawa streets, and also one at the corner of Broadway and Walnut streets, upon the plans and specification on file in the City Engineer's Office. Payment for said work to be made in cash after completion, and upon said cisterns being tested and found satisfactory by the proper committee and city council. The city reserves the right to reject any or all bids. Bidders are required to deposit a certified draft, or check, or money, to the amount of \$100, as collateral to their bid. FRED M. SPAULDING, City Clerk.

PROPOSALS.

WROUGHT AND CAST-IRON WORK.

Proposals for Wrought and Cast-Iron Work for the U. S. Court-House and Post-Office at Philadelphia, Pa. OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., August 10, 1878. Sealed proposals will be received at this office until 12 m., of the 19th day of August, 1878, for furnishing, delivering, fitting, and putting in place complete the Wrought and Cast-Iron Work, comprising Cast-Iron Columns, Pilasters, etc., in second story, and Rolled-Iron Beams, etc., in third story floor of the U. S. Court-House and Post-Office at Philadelphia, Pa., in accordance with drawings, specification, and schedule, copies of which, and any additional information, may be had on application at this office or the office of the Superintendent. H. G. JACOBS, Acting Supervising Architect.

PILE DYKE.

ROUNDTOWN, N. Y. UNITED STATES ENGINEER OFFICE, ROOM 31, ARMY BUILDING, NEW YORK, August 9, 1878. Sealed proposals for constructing a Pile Dyke at Roundtown, New York, will be received at this office until noon of August 24, 1878. For forms of bids or other information apply to this office. JOHN NEWTON, Lieutenant-Colonel Engineers.

WHITE MARBLE MANTELS.

Proposals for White Marble Mantels for the U. S. Custom-House at Charleston, S. C. OFFICE OF SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., August 1, 1878. Sealed proposals will be received at this office until 12 m., on the 19th day of August, 1878, for nine White Marble Mantels for the U. S. Custom-House at Charleston, S. C., in accordance with drawing and specification, copies of which and any additional information may be had on application at this office or the office of the Superintendent. H. G. JACOBS, Acting Supervising Architect.

IRON BEAMS.

LOCK ISLAND ARSENAL, ILL., July 31, 1878. Sealed proposals, to be opened at 10 A. M., August 30, 1878, are hereby invited to furnish, delivered on cars at this Arsenal, about 1,543,000 pounds of 15-inch Wrought-Iron I Beams, to weigh 200 pounds per yard, about 754,000 pounds of 12 or 12 1/2-inch Wrought-Iron I Beams, to weigh 125 pounds per yard, and about 8,100 pounds of Angie Pieces, 3 1/2 inches by 3 1/2 inches by 3 1/2 inches. The beams must be straight, cut of wind, cut square at the ends, free from flaws, blisters, and ragged edges, and contain good iron, and the bid should be accompanied by the manufacturer's published tables or formula, giving the guaranteed strength and stiffness of beams. Nearly all the beams will be required in lengths of from 16 to 20 feet, and two thirds of them in such exact lengths that they must be cut cold. Bids must be addressed to the undersigned, indorsed on the outside, "Proposals to furnish Beams." The successful bidder will be required to enter into contract, and to give good and sufficient bonds for the faithful performance of the contract. About one fifth of the beams must be delivered within two months, and the remainder within five months of the date of contract. The United States reserves the right to reject all bids which are not deemed satisfactory. D. W. FLAGLER, Major of Ordnance.

BRASS STOP-COCKS, ETC.

BOARD OF PUBLIC WORKS OFFICE, CINCINNATI, July 20, 1878. Sealed proposals will be received at this office until 12 m. of Tuesday, August 20, 1878, for the following materials required for the Water-Works Department for the year ending September 1, 1879: 60 1-inch round-flow regulation screw ferrules. 250 1/2-inch round-flow regulation screw ferrules. 60 1/2-inch round-flow regulation brass stop-cocks. 250 1/2-inch round-flow regulation brass stop-cocks. 100 1-inch round-flow regulation brass stop-cocks. 25 1/2-inch round-flow regulation brass stop-cocks. 20 1/2-inch round-flow regulation brass stop-cocks. 10 2-inch round-flow regulation brass stop-cocks. For hydrant service (all more or less). Also, all machine brass castings, machine iron castings, sheet-valves and valve-boxes, hydrants, stop-boxes, lead pipe, pig lead, hemp packing-yarn, iron water-pipe and special castings required for connections (all more or less), specifications and samples to be seen at this office. The Board reserves the right to reject any or all bids. Each bid to be accompanied by two disinterested sureties. By order of the Board. JOHN E. BELL, President. JOHN D. BANKS, Clerk.

COMPETITION.

DESIGNS FOR ENCLOSURE OF ARMY AND NAVY MONUMENT.

CITY OF BOSTON, CITY HALL, July 16, 1878. The Joint Standing Committee on Common and Public Grounds hereby offer a premium of Fifty Dollars for the best design for a Bronze Fence, to be erected around the Army and Navy Monument on Boston Common. The total cost of the fence, including cost of foundation and erection, not to exceed the sum of Two Thousand Dollars. Each design to be marked with some motto or device, which is to be repeated on the outside of a sealed envelope containing the author's name. The design which is accepted will become the property of the City of Boston; all others will be at the disposal of their respective authors. The Committee reserve the right to reject any or all designs received. All designs to be sent to the office of the Clerk of Committees, City Hall, on or before the 14th day of September, 1878, at 1 o'clock P. M. For the Committee. CURTIS GUILD, Chairman.

PROPOSALS.

NAIL-DRAWERS.

QUARTERMASTER'S OFFICE, 1139 GIRARD STREET, PHILADELPHIA, August 6, 1878. Sealed proposals, in triplicate, subject to the usual conditions, will be received at this office until noon, Saturday, August 31, 1878, and opened immediately thereafter, for furnishing and delivering at the Philadelphia Depot of the Quartermaster's Department, Schuykill Arsenal, (200) two hundred Box-Openers or Nail-Drawers. A sample of the implement proposed to be furnished should accompany each bid. The United States reserve the right to reject any or all bids. A preference will be given to articles of domestic production. Envelopes containing bids to be marked, "Proposals for Box-Openers," and addressed to the undersigned. J. J. DANA, Major and Quartermaster.

STEAM-HEATING APPARATUS.

XENIA, O. Sealed proposals will be received by the Board of Trustees of the Ohio Soldiers' and Sailors' Orphans' Home, at Home Buildings, Xenia, Ohio, up to one o'clock P. M., on Friday, August 23, 1878. For furnishing in place and completing a Steam-Heating Apparatus for State School Building, now being erected at the Home, according to plans and specifications now on file at the office of the Auditor of State, Columbus, Ohio, a copy of which may be seen at the Home, Xenia, Ohio. Steam fitters and contractors may submit plans and specifications of boiler, other than specified, should they so desire, providing same capacity as specified, for inspection of the Trustees, at the above named time. All proposals must be accompanied with an approved guarantee bond, in a sum equal to one half the amount of contract, specifying that if bid is accepted the completion of contract in accordance with plans and specifications and to the entire satisfaction of the Board of Trustees and Supervising Architect. The Board of Trustees reserve the right to reject any or all bids. By order of the Board of Trustees of the Ohio Soldiers' and Sailors' Orphans' Home, Xenia, Ohio. DAVID W. GIBBS, Supervising Architect.

STONE AND IRON WORK.

Proposals for Stone and Iron Work for Fence, etc., for the U. S. Court-House and Post-Office at Raleigh, N. C. OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., August 1, 1878. Sealed proposals will be received at this office until 12 m., on the 19th day of August, 1878, for the Stone-Work for Fence, etc., of the U. S. Court-House and Post-Office at Raleigh, N. C., in accordance with drawings and specifications. Proposals will also be received until that time for the Iron-Work for Fence, etc., for same building, in accordance with drawings and specification. Copies of the drawings and specifications, and any additional information, may be had on application at this office or the office of the Superintendent. H. G. JACOBS, Acting Supervising Architect.

(Established 1848.)

MARKET ST. ARCHITECTURAL FOUNDRY

AND IRON WORKS. SNEAD & CO., LOUISVILLE, KY. Makers of every description of Iron Work for Buildings.

ARCHITECTURAL IRON WORKS.

YOUNGLOVE & CO., Prop'r's. CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CRESTING, ETC. Estimates promptly furnished.

A. L. FAUCHÈRE & CO.

OFFICE AND WAREHOUSES 1319 and 1321 Broadway, New York, Importers, Manufacturers, and Dealers in all kinds of foreign and domestic MARBLE FOR INTERIOR WORK. Estimates furnished on application.

The Useful

is issued monthly—consists of Perspectives of Interiors, Ornaments of Buildings, Fresco Painting, Furniture, etc., and is accompanied with full-size working-drawings—for direct use—Price to Subscriber One dollar per number.

Office 28 Pemberton Square, Boston, Mass.

SITUATION WANTED with a Granite, Marble, or Freestone Company, or any position that can be filled by a competent gentleman 27 years of age, experienced in managing a large force of men; six years an architectural draughtsman and designer, having a thorough knowledge of plans, scale, detail, and isometric drawings, the requirements of architects, and preparing quantities for contractors, with a large circle of friends in the offices of Boston and New York, and means of keeping well informed of building news and work going on. References as to ability given. Address for two weeks O. WESLEY, 246 East 25th St., New York City.

THE EUREKA VENTILATION CO.

OFFICE AND MANUFACTORY, 74 CHARLESTOWN STREET, BOSTON, MASS.

MARSHALL'S AMERICAN



LEADED SHEETS. Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Represented in New England States by C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

TO ARCHITECTS.

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the Scagliola & Marezzo Marble, Which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall and Altar Work

JAS. T. ALLEN & CO., 25 North 17th Street, Philadelphia.



METALLIC SHINGLES.

We call the attention of all parties interested in Roofing, and the owners of large buildings, to the above article. It is superior to Slate, Cheaper, Fire-proof, about one fourth the weight, lays much closer, therefore is Storm-proof, cannot Crack, etc. Any carpenter can put them on. Send for description and Price List to IRON CLAD MANUFACTURING CO., 59 Greenpoint Ave., Brooklyn, E. D. P. O. Box 2638, N. Y. City



D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

BUILDING MARBLE.

Branch yard of the RUTLAND MARBLE CO., 108 Causeway Street, Boston. JOAN D. ALLAN, Agent. Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Rutland and Continental Marble, furnished at low prices.



The Draft of the Chimney increased.

Smoking Chimneys Prevented. Particularly adapted to Chimneys in exposed positions. Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR, 70 Grand St., Brooklyn N. Y.

PATENT MINERAL WOOL.

ENTIRELY FIRE-PROOF AND UNDECAYING.

THE BEST INSULATOR OF HEAT, COLD, AND SOUND.

For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc.

ALEXANDER D. ELBERS, P. O. Box 4461. 26 1/2 Broadway, New York

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free

HENRY McSHANE & CO.,

Baltimore, Md.

THE ROCHESTER, N. Y.

FREAR-STONE COMPANY,

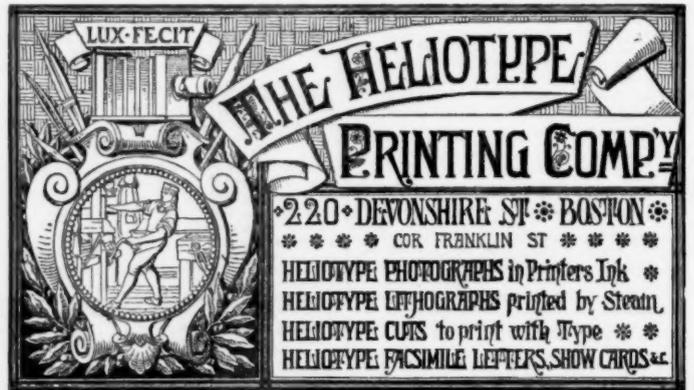
ESTABLISHED IN 1870.

Continues to manufacture a superior quality of Sandstone, equal in all respects to the best cut stone, at about one half the price. It is adapted to all work where sandstone is admissible. The Safe Deposit Co.'s Building, San Francisco, estimated value, \$2,600,000, and hundreds of first-class buildings all over the country, are referred to Frost and fire proof. Circulars sent on application.

P. H. CURTIS, Sec. and Treas.

OUR ADVERTISERS and others who are in the habit of using business circulars, will find in our columns of "Building Intelligence" a continually new directory of names and addresses of those persons who, being at present actively engaged in building, are the ones who are most desirous of receiving circulars setting forth the advantages and qualities of all classes of building appliances.

An hour spent in mailing circulars to the persons mentioned above cannot fail of being profitable to the business man.



220 DEVONSHIRE ST. BOSTON COR FRANKLIN ST. HELIOTYPE PHOTOGRAPHS in Printers Ink HELIOTYPE LITHOGRAPHS printed by Steam HELIOTYPE CUTS to print with Type HELIOTYPE FACSIMILE LETTERS, SHOW CARDS &c

THE "AIR SPACE" BOILER COVERINGS

Save 10 to 20 per cent in fuel.

THE CHALMERS-SPENCE COMPANY.

See Am. Architect and Building News, Dec. 13, 1877. 140 Congress Street, Boston. Foot 9th St., E. R., New York.

CLASSIFIED ADVERTISEMENTS.

Table listing various categories and their corresponding page numbers: ARCHITECTS, BUILDING MARBLE, METALLIC SHINGLES, etc.

Table listing various categories and their corresponding page numbers: DECORATORS, INTERIOR FINISHING WOOD, LEADERS SHEETS, etc.

Table listing various categories and their corresponding page numbers: SCAGLIOLA AND MAREZZO MARBLE, SEWER GAS TRAP, SHUTTERS (STEEL), etc.

**ETNA IRON CO.**

Manufacturers of every description of Wrought and Cast

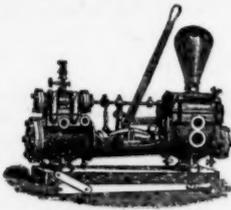
**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**

Patent



Steam

**PUMP THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a speciality.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

**KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES, { 14 & 16 Federal St., } Boston.  
{ 113 & 115 Congress St., }  
{ 82 & 94 Liberty St., } New York.

Send for Illustrated Catalogue.

**THE**

**Plumber & Sanitary Engineer,**

A Monthly Journal devoted to

**WATER SUPPLY, DRAINAGE, HEATING & LIGHTING.**

It contains no paid puff.

Its technical articles are written by experts.

It is a manual of the best practice in Plumbing.

It illustrates the latest improvements in House Drainage.

It is indispensable to every Architect and Builder.

Terms, \$1.50 a year. Single Copies, 15 cents.

Address

**AM. PLUMBER PUBLISHING CO.**

Box 3087 P. O. 297 Pearl St., New York.

**"ZODTCHY" (BUILDER).**

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

**M. JEROME KÜTTNER,**

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from EIGHT to SIXTEEN pages of letterpress, gr. quarto, with cuts, and at least FIVE autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodych," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.

The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address.

**JOURNAL "ZODTCHY,"**

18 OFFICER STREET, ST. PETERSBURG, RUSSIA.



**Carson's Kitchen Sink**

Is an improvement in this fixture that must meet with the approval of every house-keeper as it retains every particle of grease, and prevents the waste of pipes from filling up; besides being better trapped than any other sink in use.

Signal Mfg. Co., Medina, N. Y., or J. M. Carson, Louisville, Ky., Man'rs.

**NATIONAL**

**FINE ART FOUNDRY,**

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze.

TO ARCHITECTS AND BUILDERS.

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

**GEO. DWIGHT, JR., & CO.,**

Builders in Iron, and Engineers in Fire-Proof Construction,

SPRINGFIELD, MASS.,

HAVE for many years given their exclusive attention to FIRE-PROOF CONSTRUCTION; and they now invite the correspondence of Architects to the following specialties which hereafter will constitute the leading items of their business:

**FIRE-PROOF FLOORS.** The only floors that have stood fire in this country.

**FIRE-PROOF ROOFS.** Refer to Equitable Life Insurance Company's Building at Boston.

**FIRE-PROOF SHUTTERS.** Have stood many fires in all parts of the country. Over 6000 pairs put up in Boston after the fire. Saved the city of Springfield last year.

**FIRE-PROOF LATH.** In the words of one of the best-known architects of this country, "Minimum of metal, maximum of stiffness, maximum of elch: the best lath ever made, either wood or iron." See New York Post-Office; State Department, Washington; Equitable Life Insurance Company's Buildings, and many others.

Mr. Hoyt will be pleased to wait upon Architects, when desired, to explain our methods, and to present for inspection construction plans and estimates for any specific work.

**BURDITT & WILLIAMS,**

DEALERS IN

**FINE HARDWARE**

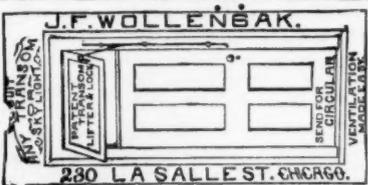
of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE

of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



**CATALOGUE OF**

**Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO.,

ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.

**BICKELHOUP BROS.,**

829 West 37th St., New York.

No Leak.



No Putty.

**PATENT METALLIC SKY-LIGHTS.**

**BEEHIVE BRAND.**

**FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**ASAHEL WHEELER'S PAINT PRESERVER**

Is the most remarkable Wood and Paint Protector known against the hot sun's rays and storms. A trial of more than three years' constant exposure has demonstrated this fact. A perfect glossy surface yet remains without signs of perishing. ASAHEL WHEELER, 145 Milk St., Boston



**BALTIMORE PRESSED TILES,**

FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases,

DRAIN AND SEWER PIPE, FIRE-BRICK, LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

WALDO BROTHERS,

No. 94 WATER STREET, BOSTON.

**PEERLESS BRICKS.**

**THE PEERLESS BRICK COMPANY,**

OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK

ARCHITECTURAL SHAPES (80 kinds).

ALSO

**RED** Pressed Fronts.

Extra fine in color and quality

**BROWN,** Colored throughout

More beautiful than Brown Stone DURABLE

**CHOCOLATE,**

Same as above; difference in color

**FLESH COLOR,**

A very popular color.

**BUFF,** very fine.

Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F ADAMS,

JOSEPH WOOD, JR.,

PRESIDENT.

TREASURER



**DOLIVET, CUTTER, & CO.,**

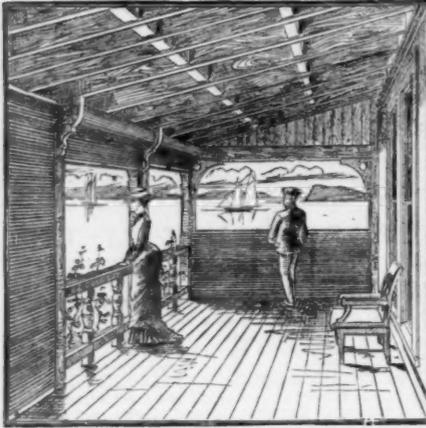
ARTISTIC

**Papier Maché Decorations,**

106 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING VENETIAN BLINDS.**

WILSON'S PATENT. These blinds can be fitted to any kind of Window or Piazza. They require no winding machinery or balance weights, and run up and down as easily as an ordinary spring shade. For Bay Windows they are found invaluable.

They are simple, durable, and handsomely finished. They were exhibited at Philadelphia in competition with the Rolling Venetian Shutters of English manufacture, and received the only award of Medal and Diploma.

Price reduced to 20 cents per foot super. in hard wood. We also manufacture Wilson's patent Rolling

**STEEL SHUTTERS,** the best and cheapest fire and burglar-proof shutters in the market.

**WILSON & JAMES,** 68 Beekman St., NEW YORK.

**VALUABLE ART PUBLICATIONS.**

**ALLONGE'S** (Auguste) Charcoal Drawing. With an Introduction by C. C. PERKINS, and a Heliotype Frontispiece. Small 4to. \$1.00.  
**BAKER'S** (W. S.) Origin and Antiquity of Engraving, with 23 Heliotype Illustrations from Dürer, Van Dyck, Raphael, Guido, etc. 8vo. \$6.00.  
**HUNT'S** (William M.) Talks on Art. 8vo. Paper. \$1.  
**CLEMENT'S** (Clara Erskine) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a complete Index. Cr. 8vo. Cloth, red edges, \$3.25.  
**MURRAY'S** (Mrs. Elizabeth) The Modern System of Painting in Water-Colors from the living model. 12mo, paper, 50 cents.

HOUGHTON, OSGOOD AND COMPANY, Boston.

**A NOVELTY.**

**THE YALE PATENT ANTI-FRICTION ROLLER STRIKE.**

Applicable for use with all Mortise Locks, old and new.

IT ENABLES THE DOOR TO BE SHUT WITHOUT SLAMMING.  
 IT PREVENTS ALL JAR AND NOISE.  
 IT SAVES WEAR OF THE LOCK AND DOOR.  
 IT CAN BE EASILY APPLIED.  
 ITS COST IS BUT TRIFLING.

Architects can obtain a sample strike free by addressing

**YALE LOCK MANUFACTURING CO., STAMFORD, CONN.**  
 New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,

**SPECIALTIES IN PLUMBING GOODS.** 94 BEEKMAN STREET, NEW YORK.

**JENNINGS' NEW CLOSET, WITH New Valve**

Having for their especial object *Cleanliness, Durability,* And the exclusion of Sewer Gas. With non-corrosive Valve Seating and Solid Plunger.

**PRIZE MEDALLISTS.** 1863; 1865; 1867; 1872; 1873; AND ONLY AWARD and MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,** ORIGINAL INVENTORS AND SOLE PATENTEES OF **NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable & Co., and Park & Tilford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.

OFFICE AND MANUFACTORY. 162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.** 76 READE STREET, NEW YORK, WORKS, DARLINGTON, N. J.

*Lock and Hardware Manufacturers,* DESIGNERS, FOUNDERS, AND WORKERS

**BRONZE AND BRASS.**

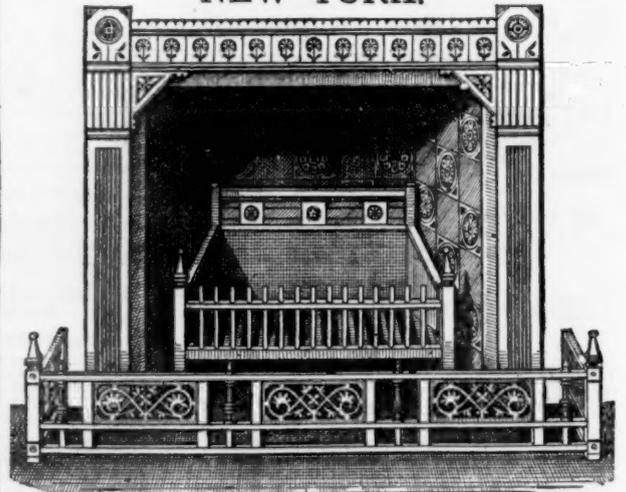
Architects' Designs faithfully executed.

Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side,) NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile. HAVE NO OTHER WAREHOUSES.

**BOWER'S PATENT SEWER-GAS TRAP.**

Patented in U. S. Apr. 24 & Aug. 14, 1877.

The most PERFECT BARRIER against SEWER GAS that has yet been invented.

The only trap that has been FULLY INDORSED by the LEADING SANITARIANS throughout the WORLD.



IT IS A POSITIVE SEAL

Against sewer-gas under pressure, absorbed gases, and back water.

Seal is not broken by siphonage or evaporation.

Self-Scouring, not injured by freezing, It has many other good points that

No other Trap possesses.

It can be readily attached to old work, in a very short time, and at very little expense.

**SIMPLE, CHEAP, DURABLE, AND EFFECTIVE.**

A sample Trap FREE to Architects on application. Send for full descriptive Circulars to the Manufacturers,

**B. P. BOWER & CO.** 104 & 106 St. Clair St., Cleveland, O.

**STEWART'S SLATE, MARBLE AND HARD WOOD MANTELS.** MIRRORS, ART-TILES FOR MANTELS, HEARTHES &c. Masonic Temple, 23rd St. & 6th Ave. N.Y.



Sewer Pipe, Fire Brick, Terra Cotta, Chimney Tops, Garden Vases, Art Pottery for Decoration. The strongest and smoothest pipe in the country. Send for lists and Catalogue. Prices as low as any other manufacturer.

Portland Stone Ware Co. GEO. C. DUNN, Gen'l Ag't, 50 Kilby Street, 400 Federal Street, Boston.

**LIMMER ROCK ASPHALT CO.**

111 Broadway, Room 105, New York. Rock Asphalt is a natural product, and the ideal material for Paving Roadways, Streets, Yards, and Stables, and for Flooring Cellars in Breweries and other establishments.



**SAYLOR'S PORTLAND CEMENT.**

Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R., U. S. Government Works (Forts and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally. For Sale by all dealers in Building Materials. Johnson & Wilson, Gen'l Agts., Send for circular. 83 Liberty Street, New York

**Automatic Signal Telegraph Co.,** CITY OF BOSTON,

OFFICE, 178 DEVONSHIRE STREET, ROOM 20, Is prepared to make contracts for the protection of buildings against fire.

DIRECTORS. CHARLES E. GUILD, President. WILLIAM ENDICOTT, Jun JOHN D. W. JOY. WILLIAM B. WATKINS. PATRICK T. JACKSON, Treasurer.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

Theatrical Fresco only. Prices moderate. Refer ences first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited. LAFAYETTE W. SEAVEY. Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK

**THE WELLINGTON PATENT OVERFLOW BASIN.**

No sewer gas. No overflow. No leakage around the top of the basin. This thoroughly reliable basin is rapidly taking the place of the ordinary one. It gives perfect satisfaction in every instance. Manufactured by

**L. S. MOORE & CO.,** 40 Oliver St., Boston. Send for Circulars.

# AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 139.]

SATURDAY, AUGUST 24, 1878.

[PRICE 15 CENTS.

### BUILDERS' SUPPLIES.

**AMERICAN ENCAUSTIC TILE,**  
Acknowledged by experts to be  
**THE BEST IN THE WORLD.**  
Manufactured by the  
**AMERICAN ENCAUSTIC TILING CO. (Limited.)**  
OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.  
Designs and estimates for Public Buildings, Halls,  
Churches, Vestibules, and for External Decoration, fur-  
nished on application.

**WALWORTH MANUFACTURING CO.,**  
69 KILBY ST., BOSTON.  
**PUBLIC BUILDINGS,**  
**PRIVATE RESIDENCES,**  
**GREENHOUSES, ETC.**  
Warmed and ventilated by  
**STEAM OR HOT WATER.**  
Correspondence solicited. Plans and estimates furnished  
on application.

**"HOTCHKISS" TOWER CLOCKS,**  
MANUFACTURED BY  
**SETH THOMAS CLOCK CO., THOMASTON, CONN.**  
Prices \$100 to \$5,000.  
**WARRANTED ACCURATE, STRONG, DURABLE.**  
OFFICE, 581 BROADWAY, NEW YORK.  
Send for Illustrated Catalogue.

**"MINTON'S ART AND ENAMELLED  
TILES."**  
(China Works, Stoke-Up-on-Trent.) Also, The Campbell  
Brick and Tile Co.'s  
**ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS,  
ETC.**  
For Churches, Banks, Halls, Vestibules, and Hearths;  
Outside Decorations, Flower Boxes, Etc.  
**TILOS, ASPINWALL & SON,**  
604 Broadway, NEW YORK.  
The only representatives in the United States for the  
above firms.

**ASPHALT (FELT) ROOFING.**  
**WARREN'S NEW PATENT  
FELT AND GRAVEL ROOFING,**  
Substitutes NATIVE ASPHALT for Coal-Tar materials for  
these roofs.  
The very best and most durable material for flat roofs.  
Also, Native Asphalt and Asphaltic Cement for Concrete  
Walks and Pavements.  
Roofers and pavers supplied with the above, and with War-  
ren's original Coal Tar Roofing and Paving Materials.  
Send for circulars and samples.  
**WARREN CHEMICAL AND MANUFACTURING CO.,**  
20 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**THE MITCHELL GRANITE WORKS,**  
QUINCY, MASS.  
Has abundant facilities for furnishing the very best work,  
and all the most celebrated Granites of the New England  
States, for  
**MONUMENTAL, CEMETERY, AND BUILDING  
PURPOSES.**  
WORK PROMPTLY DONE, AND AT REASONABLE RATES.  
Polishing a specialty. Orders solicited.  
Address G. H. MITCHELL, Agent.

**TILES FROM ALL PARTS OF THE  
WORLD,**  
FOR  
**BANKS, PUBLIC BUILDINGS, AND PRIVATE HOUSES.**  
References given to Tile Work throughout the United  
States and British Provinces  
AGENT FOR THE AMERICAN ROOFING TILE  
Contracts Solicited  
**O. A. WELLINGTON, HOUSEHOLD ART ROOMS,**  
No. 171 TREMONT STREET, BOSTON.

**OHIO VALLEY PRESS BRICK CO.**  
Challenge the world for fine stock Brick; also manufac-  
turers of all kinds of Bricks, octagon and square. Office 32  
& 3d St., Yard Preston and Knapp Sts.  
LOUISVILLE, KY.

**HAWTHORNE & TUCKER,**  
PLUMBERS,  
16 PROVINCE STREET, BOSTON  
Estimates for Plumbing made, and work done in any part  
of the United States or Provinces.

**J. H. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue Mattapan (Ward 24), Boston.

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY  
OF NEW YORK.**  
LEONARD F. BECKWITH, Pres't. E. GILLET, Vice-Pres't.  
Hollow Blocks of any pattern, uniting strength and re-  
sistance to fire and water. The Hydraulic Lime of Teil  
(France), one of the strongest cements known, is largely  
used in this manufacture. The blocks do not conduct  
heat, cold, or sound, and weigh 60 per cent less than brick.  
Fire-proof Partitions, Floor Arches between iron or  
beams, and ceilings under iron or wooden beam  
in following buildings:  
Western Union Telegraph, Orient, and Queens' Ins.  
Coal and Iron Exchange, Museum of Natural Hist.  
Equitable, Staats Zeitung, Hudson R. R. R. Fr. Dep't  
Windsor, & W'm'ster Hotels, N. Y. Hospital, Drexel,  
Cluny, & Young's Hotel,  
Syracuse Savings Bank, West Point Mill,  
Columbia College, Tribune, Coryell, & Vancori  
Baltimore Safe Deposit Co. Peabody Inst., B'  
Peabody Museum, N. Haven, Westmoreland, &  
Sidewalks laid at Lenox Library, Tribune,

Hollow Burnt Clay Bricks, for flat and curved arches,  
partitions, etc., and Skewbacks for brick arches.  
Sole agents for the U. S. for HYDRAULIC LIME OF TEIL,  
and LAFARGE PORTLAND CEMENT.  
Sole agents for the U. S. for METLACH ENCAUSTIC TILES,  
laid in Tribune, Staats Zeitung, Mineral Spa, Central Park,  
Belvidere Hotel, etc.  
Sole agents for the Atlantic States for WIGHT'S FIRE-  
PROOF COLUMNS.  
Our Fire-proof work is the only one approved by the  
New York Board of Fire Underwriters and the Superin-  
tendent of Buildings, after severe public tests.  
Office Room 54 COAL AND IRON EXCHANGE, 21 Courtland  
Street, New York.  
BOORMAN & Co., Agents, Boston, 5 Doane St.

**E. HOWARD & CO.**  
MANUFACTURERS OF CLOCKS AND WATCHES  
**CLOCKS FOR PUBLIC BUILDINGS**  
114 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**  
**PLAIN AND ENCAUSTIC  
FOR PUBLIC BUILDINGS AND DWELLINGS,**  
As laid by us in  
**THE CAPITOL AT WASHINGTON,**  
And in numerous Churches, Banks, and Dwellings in every  
part of the Country.  
Glazed and Enamelled Tiles for Mantels, Hearths, Wain-  
scoting, &c., and for Exterior Decoration.  
**MILLER & COATES,**  
277 PEARL STREET NEW YORK.

**BARTLETT, ROBBINS & CO.**  
**HEATING AND VENTILATING OF PUBLIC AND  
PRIVATE BUILDINGS  
A SPECIALTY**  
PLANS AND SPECIFICATIONS FURNISHED.  
FOUNDERS, AND MANUFACTURERS OF GAS WORKS,  
ETC., ETC.  
24 LIGHT STREET, BALTIMORE.

**THE NEW ENGLAND GRANITE WORKS**  
HARTFORD, CONN., and 1321 BROADWAY, N.Y.  
Quarries at Westery, R.I.  
**MONUMENTAL AND BUILDING WORK**  
of every description, all the varieties of  
**AMERICAN AND FOREIGN GRANITE.**  
UNEQUALLED FACILITIES OFFERED TO THE TRADE.  
**J. G. BATTERSON, Pres't. H. E. BATTERSON, Sec'y.**  
DIRECTORS,  
**J. G. BATTERSON, C. B. CANFIELD, H. A. BATTERSON**  
**G. T. BATTERSON, CARL CONRAD, Sculptor.**

**WHITTIER MACHINE CO.**  
Manufacturers of Steam and Hydraulic  
**ELEVATORS,**  
**STEAM ENGINES, BOILERS, AND MACHINERY.**  
No. 117 Tremont Street, Boston.  
Office in the New England Mutual Life Insurance Co's  
Building, Post Office Square,  
and 120 Broadway, New York  
**CHARLES WHITTIER, Pres. A. C. WHITTIER, Treas.**

**OTIS BROTHERS & CO.**  
**SAFETY STEAM AND HYDRAULIC  
ELEVATORS.**  
A specialty for a quarter of a century.  
**BUILDERS OF THE HALE HYDRAULIC ELEVATOR.**  
No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
**OHIO BUILDING STONE.**  
GRIND AND SOTTE STONE,  
From our FLORENCE and AMHERST QUARRIES.  
Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS  
111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
Designers and Manufacturers of  
**GAS FIXTURES,**  
**CASTAL METAL WORK, CLOCKS AND BROSERS**  
**ARCHITECTS' ORDERS SOLICITED.**  
Special designs submitted on application.  
JONES, 538 AND 535 BROADWAY, NEW YORK.  
MANUFACTORY, 24th AND 25th Sts., AND 10th AVENUE, N. Y.

**FISHER & BIRD,**  
Workers in all kinds of Foreign and Domestic  
**MARBLES,**  
97 to 103 EAST HOUSTON ST., NEW YORK.  
Established 1830.

Among our notable decorations are: The Illinois new  
State House; Palace Hotel, San Francisco; Baldwin's Ho-  
tel, San Francisco; Insurance Building, 10th and Chestnut  
Streets, Philadelphia; Mutual Life Insurance Building  
Boston; Orient Mutual Insurance Building, New York;  
Union College, Schenectady; and numerous Churches,  
Private Residences, etc., etc., throughout the country. We  
solicit the opportunity to estimate upon all classes of work,  
viz., Tiling, Wainscoting, Staircases, Mantels, etc. Come  
tery work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
Are ready to estimate on contracts of any size for  
furnishing their celebrated Amherst, Ohio,  
**BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS  
OR CUT AND SET.**  
Also,  
**AMHERST AND INDEPENDENCE GRINDSTONES,  
AND OHIO MINERAL AND STONE PAINTS**  
Fire-Proof Stove Cement and Stove Putty ground in Oil  
OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MO-  
SAICS."** Floor Tiles, beautiful in color and design, for  
Dwellings, Churches, and Public Buildings.  
**SPANISH WALL TILES.** White, Glazed, Valencia,  
Tiles for Walls and for decorative painting.  
**PRINTED FIGURED TILES** of Spanish designs, for  
Wainscoting, Mantels, Jardinières, etc.  
Floors of "Nolla Mosaics" can be seen at the "Rock-  
ingham," corner of Broadway and 56th Street. Imported  
and for sale by **JOHN CHADWICK, Sole Ag't for U. S.**  
48 Broadway, N. Y.  
**C. E. PARKER, Agent, 14 Exchange Place, Boston.**

**TUFTS' ELEVATOR WORKS,**  
MANUFACTURERS OF "TUFTS' PATENT" COMB-  
INATION ROPE ELEVATOR.  
TO BE OPERATED EITHER BY STEAM OR WATER.  
The only safe and reliable machine made for Passenger use  
in Public Buildings and Hotels, and for business purposes in  
Warehouses, Stores, &c.  
37 FOUNDRY STREET, SOUTH BOSTON.  
OFFICE, 243 Broadway, New York.  
**OTIS TUFTS, L. A. BIRLOW,**  
President. Treas'r and Gen'l Manager.

**STEAM WARMING APPARATUS.**  
**HIGH AND LOW PRESSURE.**  
**HOUSE WARMING A SPECIALTY.**  
Pamphlet with more than 1,000 references sent on appli-  
cation.  
**WYLLYS H. WARNER,**  
114 LEONARD STREET, NEW YORK,  
and 33 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**  
No. 6 COURTLAND ST., NEW YORK.  
Works at Paterson, N.J.  
**PATENT SAFETY STEAM ELEVATORS**  
for Public and Bank Buildings, Hotels, Private Dwell-  
ings, etc.  
**SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP  
GUARANTEED.**  
Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "HEALTH" AND "TUBULAR"  
Manufactured by the

**GOLD'S HEATER MANUFACTURING CO.**  
114 LEONARD ST., NEW YORK.

Send for Pamphlet.

W. F. GOLD, Pres't W. TILLY H. WADSWORTH, Treas.

**HUGH SISSON & SON,**

Importers, Dealers, and Manufacturers of

**MARBLE.**

INTERIOR MARBLE WORK AND MONUMENTAL  
WORK A SPECIALTY.

Salesrooms, No. 140 W. Baltimore St.: Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,  
SPEAKING TUBES,**

AND BURGLAR ALARMS,  
For Public and Private Buildings.

THE BEST IN USE.

**S. W. FULLER,**

63 Devonshire Street, Boston.

**TOWER CLOCKS.**

FOR CHURCHES,  
PUBLIC AND PRIVATE BUILDINGS,

**G. M. STEVENS & CO., MANUFACTURERS,**

90 SUDBURY ST., BOSTON, MASS.

**ART PAINTED TILES**

FOR MANTELS, CABINETS, ETC.

SHARPLESS & WATTS,

925 MARKET STREET, PHILADELPHIA.

Agents for

**MINTON'S TILES,**

AND TESSELLATED PAVEMENTS.

**JOHN MACK,** Plain and Ornamental Plasterer.  
41 Cambridge Street, Boston.

**PRESSED BRICK,  
STOCK AND COMMON**

MANUFACTURED BY

**FLETCHER & THOMAS,**

Indianapolis, Ind.

All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY

**GILLIS & GEOGHEGAN,**

Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 50th St. and 5th Av.;  
Drexel Building, cor Wall and Broad; Bennett Building,  
Fulton and Nassau, etc.

Architects and owners promptly furnished with specifications and estimates.

**ARCHITECTS.**

**P. B. WIGHT,**

CONSULTING ARCHITECT,

73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.

Consultations on matters pertaining to Fire-Proof Construction, Foundations, Drainage, Sanitary Work, Ventilation, Machinery, Valuations, Interior Decorations, and Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**

ARCHITECT,

COAL AND IRON EXCHANGE,

NEW YORK CITY.

**W. W. GOODRICH, C. E., ARCHITECT  
AND SANITARY ENGINEER**

KINGSTON, N. Y.

Plans, Specifications, and Estimates furnished for all classes  
of Public or Private Buildings, Monumental Designs, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,  
ARCHITECT,**

Room 17, Life Insurance Building,  
ST. LOUIS, MO.

Special attention to Churches, Schools, and other  
public buildings.

WALTER DICKSON, ARCHITECT, PERRY BUILDING,  
Albany, N. Y.

**GEO. E. WARING, JR.,**

CONSULTING ENGINEER,

FOR SANITARY AND AGRICULTURAL WORKS,  
NEWPORT, R.I.

**SANITARY ENGINEERING.**

**EDWARD S. PHILBRICK, C. E.,**

12 WEST ST., BOSTON, MASS.,

Offers advice and superintendence in

CONSTRUCTION OF WORKS,

IN PLUMBING, DRAINAGE, AND VENTILATION.

And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**

387 HARRISON AVENUE . . . . . BOSTON,  
SHEET METAL CORNICES, HAYES'S PAT-  
ENT VENTILATING SKY-LIGHTS,  
WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

**MANTELS AND GRATES.**

RANKIN'S PATENT makes the Cleanest, Cheap-  
est, and Hottest Fire. Avoid infringements, and send for  
Circular to

**C. S. RANKIN & CO.,**

ARCHITECTURAL IRON WORKS,  
Manufacturers of all kinds of Iron Work for

BUILDINGS, JAILS, ETC.

187 W. PEARL ST., CINCINNATI, O.

**EXCELSIOR  
ROOF PAINT.**

This paint has been thoroughly tested throughout the  
Eastern States, and has been found to be a perfect tin or  
metallic preserver. We warrant it neither to crack nor  
blister by **HEAT** or **COLD**, and to last

**IN ANY CLIMATE TEN YEARS.**

Those desiring to use this valuable preparation upon  
their buildings, can secure the same by addressing

**C. M. WHEELER, J. M. ROOT,**

Toledo, Ohio.

**DECORATORS.**

**W. J. MCPHERSON,**

(Established A.D. 1845.)

**MURAL PAINTER,**

**DESIGNER,**

**Ecclesiastical Decorator,**

AND

**ART STAINED GLASS MANUFACTURER,**

440 TREMONT STREET,

BOSTON, MASS.

**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the  
subscriber to produce Modern and Medieval styles of work  
equal to any European examples, for Churches, Pri-  
vate Residences, Halls, etc.

The value of the work is attained by a careful selection  
of colors in Cathedral and French Glass of his own impor-  
tation.

Designs in accord with architects' plans furnished at  
short notice. Reference of work at office

**SAMUEL WEST, 115 Eliot St., Boston**

**FRANK HILL SMITH,**

1717 TREMONT STREET,

BOSTON . . . . . MASS.

**COOK, REDDING & CO.**

149 CONGRESS ST., BOSTON,

Ornamental, Stained, and Cut Glass,

FOR

Churches, Public Buildings, and  
Private Residences.

We manufacture Slate Goods, through every operation, from quarry to completion.

**THE FAIR HAVEN MARBLE AND MARBLEIZED SLATE CO.**

FAIR HAVEN, VERMONT.

The oldest and most extensive producers of

**SLATE MANTELS**

IN THE UNITED STATES.

We imitate more than fifty rare marbles and woods. Styles and workmanship unsurpassed. Special care given to  
making Mantels and other goods from architects' drawings. Being in close proximity to the best white American  
marble quarries, and with rare facilities for selecting stock and doing the work, we are also producing

**MARBLE MANTELS**

At the very lowest prices, and in the best manner possible. We also produce all kinds of plain slate and marble work

Look over this list and correspond with us and get our Catalogue.

- |  |  |   |   |
|--|--|---|---|
| Purple, Green,<br>Red, Variegated<br>Roofing Slates.<br>Same Color Slate.<br>Also White and Black<br>Marble Tiles. | Window Sills.<br>Window Lintels.<br>Water Table.<br>Belt Courses.<br>Ashlar Steps and<br>Risers. | Laundry Tubs.<br>Urinals.<br>Grave Covers.<br>Vault Work.<br>Carriers' Tables.<br>Counter Tops. | Billiard Beds.<br>Blackboards.<br>Brewers' Vats.<br>Cisterns.<br>Greenhouse Shelves.<br>Plumbers' Goods, etc. |
|--|--|---|---|

**DECORATORS.**

**JOHN LAFARGE,**

**MURAL DECORATION,**

51 W. Tenth St., New York, and Newport, R. I.

**SOCIETY OF DECORATIVE ART.**

4 East 20th Street,  
NEW YORK.

Architects' designs for panels, tiles and plaques for inser-  
tion in Cabinet Work, and other decorative uses, and for  
Art Needlework applied to curtains, hangings, portieres,  
screens, table-covers, etc., carefully executed. Original  
designs for any of the above, subject to approval, will be  
gladly received, and paid for by the Society when used.  
Orders are earnestly solicited.

The Society has arranged with Mr. RUSSELL SYRGIS,  
Architect, for the Exhibition and Sale of his well-known  
Wall Papers. Some of these are faithful reproductions of  
Japanese decorative papers; some are taken from Oriental  
and other stuffs; some are of original design. New pat-  
terns will be added from time to time.

**Fresco Decoration.**

**EMMART & QUARTLEY,**

Designers, Decorators, and Painters,

32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made  
and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate  
work on hand or made to order. No. 1210 Ridge Avenue.  
JOSEPH S. MILLER, successor to Wilson & Miller, Philadel-  
phia, Pa. Send for Illustrated Price-List

**Donald MacDonald,**

**GLASS STAINER AND DECORATOR**

No. 6 Hayward Place,

BOSTON



**INLAID WOOD FLOORS.**

ORNAMENTAL WOOD BORDERS.

Designs and Estimates free.

National Wood Manuf'g Co.,

950 Broadway, near 23d St., New York

**PHILIP A. BUTLER,**

DECORATOR AND DESIGNER,

No. 17 FENBERTON SQUARE,  
BOSTON.

**HENRY B. JONES & CO.**

IMPORTERS, JOBBERS, AND RETAILERS OF

PAPER HANGINGS.

612 WASHINGTON STREET, BOSTON.

**L. HABERSTROH & SON,**

FRESCO PAINTERS,  
and INTERIOR DECORATORS,  
No. 12 SCHOOL STREET, BOSTON.

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa (Can.)	Philadelphia.	San Francisco	St. Louis.
1. BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2. Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50		3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00		3.00
3. CARPENTER	1.50 @ 2.25	1.50 @ 2.00	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25		1.50 @ 2.00
4. Cabinet Maker	2.50 @ 3.25		1.75 @ 2.25			1.50 @ 3.00	1.50 @ 2.00			
5. Finisher	2.00 @ 2.50		1.50 @ 2.00			1.50 @ 3.00	1.25 @ 1.75			1.50 @ 2.00
6. FOUNDRYMAN			1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50			2.25 @ 2.50
7. Blacksmith	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 2.00			1.50 @ 2.50
8. Whitesmith			1.50 @ 2.50	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.75			
9. Galvanized Iron Worker	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00			2.25 @ 2.50
10. GAS FITTER	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00			2.00 @ 3.00
11. LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.25 @ 1.50		1.00 @ 2.00
12. PAINTER	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.50 @ 2.25	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13. Gilder		2.00 @ 2.50	1.75 @ 2.00			1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50		
14. Grainer	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00		2.00 @ 3.00	1.75 @ 2.50			3.50
15. Paper-Hanger	.75 @ 2.50		per roll.		16c. pr. roll.	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00
16. PLASTERER	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	1.50 @ 2.50	1.50 @ 2.00	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00		2.25 @ 2.75
17. Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	1.50 @ 2.50		2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
18. PLUMBER	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.00	2.50 @ 3.50	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50			1.50 @ 3.50
19. QUARRYMAN		3.00 @ 3.50	1.10 @ 1.25		1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20. Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	1.50 @ 2.00	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21. Carver	3.00	3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75	3.00	2.00 @ 2.50	3.50 @ 6.00	2.75 @ 3.25		2.00 @ 2.50
22. Painters and Washers		2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75		1.50 @ 2.00	1.80 @ 1.00	1.50 @ 1.75		
23. Rubber		1.50 @ 2.00	1.75 @ 1.75	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	1.50 @ 1.75		
24. Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.75		
25. Stone-Setter	3.00	3.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	2.75	2.00 @ 2.50	1.50 @ 2.00	2.25 @ 2.75		2.00 @ 2.50
26. ROOFER (Tin)	2.00 @ 2.35	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25		2.00 @ 2.25
27. Slatier	2.50 @ 3.00	2.00 @ 2.25	2.00 @ 2.25	3.50 @ 4.00		2.00 @ 2.25	1.25 @ 2.00	1.75 @ 2.25		3.00
28. STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75		1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25			1.50 @ 2.50
29. STEAM FITTER	2.50 @ 3.00	2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00



ARCHITECTS AND BUILDERS

WILL ADD MUCH TO THE BEAUTY OF THEIR BUILDINGS BY USING

GARDNER'S PERFORATED THREE-PLY VENEER SEATING,

Which is Ornamental, Durable, and Cleanly.

We refer to the following new and elegant buildings fitted up with our goods:—

Morris Plains, N. J., Insane Asylum.  
New York Hospital.  
American Museum of Natural History, New York.  
Institution for Feeble-minded Children, Lincoln, Ill.  
Insane Asylum, Oshkosh, Wis.

Opera Chairs in new Music Halls, Lewiston, Me., Providence, R. I., and Brooklyn, N. Y.  
Seating in Depots of the Pennsylvania Railroad, at Philadelphia, Pittsburgh, etc.

Please send for Illustrated Catalogue.

GARDNER & COMPANY,

Patentees and Manufacturers,

376 PEARL STREET.....NEW YORK.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

GALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States.

Our twenty years' experience, and the numerous contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO., 72 & 74 West Monroe St. Chicago, Ill.

A SACHEL GUIDE.

FOR THE VACATION TOURIST IN EUROPE. Revised Edition for 1878. With Maps. 16mo, flexible cloth, \$2.00. HOUGHTON, OSGOOD & CO.



NONESUCH Self-Locking AND Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.

Patented July 10th, 1877

THE BEST PORTRAIT OF William Cullen Bryant

Is the ATLANTIC PORTRAIT, which was published last year expressly for subscribers to the ATLANTIC MONTHLY, and which is unquestionably the best large portrait ever made of him. To show how it is regarded by excellent judges, we append the following extracts:—

I think the picture admirable in its rare and commanding lines, and shall gladly give it the best place I can find in my limited collection. — RALPH WALDO EMERSON.

I hesitate to bestow any praise upon it, for the reason that I should use stronger terms than, as a mere unskilled lover of art, I should have any right to employ. I shall be disappointed, however, if the best judges do not unite in considering it a masterpiece of portraiture and execution. — DR. OLIVER WENDELL HOLMES.

Mr. Baker was singularly fortunate in his subject; he has produced a marvelous likeness of Bryant, and a very noble work of art. If a head like this, in bronze or marble, were found in some Greek or Roman ruin, it would be worth its weight in gold. — T. B. ALDRICH.

This portrait is life-size, on paper 24 X 30. The retail price is \$2.00. With the ATLANTIC MONTHLY for a year, \$5.00; six months, \$3.00.

ATLANTIC PORTRAITS.

Henry Wadsworth Longfellow. It is one of the most admirable likenesses I have ever seen, and I can scarcely imagine a better representation of the poet and the man. — BAYARD TAYLOR.

John Greenleaf Whittier. It is very fine; it is the ideal Whittier. — J. T. TROWBRIDGE.

The above portraits are life-size, and the dimensions of each picture are 24 X 30. Subscribers to the ATLANTIC MONTHLY can obtain either portrait, with the magazine for a year, by remitting \$5.00 to the publishers; for \$6.00 the magazine and two portraits, and for \$7.00 the magazine and all three portraits will be sent. The subscription price of the ATLANTIC alone is \$4.00.

The portraits are sent by mail, carefully rolled, so as to avoid all danger of injury, and will be forwarded to any address on receipt of the price and subscription by the Publishers; they can be obtained through newdealers and booksellers generally.

HOUGHTON, OSGOOD AND COMPANY, BOSTON, MASS.

AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT. MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS. Regular Sizes, 2, 3, 4, 5 & 6 Inch. SPECIAL SIZES MANUFACTURED TO ORDER. AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS. 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA. WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS, AND WILL BE TREATED AS SUCH.

- PRINCIPAL AGENTS.
- M. Halliday . . . . . New York City.
  - Hicks & Badger . . . . . Boston, Mass.
  - James Berry . . . . . Buffalo, N. Y.
  - George W. Pitkin & Co. . . . . Chicago, Ill.
  - Wasson & Martin . . . . . Albany, N. Y.
  - McLeod, Beardon & Co. . . . . Troy, N. Y.
  - W. H. Scott . . . . . Portland, Me.
  - Kittredge Corlice Co. . . . . Salem, O.
  - J. W. Jordan . . . . . Worcester, Mass.
  - H. G. Carpenter & Co. . . . . Wilkesbarre, Penn.
  - T. W. Irwin . . . . . Allegheny City, Penn.
  - Sellew & Co. . . . . Cincinnati, Ohio.

IMPERIAL GAS MACHINE. SEND FOR CIRCULARS. DENNY BROS & CO.

BIBB'S Celebrated Original Baltimore Fire Place Heaters. Mantels and Registers. B. C. BIBB & SON, Baltimore, Md. Best workmanship. Lowest prices guaranteed. Send for circulars.

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the art-workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

**Examples of Modern Architecture.**  
**EXAMPLES OF MODERN ARCHITECTURE, ECCLÉSIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. P'ANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist*, Boston.

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courant.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVIS. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIÉNARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11½ X 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOthic FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOLETTE-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

The works of the learned and distinguished French Architect, EUGENE VIOLETTE-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

## Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — *EUGENE BENSON, in The College Courant.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

**The New York Sketch-Book of Architecture.**

3 vols., 4to, \$6.50 each.  
We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

**The American Architect and Building News.**

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\*\* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers.

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

[Reported for the American Architect and Building News.]

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for various building materials including brick, fire brick, doors, and windows.

Table listing prices for cement, fire brick, and doors.

Table listing prices for doors, windows, and blinds.

Table listing prices for window frames, hair, lath, lime, and lumber.

Table listing prices for various types of lumber.

Table listing prices for various types of paint and oil.

Table listing prices for various types of nails.

Table listing prices for various types of pulleys and weights.

Table listing prices for stone materials like granite and marble.

Table listing prices for slate materials.

Table listing prices for tin plates.

Table listing prices for zinc materials.

Table listing prices for lead materials.

Table listing prices for building stone.

Table listing prices for various types of lumber.

Table listing prices for various types of paint and oil.

Table listing prices for various types of cement.

Table listing prices for various types of nails.

Table listing prices for various types of pulleys and weights.

Table listing prices for mortise locks and door knobs.

Table listing prices for various types of fasteners and screws.

Table listing prices for iron materials.

CHICAGO.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for various types of lumber in Chicago.

Table listing prices for various types of paint and oil in Chicago.

Table listing prices for various types of cement in Chicago.

Table listing prices for various types of nails in Chicago.

Table listing prices for various types of pulleys and weights in Chicago.

Table listing prices for roofing materials.

Table listing prices for solder and lead.

Table listing prices for various types of wire.

Table listing prices for various types of paint and color.

PHILADELPHIA.

Table listing prices for various types of lumber in Philadelphia.

Table listing prices for various types of paint and oil in Philadelphia.

Table listing prices for various types of cement in Philadelphia.

Table listing prices for various types of nails in Philadelphia.

Table listing prices for various types of pulleys and weights in Philadelphia.

Table listing prices for various types of paint and oil in Philadelphia.

A Word to Manufacturing Firms.

Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms.

CRESOTED WOOD.

Prepared at the Hayford Patent Creosote Wood Preserving Works. EDWARD R. ANDREWS, Proprietor.

TO ADVERTISERS.

The following letter from an architect of Des Moines, Iowa, explains itself: 'The American Architect is especially invaluable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper.'

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY.



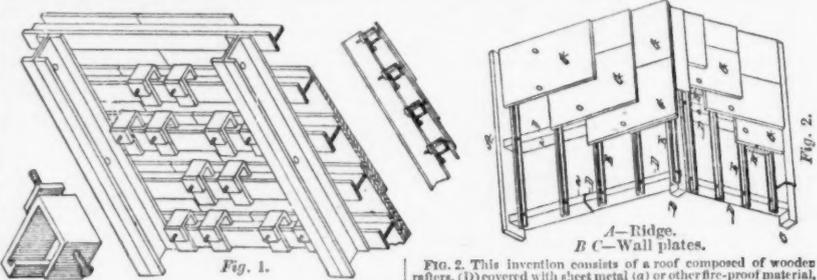
The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, ETC., ETC.

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.  
ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

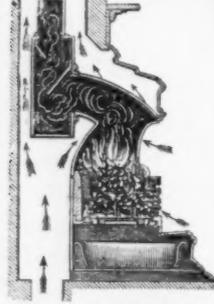
**ESTABLISHED, 1836.**  
**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**  
Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Compositoin Roof known. Also inventors and owners of the following patents:—



**Fig. 1.** The above invention relates to the manner of securing slate to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the purlins on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

**Fig. 2.** This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or other fire-proof material, and iron purlins (c) or beams, with the slates (G) or other covering secured thereto by clasps, (FIG. 1) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contact with the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point, avoiding condensation, contraction and expansion of roofs formed wholly of iron.

**WARMING AND VENTILATION.**  
**FIRE ON THE HEARTH.**  
**FIRE-PLACE HEATERS AND STOVES.**  
VENTILATION of a Fire-Place. RESERVE FORCE of a Close Stove. CIRCULATION of a Furnace.  
Adapted for any kind of Fuel,  
And the only FIRE-PLACE HEATER PERFECTLY ADAPTED FOR SOFT COAL and WOOD.  
Send for our testimonials from all parts of the United States.




**OPEN STOVE VENTILATING COMPANY,**  
115 Fulton and 54 Ann Streets, New York.

**GAS**  
SPRINGFIELD GAS MACHINE.  
Springfield, Mass.; 75 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

**BUHRER'S INFALLIBLE SEWER GAS TRAP.**  
The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (E) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (G) makes the seal more secure.



**S. BUHRER,** Inventor and Manufacturer, Cleveland, Ohio.  
WHOLESALE AGENTS.  
W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O.  
L. WOLFF Mfg Co., 109 & 111 West Lake St., Chicago, Ill.  
HAMBLES & MATHEWS, 82 & 84 North St., Boston, Mass.  
U. A. BLESSING, 44 North Fifth St., Philadelphia, Pa.  
THE J. L. MOTT IRON WORKS, 88 & 90 Beekman St., N. Y.  
Please send for Circular.

**Brandeis' Seamless Paragon Trap.**  
Safest, Best, Cheapest, and Non-siphoning.  
Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDEIS & WICKERT,** 46 Fulton Street, Brooklyn, N. Y.



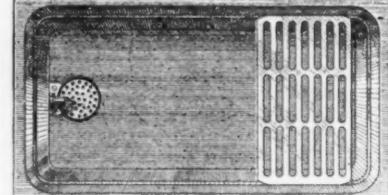
**C. BUTCHER,**  
107  
Devonshire St.  
BOSTON.  
Send for  
Illustrated  
Catalogue.

**PATENT MARQUETRY FLOORING.**  
Specimens at Lawrence, Wilds & Co.'s, 42 Cornhill, Boston.

**DORCHESTER UNION FREESTONE CO.**  
NEW BRUNSWICK YELLOW FREESTONE.  
The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order.  
34 Pine St., New York. - G. P. SHERWOOD.

**MENEELY & KIMBERLY,**  
Bell Founders, Troy, N. Y.,  
Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT HOUSE BELLS. Illustrated Catalogue sent free.

Architects and Builders will be quick to appreciate the many New and Practical Features possessed by

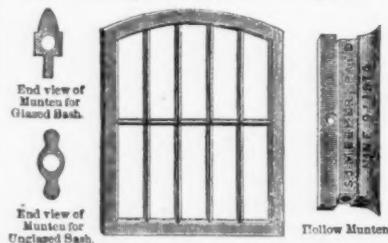


**THE MAGEE PATENT SINK,**  
which commend themselves at once to every householder. The escape of noxious and poisonous sewer gases is prevented by the arrangement of the patent trap, it being immovable, while the strainer, being hinged on brass pins, can be raised for the purpose of cleaning the cesspool. The sink is furnished with an improved galvanized shelf or rack for draining dishes, etc., after washing. It is of extra size, and being made with square corners, saves the carpenter much labor in setting. In smoothness of casting it fully sustains the long-established reputation of the Magee goods.

Particular attention is invited to the Magee Standard Furnace, portable and for setting in brick, guaranteed superior to any in the market for economy, durability, and heating capacity. Estimates furnished for heating all sizes of dwelling-houses and public buildings. Also a full line of Brick and Portable Ranges. Circulars and prices of all the above goods furnished on application.

**MAGEE FURNACE CO.,**  
32 to 38 Union St., Boston

**D. M. MEEKER & SON'S**  
**Malleable Iron Hollow Munten Window Sash.**  
For Insane Hospitals, Fire Proof Buildings, &c.



The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

**D. M. MEEKER & SON,**  
Newark, N. J.  
Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

**MAKE YOUR OWN GAS**  
Send for CIRCULAR.  
**WALWORTH MANUF. CO.**  
No. 69 Kilby Street,  
BOSTON, MASS.

**J. & R. LAMB, 59 CARMINE ST., N. Y.**  
**CHURCH FURNISHERS**  
Practical Workers in Sterling Silver, Brass, and Bronze. Carved Wood, Decorations, etc.  
Illustrated Catalogues.  
Furniture, 10c.; Metalwork, 10c.; Decoration, 10c.

**HOISTING MACHINES**  
EXCLUSIVELY.  
HOTEL STEAM ELEVATORS,  
HYDRAULIC ELEVATORS,  
HAND POWER HOISTS,  
DUMB WAITERS.  
**H. J. REEDY, Manufacturer,**  
128 EAST EIGHTH ST., - Cincinnati, O.

**CRANE BREED & COMPANY**  
**SAFETY BOILERS**  
FOR  
**STEAM HEATING**  
BY  
**STEAM AND HOT WATER**  
MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RADIATORS, PIPE COILS, REGISTERS, FITTINGS, STEAM-PUMPS.

**NATIONAL TUBE WORKS CO.**  
PATENT  
Indestructible Enamelled Wrought Iron  
**LAP-WELDED PIPE,**  
From 1/4 inch to 15 inches diameter.  
Now extensively used for  
Water, Gas, Sewerage, and Mining.  
It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making Joints, supplied to Engineers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at once of



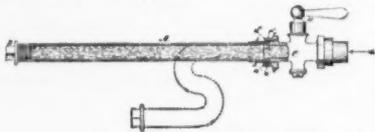
**National Tube Works Co.,**  
8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

**BUILDING INTELLIGENCE.**

[Reported for the American Architect and Building News.]  
 [Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

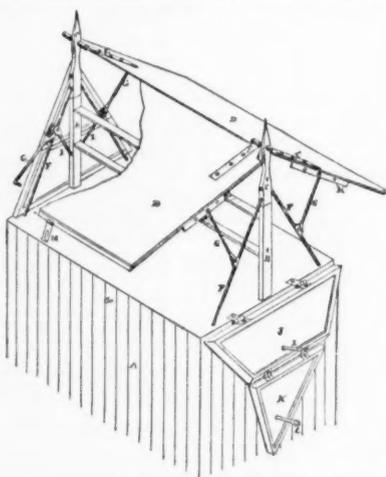
**BUILDING PATENTS.**

**CLOSING SEAMS OF SHEET METAL ROOFS.**—Hamlet E. Bolton, Colorado.  
**STONE-PIPE DAMPER.**—Solomon Crowell, Palmyra, N. Y.  
**SAND-PULLER FRAME.**—Oliver S. Garretson, Buffalo, N. Y. The shell or frame is cast in a single piece, with interior re-enforcements and projecting lugs, and there are curved recesses and rear recesses and screw-holes, all molded and cast at one operation, thus diminishing the weight of metal, and simplifying and cheapening the construction.  
**SHEET-METAL ROOFING.**—William S. Grafton, Steubenville, O.  
**SHEET-METAL ROOFING.**—Malcolm Harris, Morris, Ill.  
**DEVICES FOR OPENING AND CLOSING HATCHWAY DOORS.**—John J. Lucey, San Francisco, Cal. Sliding doors are operated by pulleys above and below the floor, connected by cords and intermediate pulleys. The pulleys have pinion wheels on their axes, those above and below engaging with racks on the cage, and those on the intermediate pulleys engaging with racks on the doors, whereby the doors are opened and closed by the passage of the cage.  
**DRAG-SAWS.**—Frank Mayrhofer, Delphos, O. The back-saw has its teeth reversed from their usual cutting position. The buck can be closed more or less, and fastened by chains.  
**REVERSIBLE LATCH.**—M. C. and S. S. Niles, Oak Park, Ill.  
**AUGERS.**—George F. Stearns, Forestville, Conn. A cutting lip inserted in a slot at the circumference of the twisted shank is longitudinally adjustable by a screw working in threads on the inner side of the sliding lip.  
**CALIPERS.**—Hiram C. Wright, Worcester, Mass.  
**METHOD OF BENDING TRAPS.**—Edward A. Leland, New York, N. Y. The object of the invention is to provide a means of making from a length of lead or other pipe a trap or number of traps. This is accomplished by filing the pipe, which is to be bent, with liquid, — water, oil, brine, or other liquid, — under hydraulic pressure. The pressure necessary will vary from one hundred to two hundred



pounds per square inch, according to the size, material, and thickness of wall of the pipe. The flexibility of the pipe may be increased by using a heated liquid to resist the tendency of the pipe to flatten and crush as the bends are made. One end of the pipe A is closed by a screw-plug B, while the other is attached to the outer pipe of the hydraulic press by a proper sleeve and coupling. When filled with the liquid under pressure the pipe can be bent as shown by the dotted lines.

**BIT STOCK.**—Charles M. Knowles, New London, Conn.  
**SASH FASTENER.**—Frederic Marten, Sodus, N. Y.  
**GATE LATCH.**—J. S. and J. Matthews, Athens, Tenn.  
**CURTAIN-CORD FASTENER.**—Frederic E. Porter and David A. Beston, New York, N. Y.  
**VENTILATOR.**—Jean E. Richards, New York, N. Y.  
**HAND VISE.**—Benjamin F. Stephens, Brooklyn, N. Y.  
**ETCHING ON GLASS.**—John Unwin, Sheffield, Great Britain. A design is printed directly on glass by flexible moulds and treated with powdered resins. Then fluorid acid and soda-ash are applied.  
**BURGLAR ALARM.**—James W. and W. W. Wharf, Detroit, Mich.  
**SASH HOLDER.**—J. W. and W. W. Wharf, Detroit, Mich.  
**HOUSE.**—Joseph D'combe, San Francisco, Cal. The gable-roof and roof of this house are hinged so that they can be lowered or raised, respectively, for the purpose of re-



curing ventilation. This cut sufficiently explains the construction of such a house, which is suitable for hot countries, for hospitals, or for boathouses.

**MACHINES FOR CUTTING VENEERS.**—Leonard Anderson, Painesville, O. Either straight or tapering veneers for pails, buckets, etc., can be cut from log of any size, without breaking or checking, by means of a knife, arranged to vary its angle automatically, and suitable operating mechanism.  
**PILE DRIVER.**—George H. Cavanagh, Boston, Mass.  
**HYDRAULIC CEMENT.**—John Dimelow, Austin, Tex. The cement is made by burning rotten or refuse limestone or marble, mixing the lime with the deposit of rivers, treating the mixture with water, and afterwards grinding and sifting it. After the water is evaporated the solid residuum is dried, cut into blocks, and burned, leaving as a result hydraulic cement.  
**SASH FASTENER.**—L. W. Knight, Elgin, Ill.  
**ARTIFICIAL MARBLE.**—Agapit Braut, Montreal, Canada.  
**VENEUR CUTTING MACHINE.**—Thomas Harvey, Rochester, N. Y.

**FIRE-PROOF SHUTTERS.**—Simon L. Pollock, St. Paul, Minn. A sheet-iron shutter is formed with a central and two outer walls interposed, supporting strips, and overlapping flanges on its sides bolted together. Dead-air spaces between the walls are formed by closing top and bottom.  
**ELECTRIC LIGHTING SYSTEM.**—William E. Sawyer, New York, and Albon Man, Brooklyn, N. Y.

**COMPLETED BUILDINGS.**

**EAST HAMPTON, CONN.**—The new Catholic church was dedicated on Sunday, August 11. The church is a neat frame building which will seat about 500.  
**VERSAILLES, KY.**—The new church was dedicated on Sunday, July 28.  
**ORANGE, N. J.**—The Roman Catholic Church of our Lady of the Valley was dedicated August 15. The edifice has been rebuilt and enlarged by the addition of two transepts, at a cost of \$10,500.

**SUMMARY OF THE WEEK.**

**Baltimore.**  
**STORES AND DWELLINGS.**—Mr. Conrad Kratz is the architect and builder of three three-story buildings at the corner of Pratt and Albemarle streets, now building for Mr. James Bates. Size, 46' x 73'; cost, \$8,000.  
**STORE.**—A four-story store is now building at the corner of Baltimore and Frederick streets for Messrs. Seldner & Kerr. It is to be built of pressed brick with stone finish, and will cost about \$18,000. Size 35' x 60'. Mr. John Murdock architect. Mr. B. J. Bennett builder.

**Boston.**  
**BUILDING PERMITS.**—The following permits have been issued since our last issue:—

BRICK BUILDINGS.				
Mechanic.	No.	Stories.	Class.	Size.
Lynch Brothers.	3	4	Tenement	24' x 42'.
James Pillsbury.	1	1	Boiler House.	14' x 33'.
WOODEN BUILDINGS.				
Mechanic.	No.	Stories.	Class.	Size.
Stephen P. Trafton.	1	1	Piggery.	10' x 187' 6".
Stephen P. Trafton.	1	2	Stable, etc.	35' x 33' 6".
Bennet Doak.	1	1	Poultry Hse.	15' x 19'.
Joseph P. Shaw.	1	1	Dwelling.	24' x 30'.
Timothy D. Mulrey.	1	1	Stable.	24' x 34'.
McDonald Macaulay.	1	2	Dwelling.	24' 4" x 32'.
Samuel M. Shapleigh.	1	2	Dwelling.	23' 6" x 33'.
William Fridham.	1	1	Stable.	12' x 25'.
Abner Chute.	1	2	Dwelling.	16' x 25'.

**HOUSES.**—Mr. Silas W. Merrill is the owner and builder of two dwelling houses, which are to be built on Fairfield Street. Cost of each, \$11,500. Messrs. Ober & Rand, architects.  
**HOUSE.**—A dwelling house for Mr. C. F. King is building on Seaver Street. Cost, \$6,000. Wilson Bros., contractors. Mr. W. P. Wentworth, architect.  
**HOUSE.**—Mr. Wentworth is also building a house for Mrs. S. M. Hicks, on Lambert Ave. Andrew Anderson, builder.

**Brooklyn.**  
**BUILDING PERMITS.**—Bond St., cor. State St., 1 four-story brick tenement, 25' x 50'; owner, Thomas E. McCarly, architect, Thos. F. Houghton, 100 Bond St., cor. State St., 5 four-story brown stone dwells, 20' x 42'; owner, etc., William Flanagan, 400 Second St.; masons, Cooney & Shandy, — Elm St., 1 one-story brick shop 20' x 40'; owner and builder, Wan. Mogg, 645 Bushwick Ave. — Hope st., 1 four-story brick tenement, 25' 7" x 50'; owner, James Cavanagh, 54 South Second St.; architect, W. H. Gayler; builders, T. Gibbons and S. M. Weekes. — Hopkinson Ave., 1 two-story frame dwell, 25' x 40'; owner, Cath. Loeffler, 77 Tompkins Ave.; architect, George Loeffler. — Nevins St., 1 three-story brick store and tenement, 25' x 40'; owner, Ann Sheridan, Newburgh, N. Y.; architect, I. D. Reynolds; builder, J. J. Quinn. — Fourth St. (No. 169), 1 four-story brick dwell, 22' x 50', one-story, 60'; owner, George Thompson, No. 105 Fourth St.; architect, G. N. Casey; builder, Jno. Fallon. — Flatbush Ave., 8 four-story brown stone stores and tenements, 20' x 53' and 62'; owners, D. & M. Chauncey, 209 Montague St.; architect, G. L. Morse; builders, F. Kelly and Morris & Selover. — Greene Ave., cor. Vanderbilt Ave., 4 three-story brown stone dwells, 20' x 43'; owner and builder, Joseph L. Kirby, 73 Gates Ave.

**THE BUILDING IN A DECADE AND A HALF.**—A comparative statement of the number and assessed value of new buildings erected in this city from 1864 to 1878 inclusive is given below:—

Year.	Number of Buildings.	Amount.	Average per Building.
1864 . . . . .	714	\$1,498,400	\$2,110
1865 . . . . .	698	1,717,200	2,887
1866 . . . . .	1,058	2,520,500	2,882
1867 . . . . .	1,654	3,586,500	2,170
1868 . . . . .	2,331	4,815,000	1,930
1869 . . . . .	2,971	5,401,300	1,822
1870 . . . . .	2,486	5,592,200	2,262
1871 . . . . .	2,124	4,930,900	2,321
1872 . . . . .	2,015	4,684,400	2,324
1873 . . . . .	1,920	5,020,600	2,614
1874 . . . . .	1,786	4,251,700	2,380
1875 . . . . .	1,470	3,617,300	2,460
1876 . . . . .	1,506	3,742,100	2,485
1877 . . . . .	1,470	3,349,200	2,637
1878 . . . . .	1,977	3,967,500	2,848
Total . . . . .	21,580	\$57,503,700	\$2,314

**Chicago.**  
**BUILDING PERMITS.**—John Kieser, one-story dwell, 214 Sherman St.; cost, \$1,500. — Patrick Brannock, two-story dwell, 587 West Monroe St.; cost, \$2,000. — Hannah Hartin, 4 two-story dwells, cor. Sholto and Gurley sts.; cost, \$1,500 each. — Vincent Barzynski, two-story dwell, Ingraham St.; cost, \$7,000. — Annelia Miller, two-story and flat; cost, \$4,000; 851 Clark St. — Louis Walterdorf, addition to 171 Blue Island Ave.; cost, \$2,400. — Barbara Cluer, Jr., two-story stone-front dwell, 1426 Indiana Ave.; cost, \$4,500. — Peter Junius, two-story dwell, 225 Mohawk St.; cost, \$2,400. — Leopold Bloom, three-story brown stone-front dwell, 630 Michigan Ave.; cost, \$8,500. — J. C. Nyman, 3 two-story dwells, 95 to 99 Dearborn Ave.; cost, \$15,000. — George

Leslie, three-story dwell and two-story barn, 363 Ontario St.; cost, \$4,000.  
**CHANGE OF FIRM.**—The former partner of Mr. E. Burling retires and his place is taken by Mr. F. M. Whitehouse.

**Indianapolis.**

**BUILDING.**—The aggregate value of buildings which were authorized by permits issued during the month of July is \$24,941.

**JAIL.**—A new jail is to be built.  
**THE STATE-HOUSE BIDS.**—The Board of State-House Commissioners opened the bids for the erection of the State House on August 15th. There were thirty-one bidders in all, but only nine for the entire building and finishing, as follows: Kannacher & Denny, of Austin, Texas, \$1,611,672.25; New England Granite Company, \$2,114,714.33; Decker & Applegard, \$1,778,230.58; Farman & Pierce, \$1,639,991.53; McCormack & Sweeney, \$1,893,218.77; John M. Armstrong, \$1,759,499; Martin Hinkey, \$1,770,539; William McNeal, \$1,942,500; P. J. Sexton, \$1,789,999.64. The board reserved the right to accept the best bids, either in whole or in part, and, if the lowest bids for each division are accepted, the following will be the list of contractors and prices:—  
 Dewey & Twinn, excavation and mason work. . . . . \$131,048.34  
 Decker & Applegard, cut stone. . . . . 642,330.00  
 Kannacher & Denny, brick. . . . . 128,694.00  
 Decker & Applegard, wrought and cast iron. . . . . 314,355.54  
 McCormack & Sweeney, copper and slating. . . . . 29,671.20  
 Farman & Pierce, carpentering. . . . . 60,345.57  
 Kannacher & Denny, plastering. . . . . 35,450.00  
 Kannacher & Denny, painting and glazing. . . . . 11,582.00  
 Kannacher & Denny, plumbing and gas-fitting. . . . . 4,964.00  
 Indianapolis Asphalt Company, marble, slate, and tile (over \$45,000 less than the next lowest bid). . . . . 12,078.00  
 McCormack & Sweeney, inside finish of dome, obelisk stone. . . . . 23,284.00  
 Walworth Manufacturing Company, steam-heating. . . . . 45,893.35  
**Total. . . . . \$1,241,289.00**  
 This is \$570,383.95 less than the lowest bid for the work entire, and nearly half a million less than the estimate of the architect.

**New York.**

**BUILDING PERMITS.**—Seventy-fifth St., near Second Ave., three flats, 29' x 60'; four stories; cost, \$8,500 each; Grube & Nichols, owners; John Brandt, architect. — Fifty-seventh St., near Seventh Ave., 5 first class dwells, 20' x 59', brown stone front; cost, \$17,500 each; J. C. Thompson, owner and builder; J. C. Markham, architect. — One Hundred and Fifteenth St., near First Ave., second-class dwell, 25' x 55', cost, \$4,000; B. McKenney, owner; B. McGurt, architect. — Sixty-seventh St., near Fourth Ave., 5 first-class dwells, 20' x 55'; brown stone front; cost, \$15,000 each; Anderson Fowler, owner; D. & J. Jardine, architects; J. & G. Rudell, builders. — Mercer St., near Clinton Place, tenement, 28' x 50', four stories; iron front; cost, \$6,000; Sailors Snug Harbor, owners; Thos. Hyland, builder. — 37 and 39 W. Fifty-third St., flat brown stone front, 50' x 90'; four stories; cost, \$75,000; J. B. Tallman, owner and builder.

**Philadelphia.**

**BUILDING PERMITS.**—A. H. Taylor, three-story front building, 16' x 16', Leiper St., Frankford. — J. Barrell & Co., two-story dwell, 18' x 40', Townsend St. — A. Miller, two-story dwell, 32' x 15', cor. Kensington Ave and "E" St. — R. H. Clifton, two-story dwell, 14' x 30', Smudley St. — P. H. Somerset, two-story back building, 12' x 32', Tenth St. — Christ. Brown, two-story dwell, 14' x 44', Carlisle St. — A. E. Haines, 11 two-story dwells, 15' x 42', Mervine St. — Smith & Fagely, two-story dwell, 16' x 37', Lloyd St. — Jas. Young, three-story front building, 16' x 17', No. 1264 Edgemont St. — T. Binan, 4 two-story dwell, 15' x 30', Centre St. — J. A. Palmer, three-story back building, 14' x 32', No. 384 Spruce St. — J. C. Hurlinger, 2 three-story stores and dwells, 15' x 73', cor. Thirty-ninth and Market sts. — G. W. Ash, two-story school building, 35' x 200', Green St. — Sturgis & Co., 2 two-story dwells, 15' x 33', Baldwin St., Manayunk. — M. McConnell, three-story addition, 17' x 58', No. 259 South Twentieth St. — T. C. Nesbit, 2 two-story dwells, 14' x 29', Tudor St. — T. C. Nesbit, three-story dwell, 18' x 58', Eighth St. — Nichols & McDowell, two-story dwell, 15' x 20', Second St.

**THE POST OFFICE.** The contract for the iron beams, girders, columns, and plaster for the third floor of the new Post Office building in this city has been awarded to Steward & Stevens, of this city, they being the lowest bidders. The present contract is for over 600,000 pounds and is to be completed in six weeks.

**St. Louis.**

**BUILDING PERMITS.**—Forty-seven permits have been issued for the week ending August 16, 1878. Fifteen of these are for unimportant frame structures; the rest are for brick buildings, with finish and occasional fronts of stone. Those worth \$2,500 and over are as follows:—

Owners.	Use.	Stories.	Rooms.	Cost.
City of St. Louis.	Engine house.	2	2	\$4,333
J. Best.	Dwelling.	1	4	3,000
M. Walsh.	Dwelling.	2	16	4,400
J. R. Weber.	Dwelling.	2	12	3,000
P. W. Marburg.	Dwelling.	2	12	2,400
Mrs. L. A. Preston.	Dwelling.	2	6	3,500
St. Louis School Board.	School-house.	2	6	10,000
Mrs. A. Sinden.	Dwelling.	2	21	9,700

**CHURCH.**—The First Unitarian Congregation, Rev. John Snyder, pastor, contemplate building a new church, and it is understood have instituted a limited competition. The anticipated cost is \$50,000.

**Washington, D. C.**

**BUILDING PERMITS.**—Charles Ford, et al., four brick dwells, on Tenth and R sts.; cost, \$14,500. — M. A. Kuehling, three-story brick dwell, Vermont Ave. and U st.; cost, \$3,000; R. G. Campbell, two-story brick house on D st.; cost, \$2,000. — Prof. Riley, brick dwell, cor. of Thirteenth and R sts.; cost, \$4,000. — L. D. Merchant, two-story brick building, 13' East Capitol St., northeast; cost, \$1,800. — St. Matthew's Institute, three-story brick and stone college on Vermont Ave.; cost, \$16,000. — Mrs. M. K. Simpson, additional story to house on Louisiana Ave.; cost, \$2,000. — Theodore Myer, 2 dwells, two stories in height, cor. of Seventh and T sts.; cost, \$3,000.

**THE NEW WORK-HOUSE.**—Work has begun on the two wings of the new work-house and they will be ready for occupancy in sixty days.

**UNSAFE CHURCH.**—The church at the corner of Fifteenth and Sanson streets, being in an unsafe condition, the pastor, Rev. Alexander Crummel, has been notified that the walls must be secured or taken down, to prevent accident.  
**MORE BUILDING REGULATIONS.**—Building Inspector Entwisle has recommended that an addition be made to the building regulations, requiring owners or builders occupying the roadway or footwalk to exhibit a light, or if the obstructions shall extend twenty-five feet or more, two lights

placed in such manner as to show distinctly the clear passage-way left. Also, that proper provision be made for conducting the rain-water from buildings in course of erection, so as to protect them and the adjoining property.

General Notes.

ALEXANDRIA, VA.—The bids for the agricultural fair building were opened on August 3d by the committee, and the contract awarded to Mr. William Vincent, his bid being less than \$2,000.

ASSURANCE, N. J.—Ground has been broken for the erection of the First Baptist Church.

AUBURN, N. Y.—Hon. E. B. Morgan proposes to build for Wells College a new building large enough to contain music-rooms, laboratories, lecture-rooms, art gallery, and a gymnasium.

BELLELEVILLE, MO.—Mr. Conrad Reinecke has commenced to build a house on North Jackson Street.

BOONE, IO.—Mason Bros. are building a two-story stone-front, brick with cut-stone finish, and galvanized iron cornices. Cost, \$4,000. William Foster, architect, Des Moines, Iowa.

BROCKTON, MASS.—W. V. Howard is the architect of a two-story French roof dwelling-house for Sanford Winter, Esq., now building. Cost, \$10,000. N. S. Holmes is the builder.—Over 50 houses have been built or are building in this town this season.—A four room school-house, costing \$7,000, has just been completed.

BROOKLINE, MASS.—Mr. A. C. Martin, Boston, is the architect of a dwelling-house for G. D. Noyes, Esq. Cost, \$7,000. Leander Greeley, builder.

BURLINGTON, VT.—Work is progressing on the Mary Fletcher Hospital, the work on which is done by the day. Cost, \$40,000. Mr. W. P. Wentworth, architect, of Boston.

CAMBRIDGE, MASS.—Mr. J. Fogarty, Architect, is preparing plans for the new factory of John Beardon & Sons.

CAMDEN, N. J.—The German Methodists have nearly completed quite a large and convenient new church on Berkley Street, between Fifth Street and Broadway, which, in a short time, will be dedicated.

CHARITON, IO.—A six-room school-house, brick with cut-stone finish, is now building. Cost, \$12,800. William Foster, architect, Des Moines, Io.

COVERT, MICH.—On Tuesday last proposals were received for building the new Congregational Church. O. S. Saas is chairman of the committee.

COWINGTON, KY.—The city council has taken steps to procure land on which to build a new jail by the side of the court-house.

DANVERS, MASS.—Mr. Oliver Roberts is about to build a house on the Devereux farm.

DAYTON, O.—Mr. B. Kuntz will this season build a four-story block on the corner of Main and Fourth streets. The front will be of pressed brick.

DEEP RIVER, CONN.—Wm. D. Clark & Son, of Chester, quarrymen, have contracted to furnish the stone for the new building to be erected by the Deep River National Bank.

DETROIT, MICH.—The foundation of T. P. Hall's new business block, on the corner of Michigan Avenue and Griswold Street is completed.

EAST PROVIDENCE, R. I.—At Riverside Mr. Frank P. Connor has commenced building a large two-story house.—Mr. Thomas Shays, Esq., of New York city, is building a French-roofed cottage on the bluff, opposite Pomham rocks, and Mr. Clark Potter, of Providence, a fine cottage a short distance below Silver Spring.

EAU CLAIRE, WIS.—There are prospects of a good deal of building here just now.

FALL RIVER, MASS.—Mr. Patrick Barry has just laid the foundation of a block of stores and tenements, and Mr. Thomas Brady is erecting a large cottage on Fish Road, hard by. There is besides a Catholic church, now in course of erection, at that end of the city, on South Main Street, in the parish of Rev. Father Kelley.—The building will be of granite, and of commodious dimensions. The masons and hod-carriers employed in the Pocasset Mill extension have struck. The former received \$1.50 and demand \$2, the latter 90 cents and demand \$1.

GREEN BAY, WIS.—The rafters for the roof of the new Cathedral are being placed in position.

HILLSDALE, MICH.—United States engineers are building an observatory. It will be 75 feet high and is to be used by government surveying parties.

IDA GROVE, IO.—A new Methodist Church is to be built at a cost of \$1,200.

KALAMAZOO, MICH.—The Ladies' Library Association of this city has just secured plans for a new library building which will cost about \$8,000.

KNOXVILLE, TENN.—The dormitories of Shorter College are approaching completion. The Masonic Temple is completed.

LACONIA, N. H.—The Catholics are about to build a church which will probably not exceed \$8,000 in cost.

LEWISBURG, PENN.—The corner stone of St. Mark's Chapel was laid on Friday, August 2. The chapel will be Gothic in style, built of brown stone, with pressed brick finish.

LYNN, MASS.—It has just been brought to our notice that we have unintentionally done injustice to Mr. H. J. Preston, a Boston architect, by attributing to Mr. W. G. Preston, an architect of the same city, the design of the First Methodist Church of this city.

MINNEAPOLIS, MINN.—Mr. L. S. Buffington, architect, is now building the Monroe Humboldt school house, which will cost \$35,000; a house for George A. Pillsbury, Esq., costing \$30,000; and one for John S. Pillsbury, Esq., which will cost \$25,000.

NEADA, IO.—Mr. Otis Briggs is building a brick house, cost, \$4,000. William Foster, architect, Des Moines, Iowa.

NEWARK, N. J.—The corner-stone of the Memorial Presbyterian Church, corner of South Seventh Street and South Orange Avenue, was laid August 19.

NEWTON, IO.—Mr. Manning is building a frame dwelling, to be heated with steam and to have all the modern conveniences. Cost, \$8,000. William Foster, architect, Des Moines, Io.

QUINCY, MASS.—The attitude of the striking granite cutters and the contractor is still unchanged.

RIVERTON, N. J.—The corner stone of a new Presbyterian Church was laid August 1st. The building will cost about \$4,000.

ROCHESTER, MINN.—The Second Insane Asylum is now building under the charge of Mr. L. S. Buffington, architect, Minneapolis.

ROCK ISLAND, ILL.—Proposals are received to-day for furnishing all the stone that will be required during the next four years at the arsenal.

ROME, GA.—The building of the Opera House has been postponed, and two stores, 25 feet front, three stories high, will be built by Mr. James Noble. The contract has been let to Mr. Jas. A. Cooley, of this town. The work will be superintended by Mr. A. C. Bruce, architect, Knoxville, Tenn.

SMITHFIELD, R. I.—The Blackstone Manufacturing Company are to rebuild the mill at Branch Village, North Smithfield, immediately, work having been begun already. This mill was burned down about a month ago, and was leased by Pitts & Aldrich for a shoddy mill. They are to lease part of the new mill when it is built.

FOKERVILLE, MASS.—A brick building which will be used as a counting room by the American Tube Works is to be built by Mr. J. Fogarty, architect, of Cambridge, Mass.

ST. PAUL, MINN.—The extension of the Capitol is under the charge of Mr. L. S. Buffington, architect, Minneapolis, Minn.

SWISSTVALE, PENN.—Dr. E. Dyer, of Pittsburgh, is building a house.

UXBRIDGE, MASS.—Mr. S. W. Scott is to replace the mill burned a short time ago by a new one measuring 37 x 85.

WINTERSSET, IO.—A new six-room school-house, two stories, and high basement, is now building. The basement is to be used for play rooms. The materials are brick with cut-stone finish. Cost, \$12,000. Judge Lewis, contractor.

—Mr. Ruby is building a \$6,000 residence, brick with cut-stone finish. Judge Lewis, contractor; William Foster, of Des Moines, architect.

WOOD'S HOLL, MASS.—Mr. A. C. Martin, of Boston, is the architect of a seaside residence, farmhouse, and barn, for Mr. H. H. Fay.

WORCESTER, MASS.—Church of the Immaculate Conception. Cost, \$30,000. Jas. Berger, builder, of Milford, Mr. P. W. Ford, of Boston, is the architect.

The architect of the house of Mr. L. Slater is Mr. J. Fogarty, of Cambridge, Mass.

WAVERTLY, MD.—Messrs. Kees and Boyden, of Baltimore, are the architects of the two-story brick and stone fire department building now erecting at a cost of \$2,000.

INDEX OF CURRENT WORK, Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

Baltimore, Md. Church.—The Cummings Memorial Church. Mr. Cassell, architect. Church.—The Pius IX. Memorial Church. G. A. Frederick, architect. Cost \$100,000. Church.—Church of St. Michael and All Angels. Cost \$80,000. Wyatt & Sperry, architects. Hospital.—Johns Hopkins Hospital. J. R. Niernsée, consulting architect. BANK BUILDING.—Tremont Bank Building. Carl Fehmer, architect. HOTEL.—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect. THE MUSEUM OF FINE ARTS.—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000. SCHOOL-HOUSE.—High and Latin School. G. A. Clough, architect. ASYLUM.—Asylum for Aged People, C. J. Bateman, architect. Cost \$50,000.

Brooklyn, N. Y. TENEMENT.—A. T. White, owner. William Field & Son, architects. SOCIETY BUILDING.—The Long Island Historical Society Building. Mr. G. B. Post, architect. Cost \$100,000. Church.—St. Francis Xavier R. C. Church, West Fifteenth Street. Cost \$150,000. P. Keely, architect. HOSPITAL.—St. John's Hospital, N. L. Derby, New York, architect.

Chicago, Ill. ARMORY.—Armory for the First Regiment. Messrs. Wheelock & Clay, architects. Cost \$25,000. STORE.—The Singer Building. Cost \$250,000.

Cincinnati, O. U. S. CUSTOM HOUSE AND POST OFFICE.—S. Hannaford, local superintendent. CHILDREN'S HOME.—J. W. McLaughlin, architect. Cost \$50,000. NEWSPAPER OFFICE.—The Gazette Building. E. Anderson, architect. Church.—Church of St. Francis de Sales. CLUB-HOUSE.—Allemania Club-House. J. W. McLaughlin, architect. Cost \$60,000. UNIVERSITY BUILDING.—Cincinnati University Building. S. Hannaford, architect. Cost \$50,000.

Cleveland, O. BUSINESS BLOCK.—Ambra Stone, owner. J. Ireland, architect. Cost \$70,000. Church.—Second Presbyterian. J. Ireland, architect. Cost \$70,000. CONVENT.—Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

Hartford, Conn. SEMINARY.—Theological Seminary. F. H. Kimball, architect. Cost \$75,000. CATHEDRAL.—R. C. Cathedral of St. Joseph. P. Keely, architect. CATHOLIC SCHOOL.—Brown & Stilson, architects, New Haven. Cost about \$25,000.

Jersey City. CONVENT.—Convent of the Sisters of St. Dominick. Cost \$40,000.

New York. THE "FLORENCE."—Emile Grewé, architect. Mrs. Matthews, owner. Cost \$500,000. THE BOREAL BUILDING.—S. D. Hatch, architect. Cost \$250,000. COLLEGE.—Addition to Columbia College. C. C. Haight, architect. Cost \$200,000. OFFICE BUILDING.—Messrs. Stillman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000. APARTMENT HOUSE.—Mr. H. J. Hardenburgh, architect. Cost \$300,000. PRIVATE RESIDENCE.—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000. ARMORY for the Seventh Regiment.—Cost \$300,000. C. W. Clinton, architect. HOSPITAL.—Presbyterian Hospital. Wilson Bros., arch'ts. OFFICE BUILDING.—Girard trust.

Providence, R. I. DORMITORY for Brown University.—Messrs. Stone & Carpenter, architects. CITY HALL.—Mr. S. J. F. Thayer, Boston, architect. HIGH SCHOOL BUILDING.—Messrs. Walker & Gould, architects.

St. John, N. B. POST OFFICE, Custom House, and Savings Bank.—Mr. Scott, Chief Architect to the Dominion Government. BANK.—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal. Church.—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y. CITY HALL.—Messrs. McKean & Fairweather, architects. CHAPEL.—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.

CHURCHES.—St. James's Church, Croff & Camp, architects, St. John N. B.—St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$60,000.

Publishers' Department. The American Architect and Building News. PUBLISHED EVERY SATURDAY BY HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON. NEW YORK OFFICE, 21 ASTOR PLACE. An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc. 15 cents per copy; \$7.50 per year; \$6.00 in advance. CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS, WITH Houghton, Osgood & Co.'s other Periodicals. THE ARCHITECT and ATLANTIC MONTHLY... \$9.00 THE ARCHITECT and THE REPORTER... 15.00 THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL... 10.00 THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE... 7.00 \* N. B.—The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate. RATES OF ADVERTISING. PAGES NEXT TO READING MATTER, single insertion... 12 1/2 cts. per line. One inch (14 lines) one insertion... \$1.75 One inch, six insertions... 10.00 INSIDE PAGES, single insertion... 10 cts. per line. One inch, single insertion... \$1.40 One inch, six insertions... 7.00 For larger space, and for a series of more than six insertions, reduced rates, made known on application to the Publishers. Special rates for first and last pages. No extra charge for cuts, or for advertisements that occupy more than a column in width. Payments should be made directly to the Publishers, either by draft or by post office order. HOUGHTON, OSGOOD & CO., Publishers, WINTHROP SQUARE, BOSTON.

H. Hall & Sons Manufacturers of Architectural Terra Cotta, Buff and Colored Brick, Fire Brick Established 1836, 211 South Broadway, N. Y. ARCHITECTURAL IRON WORKS. YOUNGLOVE & CO., Prop'r's. CLEVELAND, O. IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TIE LIGHT, CRESTING, ETC. Estimates promptly furnished. (Established 1848.) MARKET ST. ARCHITECTURAL FOUNDRY AND IRON WORKS. SNEAD & CO.. LOUISVILLE, KY. Makers of every description of Iron Work for Buildings. GAS FIXTURES OF EVERY DESCRIPTION. SPECIAL RATES TO BUILDERS. R. HOLLINGS & CO 647 Washington St., BOSTON. PROPOSALS. PLATFORMS AND MATERIALS. OFFICE OF THE LAND COMMISSIONERS, STATE HOUSE, BOSTON, AUGUST 17, 1878. Sealed proposals will be received at this office until August 28, at 4 o'clock P. M., for furnishing Oak and Spruce Piles, Hard Pine Lumber, Spruce Planks, Iron, and Labor requisite to build and complete the platforms proposed to be built upon the Commonwealth's property at South Boston. Separate proposals will be received for the Oak Piles, Spruce Piles, the Hard Pine Timber, the Spruce Planks, the Iron and the Labor; or proposals for furnishing all or any part of the materials and for completing the work at a date to be specified in each proposal. Specifications and plans may be seen at the Engineer's Office upon the South Boston property. Satisfactory bonds will be required. The Land Commissioners reserve the right to reject any or all the proposals. WILLARD P. PHILLIPS, EDWARD C. PURDY, HORACE C. BACON, 139 Land Commissioners of the Commonwealth.

H. Hall & Sons Manufacturers of Architectural Terra Cotta, Buff and Colored Brick, Fire Brick Established 1836, 211 South Broadway, N. Y. ARCHITECTURAL IRON WORKS. YOUNGLOVE & CO., Prop'r's. CLEVELAND, O. IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TIE LIGHT, CRESTING, ETC. Estimates promptly furnished. (Established 1848.) MARKET ST. ARCHITECTURAL FOUNDRY AND IRON WORKS. SNEAD & CO.. LOUISVILLE, KY. Makers of every description of Iron Work for Buildings. GAS FIXTURES OF EVERY DESCRIPTION. SPECIAL RATES TO BUILDERS. R. HOLLINGS & CO 647 Washington St., BOSTON. PROPOSALS. PLATFORMS AND MATERIALS. OFFICE OF THE LAND COMMISSIONERS, STATE HOUSE, BOSTON, AUGUST 17, 1878. Sealed proposals will be received at this office until August 28, at 4 o'clock P. M., for furnishing Oak and Spruce Piles, Hard Pine Lumber, Spruce Planks, Iron, and Labor requisite to build and complete the platforms proposed to be built upon the Commonwealth's property at South Boston. Separate proposals will be received for the Oak Piles, Spruce Piles, the Hard Pine Timber, the Spruce Planks, the Iron and the Labor; or proposals for furnishing all or any part of the materials and for completing the work at a date to be specified in each proposal. Specifications and plans may be seen at the Engineer's Office upon the South Boston property. Satisfactory bonds will be required. The Land Commissioners reserve the right to reject any or all the proposals. WILLARD P. PHILLIPS, EDWARD C. PURDY, HORACE C. BACON, 139 Land Commissioners of the Commonwealth.

H. Hall & Sons Manufacturers of Architectural Terra Cotta, Buff and Colored Brick, Fire Brick Established 1836, 211 South Broadway, N. Y. ARCHITECTURAL IRON WORKS. YOUNGLOVE & CO., Prop'r's. CLEVELAND, O. IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TIE LIGHT, CRESTING, ETC. Estimates promptly furnished. (Established 1848.) MARKET ST. ARCHITECTURAL FOUNDRY AND IRON WORKS. SNEAD & CO.. LOUISVILLE, KY. Makers of every description of Iron Work for Buildings. GAS FIXTURES OF EVERY DESCRIPTION. SPECIAL RATES TO BUILDERS. R. HOLLINGS & CO 647 Washington St., BOSTON. PROPOSALS. PLATFORMS AND MATERIALS. OFFICE OF THE LAND COMMISSIONERS, STATE HOUSE, BOSTON, AUGUST 17, 1878. Sealed proposals will be received at this office until August 28, at 4 o'clock P. M., for furnishing Oak and Spruce Piles, Hard Pine Lumber, Spruce Planks, Iron, and Labor requisite to build and complete the platforms proposed to be built upon the Commonwealth's property at South Boston. Separate proposals will be received for the Oak Piles, Spruce Piles, the Hard Pine Timber, the Spruce Planks, the Iron and the Labor; or proposals for furnishing all or any part of the materials and for completing the work at a date to be specified in each proposal. Specifications and plans may be seen at the Engineer's Office upon the South Boston property. Satisfactory bonds will be required. The Land Commissioners reserve the right to reject any or all the proposals. WILLARD P. PHILLIPS, EDWARD C. PURDY, HORACE C. BACON, 139 Land Commissioners of the Commonwealth.

HEATING. CINCINNATI, O. Proposals will be received until 12 o'clock M., the 31st day of August, 1878, by the Allemania Society, for heating the new building now being erected on the corner of Central Avenue and Fourth St. Plans can be seen at the office of James W. McLaughlin, architect 46 and 47 Johnston Building. All proposals shall be accompanied by full specifications of the manner in which the work is proposed to be done. The Society reserves the right to reject any or all of the proposals, which must be addressed to FRED. RAUGH, Secretary, 139 32 West Third St., Masonic Building.

PROPOSALS.

GATE-HOUSE.

FRAMINGHAM, MASS. CITY OF BOSTON, CITY HALL, BOSTON WATER BOARD, August 16, 1878. Sealed proposals, indorsed "Proposals for building a Gate-House at Dam 1. in the town of Framingham, Mass.," will be received at this office until 12 o'clock M. of Wednesday, the 28th day of August, 1878, at which place and time they will be publicly opened and read.

Each bid must be signed by the bidder, and giving his address and accompanied by a written bond for \$500 of a responsible person, giving his place of business or residence, and conditioned for the execution of the contract (with a satisfactory bond for its performance) within the time specified in this advertisement, in case the bid be accepted, or in lieu of the bond to accompany the bid, a sum of money or other satisfactory collateral security in the same amount may be deposited with said Water Board; but the bond for the performance of the contract must be a written bond, with satisfactory sureties.

The person or persons to whom this contract may be awarded will be required to appear at this office, with the securities offered by him or them, and execute the contract within four days (not including Sundays) from the date of notification of such award, and the preparation and readiness for signature of the contract.

The work is to commence within six days after the execution of the contract, and to be continued with regularity until its completion, which completion must be before the 7th day of November, 1878.

The specifications and plans, with blank forms of proposal, bond, and contract, may be seen at the office of the City Architect, City Hall, Boston, after Saturday, Aug. 17, 1878.

The amount of the bond required will be such sum as may be fixed by the Boston Water Board, after the proposals are opened, said sum not being less than one fourth nor more than two-thirds of the amount of the contract.

The Water Board reserve the right to reject any or all bids, should it deem it to be for the interest of the city of Boston so to do.

T. T. SAWYER, Chairman of Boston Water Board.

MILITARY OFFICES.

OFFICE OF THE BOARD OF STATE BUILDING COMMISSIONERS, LANSING, MICH., August 6, 1878. Proposals will be received at the above office until 12 o'clock M., on Thursday, September 12, 1878, for fitting up the military rooms in the new capitol in accordance with drawings and specifications adopted therefor.

The drawings and specifications may be examined, and all necessary information obtained by application to the Secretary.

All proposals must be sealed, indorsed "Proposals for fitting up Military Apartments," and addressed to A. L. Bours, Secretary of the Board, Lansing, Mich.

The proposals will be opened at the office of the Board at 8 o'clock P. M. of the above-named day.

The Board reserve the right to reject any or all proposals submitted.

CHAS. M. CROSWELL, Governor. E. O. GROSVENOR, JAMES SHEARER, ALEX. CHAPOTON, State Building Commissioners.

ALLEN L. BOURS, Secretary.

DIKE.

EVANSVILLE, IND. U. S. ENGINEER OFFICE, 82 WEST THIRD STREET, CINCINNATI, OHIO, August 6, 1878. Sealed proposals, in duplicate, will be received at this office until noon on Friday, the 13th day of September, 1878, for extending and repairing the dike in the Ohio River, opposite the city of Evansville, Ind. Work to be completed by December 31, 1878.

Approximate estimate of materials: 5,000 cubic yards of rip rap stone, 5,000 cords of brush, 24 piles. Specifications and printed forms of proposals will be furnished on application.

WM. E. MERRILL, Major of Engineers.

IRON WORK.

Proposals for Wrought and Cast-Iron Work for the U. S. Court-House and Post-Office at Little Rock, Ark. OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., August 8, 1878.

Sealed proposals will be received at this office until 12 M., on the 22d day of August, 1878, for furnishing, delivering, fitting, and putting in place complete the Rolled Iron Beams, etc., required for the third story floor of the U. S. Court-House and Post-Office at Little Rock, Ark., in accordance with drawing, specification, and schedule, copies of which, and any additional information, may be had on application at this office or the office of the Superintendent.

H. G. JACOBS, Acting Supervising Architect.

DREDGING.

U. S. ENGINEER OFFICE, NORFOLK, VA., July 31, 1878. Proposals for the improvement of the following named localities in Virginia will be received at this office until noon of August 30, 1878, and opened immediately thereafter.

1. Dredging in the Norfolk Harbor, Va., and its approaches.

2. Dredging in the South Branch of the Elizabeth River. The right to reject any bid is reserved.

Blank forms, specifications, and any desired information can be had on application at this office.

CHAS. B. PHILLIPS, Captain of Engineers.

NAIL-DRAWERS.

QUARTERMASTER'S OFFICE, 1129 GIRARD STREET, PHILADELPHIA, August 6, 1878. Sealed proposals, in triplicate, subject to the usual conditions, will be received at this office until noon, Saturday, August 31, 1878, and opened immediately thereafter, for furnishing and delivering at the Philadelphia Depot of the Quartermaster's Department, Schuylkill Arsenal, (200) two hundred Box-Openers or Nail-Drawers. A sample of the implement proposed to be furnished should accompany each bid.

The United States reserve the right to reject any or all bids. A preference will be given to articles of domestic production.

Envelopes containing bids to be marked, "Proposals for Box-Openers," and addressed to the undersigned.

J. J. DANA, Major and Quartermaster.

PROPOSALS.

SEWER.

BOSTON, MASS. OFFICE OF CITY ENGINEER, CITY HALL, BOSTON, Aug. 16, 1878. Sealed proposals, addressed to the Committee on Improved Sewerage, indorsed "Proposal for Building Section Six of the Main Intercepting Sewer," will be received at the office of the City Engineer, City Hall, Boston, until 12 o'clock M. of Saturday, the 31st day of August, 1878, and at that time will be publicly opened and read.

Bids must be signed by the bidders and accompanied by a bond for \$2,000, with satisfactory sureties, conditioned for the execution of the contract (with a bond for \$10,000, with satisfactory sureties, residents of Massachusetts, for its performance), within six days, in case the bid be accepted. As additional security a sum equal to five (5) per cent. of the amount of the bid, according to the engineer's estimate, will be retained by the city from the moneys first due under the contract, till its completion.

Bids will be compared on the basis of the engineer's approximate estimate of quantities of work to be done, which is as follows:—

- 4,100 linear feet of earth excavation and refilling above grade in sewer trench.
150 cubic yards of earth excavation and refilling above grade not in sewer trench.
50 cubic yards rock excavation.
500 " " concrete.
3,000 " " brick masonry, Am. cement mortar.
2,750 " " " Portland cement mortar.
3,450 " " rubble-stone masonry.
5 " " dimension-stone masonry.
230 M. feet B. M. spruce lumber in place and secured.
4,100 linear feet of 12-inch drain pipe in place.
100 square feet flag-stone masonry.

For further particulars see the advertisement accompanying form of contract.

Specifications may be obtained and plans seen at the Office of Improved Sewerage, No. 74 Tremont street, Boston.

The Committee reserves the right to reject any or all of the bids.

THOMAS J. WHIDDEN, Chairman of Committee on Improved Sewerage.

CEMETERY LODGE.

ALEXANDRIA, VA. OFFICE OF NATIONAL CEMETERIES, WASHINGTON, D. C., August 15, 1878.

Sealed proposals, in triplicate, with copy of this advertisement attached to each, will be received at this office until Tuesday, August 27, 1878, for rebuilding the Superintendent's Lodge at the Alexandria, Virginia, National Cemetery.

The front and side walls will not require rebuilding. But little, if any, additional stone will be needed.

The work will be commenced at once, and must be completed by the 15th of November next. During its progress it will be frequently inspected by competent engineers, and a strict compliance with the terms of the contract will be required.

The right is reserved to reject any or all bids not deemed of interest to the Government.

Copies of plans and specifications may be seen at this office, and at the Quartermaster's office at New York (corner of Greene and Houston streets), Philadelphia, Baltimore, and Fort Monroe.

Proposals should be indorsed: "Proposals for Rebuilding Lodge at Alexandria Cemetery," and addressed to the undersigned. They will be opened at noon on the date specified, when bidders are invited to be present.

A. F. ROCKWELL, Captain and A. Q. M.

RETAINING WALLS.

AVONDALE, O. Sealed proposals will be received at my Law Office, No. 6 East Third street, or at the Office of the Corporation Clerk of the Incorporated Village of Avondale, up to 12 o'clock M. of Thursday, September 6, 1878, for building retaining walls and making additions to culvert, under Gholson avenue, in said village, requiring about 225 perches mortar masonry and about 200 yards of excavation.

Bidders will state the price per perch for masonry, also price per yard for excavation.

The work to be completed according to the plan and specifications of the Village Engineer, within thirty days from the time of the award of the contract.

Payment in full will be made when the work is approved by the Committee of Improvement, and a certificate of the Engineer is produced that the work has been completed according to the specifications on file with the Clerk.

By order of the Village Council. FLAMEN BALL, JR., Corporation Clerk of Avondale.

DAM.

SAVANNAH RIVER, GA. Sealed proposals for the construction of a Submerged Dam in the Savannah River, at the Cross Tides, will be received at the United States Engineer Office, Army Building, New York, until noon of September 5, 1878, and opened immediately thereafter. Blank forms, specifications, and all necessary information can be had on application at said office, or until August 26, to Capt. James C. Post, Corps of Engineers, Savannah, Ga.

Q. A. GILLMORE, Lieut.-Colonel of Engineers.

COMPETITION.

DESIGNS FOR ENCLOSURE OF ARMY AND NAVY MONUMENT.

CITY OF BOSTON, CITY HALL, July 16, 1878. The Joint Standing Committee on Common and Public Grounds hereby offer a premium of Fifty Dollars for the best design for a Bronze Fence, to be erected around the Army and Navy Monument on Boston Common.

The total cost of the fence, including cost of foundation and erection, not to exceed the sum of Two Thousand Dollars.

Each design to be marked with some motto or device, which is to be repeated on the outside of a sealed envelope containing the author's name.

The design which is accepted will become the property of the City of Boston; all others will be at the disposal of their respective authors. The Committee reserve the right to reject any or all designs received.

All designs to be sent to the office of the Clerk of Committees, City Hall, on or before the 14th day of September, 1878, at 1 o'clock P. M. For the Committee. CURTIS GUILD, Chairman.

PROPOSALS.

LABOR AND MATERIALS.

Proposals for Labor and Materials for the proposed Building for the Bureau of Engraving and Printing, Washington, D. C.

OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., August 17, 1878.

Sealed proposals will be received at this office until 12 M. on the 20th day of August, 1878, for furnishing and delivering at the site of the proposed building for the Bureau of Engraving and Printing, Washington, D. C., all the common brick required for the structure, being 4,650,000 more or less, half red and half arch.

Also, sealed proposals for mixing and putting in the concrete foundations, and setting of all brick and stonework up to first floor level, including the furnishing of the stonework, such as sills, water-table, etc., the Government to furnish all brick, sand, and cement.

Copies of specification, blank form of bond, and any additional information may be had on application at this office.

JAS. G. HILL, Supervising Architect.

BRICKS, LIME, CEMENT, AND SAND.

Proposals for Bricks, Lime, Cement, and Sand, for the U. S. Sub-Treasury, etc., at Boston, Mass.

OFFICE OF THE SUPERINTENDENT, BOSTON, MASS., August 17, 1878.

Sealed proposals will be received at this office until 12 M. on the 28th day of August, 1878, for one million, more or less, common brick, one thousand barrels, more or less, of lime (two and one-half bushels per barrel), five hundred barrels, more or less, of cement (three hundred pounds per barrel), and three hundred and fifty cubic yards, more or less, clean sharp sand, required for the U. S. Sub-Treasury, etc., at Boston, Mass.

Copies of specification and conditions of submitting proposals, and any additional information, may be had on application at this office, or at the office of the Supervising Architect.

ALEX. R. ESTY, Superintendent.

IRON BEAMS.

ROCK ISLAND ARSENAL, ILL., July 31, 1878. Sealed proposals, to be opened at 10 A. M., August 30, 1878, are hereby invited to furnish, delivered on cars at this Arsenal, about 1,643,000 pounds of 16-inch Wrought-Iron I Beams, to weigh 200 pounds per yard, about 754,000 pounds of 12 or 12 1/2-inch Wrought-Iron I Beams, to weigh 125 pounds per yard, and about 8,100 pounds of Angle Pieces, 3 1/2 inches by 3 1/2 inches by 3/4 inches.

The beams must be straight, out of wind, cut square at the ends, free from flaws, billets, and ragged edges, and contain good iron, and the bid should be accompanied by the manufacturer's published tables or formula, giving the guaranteed strength and stiffness of beams.

Nearly all the beams will be required in lengths of from 16 to 20 feet, and two thirds of them in such exact lengths that they must be cut cold.

Bids must be addressed to the undersigned, indorsed on the outside, "Proposals to furnish Beams." The successful bidder will be required to enter into contract, and to give good and sufficient bonds for the faithful performance of the contract.

About one fifth of the beams must be delivered within two months, and the remainder within five months of the date of contract.

The United States reserve the right to reject all bids which are not deemed satisfactory.

D. W. FLAGLER, Major of Ordnance.

The Useful

is issued monthly—consists of Perspectives of Interiors, Ornaments of Buildings, Fresco Painting, Furniture, etc., and is accompanied with full-size working-drawings—for direct use—

Price to Subscriber One dollar per number.

Office 28 Pemberton Square, Boston, Mass.

BOUND VOLUMES

OF THE

AMERICAN ARCHITECT.

We are prepared to fill orders for binding the American Architect and Building News in styles similar to the volume for 1876, at the following rates:—

- Price of cover without binding.....\$1.00
Cover and binding (for subscribers)..... 2.00
Numbers of 1876 or 1877 without cover or binding 7.50
Bound volumes of 1876 or 1877..... 9.00

In sending volumes to be bound it should be stated whether the illustrations are to be bound with their respective numbers, or whether all illustrations are to be placed together at the end of volume.

N. B. — Volumes bound in both styles are kept in stock.

The above will be sent, post paid. Subscribers sending their numbers to be bound will prepay postage or express charges.

HOUGHTON, OSGOOD & CO., PUBLISHERS, Winthrop Square, Boston.

CONTRACTORS

WHO WISH TO MAKE MONEY

Should read the Proposals advertised in

ENGINEERING NEWS,

Published for THREE DOLLARS per year, by GEORGE H. FROST, at

153 Washington Street, Chicago, Ill.

MARSHALL'S AMERICAN



LEADED SHEETS.

Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Represented in New England States by C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

TO ARCHITECTS.

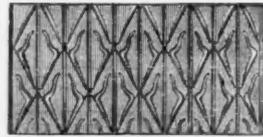
The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the

Scagliola & Marezzo Marble,

Which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall and Altar Work

JAS. T. ALLEN & CO.,

25 North 17th Street, Philadelphia



METALLIC SHINGLES.

We call the attention of all parties interested in Roofing, and the owners of large buildings, to the above article. It is superior to Slate, Cheaper, Fire proof, about one fourth the weight, lays much closer, therefore is Storm-proof, cannot Crack, etc. ANY CARPENTER can put them on. Send for description and Price List to IRON CLAD MANUFACTURING CO., 59 Greenpoint Ave., Brooklyn, E. D. P. O. Box 2638, N. Y. City



Terra Cotta Chimney Tops, Akron Land Tile

D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

BUILDING MARBLE.

Branch yard of the RUTLAND MARBLE CO., 198 Causeway Street, Boston, Jos. D. ALLEN, Agent. Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Rutland and Continental Marble, furnished at low prices.



The Draft of the Chimney increased.

Smoking Chimneys Prevented. Particularly adapted to Chimneys in exposed positions. Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR, 70 Grand St., Brooklyn, N. Y.

PATENT MINERAL WOOL.

ENTIRELY FIRE-PROOF AND UNDECAYING.

THE BEST INSULATOR OF HEAT, COLD, AND SOUND.

For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc.

ALEXANDER D. ELBERS, P. O. Box 4461. 26 1/2 Broadway, New York

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free

HENRY McSHANE & CO.,

Baltimore, Md.

THE ROCHESTER, N. Y.

FREAR-STONE COMPANY,

ESTABLISHED IN 1870.

Continues to manufacture a superior quality of Sandstone, equal in all respects to the best cut stone, at about one half the price. It is adapted to all work where sandstone is admissible. The Safe Deposit Co.'s Building, San Francisco, estimated value, \$2,000,000, and hundreds of first-class buildings all over the country, are referred to Frost and fire proof. Circulars sent on application. P. H. CURTIS, Sec. and Treas.

OUR ADVERTISERS and others who are in the habit of using business circulars, will find in our columns of "Building Intelligence" a continually new directory of names and addresses of those persons who, being at-present actively engaged in building, are the ones who are most desirous of receiving circulars setting forth the advantages and qualities of all classes of building appliances.

An hour spent in mailing circulars to the persons mentioned above cannot fail of being profitable to the business man.

Advertisement for THE HELIOTYPE PRINTING COMPANY, 220 DEVONSHIRE ST. BOSTON. Includes a logo with 'LUX-FECIT' and 'THE HELIOTYPE PRINTING COMPANY' text.

THE "AIR SPACE" BOILER COVERINGS

Save 10 to 20 per cent in fuel.

STEAM PIPE and

See Am. Architect and Building News, Dec. 13, 1877.

THE CHALMERS-SPENCE COMPANY.

140 Congress Street, Boston. Foot 19th St., E. R. New York.

CLASSIFIED ADVERTISEMENTS.

Table listing various categories of advertisements such as ARCHITECTS, BUILDING MARBLE, and CLASSIFIED ADVERTISEMENTS with corresponding page numbers.

Table listing various categories of advertisements such as IRON WORK FOR BUILDINGS, LEADED SHEETS, and PATENT MINERAL WOOL with corresponding page numbers.

Table listing various categories of advertisements such as SCAGLIOLA AND MAREZZO MARBLE, SEWER GAS TRAP, and STEAM PUMP, KNOWLES PATENT.

Table listing various categories of advertisements such as TILES, VENTILATION, and WOOD CARPETING.

**ETNA IRON CO.**

Manufacturers of every description of Wrought and Cast

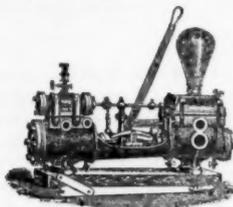
**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**

Patent



Steam

**PUMP**

**THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

**KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES, { 14 & 16 Federal St., } Boston.  
{ 113 & 115 Congress St., }  
{ 92 & 94 Liberty St., } New York.

Send for Illustrated Catalogue.

**THE**

**Plumber & Sanitary Engineer,**

A Monthly Journal devoted to

**WATER SUPPLY, DRAINAGE, HEATING & LIGHTING.**

It contains no paid puffs.

Its technical articles are written by experts.

It is a manual of the best practice in Plumbing.

It illustrates the latest improvements in House Drainage.

It is indispensable to every Architect and Builder.

Terms, \$1.50 a year. Single Copies, 15 cents.

Address

**AM. PLUMBER PUBLISHING CO.**

Box 3037 P. O. 297 Pearl St., New York.

**"ZODTCHY" (BUILDER).**

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

**M. JEROME KÜTTNER,**

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from EIGHT to SIXTEEN pages of letterpress, gr. quarto, with cuts, and at least FIVE autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES

\$12.50 PER ANNUM.

The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address.

**JOURNAL "ZODTCHY,"**

12 OFFICER STREET, ST. PETERSBURG, RUSSIA.



**Carson's Kitchen Sink.**

Is an improvement in this fixture that must meet with the approval of every house keeper as it retains every particle of grease, and prevents the waste pipes from filling up; besides being better trapped than any other sink in use.

PAT'D JAN. 24 1877. Signal Mfg. Co., Modina, N. Y., or J. M. Carson, Louisville, Ky., Man'rs.

**NATIONAL**

**FINE ART FOUNDRY,**

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze TO ARCHITECTS AND BUILDERS.

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET. BOSTON.

**GEO. DWIGHT, JR., & CO.,**

Builders in Iron, and Engineers in Fire-Proof Construction,

SPRINGFIELD, MASS.

HAVE for many years given their exclusive attention to FIRE-PROOF CONSTRUCTION; and they now invite the correspondence of Architects to the following specialties which hereafter will constitute the leading items of their business: FIRE-PROOF FLOORS. The only floors that have stood fire in this country.

FIRE-PROOF ROOFS. Refer to Equitable Life Insurance Company's Building at Boston.

FIRE-PROOF SHUTTERS. Have stood many fires in all parts of the country. Over 6000 pairs put up in Boston after the fire. Saved the city of Springfield last year.

FIRE-PROOF LATH. In the words of one of the best-known architects of this country, "Minimum of metal, maximum of stiffness, maximum of clinch; the best lath ever made, either wood or iron." See New York Post-Office; State Department, Washington; Equitable Life Insurance Company's Buildings, and many others.

Mr. HOTT will be pleased to wait upon Architects, when desired, to explain our methods, and to present for inspection construction plans and estimates for any specific work.

**BURDITT & WILLIAMS,**

DEALERS IN

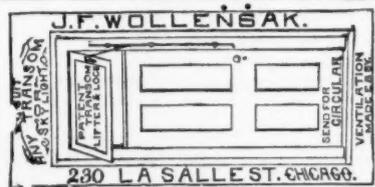
**FINE HARDWARE**

of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



**CATALOGUE OF**

**Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO.,

ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.



**BICKELHOUP BROS.,**  
829 West 37th St., New York.



**PATENT METALLIC SKY-LIGHTS.**

**BEEHIVE BRAND.**

**FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**ASAHEL WHEELER'S PAINT PRESERVER** Is the most remarkable Wood and Paint Protector known against the hot sun's rays and storms. A trial of more than three years' constant exposure has demonstrated this fact. A perfect glossy surface yet remains without signs of perishing. ASAHEL WHEELER, 145 Milk St., Boston



**BALTIMORE PRESSED TILES,**  
FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases,  
DRAIN AND SEWER PIPE, FIRE-BRICK, LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

WALDO BROTHERS,

No. 94 WATER STREET, BOSTON.

**PEERLESS BRICKS.**

**THE PEERLESS BRICK COMPANY,**  
OF PHILADELPHIA,  
MANUFACTURES AND KEEPS IN STOCK  
ARCHITECTURAL SHAPES (80 kinds).

ALSO  
RED Pressed Fronts.  
Extra fine in color and quality

**BROWN,** Colored throughout.  
More beautiful than Brown Stone DURABLE

**CHOCOLATE,**  
Same as above; difference in color

**FLESH COLOR,**  
A very popular color.

**BUFF,** very fine.  
Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

**NORTHEAST COR. FIFTH & CHESTNUT STS.**

THOMAS F ADAMS, JOSEPH WOOD, JR.,  
PRESIDENT. TREASURER



**DOLIVET, CUTTER, & CO.,**

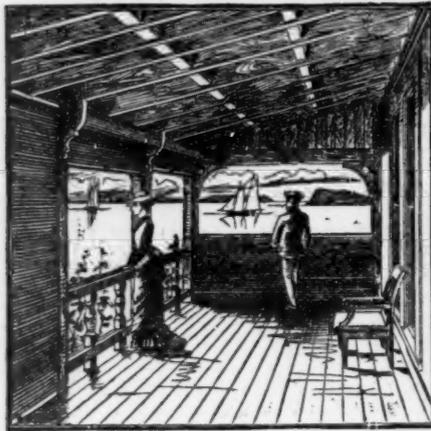
ARTISTIC

**Papier Maché Decorations,**

106 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawing strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING VENETIAN BLINDS.**

**WILSON'S PATENT.**  
These blinds can be fitted to any kind of Window or Piazza. They require no winding machinery or balance weights, and run up and down as easily as an ordinary spring shade. For Bay Windows they are found invaluable.

They are simple, durable, and handsomely finished. They were exhibited at Philadelphia in competition with the Rolling Venetian Shutters of English manufacture, and received the only award of Medal and Diploma.

Price reduced to 30 cents per foot super, in hard wood.

We also manufacture Wilson's patent Rolling **STEEL SHUTTERS**, the best and cheapest fire and burglar-proof Shutters in the market.

**WILSON & JAMES,**  
68 Beekman St., NEW YORK.

**PRIZE MEDALLISTS.**  
1863; 1865; 1867; 1872; 1873; AND ONLY AWARD and MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**  
ORIGINAL INVENTORS AND SOLE PATENTEES OF  
**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

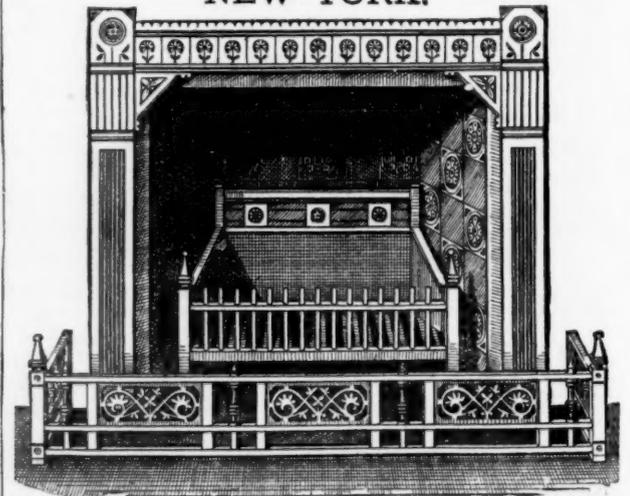
Fire and Burglar Proof. Also, improved Rolling Wood Shutters OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Tilford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.  
OFFICE AND MANUFACTORY,  
162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**  
76 READE STREET, NEW YORK,  
WORKS, DARLINGTON, N. J.

*Lock and Hardware Manufacturers,*  
DESIGNERS, FOUNDERS, AND WORKERS  
IN  
**BRONZE AND BRASS.**

*Architects' Designs faithfully executed.*  
Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**  
(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)  
Union Sq., 2d door from Broadway, (17th St. side),  
NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile.  
HAVE NO OTHER WAREROOMS.

**VALUABLE ART PUBLICATIONS.**  
**ALLONGE'S** (Auguste) Charcoal Drawing. With an Introduction by C. C. PERKINS, and a Heliotype Frontispiece. Small 4to. \$1.00.  
**BAKER'S** (W. S.) Origin and Antiquity of Engraving, with 23 Heliotype Illustrations from Dürer, Van Dyck, Raphael, Guido, etc. 8vo. \$5.00.  
**HUNT'S** (William M.) Talks on Art. 8vo. Paper. \$1.  
**CLEMENT'S** (Clara Erskine) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a complete Index. Cr. 8vo. Cloth, red edges, \$3.25. Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.  
**MURRAY'S** (Mrs. Elizabeth) The Modern System of Painting in Water-Colors from the living model. 12mo, paper, 50 cents.  
**HOUGHTON, OSGOOD AND COMPANY, Boston.**

**A NOVELTY.**  
**THE YALE PATENT**  
**ANTI-FRICTION ROLLER STRIKE.**  
Applicable for use with all Mortise Locks, old and new.  
IT ENABLES THE DOOR TO BE SHUT WITHOUT SLAMMING.  
IT PREVENTS ALL JAR AND NOISE.  
IT SAVES WEAR OF THE LOCK AND DOOR.  
IT CAN BE EASILY APPLIED.  
ITS COST IS BUT TRIFLING.  
Architects can obtain a sample strike free by addressing  
**YALE LOCK MANUFACTURING CO., STAMFORD, CONN.**  
New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**  
A. G. MYERS, Manager,

**SPECIALTIES** IN **PLUMBING GOODS.** **94 BEEKMAN STREET, NEW YORK.**  
**JENNINGS' NEW CLOSET,** WITH **New Valve**  
Having for their especial object **Cleanliness, Durability,** and the exclusion of Sewer Gas. With non-corrosive Valve Seating and Solid Plunger.

**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer Gas that has yet been invented.  
**A POSITIVE SEAL**  
Against sewer-gas, absorbed gases, and back water. Seal is not broken by syphonage or evaporation. Self-scouring, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers.  
**B. P. BOWER & CO.,**  
104 & 106 St. Clair St., Cleveland, O.

**THE EUREKA VENTILATION CO.**  
OFFICE AND MANUFACTORY,  
74 CHARLESTOWN STREET,  
BOSTON, MASS.

**A. L. FAUCHÈRE & CO.**  
OFFICE AND WAREHOUSES  
1319 and 1321 Broadway, New York,  
Importers, Manufacturers, and Dealers in all kinds of foreign and domestic

**MARBLE FOR INTERIOR WORK.**  
Estimates furnished on application.

**ARCHITECTURAL IRON AND JAIL WORKS.**  
**M. CLEMENTS,**  
MANUFACTURER OF  
Iron Railing, Bank Vaults, and Jail Cells,  
Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc.  
BAYMILLER STREET, near Sixth and C. H. & D. R. R. Depot, CINCINNATI, OHIO.

**STEWART'S SLATE, MARBLE AND HARD WOOD MANTELS.**  
MIRRORS, ART-TILES, G. G. MANTELS, HEARTHS &c.  
Masonic Temple 23<sup>d</sup> st & 6<sup>th</sup> Ave N.Y.

Sewer Pipe, Fire Brick, Terra Cotta, Chimney Tops, Garden Vases, Art Pottery for Decoration. The strongest and smoothest pipe in the country. Send for tests and Catalogue. Prices as low as any other manufacturer.  
Portland Stone Ware Co.  
Geo. C. DUNN, Gen'l Ag't,  
50 Kilby Street,  
400 Federal Street, Boston.

**LIMMER ROCK ASPHALT CO.**  
111 Broadway, Room 105, New York.  
Rock Asphalt is a natural product, and the ideal material for Paving Roadways, Streets, Yards, and Stables, and for Flooring Cellars in Breweries and other establishments.



**SAYLOR'S PORTLAND CEMENT.**  
Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R. U. S. Government Works (Forts and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally.  
For Sale by all dealers in Building Materials. **Johnson & Wilson, Gen'l Agts.,**  
Send for circular. 93 Liberty Street, New York.

**Automatic Signal Telegraph Co.,**  
CITY OF BOSTON,

OFFICE, 178 DEVONSHIRE STREET, ROOM 20,  
Is prepared to make contracts for the protection of buildings against fire.  
DIRECTORS:  
CHARLES E. GUILD, President. WILLIAM ENDICOTT, JR. JOHN D. W. JOY. WILLIAM B. WATKINS. PATRICK T. JACKSON, Treasurer.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**  
Theatrical Fresco only. Prices moderate. References first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.  
LAFAYETTE W. SEAVEY,  
Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK

**THE WELLINGTON PATENT OVERFLOW BASIN.**  
No sewer gas. No overflow. No leakage around the top of the basin. This thoroughly reliable basin is rapidly taking the place of the ordinary one.  
It gives perfect satisfaction in every instance.  
Manufactured by  
**L. S. MOORE & CO.,**  
Send for Circulars. 40 Oliver St., Boston.

# AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 140.]

SATURDAY, AUGUST 31, 1878.

[PRICE 15 CENTS

### BUILDERS' SUPPLIES.

**AMERICAN ENCAUSTIC TILE,**  
Acknowledged by experts to be  
**THE BEST IN THE WORLD.**  
Manufactured by the  
**AMERICAN ENCAUSTIC TILING CO. (Limited.)**  
OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.  
Designs and estimates for Public Buildings, Hall-  
Churches, Vestibules, and for External Decoration, fur-  
nished on application.

**WALWORTH MANUFACTURING CO.,**  
69 KILBY ST., BOSTON.  
**PUBLIC BUILDINGS,**  
**PRIVATE RESIDENCES,**  
**GREENHOUSES, ETC.,**  
Warmed and ventilated by  
**STEAM OR HOT WATER.**  
Correspondence solicited. Plans and estimates furnished  
on application.

**"HOTCHKISS" TOWER CLOCKS,**  
MANUFACTURED BY  
**SETH THOMAS CLOCK CO., THOMASTON, CONN.**  
Prices \$100 to \$6,000.  
**WARRANTED ACCURATE, STRONG, DURABLE.**  
OFFICE, 581 BROADWAY, NEW YORK.  
Send for Illustrated Catalogue.

**"MINTON'S ART AND ENAMELLED**  
**ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS,**  
ETC.  
For Churches, Banks, Halls, Vestibules, and Hearths;  
Outside Decorations, Flower Boxes, Etc.  
**THOS. ASPINWALL & SON,**  
604 Broadway, New York.  
The only representatives in the United States for the  
above firm.

**ASPHALT (FELT) ROOFING.**  
**WARREN'S NEW PATENT**  
**FELT AND GRAVEL ROOFING,**  
Substitutes NATIVE ASPHALT for Coal-Tar materials for  
these roofs.  
The very best and most durable material for flat roofs.  
Also, Native Asphalt and Asphaltic Cement for Concrete  
Walks and Pavements.  
Roofers and pavers supplied with the above, and with War-  
ren's original Coal Tar Roofing and Paving Materials.  
Send for circulars and samples.  
**WARREN CHEMICAL AND MANUFACTURING CO.,**  
90 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**THE MITCHELL GRANITE WORKS,**  
QUINCY, MASS.  
Has abundant facilities for furnishing the very best work,  
and all the most celebrated Granites of the New England  
States, for  
**MONUMENTAL, CEMETERY, AND BUILDING**  
**PURPOSES.**  
**WORK PROMPTLY DONE, AND AT REASONABLE RATES.**  
Polishing a specialty. Orders solicited.  
Address G. H. MITCHELL, Agent.

**TILES FROM ALL PARTS OF THE**  
**WORLD,**  
FOR  
**BANKS, PUBLIC BUILDINGS, AND PRIVATE HOUSES.**  
References given to Tile Work throughout the United  
States and British Provinces  
**AGENT FOR THE AMERICAN ROOFING TILE**  
Contracts Solicited  
**C. A. WELLINGTON, HOUSEHOLD ART ROOMS,**  
No. 171 TREMONT STREET, BOSTON.

**OHIO VALLEY PRESS BRICK CO.**  
Challenge the world for fine stock brick; also manufac-  
turers of all kinds of bricks, octagon and square. Office &  
34 St. Yard Preston and Knapp Sts. LOUISVILLE, KY.

**HAWTHORNE & TUCKER,**  
PLUMBERS,  
16 PROVINCE STREET, BOSTON  
Estimates for Plumbing made, and work done in any part  
of the United States or Provinces.

**J. H. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue Mattapan (Ward 24), Boston.

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY**  
OF NEW YORK.

**LEONARD F. BECKWITH, Pres't.** **E. GILLEY, Vice-Pres't.**  
Hollow Blocks of any pattern, uniting strength and resis-  
tance to fire and water. The Hydraulic Lime of Tell  
(France), one of the strongest cements known, is largely  
used in this manufacture. The blocks do not conduct  
heat, cold, or sound, and weigh 60 per cent less than brick.  
Fire-proof Partitions, Floor Arches between iron or wooden  
beams, and ceilings under iron or wooden beams, erected  
in following buildings:  
Western Union Telegraph, Orient, and Queens' Ins.  
Coal and Iron Exchange, Museum of Natural Hist.  
Equitable, Staats Zeitung, Hudson R. R. Fr. Depot.  
Wmsburgh Savings Bank, N. Y. Hospital, Drexel,  
Windsor, & Wm'ster Hotels, City, & Young's Hotel, Bos'n,  
Syracuse Savings Bank, West Point Military Hosp.  
Columbia College, Tribune, Cornell, & Vanoclear Flats,  
Baltimore Safe Deposit Co., Peabody Inst., Baltimore,  
Peabody Museum, N. Haven, Westmoreland, & Elise Flats,  
Sidewalks laid at Lenox Library, Tribune, etc.  
Hollow Burnt Clay Bricks, for flat and curved arches,  
partitions, etc., and Skewbacks for brick arches.  
Sole agents for the U. S. for HYDRAULIC LIME OF TELL,  
and LAFARGE PORTLAND CEMENT.

Sole agents for the U. S. for METLACH ENCAUSTIC TILES,  
laid in Tribune, Staats Zeitung, Mineral Spa, Central Park,  
Belvidere Hotel, etc.  
Sole agents for the Atlantic States for WIGHT'S FIRE-  
PROOF COLUMNS.  
Our Fire-proof work is the only one approved by the  
New York Board of Fire Underwriters and the Superin-  
tendent of Buildings, after severe public tests.  
Office Room 54 COAL AND IRON EXCHANGE, 21 Courtlandt  
Street, New York.  
BOOKMAN & Co., Agents, Boston, 5 Doane St.

**E. HOWARD & CO.**  
MANUFACTURERS OF CLOCKS AND WATCHES  
**CLOCKS FOR PUBLIC BUILDINGS**  
114 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**  
**PLAIN AND ENCAUSTIC**  
FOR PUBLIC BUILDINGS AND DWELLINGS,  
As laid by us in  
**THE CAPITOL AT WASHINGTON,**  
And in numerous Churches, Banks, and Dwellings in every  
part of the Country.  
Glazed and Enamelled Tiles for Mantels, Hearths, Wain-  
scoting, &c., and for Exterior Decoration.  
**MILLER & COATES,**  
279 PEARL STREET, NEW YORK.

**BARTLETT, ROBBINS & CO.**  
**HEATING AND VENTILATING OF PUBLIC AND**  
**PRIVATE BUILDINGS**  
A SPECIALTY  
PLANS AND SPECIFICATIONS FURNISHED.  
FOUNDERS, AND MANUFACTURERS OF GAS WORKS,  
ETC., ETC.  
24 LIGHT STREET, BALTIMORE.

**THE NEW ENGLAND GRANITE WORKS**  
HARTFORD, CONN., and 121 BROADWAY, N.Y.  
Quarries at Westerly, R.I.  
**MONUMENTAL AND BUILDING WORK**  
of every description, in all the varieties of  
**AMERICAN AND FOREIGN GRANITE.**  
UNEQUALLED FACILITIES OFFERED TO THE TRADE.  
**J. G. BATTERSON, Pres't.** **H. R. BATTERSON, Sec'y.**  
DIRECTORS, **C. H. CANFIELD,** **H. A. BATTERSON**  
**G. T. BATTERSON,**  
**CARL CONRADS, Sculptor.**

**WHITTIER MACHINE CO.**  
Manufacturers of Steam and Hydraulic  
**ELEVATORS,**  
**STEAM ENGINES, BOILERS, AND MACHINERY.**  
No. 1176 Tremont Street, Boston.  
Office in the New England Mutual Life Insurance Co's  
Building, Post Office Square,  
and 120 Broadway, New York  
**CHARLES WHITTIER, Pres.** **A. C. WHITTIER, Treas.**

**OTIS BROTHERS & CO.**  
**SAFETY STEAM AND HYDRAULIC**  
**ELEVATORS.**  
A specialty for a quarter of a century.  
**BUILDERS OF THE HALE HYDRAULIC ELEVATOR.**  
No. 343 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
**OHIO BUILDING STONE.**  
**GRIND AND SCOTCH STONE.**  
From our FLORENCE and AMHERST QUARRIES.  
Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS  
111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
Designers and Manufacturers of  
**GAS FIXTURES,**  
**ORNAMENTAL METAL WORK, CLOCKS AND BRONZE**  
**ARCHITECTS' ORDERS SOLICITED.**  
Special designs submitted on application.  
**WAREHOUSES, 536 AND 538 BROADWAY, NEW YORK.**  
**MANUFACTORY, 24th AND 25th Sts., and 10th AVENUE, N. Y.**

**FISHER & BIRD,**  
Workers in all kinds of Foreign and Domestic  
**MARBLE.**  
97 TO 103 EAST HOUSTON ST., NEW YORK.  
Established 1830.  
Among our notable decorations are: The Illinois new  
State House; Palace Hotel, San Francisco; Baldwin's Ho-  
tel, San Francisco; Insurance Building, 10th and Chestnut  
Streets, Philadelphia; Mutual Life Insurance Building  
Boston; Orient Mutual Insurance Building, New York;  
Union College, Schenectady; and numerous Churches,  
Private Residences, etc., etc., throughout the country. We  
solicit the opportunity to estimate upon all classes of work,  
viz., Tiling, Wainscoting, Staircases, Mantels, etc. Ceme-  
tery work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
Are ready to estimate on contracts of any size for  
furnishing their celebrated Amherst, Ohio,  
**BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS**  
**OR CUT AND SET.**  
Also,  
**AMHERST AND INDEPENDENCE GRINDSTONES,**  
And OHIO MINERAL AND STONE PAINTS  
Fire-Proof Stove Cement and Stove Putty ground in Oil  
OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MO-**  
**SAICS." Floor Tiles, beautiful in color and design, for**  
**Dwellings, Churches, and Public Buildings.**  
**SPANISH WALL TILES. White, Glazed, Valencia,**  
Tiles for Walls and for decorative painting.  
**PRINTED FIGURED TILES of Spanish designs, for**  
Wainscoting, Mantels, Jardinières, etc.  
Floors of "Nolla Mosaics" can be seen at the "Rock-  
Incham," corner of Broadway and 56th Street. Imported  
and for sale by **JOHN CHADWICK, Sole Ag't for U. S.,**  
49 Broadway, N. Y.  
**C. E. PARKER, Agent, 14 Exchange Place, Boston.**

**TUFTS' ELEVATOR WORKS,**  
MANUFACTURERS OF "TUFTS' PATENT" COMB-  
INATION ROPE ELEVATOR.  
TO BE OPERATED EITHER BY STEAM OR WATER.  
The only safe and reliable machine made for passenger use  
in Public Buildings and Hotels, and for business purposes in  
Warehouses, Stores, &c.  
**37 FOUNDRY STREET, SOUTH BOSTON.**  
OFFICE, 243 Broadway, New York.  
**OTIS TUFTS,** **L. A. BIGLOW,**  
President. Treas'r and Gen'l Manager

**STEAM WARMING APPARATUS.**  
**HIGH AND LOW PRESSURE.**  
**HOUSE WARMING A SPECIALTY.**  
Pamphlet with more than 1,000 references sent on app-  
lication.  
**WYLLYS H. WARNER,**  
114 LEONARD STREET, NEW YORK,  
and 33 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**  
No. 6 COURTLAND ST., NEW YORK.  
Works at Paterson, N.J.  
**PATENT SAFETY STEAM ELEVATORS**  
for Public and Bank Buildings, Hotels, Private Dwell-  
ings, etc.  
**SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP**  
GUARANTEED.  
Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "HEALTH" AND "TUBULAR"  
Manufactured by the

**GOLD'S HEATER MANUFACTURING CO.**  
114 LEONARD ST., NEW YORK.

Send for Pamphlet.

W. F. GOLD, President WILLYS H. WALKER, Treas.

**HUGH SISSON & SON,**

Importers, Dealers, and Manufacturers of  
**MARBLE.**

INTERIOR MARBLE WORK AND MONUMENTAL  
WORK A SPECIALTY.

Salesrooms, No. 140 W. Baltimore St.; Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,**

SPEAKING TUBES,  
AND BURGLAR ALARMS,  
For Public and Private Buildings.

THE BEST IN USE.

**S. W. FULLER,**

63 Devonshire Street, Boston.

**TOWER CLOCKS.**

FOR CHURCHES,  
PUBLIC AND PRIVATE BUILDINGS.

**G. M. STEVENS & CO., MANUFACTURERS,**  
90 SCRIBNEY ST., BOSTON, MASS.

**ART PAINTED TILES**

FOR MANTELS, CABINETS, ETC.

SHARPLESS & WATTS,

225 MARKET STREET, PHILADELPHIA.

Agents for

**MINTON'S TILES,**

AND TESSELLATED PAVEMENTS.

**JOHN MACK,** Plain and Ornamental Plasterer.  
41 Cambridge Street, Boston

**PRESSED BRICK,**

STOCK AND COMMON

MANUFACTURED BY

**FLETCHER & THOMAS,**  
Indianapolis, Ind

All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY

**GILLIS & GEOGHEGAN,**

Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 50th St. and 5th Av.;  
Drexel Building, cor Wall and Broad; Bennett Building,  
Fulton and Nassau, etc.

Architects and owners promptly furnished with speci-  
fications and estimates.

**ARCHITECTS.**

**P. B. WIGHT,**

CONSULTING ARCHITECT,

73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.

Consultations on matters pertaining to Fire-Proof Con-  
struction, Foundations, Drainage, Sanitary Work, Ventila-  
tion, Machinery, Valuations, Interior Decorations, and  
Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**

ARCHITECT,

COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E., ARCHITECT**  
AND SANITARY ENGINEER  
KINGSTON, N. Y.

Plans, Specifications, and Estimates furnished for all classes  
of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,**

ARCHITECT,

Room 17, Life Insurance Building,  
ST. LOUIS, MO.

Special attention to Churches, Schools, and other  
public buildings.

WALTER  
DICKSON,

ARCHITECT.  
Albany, N. Y.

PERRY  
BUILDING,

**GEO. E. WARING, Jr.,**

CONSULTING ENGINEER,

FOR SANITARY AND AGRICULTURAL WORKS,  
NEWPORT, R.I.

**SANITARY ENGINEERING.**

**EDWARD S. PHILBRICK, C. E.,**

12 WEST ST., BOSTON, MASS.,

Offers advice and superintendence in

CONSTRUCTION OF WORKS,

IN PLUMBING, DRAINAGE, AND VENTILATION,

And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**

387 HARRISON AVENUE . . . . . BOSTON,  
**SHEET METAL CORNICES, HAYES'S PAT-  
ENT VENTILATING SKY-LIGHTS,  
WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.**

**MANTELS AND GRATES.**

**RANKIN'S PATENT** makes the Cleanest, Cheap-  
est, and Hottest Fire. Avoid infringements, and send for  
Circular to

**C. S. RANKIN & CO.,**

**ARCHITECTURAL IRON WORKS,**  
Manufacturers of all kinds of Iron Work for  
**BUILDINGS, JAILS, ETC.**

187 W. PEARL ST., CINCINNATI, O.

**EXCELSIOR  
ROOF PAINT.**

This paint has been thoroughly tested throughout the  
Eastern States, and has been found to be a perfect tin or  
metallic preserver. We warrant it neither to crack nor  
blister by **HEAT or COLD**, and to last

**IN ANY CLIMATE TEN YEARS.**

Those desiring to use this valuable preparation upon  
their buildings, can secure the same by addressing

**C. M. WHEELER, J. M. ROOT,**  
Toledo, Ohio.

**DECORATORS.**

**W. J. MCPHERSON,**

(Established A.D. 1845.)

**MURAL PAINTER,**

**DESIGNER,**

**Ecclesiastical Decorator,**

AND

**ART STAINED GLASS MANUFACTURER,**

440 TREMONT STREET,

**BOSTON, MASS.**

**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the  
subscriber to produce Modern and Medieval styles of work  
equal to any European examples, for Churches, Private  
Residences, Halls, etc.

The value of the work is attained by a careful selection  
of colors in Cathedral and French Glass of his own impor-  
tation.

Designs in accord with architects' plans furnished at  
short notice. Reference of work at office

**SAMUEL WEST, 115 Eliot St., Boston**

**FRANK HILL SMITH,**

1114 TREMONT STREET,

BOSTON . . . . . MASS.

**COOK, REDDING & CO.**

149 CONGRESS ST., BOSTON,

**Ornamental, Stained, and Cut Glass,**

FOR

**Churches, Public Buildings, and  
Private Residences.**

We manufacture Slate Goods, through every operation, from quarry to completion.

**THE FAIR HAVEN MARBLE AND MARBLEIZED SLATE CO.**

FAIR HAVEN, VERMONT.

The oldest and most extensive producers of

**SLATE MANTELS**  
IN THE UNITED STATES.

We imitate more than fifty rare marbles and woods. Styles and workmanship unsurpassed. Special care given to  
making Mantels and other goods from architects' drawings. Being in close proximity to the best white American  
marble quarries, and with rare facilities for selecting stock and doing the work, we are also producing

**MARBLE MANTELS**

At the very lowest prices, and in the best manner possible. We also produce all kinds of plain slate and marble work

Look over this list and correspond with us and get our Catalogue.

- |  |  |   |   |
|--|--|---|---|
| Purple, Green,<br>Red, Variegated<br>Roofing Slates.<br>Same Color Slate.<br>Also White and Black<br>Marble Tiles. | Window Sills.<br>Window Lintels.<br>Water Table.<br>Belt Courses.<br>Ashlar Steps and<br>Risers. | Laundry Tubs.<br>Urinals.<br>Grave Covers.<br>Vault Work.<br>Carriers' Tables.<br>Counter Tops. | Billiard Beds.<br>Blackboards.<br>Brewers' Vats.<br>Cisterns.<br>Greenhouse Shelves.<br>Plumbers' Goods, etc. |
|--|--|---|---|

**DECORATORS.**

**JOHN LAFARGE,**

**MURAL DECORATION,**  
51 W. Tenth St., New York, and Newport, R. I.

**SOCIETY OF DECORATIVE ART.**

4 East 20th Street,  
NEW YORK.

Architects' designs for panels, tiles and plaques for inser-  
tion in Cabinet Work, and other decorative uses, and for  
Art Needlework applied to curtains, hangings, portieres,  
screens, table-covers, etc., carefully executed. Original  
designs for any of the above, subject to approval, will be  
gladly received, and paid for by the Society when used.

Orders are earnestly solicited.  
The Society has arranged with Mr. RUSSELL STURDIS,  
Architect, for the Exhibition and Sale of his well-known  
Wall Papers. Some of these are faithful reproductions of  
Japanese decorative papers; some are taken from Oriental  
and other stuffs; some are of original design. New pat-  
terns will be added from time to time.

**Fresco Decoration.**

**EMMART & QUARTLEY,**

Designers, Decorators, and Painters,

32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made  
and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate  
work on hand or made to order. No. 1210 Ridge Avenue.  
JOSEPH S. MILLER, successor to Wilson & Miller, Philadel-  
phia, Pa. Send for Illustrated Price-List

**Donald MacDonald,**

**GLASS STAINER AND DECORATOR**

No. 6 Hayward Place,

**BOSTON**



**INLAID WOOD FLOORS.**

ORNAMENTAL WOOD BORDERS.

Designs and Estimates free.

National Wood Manuf'g Co.,

850 Broadway, near 23d St., New York

**PHILIP A. BUTLER,**

DECORATOR AND DESIGNER,

No. 17 FENNINGTON SQUARE,

BOSTON.

**HENRY B. JONES & CO.**

IMPORTERS, JOBBERS, AND RETAILERS OF

PAPER HANGINGS.

612 WASHINGTON STREET, BOSTON.

(Established 1848.)

**L. HABERSTROH & SON,**

FRESKO PAINTERS,  
and INTERIOR DECORATORS,

No. 12 SCHOOL STREET, BOSTON.

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa (Can.)	Philadelphia.	San Francisco	St. Louis.
1. BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50	.....	2.25 @ 2.50
2. Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50	.....	3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00	.....	3.00
3. CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25	.....	1.50 @ 2.00
4. Cabinet Maker	2.50 @ 3.25	.....	1.75 @ 2.25	.....	.....	1.50 @ 3.00	1.50 @ 2.00	.....	.....	.....
5. Finisher	2.00 @ 2.50	.....	1.50 @ 2.00	.....	1.50 @ 2.00	1.50 @ 3.00	1.25 @ 1.75	.....	.....	.....
6. FOUNDRYMAN	.....	.....	1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50	.....	.....	2.25 @ 2.50
7. Blacksmith	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50	.....	2.00 @ 2.50	1.25 @ 2.00	.....	.....	1.50 @ 2.50
8. Whitesmith	.....	.....	1.50 @ 2.00	1.50 @ 2.50	.....	2.00 @ 2.50	1.25 @ 1.75	.....	.....	.....
9. Galvanized Iron Worker	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00	.....	.....	2.25 @ 2.50
10. GAS FITTER	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00	.....	.....	2.00 @ 3.00
11. LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50	.....	1.00 @ 2.00
12. PAINTER	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50	.....	2.00 @ 2.50
13. Glazier	.....	2.00 @ 2.50	1.75 @ 2.00	.....	.....	1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50	.....	.....
14. Gilder	.....	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00	.....	2.00 @ 3.00	1.75 @ 2.50	.....	.....	3.50
15. Paper-Hanger	.75 @ 2.50	.....	.....	.....	.....	2.00 @ 2.50	1.50 @ 2.00	.....	.....	2.00 @ 3.00
16. PLASTERER	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	.....	.....	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00	.....	2.25 @ 2.75
17. Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	1.50 @ 2.50	.....	2.00 @ 2.50	1.50 @ 2.25	.....	.....	2.25 @ 2.75
18. PLUMBER	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.50	2.50 @ 3.50	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50	.....	.....	2.50 @ 3.50
19. QUAREYMAN	.....	3.00 @ 3.50	1.10 @ 1.25	.....	1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75	.....	1.50 @ 1.75
20. Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25	.....	2.00 @ 2.50
21. Carver	.....	3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75	.....	3.00	2.00 @ 2.50	3.50 @ 6.00	.....	2.75 @ 3.25
22. Painters and Washers	.....	2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75	.....	.....	1.50 @ 2.50	1.00 @ 1.25	.....	2.25 @ 2.50
23. Rubber	1.50 @ 2.00	.....	1.75 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75	.....	.....
24. Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	.....	2.50	2.00 @ 3.00	2.00 @ 2.50	.....	2.25 @ 2.75
25. Stone-Setter	.....	2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	.....	2.75	2.00 @ 2.50	1.50 @ 2.00	.....	2.25 @ 2.75
26. ROOFER (Tin)	2.00 @ 2.35	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25	.....	2.00 @ 2.50
27. Slatier	.....	2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00	.....	2.00 @ 2.25	1.25 @ 2.00	1.75 @ 2.25	.....	3.00
28. STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25	.....	.....	1.50 @ 2.50
29. STEAM FITTER	.....	2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00	.....	.....	2.00 @ 3.00

AMERICAN ARCHITECT AND BUILDING NEWS.

PRIZES.

The attention of draughtsmen and architectural students is directed to the following announcement of a way in which valuable and useful books can be added to their professional library.

SUBSCRIPTION PRIZES.

The Publishers will send, postpaid, the following prizes to the draughtsman, student, or regular canvasser, who, complying with the conditions, shall secure subscribers for the American Architect and Building News:—

- I. For two new subscribers, a year's subscription to the American Architect and Building News..... \$6.00
- Or, "Story of a House," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00
- Or, "Annals of a Fortress," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00
- II. For four new subscribers, a bound volume of the American Architect and Building News, vol. i. or ii., price..... 9.00
- Or, "Examples of Ancient and Modern Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 8.00
- Or, "Discourses on Architecture," translated from the French of M. Viollet-le-Duc, illustrated, price..... 8.00
- III. For eight new subscribers, both bound volumes of the American Architect and Building News, price..... \$18.00
- Or, "Gothic Forms applied to Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 15.00
- Or, "Art Foliage for Sculpture and Decoration," by J. K. Colling, royal quarto, illustrated by 72 plates, price..... 15.00
- Or, "Examples of Modern Architecture, Ecclesiastical and Domestic," being designs by Messrs. Scott, Street, Liddon, and other noted architects, illustrated by 64 quarto plates, price, 15.00
- IV. For fifteen new subscribers, the "Decoration and Ornamentation of the Nineteenth Century," by Léonard, illustrated by 100 folio plates, price..... 27.00

In lieu of these books the canvasser may obtain books of equal value selected from our trade list, or may obtain as equivalent the value of the prize in Helio-type engravings, selected from our collection, which numbers over three hundred.

The conditions to be observed are:—

1. The subscribers must in all cases be new subscribers.
2. The subscription must be paid in advance directly to the Publishers by check or money order; but in no case to the canvasser.
3. If canvassers adopt the method of sending to us one subscriber at a time, they must state at such time for which one of the before-mentioned prizes they are canvassing.
4. The prizes will not be delivered until all subscribers have paid in full

N.B. — These prizes are not cumulative; i. e., a canvasser who sends us fifteen new subscribers cannot claim successively the prizes I., II., III., and IV.; or in other words, to obtain all four prizes a canvasser must send us twenty-nine new subscribers.

A canvasser who has stated that he is trying to secure one of the highest prizes may in the case of failure claim such lesser prize as is warranted by the number of subscriptions actually paid.

No claims will be allowed for subscriptions secured before Jan. 1, 1878.

HOUGHTON, OSGOOD AND COMPANY, Publishers, Boston.

**SLATE, TIN, AND CORRUGATED IRON ROOFERS.**  
Correspondence solicited.  
**GALVANIZED IRON CORNICES.**  
Send for Illustrated Catalogues. Estimates furnished on application.  
**HAYES'S PATENT SKY-LIGHTS.**  
All work warranted.  
**CORRUGATED IRON CEILINGS.**  
Contracts taken in any part of the United States.  
Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.  
**A. KNISELY & CO.** 72 & 74 West Monroe St. Chicago, Ill.

**A SACHEL GUIDE.**  
FOR THE VACATION TOURIST IN EUROPE. Revised Edition for 1878. With Maps. 16mo, flexible cloth, \$2.00. HOUGHTON, OSGOOD & CO.



**NONESUCH Self-Locking AND Burglar-Proof Window Locks.**  
Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.  
**FRED. J. HOYT,** 733 Broadway, N. Y.  
Patented July 10th, 1877

**AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT.**  
MANUFACTURED OF GALVANIZED IRON, & ALL SHEET METALS  
Regular Sizes, 2, 3, 4, 5 & 6 Inch.  
SPECIAL SIZES MANUF'D TO ORDER.  
**AUSTIN, OBYDKE & CO.** SOLE MANUFACTURERS.  
1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA.  
WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH.

- PRINCIPAL AGENTS.
- M. Halliday New York City.
  - Hicks & Badger Boston, Mass.
  - James Berry Buffalo, N. Y.
  - George W. Pitkin & Co. Chicago, Ill.
  - Wasson & Martin Albany, N. Y.
  - McLeod, Reardon & Co. Troy, N. Y.
  - W. H. Scott Portland, Me.
  - Kittredge Cornice Co. Salem, O.
  - I. W. Jordan Worcester, Mass.
  - B. G. Carpenter & Co. Wilkesbarre, Penn.
  - T. W. Irwin Allegheny City, Penn.
  - Sellew & Co. Cincinnati, Ohio.

**IMPERIAL GAS MACHINE.**  
SEND FOR CIRCULARS.  
REPAIRS AND SUPPLIES.  
LEWIS BARD & CO.



**BIBB'S** Celebrated Original Baltimore Fire Place Heaters  
Mantels and Registers.  
**B. C. BIBB & SON,** Baltimore, Md.  
Best workmanship. Lowest prices guaranteed. Send for circulars.

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

## HOUGHTON, OSGOOD AND COMPANY.

### Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the art-workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

### Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

### American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLIS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

### Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. P'ANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

### Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1 50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist, Boston.*

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

### Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courant.*

### The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVES. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

### Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIENARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11½ X 15½ inches), \$27 00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

### Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

### Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

### Gothic Forms.

**GOTHIC FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

### Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

### Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOLETTE-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

The works of the learned and distinguished French Architect, EUGENE VIOLETTE-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

### Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — *EUGENE BENSON, in The College Courant.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

### The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

### The New York Sketch-Book of Architecture.

3 vols., 4to, \$6.50 each.

We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

### The American Architect and Building News.

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\*\* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers.

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

(Reported for the American Architect and Building News.)

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, FRONTS, CEMENT, and FIRE BRICK. Includes items like Pale, Jersey, Long Island, and various types of bricks and cement.

Table listing prices for DOORS, RAISED PANELS, and Mouldings. Includes items like 2.0 x 6.0, 2.6 x 6.6, and various door and molding profiles.

Table listing prices for BLINDS, INSIDE, WINDOW FRAMES, and HAIR. Includes items like blinds for various window sizes and window frame materials.

Table listing prices for LATH, LIME, and LUMBER. Includes items like state common cargo rate, lath, and various types of lumber.

Table listing prices for PAINTS AND OILS. Includes items like Paris white, zinc white, ochre, and various oil products.

Table listing prices for STONE, including Amherst freestone, Berlin freestone, and various types of granite and marble.

Table listing prices for SLATE, TIN PLATES, and ZINC. Includes items like purple roofing slate, tin plates, and zinc duty.

Table listing prices for BOSTON, including FIRE BRICK, BUILDING BRICKS, BUILDING STONE, and LUMBER.

Table listing prices for PAINTS AND OILS in Boston. Includes items like Paris white, zinc white, and various oil products.

Table listing prices for CEMENT, NAILS, AXLE PULLEYS, and SASH WEIGHTS. Includes items like Rosendale, Portland, and various nails and pulleys.

Table listing prices for DOOR BUTTS. Includes items like Japanned Acorn and various door butt types.

Table listing prices for MORTISE LOCKS, DOOR KNOBS, and SASH FASTS. Includes items like brass face and lock, door knobs, and sash fasts.

Table listing prices for SCREWS, STORE DOOR HANDLES, and IRON. Includes items like round head nickel plated, store door handles, and iron beams.

Table listing prices for BRICK, LIME, AND CEMENT in Chicago. Includes items like lime in bulk, Chicago building brick, and cement.

Table listing prices for LUMBER (MICHIGAN PINE). Includes items like 1st and 2d clear, 3d clear, and various lumber grades.

Table listing prices for HARDWOOD LUMBER. Includes items like whitewood clear, whitewood box boards, and various hardwood types.

Table listing prices for SHEET IRON, WIRE, and NAILS. Includes items like sheet iron, wire, and various nail types.

Table listing prices for PAINTS AND COLORS, OILS, and PHILADELPHIA. Includes items like white lead, zinc, and various oil products.

Table listing prices for WHOLESALE PRICES, including IRON, LATH, and LIME. Includes items like iron, lath, and lime.

Table listing prices for LUMBER, including Michigan pine and various other lumber types.

Table listing prices for PAINTS AND OILS, including white lead, iron, and various oil products.

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms.

CREOSOTED WOOD. PREPARED AT THE Hayford Patent Creosote Wood Preserving Works. EDWARD R. ANDREWS, Proprietor.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially invaluable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY.

The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, ETC., ETC.

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.  
ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

ESTABLISHED, 1836.  
**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Composition Roof known. Also inventors and owners of the following patents:—

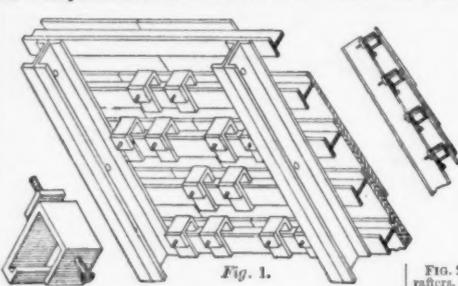


FIG. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the plates on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

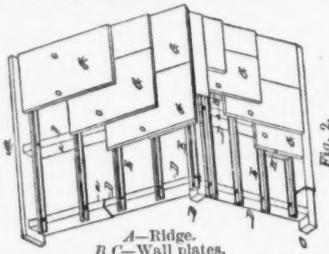


FIG. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or other fire-proof material, and iron purlins (c) or beams, with the slates (G) or other covering secured thereto by clasp (Fig. 1) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contact with the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point avoiding condensation, contraction and expansion of roofs formed wholly of iron.

**WARMING AND VENTILATION.**  
**FIRE ON THE HEARTH.**  
**FIRE-PLACE HEATERS AND STOVES.**  
VENTILATION of a Fire-Place. RESERVE FORCE of a Close Stove. CIRCULATION of a Furnace.  
Adapted for any kind of Fuel,  
And the only FIRE-PLACE HEATER PERFECTLY ADAPTED for SOFT COAL and WOOD.

Send for our testimonials from all parts of the United States.

**OPEN STOVE VENTILATING COMPANY,**  
115 Fulton and 54 Ann Streets, New York.

**GAS**  
SPRINGFIELD GAS MACHINE.  
Springfield, Mass.: 75 Maiden Lane, New York: 117 and 119 Court St., Boston: and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

**BUHRER'S INFALLIBLE SEWER GAS TRAP.**  
The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (E) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.

**S. BUHRER,** Inventor and Manufacturer, Cleveland, Ohio.

WHOLESALE AGENTS.  
W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O.  
L. WOLFF M'fg Co., 109 & 111 West Lake St., Chicago, Ill.  
HAMLEN & MATHews, 82 & 84 North St., Boston, Mass.  
C. A. BLESSING, 44 North Fifth St., Philadelphia, Pa.  
THE J. L. MOTT IRON WORKS, 88 & 90 Beekman St., N. Y.  
Please send for Circular.

**Brandeis' Seamless Paragon Trap.**  
Safe, Best, Cheapest, and Non-siphoning.  
Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDEIS & WICKERT,** 46 Fulton Street, Brooklyn, N. Y.

**C. BUTCHER,**  
107 Devonshire St. BOSTON.  
Send for Illustrated Catalogue.

**PATENT MARQUETRY FLOORING.**  
Specimens at Lawrence, Wilde & Co.'s, 42 Cornhill, Boston.

**DORCHESTER UNION FREESTONE CO.**  
NEW BRUNSWICK YELLOW FREESTONE.  
The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order.  
34 Pine St., New York. - G. P. SHERWOOD.

**MENEELY & KIMBERLY,**  
Bell Founders, Troy, N. Y.,  
Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT HOUSE BELLS. Illustrated Catalogue sent free.

Architects and Builders will be quick to appreciate the many New and Practical Features possessed by

**THE MAGEE PATENT SINK,**  
which commend themselves at once to every household. The escape of noxious and poisonous sewer gases is prevented by the arrangement of the patent trap, it being impossible, while the strainer, being hinged on brass pins, can be raised for the purpose of cleaning the cesspool. The sink is furnished with an improved galvanized shelf or rack for draining dishes, etc., after washing. It is of extra size, and being made with square corners, saves the carpenter much labor in setting. In smoothness of casting it fully sustains the long-established reputation of the Magee goods.

Particular attention is invited to the **Magee Standard Furnace**, portable and for setting in brick, guaranteed superior to any in the market for economy, durability, and heating capacity. Estimates furnished for heating all sizes of dwelling houses and public buildings. Also a full line of **Brick and Portable Ranges**. Circulars and prices of all the above goods furnished on application.

**MAGEE FURNACE CO.**  
32 to 38 Union St., Boston

**D. M. MEEKER & SON'S**  
**Malleable Iron Hollow Munten Window Sash.**  
For Insane Hospitals, Fire Proof Buildings, &c.

The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

**D. M. MEEKER & SON,**  
Newark, N. J.  
Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

**MAKE YOUR OWN GAS**  
GAS GENERATORS, FOR LIGHTING Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.

Send for CIRCULAR

**WALWORTH MANUF. CO.**  
No. 69 Kilby Street, BOSTON, MASS.

**J. & R. LAMB, 59 CARMINE ST., N. Y.**  
**CHURCH FURNISHERS**  
Practical Workmen in Sterling Silver, Brass, and Bronze. Carved Wood, Decorations, etc. Illustrated Catalogues. Furniture, etc.; Metalwork, etc.; Decoration, etc.

**HOISTING MACHINES EXCLUSIVELY.**  
HOTEL STEAM ELEVATORS, HYDRAULIC ELEVATORS, HAND POWER HOISTS, DUMB WAITERS.

**H. J. REEDY, Manufacturer,**  
128 EAST EIGHTH ST. - Cincinnati, O.

**CRANE, BREED & COMPANY**  
CINCINNATI, O.  
**SAFETY BOILERS**  
FOR HEATING  
STEAM AND HOT WATER.  
MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, PATENT SLEEVE COUPLINGS, PREVENTING ALL LEAKAGE. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMELED for making Joints, supplied to Furnaces, Steam and Gas Pumps, etc. Specimens can be seen and obtained at offices of

**NATIONAL TUBE WORKS CO.**  
PATENT  
Indestructible Enamelled Wrought Iron  
**LAP-WELDED PIPE,**  
From 1/2 inch to 15 inches diameter.  
Now extensively used for  
Water, Gas, Sewerage, and Mining.

It is not affected by heat or acid, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMELED for making Joints, supplied to Furnaces, Steam and Gas Pumps, etc. Specimens can be seen and obtained at offices of

**National Tube Works Co.,**  
8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

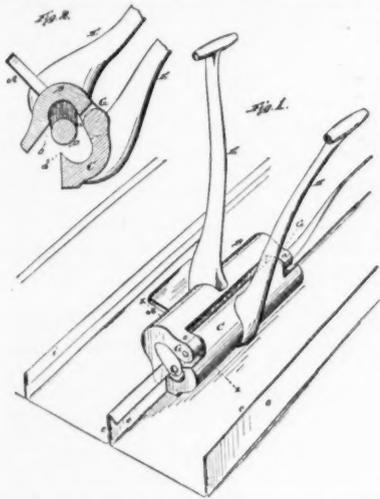
BUILDING INTELLIGENCE.

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

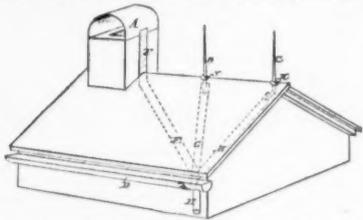
BUILDING PATENTS.

ROOFING TONGS.—Thomas B. Beeson, Wilmington, Del. The object of this invention is to do away with the use of the mallet in turning the rolls of sheet metal roofing. Each jaw of the tongs is provided with handles E, while the jaw B is provided with a treadle A, which with the handles serves to operate the tongs. These jaws, which are concave on the inside, as shown in Fig. 2, are hinged by a knuckle-joint G. The roller D, between the jaws, which is journaled at a in



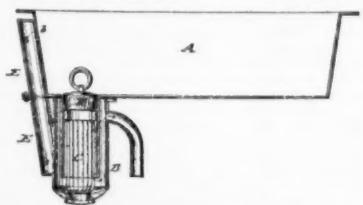
is the important part of the apparatus. When the metal sheets have been affixed to the roof in the ordinary way, and the edges turned up as at e, Fig. 1, the tongs are then brought into use, and by pressure on the handles the roller draws in the metal and forces it into the concavity in C over the V-shaped angle d; in this way a V-shaped fold is formed as shown; this can be reduced to the state shown at f, by the flat faces of the jaws at b and d, and then, if necessary, the operation can be repeated.

LIGHTNING CONDUCTOR.—Henry W. Spang, Reading, Penn. The object of this invention is to provide a lightning conductor which shall not be the cause of broken slates and leaky roofs while being put up, nor disfigure it after it is up, nor be torn away by the weight of snow. This is done by using flat metal strips of tin-plate, galvanized iron, or other metal of good conductivity, which are conducted, by the shortest downward paths, from the air-terminals to the metal gutter or rain-water conductors of the house, being fixed always beneath the slates, shingles, or



other roofing-covered used, and, when necessary, below the boarding. A is a chimney-cap of metal, which serves as an air-terminal for the conductor F, while the half-inch rods B and C do the same service for G and H. G is soldered to the gutter D, while to it are soldered the conductors F and H. Each of the metal bands, F, G, H, should be of equal conductivity to the gutter. The rain-water conductors, which should be provided with good earth-contacts, should be, preferably, about four inches in diameter. The flashing on the hips and in the valleys of roofs may be used, if running in short and direct lines, as conductors, provided, also, the metal is a good conductor, and the connection between the air-terminal and the earth-contact unbroken.

KITCHEN SINK.—Michael W. Scammel, Williamsport, Penn. The object of this invention is to provide a sink whose outlet can be closed with a plug and the sink used as a wash-tray, while at the same time the outlet is trapped and provided with a strainer. A is an iron sink whose outlet can be closed by the plug D. Cast in one piece with A is the upper part of the over-flow E, which has a flange at its lower end, so that it can be bolted securely to its lower part, which is cast in one piece with the trap B. This trap,



which is bolted to the sink, preferably to being cast in one piece with it, consists of an outer and an inner cylindrical shell. Through the inner shell, and through the space between the inner and the outer shells, all waste must pass in order to escape through the waste-pipe, which, entering the trap near the top, keeps the trap always full of water. Fitting loosely within the inner shell is a strainer C, cylindrical in form, and made of small vertical rods, which are connected by a ring at the top, and are connected to a solid bottom. Through this strainer all waste must pass. Whenever the strainer gets foul it can be lifted out and cleaned, and all resultant that succeeds in passing through it can be clear-

out through the opening in the bottom of the trap, which is closed by the screw-plug a.

LATHES FOR TURNING OVALS.—M. Chittenden and W. A. Lyon, Danbury, Conn.

CURTAIN FIXTURE.—John R. Macfarlane, St. Louis, Mo.

FIRE-ESCAPE.—Daniel G. Stiller, St. Louis, Mo. The ladder-sections are extended by a cable, which extends in a line down the centre of the several sections, and passes over pulleys at the top and bottom of each section, those at the top being placed at an angle to the plane of the rounds, and those at the bottom being parallel with the rounds, whereby the cable passes in front of and back of each section without crossing between the rounds of a section. The ladder is brought to the desired angle and secured there by a windlass and rope above and one below the truck-floor. It is levelled or adjusted at its base by spring-locked hand-levers pivoted to the carriage, their outer ends carrying the ladder-pivots. When the ladder is employed the truck-springs are prevented from yielding to its load by means of clamping-levers bearing against vertical arms secured to the truck-frame. A sliding clutch-pulley or drum is employed, whereby the draft of animals may be utilized to extend the sections.

SASH BALANCE.—M. J. Treach and H. F. Urey, Edensburg, Penn.

SASH-HOLDER.—Jacob B. Yeungle, Indianapolis, Ind.

FILE-GUARDS.—Mary F. Ayers, San Francisco, Cal.

GROOVES ON THE INNER SIDES OF TWO WOODEN ARMS, hinged together, receive the edges of a file, which are thus protected. One end of the arms forms a handle.

COMPASS.—Thomas H. Grigg, West Meriden, Conn.

PUMP-VALVE.—William L. Miller, Santa Rosa, Cal.

FASTENER FOR MEETING RAILS OF SASHES.—J. B. Morris, Cincinnati, Ohio. A horizontally swinging latch-bar is pivoted to the lower sash, one end being provided with a flip which engages with a catch upon the upper sash, the other end having a hing-d extension which drops over the front edge of the lower sash.

PRESS FOR PRESSING BRICK AND CONCRETE BLOCKS.—Augustus F. Nagle, Providence, R. I.

VENETIAN BLINDS.—Theodor Siml, Hamburg, Germany. The slats of a Venetian blind are made of skeleton-frames, which are covered with cloth or translucent material, to subdue and diffuse the light. The axes of the slats are received in bearings inserted in pendant flaps of the same material, which are also provided on their outer edges with projections to cover the spaces between the slats and pendants.

FIRE-ESCAPE.—Edward Row, Indiana, Penn. Foot-ribs connected by rigid links having an eye at each end constitute the escape-ladder, which is suspended from a bracket having a broad, flat, hook-like end, whereby the foot-ribs are held in parallel line to the wall of the building.

BRICK-MACHINE.—J. E. Allen and P. F. Duffy, Greensborough, N. C.

MACHINE FOR TURNING TREENAILS.—W. S. Auchincloss, Wilmington, Del.

HATCHWAY-DOOR MECHANISM.—Reuben F. Bancroft, Camden, N. J., and J. L. Ash-core, Philadelphia, Penn.

PILES.—John Coffey, Menasha, Wis. Two sections of pile are connected together by a sleeve rigidly bolted to one, but loosely fitting the other, so that it may move in an end-wise direction, and that the part in the ground may not be pulled out in ice jams. The sleeve is composed of several sticks of timber surrounding the pile and fastened together by metal hoops.

MANUFACTURE OF HYDRAULIC CEMENT.—U. Cummings and L. J. Bennett, Buffalo, N. Y.

STREAM-HEAT RADIATOR.—Patrick Mihan, Cambridgeport, Mass.

FIRE EXTINGUISHER.—Henry S. Parmelee, New Haven, Conn.

HYDRAULIC JACK.—Matthias Pennyacker, Philadelphia, Penn.

REGULAR ALARM.—Thomas Powell, Philadelphia, Penn.

WEATHER-STRIPS.—Nelson Rowen and M. D. Miller, Oswego, Kan. A loose strip with-out hinges rests in a groove in the door-sill, and has a covering overlapping the edges of the groove. The bottom of the door is bevelled, and a projection on the strip, pressed into a recess in the frame by the door, tilts the strip up against the bottom of the door.

COMPLETED BUILDINGS.

BRENSH CREEK, PENN.—A new church will be dedicated September 4.

CHILLICOTHE, O.—The new jail, which has been so long in building, is finished.

HAMPTON, CONN.—The dedication of the Church of our Lady of Lourdes, the first of that name in America, took place August 18.

LOUISVILLE, KY.—The Right Reverend Bishop dedicated the new Catholic church at the corner of Milk and Shelby streets August 18.

SANTA ANA, CAL.—The Baptist church will be dedicated on the first Sunday in September.

SHASTA, CAL.—The new edifice of the Congregational Church, in Little Shasta Valley was dedicated on Sunday, July 28.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—The Inspector of Buildings has received applications for the following privileges:—

J. L. Mantler, 83 Patterson Ave., stable, 12' x 15'.—Baltimore Paving Mill and Manufacturing Co., 35 and 38 Eastern Ave., shed, 16' x 40'.—John Morris, 1 Cuba St., stable, 5' x 25'.—Henry Halseman, Boston St., shed, 10' x 40'.—Geo. E. Stoppenhary, 24 Stiles St., shed, 22' x 45'.

Boston.

BUILDING PERMITS.—The following permits have been issued since our last issue:—

BRICK BUILDINGS.

Table with 5 columns: Mechanic, No., Stories, Class, Size. Includes James Pillsbury (Storage, 44' x 14'), A. H. Glover (Signal House, 29' x 25'), John Kelley (Storage, 40' x 70'), and Frederic Johnson (Stables, 70' x 40').

WOODEN BUILDINGS.

Table with 5 columns: Mechanic, No., Stories, Class, Size. Includes E. G. Allen & Co. (Manufacturing, 100' x 50'), Thomas Keyes (Store, 40' x 14' 6"), D. C. McKinnion (Stable, 19' x 45'), and J. H. Burt & Co. (Dwelling, 28' x 45').

Repairs and alterations active.

HOUSE.—Dr. E. F. Hodges is the owner of a dwelling-house now building on Marlboro Street; cost, \$30,000. T.

W. Whidden, contractor. Messrs. Peabody & Stearns are the architects.

HOUSE.—The dwelling-house on Commonwealth Ave. for Mrs. Warren, Messrs. Scull & Gregerson, architects, is nearly completed. It is elaborately decorated throughout.

PROPOSALS OPENED.—Proposals for 1,000,000 common bricks, 1,000 barrels of lime, 500 barrels of cement, and 350 cubic yards of sharp sand, for the United States Sub-Treasury building, were opened at the office of the Superintendent, Mr. Alexander R. Esey, August 28. The contracts will be awarded to the lowest bidder, subject to the approval of the Treasury authorities at Washington. The lowest bidders are George F. Smith, for brick, at \$7.43 per M.; J. S. Hobbs & Co., for lime, at 83 cents per bbl.; T. W. Hoyle, for cement, at 98 cents per bbl.; and A. C. Wellington, for sand, at \$1.60 per cubic yard.

Brooklyn.

BUILDING PERMITS.—Boerum St., No. 191, 1 two-sty frame dwell., 25' x 32'; owner, Andrew Beck; builder, Adam Boucher. — Court St., 1 two-sty brick store and dwell., 20' x 45'; owner, Charles Oehlman; architect, Carl F. Eisenach; builder, George Damon. — Fulton St., 5 two-sty frame stores and dwells., 17' x 40'; owner, M. M. Hyde, 40 and 42 Putnam Ave.; architect, Amad Hill; builder, G. F. Stuffs. — Halsey St., 4 two-sty brown stone dwells., 18' 9" x 44'; owner, B. T. Robbins, Northport, L. I. — Herkimer St., 2 two-sty brick dwells., 17' 6" x 40'; owner, Peter Donlon. — Hooper St., 2 two-sty brown stone dwells., 22' 4" x 42'; owner and builder, Lewis Summis, 138 Penn St.; architect, G. N. Casey. — Lorimer St., 1 two-sty frame dwell., 25' x 39'; owner, David Manning, 317 Lorimer St. — Nevins St., 1 three-sty frame store and tenement, 25' x 40'; owner, Ann Sheridan, Newburgh, N. Y.; architect, J. D. Quinn; builder, J. J. Quinn. — Quincey St., 1 two-sty frame dwell., 20' x 30'; owner, John W. Ogden, 131 Kent St. — Flatbush Ave., 8 four-sty brown stone stores and dwells., 20' x 53' and 62'; owners, D. & M. Chauncey, 269 Montague St.; architect, G. L. Morse; builders, Francis Kelly, and Morris & Selover.

CHURCH.—Under the invention of the Most Holy Name the corner-stone of the Fortieth Catholic Church of the city of Brooklyn was laid August 1.

Chicago.

BUILDING PERMITS.—Peter Hayte, two-sty dwell., 364 Clinton St.; cost, \$2,000. — J. E. Strong, two-sty dwell., 22 Bryant Ave.; cost, \$2,800. — Mrs. Elizabeth Hahn, two-sty store and flat, Larrabee St.; cost, \$2,100. — John Wallace, two-sty store and flat, 507 West Twelfth St.; cost, \$2,000. — Jerusha Deucey, two-sty warehouse, Kinzie St.; cost, \$2,000. — Anna Wessling, two-sty store and flat, 361 Division St.; cost, \$3,000. — Martin Bonelle, two-sty flat, 744 Archer Ave.; cost, \$3,500. — S. Yankirk, 4 two-sty flats, Eighteenth St.; cost, \$4,000. — Andrew Hansen, two-sty dwell., 278 Hubbard St.; cost, \$2,400. — C. J. Hull, 2 two-sty dwells., 633 Carroll Ave.; cost, \$2,000. — Mary A. Rozet, three-sty stone-front dwell., La Salle St.; cost, \$6,000.

Cincinnati.

BUILDING PERMITS.—Since our last report the following building permits have been issued:— Fred Luckner, three-sty brick; cost, \$2,500. — McCreary & Clark, two-sty brick; cost, \$1,200. — Loughorst & Suller, two-sty brick; cost, \$2,000. — Fred Enshoff, two-sty brick; cost, \$12,000. — Albert Klucke, two-sty frame; cost, \$1,400. — Kuhlman & Bunni, three-and-one-half-sty brick; cost, \$3,800. — Louis Bukharitz, two-sty brick; cost, \$4,500. — W. E. Dibble, three-sty stone front; cost, \$4,000. — H. H. Lippelman, two-sty brick; cost, \$4,500. — Jas. Hart, two-sty brick; cost, \$3,000. — Pope Bros. & Kugelman, five-sty brick; cost, \$10,000. — Lakamp & Wulck, three-sty brick; cost, \$3,000. — Seventeen permits were issued for repairs, at a total cost of \$8,225. Total permits, 29. Total cost, \$50,225. Total permits to date, 507. Total cost to date, \$1,008,033.

Cleveland, O.

THE VIADUCT.—On August 21 the last stone of the Cleveland viaduct was laid, connecting the east and west sides of that city over Cuyahoga River. Four years ago the work was commenced, and will be completed in sixty days from now. The total cost is over \$2,000,000.

Louisville, Ky.

FACTORY.—Mr. P. Bannion will rebuild, at once, his terracotta factory, which was burned last week.

New York.

BUILDING PERMITS.—Sixty-third St., near Fourth Ave., seven first-class dwellings, 14' x 50' each, cost \$11,000 apiece; Thos. Kilpatrick, owner; J. H. Valentine, architect; J. G. Ruddell, builder. — Forty-fifth St., near Fifth Ave., two public buildings, 50' x 60', cost \$4,000 each; H. Gilbert, owner; W. Grant, architect. — One Hundred and Seventeenth St., west of Fifth Ave., first-class dwelling, 30' x 82', cost \$45,000; G. O. Morde, owner; D. Lienan, architect; J. M. Dodd & Son, builders. — 119 Spring St., first-class iron store, 2' x 95', cost \$16,000; F. A. Karsheed, owner; D. Lienan, architect; J. Rogers, builder. — 179 E. Seventieth St., building for Little Sisters of the Poor, owners; L. J. O'Connor, architect; building 73' x 18', five-sty, cost \$20,000. — One Hundred and Fifty-sixth St. and Ames Ave., brewery, 73' x 76', five-sty, cost \$20,000; P. W. Ebling, owner; A. Pfund, architect. — 165 & 168 E. Eighth-sts., two first-class dwellings; D. W. Evans, owner; Wm. Picken, architect and builder; size, 25' x 53'; cost \$9,000 each. — 541 W. Forty-fifth St., tenement, 25' x 70', five-sty, cost \$9,000; S. F. Engle, owner; W. J. Morrell, architect; E. Dunnington, builder.

St. Louis.

BUILDING PERMITS.—Thirty-six permits have been issued since our last report. Twelve of these are for unimportant frame erections; the rest are for brick buildings, with finish of stone and occasional fronts of sandstone ashlar. Those worth \$2,500 and over are as follows:—

Table with 5 columns: Owners, Use, Stories, Rooms, Cost. Includes Theo. Sunder (Dwelling, 2, 7, \$2,500), Board (School-house, 4, 4, 7,370), F. O. Day (Dwelling, 3, 12, 11,000), O. E. Owen (Dwelling, 3, 16, 7,000), A. Roenicke (Dwelling, 2, 8, 2,800), F. T. Bryan (Store and Dwelling, 2, 20, 4,500), Mrs. M. A. Crunden (Dwelling, 3, 10, 6,500), E. Scholer (Store and Dwelling, 2, 5, 4,000), Mrs. E. Becker (Dwelling, 2, 7, 2,500), H. E. Higley (Dwelling, 3, 10, 3,200), F. W. Rockwell (Dwelling, 3, 10, 8,000).

STORE.—It is understood that negotiations are in progress for the erection of a large store on Olive Street for William Barr & Co., the leading retail dry goods firm in this city.

Philadelphia.

BUILDING PERMITS.—Geo. Elchin, two-sty dwell., 16' x 48', Trenton Ave. — Charles Rosert, 3 three-sty dwells.,

15 x 37, Lawrence St.—David McMahon, 2 two-sty dwell. 15 x 37, Haines St.—William Wulley, three-sty dwell. 15 x 37, Sixteenth St.—A. Wharton, two-sty stable. 15 x 22, cor. Eighteenth and Cayuga sts.—M. A. Lavelle, three-sty store and dwell. 18 x 7 1/2, cor. Frankford Road and Hill St.—John Kiehe, three-sty dwell. 16 6/8 x 46 1/2, Dauphin St.—E. C. Taylor, two-sty dwell. 26 1/2 x 32 1/2, Melrose St.—M. Molloy, 4 three-sty dwell., one 7 x 34, and three 15 x 31, cor. Lawrence and Jefferson sts.—W. D. Haines, three-sty store and dwell. 15 x 2 1/2, Clermont St.—C. Frost, one-sty slaughter-house. 54 x 2 1/2, Duhan St.—S. C. Bunting, 2 three-sty dwell. 15 x 30, Thirty-sixth St.—H. S. Urian, 2 two-sty dwell. 15 x 30, Woodland Ave.—H. S. Urian, 2 two-sty dwell. 15 x 30, Lloyd St.—Isaac Payne, three-sty dwell. 27 x 47, Woodland Ave.—Sisler & Grow, two-sty dwell. 15 x 28, Grape St., Manayunk.

Washington, D. C.

BUILDING PERMITS.—John Long, two-sty and back building, brick house, on Fourth St.; cost, \$2,300.—Wm. Kennedy, three-sty brick store and dwell., cor. Ninth and R sts.; cost, \$6,000.—Theresa Lochbocher, two-sty and back building, brick house, on K St.; cost, \$2,000.—Daniel Clark, two-sty brick house on New Jersey Ave.; cost, \$1,200.—Patrick J. Downing, two-sty brick dwell., on Fourth St.; cost, \$2,200.—R. H. Gillette, two-sty brick back building, cost, \$800.—J. M. Johnson, to inclose rear area for office, at 519 Seventh St.; cost, \$500.—Ann A. Rawlings, two-sty brick dwell., on Sixth St.; cost, \$3,300.—Charles Edmonson, one-sty brick store-room on North Capitol St.; cost, \$400.—Timothy Gannon, two-sty brick stable on Massachusetts Ave. and Seventeenth St.; cost, \$400.

THEATRE.—It is reported that the Thalian Club intends to build a theatre in the northwestern part of the city.

General Notes.

ALBANY, OREG.—Work on the Odd Fellows' Building is pushing ahead rapidly. The corner-stone will be laid in a week or so.

ACROEA, O.—The opera house is to be an actuality. The foundations are nearly laid.

BAY CITY, MICH.—The plans for a new city building have been accepted by the common council.—A new Universalist church, to replace the one burnt last spring, is about to be built.

BRISTOL, CONN.—The report is current that H. W. Gridley, Esq., intends to build a fine block this fall on the corner of Main Street and Pearl Road Square.

BUFFALO, N. Y.—The corner-stone of St. Anne's Roman Catholic Church was laid August 25.

CLIFTON, O.—Mr. Fry and Mr. Laws commence on their new building within a week or two, and Mr. N. E. Jordan is almost ready to break ground.

CONCORD, N. H.—The Merrimack County Legislative Delegation has voted an appropriation of \$8,000 to rebuild the county farm buildings burned last year.

EVANSVILLE, IND.—The Evans Masonic Hall, which has been talked about so long, will be begun at once.

FARIBAULT, MINN.—The main building of the Institut on for the Education of Deaf Mutes is nearly completed, the wings having been built first. It is 236 feet long, and three stories above the basement, costing, wings and all, about \$200,000.—Besides the new buildings replacing those burnt in July, numerous others are rising, showing steady progress in Faribault.—The French Catholics are finishing off a church.

FOXBORO, MASS.—Remodelling of Baptist church. Drake & Bourne, contractors. Mr. T. W. Silway, of Boston, architect.

GEORGETOWN, D. C.—Mr. W. W. McCullough has been awarded the contract for the lumber for the new stables of the Washington and Georgetown Street Railroad Company. Upwards of three quarters of a million feet of lumber will be required.

GREELEY, COL.—Mr. T. W. Silway, of Boston, is the architect of a church; cost, \$5,000.

GREENVILLE, MASS.—A \$2,500 school-house is to be built to supply the demand for more room.

JANESVILLE, WIS.—Few cities in the state are showing so much activity in building.

LAFAYETTE, MICH.—It is proposed to build a town-hall and engine-house at a cost not exceeding \$2,500.

LONG BRANCH, N. J.—The cost of the iron pier, which is to be built, will be about \$150,000.

Lynn, MASS.—Three thousand dollars in excess of the \$15,000 appropriation will be needed to finish the new engine-house.

LYNCHBURG, VA.—On October 5th, the corner-stone of the First Baptist Church will be laid.

MADISON, IND.—The contract for building the new colored Bryant M. E. Church on Poplar Street has been let.

MARSHALL, MINN.—The Congregational Society has begun to build a new church edifice.

NEWTON CENTRE, MASS.—A new depot is to be built.

NICHOLASVILLE, KY.—Mr. Thomas Boyd, of Pittsburgh, Penn., is the architect of the court-house, which is to cost about \$54,000.

PAWTUCKET, R. I.—It is expected that St. Joseph's Church, on Walecot Street, will be completed about the middle of September.

PITTSBURGH, PENN.—Bishop Tuigg has just purchased a site on the corner of Thirty-second Street and Liberty Avenue for another Catholic church. The lot is 174 by 120 feet, and the building will be commenced at once.

PORTLAND, OREG.—The corner-stone of the new Catholic Church was laid August 15.

PUGALEP, CAL.—A Baptist Church is to be built here.

RAPA CITY, CAL.—A court house is building here.

SALISBURY, MD.—The new court-house is nearing completion.

SANDWICH, ILL.—A new town hall is now building.

SAULT STE. MARIE, MICH.—Building in the Sault is very active this summer. The ground for a new union school has been broken. It will cost \$10,000 when completed. There are over twenty-five new dwelling-houses in the course of erection here this season.

SOUTH CHESTER, PENN.—The school directors are about to apply to the court for authority to borrow \$4,000 for the purpose of building a school-house.

THOMASTON, CONN.—Winsted parties have the contract for rebuilding Morse Block and are getting out timber.—Asron Thomas will put up a large brick building with depth of sixty feet, on the site of the wooden building which was pulled down to prevent further spread of the flames in the late fire.

URBANA, O.—The corner-stone of Grace M. E. Church was laid Thursday afternoon, August 22.

VAN WERT, O.—Work on the Methodist church, which has been delayed for several months for want of funds, has been resumed.

URBANA, O.—On August 22d the corner-stone of Grace Church, now building for the Second Methodist Society, was laid.

WARWICK, R. I.—Mr. W. S. Aldrich, of Phenix, is the architect of the house now building for W. M. Spink, Esq.

tonia Sentinel: The M. E. society are building a handsome church, 30 by 50 feet, one and a half miles south of Olessa Center. It is thought it will be ready for dedication about the last of September.

WALLINGFORD, CONN.—The Wallingford Community will soon build additional buildings for the manufacture of spoons. A pile driver is now busy at work making a secure foundation for the heavy drop presses. WESTFELY, R. I.—Messrs. Pierce & McDonald have commenced to lay up the brick work of S. A. Champin's new building on Main Street. WILBER, NEB.—A court-house and jail for Salina County are to be built.

INDEX OF CURRENT WORK,

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

Baltimore, Md.

CHURCH.—The Cummings Memorial Church. Mr. Cassell, architect.

CHURCH.—The Pius IX. Memorial Church. G. A. Frederick, architect. Cost \$100,000.

CHURCH.—Church of St. Michael and All Angels. Cost \$80,000. Wyatt & Sperry, architects.

HOSPITAL.—Johns Hopkins Hospital. J. B. Niernsée, consulting architect.

BANK BUILDING.—Tremont Bank Building. Carl Fehmer, architect.

HOTEL.—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.

THE MUSEUM OF FINE ARTS.—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.

SCHOOL-HOUSE.—High and Latin School. G. A. Clough, architect.

ASYLUM.—Asylum for Aged People, C. J. Bateman, architect. Cost \$50,000.

Brooklyn, N. Y.

TENEMENT.—A. T. White, owner. William Field & Son, architects.

SOCIETY BUILDING.—The Long Island Historical Society Building, Mr. G. B. Post, architect. Cost \$100,000.

CHURCH.—St. Francis Xavier R. C. Church, West Fifteenth Street. Cost \$150,000. P. Keely, architect.

HOSPITAL.—St. John's Hospital, N. L. Derby, New York, architect.

Chicago, Ill.

ARMORY.—Armory for the First Regiment. Messrs. Wheelock & Clay, architects. Cost \$25,000.

STORE.—The Singer Building. Cost \$250,000.

Cincinnati, O.

U. S. CUSTOM HOUSE AND POST OFFICE.—S. Hannaford, local superintendent.

CHILDREN'S HOME.—J. W. McLaughlin, architect. Cost \$50,000.

NEWSPAPER OFFICE.—The Gazette Building. E. Anderson, architect.

CHURCH.—Church of St. Francis de Sales.

CLUB-HOUSE.—Allemania Club-House. J. W. McLaughlin, architect. Cost \$90,000.

UNIVERSITY BUILDING.—Cincinnati University Building. S. Hannaford, architect. Cost \$50,000.

Cleveland, O.

BUSINESS BLOCK.—Amasa Stone, owner. J. Ireland, architect. Cost \$70,000.

CHURCH.—Second Presbyterian. J. Ireland, architect. Cost \$70,000.

CONVENT.—Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

Hartford, Conn.

SEMINARY.—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.

CATHEDRAL.—R. C. Cathedral of St. Joseph. P. Keely, architect.

CATHOLIC SCHOOL.—Brown & Stillson, architects, New Haven. Cost about \$25,000.

Jersey City.

CONVENT.—Convent of the Sisters of St. Dominick. Cost \$40,000.

New York.

THE "FLORENCE."—Emile Grévy, architect. Mrs. Matthews, owner. Cost \$500,000.

THE BOULEVARD BUILDING.—S. D. Hatch, architect. Cost \$250,000.

COLLEGE.—Addition to Columbia College. C. C. Haight, architect. Cost \$200,000.

OFFICE BUILDING.—Messrs. Stillman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.

APARTMENT HOUSE.—Mr. H. J. Hardenburgh, architect. Cost \$300,000.

PRIVATE RESIDENCE.—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.

ARMORY for the Seventh Regiment.—Cost \$300,000. C. W. Clinton, architect.

HOSPITAL.—Presbyterian Hospital. Wilson Bros., arch'ts.

OFFICE BUILDING.—Girard trust.

Providence, R. I.

DORMITORY for Brown University.—Messrs. Stone & Carpenter, architects.

CITY HALL.—Mr. S. J. F. Thayer, Boston, architect.

HIGH SCHOOL BUILDING.—Messrs. Walker & Gould, architects.

St. John, N. B.

POST OFFICE, Custom House, and Savings Bank.—Mr. Scott, Chief Architect to the Dominion Government.

BANK.—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.

CHURCH.—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.

CITY HALL.—Messrs. McKean & Fal weather, architects.

CHURCH.—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.

CHURCHES.—St. James's Church, Croft & Camp, architects, St. John N. B.—St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$90,000.

St. Louis.

CHURCH.—Second Baptist Church. Edward Hilsley, contractor. Cost \$100,000.

COURT HOUSE for the new county of St. Louis.—F. Renwick, architect. Cost \$28,000.

COLLEGE.—College for the Christian Brothers. Mr. Jas. McGrath, architect. Cost \$200,000.

CUSTOM HOUSE AND POST OFFICE.—Mr. Jas. G. Hill, Supervising Architect of the Treasury Department.

UNIVERSITY BUILDING.—The Female Department of Washington University. Rev. W. G. Elliot, Chancellor. Cost \$90,000.

General.

CAMBRIDGE, ILL.—Court House for Henderson County. Cost \$65,000.

CAMBRIDGE, MASS.—Gymnasium for Harvard College. Messrs. Peabody & Stearns, architects.

CONCORD, N. H.—State Prison. Messrs. Dow & Wheeler, architects. Appropriation, \$200,000.

CROWN POINT, IND.—Court-House. J. C. Cochrane, architect, Chicago. Cost \$45,000.

DURHAM, IOWA.—St. John's Church, H. M. Congdon, architect, New York, \$40,000.

ELMIRA, N. Y.—Masonic Hall. N. LeBrun, architect, New York. Cost \$60,000.

FARIBAULT, MINN.—Deaf, Dumb, and Blind Asylum. J. Babcock & Co, contractors. Cost \$53,730.

INDEPENDENCE, IOWA.—Hospital for the Insane. G. Jossey, supervising architect. Cost \$850,000.

JACKSONVILLE, FLA.—Store. W. Astor, New York, owner, Geo. Hoover, architect. Cost \$75,000.

JOLIET, ILL.—St. Mary's (Roman Catholic) Church. Mr. Kelly, architect, Brooklyn.

KANKAKEE, ILL.—Insane Asylum. J. B. Willett, architect, Chicago, Ill.

LOWELL, MASS.—Appleton Bank. O. A. Merrill, architect. Cost \$70,000.

NORRISTOWN, PENN.—Insane Asylum. Wilson Bros. & Co., architects, Philadelphia.

OAKLAND, CAL.—First Congregational Church. Mr. L. B. Valk, New York, architect. Cost \$60,000.

OTTAWA, ILL.—Holy Trinity (R. C.) Church. H. C. Furdoss, architect. Cost \$150,000.

ATHOLY, COSTA RICA.—Mr. H. C. Furness, architect.

PORTLAND, CONN.—Trinity Church, H. M. Congdon, architect, New York, \$50,000.

POUGHKEEPSIE, N. Y.—Hudson River Hospital for the Insane. Mr. F. C. Withers, architect.

SAN FRANCISCO, CAL.—College of the Jesuit Fathers. Cost \$500,000.

SPRINGFIELD, ILL.—Jail. G. H. Helmie, architect. Cost \$65,000.

TOPEKA, KAN.—Insane Asylum. Cost \$75,000. Mr. E. T. Catt, architect, Leavenworth, Kan.

WABASH, IND.—Court House. B. V. Enos & Son, architects. Cost \$100,000.

WAUKESHA, ILL.—Court House. H. C. Koch, architect. Cost \$40,000.

ZANESVILLE, O.—Hotel. H. E. Myers, architect. Black & Graham, owners. Cost \$75,000.

Publishers' Department.

The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE. An Illustrated Journal of Constructive and Decorative Art devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year, \$6.00 in advance.

CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,

WITH Houghton, Osgood & Co.'s other Periodicals.

Table with 2 columns: Publication Name and Price. Includes THE ARCHITECT and ATLANTIC MONTHLY, THE ARCHITECT and THE REPORTER, THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL, THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE, etc.

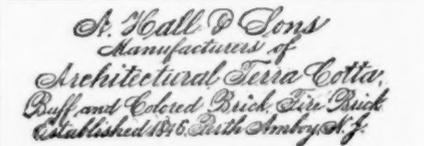
RATES OF ADVERTISING.

PAGES NEXT TO READING MATTER, single insertion, 12 1/2 cts. per line. One inch (14 lines) one insertion, \$1.75. One inch, six insertions, 10.00. INSIDE PAGES, single insertion, 30 cts. per line. One inch, single insertion, \$1.40. One inch, six insertions, 7.00. For larger space, and for a series of more than six insertions, reduced rates, made known on application to the Publishers.

Special rates for first and last pages. No extra charge for cuts, or for advertisements that occupy more than a column in width.

Payments should be made directly to the Publishers, either by draft or by post office order.

HOUGHTON, OSGOOD & CO., Publishers, WINTHROP SQUARE, BOSTON.



ARCHITECTURAL IRON WORKS. YOUNGLOVE & CO., Propr's. CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CRISTING, ETC. Estimates promptly furnished.

TO ARCHITECTS AND BUILDERS.

MORTAR BLACK,

Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar. For sale only by Wholesale Color and Chemical Works, HENRY D. DUPEE, Proprietor, 79 KILBY STREET, BOSTON.

GAS FIXTURES OF EVERY DESCRIPTION. SPECIAL RATES TO BUILDERS. R. HOLLINGS & CO 37 Washington St. BOSTON.

(Established 1848.)  
**MARKET ST. ARCHITECTURAL FOUNDRY**  
 AND  
**IRON WORKS.**  
**SNEAD & CO..**  
 LOUISVILLE, KY.  
 Makers of every description of Iron Work for Buildings.

**CHURCHES.**

In our issue for September 14 will be printed a special list giving accurate information concerning the churches and chapels now building, or about to be built, in this country and Canada.

Architects, builders, and other informed persons, who have not as yet sent us the information in their possession, are invited to do so without further delay.

**ATLANTIC PORTRAITS.**

**Henry Wadsworth Longfellow.** It is one of the most admirable likenesses I have ever seen, and I can scarcely imagine a better representation of the poet and the man. — BAYARD TAYLOR.

**John Greenleaf Whittier.** It is very fine; it is the ideal Whittier. — J. T. TROWBRIDGE.

The above portraits are life-size, and the dimensions of each picture are 24 x 30. Subscribers to the ATLANTIC MONTHLY can obtain either portrait, with the magazine for a year, by remitting \$5.00 to the publishers; for \$6.00 the magazine and two portraits, and for \$7.00 the magazine and all three portraits will be sent. The subscription price of the ATLANTIC alone is \$4.00.

The portraits are sent by mail, carefully rolled, so as to avoid all danger of injury, and will be forwarded to any address on receipt of the price and subscription by the Publishers; they can be obtained through newsdealers and booksellers generally.

**HOUGHTON, OSGOOD AND COMPANY,**  
 BOSTON, MASS.

**PROPOSALS.**

**PUMPS.**

COVINGTON, KY.  
 Sealed proposals will be received to September 6th, at the Water-Works Office, for furnishing and erecting not less than four nor more than eight pumps, having the capacity of pumping 3,500,000 gallons of water in twenty-four hours, making twelve revolutions per minute. All information desired can be obtained from the engineer at the pumping-house, corner of Second and Main streets, Covington, Ky.  
 140

**SCHOOL-HOUSES.**

CINCINNATI, O.  
 Sealed proposals will be received at the office of the Board of Education, Public Library Building, until Monday, September 16, 1878, at 12 M., for the material and labor required for each separate and distinct trade or kind of mechanical labor necessary for building two (2) new school-houses, one on Eighth Street, between John and Mound streets, and one on Browne Street, west of Baymiller Street, according to plans and specifications on file in the office of the Superintendent of School Buildings, No. 309 West Fifth Street.

Bids must be on blank forms, to be obtained at either of the above offices.

No bid will be received for the whole work or for any greater portion than is embraced in one trade or kind of mechanical labor.

Each bid must contain the name of every person interested therein, and must be accompanied by a sufficient guarantee by some disinterested person in a penalty equal to the amount of the bid, that if the bid is accepted a contract will be entered into and the performance of it properly secured. Each bid must be indorsed with the kind of work bid upon, and addressed to Isaac Adler, Chairman of Building Committee.

The right is reserved to reject any and all bids.

By order of the Board of Education. ISAAC ADLER,  
 Chairman of Committee on Buildings.

141

**BEACONS AND DWELLINGS.**

SIXTH DISTRICT,  
 CHARLESTON, S. C., August, 1878. }  
 Sealed proposals will be received at this office until 10 A. M., September 21, 1878, for the construction and erection, at the site, Port Royal Harbor, South Carolina, of the Hilton Head Range Beacons and Dwellings.

The structures comprise two wooden-frame dwellings and one iron-frame tower, eighty-seven feet high.

Proposals may be for the whole work, or for portions thereof, separated as follows:

1. For the wooden-frame structure erected at the site.
2. For the iron tower erected at the site.
3. For the iron tower delivered on board sea-going vessel or vessels, after inspection and while completely erected at the workshops.
4. For transportation and complete erection of the iron tower at the site.
5. For the building of the concrete foundation of the iron tower.

Proposals must be made out on blanks furnished from this office.

The contract is to be entered into within ten (10) days after the notification of the award of the contract.

The usual conditions will be observed.

The right to reject any or all bids, or to waive defects, if it be deemed for the interests of the Government to do so, is reserved.

A copy of this advertisement should accompany each bid.

Plans and specifications can be seen at this office, or obtained upon application.

Proposals must be enclosed in a sealed envelope and indorsed "Proposals for Hilton Head Range Beacons," and then enclosed in another envelope addressed to

W. A. JONES,  
 Capt. Corps of Engineers, U. S. A.,  
 Engineer 6th L. H. District,  
 No. 45 Broad Street,  
 Charleston, S. C.

142

**PROPOSALS.**

**LOCKS AND KEYS.**

POST OFFICE DEPARTMENT,  
 WASHINGTON, D. C., August 15, 1878. }  
 Separate sealed proposals will be received at this Department until 12 o'clock noon on the 20th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as are to be used for the street letter-boxes of the United States.

As the public exposure and searching examination necessary to intelligent bidding on any prescribed model of a lock and key would tend to impair, if not entirely destroy, the further utility of all such locks and keys for the purposes of the mails, the Postmaster-General prescribes no models or samples for bidders, but relies for a selection on the mechanical ingenuity and skill which a fair competition among inventors, hereby invited, may develop in samples submitted by them.

Specifications of requirements as to proposals, samples, kinds and quantities of locks and keys, contracts, etc., will be furnished on application by letter to the Second Assistant Postmaster-General.

No proposal will be considered which is not submitted in accordance with such specifications and forms of proposal. The contracts which may be made are to be in conformity with the specifications and accepted proposals.

170 D. M. KEY, Postmaster-General.

**PIER.**

U. S. ENGINEER OFFICE, }  
 OSWEGO, N. Y., August 6th, 1878. }  
 Sealed proposals for the extension of the East Pier, Ashtabula Harbor, Ohio, will be received at the U. S. Engineer Office, Cleveland, Ohio, until 11 o'clock, A. M., Tuesday, September 17th, 1878.

Specifications and blank forms for proposals, which must be made in duplicate, may be had on application to this or to the Cleveland office.

141 WALTER MCFARLAND, Major of Eng'rs.

**BREAKWATER.**

U. S. ENGINEER OFFICE, }  
 OSWEGO, N. Y., August 6th, 1878. }  
 Sealed proposals for the extension of the Cleveland Breakwater will be received at the U. S. Engineer Office, Cleveland, Ohio, until 11 o'clock, A. M., Tuesday, September 17th, 1878.

Specifications and blank forms of proposals, which must be made in duplicate, may be had on application to this or to the Cleveland office.

141 WALTER MCFARLAND, Major of Eng'rs.

**DIKE.**

EVANSVILLE, IND.,  
 U. S. ENGINEER OFFICE,  
 82 WEST THIRD STREET,  
 CINCINNATI, OHIO, August 6, 1878. }  
 Sealed proposals, in duplicate, will be received at this office until noon on Friday, the 13th day of September, 1878, for extending and repairing the dike in the Ohio River, opposite the city of Evansville, Ind. Work to be completed by December 31, 1878.

Approximate estimate of materials: 5,000 cubic yards of rip-rap stone, 5,000 cords of brush, 24' piles.

Specifications and printed forms of proposals will be furnished on application. WM. E. MERRILL,  
 Major of Engineers.

141

**RETAINING WALLS.**

AVONDALE, O.  
 Sealed proposals will be received at my Law Office, No. 6 East Third street, or at the Office of the Corporation Clerk of the Incorporated Village of Avondale, up to 12 o'clock M. of Thursday, September 6, 1878, for building retaining walls and making additions to culvert under Gholsen avenue, in said village, requiring about 225 perches mortar masonry and about 200 yards of excavation.

Bidders will state the price per perch for masonry, also price per yard for excavation.

The work to be completed according to the plan and specifications of the Village Engineer, within thirty days from the time of the award of the contract.

Payment in full will be made when the work is approved by the Committee of Improvements, and a certificate of the Engineer is produced that the work has been completed according to the specifications on file with the Clerk.

By order of the Village Council. FLAMEN BALL, Jr.,  
 Corporation Clerk of Avondale.

140

**DAM.**

SAVANNAH RIVER, GA.  
 Sealed proposals for the construction of a Submerged Dam in the Savannah River, at the Cross Tides, will be received at the United States Engineer Office, Army Building, New York, until noon of September 5, 1878, and opened immediately thereafter. Blank forms, specifications, and all necessary information can be had on application at said office, or until August 26, to Capt. James C. Post, Corps of Engineers, Savannah, Ga. Q. A. GILLMORE,  
 Lieut.-Colonel of Engineers.

140

**COMPETITION.**

**DESIGNS FOR ENCLOSURE OF ARMY AND NAVY MONUMENT.**

CITY OF BOSTON, }  
 CITY HALL, July 16, 1878. }  
 The Joint Standing Committee on Common and Public Grounds hereby offer a premium of Fifty Dollars for the best design for a Bronze Fence, to be erected around the Army and Navy Monument on Boston Common.

The total cost of the fence, including cost of foundation and erection, not to exceed the sum of Two Thousand Dollars.

Each design to be marked with some motto or device, which is to be repeated on the outside of a sealed envelope containing the author's name.

The design which is accepted will become the property of the City of Boston; all others will be at the disposal of their respective authors. The Committee reserve the right to reject any or all designs received.

All designs to be sent to the office of the Clerk of Committee, City Hall, on or before the 14th day of September, 1878, at 1 o'clock P. M.

For the Committee. CURTIS GUILD, Chairman.

141

**PROPOSALS.**

**COURT HOUSE AND JAIL.**

SPRINGFIELD, O.  
 Sealed proposals will be received at the Auditor's Office, in the City of Springfield, Clark County, Ohio, until 2 o'clock P. M. on Thursday, the 12th day of September, A. D. 1878, for furnishing all materials and labor, or any part thereof, required in the erection, construction, and completion of a new Court House, and a new Jail and Sheriff's Residence (separate buildings), in the City of Springfield, for the County of Clark, State of Ohio, according to plans and specifications for the same as furnished by T. J. Toian & Son, architects, of Port Wayne, Ind. Plans, specifications, and bills of quantities can be seen at the Auditor's Office. Said buildings will be required to be fully finished and completed at dates following: the Sheriff's Residence and Jail, on or before the 1st day of August, A. D. 1879. The Court House, on or before the 1st day of December, 1879. All proposals must be accompanied with a bond in the sum of the amount of contract, certified to by the Clerk of the Court, or Auditor of the County where bidders reside; that the same is good and sufficient for the amount; that the bidder or bidders will give a good and satisfactory bond, if awarded the contract for said buildings or any part of the same, — and no bid or bids will be considered unless such bond accompanies it. Blank forms for bids will be furnished by the Auditor, and all bids must be made thereon. Estimates to be made monthly as the work progresses. The Board of County Commissioners for said county reserve the right to reject any or all bids. By order of the County Commissioners,  
 QUINCY A. PETTS,  
 Auditor of Clark County, Ohio.

141

**MILITARY OFFICES.**

OFFICE OF THE BOARD OF STATE BUILDING COMMISSIONERS,  
 LANSING, MICH., August 6, 1878 }  
 Proposals will be received at the above office until 12 o'clock M., on Thursday, September 12, 1878, for fitting up the military rooms in the new capitol in accordance with drawings and specifications adopted therefor.

The drawings and specifications may be examined, and all necessary information obtained by application to the Secretary.

All proposals must be sealed, indorsed "Proposals for fitting up Military Apartments," and addressed to A. L. Bours, Secretary of the Board, Lansing, Mich.

The proposals will be opened at the office of the Board at 8 o'clock P. M. of the above-named day.

The Board reserve the right to reject any or all proposals submitted.

E. O. GROSVENOR,  
 JAMES SHEARER,  
 ALEX. CHAPOTON,  
 State Building Commissioners.  
 ALLEN L. BOURS, Secretary. 141

**Drawings for the American Architect and Building News.**

Architects and architectural draughtsmen who desire to contribute drawings for publication will find the following facts of use:—

Only pen-and-ink drawings, without brush-work of any kind, can be reproduced.

The space upon a single page allowed for a drawing is 7" x 11"; therefore drawings should have approximately these proportions.

The reproductions are most satisfactory when they are from one-third to one-half as large as the originals.

The most satisfactory results are obtained from drawings upon Bristol board, or hot-pressed Whatman.

Tinted paper should not be used.

Tracing cloth upon the dull side, bank-note paper, or tracing paper, provided it is not of a yellowish tinge, may be used in cases of absolute necessity.

The ink should be black and of uniform strength.

The lines should be firm, sharp, not too coarse, and not unintentionally broken.

Shading and hatching lines must not be too close and crowded, especially where a large surface is to be shaded.

It is very desirable that plans should accompany the drawings.

Drawings of details both constructional and ornamental are also desirable.

**The Useful**

is issued monthly—consists of Perspectives of Interiors, Ornaments of Buildings, Fresco Painting, Furniture, etc., and is accompanied with full-size working-drawings—for direct use—  
 Price to Subscriber  
 One dollar per number.

Office 28 Pemberton Square.

Boston, Mass.

**BOUND VOLUMES**

**OF THE AMERICAN ARCHITECT.**

We are prepared to fill orders for binding the American Architect and Building News in styles similar to the volume for 1876, at the following rates:—

- Price of cover without binding.....\$1.00
- Cover and binding (for subscribers)..... 2.00
- Numbers of 1876 or 1877 without cover or binding 7.50
- Bound volumes of 1876 or 1877..... 9.00

In sending volumes to be bound it should be stated whether the illustrations are to be bound with their respective numbers, or whether all illustrations are to be placed together at the end of volume.

N. B.— Volumes bound in both styles are kept in stock.

The above will be sent, post paid. Subscribers sending their numbers to be bound will prepay postage or express charges.

HOUGHTON, OSGOOD & CO., PUBLISHERS,  
 Winthrop Square, Boston.

MARSHALL'S AMERICAN



LEADED SHEETS. Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Represented in New England States by C. T. HOLBROOK, No. 69 UNION STREET, BOSTON.

TO ARCHITECTS.

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the Scagliola & Marezzo Marble, Which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall and Altar Work JAS. T. ALLEN & CO., 25 North 17th Street, Philadelphia.



METALLIC SHINGLES.

We call the attention of all parties interested in Roofing, and the owners of large buildings, to the above article. It is superior to Slate, Cheaper, Fire-proof, about one fourth the weight, lays much closer, therefore is Storm-proof, cannot Crack, etc. Any carpenter can put them on. Send for description and Price List to IRON CLAD MANUFACTURING CO., 59 Greenpoint Ave., Brooklyn, E. D. P. O. Box 2528, N. Y. City



AKRON OHIO DRAIN PIPE. D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

BUILDING MARBLE.

Branch yard of the RUTLAND MARBLE CO., 198 Causeway Street, Boston. JOHN D. ALLAN, Agent. Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Rutland and Continental Marble, furnished at low prices.



The Draft of the Chimney increased. Smoking Chimneys Prevented. Particularly adapted to Chimneys in exposed positions. Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application. JOS. W. TAYLOR, 70 Grand St., Brooklyn, N. Y.

PATENT MINERAL WOOL.

ENTIRELY FIRE-PROOF AND UNDECAYING. THE BEST INSULATOR OF HEAT, COLD, AND SOUND. For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc. ALEXANDER D. ELBERS, P. O. Box 4461, 26 1/2 Broadway, New York

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free HENRY McSHANE & CO., Baltimore, Md.

THE ROCHESTER, N. Y. FREAR-STONE COMPANY,

ESTABLISHED IN 1870. Continues to manufacture a superior quality of Sandstone, equal in all respects to the best cut stone, at about one half the price. It is adapted to all work where sandstone is admissible. The Safe Deposit Co.'s Building, San Francisco, estimated value, \$2,000,000, and hundreds of first-class buildings all over the country, are referred to Frost and fire proof. Circulars sent on application. P. H. CURTIS, Sec. AND TREAS.

OUR ADVERTISERS and others who are in the habit of using business circulars, will find in our columns of "Building Intelligence" a continually new directory of names and addresses of those persons who, being at present actively engaged in building, are the ones who are most desirous of receiving circulars setting forth the advantages and qualities of all classes of building appliances. An hour spent in mailing circulars to the persons mentioned above cannot fail of being profitable to the business man.

Advertisement for THE HELIOTYPE PRINTING COMPANY, 220 Devonshire St. Boston. Features include Helio-type photographs in Printers Ink, Helio-type lithographs printed by Steam, Helio-type cuts to print with Type, and Helio-type facsimile letters, show cards, etc.

THE "AIR SPACE" BOILER COVERINGS

Save 10 to 20 per cent in fuel.

STEAM PIPE and

THE CHALMERS-SPENCE COMPANY.

See Am. Architect and Building News, Dec. 15, 1877.

140 Congress Street, Boston. Foot 9th St., E. R., New York.

CLASSIFIED ADVERTISEMENTS.

Table listing various categories of advertisements such as ARCHITECTS, BUILDING MARBLE, and IRON WORK FOR BUILDINGS, with corresponding page numbers.

Table listing various categories of advertisements such as ARCHITECTS, BUILDING MARBLE, and IRON WORK FOR BUILDINGS, with corresponding page numbers.

Table listing various categories of advertisements such as ARCHITECTS, BUILDING MARBLE, and IRON WORK FOR BUILDINGS, with corresponding page numbers.

Table listing various categories of advertisements such as ARCHITECTS, BUILDING MARBLE, and IRON WORK FOR BUILDINGS, with corresponding page numbers.

**ETNA IRON CO.**

Manufacturers of every description of Wrought and Cast

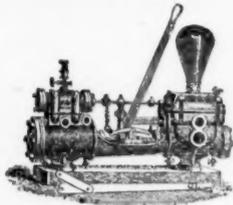
**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**

Patent



Steam

**PUMP THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.  
Noiseless Pumps for Water Elevators.

ALSO,  
Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.  
The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE  
**KNOWLES STEAM PUMP WORKS.**  
WARREN, MASS.

WAREHOUSES, { 11 & 16 Federal St., Boston.  
113 & 115 Congress St., Boston.  
92 & 94 Liberty St., New York.

Send for Illustrated Catalogue.

**THE**

**Plumber & Sanitary Engineer,**

A Monthly Journal devoted to

**WATER SUPPLY,  
DRAINAGE,  
HEATING & LIGHTING.**

It contains no paid puff  
Its technical articles are written by experts.  
It is a manual of the best practice in Plumbing.  
It illustrates the latest improvements in House Drainage.  
It is indispensable to every Architect and Builder.

Terms, \$1.50 a year. Single Copies, 15 cents.

Address

**AM. PLUMBER PUBLISHING CO.**

Box 387 P. O. 297 Pearl St., New York.

**"ZODTCHY" (BUILDER).**

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

**M. JEROME KÜTTNER,**

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from EIGHT to SIXTEEN pages of letterpress, gr. quarto, with cuts, and at least FIVE auto graphic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

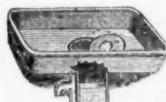
SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.  
The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address.

**JOURNAL "ZODTCHY,"**

18 OFFICER STREET, ST. PETERSBURG, RUSSIA.



**Carson's Kitchen Sink**  
is an improvement in this fixture that must meet with the approval of every house keeper as it retains every particle of grease, and prevents the waste pipes from filling up; besides being better trapped than any other sink in use.

PAT'D JAN. 24 1877.

Signal Mfg. Co., Medina, N. Y., or J. M. Carson, Louisville, Ky. Man'rs.

**NATIONAL**

**FINE ART FOUNDRY,**

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze TO ARCHITECTS AND BUILDERS.

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

**GEO. DWIGHT, JR., & CO.,**

Builders in Iron, and Engineers in Fire-Proof Construction,

SPRINGFIELD, MASS.

HAVE for many years given their exclusive attention to FIRE-PROOF CONSTRUCTION, and they now invite the correspondence of Architects to the following specialties which hereafter will constitute the leading items of their business:

**FIRE-PROOF FLOORS.** The only floors that have stood fire in this country.

**FIRE-PROOF ROOFS.** Refer to Equitable Life Insurance Company's Building at Boston.

**FIRE-PROOF SHUTTERS.** Have stood many fires in all parts of the country. Over 6000 pairs put up in Boston after the fire. Saved the city of Springfield last year.

**FIRE-PROOF LATH.** In the words of one of the best-known architects of this country, "Minimum of metal, maximum of stiffness, maximum of clinch; the best lath ever made, either wood or iron." See New York Post-Office; State Department, Washington. Equitable Life Insurance Company's Buildings, and many others.

Mr. HOTT will be pleased to wait upon Architects, when desired, to explain our methods, and to present for inspection construction plans and estimates for any specific work.

**BURDITT & WILLIAMS,**

DEALERS IN

**FINE HARDWARE**

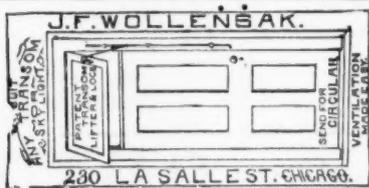
of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE

of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



**CATALOGUE OF**

**Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO.,

ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.



**BICKELHOUP BROS.,**  
829 West 37th St., New York.

No Leak.



No Putty.

**PATENT METALLIC SKY-LIGHTS.**

BEEHIVE BRAND.

**FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**UNPARALLELED DISCOVERY.**

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the *Paint Preserver* invented by ASAHEL WHEELER, Boston. It will neither crack, blister, nor scale.



**BALTIMORE PRESSED TILES,**  
FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases,

DRAIN AND SEWER PIPE, FIRE-BRICK, LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

WALDO BROTHERS,

No. 94 WATER STREET, BOSTON.

**PEERLESS BRICKS.**

THE PEERLESS BRICK COMPANY,  
OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK

ARCHITECTURAL SHAPES (80 kinds).

ALSO

RED Pressed Fronts.

Extra fine in color and quality

**BROWN,** Colored throughout

More beautiful than Brown Stone DURABLE

**CHOCOLATE,**

Same as above; difference in color

**FLESH COLOR,**

A very popular color.

**BUFF,** very fine.

Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F. ADAMS, JOSEPH WOOD, JR.,

PRESIDENT.

TRAMURER



**DOLIVET, CUTTER, & CO.,**

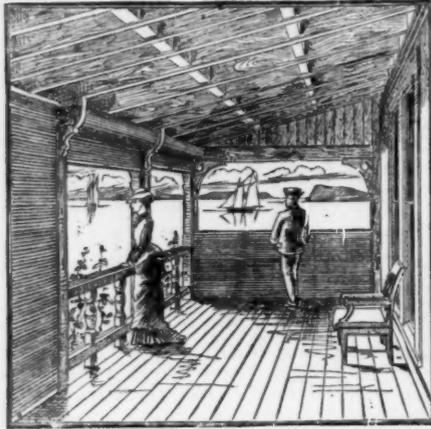
ARTISTIC

**Papier Maché Decorations,**

106 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details finished on application. Work shipped to any distance





**ROLLING VENETIAN BLINDS.**  
**WILSON'S PATENT.**  
 These blinds can be fitted to any kind of Window or Piazza. They require no winding machinery or balance weights, and run up and down as easily as an ordinary spring shade. For Bay Windows they are found invaluable.  
 They are simple, durable, and handsomely finished.  
 They were exhibited at Philadelphia in competition with the Rolling Venetian Shutters of English manufacture, and received the only award of Medal and Diploma.  
 Price reduced to 50 cents per foot super, in hard wood.  
 We also manufacture Wilson's patent Rolling **STEEL SHUTTERS**, the best and cheapest fire and burglar-proof Shutters in the market.  
**WILSON & JAMES,**  
 68 Beekman St., NEW YORK.

**PRIZE MEDALLISTS.**  
 1862; 1865; 1867; 1872; 1873; AND ONLY AWARD AND MEDAL FOR SELF-COILING STEEL SHUTTERS AT CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**  
 ORIGINAL INVENTORS AND SOLE PATENTEES OF  
**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters  
 OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable & Co., and Park & Tilford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.  
 OFFICE AND MANUFACTORY.  
 162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**  
 76 READE STREET, NEW YORK,  
 WORKS, DARLINGTON, N. J.

*Lock and Hardware Manufacturers,*  
 DESIGNERS, FOUNDERS, AND WORKERS

**BRONZE AND BRASS.**

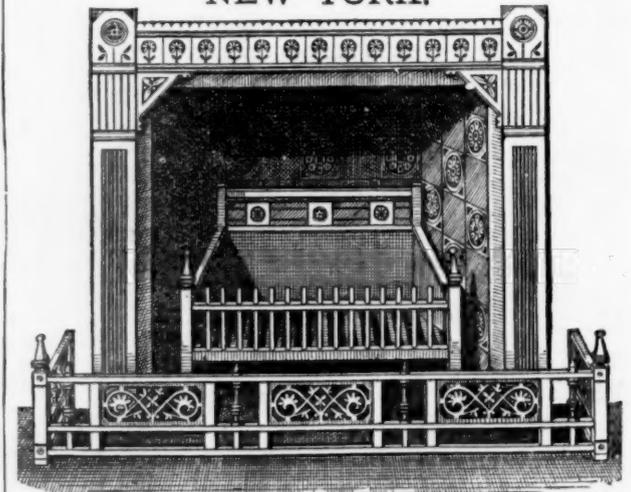
*Architects' Designs faithfully executed.*

Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side,) NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile.  
 HAVE NO OTHER WAREHOUSES.

**VALUABLE ART PUBLICATIONS.**

**ALLONGÉ'S** (Auguste) Charcoal Drawing. With an Introduction by C. C. PERKINS, and a Heliotype Frontispiece. Small 4to. \$1.00.  
**BAKER'S** (W. S.) Origin and Antiquity of Engraving, with 23 Heliotype Illustrations from Dürer, Van Dyck, Raphael, Guido, etc. 8vo. \$5.00.  
**HUNT'S** (William M.) Talks on Art. 8vo. Paper. \$1  
**CLEMENT'S** (Clara Erskine) A Handbook of Legendary and Mythological Art Profusely Illustrated, and with a complete Index. Cr. 8vo. Cloth, red edges, \$3.25.  
 Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.  
**MURRAY'S** (Mrs. Elizabeth) The Modern System of Painting in Water-Colors from the living model. 12mo, paper, 50 cents.

**HOUGHTON, OSGOOD AND COMPANY, Boston.**

**A NOVELTY.**

**THE YALE PATENT ANTI-FRICTION ROLLER STRIKE.**

Applicable for use with all Mortise Locks, old and new.

IT ENABLES THE DOOR TO BE SHUT WITHOUT SLAMMING.  
 IT PREVENTS ALL JAR AND NOISE.  
 IT SAVES WEAR OF THE LOCK AND DOOR.  
 IT CAN BE EASILY APPLIED.  
 ITS COST IS BUT TRIFLING.

Architects can obtain a sample strike free by addressing

**YALE LOCK MANUFACTURING CO., STAMFORD, CONN.**  
 New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,

94 BEEKMAN STREET,  
 NEW YORK.

**SPECIALTIES**  
 IN  
**PLUMBING**  
**GOODS.**  
 Having for their especial object  
*Cleanliness,*  
*Durability,*  
 And the exclusion of Sewer Gas.

**JENNINGS' NEW CLOSET,**  
 WITH  
 New Valve

With non-corrosive Valve Seating and Solid Plunger.



**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer Gas that has yet been invented.

**A POSITIVE SEAL**

Against sewer-gas, absorbed gases, and back water. Seal is not broken by siphonage or evaporation. Self-scouring, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers,

**B. P. BOWER & CO.,**  
 104 & 106 St. Clair St., Cleveland, O.

**THE EUREKA VENTILATION CO.**  
 OFFICE AND MANUFACTORY,  
 74 CHARLESTOWN STREET,  
 BOSTON, MASS.

**A. L. FAUCHÉRE & CO.**

OFFICE AND WAREHOUSES

1319 and 1321 Broadway, New York,

Importers, Manufacturers, and Dealers in all kinds of foreign and domestic

**MARBLE FOR INTERIOR WORK.**

Estimates furnished on application.

**ARCHITECTURAL IRON AND JAIL WORKS.**

**M. CLEMENTS,**

MANUFACTURER OF

Iron Railing, Bank Vaults, and Jail Cells, Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc.

**SAYMILLER STREET, near Sixth and C. H. & D. R. R. Depot, CINCINNATI, OHIO.**

**STEWART'S HARD WOOD SLATE, MARBLE AND MANTELS**  
 MIRRORS, ART-TILES, MANTELS, HEARTH'S &c.  
 Masonic Temple 23<sup>d</sup> St & 6<sup>th</sup> Ave. N.Y.



Sewer Pipe, Fire Brick, Terra Cotta, Chimney Tops, Garden Vases, Art Pottery for Decoration.  
 The strongest and smoothest pipe in the country. Send for list and Catalogue. Prices as low as any other manufacturer.



Portland Stone Ware Co.  
 GEO. C. DUNNE, Gen'l Ag't,  
 50 Kilby Street,  
 400 Federal Street, Boston.

**LIMMER ROCK ASPHALT CO.**

111 Broadway, Room 105, New York.

Rock Asphalt is a natural product, and the ideal material for Paving Roadways, Streets, Yards, and Stables, and for Flooring Cellars in Breweries and other establishments.

**Automatic Signal Telegraph Co.,**  
 CITY OF BOSTON,

OFFICE, 178 DEVONSHIRE STREET, ROOM 20.  
 Is prepared to make contracts for the protection of buildings against fire.

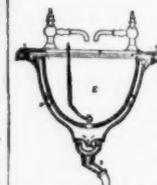
DIRECTORS.

CHARLES E. GUILD, President. WILLIAM ENDICOTT, JUN.  
 JOHN D. W. JOY. WILLIAM B. WATKINS.  
 PATRICK T. JACKSON, Treasurer.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

Theatrical Fresco only. Prices moderate. Refer ences first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.  
 LAFAYETTE W. SEAVEY.  
 Established 1865. NO. 8 LAFAYETTE PLACE, NEW YORK

**THE WELLINGTON PATENT OVERFLOW BASIN**



No sewer gas. No overflow. No leakage around the top of the basin. This thoroughly reliable basin is kept by taking the place of the ordinary one.  
 It gives perfect satisfaction in every instance.  
 Manufactured by

**L. S. MOORE & CO.,**  
 40 Oliver St., Boston

Send for Circulars.



**SAYLOR'S PORTLAND CEMENT.**

Indorsed and now being used by New York and Brooklyn Bridge, N. Y. Elevated R.R., U. S. Government Works (Fortis and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally.  
 For Sale by all dealers in Building Materials. **Johnson & Wilson, Gen'l Agts.**  
 Send for circular. 93 Liberty Street, New York

No. 10387  
CITY OF NEW YORK

# AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 141.]

SATURDAY, SEPTEMBER 7, 1878.

[PRICE 15 CENTS.

### BUILDERS' SUPPLIES.

**AMERICAN ENCAUSTIC TILE,**  
Acknowledged by experts to be  
THE BEST IN THE WORLD.  
Manufactured by the  
AMERICAN ENCAUSTIC TILING CO. (Limited.)  
OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.  
Designs and estimates for Public Buildings, Halls,  
Churches, Vestibules, and for External Decoration, fur-  
nished on application.

**WALWORTH MANUFACTURING CO.,**  
69 KILBY ST., BOSTON.  
PUBLIC BUILDINGS.  
PRIVATE RESIDENCES,  
GREENHOUSES, ETC.,  
Warmed and ventilated by  
STEAM OR HOT WATER.  
Correspondence solicited. Plans and estimates furnished  
on application.

**"HOTCHKISS" TOWER CLOCKS,**  
MANUFACTURED BY  
SETH THOMAS CLOCK CO., THOMASTON, CONN.  
Prices \$100 to \$6,000.  
WARRANTED ACCURATE, STRONG, DURABLE.  
OFFICE, 581 BROADWAY, NEW YORK.  
Send for Illustrated Catalogue.

**"MINTON'S ART AND ENAMELLED TILES."**  
(China Works, Stoke-Upon Trent.) Also, The Campbell  
Brick and Tile Co.'s  
ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS,  
ETC.  
For Churches, Banks, Halls, Vestibules, and Hearths;  
Outside Decorations, Flower Boxes, Etc.  
THOS. ASPINWALL & SON,  
604 BROADWAY, NEW YORK.  
The only representatives in the United States for the  
above firm.

**ASPHALT (FELT) ROOFING.**  
WARREN'S NEW PATENT  
FELT AND GRAVEL ROOFING,  
Substitutes NATIVE ASPHALT for Coal-Tar materials for  
these roofs.  
The very best and most durable material for flat roofs.  
Also, Native Asphalt and Asphaltic Cement for Concrete  
Walks and Pavements.  
Roofers and pavers supplied with the above, and with War-  
ren's original Coal Tar Roofing and Faving Materials.  
Send for circulars and samples.  
WARREN CHEMICAL AND MANUF'G CO.,  
26 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**THE MITCHELL GRANITE WORKS,**  
QUINCY, MASS.,  
Has abundant facilities for furnishing the very best work,  
and all the most celebrated Granites of the New England  
States, for  
MONUMENTAL, CEMETERY, AND BUILDING  
PURPOSES,  
WORK PROMPTLY DONE, AND AT REASONABLE RATES.  
Polishing a specialty. Orders solicited.  
Address G. H. MITCHELL, Agent.

**TILES FROM ALL PARTS OF THE  
WORLD,**  
FOR  
BANKS, PUBLIC BUILDINGS, and PRIVATE HOUSES.  
References given to Tile Work throughout the United  
States and British Provinces  
AGENT FOR THE AMERICAN ROOFING TILE  
Contracts Solicited  
O. A. WELLINGTON, HOUSEHOLD ART ROOMS,  
No. 171 TREMONT STREET, BOSTON.

**OHIO VALLEY PRESS BRICK CO.**  
Challenge the world for fine stock Brick; also manufac-  
turers of all kinds of Bricks, octagon and square. Office 66  
St. Y. Yard Preston and Knapp Sts.  
LOUISVILLE, KY.

**HAWTHORNE & TUCKER,**  
PLUMBERS,  
16 PROVINCE STREET, BOSTON  
Estimates for Plumbing made, and work done in any part  
of the United States or Provinces.

**J. H. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue Mattapan (Ward 24), Boston.

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY**  
OF NEW YORK.  
LEONARD F. BECKWITH, Pres't. E. GILLET, Vice-Pres't.  
Hollow Blocks of any pattern, uniting strength and re-  
sistance to fire and water. The Hydraulic Lime of Teil  
(France), one of the strongest cements known, is largely  
used in this manufacture. The blocks do not conduct  
heat, cold, or sound, and weigh 60 per cent less than brick.  
Fire-proof Partitions, Floor Arches between iron or wooden  
beams, and ceilings under iron or wooden beams, erected  
in following buildings:  
Western Union Telegraph, Orient, and Queens' Ins.  
Coal and Iron Exchange, Museum of Natural Hist.  
Equitable, Staats Zeitung, Hudson R. R. Fr. Depot.  
Windsor, & Wm. Hotel, N. Y. Hospital, Drexel,  
Syracuse Savings Bank, West Point Military Hosp.  
Columbia College, Tribune, Coryell, & Vanoclear Flats,  
Baltimore Safe Deposit Co. Peabody Inst., Baltimore,  
Peabody Museum, N. Haven, Westmoreland, & Elise Flats,  
Sidewalks laid at Lenox Library, Tribune, etc.  
Hollow Burnt Clay Bricks, for flat and curved arches,  
partitions, etc., and Skebacks for brick arches.  
Sole agents for the U. S. for HYDRAULIC LIME OF TEIL,  
and LAFARGE PORTLAND CEMENT.  
Sole agents for the U. S. for METTLACH ENCAUSTIC TILES,  
laid in Tribune, Staats Zeitung, Mineral Spa, Central Park,  
Belvidere Hotel, etc.  
Sole agents for the Atlantic States for WIGHT'S FIRE-  
PROOF COLUMNS.  
Our Fire-proof work is the only one approved by the  
New York Board of Fire Underwriters and the Superin-  
tendent of Buildings, after severe public tests.  
Office Room 54 COAL AND IRON EXCHANGE, 21 Courtlandt  
Street, New York.  
BOORMAN & Co., Agents, Boston, 5 Doane St.

**E. HOWARD & CO.**  
MANUFACTURERS OF CLOCKS AND WATCHES  
CLOCKS FOR PUBLIC BUILDINGS  
114 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**  
PLAIN AND ENCAUSTIC  
FOR PUBLIC BUILDINGS AND DWELLINGS,  
As laid by us in  
THE CAPITOL AT WASHINGTON,  
And in numerous Churches, Banks, and Dwellings in every  
part of the Country,  
Glazed and Enamelled Tiles for Mantels, Hearths, Wain-  
scoting, &c., and for Exterior Decoration.  
MILLER & COATES,  
279 PEARL STREET NEW YORK.

**BARTLETT, ROBBINS & CO.**  
HEATING AND VENTILATING OF PUBLIC AND  
PRIVATE BUILDINGS  
A SPECIALTY  
PLANS AND SPECIFICATIONS FURNISHED.  
FOUNDERS, AND MANUFACTURERS OF GAS WORKS,  
ETC., ETC.  
24 LIGHT STREET, BALTIMORE.

**THE NEW ENGLAND GRANITE WORKS**  
HARTFORD, CONN., and 1321 BROADWAY, N.Y.  
Quarries at Westerly, R.I.  
MONUMENTAL AND BUILDING WORK  
of every description, all the varieties of  
AMERICAN AND FOREIGN GRANITE.  
UNEQUALLED FACILITIES OFFERED TO THE TRADE.  
J. G. BATTERSON, Pres't. H. R. BATTERSON, Sec'y.  
DIRECTORS, C. B. CANFIELD, H. A. BATTERSON  
G. T. BATTERSON,  
CARL CONRADS, Sculptor.

**WHITTIER MACHINE CO.**  
Manufacturers of Steam and Hydraulic  
ELEVATORS,  
STEAM ENGINES, BOILERS, and MACHINERY.  
No. 1176 Tremont Street, Boston.  
Office in the New England Mutual Life Insurance Co's  
Building, Post Office Square,  
and 120 Broadway, New York.  
CHARLES WHITTIER, Pres. A. C. WHITTIER, Treas.

**OTIS BROTHERS & CO.**  
SAFETY STEAM AND HYDRAULIC  
ELEVATORS.  
A specialty for a quarter of a century.  
BUILDERS OF THE HALE HYDRAULIC ELEVATOR.  
No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
OHIO BUILDING STONE.  
GRIND AND SOTTER STONE,  
From our FLORENCE and AMHERST QUARRIES.  
Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS  
111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
Designers and Manufacturers of  
GAS FIXTURES,  
ORNAMENTAL METAL WORK, CLOCKS AND BROTHERS  
ARCHITECTS' ORDERS SOLICITED.  
Special designs submitted on application.  
WAREHOUSES, 536 AND 538 BROADWAY, NEW YORK.  
MANUFACTORY, 24th AND 25th Sts., AND 10th AVENUE, N. Y.

**FISHER & BIRD,**  
Workers in all kinds of Foreign and Domestic  
MARBLES,  
97 TO 103 EAST HOUSTON ST., NEW YORK.  
Established 1830.

Among our notable decorations are: The Illinois New  
State House; Palace Hotel, San Francisco; Baldwin's Ho-  
tel, San Francisco; Insurance Building, 10th and Chestnut  
Streets, Philadelphia; Mutual Life Insurance Building  
Boston; Orient Mutual Insurance Building, New York;  
Union College, Schenectady; and numerous Churches,  
Private Residences, etc., etc., throughout the country. We  
solicit the opportunity to estimate upon all classes of work,  
viz., Tiling, Wainscoting, Staircases, Mantels, etc. Ceme-  
tery work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
Are ready to estimate on contracts of any size for  
furnishing their celebrated Amherst, Ohio,  
BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS  
OR CUT AND SET.  
Also,  
AMHERST AND INDEPENDENCE GRINDSTONES,  
And OHIO MINERAL AND STONE PAINTS  
Fire-Proof Stove Cement and Stove Putty ground in Oil  
OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MO-  
SAICS."** Floor Tiles, beautiful in color and design, for  
Dwellings, Churches, and Public Buildings.  
SPANISH WALL TILES. White, Glazed, Valencia,  
Tiles for Walls and for decorative painting.  
PRINTED FIGURED TILES of Spanish designs, for  
Wainscoting, Mantels, Jardinières, etc.  
Floors of "Nolla Mosics" can be seen at the "Rock-  
ingham," corner of Broadway and 56th Street. Imported  
and for sale by JOHN CHADWICK, Sole Ag't for U. S.,  
49 Broadway, N. Y.  
C. E. PARKER, Agent, 14 Exchange Place, Boston.

**TUFTS' ELEVATOR WORKS,**  
MANUFACTURERS OF "TUFTS' PATENT" COMBI-  
NATION ROPE ELEVATOR,  
TO BE OPERATED EITHER BY STEAM OR WATER.  
The only safe and reliable machine made for passenger use  
in Public Buildings and Hotels, and for business purposes in  
Warehouses, Stores, &c.  
37 FOUNDRY STREET, SOUTH BOSTON.  
Office, 243 Broadway, New York.  
OTIS TUFTS, President. L. A. BIGELOW,  
Treas'r and Gen'l Manager.

**STEAM WARMING APPARATUS.**  
HIGH AND LOW PRESSURE.  
HOUSE WARMING A SPECIALTY.  
Pamphlet with more than 1,000 references sent on appli-  
cation.  
WYLLYS H. WARNER,  
114 LEONARD STREET, NEW YORK,  
and 23 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**  
No. 6 COURTLAND ST., NEW YORK.  
Works at Paterson, N.J.  
PATENT SAFETY STEAM ELEVATORS  
for Public and Bank Buildings, Hotels, Private Dwell-  
ings, etc.  
SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP  
GUARANTEED.  
Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "HEALTH" AND "TUBULAR"  
Manufactured by the  
**GOLD'S HEATER MANUFACTURING CO.**  
114 LEONARD ST., NEW YORK.  
Send for Pamphlet.

W. F. GOLD, Pres't. WYLLIS H. WARNER, Treas.

**HUGH SISSON & SON,**

Importers, Dealers, and Manufacturers of  
**MARBLE.**

INTERIOR MARBLE WORK AND MONUMENTAL  
WORK A SPECIALTY.

Salesrooms, No. 140 W. Baltimore St.; Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,**

SPEAKING TUBES,  
AND BURGLAR ALARMS,  
For Public and Private Buildings.

THE BEST IN USE.  
**S. W. FULLER,**  
63 Devonshire Street, Boston.

**ART PAINTED TILES**

FOR MANTELS, CABINETS, ETC.

SHARPLESS & WATTS,  
225 MARKET STREET, PHILADELPHIA.  
Agents for  
**MINTON'S TILES,**  
AND TRESSELLATED PAVEMENTS.

**JOHN MACK, Plain and Ornamental Plasterer.**  
41 Cambridge Street, Boston.

**BUILDING MARBLE.**

Branch yard of the RUTLAND MARBLE CO., 198 Cause-  
way Street, Boston. JOHN D. ALLAN, Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Rut-  
land and Continental Marble, furnished at low prices.

**PRESSED BRICK,  
STOCK AND COMMON**

MANUFACTURED BY  
**FLETCHER & THOMAS,**  
Indianapolis, Ind.  
All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY  
**GILLIS & GEOGHEGAN,**  
Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 50th St. and 5th Av.;  
Drexel Building, cor. Wall and Broad; Bennett Building,  
Fulton and Nassau, etc.  
Architects and owners promptly furnished with speci-  
fications and estimates.

**ARCHITECTS.**

**P. B. WIGHT,**

CONSULTING ARCHITECT,

73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.

Consultations on matters pertaining to Fire-Proof Con-  
struction, Foundations, Drainage, Sanitary Work, Ventila-  
tion, Machinery, Valuations, Interior Decorations, and  
Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**

ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E., ARCHITECT  
AND SANITARY ENGINEER**

KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes  
of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,  
ARCHITECT,**

Room 17, Life Insurance Building,  
ST. LOUIS, MO.  
Special attention to Churches, Schools, and other  
public buildings.

WALTER ARCHITECT. PERRY  
DICKSON, Albany, N. Y. BUILDING.

**GEO. E. WARING, JR.,**

CONSULTING ENGINEER,  
FOR SANITARY AND AGRICULTURAL WORKS,  
NEWPORT, R.I.

**SANITARY ENGINEERING.**

EDWARD S. PHILBRICK, C. E.,  
12 WEST ST., BOSTON, MASS.  
Offers advice and superintendence in  
CONSTRUCTION OF WORKS,  
AND PLUMBING, DRAINAGE, AND VENTILATION,  
And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
227 HARRISON AVENUE . . . . . BOSTON,  
SHEET METAL CORNICES, HAYES' PAT-  
ENT VENTILATING SKY-LIGHTS,  
WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

**MANTELS AND GRATES.**

RANKIN'S PATENT makes the Cleanest, Cheap-  
est, and Hottest Fire. Avoid infringements, and send for  
Circular to

**C. S. RANKIN & CO.,  
ARCHITECTURAL IRON WORKS,**  
Manufacturers of all kinds of Iron Work for  
BUILDINGS, JAILS, ETC.

187 W. PEARL ST., CINCINNATI, O.

**EXCELSIOR  
ROOF PAINT.**

This paint has been thoroughly tested throughout the  
Eastern States, and has been found to be a perfect tin or  
metallic preserver. We warrant it neither to crack nor  
blister by **HEAT** or **COLD**, and to last

**IN ANY CLIMATE TEN YEARS.**

Those desiring to use this valuable preparation upon  
their buildings, can secure the same by addressing

**C. M. WHEELER, J. M. ROOT,**  
Toledo, Ohio.

**DECORATORS.**

**W. J. MCPHERSON,**

(Established A.D. 1845.)

**MURAL PAINTER,  
DESIGNER,**

**Ecclesiastical Decorator,  
AND  
ART STAINED GLASS MANUFACTURER,**

440 TREMONT STREET,

BOSTON, MASS.

**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the  
subscriber to produce Modern and Mediaeval styles of work  
equal to any European examples, for Churches, Pri-  
vate Residences, Halls, etc.

The value of the work is attained by a careful selection  
of colors in Cathedral and French Glass of his own impor-  
tation.

Designs in accord with architects' plans furnished at  
short notice. Reference of work at office

**SAMUEL WEST, 115 Elliot St., Boston**

**FRANK HILL SMITH,**

174 TREMONT STREET,  
BOSTON . . . . . MASS.

**COOK, REDDING & CO.**

149 CONGRESS ST., BOSTON,  
**Ornamental, Stained, and Cut Glass,**  
FOR  
*Churches, Public Buildings, and  
Private Residences.*

We manufacture Slate Goods, through every operation, from quarry to completion.

**THE FAIR HAVEN MARBLE AND MARBLEIZED SLATE CO.**

FAIR HAVEN, VERMONT.

The oldest and most extensive producers of

**SLATE MANTELS**  
IN THE UNITED STATES.

We imitate more than fifty rare marbles and woods. Styles and workmanship unsurpassed. Special care given to  
making Mantels and other goods from architects' drawings. Being in close proximity to the best white American  
marble quarries, and with rare facilities for selecting stock and doing the work, we are also producing

**MARBLE MANTELS**

At the very lowest prices, and in the best manner possible. We also produce all kinds of plain slate and marble work

Look over this list and correspond with us and get our Catalogue.

- |  |  |   |   |
|--|--|---|---|
| Purple, Green, Red, Vari-<br>egated Roofing Slates.<br>Same Color Slate, also<br>White and Black<br>Marble Tiles.<br>Window Sills. | Window Lintels.<br>Water Table.<br>Belt Courses.<br>Ashlar.<br>Solid Steps.<br>Steps and Risers. | Laundry Tubs.<br>Urinals.<br>Grave Covers.<br>Vault Work.<br>Curriers' Tables.<br>Counter Tops. | Billiard Table Beds.<br>Blackboards.<br>Brewers' Vats.<br>Cisterns.<br>Greenhouse Shelves.<br>Plumbers' Goods, etc. |
|--|--|---|---|

**DECORATORS.**

**JOHN LAFARGE,  
MURAL DECORATION,**  
51 W. Tenth St., New York, and Newport, R. I.

**SOCIETY OF DECORATIVE ART.**

4 East 20th Street,  
NEW YORK.

Architects' designs for panels, tiles and plaques for inser-  
tion in Cabinet Work, and other decorative uses, and for  
Art Needlework applied to curtains, hangings, portières,  
screens, table-covers, etc., carefully executed. Original  
designs for any of the above, subject to approval, will be  
gladly received, and paid for by the Society when used.  
Orders are earnestly solicited.

The Society has arranged with Mr. RUSSELL STURROB,  
Architect, for the Exhibition and Sale of his well-known  
Wall Papers. Some of these are faithful reproductions of  
Japanese decorative papers; some are taken from Oriental  
and other stuffs; some are of original design. New pat-  
terns will be added from time to time.

**Fresco Decoration.**

**EMMART & QUARTLEY,**

Designers, Decorators, and Painters,

32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made  
and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate  
work on hand or made to order. No. 1210 Ridge Avenue.  
JOSEPH S. MILLEP successor to Wilson & Miller, Philadel-  
phia, Pa. Send for Illustrated Price-List

**Donald MacDonald,**

GLASS STAINER AND DECORATOR

No. 6 Hayward Place,

BOSTON



**INLAID WOOD FLOORS.**

ORNAMENTAL WOOD BORDERS.

Designs and Estimates free.

National Wood Manuf'g Co.,  
950 Broadway, near 23d St., New York

**PHILIP A. BUTLER,**

DECORATOR AND DESIGNER,  
No. 17 PEMBERTON SQUARE,  
BOSTON.

**HENRY B. JONES & CO.**

IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS,  
612 WASHINGTON STREET, BOSTON.

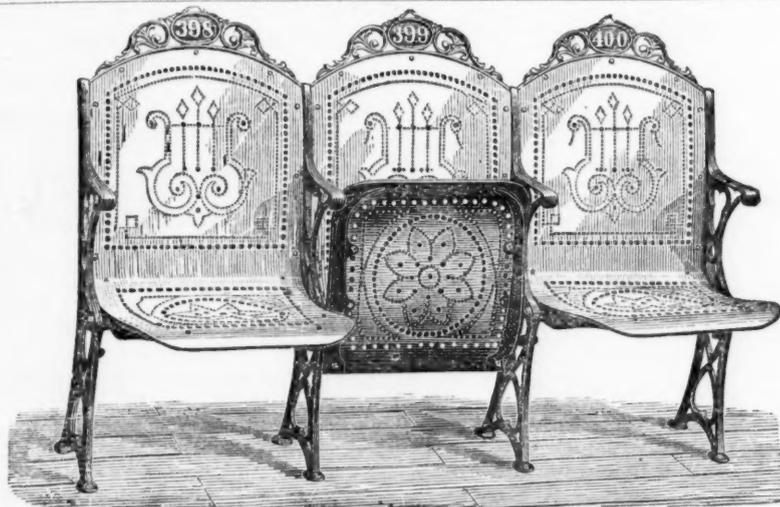
**L. HABERSTROH & SON,**

FRESCO PAINTERS,  
AND INTERIOR DECORATORS,  
No. 12 SCHOOL STREET, BOSTON.

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa. (Can.)	Philadelphia.	San Francisco	St. Louis.
1. BRICKLAYER .....	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2. Brick Mason (Fronts) .....	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50	3.50 @ 4.50	3.00 @ 3.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00		3.00
3. CARPENTER .....	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25		1.50 @ 2.00
4. Cabinet Maker .....	2.50 @ 3.25		1.75 @ 2.25			1.50 @ 3.00	1.50 @ 2.00			
5. Finisher .....	2.00 @ 2.50		1.50 @ 2.00		1.50 @ 2.00	1.50 @ 3.00	1.25 @ 1.75			1.50 @ 2.00
6. FOUNDRYMAN .....			1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50			2.25 @ 2.50
7. Blacksmith .....	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.25 @ 2.00			1.50 @ 2.50
8. Whitesmith .....			1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.75			
9. Galvanized Iron Worker .....	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00			2.25 @ 2.50
10. GAS FITTER .....	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00			2.00 @ 3.00
11. LABORER .....	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.25	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50		2.00 @ 3.00
12. PAINTER .....	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50		1.90 @ 2.50
13. Glazier .....	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00		1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50		
14. Grainer .....						2.00 @ 3.00	1.75 @ 2.50			3.50
15. Paper-hanger .....	.75 @ 2.50		per roll.			15c. pr. roll.	2.00 @ 2.50	1.50 @ 2.00		2.00 @ 3.00
16. PLASTERER .....	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	2.00	2.00 @ 2.50	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00		2.25 @ 2.75
17. Stucco-Worker .....	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	1.50 @ 2.50		2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
18. PLUMBER .....	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.50	2.50 @ 3.50	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50			2.50 @ 3.50
19. QUARRYMAN .....		3.00 @ 3.50	1.10 @ 1.25		1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20. Stone Mason .....	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21. Carver .....	3.00	3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75	3.00	2.00 @ 2.50	3.50 @ 6.00	2.75 @ 3.25		
22. Pointers and Washers .....		2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75		1.50 @ 2.50	1.00 @ 1.25	2.25 @ 2.50		
23. Rubber .....	1.50 @ 2.00	1.75	1.10 @ 1.25	1.25 @ 1.50	1.00 @ 1.25	1.50 @ 2.50	1.00 @ 1.00	1.50 @ 1.75		
24. Stone-Cutter .....	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	2.50	2.00 @ 2.00	.80 @ 1.00	1.50 @ 1.75		
25. Stone-Setter .....		2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	2.75	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.75		2.00 @ 2.50
26. ROOFER (Tin) .....	2.00 @ 2.35	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25		2.00 @ 2.25
27. Slatier .....		2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00	2.00	2.00 @ 2.25	1.25 @ 2.00	1.75 @ 2.25		3.00
28. STAIR BUILDER .....	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25			1.50 @ 2.50
29. STEAM FITTER .....		2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00



ARCHITECTS AND BUILDERS

WILL ADD MUCH TO THE BEAUTY OF THEIR BUILDINGS BY USING

GARDNER'S PERFORATED THREE-PLY VENEER SEATING,

Which is Ornamental, Durable, and Cleanly.

We refer to the following new and elegant buildings fitted up with our goods:—

Morris Plains, N. J., Insane Asylum.  
New York Hospital.  
American Museum of Natural History, New York.  
Institution for Feeble-minded Children, Lincoln, Ill.  
Insane Asylum, Oshkosh, Wis.

Opera Chairs in new Music Halls, Lewiston, Me., **Providence, R. I.,** and Brooklyn, N. Y.  
Seating in Depots of the Pennsylvania Railroad, at Philadelphia, Pittsburgh, etc.

Please send for Illustrated Catalogue.

GARDNER & COMPANY,

Patentees and Manufacturers,

376 PEARL STREET.....NEW YORK.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

GALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States.

Our twenty years' experience, and the numerous contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO., 72 & 74 West Monroe St. Chicago, Ill.

A SATCHEL GUIDE.

FOR THE VACATION TOURIST IN EUROPE. Revised Edition for 1878. With Maps. 16mo, flexible cloth, \$2.00. HOUGHTON, OSGOOD & CO.



NONESUCH

Self-Locking

AND

Burglar-Proof

Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.

Patented July 10th, 1877

THE BEST PORTRAIT

OF

William Cullen Bryant

Is the ATLANTIC PORTRAIT, which was published last year expressly for subscribers to the ATLANTIC MONTHLY, and which is unquestionably the best large portrait ever made of him. To show how it is regarded by excellent judges, we append the following extracts:—

I think the picture admirable in its rare and commanding lines, and shall gladly give it the best place I can find in my limited collection.—RALPH WALDO EMERSON.

I hesitate to bestow any praise upon it, for the reason that I should use stronger terms than, as a mere unskilled lover of art, I should have any right to employ. I shall be disappointed, however, if the best judges do not unite in considering it a masterpiece of portraiture and execution.—DR. OLIVER WENDELL HOLMES.

Mr. Baker was singularly fortunate in his subject; he has produced a marvelous likeness of Bryant, and a very noble work of art. If a head like this, in bronze or marble, were found in some Greek or Roman ruin, it would be worth its weight in gold.—T. B. ALDRICH.

This portrait is life-size, on paper 24 x 30. The retail price is \$2.00. With the ATLANTIC MONTHLY for a year, \$5.00; six months, \$3.00.

ATLANTIC PORTRAITS.

Henry Wadsworth Longfellow. It is one of the most admirable likenesses I have ever seen, and I can scarcely imagine a better representation of the poet and the man.—BAYARD TAYLOR.

John Greenleaf Whittier. It is very fine; it is the ideal Whittier.—J. T. TROWBRIDGE.

The above portraits are life-size, and the dimensions of each picture are 24 x 30. Subscribers to the ATLANTIC MONTHLY can obtain either portrait, with the magazine for a year, by remitting \$5.00 to the publishers; for \$6.00 the magazine and two portraits, and for \$7.00 the magazine and all three portraits will be sent. The subscription price of the ATLANTIC alone is \$4.00.

The portraits are sent by mail, carefully rolled, so as to avoid all danger of injury, and will be forwarded to any address on receipt of the price and subscription by the Publishers; they can be obtained through newsdealers and booksellers generally.

HOUGHTON, OSGOOD AND COMPANY, BOSTON, MASS.

AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT. MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS. Regular Sizes, 2, 3, 4, 5 & 6 Inch. SPECIAL SIZES MANUFACTURED TO ORDER. AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS. 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA. WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS. AND WILL BE TREATED AS SUCH.

PRINCIPAL AGENTS.

- M. Halliday New York City
- Hicks & Badger Boston, Mass
- James Berry Buffalo, N. Y.
- George W. Pitkin & Co. Chicago, Ill.
- Wasson & Martin Albany, N. Y.
- McLeod, Reardon & Co. Troy, N. Y.
- W. H. Scott Portland, Me.
- Kittredge Cornice Co. Salem, O.
- J. W. Jordan Worcester, Mass.
- R. G. Carpenter & Co. Wilkesbarre, Penn.
- T. W. Irwin Alleghany City, Penn.
- Sellew & Co. Cincinnati, Ohio

RECOMMENDED BY ARCHITECTS, ENGINEERS, SIMPLICITY & RELIABILITY. IMPERIAL GAS MACHINE. SEND FOR CIRCULAR. DENNY BROS & CO.



BIBB'S

Celebrated Original Baltimore

Fire Place Heaters

Mantels and Registers.

B. C. BIBB & SON,

Baltimore, Md.

Best workmanship, lowest prices guaranteed. Send for circulars.

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the art-workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Heliotype Views of twenty-two striking interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. P'ANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist*, Boston.

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courant.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVES. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIÉNARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11½ X 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOTHIC FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOLETTE-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

The works of the learned and distinguished French Architect, EUGENE VIOLETTE-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

## Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — *EUGENE BENSON, in The College Courant.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

## The New York Sketch-Book of Architecture.

3 vols., 4to, \$6.50 each. We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

## The American Architect and Building News.

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\*\* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers.

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

(Borrowed for the American Architect and Building News.)

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, CEMENT, and FIRE BRICK. Includes items like Rosendale, Portland, and American brands.

Table listing prices for DOORS, including raised panels and blinds. Includes sizes like 1 1/2 x 6 1/2 and 2 1/2 x 6 1/2.

Table listing prices for PAINTS AND OILS, including various colors and brands like Lead, Zinc, and Vermilion.

Table listing prices for PAINTS AND OILS, including various colors and brands like Lead, Zinc, and Vermilion.

Table listing prices for PAINTS AND OILS, including various colors and brands like Lead, Zinc, and Vermilion.

Table listing prices for PAINTS AND OILS, including various colors and brands like Lead, Zinc, and Vermilion.

Table listing prices for STONE, including Amherst, Berlin, and Brown stone. Includes cargo rates and delivered prices.

Table listing prices for SLATE, including Purple roofing slate and Green slate. Includes prices per square and per 100.

Table listing prices for TIN PLATES, including L. C. charcoal and L. C. coke. Includes prices per box and per 100.

Table listing prices for ZINC, including sheet and duty. Includes prices per 100 and per 1000.

BOSTON.

Table listing prices for FIRE BRICK, including Waldo Bros. Extra and Waldo Bros. No. 1. Includes prices per 100 and per 1000.

Table listing prices for BUILDING BRICKS, including Eastern and Bay State. Includes prices per 100 and per 1000.

Table listing prices for BUILDING STONE, including Rutland Marble and LUMBER. Includes prices per 100 and per 1000.

Table listing prices for PAINTS AND OILS, including various colors and brands like Lead, Zinc, and Vermilion.

Table listing prices for PAINTS AND OILS, including various colors and brands like Lead, Zinc, and Vermilion.

Table listing prices for MORTISE LOCKS, including brass face and bolt. Includes prices per doz. and per 100.

Table listing prices for SASH FASTS, including Plain brass and Nickel plated. Includes prices per doz. and per 100.

Table listing prices for SCREWS, including Round head and for window beads. Includes prices per 100 and per 1000.

Table listing prices for STORE DOOR HANDLES, including lacquered brass and bronze metal. Includes prices per doz. and per 100.

Table listing prices for IRON, including Wrt-iron I Beams and Wrt-iron II Beams. Includes prices per 100 and per 1000.

Table listing prices for BRICK, LIME, AND CEMENT, including Lime in bulk and Chicago building brick. Includes prices per 100 and per 1000.

Table listing prices for LUMBER (MICHIGAN PINE), including 1st and 2d clear, 1st and 2d dressed. Includes prices per 100 and per 1000.

Table listing prices for HARDWOOD LUMBER, including Whitewood clear and Whitewood box boards. Includes prices per 100 and per 1000.

Table listing prices for I C roofing, including 14 x 20, charcoal. Includes prices per 100 and per 1000.

Table listing prices for SOLDER, including No. 1, 1 1/2, and extra. Includes prices per 100 and per 1000.

Table listing prices for SHEET ZINC, including Full casks and slabs. Includes prices per 100 and per 1000.

Table listing prices for SHEET IRON, including No. 24, 3 c. rates. Includes prices per 100 and per 1000.

Table listing prices for WIRE, including Nos. 1 to 14. Includes prices per 100 and per 1000.

Table listing prices for PAINTS AND COLORS, including White Lead and Zinc. Includes prices per 100 and per 1000.

Table listing prices for OILS, including Linseed, raw, and Turpentine. Includes prices per 100 and per 1000.

Table listing prices for PHILADELPHIA WHOLESALE PRICES, including IRON, CEMENT, and LUMBER. Includes prices per 100 and per 1000.

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms.

CRESOTED WOOD. PREPARED AT THE Hayford Patent Cresote Wood Preserving Works. EDWARD R. ANDREWS, Proprietor.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

**FISKE & COLEMAN,**

New England Agents for

**AKRON**

SEWER PIPE COMPANY.

The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**

AKRON ROOFING TILES, VITRIFIED BUILDING BLOCKS, OHIO SAWED FLAGGING, ENAMELED BRICK, CHIMNEY TOPS, CEMENT, ETC., ETC.

OFFICE, 72 WATER STREET, BOSTON. YARD AT BERKELEY STREET

**S. KLABER & CO.**

**STEAM MARBLE WORKS,**

217 to 223 W. 51st St., New York.

ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

ESTABLISHED, 1836.

**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Composition Roof known. Also inventors and owners of the following patents:—

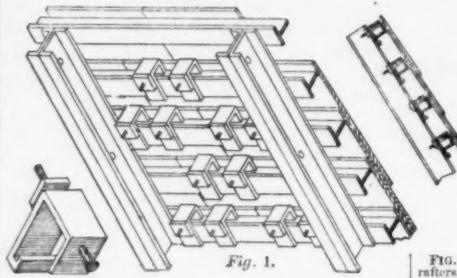


Fig. 1.

FIG. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the purlins on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

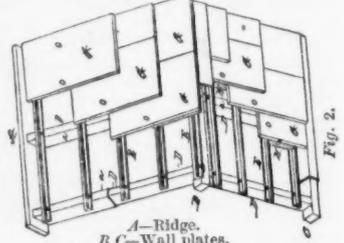


Fig. 2.

FIG. 2. This invention consists of a roof composed of wooden rafters, (B) covered with sheet metal (A) or other fire-proof material, and iron purlins (C) or beams, with the slates (G) or other covering secured thereto by claps, (FIG. 1) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contact with the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point avoiding condensation, contraction and expansion of roofs formed wholly of iron.

**WARMING AND VENTILATION.**

**FIRE ON THE HEARTH.**

**FIRE-PLACE HEATERS AND STOVES.**

VENTILATION of a Fire-Place. RESERVE FORCE of a Close Stove. CIRCULATION of a Furnace.

Adapted for any kind of Fuel,

And the only FIRE-PLACE HEATER PERFECTLY ADAPTED for SOFT COAL and WOOD.

Send for our testimonials from all parts of the United States.

**OPEN STOVE VENTILATING COMPANY,**

115 Fulton and 54 Ann Streets, New York.



Section of Fire-Place Heater.



Section of Stove.

**GAS**

**SPRINGFIELD GAS MACHINE.**

Springfield, Mass.; 75 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

**BUHRER'S INFALLIBLE SEWER GAS TRAP.**



The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (E) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.

S. BUHRER, Inventor and Manufacturer, Cleveland, Ohio.

WHOLESALE AGENTS.

W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O. I. WOLFF MFG CO., 109 & 111 West Lake St., Chicago, Ill. HAMBLEN & MATHEWS, 82 & 84 North St., Boston, Mass. C. A. BLESSING, 44 North Fifth St., Philadelphia, Pa. THE J. L. MOTT IRON WORKS, 88 & 90 Beekman St., N. Y. Please send for Circular.

**Brandeis' Seamless Paragon Trap.**

Simplest, Best, Cheapest, and Non-siphoning.

Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. BRANDEIS & WICKERT, 46 Fulton Street, Brooklyn, N. Y.

**C. BUTCHER,**  
107  
Devonshire St.  
BOSTON.

Send for  
Illustrated  
Catalogue.

**PATENT MARQUETRY FLOORING.**

Specimens at Lawrence, Wilde & Co.'s, 42 Cornhill, Boston.

**DORCHESTER UNION FREESTONE CO.**

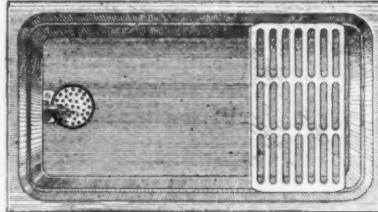
NEW BRUNSWICK YELLOW FREESTONE. The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order. 44 Pine St., New York. - C. P. SHERWOOD.

**MENEELY & KIMBERLY,**

Bell Founders, Troy, N. Y.

Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT HOUSE BELLS. Illustrated Catalogue sent free.

Architects and Builders will be quick to appreciate the many New and Practical Features possessed by



**THE MAGEE PATENT SINK,**

which commend themselves at once to every householder.

The escape of noxious and poisonous sewer gases is prevented by the arrangement of the patent trap, it being immovable, while the strainer, being hinged on brass pins, can be raised for the purpose of cleaning the cesspool.

The sink is furnished with an improved galvanized shelf or rack for draining dishes, etc., after washing. It is of extra size, and being made with square corners, saves the carpenter much labor in setting. In smoothness of casting it fully sustains the long-established reputation of the Magee goods.

Particular attention is invited to the Magee Standard Furnace, portable and for setting in brick, guaranteed superior to any in the market for economy, durability, and heating capacity. Estimates furnished for heating all sizes of dwelling-houses and public buildings.

Also a full line of Brick and Portable Ranges. Circulars and prices of all the above goods furnished on application. MAGEE FURNACE CO., 32 to 38 Union St., Boston

**D. M. MEEKER & SON'S**

**Malleable Iron Hollow Munten Window Sash.**

For Insane Hospitals, Fire Proof Buildings, &c.



End view of Muntin for Glazed Sash.

End view of Muntin for Oglazed Sash.

Hollow Muntin

The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

**D. M. MEEKER & SON,**

Newark, N. J.

Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns and Machinery.

**MAKE** GAS GENERATORS, FOR LIGHTING Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.

Send for CIRCULAR **Your own**

**WALWORTH MANUF. CO.**  
No. 69 Kilby Street,  
BOSTON, MASS.

**GAS**

**J. & R. LAMB, 59 CARMINE ST., N. Y.**  
**CHURCH FURNISHERS**  
Practical Workers in Sterling Silver, Brass, and Bronze. Carved Wood, Decorations, etc.  
Illustrated Catalogues.  
Furniture, 10c.; Metalwork, 10c.; Decoration, 10c.

**HOISTING MACHINES**  
EXCLUSIVELY.  
HOTEL STEAM ELEVATORS,  
HYDRAULIC ELEVATORS,  
HAND POWER HOISTS,  
DUMB WAITERS.

**H. J. REEDY, Manufacturer,**  
128 EAST EIGHTH ST., - Cincinnati, O.

**CRANE BREED & COMPANY**  
**SAFETY BOILERS**  
FOR HEATING  
**STEAM AND HOT WATER.**  
MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RADIATORS, PIPE COILS, REGISTERS, FITTINGS, STEAM PUMPS.

**NATIONAL TUBE WORKS CO.**  
PATENT  
Indestructible Enamelled Wrought Iron  
**LAP-WELDED PIPE,**  
From 1/4 inch to 15 inches diameter.  
Now extensively used for  
Water, Gas, Sewerage, and Mining.  
It is not affected by heat or acid, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making Joints, supplied to Farmers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at 25¢ each of  
**National Tube Works Co.,**  
\* Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport Penn.

CHURCHES.

In our issue for September 14 will be printed a special list giving accurate information concerning the churches and chapels now building, or about to be built, in this country and Canada.

Architects, builders, and other informed persons, who have not as yet sent us the information in their possession, are invited to do so without further delay.

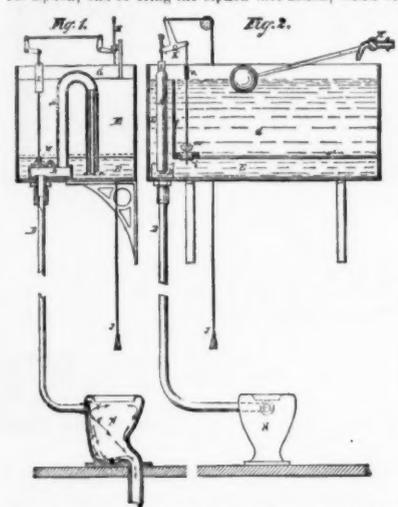
BUILDING INTELLIGENCE.

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

WATER-CLOSET FLUSHING APPARATUS. - William G. Rhoads, Philadelphia, Penn. The object of this invention is to provide a means of noiselessly flushing a water-closet bowl with a considerable but measured volume of water, delivered either automatically at stated times, or at will. It is a supply-tank filled through the pipe H, the supply being governed by the working of a ball valve. The service-box of this cistern is, for sake of compactness, made in an L-shape, as E, K, and is filled from the main tank through the opening I, which can be closed by the valve m. In the upright part of the service-box is fitted a siphon A, which, besides its regular duty, to be explained directly, can, if the ball valve does not work, come into play as an overflow for the whole tank, as the normal condition of the valve m is to be raised. Within the service-box the continuity of the long arm of the siphon is interrupted by the box B, which has in its top a valve W, whose duty it is to admit water from the service-box into the lower part of the long arm of the siphon, and so bring the siphon into action, which will



then flow until all the water in the service-box has been emptied, together with that which has had time, during the continuance of the flow, to pass from G through I. Waste-flores caused by this inflow from the tank to the service-box can be guarded against by screwing the valve m up or down upon its rod, thus changing the size of the orifice i, and also by making the orifice of the siphon much larger than i, or than the supply-pipe H. The valve W is opened, and the valve m, with which it is connected by cranks and levers, is closed by pulling the cord J; or it may be opened through the automatic action of a ball float. In order to avoid the disagreeable gurgling noise caused by the inflow of air just as the action of the siphon is ceasing, either a small air-pipe is affixed to the outside of the short arm, running from near the bottom of that arm and entering the siphon just below the bend; or, as in the cuts, the short arm may inclose a tube concentric with it, which projects slightly below the lower end of the short arm. In this way air is at once admitted to the siphon, as soon as the water level has sunk so much as to stop the action of the siphon. The apparatus is intended to apply chiefly to hot-water-closets of the form shown. Water entering the hoppers is distributed by a peculiarly shaped fan, which directs the water in currents, as shown by the arrows. The invention also embraces a new form of siphon, which occupies less space than the ordinary form. The long arm of the siphon is divided into two parts, the joint coming at the level of the bottom of the service-box, so that the upper part of the siphon may be fitted bodily, and the water entering the long arm at this point will, when the joint is closed, bring the siphon into action. The upper part, the siphon proper, is formed by two concentric tubes, the short arm of the siphon being formed by the annular space between the tube forming the long arm and the larger tube which incloses and covers it.

- BRACKET. - W. Brodie and E. Comfort, Philadelphia, Penn.
COMMUNICATED ASPHALT FOR ROOFING, ETC. - H. W. Johns, New York, N. Y.
MANUFACTURE OF WIRE. - W. L. Reynolds and Calvin Haskell, St. Louis, Mo.
SHOWER BATH. - Sols P. Nelson, St. Peter, Minn.
RULER. - John A. Green, Pontiac, Mich.
DOUBLE WINDOW SASHES. - Henry Barth, Cincinnati, Ohio.
COMBINED SQUARE, BEVEL, ETC. - Aaron F. Dickey, Somerset, Penn.
BRICK-KILN FURNACE. - J. Frank and J. C. Stevens, Allegheny, Penn.
HOSE-ELEVATOR AND FIRE-ESCAPE. - Ivers Gibbs, Worcester, Mass.
TANK-VALVE. - William Henderson, East Cambridge, Mass.
VAULT-COVER. - Ezra P. Hoyt, New York, N. Y.
HYDRAULIC ELEVATOR. - Charles R. Ous, Yorkport, N. Y.

COMPLETED BUILDINGS.

- BALTIMORE, Md. - The Church of St. Andrew the Apostle (R. C.), at the corner of Monument and Wolfe streets, will be dedicated October 6.
BOSTON, Mass. - The store and office building, corner Milk and Hawley streets, owned by Mr. Jacob Steeper, is finished.
GERMANTOWN, Penn. - A new police station-house has just been finished for the Fourteenth District by Mr. D. E. Supplee, architect, of Philadelphia.
LANCASTER, O. - The Free Library was dedicated Tuesday evening, September 3.
PHILADELPHIA, Penn. - On August 26 the Mathilde Adler Loeb Dispensary, an adjunct of the Jewish Hospital at Tabor Station, was opened to the public.
PROVIDENCE, R. I. - The new High School Building, Messrs. Walker & Gould, architects, was dedicated September 3. Cost \$160,000.
SOUTH RIVER, Md. - The Memorial M. E. Church on South River Neck was dedicated on Sunday, August 25. The church is 21 by 31 feet, and cost \$800.
TACOMA, CAL. - The M. E. Church was dedicated Sunday, August 18.

SUMMARY OF THE WEEK.

Boston. BUILDING PERMITS. - The following permits have been issued since our last issue: -

Table with columns: Mechanic, No., Stories, Class, Size. Includes entries for Donahue Bros., Chas. B. Morton, Edwin F. Burckett, Nelson Curtis, Alonzo W. Folsom, Myers & Davis, Robert Culbert, Herman A. Drake, Aug. C. Richmond, Aug. C. Richmond, Mark W. Tate, Jacob Linsford, C. F. Barton, John Harris, John Harris, J. B. Simpson.

Repairs and alterations active.

Brooklyn.

BUILDING PERMITS. - Dean St., 3 three-story brick dwellings, 16' x 34'; owner, H. W. Lovejoy, 125 St. Marks Ave.; architect and builders, Parfitt Bros. - Ellery St., cor. Broadway, 1 one and two-story brick depot and stable, 150' x 184' and 66'; owner, Broadway B. R. Co.; architect, I. D. Reynolds; builder, J. Brady. - Hoyt St., 2 two-story brown stone dwellings, 20' x 45'; owner and builder, John Thomas; architect, M. J. Morrill. - Moore St., No. 55, 1 three-story frame cabinet shop, 25' x 30'; owner, Chas. Goetz; architect, J. Platte; builder, L. Meyer. - Pacific St., 1 three-story brown stone dwelling, 20' x 45'; owner, William Moyr, cor. Sixth Ave. and Twenty-third St.; architect, Amos Hill; builders, Thomas Donlon and Andrew Miller. - Stockton St., 1 three-story brick workshop, 24' x 60'; owner, John Clark. - Sullivan St., 1 two-story frame dwelling, 20' x 32'; owner, M. Reilly; builder, T. Leibrand. - Suydam St., 1 two-story frame awning, 22' x 38'; owner, Joseph Reh; architect, Ulrich Maurer, Jr.; builder, John Rueger. - Union St., cor. Hoyt St., 9 three-story brown stone dwellings, 16' 8" x 45'; owner, John Layton, 261 Carroll St.; builder, W. J. Bevell. - Varet St., No. 79, 1 three-story frame tenement, 18' x 50'; owner, Adam Schauf; builder, John Rueger. - Varet St., 1 two-story frame dwelling, 22' x 25'; owner, Mrs. Cruger; builder, John Rueger. - Wyckoff St., 10 three-story brown stone tenements, 20' x 52'; owner, George W. Brown, 44 Portland Ave.; architect, G. F. Thomas. - Second Place, 4 three-story brown stone dwellings, 15' 10" x 47'; owner, J. W. Peckett, 313 Clinton St.; architect, Perkins & Green; builders, Rabold & Testevin. - Clermont Ave., No. 79, 2 three-story brick dwellings, 14' x 44'; owner, John C. Rustin, 42 Adelphi St. - Central Ave., 1 two-story frame dwelling, 25' x 40'; owner, Henry Loeffler. - De Kalb Ave., 1 three-story brick dwelling and store, 20' x 40'; owner, M. Fallon; architect, J. B. Twiss; builder, F. D. Norris. - Lexington Ave., 3 two-story brown stone dwellings, 18' x 38'; owner, W. J. Sayres, 337 Fulton St.; architect, S. E. C. Russell. - Bell Ave., cor. Decatur St., 1 two-story frame dwelling, 18' x 40'; owner, J. Hugerly; builder, H. C. Baur. - Tompkins Ave., 1 two-story frame stable, 22' x 35'; owner, John McEhane; builder, John Rueger.

Chicago.

BUILDING PERMITS. - J. E. Coe, two-story dwelling, 101 West Adams St.; cost, \$3,600. - Carl Kinzie, three-story building, 1071 Milwaukee Ave.; cost, \$5,000. - H. McGurken, two-story dwelling, cor. Indiana and Paulina sts.; cost, \$4,500. - J. A. Stepten, two-story dwelling, Erie St.; cost, \$2,600. - Henry Bateman, two-story store and dwelling, Henry St.; cost, \$3,000. - John Dusey, two-story dwelling, 9 Logan St.; cost, \$2,000. - G. B. Gilman, three-story brown stone front, Ohio St.; cost, \$4,500. - Jesuit Church Club House, cor. May and Eleventh sts.; cost, \$30,000. - E. H. & L. H. Turner, 2 two-story dwellings, Michigan Ave.; cost, \$6,000.

New York.

BUILDING PERMITS. - 99 Madison St., tenement and stores, 25' x 50'; brick; cost, \$7,000. - Andrew Martin, owner; Am. B. Waring, architect. - One Hundred and Eleventh St. and Madison Ave., 5 second-class dwellings, 20' x 40' each; brown stone fronts; cost, \$4,500 each. - M. S. Kelly, owner; Jos. M. Dunn, architect; John McClune, builder. - Cor. Stanton and Willett sts., 2 tenements and stores, 30' x 51'; cost, \$7,000 each. - J. B. Bender, owner; A. Heribert, architect. - Bissot & Metzger, builders. - Cor. Second Ave. and One Hundred and Twenty-second St., 8 second-class dwellings, 19' x 37'; cost, \$4,000; W. S. Livingston, owner; West & Anderson, architects; John Lumber builder. - 407 East One Hundred and Fifteenth St., second-class dwelling, 25' x 40'; cost, \$4,000; T. L. Beale, owner; Hiram Moore, architect. - 172 Broadway; stable; 25' x 35'; three stories; cost, \$8,000; O. S. Bailey, owner; A. B. Jennings, architect. - Sixty-third St. and North River, warehouse and engine-house, 70' x 225'; five stories high; cost, \$200,000; N.

Y. Central and Hudson R. R. Co., owner; I. T. Moulton, Chicago, Ill., engineer, designer, and superintendent.

Philadelphia.

BUILDING PERMITS. - John Harding, 2 two-story dwellings, 16' x 32', Franklin St., Frankford - Mark Devine, 2 three-story stores and dwellings, 20' x 53', Girard Ave. - W. Wolf, two-story store, 10' x 25', No. 1351 Frankford Road. - W. J. Tate, three-story dwelling, 20' x 45', Lewis St. - T. F. Martin, two-story dwelling, 18' x 44', Second St. - John Backus, - 3 three-story dwellings, 12' 6" x 26', No. 959 Lawrence St. - J. & W. Steel, three-story dwelling, 16' x 28', Haverston St. - J. Lewis, 2 two-story dwellings, 13' 6" x 22', Adrian St. - W. C. Moore, three-story factory, 38' x 60', cor. Twenty-first and Nicholas sts. - J. W. Taylor, one-story chapel, 40' x 45', cor. Ja-per and Ann sts. - David Young, 4 three-story dwellings, 17' x 59', Third St. - Jas. McFarland, two-story stable, 15' x 24', cor. Twenty-fourth and Nassau sts. - Jas. McCartney, four-story factory, 35' x 95', cor. Hancock and Putnam sts. - Geo. Maxwell, two-story building, 14' x 30', Filbert St. - Mary Holbrook, two-story dwelling, 20' x 70', Woodland Ave. - Harold & Stone, 3 two-story dwellings, 15' x 28', Amore St. - Thos. Leeming, three-story store and dwelling, 18' x 66', No. 230 Vine St. - John Embley, three-story store, 16' x 68', No. 636 Arch St. - L. W. Goodman, 4 two-story dwellings, 12' x 31', Thirty-seventh St. - C. R. Bullock, three-story back building, 20' x 51', No. 1359 Ridge Ave. - Geo. Reese, two-story stable, 32' x 32', Forty-ninth St. - Elias Pohl, three-story store and dwelling, 16' x 54', No. 1709 South Second St. - Martin Keller, two-story dwelling, 17' x 27', Leverington Ave., Roxborough. - Martin Keller, two-story dwelling, 16' x 28', Mitchell St., Roxborough. - A. A. Harmer, 2 three-story dwellings, 12' x 25', cor. Jackson & Crosson sts., Manayunk. - A. A. Harmer, 3 three-story dwellings, 16' x 40', cor. Keely Ave. and Center St., Manayunk. - F. F. Durang, three-story convent, 55' x 23', Twentieth St. - B. R. Marley, 2 two-story dwellings, 15' x 30', Thirty-fifth St.

St. Louis.

BUILDING PERMITS. - Forty-three permits have been issued for the week ending August 30. Seventeen of these are for unimportant frame erections; the rest are for brick buildings. Those worth \$2,500 and over are as follows: -

Table with columns: Owners, Use, Stories, Rooms, Cost. Includes entries for Geo. D. Hall, Hellman & Heyster, F. Reiman.

ENGINE-HOUSE. - Yesterday proposals were received by the Board of Public Improvements for the new engine-house which is to be built on Market Street.

General Notes.

- ALBANY, N. Y. - The Assembly Chamber in the new Capitol is now nearly finished, and will be ready for occupancy at the next winter's session.
ASHBURNHAM, MASS. - The reservoir dam north of the village, about which there was so much excitement last spring, is being extensively repaired.
ATTLEBOROUGH, MASS. - Messrs. Walker & Gould, architects, of Providence, are building for Mr. A. W. Studly a dwelling-house in the Queen Anne style.
BENICIA, CAL. - A new tower sixty feet high, for the accommodation of the new machinery for the arsenical well at the Arsenal, has been commenced, under the supervision of Mr. George Poor.
CHEYENNE, WYO. - Houses for Judge D. C. Tracey, R. B. Horrie, and G. A. Seavright, are building from the designs of Mr. F. W. Cooper, architect.
CHESWELL, OREG. - John Turner is building a flaring mill.
DALLAS, OREG. - A new hotel is to be built.
DETROIT, MICH. - The foundation for a new building at the Michigan Military Academy is completed.
DORCHESTER, MASS. - Mr. J. A. Fox, of Boston, is the architect of two wooden houses, separated by a brick partition wall, for Mr. Franklin King.
ELMIRA, N. Y. - A four-story building, which in plan will measure 83 by 57 feet, is to be built on Water Street as the Odd Fellows' Temple.
FOREST GROVE, OREG. - Mr. Hoxter is building a store and warehouse building.
FRAMINGHAM, MASS. - Messrs. Fuller & Nash, of Worcester, have taken a contract to build the gate-house at Dam No. 1 on the Boston Water Works.
GREENVILLE, O. - A new market house is to be built by the city.
HARTFORD, CONN. - Mr. Jacob Bachmeier is the architect of the new brick dwelling house now building for Mr. Hugh Harrison.
LAKEMAN CITY, WYO. - Mr. F. W. Cooper, architect, of Cheyenne, in the same State, is building in the Italian Gothic style, St. Joseph's Hospital for the Sisters of Charity.
NEWPORT, KY. - On Wednesday last proposals were received at the Chief Quartermaster's Office for building four sets of field officers' quarters.
NORTHFIELD, MINN. - The new college building for the Scandinavian Institution is completed and ready for use at the opening of the autumn term.
OXFORD, O. - Some old buildings around the square on High Street will be removed at once to make way for an iron front two-story building, to be built by Mr. James Henderson, the owner of the property.
PALMISTINE, TEX. - The corner-stone of the new Masonic Temple was laid on August 29th.
RENO, NEV. - The plans of Mr. H. D. Powell have been accepted for the State Fair Building, which is to cost about \$5,000.
ROXBURY, MASS. - The Roxbury Carpet Co. is to build a brick coloring-house on Hampshire Street.
SAN FRANCISCO, CAL. - Plans are being prepared under the direction of General Coey for remodeling the interior of the post office, so as to utilize the space to better advantage than at present, and at the same time secure better light.

**SIDNEY, O.**—Mrs. Carroll is preparing to build a new business room where the old Carroll Building now stands.

**SPRINGFIELD, ILL.**—The Springfield Iron Company are now building an addition to their extensive rolling mills; size, 106 by 235 feet. 44 feet high to top of truss; cost, \$14,000. They are also building a gas works in connection with their mill, to cost about \$2,000. Bell & Hackney, architects; White & Wellar, contractors.—George H. Helmie, architect, has just completed plans for the following dwelling houses: For H. H. Glidden, North Fifth Street, two-story cottage; cost, \$1,600.—John J. Hardin, West Monroe Street, two-story frame, eight rooms; cost, \$2,500.—Joseph I. Loose, South Sixth Street, seven-room frame cottage; cost, \$2,000.—John C. Lanphier, North Sixth Street, eight-room two-story frame cottage; cost, \$2,500.

**STAMFORD, CONN.**—A house is building for Dr. Francis. Cost, about \$3,500. Mr. C. S. Luce, of Boston, architect.

**STURGEON BAY, WIS.**—On September 4th proposals for building a court-house were received by A. D. Thorp, county clerk.

**THOMASTON, ME.**—Mr. T. W. Silloway, architect, of Boston, is remodeling the Baptist church. Cost, \$6,000.

**UTSALADDI, W. T.**—A new warehouse, measuring 60 by 120 feet, is building.

**WHITE SULPHUR SPRINGS, W. VA.**—Mr. C. S. Luce, of Boston, is the architect of a brick and oak dwelling for Geo. Grant Peterkin, Esq. Cost, \$10,000. Contract not yet awarded.

**CHURCHES.**—St. James's Church, Croff & Camp, architects, St. John N. B.—St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$60,000.

**St. Louis.**

**CHURCH.**—Second Baptist Church. Edward Illsley, contractor. Cost \$10,000.

**COURT HOUSE** for the new county of St. Louis.—F. Renwick, architect. Cost \$28,000.

**COLLEGE.**—College for the Christian Brothers. Mr. Jas. McGrath, architect. Cost \$200,000.

**CUSTOM HOUSE AND POST OFFICE.**—Mr. Jas. G. Hill, Supervising Architect of the Treasury Department.

**General.**

**CAMBRIDGE, MASS.**—Gymnasium for Harvard College. Messrs. Peabody & Stearns, architects.

**CONCORD, N. H.**—State Prison. Messrs. Dow & Wheeler, architects. Appropriation, \$200,000.

**CROWN POINT, IND.**—Court-House. J. C. Cochran, architect, Chicago. Cost \$45,000.

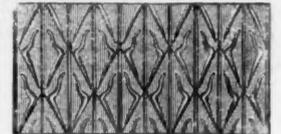
**ELMIRA, N. Y.**—Masonic Hall. N. LeBrun, architect, New York. Cost \$60,000.

**FAMBAULT, MISS.**—Deaf, Dumb, and Blind Asylum. J. Babcock & Co., contractors. Cost \$53,730.

**INDEPENDENCE, IO.**—Hospital for the Insane. G. Joseph, supervising architect. Cost \$850,000.

**JOLIET, ILL.**—St. Mary's (Roman Catholic) Church. Mr. Kelly, architect, Brooklyn.

**KANKAKEE, ILL.**—Insane Asylum. J. R. Willett, architect, Chicago, Ill.



**METALLIC SHINGLES.**

We call the attention of all parties interested in Roofing, and the owners of large buildings, to the above article. It is superior to Slate, Cheaper, Fire-proof, about one fourth the weight, lays much closer, therefore is Storm-proof, cannot Crack, etc. Any carpenter can put them on. Send for description and Price List to IRON CLAD MANUFACTURING CO. 59 Greenpoint Ave., Brooklyn, E. D. P. O. Box 2528, N. Y. City

**TO ARCHITECTS.**

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the Scagliola & Marezzo Marble, Which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall and Altar Work

**JAS. T. ALLEN & CO.,**  
25 North 17th Street, Philadelphia.

Should you want Ornamental Glass, write for particulars to



**BOUND VOLUMES**

**OF THE AMERICAN ARCHITECT.**

We are prepared to fill orders for binding the American Architect and Building News in styles similar to the volume for 1876, at the following rates:—  
Price of cover without binding.....\$1.00  
Cover and binding (for subscribers)..... 2.00  
Numbers of 1876 or 1877 without cover or binding 7.50  
Bound volumes of 1876 or 1877..... 9.00

In sending volumes to be bound it should be stated whether the illustrations are to be bound with their respective numbers, or whether all illustrations are to be placed together at the end of volume.  
N. B.—Volumes bound in both styles are kept in stock.

The above will be sent, post paid. Subscribers sending their numbers to be bound will prepay postage or express charges.  
**HOUGHTON, OSGOOD & CO., PUBLISHERS,**  
Winthrop Square, Boston.



**The Draft of the Chimney Increased.**

Smoking Chimneys Prevented. Particularly adapted to Chimneys in exposed positions. Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

**JOS. W. TAYLOR,**  
70 Grand St., Brooklyn, N. Y.

**TO ARCHITECTS AND BUILDERS.**

**MORTAR BLACK,**

now being used largely as a substitute for Lamp Black, dries readily and does not rot the mortar. For sale only in *Walpole Color and Chemical Works,*  
**HENRY D. DUPEE, Proprietor,**  
79 KILBY STREET, BOSTON

**INDEX OF CURRENT WORK,**

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

**Baltimore, Md.**

**CHURCH.**—The Cummings Memorial Church. Mr. Caswell, architect.

**CHURCH.**—The Pius IX. Memorial Church. G. A. Frederick, architect. Cost \$100,000.

**CHURCH.**—Church of St. Michael and All Angels. Cost \$80,000. Wyatt & Sperry, architects.

**HOSPITAL.**—Johns Hopkins Hospital. J. R. Niernsee, consulting architect.

**Boston.**

**BANK BUILDING.**—Tremont Bank Building. Carl Fehmer, architect.

**HOTEL.**—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.

**THE MUSEUM OF FINE ARTS.**—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.

**SCHOOL-HOUSE.**—High and Latin School. G. A. Clough, architect.

**ASYLUM.**—Asylum for Aged People, C. J. Bateman, architect. Cost \$5,000.

**Brooklyn, N. Y.**

**TENEMENT.**—A. T. White, owner. William Field & Son, architects.

**SOCIETY BUILDING.**—The Long Island Historical Society Building. Mr. G. B. Post, architect. Cost \$100,000.

**CHURCH.**—St. Francis Xavier R. C. Church, West Fifteenth Street. Cost \$150,000. P. Keely, architect.

**HOSPITAL.**—St. John's Hospital, N. L. Derby, New York, architect.

**Chicago, Ill.**

**ARMORY.**—Armory for the First Regiment. Messrs. Wheeler & Clay, architects. Cost \$25,000.

**STORE.**—The Singer Building. Cost \$250,000.

**Cincinnati, O.**

**U. S. CUSTOM HOUSE AND POST OFFICE.**—S. Hannaford, local superintendent.

**CHILDREN'S HOME.**—J. W. McLaughlin, architect. Cost \$50,000.

**NEWSPAPER OFFICE.**—The Gazette Building. E. Anderson, architect.

**CLUB-HOUSE.**—Allemania Club-House. J. W. McLaughlin, architect. Cost \$60,000.

**UNIVERSITY BUILDING.**—Cincinnati University Building. S. Hannaford, architect. Cost \$50,000.

**Cleveland, O.**

**BUSINESS BLOCK.**—Anasa Stone, owner. J. Ireland, architect. Cost \$70,000.

**CHURCH.**—Second Presbyterian. J. Ireland, architect. Cost \$70,000.

**CONVENT.**—Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

**Hartford, Conn.**

**SEMINARY.**—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.

**CATHEDRAL.**—B. C. Cathedral of St. Joseph. P. Keely, architect.

**CATHOLIC SCHOOL.**—Brown & Stilson, architects, New Haven. Cost about \$25,000.

**Jersey City.**

**CONVENT.**—Convent of the Sisters of St. Dominic. Cost \$40,000.

**New York.**

**THE "FLORENCE."**—Emile Grewé, architect. Mrs. Matthews, owner. Cost \$500,000.

**THE ROBEEL BUILDING.**—S. D. Hatch, architect. Cost \$250,000.

**COLLEGE.**—Addition to Columbia College. C. C. Haight, architect. Cost \$200,000.

**OFFICE BUILDING.**—Messrs. Silliman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.

**APARTMENT HOUSE.**—Mr. H. J. Hardenburgh, architect. Cost \$300,000.

**PRIVATE RESIDENCE.**—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.

**ARMORY** for the Seventh Regiment.—Cost \$300,000. C. W. Clinton, architect.

**HOSPITAL.**—Presbyterian Hospital. Wilson Bros., architects OFFICE BUILD NO.—Girard trust.

**Providence, R. I.**

**DORMITORY** for Brown University.—Messrs. Stone & Carpenter, architects.

**St. John, N. B.**

**POST OFFICE, Custom House, and Savings Bank.**—Mr. Scott, Chief Architect to the Dominion Government.

**BANK.**—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.

**CHURCH.**—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.

**CITY HALL.**—Messrs. McKean & Fai weather, architects.

**CHAPEL.**—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.

**Publishers' Department.**

**The American Architect and Building News.**

PUBLISHED EVERY SATURDAY BY  
**HOUGHTON, OSGOOD & CO.,**  
WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.  
An Illustrated Journal of Constructive and Decorative Art devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year, \$6.00 in advance.

**CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,**

WITH  
*Houghton, Osgood & Co.'s other Periodicals.*  
THE ARCHITECT and \*ATLANTIC MONTHLY.....\$9.00  
THE ARCHITECT and THE REPORTER.....15.00  
THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL.....10.00  
THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE..... 7.00  
\* N. B.—The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

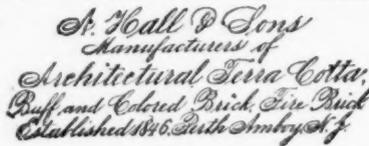
**RATES OF ADVERTISING.**

PAGES NEXT TO READING MATTER,  
single insertion.....12½ cts. per line.  
One inch (14 lines) one insertion..... \$1.75  
One inch, six insertions..... 10.00  
INSIDE PAGES, single insertion..... 10 cts. per line.  
One inch, single insertion..... \$1.40  
One inch, six insertions..... 7.00  
For larger space, and for a series of more than six insertions, reduced rates, made known on application to the Publishers

Special rates for first and last pages.  
No extra charge for cuts, or for advertisements that occupy more than a column in width.

Payments should be made directly to the Publishers, either by draft or by post office order.

**HOUGHTON, OSGOOD & CO., Publishers,**  
WINTHROP SQUARE, BOSTON.



**ARCHITECTURAL IRON WORKS.**  
**YOUNGLOVE & CO., Propr's.**  
CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CRESTING, ETC.  
Estimates promptly furnished.

(Established 1848.)  
**MARKET ST. ARCHITECTURAL FOUNDRY**

**AND IRON WORKS.**  
**SNEAD & CO.,**

LOUISVILLE, KY.  
Makers of every description of Iron Work for Buildings.

**OUR ADVERTISERS** and others who are in the habit of using business circulars, will find in our columns of "Building Intelligence" a continually new directory of names and addresses of those persons who, being at present actively engaged in building, are the ones who are most desirous of receiving circulars setting forth the advantages and qualities of all classes of building appliances.

An hour spent in mailing circulars to the persons mentioned above cannot fail of being profitable to the business man.

PROPOSALS.

SCHOOL-HOUSES.

CINCINNATI, O. Sealed proposals will be received at the office of the Board of Education, Public Library Building, until Monday, September 16, 1878, at 12 m., for the material and labor required for each separate and distinct trade or kind of mechanical labor necessary for building two (2) new school-houses, one on Eighth Street, between John and Mound streets, and one on Brown Street, west of Baymiller Street, according to plans and specifications on file in the office of the Superintendent of School Buildings, No. 359 West Fifth Street. Bids must be on blank forms, to be obtained at either of the above offices. No bid will be received for the whole work or for any greater portion than is embraced in one trade or kind of mechanical labor. Each bid must contain the name of every person interested therein, and must be accompanied by a sufficient guarantee by some disinterested person in a penalty equal to the amount of the bid, that if the bid is accepted a contract will be entered into and the performance of it properly secured. Each bid must be indorsed with the kind of work bid upon, and addressed to Isaac Adler, Chairman of Building Committee. The right is reserved to reject any and all bids. In order of the Board of Education. ISAAC ADLER, Chairman of Committee on Buildings. 141

IRON WORK, CUT GRANITE, BRICK, CEMENT, SAND.

Proposals for Iron Work, Cut Granite Work, Bricks, Cement, and Sand for the U. S. Custom-House, etc., at Albany, N. Y. OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., September 2, 1878. Sealed proposals will be received at this office until 12 m., of the 16th day of September, 1878, for the following items required for the basement and first story of the U. S. Custom-house, etc., at Albany, N. Y. First, For wrought and cast-iron work, basement columns, and first floor beams. Second, For granite work for first story, cut, lewis, and delivered at the site of the building ready for setting. Third, For 850,000, more or less, best common bricks. Fourth, For 1,200 barrels, more or less, of cement, 300 pounds to the barrel, equal to best American brands. Fifth, For 300 cubic yards, more or less, clean, sharp sand. Copies of drawings and specification of the iron and stone-work, and specifications for bricks, cement, and sand, and any additional information, may be had on application at this office or the office of the Superintendent. H. G. JACOBS, Acting Supervising Architect. 142\*

IRON WORK.

CLEVELAND, O. BOARD OF EDUCATION, CLERK'S OFFICE, August 19, 1878. Proposals will be received by the Board of Education at this office until 12 m., Monday, September 16, 1878, for the material and labor contained in the specifications and drawings for the iron work of the Walton Avenue School Building. A detailed list of material can be seen at the office of Levi T. Schofield, architect, or this office. No proposal will be entertained unless made on the blanks furnished by the Board. The bid for labor and material must be separately stated, with the price thereof. Each bid shall contain the name of every person interested in the same, and shall be accompanied by a sufficient guarantee of some disinterested person that if the bid is accepted a contract will be entered into and the performance of it properly secured. The Board reserves the right to reject any or all bids, to accept or decline to close a contract as in their discretion they shall deem it their duty to do. THOS. B. WHITEHEAD, Clerk. 141

STEAM RADIATORS.

PHILADELPHIA, PENN., August 29, 1878. Proposals will be received by the Trustees until Monday, September 9, 1878, at 12 noon, for furnishing Steam Radiators for heating City Ice Boats. Specifications of work required can be seen at the office of the Trustees, and the bids must be for material and workmanship of the best quality. The Trustees reserve the right to reject all bids not considered by them satisfactory. No bids will be considered unless accompanied by a certificate from the City Solicitor that the provisions of an ordinance approved May 25, 1869, have been complied with. Address proposals to C. A. GRIFFITH, President Trustees City Ice Boats. Office, 115 Walnut Street. 141

CANAL.

OTTAWA, CAN. Sealed tenders, addressed to the Secretary of Public Works, and indorsed "Tender for the Lachine Canal," will be received at the office of the Department of Public Works, at Ottawa, Ontario, until the arrival of the eastern and western mails, on Wednesday, the 18th day of September next, for the deepening, enlargement, and completion of that part of the Lachine Canal now known as Section No. 9, and formerly called the "Rock Cut." A plan, showing the position of the work, and a specification of what remains to be done, can be seen at said office, and at the Lachine Canal Office, Montreal, on and after Friday, the 6th day of September next. Contractors are requested to bear in mind that tenders will not be considered unless made strictly in accordance with the printed forms, and—in the case of firms—except there are attached the actual signatures of the nature of the occupation, and residence of each member of the same; and further, an accepted bank check for the sum of \$2,000 must accompany the tender, which sum shall be forfeited if the party tendering declines entering into contract for the works at the rates and on the terms stated in the offer submitted. The check thus sent in will be returned to the respective parties whose tenders are not accepted. For the due fulfillment of the contract, satisfactory security will be required by the deposit of money to the amount of 5 per cent on the bulk sum of the contract, of which the sum sent in with the tender will be considered a part. Ninety per cent only of the progress estimates will be paid until the completion of the work. To each tender must be attached the actual signatures of two responsible and solvent persons, residents of the Dominion, willing to become sureties for the carrying out of these conditions as well as the due performance of the works embraced in the contract. This Department does not, however, bind itself to accept the lowest or any tender. By order, F. BRAUN, Secretary. 142

PROPOSALS.

LOCKS AND KEYS.

POST OFFICE DEPARTMENT, WASHINGTON, D. C., August 15, 1878. Separate sealed proposals will be received at this Department until 12 o'clock noon on the 20th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as are to be used for the street letter-boxes of the United States. As the public exposure and searching examination necessary to intelligent bidding on any prescribed model of a lock and key would tend to impair, if not entirely destroy, the further utility of all such locks and keys for the purposes of the mails, the Postmaster-General prescribes no models or samples for bidders, but relies for a selection on the mechanical ingenuity and skill which a fair competition among inventors, hereby invited, may develop in samples submitted by them. Specifications of requirements as to proposals, samples, kinds and quantities of locks and keys, contracts, etc., will be furnished on application by letter to the second Assistant Postmaster-General. No proposal will be considered which is not submitted in accordance with such specifications and forms of proposal. The contracts which may be made are to be in conformity with the specifications and accepted proposals. 170 D. M. KEY, Postmaster-General.

PIER.

ASHTABULA HARBOR, U. S. ENGINEER OFFICE, OSWEGO, N. Y., August 8, 1878. Sealed proposals for the extension of the East Pier, Ashtabula Harbor, Ohio, will be received at the U. S. Engineer Office, Cleveland, Ohio, until 11 o'clock, A. M., Tuesday, September 17th, 1878. Specifications and blank forms for proposals, which must be made in duplicate, may be had on application to this or to the Cleveland office. 141 WALTER MCFARLAND, Major of Eng'rs.

BREAKWATER.

CLEVELAND, O. U. S. ENGINEER OFFICE, OSWEGO, N. Y., August 7, 1878. Sealed proposals for the extension of the Cleveland Breakwater will be received at the U. S. Engineer Office, Cleveland, Ohio, until 11 o'clock, A. M., Tuesday, September 17th, 1878. Specifications and blank forms of proposals, which must be made in duplicate, may be had on application to this or to the Cleveland office. WALTER MCFARLAND, Major of Eng'rs. 141

DIKE.

EVANSVILLE, IND. U. S. ENGINEER OFFICE, 82 WEST THIRD STREET, CINCINNATI, OHIO, August 6, 1878. Sealed proposals, in duplicate, will be received at this office until noon on Friday, the 13th day of September, 1878, for extending and repairing the dike in the Ohio River, opposite the city of Evansville, Ind. Work to be completed by December 31, 1878. Approximate estimate of materials: 5,000 cubic yards of rip-rap stone, 5,000 cords of brush, 24 piles. Specifications and printed forms of proposals will be furnished on application. WM. E. MERRILL, Major of Engineers. 141

DESIGNS FOR ENCLOSURE OF ARMY AND NAVY MONUMENT.

CITY OF BOSTON, CITY HALL, July 16, 1878. The Joint Standing Committee on Common and Public Grounds hereby offer a premium of Fifty Dollars for the best design for a Bronze Fence, to be erected around the Army and Navy Monument on Boston Common. The total cost of the fence, including cost of foundation and erection, not to exceed the sum of Two Thousand Dollars. Each design to be marked with some motto or device, which is to be repeated on the outside of a sealed envelope containing the author's name. The design which is accepted will become the property of the City of Boston; all others will be at the disposal of their respective authors. The Committee reserve the right to reject any or all designs received. All designs to be sent to the office of the Clerk of Committees, City Hall, on or before the 14th day of September, 1878, at 1 o'clock P. M. For the Committee. CURTIS GUILD, Chairman. 141

BEACONS AND DWELLINGS.

SIXTH DISTRICT, CHARLESTON, S. C., August, 1878. Sealed proposals will be received at this office until 10 A. M., September 21, 1878, for the construction and erection, at the site, Port Royal Harbor, South Carolina, of the Hilton Head Range Beacons and Dwellings. The structures comprise two wooden frame dwellings and one iron-frame tower, eighty-seven feet high. Proposals may be for the whole work, or for portions thereof, separated as follows: 1. For the wooden-frame structure erected at the site. 2. For the iron tower erected at the site. 3. For the iron tower delivered on board sea-going vessel or vessels, after inspection and while completely erected at the workshops. 4. For transportation and complete erection of the iron tower at the site. 5. For the building of the concrete foundation of the iron tower. Proposals must be made out on blanks furnished from this office. The contract is to be entered into within ten (10) days after the notification of the award of the contract. The usual conditions will be observed. The right to reject any or all bids, or to waive defects, if it be deemed for the interests of the Government to do so, is reserved. A copy of this advertisement should accompany each bid. Plans and specifications can be seen at this office, or obtained upon application. Proposals must be enclosed in a sealed envelope and indorsed "Proposals for Hilton Head Range Beacons," and then enclosed in another envelope addressed to W. A. JONES, Capt. Corps of Engineers, U. S. A., Engineer 6th L. H. District, No. 45 Broad Street, Charleston, S. C. 142

PROPOSALS.

BRIDGES, VIADUCTS, ETC.

CINCINNATI, O. Sealed proposals addressed to the undersigned at their office, No. 82 West Third Street, Cincinnati, will be received until noon Wednesday, the 18th of September, 1878, for the construction of thirty-four (34) iron bridges and viaducts, and twelve (12) wooden bridges—all or part of them—on the Cincinnati Southern Railway, between Somerset, Ky., and Boyce's Station, Tenn. Maps and profiles of the different localities, with plans, strain sheets, and specifications, can be seen at the office of G. Boucarré, Principal Engineer Cincinnati Southern Railway, No. 70 West Third Street, Cincinnati, where printed forms can be had, and any desired information given in reference to the work. Ninety per cent. only of the monthly progress estimates will be paid in cash until the final completion of the work. For the due fulfillment of the contract satisfactory security will be required to the amount of 10 per cent on the bulk sum of the contract. The firm does not bind itself to accept the lowest or any proposal. R. G. HUSTON & CO., Major of Engineers. 82 West Third Street. August 26, 1878. 142

BREAKWATER.

BUFFALO, N. Y. Sealed proposals for the extension of the Buffalo Breakwater will be received at the U. S. Engineer's Office, Buffalo, N. Y., until 11 o'clock A. M., September 18, 1878. Specifications and blank forms for proposals, which must be made in duplicate, may be had on application to this or to the Buffalo office. WALTER MCFARLAND, Major of Engineers. U. S. Engineer Office, Oswego, N. Y. 142

CANAL AND CANAL LOCKS.

U. S. ENGINEER OFFICE, PORTLAND, OREGON, August 1, 1878. Sealed proposals will be received at this office until 11 o'clock, A. M., Tuesday, October 1, 1878, for furnishing labor and materials for the construction of a portion of the canal and locks at the Cascades of the Columbia River, Oregon. Plans and model of canal can be seen, and specifications and forms of proposals obtained, at this office. JOHN M. WILSON, Major of Engineers. 144

COURT HOUSE AND JAIL.

SPRINGFIELD, O. Sealed proposals will be received at the Auditor's Office, in the City of Springfield, Clark County, Ohio, until 2 o'clock P. M. on Thursday, the 12th day of September, A. D. 1878, for furnishing all materials and labor, or any part thereof, required in the erection, construction, and completion of a new Court House, and a new Jail and Sheriff's Residence (separate buildings), in the City of Springfield, for the County of Clark, State of Ohio, according to plans and specifications for the same as furnished by T. J. Tolson & S. S. architects, of Fort Wayne, Ind. Plans, specifications, and bills of quantities can be seen at the Auditor's Office. Said buildings will be required to be fully finished and completed at dates following: the Sheriff's Residence and Jail, on or before the 1st day of August, A. D. 1879. The Court House, on or before the 1st day of December, 1879. All proposals must be accompanied with a bond in the sum of the amount of contract, certified to by the Clerk of the Court, or Auditor of the County where bidders reside; that the same is good and sufficient for the amount; that the bidder or bidders will give a good and satisfactory bond, if awarded the contract for said buildings or any part of the same,—and no bid or bids will be considered unless such bond accompanies it. Blank forms for bids will be furnished by the Auditor, and all bids must be made thereon. Estimates to be made monthly as the work progresses. The Board of County Commissioners for said county reserve the right to reject any or all bids. By order of the County Commissioners, QUINCY A. PETTS, Auditor of Clark County, Ohio. 141

MILITARY OFFICES.

OFFICE OF THE BOARD OF STATE BUILDING COMMISSIONERS, LANSING, MICH., August 6, 1878. Proposals will be received at the above office until 12 o'clock M., on Thursday, September 12, 1878, for fitting up the military rooms in the new capitol in accordance with drawings and specifications adopted therefor. The drawings and specifications may be examined, and all necessary information obtained by application to the Secretary. All proposals must be sealed, indorsed "Proposals for fitting up Military Apartments," and addressed to A. L. Bours, Secretary of the Board, Lansing, Mich. The proposals will be opened at the office of the Board at 8 o'clock P. M. of the above-named day. The Board reserve the right to reject any or all proposals submitted. CHAS. M. CROSWELL, Governor. E. O. GROSVENOR, JAMES SHEARER, ALEX. CHAPFON, State Building Commissioners. ALLEN L. BOURS, Secretary. 141

COMPETITION.

COUNTY ASYLUM.

MILWAUKEE, WIS. Notice is hereby given in pursuance of a resolution of the County Board of Supervisors, of Milwaukee County, Wisconsin, adopted on the 30th day of July, 1878, that plans, drawings, and specifications, including an estimate of the cost for the erection and completion of a county asylum for the care of insane and imberbe persons in and for the county of Milwaukee, for the accommodation of 250 patients,—such plans, drawings, and specifications, to comprise a complete building, including heating apparatus and other requisite machinery, and said plans and drawings to be drawn to the scale of 1/4 inch to the foot, and the sectional views of the walls and partitions to be colored in the proper colors, to indicate the material used therein, as recited in such specifications, and the dimensions of said partitions and walls and size of apartments to be set forth on the drawings in plain figures, such specifications to be full and complete in all respects, describing both the quality and material to be used and the workmanship proposed in the construction of buildings, so that if necessary the work of building can be let thereon,—will be received by the Select Committee of said Board of Supervisors on County Asylum, at the office of the County Clerk, in the Court House, in the city of Milwaukee, until the 16th day of September, 1878, at 10 o'clock, A. M. The architect whose plans shall be adopted will be employed to superintend the construction of the building, and his plan only will be paid for. For further particulars inquire at the County Clerk's office. W. M. BRIDGEMAN, Chairman Joint Committee on Insane Asylum. 141

MARSHALL'S AMERICAN

The Useful



LEADED SHEETS. Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Represented in New England States by C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

PATENT MINERAL WOOL. ENTIRELY FIRE-PROOF AND UNDECAYING. THE BEST INSULATOR OF HEAT, COLD, AND SOUND. For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc. ALEXANDER D. ELBERS, P. O. Box 4461. 26 1/2 Broadway, New York

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free HENRY McSHANE & CO., Baltimore, Md.

is issued monthly—consists of Perspectives of Interiors, Ornaments of Buildings, Fresco Painting, Furniture, etc., and is accompanied with full-size working-drawings—of direct use—Price to Subscriber—One dollar per number.

Office 28 Pemberton Square, Boston, Mass.



Terra Cotta Chimney Tops, Akron Land Tile

D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

THE HELIOTYPE PRINTING COMPANY. 220 DEVONSHIRE ST. BOSTON. COR FRANKLIN ST. HELIOTYPE PHOTOGRAPHS in Printers Ink. HELIOTYPE LITHOGRAPHS printed by Steam. HELIOTYPE CUTS to print with Type. HELIOTYPE FACSIMILE LETTERS, SHOW CARDS, &c.

THE "AIR SPACE" BOILER COVERINGS

Save 10 to 20 per cent in fuel.

STEAM and PIPE

THE CHALMERS-SPENCE COMPANY.

140 Congress Street, Boston. Foot 9th St., E. R., New York.

CLASSIFIED ADVERTISEMENTS.

Table listing various categories of advertisements such as ARCHITECTS, ARCHITECTURAL IRON WORK, BRICK, CARPENTERS, etc., with corresponding page numbers.

Table listing various categories of advertisements such as BRONZE DECORATIONS, CEMENT, CHIMNEY TOPS, CLERKS FOR PUBLIC BUILDINGS, etc., with corresponding page numbers.

STEEL RIBBON SASH LINE, HOOKHAM'S PATENT. Includes detailed diagrams of the sash line mechanism, a circular inset with 'DIRECTIONS FOR FIXING', and a list of 'ADVANTAGES'. The text describes the product as being made of several bands of galvanized steel, and notes it is much cheaper than ordinary lines and chains.

McCoy & Co., Sole Agents, 134 AND 136 DUANE STREET, NEW YORK.

Table listing various categories of advertisements such as STEEL RIBBON SASH LINE, STONE (BUILDING), SUGAR, etc., with corresponding page numbers.

**ETNA IRON CO.**

Manufacturers of every description of Wrought and Cast

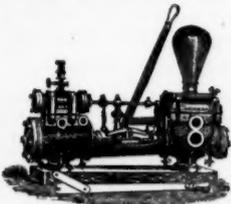
**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**

Patent



Steam

**PUMP THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a speciality.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

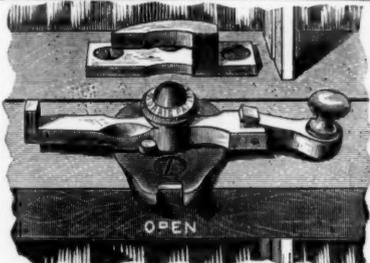
The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

**KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES, { 14 & 16 Federal St., } Boston.  
{ 113 & 115 Congress St., }  
{ 92 & 94 Liberty St., New York.

Send for Illustrated Catalogue.



THE

**MORRIS BURGLAR-PROOF SASH LOCK.**

Patented July 2, 1878. The Safest! The Simplest! The Most Reliable! THE BEST!

N. B.—No springs to get out of order. Sold by all hardware jobbers. Manufactured by the MORRIS SASH LOCK MANUFACT'G CO., Office 168 Walnut St., Cincinnati, O.

Price List and Samples furnished to the trade on application. A liberal discount to the trade.

**PATENTS.**

F. A. LEHMANN, Solicitor of Patents, Washington, D. C. NO PATENT NO PAY. Send for Circular.

**"ZODTCHY" (BUILDER).**

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING,

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

**M. JEROME KÜTTNER,**

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from EIGHT to SIXTEEN pages of letterpress, gr. quarto, with cuts, and at least FIVE autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.

The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

**JOURNAL "ZODTCHY,"**

13 OFFICER STREET, ST. PETERSBURG, RUSSIA.



**Carson's Kitchen Sink.**

Is an improvement in this fixture that must meet with the approval of every house-keeper as it retains every particle of grease, and prevents the waste of pipes from filling up; besides being better trapped than any other sink in use.

Pat'd Jan. 24 1877. Bignall Mfg. Co., Medina, N. Y., or J. M. Carson, Louisville, Ky., Man'rs.

**NATIONAL**

**FINE ART FOUNDRY,**

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze. TO ARCHITECTS AND BUILDERS.

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

**GEO. DWIGHT, JR., & CO.,**

Builders in Iron, and Engineers in Fire-Proof Construction,

SPRINGFIELD, MASS.,

HAVE for many years given their exclusive attention to FIRE-PROOF CONSTRUCTION; and they now invite the correspondence of Architects to the following specialities which hereafter will constitute the leading items of their business:

**FIRE-PROOF FLOORS.** The only floors that have stood fire in this country.

**FIRE-PROOF ROOFS.** Refer to Equitable Life Insurance Company's Building at Boston.

**FIRE-PROOF SHUTTERS.** Have stood many fires in all parts of the country. Over 6000 pairs put up in Boston after the fire. Saved the city of Springfield last year.

**FIRE-PROOF LATH.** In the words of one of the best-known architects of this country, "Minimum of metal, maximum of stiffness, maximum of strength; the best lath ever made, either wood or iron." See New York Post-Office; State Department, Washington; Equitable Life Insurance Company's Buildings, and many others.

Mr. Hoyt will be pleased to wait upon Architects, when desired, to explain our methods, and to present for inspection construction plans and estimates for any specific work.

**BURDITT & WILLIAMS,**

DEALERS IN

**FINE HARDWARE**

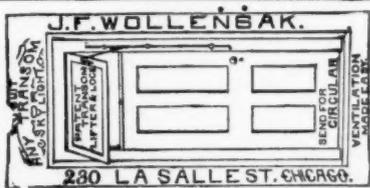
of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE

of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



**CATALOGUE OF Architectural Books**

Mailed free to any address.

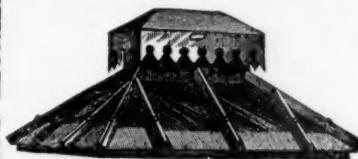
All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO.,

ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.

**BICKELHOUP BROS.,**  
829 West 37th St., New York.

NO LEAK.



NO FURTHER.

**PATENT METALLIC SKY-LIGHTS.**

BEEHIVE BRAND.

**FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**UNPARALLELED DISCOVERY.**

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the *Paint Preserver* invented by ASAHEL WHEELER, Boston. It will neither crack, blister, nor scale.



**BALTIMORE PRESSED TILES,**  
FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases,

DRAIN AND SEWER PIPE, FIRE-BRICK, LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

WALDO BROTHERS,

No. 94 WATER STREET, BOSTON.

**PEERLESS BRICKS.**

THE PEERLESS BRICK COMPANY,

OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK

ARCHITECTURAL SHAPES (80 kinds).

ALSO

**RED** Pressed Fronts.

Extra fine in color and quality

**BROWN,** Colored throughout

More beautiful than Brown Stone DURABLE

**CHOCOLATE,**

Same as above; difference in color

**FLESH COLOR,**

A very popular color.

**BUFF,** very fine.

Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F ADAMS,

JOSEPH WOOD, JR.,

PRESIDENT.

TREASURER



**DOLIVET, CUTTER, & CO.,**

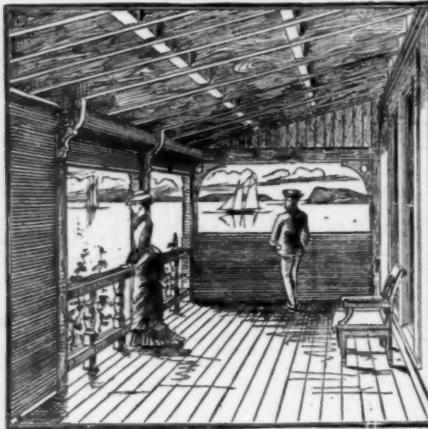
ARTISTIC

**Papier Mache Decorations,**

106 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING VENETIAN BLINDS.**  
**WILSON'S PATENT.**  
 These blinds can be fitted to any kind of Window or Piazza. They require no winding machinery or balance weights, and run up and down as easily as an ordinary spring shade. For Bay Windows they are found invaluable. They are simple, durable, and handsomely finished. They were exhibited at Philadelphia in competition with the Rolling Venetian Shutters of English manufacture, and received the only award of Medal and Diploma. Price reduced to 50 cents per foot super. In hard wood. We also manufacture Wilson's patent Rolling **STEEL SHUTTERS**, the best and cheapest fire and burglar-proof shutters in the market.  
**WILSON & JAMES,**  
 68 Beekman St., NEW YORK.

**VALUABLE ART PUBLICATIONS.**

**ALLONGE'S** (Auguste) Charcoal Drawing. With an Introduction by C. C. PERKINS, and a Heliotype Frontispiece. Small 4to. \$1.00.  
**BAKER'S** (W. S.) Origin and Antiquity of Engraving, with 23 Heliotype Illustrations from Dürer, Van Dyck, Raphael, Guido, etc. 8vo. \$5.00.  
**HUNT'S** (William M.) Talks on Art. 8vo. Paper. \$1.  
**CLEMENT'S** (Clara Erskine) A Handbook of Legendary and Mythological Art Profusely Illustrated, and with a complete Index. Cr. 8vo. Cloth, red edges, \$3.25. Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.  
**MURRAY'S** (Mrs. Elizabeth) The Modern System of Painting in Water-Colors from the living model. 12mo, paper, 50 cents.  
**HOUGHTON, OSGOOD AND COMPANY, Boston.**

**A NOVELTY.**

**THE YALE PATENT ANTI-FRICTION ROLLER STRIKE.**

Applicable for use with all Mortise Locks, old and new.  
 IT ENABLES THE DOOR TO BE SHUT WITHOUT SLAMMING.  
 IT PREVENTS ALL JAR AND NOISE.  
 IT SAVES WEAR OF THE LOCK AND DOOR.  
 IT CAN BE EASILY APPLIED.  
 ITS COST IS BUT TRIFLING.  
 Architects can obtain a sample strike free by addressing  
**YALE LOCK MANUFACTURING CO., STAMFORD, CONN.**  
 New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,  
 94 BEEKMAN STREET,  
 NEW YORK.

**SPECIALTIES IN PLUMBING GOODS.**  
 Having for their especial object  
*Cleanliness, Durability, And the exclusion of Sewer Gas.*  
 Warnings' Sewer Gas Check-Valve. Made entirely of Brass.

**JENNINGS' NEW CLOSET, WITH New Valve**  
 With non-corrosive Valve Seating and Solid Plunger.

**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer Gas that has yet been invented.  
**A POSITIVE SEAL**  
 Against sewer-gas, absorbed gases, and back water. Seal is not broken by syphonage or evaporation. Self-scouring, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers,  
**B. P. BOWER & CO.,**  
 104 & 106 St. Clair St., Cleveland, O.

**THE EUREKA VENTILATION CO.**  
 OFFICE AND MANUFACTORY,  
 74 CHARLESTOWN STREET,  
 BOSTON, MASS.

**A. L. FAUCHÈRE & CO.**  
 OFFICE AND WAREHOUSES  
 1319 and 1321 Broadway, New York,  
 Importers, Manufacturers, and Dealers in all kinds of foreign and domestic

**MARBLE FOR INTERIOR WORK.**  
 Estimates furnished on application.  
**ARCHITECTURAL IRON AND JAIL WORKS.**

**M. CLEMENTS,**  
 MANUFACTURER OF  
 Iron Railing, Bank Vaults, and Jail Cells,  
 Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Flain and Corrugated; Fire-proof Shutters, Doors, etc.  
**RAYMILLER STREET, near Sixth and C. H. & D. R. R. Depot, CINCINNATI, OHIO.**

**STEWART'S SLATE, MARBLE AND HARD WOOD MANTELS.**  
 MIRRORS, ART-TILES FOR MANTELS, HEARTHES &c.  
 Masonic Temple, 23rd St & 6th Ave. N.Y.

**Portland Stone Ware Co.**  
 Geo. C. DUNNE, Gen'l Ag't,  
 60 Kilby Street,  
 400 Federal Street, Boston.

**LIMMER ROCK ASPHALT CO.**  
 111 Broadway, Room 105, New York.  
 Rock Asphalt is a natural product, and the ideal material for Paving Roadways, Streets, Yards, and Stables, and for Flooring Cellars in Breweries and other establishments.



**SAYLOR'S PORTLAND CEMENT.**  
 Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R., U. S. Government Works (Fort and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally. For Sale by all dealers in Building Materials. **Johnson & Wilson, Gen'l Agts.,** Send for circular. 93 Liberty Street, New York

**PRIZE MEDALLISTS.**

1862; 1865; 1867; 1872; 1873; AND ONLY AWARD and MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**

ORIGINAL INVENTORS AND SOLE PATENTEES OF  
**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, Improved Rolling Wood Shutters  
 OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Tilford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.  
 OFFICE AND MANUFACTORY,  
**162 & 164 West 27th Street, New York.**

**HOPKINS & DICKINSON MANUF'G CO.**

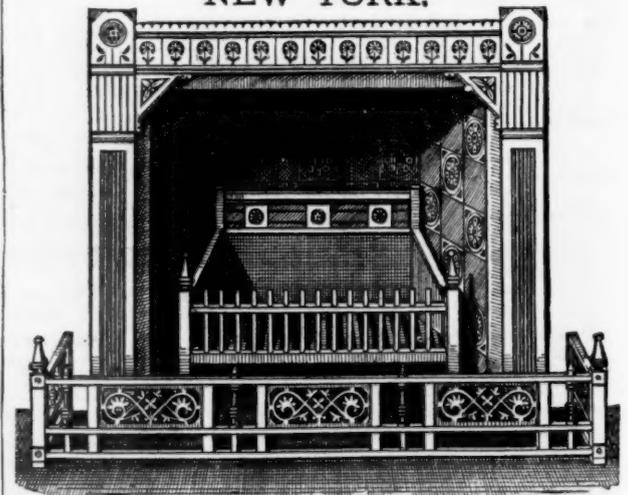
76 READE STREET, NEW YORK,  
 WORKS, DARLINGTON, N. J.  
 Lock and Hardware Manufacturers,  
 DESIGNERS, FOUNDERS, AND WORKERS

**BRONZE AND BRASS.**

Architects' Designs faithfully executed.  
 Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)  
 Union Sq., 2d door from Broadway, (17th St. side),  
 NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile.  
 HAVE NO OTHER WAREHOUSES.

**Automatic Signal Telegraph Co.,**  
 CITY OF BOSTON,

OFFICE, 178 DEVONSHIRE STREET, ROOM 20,  
 Is prepared to make contracts for the protection of buildings against fire.  
 DIRECTORS.  
 CHARLES E. GUILD, President. WILLIAM ENDICOTT, Jun  
 JOHN D. W. JOY. WILLIAM B. WATKINS.  
 PATRICK T. JACKSON, Treasurer.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

Theatrical Fresco only. Prices moderate. References first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.  
 LAFAYETTE W. SEAVEY,  
 Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK

**THE WELLINGTON PATENT OVERFLOW BASIN**

No sewer gas. No overflow. No leakage around the top of the basin. This thoroughly reliable basin is simply taking the place of the ordinary one. It gives perfect satisfaction in every instance.  
 Manufactured by  
**L. S. MOORE & CO.,**  
 Send for Circulars. 40 Oliver St., Boston.

# THE AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

Vol. IV. No. 142.]

SATURDAY, SEPTEMBER 14, 1878.

[PRICE 15 CENTS

### BUILDERS' SUPPLIES.

**AMERICAN ENCAUSTIC TILE,**  
Acknowledged by experts to be  
**THE BEST IN THE WORLD.**  
Manufactured by the  
**AMERICAN ENCAUSTIC TILING CO. (Limited.)**  
OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.  
Designs and estimates for Public Buildings, Halls, Churches, Vestibules, and for External Decoration, furnished on application.

**WALWORTH MANUFACTURING CO.,**  
69 KILBY ST., BOSTON.  
**PUBLIC BUILDINGS, PRIVATE RESIDENCES, GREENHOUSES, ETC.**  
Warmed and ventilated by  
**STEAM OR HOT WATER.**  
Correspondence solicited. Plans and estimates furnished on application.

**"HOTCHKISS" TOWER CLOCKS,**  
MANUFACTURED BY  
**SETH THOMAS CLOCK CO., THOMASTON, CONN.**  
Prices \$100 to \$6,000.  
**WARRANTED ACCURATE, STRONG, DURABLE.**  
OFFICE, 531 BROADWAY, NEW YORK.  
Send for Illustrated Catalogue.

**"MINTON'S ART AND TILES."**  
ENAMELLED  
(China Works, Stoke-Upon Trent.) Also, The Campbell Brick and Tile Co.'s  
**ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS, ETC.**  
For Churches, Banks, Halls, Vestibules, and Hearths; Outside Decorations, Flower Boxes, Etc.  
**THOS. ASPINWALL & SON,**  
604 BROADWAY, NEW YORK.  
The only representatives in the United States for the above firms.

**ASPHALT (FELT) ROOFING.**  
**WARREN'S NEW PATENT FELT AND GRAVEL ROOFING,**  
Substitutes NATIVE ASPHALT for Coal-Tar materials for these roofs.  
The very best and most durable material for flat roofs. Also, Native Asphalt and Asphaltic Cement for Concrete Walks and Pavements.  
Roofers and pavers supplied with the above, and with Warren's original Coal Tar Roofing and Paving Materials. Send for circulars and samples.  
**WARREN CHEMICAL AND MANUF'G CO.,**  
25 MAIDEN LANE, NEW YORK. 117 STATE STREET, BOSTON.

**THE MITCHELL GRANITE WORKS,**  
QUINCY, MASS.  
Has abundant facilities for furnishing the very best work, and all the most celebrated Granites of the New England States, for  
**MONUMENTAL, CEMETERY, AND BUILDING PURPOSES.**  
WORK PROMPTLY DONE, AND AT REASONABLE RATES.  
Polishing a specialty. Orders solicited.  
Address **G. H. MITCHELL, Agent.**

**TILES FROM ALL PARTS OF THE WORLD,**  
FOR  
**BANKS, PUBLIC BUILDINGS, AND PRIVATE HOUSES.**  
References given to Tile Work throughout the United States and British Provinces.  
**AGENT FOR THE AMERICAN ROOFING TILE**  
Contracts Solicited  
**C. A. WELLINGTON, Household Art Rooms,**  
No. 171 Tremont Street, Boston.

**OHIO VALLEY PRESS BRICK CO.**  
Challenge the world for fine stock brick; also manufacturers of all kinds of Bricks, octagon and square. Office 65 1/2 St. Yard Preston and Knapp Sts.  
**LOUISVILLE, KY.**

**HAWTHORNE & TUCKER,**  
PLUMBERS,  
16 PROVINCE STREET, BOSTON  
Estimates for Plumbing made, and work done in any part of the United States or Provinces.

**J. H. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue Mattapan (Ward 24), Boston.

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY OF NEW YORK.**

**LEONARD F. BECKWITH, Pres't.** **E. GILLET, Vice-Pres't.**  
Hollow Blocks of any pattern, uniting strength and resistance to fire and water. The Hydraulic Lime of Tell (France), one of the strongest cements known, is largely used in this manufacture. The blocks do not conduct heat, cold, or sound, and weigh 60 per cent less than brick. Fire-proof Partitions, Floor Arches between iron or wooden beams, and ceilings under iron or wooden beams, erected in following buildings:  
Western Union Telegraph, Orient, and Queens' Ins. Museum of Natural Hist. Coal and Iron Exchange, Hudson R. R. R. Fr. Depot. Equitable, Staats Zeitung, N. Y. Hospital, Drexel, Wmsburgh Savings Bank, Cluny, & Young's Hotel, Bos'n, Windsor, & Westminster Hotels, West Point Military Hosp. Syracuse Savings Bank, Columbia College, Tribune, Corvill, & Vancorlear Flats, Baltimore Safe Deposit Co. Peabody Inst., Baltimore, Peabody Museum, N. Haven, Westmoreland, & Elise Flats, Sidewalk laid at Lenox Library, Tribune, etc.  
Hollow Burnt Clay Bricks, for flat and curved arches, partitions, etc., and Skewbacks for brick arches.  
Sole agents for the U. S. for HYDRAULIC LIME OF TELL and LAFARGE PORTLAND CEMENT.  
Sole agents for the U. S. for METTLACH ENCAUSTIC TILES, laid in Tribune, Staats Zeitung, Mineral Spa, Central Park, Belvidere Hotel, etc.  
Sole agents for the Atlantic States for WIGHT'S FIRE-PROOF COLUMNS.

Our Fire-proof work is the only one approved by the New York Board of Fire Underwriters and the Superintendent of Buildings, after severe public tests.  
Office Room 54 COAL AND IRON EXCHANGE, 21 Courtlandt Street, New York.  
**BOORMAN & Co., Agents, Boston, 5 Doane St.**

**E. HOWARD & CO.**  
MANUFACTURERS OF CLOCKS AND WATCHES  
**CLOCKS FOR PUBLIC BUILDINGS**  
114 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**  
**PLAIN AND ENCAUSTIC FOR PUBLIC BUILDINGS AND DWELLINGS.**  
As laid by us in  
**THE CAPITOL AT WASHINGTON,**  
And in numerous Churches, Banks, and Dwellings in every part of the Country.  
Glazed and Enamelled Tiles for Mantels, Hearths, Wainscoting, &c., and for Exterior Decoration.  
**MILLER & COATES,**  
279 PEARL STREET NEW YORK.

**BARTLETT, ROBBINS & CO.**  
**HEATING AND VENTILATING OF PUBLIC AND PRIVATE BUILDINGS A SPECIALTY**  
PLANS AND SPECIFICATIONS FURNISHED.  
FOUNDERS, AND MANUFACTURERS OF GAS WORKS, ETC., ETC.  
24 LIGHT STREET, BALTIMORE.

**THE NEW ENGLAND GRANITE WORKS**  
HARTFORD, CONN., and 1221 BROADWAY, N.Y.  
Quarries at Westerly, R.I.  
**MONUMENTAL AND BUILDING WORK** of every description, all the varieties of AMERICAN AND FOREIGN GRANITE.  
UNRIVALED FACILITIES OFFERED TO THE TRADE.  
**J. G. BATTERSON, Pres't.** **H. R. BATTERSON, Sec'y.**  
DIRECTORS, **C. B. CANFIELD, H. A. BATTERSON, G. T. BATTERSON,**  
**CARL CORRADE, Sculptor.**

**WHITTIER MACHINE CO.**  
Manufacturers of Steam and Hydraulic  
**ELEVATORS,**  
**STEAM ENGINES, BOILERS, AND MACHINERY.**  
No. 1175 Tremont Street, Boston.  
Office in the New England Mutual Life Insurance Co's Building, Post Office Square, and 120 Broadway, New York  
**CHARLES WHITTIER, Pres.** **A. C. WHITTIER, Treas.**

**OTIS BROTHERS & CO.**  
**SAFETY STEAM AND HYDRAULIC ELEVATORS.**  
A specialty for a quarter of a century.  
**BUILDERS OF THE HALE HYDRAULIC ELEVATOR.**  
No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
**OHIO BUILDING STONE.**  
**GRIND AND SCOTCH STONE,**  
From our FLORENCE and AMHERST QUARRIES.  
Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS  
111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
Designers and Manufacturers of  
**GAS FIXTURES,**  
**ORNAMENTAL METAL WORK, CLOCKS AND BRASSES**  
**ARCHITECTS' ORDERS SOLICITED.**  
Special designs submitted on application.  
**WAREHOUSES, 636 AND 638 BROADWAY, NEW YORK.**  
**MANUFACTORY, 24th and 25th Sts., and 10th AVENUE, N.Y.**

**FISHER & BIRD,**  
Workers in all kinds of Foreign and Domestic  
**MARBLÉS,**  
97 to 103 EAST HOUSTON ST., NEW YORK.  
Established 1830.  
Among our notable decorations are: The Illinois New State House; Palace Hotel, San Francisco; Baldwin's Hotel, San Francisco; Insurance Building, 10th and Chestnut Streets, Philadelphia; Mutual Life Insurance Building Boston; Orient Mutual Insurance Building, New York; Union College, Schenectady; and numerous Churches, Private Residences, etc., etc., throughout the country. We solicit the opportunity to estimate upon all classes of work, viz., Tiling, Wainscoting, Staircases, Mantels, etc. Cementary work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
Are ready to estimate on contracts of any size for furnishing their celebrated Amherst, Ohio,  
**BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS OR CUT AND SET.**  
Also,  
**AMHERST AND INDEPENDENCE GRINDSTONES,**  
And OHIO MINERAL AND STONE PAINTS  
Fire-Proof Stove Cement and Stove Putty ground in Oil  
OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MOSAICS."** Floor Tiles, beautiful in color and design, for Dwellings, Churches, and Public Buildings.  
**SPANISH WALL TILES.** White, Glazed, Valencia, Tiles for Walls and for decorative painting.  
**PRINTED FIGURED TILES** of Spanish designs, for Wainscoting, Mantels, Jardinières, etc.  
Floors of "Nolla Mosaics" can be seen at the "Rockingham," corner of Broadway and 56th Street. Imported and for sale by **JOHN CHADWICK, Sole Ag't for U. S.,** 49 Broadway, N. Y.  
**C. E. PARKER, Agent, 14 Exchange Place, Boston.**

**TUFTS' ELEVATOR WORKS,**  
MANUFACTURERS OF "TUFTS' PATENT" COMBINATION ROPE ELEVATOR.  
TO BE OPERATED EITHER BY STEAM OR WATER.  
The only safe and reliable machine made for Passenger use in Public Buildings and Hotels, and for business purposes in Warehouses, Stores, &c.  
37 FOUNDRY STREET, SOUTH BOSTON.  
OFFICE, 243 Broadway, New York.  
**OTIS TUFTS,** President. **L. A. BIGELOW,** Treas'r and Gen'l Manager.

**STEAM WARMING APPARATUS.**  
**HIGH AND LOW PRESSURE.**  
**HOUSE WARMING A SPECIALTY.**  
Pamphlet with more than 1,000 references sent on application.  
**WYLLYS H. WARNER,**  
114 LEONARD STREET, NEW YORK,  
and 33 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**  
No. 6 COURTLAND ST., NEW YORK.  
Works at Paterson, N.J.  
**PATENT SAFETY STEAM ELEVATORS** for Public and Bank Buildings, Hotels, Private Dwellings, etc.  
**SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP GUARANTEED.**  
Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "HEALTH" AND "TUBULAR"  
Manufactured by the  
GOLD'S HEATER MANUFACTURING CO.  
114 LEONARD ST., NEW YORK.  
Send for Pamphlet.

E. GOLD, Pres't WILLYS H. WARNER, Treas.

**HUGH SISSON & SON,**

Importers, Dealers, and Manufacturers of  
**MARBLE.**

INTERIOR MARBLE WORK AND MONUMENTAL  
WORK A SPECIALTY.

Salesrooms, No. 140 W. Baltimore St.: Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,  
SPEAKING TUBES,  
AND BURGLAR ALARMS,**

For Public and Private Buildings.

THE BEST IN USE.

S. W. FULLER,  
63 Devonshire Street, Boston.

**ART PAINTED TILES**

FOR MANTELS, CABINETS, ETC.

SHARPLESS & WATTS,

325 MARKET STREET, PHILADELPHIA.

Agents for

MINTON'S TILES,

AND TRESSELL'S PAVEMENTS.

**JOHN MACK, Plain and Ornamental Plasterer.**

41 Cambridge Street, Boston.

**BUILDING MARBLE.**

Branch yard of the RUTLAND MARBLE CO., 198 Causeway  
Street, Boston. JOHN D. ALLAN, Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Rutland  
and Continental Marble, furnished at low prices.

**PRESSED BRICK,  
STOCK AND COMMON**

MANUFACTURED BY  
**FLETCHER & THOMAS,**  
Indianapolis, Ind.  
All brick warranted. Send for price list and samples.

**STEAM HEATING**

**GILLIS & GEOGHEGAN,**

Nos. 116 & 118 Wooster St., New York.  
See our work at the Cathedral, 50th St. and 5th Av.;  
Drexel Building, cor Wall and Broad; Bennett Building,  
Fulton and Nassau, etc.  
Architects and owners promptly furnished with specifications  
and estimates.

**ARCHITECTS.**

**P. B. WIGHT,**

CONSULTING ARCHITECT,

73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.

Consultations on matters pertaining to Fire-Proof Construction,  
Foundations, Drainage, Sanitary Work, Ventilation,  
Machinery, Valuations, Interior Decorations, and  
Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**

ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E., ARCHITECT  
AND SANITARY ENGINEER**

KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes  
of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,  
ARCHITECT,**

Room 17, Life Insurance Building,  
ST. LOUIS, MO.

Special attention to Churches, Schools, and other  
public buildings.

WALTER DICKSON, ARCHITECT, PERRY BUILDING,  
Albany, N. Y.

**GEO. E. WARING, JR.,**

CONSULTING ENGINEER,  
FOR SANITARY AND AGRICULTURAL WORKS,  
NEWPORT, R. I.

**SANITARY ENGINEERING.**

EDWARD S. PHILBRICK, C. E.,

12 WEST ST., BOSTON, MASS.

Offers advice and superintendence in  
CONSTRUCTION OF WORKS,  
AND PLUMBING, DRAINAGE, AND VENTILATION,

And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
327 HARRISON AVENUE . . . . . BOSTON,  
SHEET METAL CORNICES, HAYES'S PATENT  
VENTILATING SKY-LIGHTS,  
WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

**MANTELS AND GRATES.**

RANKIN'S PATENT makes the Cleanest, Cheap-  
est, and Hottest Fire. Avoid infringements, and send for  
Circular to

**C. S. RANKIN & CO.,  
ARCHITECTURAL IRON WORKS,**  
Manufacturers of all kinds of Iron Work for  
BUILDINGS, JAILS, ETC.

187 W. PEARL ST., CINCINNATI, O.

**EXCELSIOR  
ROOF PAINT.**

This paint has been thoroughly tested throughout the  
Eastern States, and has been found to be a perfect tin or  
metallic preserver. We warrant it neither to crack nor  
blister by HEAT or COLD, and to last

IN ANY CLIMATE TEN YEARS.

Those desiring to use this valuable preparation upon  
their buildings, can secure the same by addressing

C. M. WHEELER, J. M. ROOT,  
Toledo, Ohio.

**DECORATORS.**

**W. J. MCPHERSON,**

(Established A.D. 1845.)

**MURAL PAINTER,  
DESIGNER,**

**Ecclesiastical Decorator,  
AND  
ART STAINED GLASS MANUFACTURER,**

440 TREMONT STREET,

BOSTON, MASS.

**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the  
subscriber to produce Modern and Medieval styles of work  
equal to any European examples, for Churches, Pri-  
vate Residences, Halls, etc.

The value of the work is attained by a careful selection  
of colors in Cathedral and French Glass of his own importation.

Designs in accord with architects' plans furnished at  
short notice. Reference of work at office

SAMUEL WEST, 115 Eliot St., Boston

**FRANK HILL SMITH,**

1717 TREMONT STREET,

BOSTON . . . . . MASS.

**COOK, REDDING & CO.**

149 CONGRESS ST., BOSTON,

Ornamental, Stained, and Cut Glass,

FOR

Churches, Public Buildings, and  
Private Residences.

**DECORATORS.**

**JOHN LAFARGE,  
MURAL DECORATION,  
51 W. Tenth St., New York, and Newport, R. I.**

**SOCIETY OF DECORATIVE ART.**

4 East 20th Street,  
NEW YORK.

Architects' designs for panels, tiles and plaques for inser-  
tion in Cabinet Work, and other decorative uses, and for  
Art Needlework applied to curtains, hangings, portieres,  
screens, table-covers, etc., carefully executed. Original  
designs for any of the above, subject to approval, will be  
gladly received, and paid for by the Society when used.  
Orders are earnestly solicited.

The Society has arranged with Mr. RUSSELL STURGIS,  
Architect, for the Exhibition and Sale of his well-known  
Wall Papers. Some of these are faithful reproductions of  
Japanese decorative papers; some are taken from Oriental  
and other stuffs; some are of original design. New pat-  
terns will be added from time to time.

**Fresco Decoration.**

**EMMART & QUARTLEY,**

Designers, Decorators, and Painters,

32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made  
and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate  
work on hand or made to order. No. 1210 Ridge Avenue.  
JOSEPH S. MILLER successor to Wilson & Miller, Philadel-  
phia, Pa. Send for Illustrated Price-List

**Donald MacDonald,**

**GLASS STAINER AND DECORATOR**

No. 6 Hayward Place,

BOSTON



**INLAID WOOD FLOORS.  
ORNAMENTAL WOOD BORDERS.**

Designs and Estimates free.  
National Wood Manuf'g Co.,  
950 Broadway, near 23d St., New York

**PHILIP A. BUTLER,**

DECORATOR AND DESIGNER,

No. 17 FRENCHTON SQUARE,  
BOSTON.

**HENRY B. JONES & CO.**

IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS,  
612 WASHINGTON STREET, BOSTON.

(Established 1848.)  
**L. HABERSTROH & SON,  
PRESCO PAINTERS,  
and INTERIOR DECORATORS,  
No. 12 SCHOOL STREET, BOSTON.**

**VALUABLE BOOKS FOR ARCHITECTS.**

**PAINTERS, SCULPTORS, ARCHITECTS, EN-  
GRAVERS, AND THEIR WORKS.** A Hand-  
book. By CLARA ERSKINE CLEMENT. With  
illustrations and monograms. In one volume,  
crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will  
tell you all you want to know of hundreds of  
artists, and where to find all you want to know of  
their more important brethren, of whom no brief  
account will suffice you. It is a complete bio-  
graphical dictionary of the heroes of brush and  
chisel and graver. It is copiously illustrated  
with representations of standard works of art,—  
the treasures of European galleries and churches,  
—and it contains the monograms of many of the  
painters and engravers.

**AMERICAN MECHANICAL DICTIONARY.** A  
Descriptive Word-Book of Tools, Instruments,  
Machines, Chemical and Mechanical Processes;  
Civil, Mechanical, Railway, Hydraulic, and Military  
Engineering. A History of Inventions;  
General Technological Vocabulary; and Digest  
of Mechanical Appliances in Science and the  
Industrial and Fine Arts. By EDWARD H.  
KNIGHT, A.M., Civil and Mechanical Engi-  
neer. In three volumes, 8vo. Sold only by  
Subscription. Cloth, per set, \$24.00; sheep,  
\$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts,  
etc., it will become as much a necessity as Web-  
ster's Dictionary is to students and scholars.—  
M. D. Leggett, U. S. Commissioner of Patents.

\*\* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Boston.

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa. (Can.)	Philadelphia.	San Francisco	St. Louis.
1. BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50	.....	2.25 @ 2.50
2. Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50	.....	3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00	.....	3.00
3. CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25	.....	1.50 @ 2.00
4. Cabinet Maker	2.50 @ 3.25	.....	1.75 @ 2.25	.....	.....	1.50 @ 3.00	1.50 @ 2.00	.....	.....	.....
5. Finisher	2.00 @ 2.50	.....	1.50 @ 2.00	.....	.....	1.50 @ 3.00	1.25 @ 1.75	.....	.....	1.50 @ 2.00
6. FOUNDRYMAN	.....	.....	1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50	.....	.....	2.25 @ 2.50
7. Blacksmith	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50	.....	2.00 @ 2.50	1.25 @ 2.00	.....	.....	1.50 @ 2.50
8. Whitesmith	.....	.....	1.50 @ 2.00	1.50 @ 2.50	.....	2.00 @ 2.50	1.25 @ 1.75	.....	.....	.....
9. Galvanized Iron Worker	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	.....	.....	2.25 @ 2.50
10. GAS FITTER	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00	.....	.....	2.00 @ 3.00
11. LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.25	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50	.....	1.00 @ 2.00
12. PAINTER	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50	.....	2.00 @ 2.50
13. Glazier	.....	2.00 @ 2.50	1.75 @ 2.00	.....	.....	1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50	.....	.....
14. Grainer	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00	.....	2.00 @ 3.00	1.75 @ 2.50	.....	.....	3.50
15. Paper-Hanger	1.75 @ 2.50	.....	per roll.	.....	15c. pr. roll.	2.00 @ 2.50	1.50 @ 2.00	.....	.....	2.00 @ 3.00
16. PLASTERER	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	.....	2.00	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00	.....	2.25 @ 2.75
17. Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	.....	1.50 @ 2.50	2.00 @ 2.50	1.50 @ 2.25	.....	.....	2.25 @ 2.75
18. PLUMBER	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.50	2.50 @ 3.50	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50	.....	.....	2.50 @ 3.50
19. QUARRYMAN	.....	3.00 @ 3.50	1.10 @ 1.25	.....	1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75	.....	1.50 @ 1.75
20. Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25	.....	2.00 @ 2.50
21. Carver	.....	3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75	.....	3.00	2.00 @ 2.50	3.50 @ 6.00	.....	2.75 @ 3.25
22. Pointers and Washers	.....	2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75	.....	1.50 @ 2.50	1.00 @ 1.25	2.25 @ 2.50	.....	.....
23. Rubber	1.50 @ 2.00	.....	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75	.....	.....
24. Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	.....	2.50	2.00 @ 3.00	2.00 @ 2.50	.....	2.25 @ 2.75
25. Stone-Setter	.....	2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	.....	2.75	2.00 @ 2.50	1.50 @ 2.00	.....	2.25 @ 2.75
26. ROOFER (Tin)	2.00 @ 2.35	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25	.....	2.00 @ 2.50
27. Slater	.....	2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00	.....	2.00	2.00 @ 2.25	1.25 @ 2.00	.....	1.75 @ 2.25
28. STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25	.....	.....	1.50 @ 2.50
29. STEAM FITTER	.....	2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00	.....	.....	2.00 @ 3.00

AMERICAN ARCHITECT AND BUILDING NEWS.

PRIZES.

The attention of draughtsmen and architectural students is directed to the following announcement of a way in which valuable and useful books can be added to their professional library.

SUBSCRIPTION PRIZES.

The Publishers will send, postpaid, the following prizes to the draughtsman, student, or regular canvasser, who, complying with the conditions, shall secure subscribers for the American Architect and Building News:—

- I. For two new subscribers, a year's subscription to the American Architect and Building News..... \$6.00
- Or, "Story of a House," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00
- Or, "Annals of a Fortress," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00
- II. For four new subscribers, a bound volume of the American Architect and Building News, vol. i. or ii., price..... 9.00
- Or, "Examples of Ancient and Modern Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 8.00
- Or, "Discourses on Architecture," translated from the French of M. Viollet-le-Duc, illustrated, price..... 8.00
- III. For eight new subscribers, both bound volumes of the American Architect and Building News, price..... \$18.00
- Or, "Gothic Forms applied to Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 15.00
- Or, "Art Foliage for Sculpture and Decoration," by J. K. Collins, royal quarto, illustrated by 72 plates, price..... 15.00
- Or, "Examples of Modern Architecture, Ecclesiastical and Domestic," being designs by Messrs. Scott, Street, Liddon, and other noted architects, illustrated by 64 quarto plates, price, 15.00
- IV. For fifteen new subscribers, the "Decoration and Ornamentation of the Nineteenth Century," by Liénard, illustrated by 100 folio plates, price..... 27.00

In lieu of these books the canvasser may obtain books of equal value selected from our trade list, or may obtain as equivalent the value of the prize in Heliotype engravings, selected from our collection, which numbers over three hundred.

The conditions to be observed are:—

1. The subscribers must in all cases be new subscribers.
2. The subscription must be paid in advance directly to the Publishers by check or money order; but in no case to the canvasser.
3. If canvassers adopt the method of sending to us one subscriber at a time, they must state at such time for which one of the before-mentioned prizes they are canvassing.
4. The prizes will not be delivered until all subscribers have paid in full

N.B.—These prizes are not cumulative; i. e., a canvasser who sends us fifteen new subscribers cannot claim successively the prizes I, II, III, and IV; or in other words, to obtain all four prizes a canvasser must send us twenty-nine new subscribers.

A canvasser who has stated that he is trying to secure one of the highest prizes may in the case of failure claim such lesser prize as is warranted by the number of subscriptions actually paid.

No claims will be allowed for subscriptions secured before Jan. 1. 1878.

HOUGHTON, OSGOOD AND COMPANY, Publishers, Boston.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.  
**GALVANIZED IRON CORNICES.**  
 Send for Illustrated Catalogues. Estimates furnished on application.  
**HAYES'S PATENT SKY-LIGHTS.**  
 All work warranted.  
**CORRUGATED IRON CEILINGS.**  
 Contracts taken in any part of the United States.  
 Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.  
**A. KNISELY & CO.,** 72 & 74 West Monroe St. Chicago, Ill.

A SATCHEL GUIDE.  
 FOR THE VACATION TOURIST IN EUROPE. Revised Edition for 1878. With Maps. 16mo, flexible cloth, \$2.00. HOUGHTON, OSGOOD & CO.



**NONESUCH**  
 Self-Locking  
 AND  
 Burglar-Proof  
**Window Locks.**  
 Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.  
**FRED. J. HOYT,**  
 733 Broadway, N. Y.  
 Patented July 10th, 1877

**"AUSTIN'S" PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT.**  
 MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS.  
 Regular Sizes, 2, 3, 4, 5 & 6 in. SPECIAL SIZES MANUFACTURED TO ORDER.  
**AUSTIN, OBDYKE & CO.**  
 SOLE MANUFACTURERS.  
 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA.  
 WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS, AND WILL BE TREATED AS SUCH

- PRINCIPAL AGENTS.
- N. Halliday . . . . . New York City
  - Hicks & Badger . . . . . Boston, Mass
  - James Berry . . . . . Buffalo, N. Y.
  - George W. Pitkin & Co. . . . . Chicago, Ill
  - Wasson & Martin . . . . . Albany, N. Y.
  - McLeod, Beardon & Co. . . . . Troy, N. Y.
  - W. H. Scott . . . . . Portland, Me
  - Kittridge Corlies Co. . . . . Salem, G
  - J. W. Jordan . . . . . Worcester, Mass
  - B. G. Carpenter & Co. . . . . Wilkesbarre, Penna.
  - T. W. Irwin . . . . . Allegheny City, Penna
  - Rellew & Co. . . . . Cincinnati, Ohio

RECOMMENDED BY LEADING ARCHITECTS AND ENGINEERS FOR SIMPLICITY & RELIABILITY.  
**IMPERIAL GAS MACHINE**  
 SEND FOR DESCRIPTION AND PRICE LIST TO DENNY BROS. & CO.



**BIBB'S**  
 Celebrated Original Baltimore  
**Fire Place Heaters**  
 Mantels and Registers.  
**B. C. BIBB & SON,**  
 Baltimore, Md.  
 Best workmanship. Lowest prices guaranteed. Send for circulars.

MARSHALL'S AMERICAN



LEADED SHEETS. Cheapest and most durable Metal for Cornices and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Represented in New England States by C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

PATENT MINERAL WOOL. ENTIRELY FIRE-PROOF AND UNDECAYING. THE BEST INSULATOR OF HEAT, COLD, AND SOUND. For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc.

ALEXANDER D. ELBERS, P. O. Box 4461. 26 1/2 Broadway, New York. McSHANE BELL FOUNDRY. Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free

HENRY McSHANE & CO., Baltimore, Md.

The Useful.

is issued monthly—consists of Perspectives of Interiors, Ornaments of Buildings, Fresco Painting, Furniture, etc., and is accompanied with full-size working-drawings—for direct use—Price to Subscriber One dollar per number.

Office 28 Pemberton Square, Boston, Mass.



METALLIC SHINGLES.

We call the attention of all parties interested in Roofing, and the owners of large buildings, to the above article. It is superior to Slate, Cheaper, Fire proof, about one fourth the weight, lays much closer, can therefore be Storm-proof, cannot Crack, etc. Any carpenter can put them on. Send for description and Price List to IRON CLAD MANUFACTURING CO. 59 Greenpoint Ave., Brooklyn, E. D. P. O. Box 2528, N. Y. City

We manufacture Slate Goods, through every operation, from quarry to completion.

THE FAIR HAVEN MARBLE AND MARBLEIZED SLATE CO.

FAIR HAVEN, VERMONT.

The oldest and most extensive producers of

SLATE MANTELS IN THE UNITED STATES.

We imitate more than fifty rare marbles and woods. Styles and workmanship unsurpassed. Special care given to making Mantels and other goods from architects' drawings. Being in close proximity to the best white American marble quarries, and with rare facilities for selecting stock and doing the work, we are also producing

MARBLE MANTELS

At the very lowest prices, and in the best manner possible. We also produce all kinds of plain slate and marble work

- Look over this list and correspond with us and get our Catalogue. Purple, Green, Red, Variegated Roofing Slates. Same Color Slate, also White and Black Marble Tiles. Window Sills. Window Lintels. Water Table. Belt Courses. Ashlar. Solid Steps. Steps and Risers. Laundry Tubs. Urinals. Grave Covers. Vault Work. Curriers' Tables. Counter Tops. Billiard Table Beds. Blackboards. Brewers' Vats. Cisterns. Greenhouse Shelves. Plumbers' Goods, etc.

TO ARCHITECTS.

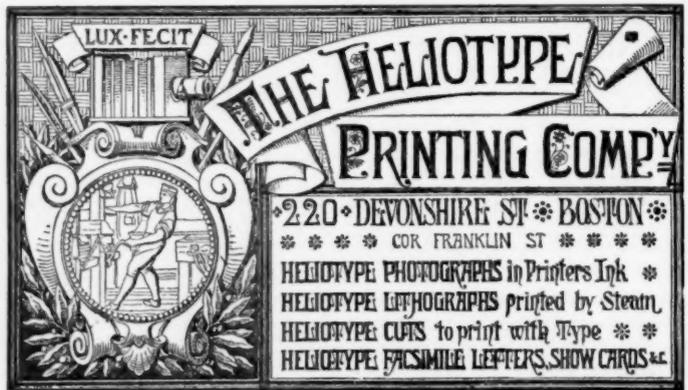
The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the

Scagliola & Marezze Marble,

Which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall and Altar Work

JAS. T. ALLEN & CO., 25 North 17th Street, Philadelphia.

Should you want Ornamental Glass, write for particulars to



STEAM and PIPE

THE "AIR SPACE" BOILER COVERINGS

Save 10 to 20 per cent in fuel.

See Am. Architect and Building News, Dec. 15, 1877. THE CHALMERS-SPENCE COMPANY. 140 Congress Street, Boston. Foot 9th St., E. R., New York.

CLASSIFIED ADVERTISEMENTS.

Table listing various categories and sub-categories such as ARCHITECTS, BRICK, CARPENTERS, etc., with corresponding page numbers.

Table listing various companies and their locations, such as W. J. McPherson, Boston; Hartlett, Robbins & Co., Baltimore, Md.; Asphalt and other (Felt), Warren Chemical and Man'g Co., Boston and New York, etc.

BUILDING MATERIALS.

(Reported for the American Architect and Building News.)

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, FRONTS, CEMENT, and FIRE BRICK. Includes items like Portland Cement, Roman Cement, and various grades of brick.

DOORS.

Table listing prices for raised panels, moulded, and blinds.

BLINDS—Outside.

Table listing prices for blinds, up to 2.10 wide, and window frames.

HAIR—Duty free.

Table listing prices for hair, including state, common, and finishing grades.

LATH.—Cargo rate.

Table listing prices for lath, including state, common, and finishing grades.

LIME.

Table listing prices for lime, including state, common, and finishing grades.

LUMBER.

Large table listing prices for various types of lumber, including pine, spruce, and hemlock.

PAINTS AND OILS.

Table listing prices for various paints and oils, including Paris white, zinc white, and lead white.

STONE. Cargo rates, delivered at New York.

Table listing prices for stone, including Amherst freestone, Berlin freestone, and Berea freestone.

SLATE. Delivered in New York.

Table listing prices for slate, including purple roofing slate and green slate.

TIN PLATES—Duty, 11-10c.

Table listing prices for tin plates, including I. C. charcoal and I. C. coke.

ZINC—Duty, sheet.

Table listing prices for zinc, including sheet (gold) foreign.

LEAD.

Table listing prices for lead, including sheet and bar.

DISCOUNT 10 per cent to trade.

BOSTON.

Prices to Contractors and Builders.

FIRE BRICK.

Table listing prices for fire brick, including Waldo Bros Extra and Waldo Bros No. 1.

BUILDING BRICKS.

Table listing prices for building bricks, including Portland Stone Ware Co. No. 2.

BUILDING STONE.

Table listing prices for building stone, including Rutland Marble.

LUMBER.

Table listing prices for lumber, including Michigan pine, Black Walnut, and various grades of oak.

PAINTS AND OILS.

Table listing prices for paints and oils, including white, zinc, and lead.

MORTISE LOCKS—Brass face and half easy spring.

Table listing prices for mortise locks, including factory make and Boston make.

DOOR KNOBS.

Table listing prices for door knobs, including solid glass and silvered glass.

RASH FASTS.

Table listing prices for rash fasts, including plain brass and plain brass self-locking.

SCREWS.

Table listing prices for screws, including round head, nickel plated, and for window beads.

STORE DOOR HANDLES—With mortise latch.

Table listing prices for store door handles, including laqueered brass and bronze metal.

IRON.

Table listing prices for iron, including Wrt-iron I Beams and Wrt-iron II Beams.

CHICAGO.

Prices to Contractors and Builders.

BRICK, LIME, AND CEMENT.

Table listing prices for brick, lime, and cement, including Chicago building brick and Indiana process brick.

LUMBER (MICHIGAN PINE).

Table listing prices for Michigan pine lumber, including 1st and 2d clear, 1 to 2-in., and 3d clear.

HARDWOOD LUMBER.

Table listing prices for hardwood lumber, including whitewood clear, whitewood box boards, and whitewood select.

LIME.

Table listing prices for lime, including quoted at 8c per cask for Rockland and Rockport.

CEMENT.

Table listing prices for cement, including Rosendale, Portland, and Venetian red.

NAILS.

Table listing prices for nails, including 10d, 8d, and 6d.

AXLE PULLEYS—Steel.

Table listing prices for axle pulleys, including 2-in. Pennsylvania make and 2-in. Boston make.

SASH WEIGHTS.

Table listing prices for sash weights, including sash line and best hemp.

DOOR BUTTS.

Table listing prices for door butts, including Japanned Acorn and Plain Bronzed Iron.

C roofing \* 14 x 20, charcoal.

Table listing prices for roofing materials, including charcoal, coke, and galvanized iron.

SOLDER.

Table listing prices for solder, including No. 1, No. 2, and extra.

LEAD.

Table listing prices for lead, including Fig. 6c, bar, 7c, and lead pipe, 6c.

COPPER.

Table listing prices for copper, including bottoms, 25c, and sheathing copper, 26c.

SHEET ZINC.

Table listing prices for sheet zinc, including full casks, 7c, and slabs, 8c.

SHIET IRON.

Table listing prices for sheet iron, including No. 24, 3c, and No. 1, 2c.

WIRE.

Table listing prices for wire, including Nos. 1 to 4, 9c, and No. 10, 16c.

NAILS.

Table listing prices for nails, including White Lead, strictly pure, 8c, and fancy brands, 8c.

PAINTS AND COLOURS.

Table listing prices for paints and colors, including White Lead, strictly pure, 8c, and various mineral colors.

OILS.

Table listing prices for oils, including Linsed, raw, 6c, and Turpentine, 3c.

PHILADELPHIA.

WHOLESALE PRICES.

Table listing prices for Philadelphia materials, including iron, sheet, and pipe.

LUMBER.

Table listing prices for Philadelphia lumber, including Michigan uppers, 45c, and Susquehanna boards.

PAINTS AND OILS.

Table listing prices for Philadelphia paints and oils, including White Lead in oil, 0c, and Dry, white, 7c.

TIN.—Duty: Pig Bars and Blocks free; Tin Plates and Sheets and Terne Plates 11 1/2c.

Table listing prices for tin, including Banca, 11c, and Straits, gold, 14c.

TO ADVERTISERS.

The following letter from an architect of Des Moines, Iowa, explains itself:—

"The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

CREOSOTED WOOD.

PREPARED AT THE Hayford Patent Creosote Wood Preserving Works. EDWARD R. ANDREWS, Proprietor.

OFFICES. No. 4 Post Office Sq., Boston. No. 10 Warren St., N. Y. WORKS. A Street, South Boston. Elizabethport, N. J. The wood is perfectly dried by steam, and the sap withdrawn, before the impregnation of the pores with creosote oil, thus rendering decay impossible.

A Word to Manufacturing Firms.

Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms. They recommend, on their own account, and for the sake of the public, that such firms advertise in this paper.

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY.

The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING,  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, ETC., ETC.

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.  
ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

**ESTABLISHED, 1836.**  
**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Composition Roof known. Also inventors and owners of the following patents:—

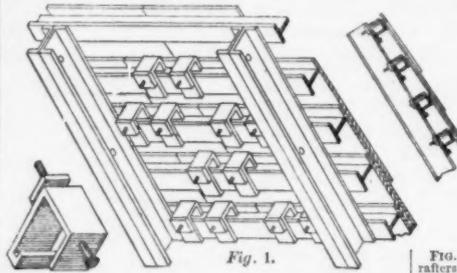


FIG. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the purlins on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

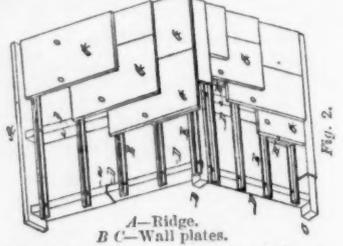


FIG. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or other fire-proof material, and iron purlins (c) or beams, with the slates (G) or other covering secured thereto by clamps, (FIG. 1.) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contradistinction to the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point avoiding condensation, contraction and expansion of roofs formed wholly of iron.

**WARMING AND VENTILATION.**  
**FIRE ON THE HEARTH.**  
**FIRE-PLACE HEATERS AND STOVES.**

VENTILATION of a Fire-Place. RESERVE FORCE of a Close Stove. CIRCULATION of a Furnace.  
Adapted for any kind of Fuel,  
And the only Fireplace Heater perfectly adapted for Soft Coal and Wood.  
**SILVER MEDAL AWARDED, PARIS EXPOSITION, 1878.**  
Send for our testimonials from all parts of the United States.

**OPEN STOVE VENTILATING COMPANY,**  
115 Fulton and 54 Ann Streets, New York.




**GAS**

**SPRINGFIELD GAS MACHINE.**  
Springfield, Mass.; 75 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

**BUHRER'S INFALLIBLE SEWER GAS TRAP.**

The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (E) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.

**S. BUHRER, Inventor and Manufacturer, Cleveland, Ohio.**  
WHOLESALE AGENTS.  
W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O.  
L. WOLFF Mfg Co., 109 & 111 West Lake St., Chicago, Ill.  
HAMLEN & MATHEWS, 82 & 84 North St., Boston, Mass.  
G. A. BLESSING, 44 North Fifth St., Philadelphia, Pa.  
THE J. L. MOTT IRON WORKS, 88 & 90 Beckman St., N. Y.  
Please send for Circular.

**Brandeis' Seamless Paragon Trap.**  
Safest, Best, Cheapest, and Non-siphoning.  
Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDIS & WICKERT, 46 Fulton Street, Brooklyn, N. Y.**

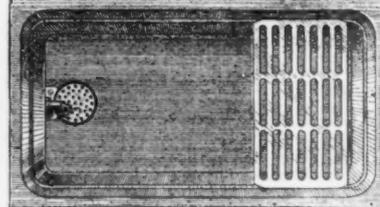
**C. BUTCHER,**  
107  
Devonshire St.  
BOSTON.

**PATENT MARQUETRY FLOORING.**  
Specimens at Lawrence, Wilds & Co.'s, 42 Cornhill, Boston.

**DORCHESTER UNION FREESTONE CO.**  
**NEW BRUNSWICK YELLOW FREESTONE.**  
The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order.  
34 Pine St., New York. - G. P. SHERWOOD.

**MENEELY & KIMBERLY,**  
Bell Founders, Troy, N. Y.,  
Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT HOUSE BELLS. Illustrated Catalogue sent free.

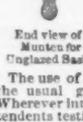
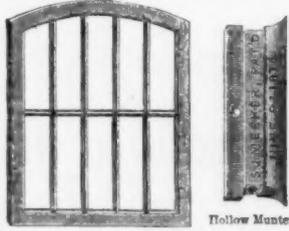
Architects and Builders will be quick to appreciate the many New and Practical Features possessed by



**THE MAGEE PATENT SINK,**  
which commend themselves at once to every householder. The escape of noxious and poisonous sewer gases is prevented by the arrangement of the patent trap, it being immovable, while the strainer, being hinged on brass pins, can be raised for the purpose of cleaning the cesspool. The sink is furnished with an improved galvanized shelf or rack for draining dishes, etc., after washing. It is of extra size, and being made with square corners, saves the carpenter much labor in setting. In smoothness of casting it fully sustains the long-established reputation of the Magee goods.

Particular attention is invited to the Magee Standard Furnace, portable and for setting in brick, guaranteed superior to any in the market for economy, durability, and heating capacity. Estimates furnished for heating all sizes of dwelling-houses and public buildings. Also a full line of **Brick and Portable Ranges.** Circulars and prices of all the above goods furnished on application.  
**MAGEE FURNACE CO.,**  
32 to 38 Union St., Boston

**D. M. MEEKER & SON'S**  
**Malleable Iron Hollow Munten Window Sash.**  
For Insane Hospitals, Fire Proof Buildings, &c.

The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by  
**D. M. MEEKER & SON,**  
Newark, N. J.  
Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

**MAKE YOUR OWN GAS**

Send for CIRCULAR

**WALWORTH MANUF. CO.**  
No. 69 Kilby Street,  
BOSTON, MASS.

**GAS GENERATORS, FOR LIGHTING**  
Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.

**J. & R. LAMB, 59 CARMINE ST., N. Y.**  
**CHURCH FURNISHERS**  
Practical Workers in Sterling Silver, Brass, and Bronze. Carved Wood, Decorations, etc.  
Illustrated Catalogues.  
Furniture, Ice, Metalwork, etc. Decoration, Inc.

**HOISTING MACHINES EXCLUSIVELY.**  
HOTEL STEAM ELEVATORS,  
HYDRAULIC ELEVATORS,  
HAND POWER HOISTS,  
DUMB WAITERS.

**H. J. REEDY, Manufacturer,**  
128 EAST EIGHTH ST., - Cincinnati, O.

**CRANE BREED & COMPANY**  
**SAFETY BOILERS**  
FOR HEATING  
STEAM AND HOT WATER.  
MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RADIATORS, PIPE COILS, REGISTERS, FITTINGS, STEAM PUMPS.

**NATIONAL TUBE WORKS CO.**  
PATENT  
Indestructible Enamelled Wrought Iron  
**LAP-WELDED PIPE,**  
From 1/4 inch to 15 inches diameter.  
Now extensively used for  
Water, Gas, Sewerage, and Mining.

It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making Joints, supplied to Farmers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at offices of  
**National Tube Works Co.,**  
8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.



CHURCHES.

PRESENT CONDITION OF CHURCHES AND CHAPELS NOW BUILDING IN THE UNITED STATES AND CANADA.

(Collected for the American Architect and Building News.)

AKRON, O.—Contracts for the building up of walls of brick and etching of the First Universalist Church of this city have been let to Messrs. W. B. Doyle & Co. The church is in the Queen Anne style, from the drawings of Frank O. Weary, architect. It will be finished inside next spring and summer, ready for the meeting of the Universalist Convention in September, 1879. Estimated cost, \$35,000.

AVON, N. Y.—Twelve thousand dollars will probably cover the cost of the brick and stone church now building for the First Presbyterian Society, from the designs of Mr. L. B. Valk, of New York.

AVON, N. Y.—A brick church is about to be built at a cost of \$9,000. The design is in Gothic. White bricks with stone finish are used. The roof will be slated. The designs being prepared by W. H. Mallory & Son, architects, Chatham, Ont.

BALTIMORE, Md.—The Lafayette Square Church, designed in the Early English Gothic style, with clerestory and open-timbered roof, is being built of serpentine stone, with Ohio sandstone finish. The auditorium measures 58 by 72 feet on the floor, and will seat about 650 persons. The chapel building at the rear measures 31 by 75 feet, and is two stories high. Estimated cost, \$50,000. The contractors for the stone-work are Messrs. Emery & Hanrahan. Mr. Wm. Ortigue, general superintendent. Messrs. Dixon & Carson, architects.

The Central Presbyterian Church, Eutaw Place, designed in the Early English Gothic style, now nearly completed, is built of green serpentine stone, with Ohio sandstone finish. The auditorium measures 58 by 86 feet, and will seat about 750 persons. Cost, \$95,000. The chapel building, two stories high, 31 by 79 feet. The contractors for stonework were Messrs. Hamilton & Mann. Mr. Wm. Fergusson, carpenter's work. Messrs. Dixon & Carson of this city, architects.

BALTIMORE, Md.—The Church of St. Michael and All Angels, now building under the direction of Messrs. Wyitt and Sperry, architects, will cost about \$80,000.

BALTIMORE, Md.—The Bishop Cummings Memorial Church is now building from the designs of Mr. C. E. Cassell, of this city. It is built of blue granite relieved with finish of sandstone and colored granites.

BALTIMORE, Md.—Mr. G. A. Frederick is the architect of the Pius IX. Memorial Church. Cost, \$100,000.

BANK LICK, KY.—The corner-stone of the new Catholic church was laid last week.

BELLEVILLE, Mo.—The corner-stone of the New Athens German Evangelical Church was laid June 30, 1878.

BLOOMFIELD, Conn.—Mr. J. C. Mead is the architect of the new Catholic church, which is to be built of brick and stone, at a cost of some \$3,000.

BLOOMFIELD, Conn.—The corner-stone of the Church of the Sacred Heart of Jesus was laid September 9. Rev. Father Hearty has charge of it.

BOONVILLE, N. Y.—A small frame church for the Roman Catholics is now building.

BOSTON, Mass.—A brick and stone church for the Swedish Society is to be built on Emerald St. It will be in the Romanesque style. Messrs. Newcomb & Son are the architects. Boston, Mass.—Messrs. Sturgis & Brigham of this city are the architects of the new church of the Advent now building. It is to be built of brick and freestone, will seat about 1,000 persons, and, with the chapel, clergy-house, etc., will cost about \$250,000.

BOSTON, Mass.—Messrs. Holmes Brothers, builders, are converting the Church Street M. E. Church into a Jewish synagogue, at a cost of \$5,000.

BOSTON, Mass.—The People's Church is building under the charge of Mr. John Welch, architect, of Brooklyn.

BROCKVILLE, Ont.—A stone church, designed in the Gothic style, is now building for the Presbyterian society, from designs prepared by J. P. Johnston, architect, of Ogdensburg, N. Y. It measures 75 by 88 feet, and will seat 800 people. Will cost about \$29,000. Messrs. Moore & Fields, of Canton, N. Y., are the contractors. At present time the walls are half built. In the basement there is a suite of Sunday-School rooms, ladies' parlors, kitchen, etc. The church is to be heated by steam. Material, blue limestone, with Ohio sandstone finish; slate roof; spire 175 feet high; seats arranged on the amphitheatrical plan.

A stone church, designed in Gothic style, is now building for the Baptist society, from designs prepared by J. P. Johnston, architect, Ogdensburg, N. Y. It measures 44 by 64 feet, and will seat 400. Will cost about \$15,000. Messrs. Scott & Cameron, of Almont, Ont., contractors. They are now putting on the roof. Materials used, blue limestone, with white limestone finish; slate roof; spire 135 feet high; seats arranged on the amphitheatrical plan; S. S. rooms, ladies' parlor, and pastor's study in basement.

BROOKLYN, N. Y.—The cost of the large brick church now building from the designs of Mr. L. B. Valk, of New York, for the First Baptist Church, will be about \$53,000.

BUFFALO, N. Y.—The St. Ann's (Catholic) society have begun to build a large brick church which will cost upwards of one hundred thousand dollars. The corner stone was laid the last of last month. The plans were made some four or five years ago by Mr. O'Connors, architect, of New York. Work being done by the day.

CANTON, O.—The new St. Peter's Catholic Church, now building, from the designs of H. Engelbert, architect, New York, in the Early English Gothic style of architecture, of brick and Ohio sandstone, is now enclosed and receiving the inside finish. It measures 80 by 168 feet, with a central tower and spire 220 feet high, and will seat 1,800 persons. The estimated cost is \$80,000, and it is intended to be dedicated in May, 1879.

CHELTON, Md.—Reynolds & Brothers, of Port Deposit, have the contract for the new Episcopal church. It amounts to \$3,249.

CHATTANOOGA, Tenn.—A frame chapel in the Gothic style, for the Second Presbyterian Church, will be let to contract at an early day. The designs were prepared by Mr. A. C. Bruce, architect, of Knoxville, Tenn. It measures 40 by 60 feet, with Sunday-School rooms in addition connecting with audience room. Estimated cost, \$3,000. Neither tower nor belfry is introduced in the design.

CHELSEA, Mass.—A wood-chapel, designed in the Queen Anne style, is now building from designs prepared by Mr. S. E. Tobey, architect, of Boston. It measures 30 by 70 feet, and will seat 40 persons. The estimated cost is \$4,200. Messrs. Mead & Mason, of Boston, are the contractors. At the present time the work is nearly completed, and will be carried on without delay.

CHEYENNE, Wyo.—A brick church with cut-stone finish is now building. Style, Late Pointed. It measures 42 x 58, and will seat 600 persons. Cost completed will be \$11,000. Mr. Dufrene, of Omaha, is the architect. Messrs. Hurd & Calland, of this city, are the contractors. F. W. Cooper, of Cheyenne, is the superintending architect. The church is for the Roman Catholic people here. At present the walls are ten feet high.

CHURCHVILLE, Md.—Holy Trinity P. E. Church is nearly completed. It is designed in the Gothic style, and according to the drawings prepared by Mr. George Archer, architect, of Baltimore, Md. The stone used is of a dark gray color, and will be pointed and pencilled. The inside dimensions of church proper are 26 by 51 feet, with a chancel 16 feet 6 inches by 18 feet, and robing-room and entrance vestibule, each 7 by 7 feet, attached. Will be finished with walnut pews and wainscoting, stained glass windows, and open timber roof. Seating capacity 200. At the present time the roof is being covered with slate. The whole work will be completed by the middle of October. Cost, about \$5,000.

CLARENCE (Erie Co.), N. Y.—The Presbyterian church of this place is about to build a new brick church, to cost \$5,000, from plans made by M. E. Beebe, architect, Buffalo, N. Y. It will be Gothic in style, 30 x 68, and seat 276 persons; contracts are now being let, and the work will go rapidly forward.

CLEVELAND, O.—A brick church with buff sandstone finish is being built from designs by F. S. Baruum, architect, of this city, for the Woodland Avenue Presbyterian Society. It measures 95 x 100 feet. Audience room 74 x 92 feet, and will seat 1,200 persons. Cost when completed, \$25,000. The audience room is seated on the amphitheatrical plan, with floor sloping toward the centre. Galleries on three sides, and a large choir gallery in rear of the speaker's platform. Five vestibules, one at each of the four corners, and one in centre of front. It will be ready to occupy about October 15, 1878.

COVERT, Mich.—Ground has just been broken for a small frame church for the First Congregational Society. It will seat 270 persons, or, including the lecture room, 420 persons. The cost is to be about \$4,000. Messrs. Randall & Miller, of Chicago, are the architects.

COVINGTON, O.—The corner-stone of a new Catholic Church at De Courcy Station was laid September 3.

DANIELSVILLE, Conn.—The architect of the First Baptist Church now building, at a cost of \$9,000, is Mr. L. B. Valk, of New York.

DANVILLE, Ind.—A church in the Romanesque style is now building by Mr. Ketchum, architect, of Indianapolis.

DAYTON, O.—It is uncertain when work upon the Third Street Presbyterian Church will be begun. The chapel is already built. The church itself, which was designed in Gothic by Mr. Wheelock, architect, of Chicago, is to measure 40 by 100 feet, and is to seat about 750 persons. The estimated cost is \$50,000.

DE KALE (St. Lawrence Co.), N. Y.—A wooden church, designed in Gothic style, is now building from designs prepared by J. P. Johnston, architect, Ogdensburg, N. Y. It measures 38 by 68 feet, and will seat about 300 persons. It will cost about \$6,000. Messrs. Thornton & Hewlet, of Havelton, N. Y., contractors. At present time the building is ready for slating.

DEPOSIT, N. Y.—The First Presbyterian Church, rural Gothic, 63 by 63 feet, with chapel 22 by 34 feet; spire, 125 feet high. Will seat 400 persons. Cost, \$10,000. A. M. & E. A. Babcock, of Deposit, contractors. At present the walls are one half built, to be completed January 1, 1879.

The Baptist church, style as above, 63 by 76 feet. Chapel on side arranged with folding partitions so that it can be thrown open to auditorium. Ladies' parlor over chapel. The auditorium will seat 375 and chapel 100. Cost, \$9,000. Spire, 130 feet high. Plans nearly completed. Work will commence soon. T. I. Lacey, of Binghamton, N. Y., is the architect and superintendent for both of the above brick buildings, which are to stand on adjoining lots and are very similar in design.

DES MOINES, Io.—The Methodists are making preparations to build a \$60,000 church. The foundations will probably be put in this fall. No plans are decided on as yet. The architects have been making preliminary sketches.

DUKE, N. S.—Trinity Church (Protestant Episcopal), a wooden Gothic building, from designs prepared by Stephen C. Earle, architect, of Boston. Dimensions 50 by 103 feet, including chancel 30 feet deep; will seat 500 persons. It is now roofed, and steadily progressing towards completion. Estimated cost about \$8,000.

EAST GREENWICH, R. I.—A movement is on foot for building a Free-will Baptist church.

EAST LIVERPOOL, O.—The corner-stone of the new M. P. church was laid June 27, 1878.

EASTON, Md.—A. M. Carroll, of Baltimore, is to rebuild the P. E. church.

ELIZABETH, N. J.—Mr. L. B. Valk, architect, New York, is building, for the Park Methodists, a wooden church, which will cost about \$8,000.

FARIBAULT, Minn.—Benjamin Le Due & Son, of Warsaw, have the contract for building the French Catholic church, which amounts to \$4,743.

FINDLEY, O.—A stone mortuary chapel is being built from the designs of Charles Crapsey, architect, Cincinnati, O.

FORT ERIE, Ont.—The St. Paul's (Episcopal) society is about to build a stone church at this place, to cost \$6,000, from designs prepared by M. E. Beebe, architect, Buffalo, N. Y. The building will be Gothic in style, measuring 40 x 72, and seating about 300 persons. Work is to be commenced at once.

FORT HOWARD, Wis.—A brick church, with Lake Superior brown stone finish, designed in the Decorated Gothic style by J. McDonnell, architect, of Green Bay, Wis., is building for the First Baptist Church. It is 34 by 88 feet, including pastor's study, library, and two class-rooms, and will seat 400 persons. The building is nearly completed, at a cost of \$13,000. James G. Brown, Esq., of Appleton, is the builder.

FREEDHOLD, N. J.—The Episcopal church is being enlarged.

GODERICH, Ont.—A brick church, with stone basement, designed in modern Gothic, is being built from designs prepared by W. H. Mallory & Son, Chatham, Ont. Size 35 by 76 feet; 480 sittings. The church is rapidly approaching completion. J. B. Crane is contractor.

GREEN BAY, Wis.—A brick church, with stone finish, designed in the Neo-Gothic style is building for St. James Church, Episcopal. It measures 35 by 100 feet, and will seat 500 people. The building will be completed the present season. The work was mainly done by the day, and the cost will be about \$22,000. J. McDonnell, of this city, is the architect.

A mortuary chapel for the Almon E. C. Cemetery. A brick chapel with blue stone trimmings, 20 by 32 feet on plan, with vault beneath. The style is Romanesque. The contractor is N. Myers, of this city. The building is now nearly completed, at a cost of \$3,500. J. McDonnell is the architect.

A red brick structure, with blue stone finish, which measures 65 by 160 feet, and will seat about 1,500 people, is now building as the B. C. cathedral. The style is Romanesque of the Byzantine type. The walls have just been

completed, and the building will probably be completed within the next two years. The design was originally prepared in St. Louis, Mo., but has been so many times altered by different architects and architects that it is impossible to say to whom credit should be given for it as it is at present. The building will cost about \$60,000. N. Myers, Esq., of this city, is the contractor.

GRINNELL, Io.—The white limestone church now building for the First Congregational Society was designed by Mr. L. B. Valk, of New York. It will cost about \$28,000.

HANOVER, Penn.—A brick church for St. Matthew's Lutheran Congregation, designed in the modern Gothic style, is now building from designs by Mr. J. A. Dempwolf, architect, of York, Penn. The dimensions are 60 by 100 feet, seating capacity 700, and estimated cost \$15,000, without the tower. Mr. W. A. Slagle, of Hanover, Penn., is the contractor. The building is nearly ready to receive the roof. The cutting of stone caps, corbels, etc., was done by Mr. W. Stewart, of Philadelphia.

HARTFORD, Conn.—The Roman Catholic Cathedral of St. Joseph is building from the designs of Mr. P. Keely, architect, of Brooklyn.

HOBOKEN, N. J.—Work on the Cathedral (R. C.), designed by F. G. Henry, architect, New York, is progressing rapidly. It measures 102 by 20 1/2 feet, and will cost about \$125,000.

HOLBROOK, Mass.—The new meeting-house which is to be built for the Winthrop Congregational Society, on the site of the old one, which was destroyed by fire Christmas morning last, will be of wood, cruciform in plan, with tower and spire central upon the front. It will measure 51 by 106 feet. The auditorium will seat 600 upon the main floor, 200 in the galleries. It is covered with a low-pitched, open-timbered roof, is finished in hard wood, and lighted by colored-glass windows. The work will be commenced at once, and the building will cost about \$17,000. Messrs. Hartwell & Tilden, of Boston, architects.

HONESDALE, Penn.—A new stone church, 54 by 110 feet, designed in Early English Gothic style of architecture, from designs prepared by H. Engelbert, architect, New York, is now building for the Rev. J. J. Doherty, pastor of St. John's Catholic Church. The estimated cost is \$25,000. It will seat 800 persons. The walls are now ready for the roof, which will be put on next spring, and it is intended to have the building finished by December, 1879.

HOPKINTON, Mass.—The exterior of the new Roman Catholic church, is nearly finished. It is designed in the Gothic style by Mr. P. W. Ford, architect, of Boston. It will seat about one thousand persons, and will cost about \$45,000. The material is granite. It is to be finished in November next.

IOWA CITY, Io.—The Catholics of this place are building a fine church in honor of St. Patrick. It is of brick with cut stone finish. Size, 54 by 98 feet, with tower 128 feet high, in which are the principal entrances, on corner. To have a partly-open open-timbered roof, with paneled panels, and covered with slate. It will have a small chancel, shallow transepts, organ-loft and choir-gallery, robing-rooms, etc. Memorial stained-glass windows; interior decorated in color; heated by steam. Estimated cost, \$20,000. Built by the day; William Foster, architect, Des Moines, Io.

IRVINGTON, N. J.—Two small frame churches in Irvington and Bloomingdale, New Jersey. Size, 25 by 60 feet; style, Early English; seating capacity, 175 each; estimated cost, \$2,500 each; to be finished by Christmas, 1878. J. O'Rourke, architect, Newark, N. J.

JAMESTOWN, N. Y.—The First Presbyterian Society of this place is now building a brick church, to cost \$25,000, from designs prepared by M. E. Beebe, architect, of Buffalo, N. Y. It is in the Gothic style, with tower, and spire at one corner 160 feet high. The building measures 75 x 122, comprising auditorium and S. S. room. It will be seated in the amphitheatrical form, and accommodate 700 persons. J. J. Hogan, of Erie, Pa., is the contractor for the entire work. The walls are about one third built; the work will be carried on without delay, and completed by January 1, 1879.

KNOXVILLE, Tenn.—A frame church, in the Gothic style, is now being built for the Church of the Epiphany in this city, from designs prepared by Mr. A. C. Bruce, architect, Knoxville, Tenn. It measures 40 by 60 feet, exclusive of the chancel, and will seat 350 persons. Messrs. Alexander & Brown, of this city, are the contractors. It has an open timbered roof. Estimated cost, \$34,000.

LEESBURG, Va.—A small frame church is now building for the Roman Catholic from designs prepared by Mr. J. L. Norris, of this city. It measures 24 x 50, will seat 132 persons, and will cost \$2,000.

LITTLE FALLS (HERK. Co.), N. Y.—A stone church, designed in the Early English Gothic style, is now building from designs prepared by G. Edw. Cooper, architect, of Utica, N. Y. It measures 80 by 155 feet, and will seat 1,200 persons. The estimated cost, completed, is \$40,000. Messrs. Wm. Dorr and Hale Bros., of Little Falls, are the contractors. The walls are laid with local rock in broken ashlar, relieved with Prospect limestone. The central tower is 20 feet square and 75 feet high, and with the stone spire will be 155 feet to top of spire. At present the walls are finished and the open-timbered roof is being raised. The building will be finished in 1880, and is intended for St. Mary's R. C. Society.

MANCHESTER, Penn.—A frame village chapel for the United Brethren congregation, designed after the modern Gothic, is now building from designs by Mr. J. A. Dempwolf, architect, of York, Penn. The church measures 30 by 48 feet, and seats about 300 persons. The estimated cost is \$2,000. Mr. J. Singer, of Manchester, is the builder. The frame of the building is now set up, and a small tower, forming the vestibule below and belfry above, is ready to be set up.

MARLBOROUGH, Mass.—The wooden chapel for the First Congregational Society, measuring 35 feet 4 inches by 61 feet, 18 feet high, will be begun about October 1, 1878. Cost, about \$3,000. Appleton & Stephenson, architects, Boston.

MASSENA, N. Y.—The material is being collected for the erection of a brick and stone church, from the designs of Mr. Emlen T. Littell, of New York. It consists of nave, 19 by 35 feet, chancel, 20 by 23 feet, organ chapel, sacristy, and tower, the last serving as a south porch. It is in the ornate, decorated Gothic style. The sittings will number about 240, and the cost will be \$7,000.

MASSILTON (STARK Co.), O.—A stone church, designed in the Gothic style, is now building, from designs prepared by Leon Beaver, architect, of Dayton, Ohio. It measures 80 by 180 feet, and will seat 1,800 persons. The estimated cost is \$100,000. The work is being done by the day and partly by contract. At present the walls are ready for the roof. The walls are laid up in rock-faced range work of a light brown sandstone, the finish of white sandstone, dressed and rubbed. The front corners are flanked with towers and spires 210 feet high, the gable between being ornamented with a rose window 30 feet in diameter, the tracery of which is of stone. There are three entrances in front, recessed to the depth of

thirteen feet, with niches on the sides to receive statues; there is also an entrance on each side, and one in the rear. The church is called St. Marie's German Catholic Church.

METHUEN, MASS.—St. Thomas's Society (Episcopal) is building a church at the corner of Broadway and Kirk Streets.

MIDDLETOWN, PENN.—Mr. L. B. Valk, architect, of New York, is building the brick and stone church for St. Peter's Lutheran Society. It will cost about \$17,000.

MILBURN, N. J.—Mr. Jeremiah O'Rourke, architect, of Newark, N. J., is preparing plans for a small frame church to be built here.

MILFORD, N. H.—A stone church and chapel is now building from designs by Oler & Rand, architects, of Boston. Mr. Thomas Jones, of Worcester, contracts for stone work, and Mr. J. C. Cochran, of Milford, has charge of carpentry. The roof trusses are now going up. The building measures 63 by 80 feet; the auditorium will seat some 200, and the vestry about the same number. The material is a local white granite, with quarry-faced ashlar and hammered finish. A modest tower occupies the angle between church and vestry.

MILWAUKEE, WIS.—A brick church, designed in the Gothic style, is now building from designs prepared by Mr. Fritz Veiguth, architect, of Milwaukee. The front, on Ninth Street, will be 30 feet wide, and the length on Prairie Street 145 feet. The estimated cost is \$38,000. The walls are now half built, and the work will be carried on without delay.

MINNEAPOLIS, MINN.—A wooden chapel, designed in the Queen Anne style, is now building from designs prepared by Stebbins & Mann, architects, of Minneapolis. It measures 37 by 66 feet, and will seat 40 persons. The contract price was \$3,000. The chapel will be completed by the 1st of October, 1878. This is the first Reformed Episcopal church in the State.

MONTEVILLE, ME.—A frame church is building at McFarland's corner.

NASHUA, IO.—Mr. E. J. Bartlett, of Des Moines, is the architect of the new M. E. church; cost, \$7,000; material, brick and stone.

NEW BEDFORD, MASS.—The Church of St. James, now building, was designed by Mr. W. C. Brockesby, of Hartford, Conn. It is to measure 38 by 70 feet, and is to be built of brick and stone.

NEWARK, N. J.—A stone church, designed in the Gothic style, is now building from designs prepared by Mr. Jeremiah O'Rourke, of Newark. It measures 70 by 177 feet, and will seat 1,200 persons. The estimated cost is \$75,000. Messrs. Moran & Kirk are the contractors. At the present time the side walls are built. The work will be carried on without delay.

Mr. O'Rourke is also building another brick church at present in this city, 48 by 100 feet.

St. Joseph's Church, built of Newark sandstone. Size, 80 by 170 feet; seating capacity, 1,200; estimated cost, \$85,000; style, early decorated English Gothic; to be finished August 15, 1879. J. O'Rourke, architect, Newark, N. J.

St. Michael's Church, built of red, black, and white brick, with Newark stone finish, all laid in black mortar. Size, 60 by 130 feet; seating capacity, 700; style, Florentine Gothic; estimated cost, \$2,000; to be finished August 15, 1879. J. O'Rourke, architect, Newark, N. J.

NEWARK, N. J.—The corner-stone of a new R. C. church, on Bellevue Ave., was laid June 16, 1878; cost, \$25,000.

NEW YORK, N. Y.—St. Paul's, Fifty-Ninth Street and Ninth Avenue; size, 120 by 285 feet; seating capacity, 2,500 to 3,000. Material, red Conn. tuff granite, rough dressed. Estimated cost, \$500,000. Style, Twelfth Century French Gothic. Walls now built to height of 19 feet above footings. Work discontinued for the present; will probably recommence next spring, and will be finished in four or five years. J. O'Rourke, architect, Newark, N. J.

NEW YORK, N. Y.—The corner-stone of the Bethany Presbyterian Church has been laid on One Hundred and Thirty-Seventh street, near Willis Avenue. A chapel 32 by 60 feet will first be built.

NEW YORK, N. Y.—At present work on the interior of St. Patrick's Cathedral is progressing rapidly. Messrs. Kenwick & Sands, architects, New York.

NEW YORK, N. Y.—The corner-stone of the new church of St. Francis Xavier on West 10th Street, was laid May 5th. NORMAN, CONN.—It is expected that St. Patrick's Church (R. C.) will be ready for dedication by St. Patrick's Day, 1879.

OAKLAND, CAL.—The large wooden church now building for the First Congregational Society was designed by Mr. L. B. Valk, of New York. It will cost about \$60,000.

ORANGE, N. J.—The Second Presbyterian Church, known as the "Brick Church," on the corner of Main and Prospect streets, is now rebuilding. It was 70 by 57 feet. There is now being added to the front a new tower 15 by 15 feet, and a "lean-to" lobby, 15 by 15 feet, and extending the church between the tower and "lean-to," 10 feet. Also, new walls four feet thick are being added on each side, with buttresses, all in brick work, relieved with Wyoming blue stone, in the Romanesque style. The church will seat 650 persons, and the improvements will cost about \$14,000. The interior is entirely new, plastering, windows, and hard wood work. The building is to be ready by the middle of October.

ORANGE VALLEY, N. J.—Remodel and extension of the Church of "Our Lady of the Valley." Built of Orange sandstone. Size, 36 feet at nave, 60 feet at transepts, and 100 feet long; seating capacity, 600; cost of remodel and extension, \$10,000; just being finished; style, Early English Gothic. J. O'Rourke, architect, Newark, N. J.

OTTAWA, ILL.—Mr. H. C. Furness is the architect of the Holy Trinity Church (R. C.), which is to cost about \$150,000.

OWATONNA, MINN.—A wooden church, Methodist, is now building from designs prepared by Stebbins & Mann, architects, of Minneapolis. Design, modern Gothic. It measures 100 by 48 feet, and will seat 600 persons. It will be ready for occupancy by November 1, 1878, but will not be finished until next spring. Contract price, \$7,340.

OSTER BAY, N. Y.—Messrs. Potter & Robertson, architects, New York, are building a small church here.

PARKERSBURG, W. VA.—Mr. A. C. Nash, of Cincinnati, is the architect of the Episcopal church, which, with the rectory, will cost about \$20,000. The church measures 42 by 96 feet, is built of sandstone, and will seat about 500 persons.

PENDLETON, OREG.—The construction of the Baptist Church has begun. The stone foundation is nearly completed.

PEORIA, ILL.—Mr. L. B. Valk, of New York, is the architect of the Calvary Presbyterian Church now building. It will cost about \$26,000; materials, brick and stone.

PETERSBURG, VA.—The corner-stone of the Gillfield Baptist Church has been laid. The members of the church are colored people. The building will cost \$25,000.

PHILADELPHIA, PENN.—Ground has been broken for a church building on Lehigh Avenue, above Fifth Street, to be called Methodist Episcopal Church. The structure, when completed, will accommodate 600 worshippers.

PLAINFIELD, N. J.—A Gothic church and Sunday-School, in brick, with stone and terra-cotta mouldings, will be built this fall for the Central Baptist Society, from the designs of Messrs. H. Edwards Ficken and Charles H. Smith, architects, New York. The auditorium will be 59 feet 6 inches by 73 feet, with seats for 515 persons. The Sunday-School, 54 by 86 feet, will have its class-rooms arranged to admit of

their being thrown into one large room, opening into the church when so desired by the raising of a stained glass screen. The upper part of the Sunday-School building, which will be half-timbered, will be used for social purposes, and will contain parlors, committee-rooms, and a kitchen. The church will have an open-timbered roof, and the entire edifice will be faced with semi-glassed brick with terra-cotta mouldings. Estimated cost for the whole, \$30,000.

PLAINFIELD, N. J.—St. Mary's Church and Presbytery, built of red, white, and black brick, with Newark stone finish, all laid in black mortar. Size, 50 feet wide at nave and aisles, 70 feet at transepts and 130 feet long; seating capacity, 700; style, Early Decorated English Gothic; estimated cost, \$5,000; church and presbytery; to be finished August 1, 1879. J. O'Rourke, architect, Newark, N. J.

PRESCOTT, ONT.—A stone church, designed in Gothic style, will probably be built next season for the Roman Catholics, from designs prepared by J. P. Johnston, architect, Ogdensburg, N. Y. It measures 80 by 135 feet, including gallery, and will seat 1,400 persons. Material, blue limestone, with Ohio sandstone finish.

PORTLAND, CONN.—Mr. H. M. Congdon, of New York, is the architect of Trinity Church, now building. It will cost about \$50,000.

QUEENSTON, ONT.—A stone church, designed in the Early English style, is now building from designs prepared by S. H. Townsend, architect, of Toronto. It measures 28 by 45 feet, exclusive of transept, and will seat 250 persons. The estimated cost is \$5,000, and it is being built by the congregation of the Church of St. Saviour, as a memorial to the late Sir Isaac Brock.

REHOBOTH, DEL.—A frame chapel is to be built from plans by E. L. Rice, Jr., architect, of Wilmington, Del. It measures 60 by 30 feet, and will seat about 350 people. Open roof and hard wood finish inside. Work to begin this fall. Estimated cost, \$5,500.

ROCHESTER, N. Y.—A wooden chapel for St. James Parish is building from the plans of Mr. Isaac L. Oatis of this city. The cost will be about \$3,000.

ROME, GA.—Plans for enlarging the First Baptist Church at this place are now being made by Mr. A. C. Bruce, architect, of Knoxville, Tenn. Transepts will be added, giving the seating capacity for six hundred persons. The building is of brick, designed in the Romanesque style, and the additions will conform to same style. Estimated cost of improvements, \$5,000.

ROME (OSSEA CO.), N. Y.—A brick church designed in the late Norman style is now building from designs prepared by G. Edw. Cooper, architect, Utica, N. Y. It measures 50 by 130 feet, and will seat 800 persons. The estimated cost is \$12,000. Wm. Davis, of Rome, is the contractor. At present the walls are just above the foundations, but the work will be finished before January 1, 1879. The building is intended for St. Peter's R. C. Society.

RUSH, N. Y.—The architect of the new Methodist church is W. H. Hayes, of Elmira, N. Y.

SIDNEY, NEB.—A small wooden chapel for Roman Catholics is building from designs prepared by F. W. Cooper, architect, Cheyenne, Wyo. Pointed work. It measures 25 x 40, and will seat 200 persons. At present time the roof is being put on. Cost, \$2,000.

SOUTH HAVEN, MICH.—The church over which Rev. E. A. Paddock has charge is nearly finished.

SOMERVILLE, N. J.—The wooden church for the First Methodist Society, designed by Mr. L. B. Valk, of New York, will cost about \$7,000.

SPRINGFIELD, ILL.—The St. Joseph's Roman Catholic Church is now being built on North Sixth Street, after the designs furnished by William White. The design is Gothic; the materials, brick and stone; size, 53 by 115 feet, basement, 8 feet high; height of main building, 40 feet; spire, 140 feet. The building will cost upwards of \$16,000. White & Welton, contractors.

SPRINGFIELD, ONT.—A brick church, designed in Gothic, is now being built, from designs prepared by W. H. Mallory & Son, architects, Chatham, Ont. The building is 41 by 80 feet, with transept 32 feet wide, basement 10 feet 6 inches high. The building is to seat 550 persons, and will cost \$10,000. Mr. J. B. Crane is the contractor.

STAFFORD SPRINGS, CONN.—The church now building of blue granite for the First Congregational Society was designed by Mr. L. B. Valk, of New York. It will cost about \$11,000.

ST. CATHERINE'S, ONT.—A stone church is now being built in this city by St. Thomas Episcopal society, from designs by M. E. Howe, architect, Buffalo, N. Y. The style is Norman. The plan is in the form of a Greek cross, measuring 80 x 80, and seating 650 persons. Cost, \$25,000. Timothy Sullivan, of this city, is the contractor for the entire job. The walls are nearly finished, and the roof is now being put on. Work is to be forwarded without delay.

ST. JOHN, N. B.—The Methodist Century Church, which will cost some \$100,000, is building under the care of Mr. J. C. Welch, architect, of New York.

ST. JOHN, N. B.—Messrs. Langley, Langley & Burke of Toronto, are the architects of St. Andrew's Kirk, which is to cost some \$80,000.

ST. JOHN, N. B.—Messrs. Croff & Camp, are the architects of St. James's Church.

SYKESVILLE, MD.—A granite church in Gothic style; design published by Church Extension Society of the Methodist Episcopal Church, Benjamin D. Price, of Philadelphia, architect. Design, adapted from wood to stone. It measures 28 by 46 feet, 10 inches. Will seat about 100 persons. Cost, about \$2,500. Mr. Z. Isaac, of Elkton City, did the stone-work, and Mr. Jno. H. Barnes, of Sykesville, does the carpenter's work. It is nearly ready for plastering.

TUCSON, ARIZ.—The corner-stone of a Presbyterian Church has been laid.

VIKESBURG, MISS.—There is now building the St. Aloysius Academy and Chapel for the Catholic congregation. The building will measure 55 by 78 feet, will be three stories high, with belfry. It will be built of brick in Roman Renaissance. The chapel for church service is to be in the first story. Architect, Alfred J. B. E. Zucker, Vicksburg, Miss.

A new tower, with pinnacles inclusive, is to be built, and thorough renovations made at the Baptist church, recently partly destroyed by fire. Structure to be brick, style, modern Renaissance; architect, Alfred J. B. E. Zucker, Vicksburg, Miss.

WAPPINGER'S FALLS, N. J.—Mr. Arthur Crooks, of New York, is the architect of the brick and stone Catholic church, which is to cost some \$30,000.

WESTFIELD, N. Y.—The First Presbyterian society of this place are rebuilding their brick church which was destroyed by fire last winter. The walls are up, and the roof is now being put on. Aaron Hall, of Jamestown, N. Y., architect and builder. Cost, \$25,000.

WILMINGTON, DEL.—A brick chapel, designed in Gothic style, is to be built after design furnished by E. L. Rice, Jr., architect, of Wilmington, Del. It measures 55 by 27 feet, and will seat about 300 persons. The estimated cost is \$4,000. Work is expected to begin this fall.

WORCESTER, MASS.—Mr. P. W. Ford, architect, of Boston, is just finishing a wooden church for the congregation of the Immaculate Conception. It will seat about eleven hundred persons. It will cost about \$30,000. The dedication will probably take place in December.

ZANESVILLE, O.—A new brick church is now building in this city for St. John's English Evangelical Lutheran

Church. It is from designs prepared by Messrs. Griese & Welle, architects, Cleveland. The style is antique Gothic. The size is 36 feet 6 inches by 66 feet 6 inches, with an addition of pulpit recess and two projecting entrances on the front, making the extreme length 74 feet. George W. Walter, of this city, is the contractor. The building is now under roof, and being plastered. The building is but one story, and will contain, when completed, a side annex for lecture and Sunday-School purposes. The cost will be about \$7,000. The contractor will have the building ready for occupation about the 1st of November next. It will seat 350 people.

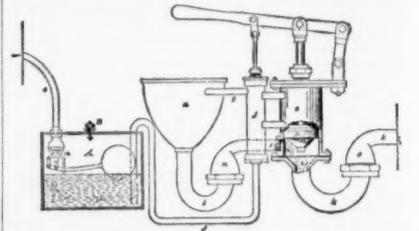
**BUILDING INTELLIGENCE.**

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

**BUILDING PATENTS.**

WATER-CLOSET.—William Bishop, New York, N. Y. The object of the invention is to obtain a not too complicated closet, which, placed at any distance below the water-line in a vessel, will prevent the water from overflowing through the valves of the flush pumps, or through the closet itself. In marine closets it is desirable to have them at or not far below the water-line, therefore a pump for flushing is necessary. As all the valves of the pump necessarily open inward, there would be a constant flow of water when the pump is connected directly with the sea, causing the closet to overflow. Vented siphon pipes and cut-offs are commonly used, says the Metal Worker, to prevent the sea from leaking in through the closet, especially when the vessel is heeled over from any cause. The principal features of this apparatus consist of the soil pump c, for withdrawing and discharging the contents of the bowl, the flush pump d, which draws the water from the water-tank A, and the bowl or basin a. The important feature is the automatically supplied tank A. This is preferably situated below the point at which the flushing pump discharges. It is connected with the water supply by the pipe e, which in a marine closet goes through the side of the vessel below the water line. A float-valve m, so constructed, however, as to make it difficult



for anything to lodge on the valve-seat, controls the supply in the usual manner. The flush pump d is connected with this tank by the pipe f, while the flush from the pump enters the bowl a from the pipe g. The flush tank is entirely inclosed, but has an air vent b, opening outward, so that the air displaced by the inflow of water may easily find an escape. By this construction, the closets and tanks may be placed below the level of the water, and yet no leakage can take place through the closet when at rest, since the water cannot flow into the tank because of the closing of the ball-cock, and the water from the tank cannot escape through the pump, because the entrance of air is prevented by the valve B. When the pump is worked, however, a vacuum is formed in the pump, and the air contained in A forces the water from the tank into the pump. Moreover, the partial vacuum in A renders the ball-float more sensitive, and the supply is more certain than if the tank were situated near the water-line. The soil-pipes and suction pumps are arranged to give very perfect security against derangement or the return of water or soil to the bowl. The soil-pump c has a side opening b for an inlet, while the outlet is at the bottom d, and the pump plunger D is constructed so that when forced to the bottom of its stroke it acts as an effective cut-off upon the pipes b and d. The check-valve boxes are shown at n and o, and with the piston form a very complete cut-off from the sea.

WATER-CLOSET VALVE.—John H. Quinn, Boston, Mass.  
HATCHWAY DOOR MECHANISM.—Charles O. Yale, New York, N. Y.

**COMPLETED BUILDINGS.**

BALTIMORE, MD.—The new Catholic Church of St. Andrew's will be dedicated on the first Sunday in October.

BRUSH CREEK, O. (Near Storetown, Muskingum County.)—A new frame church for the English Lutheran Church has just been completed at this place. An amateur architect drew the designs—Gothic style of architecture. The size of the building is 40 by 60 feet, with sandstone foundation. There is a central spire of 83 feet. The contractor is George W. Walter, of Zanesville, O. The building cost \$4,000. It will seat about 300 persons.

CEVREVILLE, MD.—The Bethel church for the African Methodist Episcopal congregation was dedicated on Sunday, September 8th.

CHURCH HILL, MD.—The new Catholic Church at Church Hill, Queen Anne's County, was dedicated September 8th.

**SUMMARY OF THE WEEK.**

**Baltimore.**

BUILDING PERMITS.—E. P. Suter, Wilkens Ave., inclosed shed, 30' x 48', and office, 12' x 18'.—Charles Richter, 244 and 246 North Calhoun St., stable, 16' x 28'.

DRY DOCK.—A framed diagram of the improvements to be made by the Dry Dock Company, at Fort McHenry, has been presented to the Corn Exchange. The dimensions of the proposed dock are as follows: Length of dock over all, 470 feet; width of dock on top, 113 feet; width of dock on bottom, 45 feet; width at the gate, 80 feet; draught of water 22 feet, and depth of water 28 feet.

**Brooklyn.**

BUILDING PERMITS.—Bleeker St., 1 two-st'y frame dwell., 21' x 39'; owner, E. Gastmeyer, Powers St.—Kent St., 1 two-st'y frame dwell., 25' x 39'; owner, James Martin, 319 Oakland St.; architect, D. A. Donlon; builders, C. M. Moore and P. Fitzgerald.—Oakland St., No. 77, 1 two-st'y

frame dwell., 17' by 29'; owner, Abm Talmadge, 111 Nassau Ave.; builders, Wm. Talmadge and S. M. Randall. — Palmetto St., cor. Hamburg Ave., 5 two-story frame stores and dwellings, 16' x 28'; owner and builder, Thomas Donohue, 103 St. Vincent Ave.; architect, Richard-on. — Sixth St., No. 208, 1 three-story brick store and dwell., 25' x 42'; owner, C. May, cor. North Seventh and Sixth sts.; architect, A. Herbert; builders, V. Bruckhauser and M. Metzger. — Eighth St., 6 two-story brown stone dwellings, 18' 4" x 40'; owner, Patrick Mullaly, 576 Quiney St.; architects, Parfit Bro.; builder, T. Dunn. — Nineteenth St., cor. Seventh Ave., 1 two-story frame store and dwell., 25' x 25'; owner, Owen O'Brien; builder, E. McKinstry. — Clinton Ave., 1 three-story brown stone dwell., 29' x 45'; owner, S. Cox; builder, B. Linkin. — Marcy Ave., cor. Keap St., 5 two-and-one-half-story brown stone dwellings, 20' x 42'; owner and builder, Jno. Wilson, 108 Lee Ave.; architect, J. Ross. — Tompkins Ave., 1 three-story frame tenement, 22' x 50'; owner, Mrs. Mary Swin, 168 Spence St.; architect, F. McMahon; builder, E. Hendrickson.

Boston.

BUILDING PERMITS.—The following permits have been granted since our last issue:—

BRICK BUILDINGS.

Table with 5 columns: Mechanic, No., Stories, Class, Size. Row 1: Asa Mitchell, 1, 1, Boiler-house, 40' x 14'.

WOODEN BUILDINGS.

Table with 5 columns: Mechanic, No., Stories, Class, Size. Rows include F. C. Creber (Dwelling, 22' x 30'), R. F. Tarr (Manufactory, 137' x 32'), G. M. Starbird (Stable, 40' x 22'), Henry Wilson (Dwelling and Store, 13' x 24'), James Brown (Green-house, 40' x 29').

Cincinnati.

BUILDING PERMITS.—Jacob Vogel, ice cellar, \$5,000. — C. P. Batt, two-and-one-half-story brick, \$2,400. — McDougall & Steele, two-story brick, \$3,000. — Chas. Muth, four-story brick, \$2,500. — Wm. Miller, \$2,000. — Henry Bertling, two-story brick, \$1,400. — Wm. Crossat, two-story brick, \$1,700. — John Kramer, two-and-one-half-story brick, \$2,000. — Fred Becht, two-story brick, \$2,000. — Harrison & McKro, three-story brick, \$4,000. — Ernst Hoffe, two-story brick, \$2,200. — Henry Rabe, two-story brick, \$2,000. — John Gaffow, three-story brick, \$4,500. — J. B. Deyer, two-story brick, \$3,500. — 23 permits for repairs at a total cost of \$10,050. Total permits, 37; total cost, \$48,050; total permits to date, 644; total cost to date, \$1,116,083.

Indianapolis.

THE STATE-HOUSE.—The contract for constructing the new State Capitol building at Indianapolis, Ind., was awarded, on the 28th ult., to Kammacher & Denig, of Columbus, Ohio, their contract being for the entire work, with the exception of the ventilating and steam-heating apparatus, which was awarded to the Walworth Manufacturing Company of Boston, for \$50,000. The original bid of Messrs. Kammacher & Denig, embracing the latter work, was \$1,611,572.65, but the steam-heating and ventilating apparatus having been awarded separately, the contract awarded them was reduced to \$1,561,572.65. The bid of this firm was a little over \$88,000 less than any one else, and \$154,000 less than the commissioners could have made up a bid, from the different ones made for portions of the work only. It is expected work will commence about the middle of the month.

Louisville, Ky.

BUILDING PERMITS.—Michael Murphy, two-story brick dwell., Ward St. — J. D. Shepherd, two-story brick dwell., Chestnut St.; cost, \$2,500. — Lewis Barkhouse, two-story brick stable, Second St.; cost \$650. — Pat. Hannon, two-story brick factory, Thirteenth St.; cost, \$1,500.

New York.

BUILDING PERMITS.—92 Reade St., storehouse, 25' x 59', white marble front; cost, \$15,000; Wm. Schwetky, owner and builder; John McIntyre, architect. — One Hundred and Fifty-third St. and St. Nicholas Ave., first-class dwell., 26' x 30'; cost, \$11,000; C. L. Fleming, owner; Jas. E. Ware, architect. — J. H. Haller, builder. — Eighty-fifth St., near Third Ave., brown-stone tenement, 30' x 17'; cost, \$13,500; Chas. F. Foutham, owner; John Brandt, architect. — Ninety-fifth St., near Third Ave., 12 first-class dwellings, 18' x 4"; cost, \$7,500 each; L. C. Bishop, owner; Thom & Wilson, architects; Jas. Crow, builder. — Madison Ave., between Sixty-second and Sixty-third sts., 10 first class dwellings, 20' x 50' each; cost, \$20,000 apiece; J. E. Dozay, owner and builder; J. H. Valentine, architect. — Fifty-sixth St., cor. Fourth Ave., 6 first-class dwellings, 16' x 50'; cost, \$12,000 each; Wm. Noble, owner; Chas. Baxter, architect. — 111 Mercer St., store, iron front, 25' x 90'; cost, \$17,000; M. & S. Sternberger, owners; Henry Fernbach, architect. — Chas. Eberpacker, builder. — Cor. Seventieth St. and Madison Ave., 5 first-class dwellings, 20' x 70'; brown stone fronts; cost, \$18,000; Thos. Pearson, owner; John G. Prague, architect. — Fifty-second St., near Seventh Ave., 7 tenements, 25' x 63'; cost, \$9,000 each; H. H. Barney, owner; L. W. Crow, builder. — Eightieth St., near Fourth Ave., 4 first-class dwellings, 18' x 50'; cost, \$8,000; G. Kuhne agent, owner; Wm. Jose, architect.

THE BUILDING DEPARTMENT.—During the month of August there were one hundred and forty-four new buildings commenced in this city, and one hundred and three were completed. There are now seven hundred and seventy-three new buildings in progress, and two hundred and twenty-seven alterations to buildings.

Philadelphia.

BUILDING PERMITS.—W. T. B. Roberts, Supt., 20 three-story dwellings, 16' x 58', Butler St. — W. T. B. Roberts, Supt., 10 three-story dwellings, 16' x 57', Thompson St. — John Bell, 2 two-story dwellings, 14' x 28', Baily St. — F. N. Forsyth, two-story stable, 17' x 48', Marshall St. — Geo. Reddes, three-story factory, 22' x 40', Wakefield St., Germantown. — Samuel Kany, three-story store and dwell., 16' x 37', No. 5457 Main St., Germantown. — Samuel Kany, three-story store and dwell., 15' x 37', No. 5459 Main St., Germantown. — C. W. Coulston, 3 three-story dwellings, 14' x 30', Woodstock St. — J. McElricle, two-story stable, 16' x 30', Evans St. — Wm. Galbraith, 2 two-story dwellings, 16' x 28', Garnet St. — Jas. Creighton, 2 two-story dwellings, 16' x 30', Somerset St. — James McCartney, addition to factory, 49' x 67', Mascher St. — C. J. Smith, 2 three-story stores and dwellings, 16' x 29', Nos. 112 and 1228 Cumberland St. — A. E. Halnes, 11 two-story dwellings, 15' x 42', Somerset St. — Hutchinson & Linger, addition to factory, 30' x 45', No. 23-4 Waterloo St. — Evans & Patterson, three-story dwell., 16' x 40', No. 177 Brighthelm St., Germantown. — John Van Horn, 3 three-story dwellings, 18' x 55', Columbia Ave. — Keeley & Brownback, 4 three-story dwellings, 16' x 50', Sixth St. — Michael Fox, 6 three-story dwellings, cor. Tenth and York sts. — W. K. Jacoby, three-story factory, 20' x 80', Ashmead St., Germantown. — Samuel Rain, 3 three-story

dwellings, 16' 7" x 57', cor. Thirteenth and Diamond sts. — J. Mulligan three-story dwell., 18' x 49', Thompson St. — W. G. Bedford, Manager, 8 three-story dwellings, 17' 6" x 63', Powellton Ave. — J. C. Hullinger, two-story dwell., 12' x 31', Thirty-ninth St. — W. H. Beckert, two-story dwell., 18' x 27', Chestnut St. — Wm. Bunch, Jr., 2 three-story dwellings, 16' x 42', cor. Thirty-seventh and Center sts. — Wm. Bunch, Jr., two-story dwell., 14' x 42', cor. Thirty-seventh and Center sts. — Wm. C. McPherson, five-story warehouse, 20' x 33', Leverington Ave. — J. P. Sheridan, two-story dwell., 18' x 39', cor. Nineteenth and Dickinson sts. — John Shorter, two-story dwell., 14' 6" x 37', No. 1228 Lyndell St. — Thos. C. Nesbitt, three-story store and dwell., 16' x 39', Passyunk Ave.

St. Louis.

BUILDING PERMITS.—Thirty-nine permits have been issued for the week ending September 6, 1878. Eleven of these are for frame buildings, all unimportant except a frame structure for the Public School Board, to cost \$2,200. Of the brick buildings, those worth \$2,500 and over are as follows:—

Table with 5 columns: Owners, Use, Stories, Rooms, Cost. Rows include T. D. Watts (Dwelling, 3 stories, 18 rooms, \$5,000), Richard Turman (Store and Dwelling, 3 stories, 7 rooms, 3,000), John Heina (Dwelling, 2 stories, 4 rooms, 2,300), F. Bodenkampe (Store and Dwelling, 3 stories, 13 rooms, 4,500).

THE EXPOSITION.—The Society of Architectural Draughtsmen in this city is arranging to give a special exhibit at the Exposition which will open in this city on the 9th instant, and continue to October 12. An aggregate of \$50,000 of premiums is to be awarded.

Wilmington.

BUILDING PERMITS.—During the month of August, 55 permits were granted by Chief Engineer Conwell, of the Engineering and Survey Department, as follows:— Benjamin B. Groome, house, cor. Dupont and Tulip streets. — Gideon B. Guyer, ten houses, Ninth Street. — Patrick Fitzgerald, one house, Pine Street. — William Hamilton, one house, Lovering Avenue. — Daniel B. Anderson, one house, corner Sixth and Scott streets. — Thomas Milliken, two houses, Seventh Street. — John Wood, three houses, Eleventh Street. — Ellen Ryan, one house, Eleventh Street. — Moses Thomas, one house, Head Street. — Samuel S. Johnson, three houses, Front Street. — Edward A. Aiker, one house, Jackson Street. — Dennis Kane, one house, Buttonwood Street. — Daniel McKeever, one house, Thatcher Street. — James A. Ashworth, one house, Pennsylvania Avenue. — Harriet Fritz, one house, Jefferson Street. — Harlan Gause, twenty houses, Walnut Street. — Patrick O'Byrne, one house, Fourth Street. — Patrick Cahill, one house, Fourth Street. — Gideon B. Guyer, two houses, Wilson Street. — Mary T. Alderice, one office, cor. Fourth and Spruce streets. — Samuel Coyle, one house, cor. Chestnut and Adams streets.

General Notes.

ANN ARBOR, MICH.—The contract for the furniture of the new court-house, J. W. Bunting, of Indianapolis, architect, is now awarded to the Phenix Furniture Manufacturing Co. of Grand Rapids.
ASHLAND, VA.—Money has been appropriated to build a modern town-house.
ATHENS, OHIO.—The estimated cost of the new court-house for Athens County, of which Mr. H. E. Myer is architect, is \$90,000. It is to be of brick and stone. In plan it will measure 60' x 117'.
BADEN, ONT.—Mr. D. W. Gingrich, of Waterloo, is building for Jas. Livingston, Esq., a three-story brick house, which will cost about \$12,000.
BOONE, IO.—There is building at this place a high school building of six rooms, two stories and basement in height. Also a two-story ward school of two rooms. Both buildings have bell towers, and are built of red brick, with cut stone finish. Contract price for the two buildings, \$14,288.
MR. H. GOESSINGER is building a frame residence, to cost \$3,500. The designs for these buildings were prepared by William Foster, architect, of Des Moines, Iowa.
CALEDONIA, N. Y.—Mr. Isaac Loomis, of Rochester, is the architect of the wooden house now building for D. W. Chamberlin. Cost, \$3,100.
CAMBRIDGE, MASS.—Messrs. Longfellow & Clark, of Boston, are the architects of a brick and wood house for Mr. J. C. Dodge. E. D. Garey, of Newton Centre, is the builder. Cost, \$8,000.
DES MOINES, IO.—The State Insurance Co. is building a three-story stone building, 44 feet wide. Front of Amherst, Ohio, stone. The insurance offices are on the second floor. The third floor is being fitted up for the I. O. O. F. It is to be completed by October 1, 1878. Cost, \$23,000. William Foster, architect.
Besides this building, Mr. Foster is building a brick and stone residence for Mr. Geo. King, to cost \$8,000. — French roof residence for L. Harbach, brick and stone, cost, \$14,000. — Frame residence for Mrs. Mattes, cost, \$4,000. — Frame residence for Mr. Gatch, cost, \$5,000.
MR. H. HOLLIS is building a brick residence from designs of J. S. Blake, architect. Cost \$4,000.
DETROIT, MICH.—A three-story building, 30 by 60 feet, is to be built next spring at 51 Rowland St. for the Detroit Scientific Association.
Work on the buildings for the State Fair is advancing rapidly.
DORCHESTER, MASS.—A block of two brick houses on Dudley Street is nearly completed. The houses are four stories high. Morton & Chesley are the contractors. Mr. J. A. Fox, of Boston, architect.
MCKEESPORT, PENN.—Work has commenced on the new foundry.
NEW ALBANY, IND.—The building committee of the Bank Street Baptist Church objected to the brick used by Mr. Conger in the construction of the edifice, and took the contract away from him, awarding it to Mr. Crawford.
NEW BEDFORD, MASS.—Messrs. Caleb Hammond & Son, architects, are to build for Mrs. Ezra Kelley a two-story frame cottage.
NEWTONVILLE, MASS.—A house is building for F. A. Dawson, Esq., D. S. McCabe, of Belmont, builder. Cost, \$6,000. Messrs. Longfellow & Clark, of Boston, architects.
OXFORD, MASS.—The contract for the new depot has been let to Mr. Charles Fuller.
ST. JOHN, N. B.—Mr. G. H. Young, of Boston, Mass., is the architect of a building in connection with the New Brunswick Cotton Mills. It measures 60 by 92 feet, built of brick and stone, and is four stories high. Wm. Parks & Sons are the owners. The contract will be let in St. John.
TOWNSEND, MASS.—A new parsonage is building of wood for Rev. F. J. Lynch. The builder is Charles McKay, of Springfield, Mass. Cost, \$5,000. Mr. P. W. Ford, of Boston, is the architect.
TIVERTON, R. I.—Mr. George L. Wilcox is about to build a dwelling-house.
TORONTO, ONT.—The jailer's house, now nearly finished, was designed by Mr. D. W. Gingrich, of Waterloo. It has cost about \$6,000.

TROT, O.—Two new law offices are being built on Main Street, nearly opposite the court-house.
VICTORIA, IO.—Mr. M. V. Tourey is building a two-story business front, to cost \$5,000. Brick, with stone finish. William Foster, architect, Des Moines.
WALLINGFORD, CONN.—At an adjourned town meeting, held August 31, the vote to adopt the plan for a new high school building that had been presented by Mr. Moulton, a New Haven architect, was reconsidered, and Amos Dickinson, Samuel Simpson, Henry L. Hall, William Wallace, and Wooster Ives were elected a committee to repair the building injured by the tornado, at a cost not to exceed \$8,500.
WATERLOO, ONT.—Mr. D. W. Gingrich, architect, is building houses for Dr. J. H. Webb, cost, \$4,000; Andrew Oetzel, cost, \$2,500; and H. O. Meyer, cost, \$2,000.
YONK, ME.—A project is on foot to build a hotel on the summit of Mount Ararat, to be provided with an observatory, in the walls of which will be glasses of high magnifying power, thus enabling the guest to have the surrounding objects of interest brought directly under their vision.

INDEX OF CURRENT WORK,

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

Baltimore, Md.

CHURCH.—The Cummings Memorial Church. Mr. Casell, architect.
CHURCH.—The Pius IX. Memorial Church. G. A. Frederick, architect. Cost \$100,000.
CHURCH.—Church of St. Michael and All Angels. Cost \$80,000. Wyatt & Sperry, architects.
HOSPITAL.—Johns Hopkins Hospital. J. B. Nierse, consulting architect.

Boston.

BANK BUILDING.—Tremont Bank Building. Carl Fehmer, architect.
HOTEL.—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.
THE MUSEUM OF FINE ARTS.—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.
SCHOOL-HOUSE.—High and Latin School. G. A. Clough, architect.
ASYLUM.—Asylum for Aged People, C. J. Bateman, architect. Cost \$51,000.

Brooklyn, N. Y.

TENEMENT.—A. T. White, owner. William Field & Son, architects.
SOCIETY BUILDING.—The Long Island Historical Society Building, Mr. G. B. Post, architect. Cost \$100,000.
CHURCH.—St. Francis Xavier R. C. Church, West Fifteenth Street. Cost \$150,000. P. Keely, architect.
HOSPITAL.—St. John's Hospital, N. L. Derby, New York, architect.

Chicago, Ill.

ARMORY.—Armory for the First Regiment. Messrs. Wheelock & Clay, architects. Cost \$25,000.
STORE.—The Singer Building. Cost \$250,000.

Cincinnati, O.

U. S. CUSTOM HOUSE AND POST OFFICE.—S. Hannaford, local superintendent.
CHILDREN'S HOME.—J. W. McLaughlin, architect. Cost \$50,000.
NEWSPAPER OFFICE.—The Gazette Building. E. Anderson, architect.
CLUB-HOUSE.—Allemania Club-House. J. W. McLaughlin, architect. Cost \$60,000.
UNIVERSITY BUILDING.—Cincinnati University Building. S. Hannaford, architect. Cost \$50,000.

Cleveland, O.

BUSINESS BLOCK.—Amasa Stone, owner. J. Ireland, architect. Cost \$70,000.
CHURCH.—Second Presbyterian. J. Ireland, architect. Cost \$70,000.
CONVENT.—Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

Hartford, Conn.

SEMINARY.—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.
CATHEDRAL.—B. C. Cathedral of St. Joseph. P. Keely, architect.
CATHOLIC SCHOOL.—Brown & Stilson, architects, New Haven. Cost about \$25,000.

Jersey City.

CONVENT.—Convent of the Sisters of St. Dominick. Cost \$40,000.

New York.

THE "FLORENCE."—Emile Grewé, architect. Mrs. Matthews, owner. Cost \$500,000.
THE BORELL BUILDING.—S. D. Hatch, architect. Cost \$250,000.
COLLEGE.—Addition to Columbia College. C. C. Haight, architect. Cost \$200,000.
OFFICE BUILDING.—Messrs. Stillman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.
APARTMENT HOUSE.—Mr. H. J. Hardenburgh, architect. Cost \$300,000.
PRIVATE RESIDENCE.—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.

Advertisement for SETH THOMAS, THOMASTON, CONN. TOWER CLOCKS. PRICES: \$125 TO \$6,000. Strong, Accurate, Durable.

Publishers' Department.

The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON.

CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,

Houghton, Osgood & Co.'s other Periodicals. THE ARCHITECT and ATLANTIC MONTHLY...\$9.00 THE ARCHITECT and THE REPORTER...\$5.00 THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL...\$10.00 THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE...\$7.00

RATES OF ADVERTISING.

PAGES NEXT TO READING MATTER, single insertion...12 1/2 cts. per line. One inch (14 lines) one insertion...\$1.75 One inch, six insertions...10.00

Special rates for first and last pages. No extra charge for cuts, or for advertisements that occupy more than a column in width.

Payments should be made directly to the Publishers, either by draft or by post office order.

A. Hall & Sons Manufacturers of Architectural Terra Cotta, Buff and Colored Brick, Fire Brick

ARCHITECTURAL IRON WORKS. YOUNGLOVE & CO., Prop'r's. CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, IRON STAIRS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CRISTING, ETC

MARKET ST. ARCHITECTURAL FOUNDRY AND IRON WORKS. SNEAD & CO., LOUISVILLE, KY.

Makers of every description of Iron Work for Buildings.

MORTAR BLACK, Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar.

BOUND VOLUMES OF THE AMERICAN ARCHITECT.

We are prepared to fill orders for binding the American Architect and Building News in styles similar to the volume for 1876, at the following rates:—

Price of cover without binding...\$1.00 Cover and binding (for subscribers)...2.00 Numbers of 1876 or 1877 without cover or binding...7.50

In sending volumes to be bound it should be stated whether the illustrations are to be bound with their respective numbers, or whether all illustrations are to be placed together at the end of volume.

The above will be sent, post paid. Subscribers sending their numbers to be bound will prepay postage or express charges.

HOUGHTON, OSGOOD & CO., PUBLISHERS, Winthrop Square, Boston.

PROPOSALS.

CANAL AND LOCK.

Sealed tenders, addressed to the Secretary of Public Works and indorsed "Tender for Canal and Lock at St. Anne," will be received at the office of the Department of Public Works, Ottawa, Ontario, until the arrival of the eastern and western mails on Tuesday, the 8th day of October next, for the construction of a Lock and the formation of approaches to it on the landward side of the present Lock at St. Anne.

The check thus sent in will be returned to the respective parties whose tenders are not accepted. For the due fulfillment of the contract, satisfactory security will be required by the deposit of money to the amount of five per cent on the bulk sum of the contract; of which the sum sent in with the tender will be considered a part.

DREDGING.

Proposals for additional dredging at Cambridge, Md., will be received until noon of September 24, 1878, and opened immediately thereafter. Blank forms, specifications, and any desired information can be had on application to this office.

IRON WORK.

Proposals for Wrought and Cast Iron Work for the U. S. Custom-House, etc., at Cincinnati, O. Office of the Supervising Architect, Treasury Department, Washington, D. C., September 4, 1878.

IRON WORK, CUT GRANITE, BRICK, CEMENT, SAND.

Proposals for Iron Work, Cut Granite Work, Bricks, Cement, and Sand for the U. S. Custom-House, etc., at Albany, N. Y. Office of the Supervising Architect, Treasury Department, Washington, D. C., September 2, 1878.

CANAL.

Sealed tenders, addressed to the Secretary of Public Works, and indorsed "Tender for the Lachine Canal," will be received at the office of the Department of Public Works, at Ottawa, Ontario, until the arrival of the eastern and western mails, on Wednesday, the 18th day of September next, for the deepening, enlargement, and completion of that part of the Lachine Canal now known as Section No. 9, and formerly called the "Rock Cut."

PROPOSALS.

LOCKS AND KEYS.

Separate sealed proposals will be received at this Department until 12 o'clock noon on the 20th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as are to be used for the street letter-boxes of the United States.

No proposal will be considered which is not submitted in accordance with such specifications and forms of proposal. The contracts which may be made are to be in conformity with the specifications and accepted proposals.

BREAKWATER.

Sealed proposals for the extension of the Cleveland Breakwater will be received at the U. S. Engineer Office, Cleveland, Ohio, until 11 o'clock, A. M., Tuesday, September 17th, 1878.

BEACONS AND DWELLINGS.

Sealed proposals will be received at this office until 10 A. M., September 21, 1878, for the construction and erection, at the site, Port Royal Harbor, South Carolina, of the Hilton Head Range Beacons and Dwellings.

Proposals must be enclosed in a sealed envelope and indorsed "Proposals for Hilton Head Range Beacons," and then enclosed in another envelope addressed to W. A. JONES, Capt. Corps of Engineers, U. S. A., Engineer 6th L. H. District, No. 45 Broad Street, Charleston, S. C.

BRIDGES, VIADUCTS, ETC.

Sealed proposals addressed to the undersigned at their office, No. 82 West Third Street, Cincinnati, will be received until noon Wednesday, the 18th of September, 1878, for the construction of thirty-four (34) iron bridges and viaducts, and twelve (12) wooden bridges—all or part of them—on the Cincinnati Southern Railway, between Somerset, Ky., and Boyce's Station, Tenn.

BREAKWATER.

Sealed proposals for the extension of the Buffalo Breakwater will be received at the U. S. Engineer's Office, Buffalo, N. Y., until 11 o'clock A. M., September 18, 1878.

CANAL AND CANAL LOCKS.

Sealed proposals will be received at this office until 11 o'clock, A. M., Tuesday, October 1, 1878, for furnishing labor and materials for the construction of a portion of the canal and locks at the Cascades of the Columbia River, Oregon.

GAS FIXTURES OF EVERY DESCRIPTION. SPECIAL RATES TO BUILDERS.

R. BOLLINGS & CO 347 Washington St. BOSTON.

**ETNA IRON CO.**

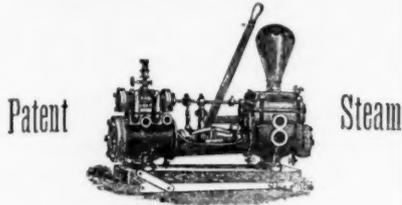
Manufacturers of every description of Wrought and Cast

**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**



**PUMP THE STANDARD.**

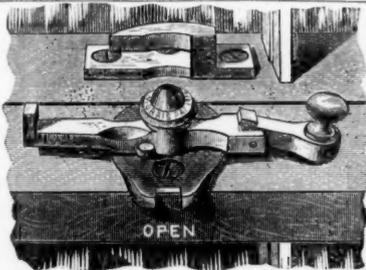
Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.  
Noiseless Pumps for Water Elevators.

ALSO,  
Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.  
The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE  
**KNOWLES STEAM PUMP WORKS,**  
WARREN, MASS.

WAREHOUSES, (14 & 16 Federal St., } Boston.  
113 & 115 Congress St., }  
(92 & 94 Liberty St., New York.

Send for Illustrated Catalogue.



**MORRIS BURGLAR-PROOF SASH LOCK.**  
Patented July 2, 1878. The Safest! The Simplest!  
The Most Reliable! THE BEST!

N. B. — No springs to get out of order. Sold by all hardware jobbers. Manufactured by the MORRIS SASH LOCK MANUFACTURING CO., Office 168 Walnut St., Cincinnati, O.  
Price List and Samples furnished to the trade on application. A liberal discount to the trade.

**PATENTS.**

F. A. LEHMANN, Solicitor of Patents, Washington, D. C.  
NO PATENT NO PAY. Send for Circular.

**"ZODTCHY" (BUILDER).**

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

M. JEROME KÜTNER,

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from EIGHT to SIXTEEN pages of letterpress, gr. quarto, with cuts, and at least FIVE autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.

The "Zodtchy" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address.

JOURNAL "ZODTCHY,"

18 OFFICER STREET, ST. PETERSBURG, RUSSIA.



**Carson's Kitchen Sink.**

Is an improvement in this fixture that must meet with the approval of every house-keeper as it retains every particle of grease, and prevents the waste of water from filling up; besides being better trapped than any other sink in use.

Signal Mfg. Co., Medina, N. Y., or J. M. Carson, Louisville, Ky., Man'rs.

**NATIONAL**

**FINE ART FOUNDRY,**

218 East 35th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze.  
TO ARCHITECTS AND BUILDERS.

**MAHOGANY, FIGURED WALNUTS,**

(all thicknesses) for Doors and Interior Finish.

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

**GEO. DWIGHT, JR., & CO.,**

Builders in Iron, and Engineers in Fire-Proof Construction,

SPRINGFIELD, MASS.,

HAVE for many years given their exclusive attention to FIRE-PROOF CONSTRUCTION; and they now invite the correspondence of Architects to the following specialties which hereafter will constitute the leading items of their business:  
**FIRE-PROOF FLOORS.** The only floors that have stood fire in this country.

**FIRE-PROOF ROOFS.** Refer to Equitable Life Insurance Company's Building at Boston.

**FIRE-PROOF SHUTTERS.** Have stood many fires in all parts of the country. Over 6000 pairs put up in Boston after the fire. Saved the city of Springfield last year.

**FIRE-PROOF LATH.** In the words of one of the best-known architects of this country, "Minimum of metal, maximum of stiffness, maximum of clinch; the best lath ever made, either wood or iron." See New York Post Office; State Department, Washington; Equitable Life Insurance Company's Buildings, and many others.

Mr. HOYT will be pleased to wait upon Architects, when desired, to explain our methods, and to present for inspection construction plans and estimates for any specific work.

**BURDITT & WILLIAMS,**

DEALERS IN

**FINE HARDWARE**

of every material. A specially complete stock of PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



**The Draft of the Chimney increased.**

Smoking Chimneys Prevented. Particularly adapted to Chimneys in exposed positions.

Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR,  
70 Grand St., Brooklyn, N. Y.

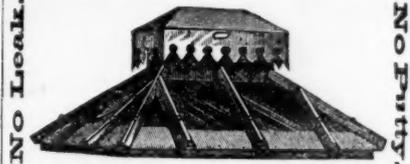
**CATALOGUE OF Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO., ARCHITECTURAL BOOK PUBLISHERS,  
27 WARREN STREET, NEW YORK.

**BICKELHOUP BROS.,**  
829 West 37th St., New York.



**PATENT METALLIC SKY-LIGHTS.**

**BEEHIVE BRAND. FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**UNPARALLELED DISCOVERY.**

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the *Paint Preserver* invented by ASAHEL WHEELER, Boston. It will neither crack, blister, nor scale.



**BALTIMORE PRESSED TILES, FOR HEARTHES, FLOORS, ETC.**

Chimney Tops and Garden Vases, DRAIN AND SEWER PIPE, FIRE-BRICK, LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

WALDO BROTHERS,  
No. 94 WATER STREET, BOSTON.

**PEERLESS BRICKS.**

THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK ARCHITECTURAL SHAPES (80 kinds).

ALSO  
**RED** Pressed Fronts.  
Extra fine in color and quality

**BROWN,** Colored throughout  
More beautiful than Brown Stone DURABLE

**CHOCOLATE,**  
Same as above; difference in color

**FLESH COLOR,**  
A very popular color.

**BUFF,** very fine.  
Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F. ADAMS, JOSEPH WOOD, JR.,  
PRESIDENT. TREASURER



**DOLIVET, CUTTER, & CO.,**

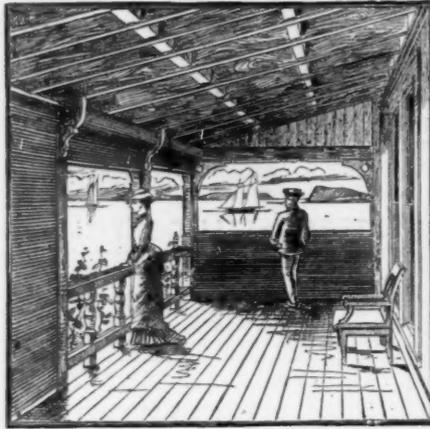
ARTISTIC

**Papier Maché Decorations,**

106 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING VENETIAN BLINDS.**  
**WILSON'S PATENT.**  
 These blinds can be fitted to any kind of Window or Piazza. They require no winding machinery or balance weights, and run up and down as easily as an ordinary spring shade. For Bay Windows they are found invaluable.  
 They are simple, durable, and handsomely finished. They were exhibited at Philadelphia in competition with the Rolling Venetian Shutters of English manufacture, and received the only award of Medal and Diploma.  
 Price reduced to 50 cents per foot super. in hard wood. We also manufacture Wilson's patent Rolling **STEEL SHUTTERS**, the best and cheapest fire and burglar-proof Shutters in the market.  
**WILSON & JAMES,**  
 68 Beekman St., NEW YORK.

**PRIZE MEDALLISTS.**  
 1862; 1865; 1867; 1872; 1873; AND ONLY AWARD and MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**  
 ORIGINAL INVENTORS AND SOLE PATENTEES OF  
**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters  
 OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Tiford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.  
 OFFICE AND MANUFACTORY,  
 162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**  
 76 READE STREET, NEW YORK,  
 WORKS, DARLINGTON, N. J.

*Lock and Hardware Manufacturers,*  
 DESIGNERS, FOUNDERS, AND WORKERS

**BRONZE AND BRASS.**

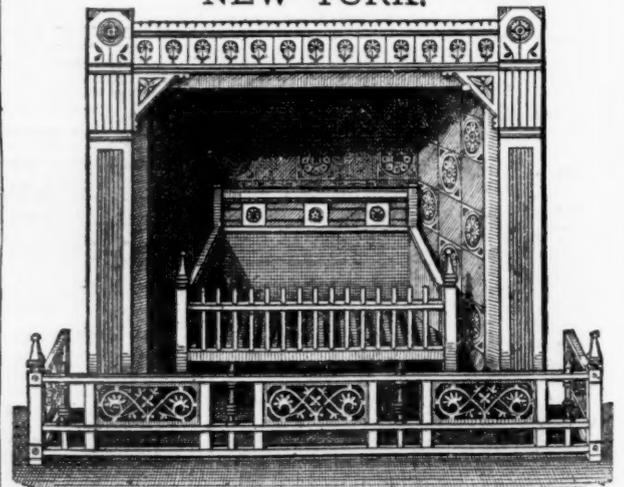
*Architects' Designs faithfully executed.*

Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side),  
 NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tin.  
 HAVE NO OTHER WAREHOUSES.

**VALUABLE ART PUBLICATIONS.**

- ALLONGE'S (Auguste) Charcoal Drawing. With an Introduction by C. C. PERKINS, and a Heliotype Frontispiece. Small 4to. \$1.00.
- BAKER'S (W. S.) Origin and Antiquity of Engraving, with 23 Heliotype Illustrations from Dürer, Van Dyck, Raphael, Guido, etc. 8vo. \$5.00.
- HUNT'S (William M.) Talks on Art. 8vo. Paper. \$1.
- CLEMENT'S (Clara Erskine) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a complete Index. Cr. 8vo. Cloth, red edges, \$3.25.
- Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.
- MURRAY'S (Mrs. Elizabeth) The Modern System of Painting in Water-Colors from the living model. 12mo, paper, 50 cents.

HOUGHTON, OSGOOD AND COMPANY, Boston.

**A NOVELTY.**

**THE YALE PATENT ANTI-FRICTION ROLLER STRIKE.**

Applicable for use with all Mortise Locks, old and new.

IT ENABLES THE DOOR TO BE SHUT WITHOUT SLAMMING.  
 IT PREVENTS ALL JAR AND NOISE.  
 IT SAVES WEAR OF THE LOCK AND DOOR.  
 IT CAN BE EASILY APPLIED.  
 ITS COST IS BUT TRIFLING.

Architects can obtain a sample strike free by addressing

YALE LOCK MANUFACTURING CO., STAMFORD, CONN.  
 New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,

SPECIALTIES IN  
**PLUMBING GOODS.**  
 94 BEEKMAN STREET,  
 NEW YORK.



JENNINGS' NEW CLOSET, WITH New Valve  
 With non-corrosive Valve Seating and Solid Plunger.

**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer Gas that has yet been invented.  
**A POSITIVE SEAL**  
 Against sewer-gas, absorbed gases, and back water. Seal is not broken by syphonage or evaporation. Self-scouring; not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers,  
**B. P. BOWER & CO.,**  
 104 & 106 St. Clair St., Cleveland, O.

**THE EUREKA VENTILATION CO.**  
 OFFICE AND MANUFACTORY,  
 74 CHARLESTOWN STREET,  
 BOSTON, MASS.

**A. L. FAUCHÈRE & CO.**  
 OFFICE AND WAREHOUSES  
 1319 and 1321 Broadway, New York,  
 Importers, Manufacturers, and Dealers in all kinds of foreign and domestic

**MARBLE FOR INTERIOR WORK.**  
 Estimates furnished on application.

**ARCHITECTURAL IRON AND JAIL WORKS.**  
**M. CLEMENTS,**  
 MANUFACTURER OF  
 Iron Railing, Bank Vaults, and Jail Cells,  
 Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated;  
 Fire-proof Shutters, Doors, etc.  
 SAYMILLER STREET, near Sixth and C. H. & D. E. R. Depot, CINCINNATI, OHIO.

**STEWART'S SLATE, MARBLE AND HARD WOOD MANTELS.**  
 MIRRORS, ART-TILES, MANTELS, HEARTH'S &c.  
 Masonic Temple 23<sup>d</sup> St. & 6<sup>th</sup> Ave. N.Y.



Sewer Pipe, Fire Brick, Terra Cotta, Chimney Tops, Garden Vases, Art Pottery for Decoration. The strongest and smoothest pipe in the country. Send for tests and Catalogue. Prices as low as any other manufacturer.  
**Portland Stone Ware Co.**  
 Geo. C. DUNN, Gen'l Ag't,  
 60 Kilby Street,  
 400 Federal Street, Boston.

**LIMMER ROCK ASPHALT CO.**  
 111 Broadway, Room 105, New York.  
 Rock Asphalt is a natural product, and the ideal material for Paving Roadways, Streets, Yards, and Stables, and for Flooring Cellars in Breweries and other establishments.

**Automatic Signal Telegraph Co.,**  
 CITY OF BOSTON,

OFFICE, 178 DEVONSHIRE STREET, ROOM 20,  
 Is prepared to make contracts for the protection of buildings against fire.  
 DIRECTORS.  
 CHARLES E. GUILD, President. WILLIAM ENDICOTT, JR. JOHN D. W. JOY. WILLIAM B. WATKINS. PATRICK T. JACKSON, Treasurer.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**  
 Theatrical Fresco only. Prices moderate. References first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.  
 LAFAYETTE W. SEAVEY,  
 Established 1865. NO. 5 LAFAYETTE PLACE, NEW YORK

**THE WELLINGTON PATENT OVERFLOW BASIN.**  
 No sewer gas. No overflow. No leakage around the top of the basin. This thoroughly reliable basin is rapidly taking the place of the ordinary one. It gives perfect satisfaction to every instance.  
 Manufactured by  
**L. S. MOORE & CO.,**  
 40 Oliver St., Boston.  
 Send for Circulars.



**SAYLOR'S PORTLAND CEMENT.**  
 Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R., U. S. Government Works (Forts and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally.  
 For Sale by all dealers in Building Materials. Johnson & Wilson, Gen'l Agts.  
 Send for circular. 93 Liberty Street, New York.

# THE AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 143.]

SATURDAY, SEPTEMBER 21, 1878.

[PRICE 15 CENTS

### BUILDERS' SUPPLIES.

**AMERICAN ENCAUSTIC TILE,**  
Acknowledged by experts to be  
**THE BEST IN THE WORLD.**  
Manufactured by the  
AMERICAN ENCAUSTIC TILING CO. (Limited.)  
OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.  
Designs and estimates for Public Buildings, Halls,  
Churches, Vestibules, and for External Decoration, fur-  
nished on application.

**WALWORTH MANUFACTURING CO.,**  
69 KILBY ST., BOSTON.  
**PUBLIC BUILDINGS, PRIVATE RESIDENCES,  
GREENHOUSES, ETC.,**  
Warmed and ventilated by  
**STEAM OR HOT WATER.**  
Correspondence solicited. Plans and estimates furnished  
on application.

**"HOTCHKISS" TOWER CLOCKS,**  
MANUFACTURED BY  
SETH THOMAS CLOCK CO., THOMASTON, CONN.  
Prices \$100 to \$6,000.  
WARRANTED ACCURATE, STRONG, DURABLE.  
OFFICE, 581 BROADWAY, NEW YORK.  
Send for Illustrated Catalogue.

**"MINTON'S ART AND ENAMELED  
TILES."**  
(China Works, Stoke-Upou Trent.) Also, The Campbell  
Brick and Tile Co.'s  
ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS,  
ETC.  
For Churches, Banks, Halls, Vestibules, and Hearths;  
Outside Decorations, Flower Boxes, Etc.  
THOS. ASPINWALL & SON,  
604 BROADWAY, NEW YORK.  
The only representatives in the United States for the  
above firms.

**ASPHALT (FELT) ROOFING.**  
WARREN'S NEW PATENT  
FELT AND GRAVEL ROOFING,  
Substitutes NATIVE ASPHALT for Coal-Tar materials for  
these roofs.  
The very best and most durable material for flat roofs.  
Also, Native Asphalt and Asphaltic Cement for Concrete  
Walks and Pavements.  
Roofers and pavers supplied with the above, and with War-  
ren's original Coal Tar Roofing and Paving Materials.  
Send for circulars and samples.  
WARREN CHEMICAL AND MANUF'G CO.,  
28 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**THE MITCHELL GRANITE WORKS,**  
QUINCY, MASS.,  
Has abundant facilities for furnishing the very best work,  
and all the most celebrated Granites of the New England  
States, for  
**MONUMENTAL, CEMETERY, AND BUILDING  
PURPOSES.**  
WORK PROMPTLY DONE, AND AT REASONABLE RATES.  
Polishing a specialty. Orders solicited.  
Address G. H. MITCHELL, Agent.

**TILES FROM ALL PARTS OF THE  
WORLD,**  
FOR  
BANKS, PUBLIC BUILDINGS, AND PRIVATE HOUSES.  
References given to Tile Work throughout the United  
States and British Provinces  
AGENT FOR THE AMERICAN ROOFING TILE  
Contracts Solicited  
C. A. WELLINGTON, HOUSEHOLD ART ROOMS,  
No. 171 TREMONT STREET, BOSTON.

**OHIO VALLEY PRESS BRICK CO.**  
Challenge the world for fine stock Brick; also manufac-  
turers of all kinds of Bricks, octagon and square. Office 6  
3d St., Yard Preston and Knapp Sts. LOUISVILLE, KY.

**HAWTHORNE & TUCKER,**  
PLUMBERS,  
16 PROVINCE STREET, BOSTON  
Estimates for Plumbing made, and work done in any part  
of the United States or Province.

**J. H. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue Mattapan (Ward 24), Boston.

### BUILDERS' SUPPLIES.

#### THE FIRE-PROOF BUILDING COMPANY OF NEW YORK.

LEONARD F. BECKWITH, Pres't. E. GILLEY, Vice-Pres't.  
Hollow Blocks of any pattern, uniting strength and re-  
sistance to fire and water. The Hydraulic Lime of Teil  
(France), one of the strongest cements known, is largely  
used in this manufacture. The blocks do not conduct  
heat, cold, or sound, and weigh 60 per cent less than brick.  
Fire-proof Partitions, Floor Arches between iron or wooden  
beams, and ceilings under iron or wooden beams, erected  
in following buildings:  
Western Union Telegraph, . . . Orient, and Queens' Ins.  
Coal and Iron Exchange, . . . Museum of Natural Hist.  
Equitable, Staats Zeitung, . . . Hudson R. R. R. Fr. Depot.  
Windsor Savings Bank, . . . N. Y. Hospital, Drexel,  
Windsor, & Wm'ter Hotels, . . . Cluny, & Young's Hotel, Bos'n,  
Syracuse Savings Bank, . . . West Point Military Hosp.  
Columbia College, Tribune, . . . Coryell, & Vancorlear Flats,  
Baltimore Safe Deposit Co. . . Peabody Inst., Baltimore,  
Peabody Museum, N. Haven, Westmoreland, & Elise Flats,  
Sidewalks laid at Lenox Library, Tribune, etc.

Hollow Burnt Clay Bricks, for flat and curved arches,  
partitions, etc., and Skewbacks for brick arches.  
Sole agents for the U. S. for HYDRAULIC LIME OF TIEL,  
and LAFARGE PORTLAND CEMENT.  
Sole agents for the U. S. for METTACH ENCAUSTIC TILES  
laid in Tribune, Staats Zeitung, Mineral Spa, Central Park,  
Belvidere Hotel, etc.  
Sole agents for the Atlantic States for WIGHT'S FIRE-  
PROOF COLUMNS.  
Our Fire-proof work is the only one approved by the  
New York Board of Fire Underwriters and the Superin-  
tendent of Buildings, after severe public tests.  
Office Room 54 COAL AND IRON EXCHANGE, 21 Courtlandt  
Street, New York.  
BOORMAN & Co., Agents, Boston, 5 Doane St.

**E. HOWARD & CO.**  
MANUFACTURERS OF CLOCKS AND WATCHES  
CLOCKS FOR PUBLIC BUILDINGS  
114 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**  
PLAIN AND ENCAUSTIC  
FOR PUBLIC BUILDINGS AND DWELLINGS,  
As laid by us in  
**THE CAPITOL AT WASHINGTON,**  
And in numerous Churches, Banks, and Dwellings in every  
part of the Country,  
Glazed and Enamelled Tiles for Mantels, Hearths, Wain-  
scoting, &c., and for Exterior Decoration.  
MILLER & COATES,  
279 PEARL STREET NEW YORK.

**BARTLETT, ROBBINS & CO.**  
HEATING AND VENTILATING OF PUBLIC AND  
PRIVATE BUILDINGS  
A SPECIALTY  
PLANS AND SPECIFICATIONS FURNISHED.  
FOUNDERS, AND MANUFACTURERS OF GAS WORKS,  
ETC., ETC.  
24 LIGHT STREET, BALTIMORE.

**THE NEW ENGLAND GRANITE WORKS**  
HARTFORD, CONN., and 121 BROADWAY, N.Y.  
Quarries at Westery, R.I.  
MONUMENTAL AND BUILDING WORK  
of every description, all the varieties of  
AMERICAN AND FOREIGN GRANITE.  
UNEQUALLED FACILITIES OFFERED TO THE TRADE.  
J. G. BATTERSON, Pres't. L. H. BATTERSON, Sec'y.  
DIRECTORS,  
C. B. CANFIELD, H. A. BATTERSON,  
G. T. BATTERSON.  
CARL CORNBAD, Sculptor.

**WHITTIER MACHINE CO.**  
Manufacturers of Steam and Hydraulic  
ELEVATORS,  
STEAM ENGINES, BOILERS, AND MACHINERY.  
No. 1176 Tremont Street, Boston.  
Office in the New England Mutual Life Insurance Co's  
Building, Post Office Square,  
and 120 Broadway, New York  
CHARLES WHITTIER, Pres. A. C. WHITTIER, Treas.

**OTIS BROTHERS & CO.**  
SAFETY STEAM AND HYDRAULIC  
ELEVATORS.  
A specialty for a quarter of a century.  
BUILDERS OF THE HALE HYDRAULIC ELEVATOR.  
No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
**OHIO BUILDING STONE.**  
GRIND AND SOTTER STONE,  
From our FLORENCE and AMHERST QUARRIES.  
Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS  
111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
Designers and Manufacturers of  
GAS FIXTURES,  
ORNAMENTAL METAL WORK, CLOCKS AND BRONZES  
ARCHITECTS' ORDERS SOLICITED.  
Special designs submitted on application.  
WAREHOUSES, 536 and 538 BROADWAY, NEW YORK.  
MANUFACTORY, 24th and 25th Sts., and 10th AVENUE, N. Y.

**FISHER & BIRD,**  
Workers in all kinds of Foreign and Domestic  
MARBLES,  
97 to 108 East HOUSTON ST., NEW YORK.  
Established 1830.  
Among our notable decorations are: The Illinois new  
State House; Palace Hotel, San Francisco; Baldwin's Ho-  
tel, San Francisco; Insurance Building, 10th and Chestnut  
Streets, Philadelphia; Mutual Life Insurance Building  
Boston; Orient Mutual Insurance Building, New York;  
Union College, Schenectady; and numerous Churches,  
Private Residences, etc., etc., throughout the country. We  
solicit the opportunity to estimate upon all classes of work,  
viz., Tiling, Wainscoting, Staircases, Mantels, etc. Ceme-  
tery work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
Are ready to estimate on contracts of any size for  
furnishing their celebrated Amherst, Ohio,  
BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS  
OR CUT AND SET.  
Also,  
AMHERST AND INDEPENDENCE GRINDSTONES,  
And OHIO MINERAL AND STONE PAINTS  
Fire-Proof Stove Cement and Stove Putty ground in Oil  
OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MO-  
SAICS." Floor Tiles, beautiful in color and design, for  
Dwellings, Churches, and Public Buildings.  
SPANISH WALL TILES. White, Glazed, Valencia,  
Tiles for Walls and for decorative painting.  
PRINTED FIGURED TILES of Spanish designs, for  
Wainscoting, Mantels, Jardinières, etc.  
Floors of "Nolla Mosaiscs" can be seen at the "Rock-  
ingham," corner of Broadway and 56th Street. Imported  
and for sale by JOHN CHADWICK, Sole Ag't for U. S.,  
60 Broadway, N. Y.  
C. E. PARKER, Agent, 14 Exchange Place, Boston.**

**TUFTS' ELEVATOR WORKS,**  
MANUFACTURERS OF "TUFTS' PATENT" COMBI-  
NATION ROPE ELEVATOR,  
TO BE OPERATED EITHER BY STEAM OR WATER.  
The only safe and reliable machine made for passenger use  
in Public Buildings and Hotels, and for business purposes in  
Warehouses, Stores, &c.  
37 FOUNDRY STREET, SOUTH BOSTON.  
OFFICE, 143 Broadway, New York.  
OTIS TUFTS, President L. A. BIGELOW, Treas'r and Gen'l Manager

**STEAM WARMING APPARATUS.**  
HIGH AND LOW PRESSURE.  
HOUSE WARMING A SPECIALTY.  
Pamphlet with more than 1,000 references sent on appli-  
cation.  
WYLLYS H. WARNER,  
114 LEONARD STREET, NEW YORK,  
and 33 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**  
No. 6 COURTLAND ST., NEW YORK.  
Works at Paterson, N.J.  
PATENT SAFETY STEAM ELEVATORS  
for Public and Bank Buildings, Hotels, Private Dwell-  
ings, etc.  
SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP  
GUARANTEED.  
Send for Circular.

**BUILDERS' SUPPLIES.**  
**GOLD'S WROUGHT IRON HEATERS.**  
 THE "HEALTH" AND "TUBULAR"  
 Manufactured by the  
**GOLD'S HEATER MANUFACTURING CO.**  
 114 LEONARD ST., NEW YORK.  
 Send for Pamphlet.  
 E. GOLD, Pres't WYLYA H. WARNER, Treas.

**HUGH SISSON & SON,**  
 Importers, Dealers, and Manufacturers of  
**MARBLE.**  
 INTERIOR MARBLE WORK AND MONUMENTAL  
 WORK A SPECIALTY.  
 Salesrooms, No. 140 W. Baltimore St.: Steam Marble  
 Works, North and Monument Streets,  
 BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,  
 SPEAKING TUBES,  
 AND BURGLAR ALARMS.**  
 For Public and Private Buildings.  
 THE BEST IN USE.  
 S. W. FULLER,  
 63 Devonshire Street, Boston.

**ART PAINTED TILES**  
 FOR MANTELS, CABINETS, ETC.  
 SHARPLESS & WATTS,  
 225 MARKET STREET, PHILADELPHIA.  
 Agents for  
 MINTON'S TILES,  
 AND TESSELLATED PAVEMENTS.

**JOHN MACK, Plain and Ornamental Plasterer.**  
 41 Cambridge Street, Boston.  
**BUILDING MARBLE.**  
 Branch yard of the RUTLAND MARBLE CO., 198 Cause-  
 way Street, Boston. JOHN D. ALLAN, Agent.  
 Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Rut-  
 land and Continental Marble, furnished at low prices.

**PRESSED BRICK,  
 STOCK AND COMMON**  
 MANUFACTURED BY  
**FLETCHER & THOMAS,**  
 Indianapolis, Ind.  
 All brick warranted. Send for price list and samples.

**STEAM HEATING**  
 BY  
**GILLIS & GEOGHEGAN,**  
 Nos. 116 & 118 Wooster St., New York.  
 See our work at the Cathedral, 50th St. and 5th Av.;  
 Drexel Building, cor Wall and Broad; Bennett Building,  
 Fulton and Nassau, etc.  
 Architects and owners promptly furnished with speci-  
 fications and estimates.

**ARCHITECTS.**  
**P. B. WIGHT,**  
 CONSULTING ARCHITECT,  
 73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.  
 Consultations on matters pertaining to Fire-Proof Con-  
 struction, Foundations, Drainage, Sanitary Work, Ventila-  
 tion, Machinery, Valuations, Interior Decorations, and  
 Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**  
 ARCHITECT,  
 COAL AND IRON EXCHANGE,  
 NEW YORK CITY.

**W. W. GOODRICH, C. E., ARCHITECT  
 AND SANITARY ENGINEER**  
 KINGSTON, N. Y.  
 Plans, Specifications, and Estimates for all classes  
 of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,  
 ARCHITECT,**  
 Room 17, Life Insurance Building,  
 ST. LOUIS, MO.  
 Special attention to Churches, Schools, and other  
 public buildings.

**WALTER ARCHITECT. PERRY BUILDING.**  
 DICKSON, Albany, N. Y.

**GEO. E. WARING, JR.,  
 CONSULTING ENGINEER,  
 FOR SANITARY AND AGRICULTURAL WORKS,  
 NEWPORT, R. I.**

**SANITARY ENGINEERING.**  
**EDWARD S. PHILBRICK, C. E.,**  
 12 WEST ST., BOSTON, MASS.  
 Offers advice and superintendence in  
 CONSTRUCTION OF WORKS,  
 IN PLUMBING, DRAINAGE, AND VENTILATION,  
 And has no interest in any patent right.

**BUILDERS' SUPPLIES.**  
**E. VAN NOORDEN,**  
 387 HARRISON AVENUE . . . . . BOSTON,  
**SHEET METAL CORNICES, HAYES' PAT-  
 ENT VENTILATING SKY-LIGHTS,  
 WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.**

**MANTELS AND GRATES.**  
**RANKIN'S PATENT** makes the Cleanest, Cheap-  
 est, and Hottest Fire. Avoid infringements, and send for  
 Circular to  
**C. S. RANKIN & CO.,  
 ARCHITECTURAL IRON WORKS,**  
 Manufacturers of all kinds of Iron Work for  
**BUILDINGS, JAILS, ETC.**  
 187 W. PEARL ST., CINCINNATI, O.

**EXCELSIOR  
 ROOF PAINT.**  
 This paint has been thoroughly tested throughout the  
 Eastern States, and has been found to be a perfect tin or  
 metallic preserver. We warrant it neither to crack nor  
 blister by **HEAT or COLD**, and to last  
**IN ANY CLIMATE TEN YEARS.**  
 Those desiring to use this valuable preparation upon  
 their buildings, can secure the same by addressing  
**C. M. WHEELER, J. M. ROOT,**  
 Toledo, Ohio.

**DECORATORS.**  
**W. J. MCPHERSON,**  
 (Established A.D. 1845.)  
**MURAL PAINTER,  
 DESIGNER,  
 Ecclesiastical Decorator,  
 AND  
 ART STAINED GLASS MANUFACTURER,**  
 440 TREMONT STREET,  
 BOSTON, MASS.  
**STAINED GLASS.**  
 Thirty years' experience in Stained Glass enables the  
 subscriber to produce Modern and Medieval styles of work  
 equal to any European examples, for Churches, Pri-  
 vate Residences, Halls, etc.  
 The value of the work is attained by a careful selection  
 of colors in Cathedral and French Glass of his own impor-  
 tation.  
 Designs in accord with architects' plans furnished at  
 short notice. Reference of work at office  
**SAMUEL WEST, 115 Eliot St., Boston**

**FRANK HILL SMITH,  
 1717 TREMONT STREET,  
 BOSTON . . . . . MASS.**

**COOK, REDDING & CO.**  
 149 CONGRESS ST., BOSTON,  
**Ornamental, Stained, and Cut Glass,**  
 FOR  
**Churches, Public Buildings, and  
 Private Residences.**

**Raphael and Michelangelo.**  
 A Critical and Biographical Essay. By  
 CHARLES C. PERKINS. 8vo. Many Illustra-  
 tions, including several Heliotypes. \$5.00.  
 The long devotion of Mr. Perkins to the study of art  
 has borne noble fruit in this beautiful volume. The idea  
 of combining in one work a series of interlinked sketches  
 of the two great representative artists of the age of Julius  
 II. and Leo X. was in every respect fortunate; for they  
 respectively illustrate power and beauty, sportive and  
 earnest labor, as no other contemporaries. . . . His style  
 is that of a scholar and a man of taste—simple, lucid,  
 graceful, and even throughout. It has much of the qual-  
 ity of that of Hermann Grimm, in his two similar biog-  
 raphies. The profuse illustrations—although some of them  
 are rather coarsely printed—are a positive boon to the  
 reader.—*New York Tribune.*

\* \* \* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,  
**HOUGHTON, OSGOOD AND COMPANY, Boston.**

**DECORATORS.**  
**JOHN LAFARGE,  
 MURAL DECORATION,  
 51 W. Tenth St., New York, and Newport, R. I.**

**SOCIETY OF DECORATIVE ART.**  
 4 East 20th Street,  
 NEW YORK.  
 Architects' designs for panels, tiles and plaques for inser-  
 tion in Cabinet Work, and other decorative uses, and for  
 Art Needlework applied to curtains, hangings, portieres,  
 screens, table-covers, etc., carefully executed. Original  
 designs for any of the above, subject to approval, will be  
 gladly received, and paid for by the Society when used.  
 Orders are earnestly solicited.  
 The Society has arranged with Mr. RUSSELL STUBBS,  
 Architect, for the Exhibition and Sale of his well-known  
 Wall Papers. Some of these are faithful reproductions of  
 Japanese decorative papers; some are taken from Oriental  
 and other stuffs; some are of original design. New pat-  
 terns will be added from time to time

**Fresco Decoration.**  
**EMMART & QUARTLEY,**  
 Designers, Decorators, and Painters,  
 32 PARK AVENUE, BALTIMORE, MD.  
 Designs for Halls, Churches, Theatres, and Private Mansions made  
 and executed in harmony with the plans of Architects.

**SLATE MANTELS**  
 Of the latest and most beautiful designs, and all other Slate  
 work on hand or made to order. No. 1210 Ridge Avenue.  
 JOSEPH S. MILLER successor to Wilson & Miller, Philadel-  
 phia, Pa. Send for Illustrated Price-List  
**Donald MacDonald,  
 GLASS STAINER AND DECORATOR**  
 No. 6 Hayward Place,  
 BOSTON

**M. E. KELLEY & HOLLARD  
 GLASS STAINERS**  
 21-27 PEARL ST., BOSTON

**INLAID WOOD FLOORS.  
 ORNAMENTAL WOOD BORDERS.**  
 Designs and Estimates free.  
**National Wood Manuf'g Co.,**  
 950 Broadway, near 23d St., New York

**PHILIP A. BUTLER,  
 DECORATOR AND DESIGNER,  
 No. 17 FRENCHTON SQUARE,  
 BOSTON.**

**HENRY B. JONES & CO.**  
 IMPORTERS, JOBBERS, AND RETAILERS OF  
 PAPER HANGINGS.  
 612 WASHINGTON STREET, BOSTON.

(Established 1848.)  
**L. HABERSTROH & SON,  
 FRESCO PAINTERS,  
 and INTERIOR DECORATORS,  
 No. 12 SCHOOL STREET, BOSTON.**

**Discoveries at Ephesus.**  
 Including the Site and Remains of the Great  
 Temple of Diana. By J. T. WOOD, F. S. A.,  
 Fellow of the Royal Institute of British Archi-  
 tects. With numerous Illustrations from Original  
 Drawings and Photographs. Imperial 8vo.  
 Gilt top, beveled boards. \$20.00.  
 The story that the explorer here tells has all the fasci-  
 nation of heroic romance. He is able to give accurate  
 elevations of the building, together with interesting draw-  
 ings of many of its bas-reliefs and other ornamental parts  
 He has unearthed also the Odeum or lyric theatre of Eph-  
 esus, and the great theatre, laying bare their seats, aisles,  
 stage, etc., and discovering there very many inscriptions  
 of great historical value, which are now in the British Mu-  
 seum. . . . The book is one of surpassing interest.—  
*New York Evening Post.*  
 Mr. Wood's results have been, if not splendid, at least  
 solid and of imperishable value.—*London Academy.*

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ohio.	Philadelphia.	San Francisco.	St. Louis.
1. BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50	.....	2.25 @ 2.50
2. Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50	.....	3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00	.....	3.00
3. CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25	.....	1.50 @ 2.00
4. Cabinet Maker	.....	.....	1.75 @ 2.25	.....	.....	1.50 @ 2.00	1.50 @ 2.00	.....	.....	.....
5. Finisher	2.50 @ 3.25	.....	1.50 @ 2.00	.....	.....	1.50 @ 3.00	1.25 @ 1.75	.....	.....	1.50 @ 2.00
6. FOUNDRYMAN	2.00 @ 2.50	.....	1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50	.....	.....	2.25 @ 2.50
7. Blacksmith	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50	.....	2.00 @ 2.50	1.25 @ 2.00	.....	.....	1.50 @ 2.50
8. Whitesmith	.....	.....	1.50 @ 2.00	1.50 @ 2.50	.....	2.00 @ 2.50	1.25 @ 1.75	.....	.....	.....
9. Galvanized Iron Worker	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00	.....	.....	2.25 @ 2.50
10. GAS FITTER	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00	.....	.....	2.00 @ 3.00
11. LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.25	.80 @ 1.00	1.20 @ 1.50	.....	1.00 @ 2.00
12. PAINTER	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50	.....	2.00 @ 2.50
13. Glazier	.....	2.00 @ 2.50	1.75 @ 2.00	.....	.....	1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50	.....	.....
14. Grainer	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00	.....	2.00 @ 3.00	1.75 @ 2.50	.....	.....	3.50
15. Paper-Hanger	.75 @ 2.00	.....	.....	.....	.....	2.00 @ 2.50	1.50 @ 2.00	.....	.....	2.00 @ 3.00
16. PLASTERER	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	.....	.....	1.50 @ 2.00	1.75 @ 2.00	1.75 @ 2.00	.....	2.25 @ 2.75
17. Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	1.50 @ 2.50	.....	2.00 @ 2.50	1.50 @ 2.25	.....	.....	2.25 @ 2.75
18. PLUMBER	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.50	2.50 @ 3.50	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50	.....	.....	2.50 @ 3.50
19. QUARRYMAN	.....	3.00 @ 3.50	1.10 @ 1.25	.....	.....	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75	.....	1.50 @ 1.75
20. Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25	.....	2.00 @ 2.50
21. Carver	.....	3.00	3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75	.....	3.00	2.75 @ 3.25	.....	2.00 @ 2.50
22. Pointers and Washers	.....	2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75	.....	1.50 @ 2.50	1.00 @ 1.25	2.25 @ 2.50	.....	.....
23. Rubber	1.50 @ 2.00	.....	1.75	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75	.....
24. Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	.....	2.50	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	.....
25. Stone-Setter	.....	3.00	2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	.....	2.75	2.00 @ 2.50	2.25 @ 2.75	2.00 @ 2.50
26. HOOPER (Tin)	2.00 @ 2.35	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	.....	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25	2.00 @ 2.25
27. Slater	.....	2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00	.....	2.00 @ 2.25	2.25 @ 2.00	1.75 @ 2.25	.....	3.00
28. STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25	.....	.....	1.50 @ 2.50
29. STEAM FITTER	.....	2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00	.....	.....	2.00 @ 3.00



ARCHITECTS AND BUILDERS

WILL ADD MUCH TO THE BEAUTY OF THEIR BUILDINGS BY USING

GARDNER'S PERFORATED THREE-PLY VENEER SEATING,

Which is Ornamental, Durable, and Cleanly.

We refer to the following new and elegant buildings fitted up with our goods:—

Morris Plains, N. J., Insane Asylum.  
New York Hospital.  
American Museum of Natural History, New York.  
Institution for Feeble-minded Children, Lincoln, Ill.  
Insane Asylum, Oshkosh, Wis.

Opera Chairs in new Music Halls, Lewiston, Me., Providence, R. I., and Brooklyn, N. Y.  
Seats in Depots of the Pennsylvania Railroad, at Philadelphia, Pittsburgh, etc.

Please send for Illustrated Catalogue.

GARDNER & COMPANY,

Patentees and Manufacturers,

376 PEARL STREET.....NEW YORK.

THE BEST PORTRAIT OF William Cullen Bryant

Is the ATLANTIC PORTRAIT, which was published last year expressly for subscribers to the ATLANTIC MONTHLY, and which is unquestionably the best large portrait ever made of him. To show how it is regarded by excellent judges, we append the following extracts:—

I think the picture admirable in its rare and commanding lines, and shall gladly give it the best place I can find in my limited collection. —RALPH WALDO EMERSON.  
I hesitate to bestow any praise upon it, for the reason that I should use stronger terms than, as a mere unskilled lover of art, I should have any right to employ. I shall be disappointed, however, if the best judges do not unite in considering it a masterpiece of portraiture and execution. —DR. OLIVER WENDELL HOLMES.

Mr. Baker was singularly fortunate in his subject; he has produced a marvelous likeness of Bryant, and a very noble work of art. If a head like this, in bronze or marble, were found in some Greek or Roman ruin, it would be worth its weight in gold. —T. B. ALDRICH.

This portrait is life-size, on paper 24 x 30. The retail price is \$2.00. With the ATLANTIC MONTHLY for a year, \$5.00; six months, \$3.00.

ATLANTIC PORTRAITS.

Henry Wadsworth Longfellow. It is one of the most admirable likenesses I have ever seen, and I can scarcely imagine a better representation of the poet and the man. —BAYARD TAYLOR.

John Greenleaf Whittier. It is very fine; it is the ideal Whittier. —J. T. TROWBRIDGE.

The above portraits are life-size, and the dimensions of each picture are 24 x 30. Subscribers to the ATLANTIC MONTHLY can obtain either portrait, with the magazine for a year, by remitting \$5.00 to the publishers; for \$6.00 the magazine and two portraits, and for \$7.00 the magazine and all three portraits will be sent. The subscription price of the ATLANTIC alone is \$4.00.

The portraits are sent by mail, carefully rolled, so as to avoid all danger of injury, and will be forwarded to any address on receipt of the price and subscription by the Publishers; they can be obtained through newsdealers and booksellers generally.

HOUGHTON, OSGOOD AND COMPANY, BOSTON, MASS.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

GALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States. Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO., 72 & 74 West Monroe St. Chicago, Ill.

A SACHEL GUIDE.

FOR THE VACATION TOURIST IN EUROPE. Revised Edition for 1878. With Maps. 16mo, flexible cloth, \$2.00. HOUGHTON, OSGOOD & CO.



NONESUCH Self-Locking AND Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.

Patented July 10th, 1877

AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT, MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS. Regular Sizes, 2, 3, 4, 5 & 6 Inch. SPECIAL SIZES MANUF'D TO ORDER. AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS. 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA. WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS. AND WILL BE TREATED AS SUCH.

PRINCIPAL AGENTS.

- N. Halliday
- Hicks & Badger
- James Henry
- George W. Pitkin & Co.
- Wasson & Martin
- McLeod, Reardon & Co.
- W. H. Scott
- Kittredge Cornice Co.
- I. W. Jordan
- B. G. Carpenter & Co.
- T. W. Irwin
- Sellew & Co.
- New York City
- Boston, Mass.
- Buffalo, N. Y.
- Chicago, Ill.
- Albany, N. Y.
- Troy, N. Y.
- Portland, Me.
- Salem, O.
- Worcester, Mass.
- Wilkesbarre, Penn.
- Alleghany City, Penn.
- Cincinnati, Ohio

RECOMMENDED FOR ARCHITECTS, ENGINEERS, SIMPLICITY & RELIABILITY. IMPERIAL GAS MACHINE. SEND FOR CIRCULAR. DENNY BROS. & CO.



BIBB'S Celebrated Original Baltimore Fire Place Heaters. Mantels and Registers. B. C. BIBB & SON, Baltimore, Md. Best workmanship. Lowest prices guaranteed. Send for circulars.

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the art-workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIÆVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and not-worthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURNE, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. L'ANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist*, Boston.

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courier.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVER. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIENARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11½ X 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASOX, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOthic FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOLETTE-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

The works of the learned and distinguished French Architect, EUGENE VIOLETTE-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

## Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — *EUGENE BENSON, in The College Courier.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

## The New York Sketch-Book of Architecture.

3 vols., 4to, \$6.50 each.

We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

## The American Architect and Building News.

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\* \* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

[Reported for the American Architect and Building News.]

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, CEMENT, and FRONTS. Includes items like Pale Jersey, Long Island, and various front types with prices per unit.

Table listing prices for CEMENT. Includes items like Roman, Keene's, and Portland (Imported) with prices per barrel.

Table listing prices for FIRE BRICK. Includes items like Red Welsh, Scotch, and American with prices per thousand.

Table listing prices for DOORS. Includes items like 10 x 6.0, 12 x 6.0, and 14 x 6.0 with prices per door.

Table listing prices for BLINDS - Outside. Includes items like Per lineal, up to 2.10 wide, and various sizes with prices per lineal foot.

Table listing prices for WINDOW FRAMES. Includes items like Hair - Duty free and Coat with prices per bushel.

Table listing prices for LATH. Includes items like State, common, cargo rate and Rockland, common with prices per square yard.

Table listing prices for LIME. Includes items like State, common, cargo rate and Rockland, common with prices per bushel.

Table listing prices for LUMBER. Includes items like Pine, choice, extra dry, Spruce boards, dressed, and various other wood products with prices per unit.

Table listing prices for PAINTS AND OILS. Includes items like Paris white, English, Zinc, white, Am., dry, and various other paint and oil products with prices per unit.

Table listing prices for CEMENT. Includes items like Rosendale, Portland, Keene's coarse, and Keene's fine with prices per barrel.

Table listing prices for NAILS. Includes items like 10d., 8d., 6d., 4d., and 3d. with prices per hundred.

Table listing prices for AXLE PULLEYS - Steel. Includes items like 2-in., Pennsylvania make and 2-in., Boston make with prices per dozen.

Table listing prices for SASH WEIGHTS. Includes items like SASH LINE and Best hemp with prices per hundred.

Table listing prices for DOOR BUTTS. Includes items like Japanned Acorn and Plain Ironed Iron with prices per pair.

Table listing prices for STONE. Includes items like Amherst freestone, Berlin freestone, Berea freestone, and various other stone types with prices per cubic foot.

Table listing prices for SLATE. Includes items like Purple roofing slate, Green slate, and Red slate with prices per square.

Table listing prices for TIN PLATES - Duty, 11-10c. Includes items like L. C. charcoal, 10 x 14 and L. C. coke, 10 x 14 with prices per box.

Table listing prices for ZINC - Duty, sheet. Includes items like Sheet (gold) foreign and Lead with prices per hundred.

BOSTON.

Table listing prices for FIRE BRICK. Includes items like Waldo Bros Extra, Waldo Bros. No. 1, and Waldo Bros. No. 2 with prices per thousand.

Table listing prices for BUILDING BRICKS. Includes items like Eastern, No. 1 and 2, and Bay State with prices per thousand.

Table listing prices for BUILDING STONE. Includes items like Rutland Marble, sawed and LUMBER with prices per unit.

Table listing prices for LUMBER. Includes items like Michigan pine - Nos. 1 and 2, Saps, and Black Walnut with prices per unit.

Table listing prices for PAINTS AND OILS. Includes items like Paris white, English, Zinc, white, Am., in oil, pure and Ochre, French, dry with prices per unit.

Table listing prices for CEMENT. Includes items like Rosendale, Portland, Keene's coarse, and Keene's fine with prices per barrel.

Table listing prices for NAILS. Includes items like 10d., 8d., 6d., 4d., and 3d. with prices per hundred.

Table listing prices for AXLE PULLEYS - Steel. Includes items like 2-in., Pennsylvania make and 2-in., Boston make with prices per dozen.

Table listing prices for SASH WEIGHTS. Includes items like SASH LINE and Best hemp with prices per hundred.

Table listing prices for DOOR BUTTS. Includes items like Japanned Acorn and Plain Ironed Iron with prices per pair.

Table listing prices for MORTISE LOCKS - Brass face and bolt - easy spring. Includes items like 3/4 to 4 1/2 in. and 1 to 2 in. with prices per dozen.

Table listing prices for DOOR KNOBS. Includes items like Solid glass, Silvered glass, and Nickel plated with prices per set.

Table listing prices for SASH FASTS. Includes items like Plain brass, Plain brass, self-locking, and Bronze metal, self-locking with prices per dozen.

Table listing prices for SCREWS. Includes items like Round head, nickel plated, and for window beads with prices per gross.

Table listing prices for STORE DOOR HANDLES - With mortise lock. Includes items like Lasquered brass and Bronze metal with prices per set.

Table listing prices for IRON. Includes items like Wrt-iron I Beams (J. I. Reed & Co.), Wrt-iron I Beams, and Wrt-iron Chari Beams with prices per unit.

Table listing prices for CHICAGO. Includes items like Brick, Lime, and Cement with prices per unit.

Table listing prices for BRICK, LIME, AND CEMENT. Includes items like Lime, in bulk, and Chicago building brick with prices per unit.

Table listing prices for LUMBER (MICHIGAN PINE). Includes items like 1st and 2d clear, 1 to 2-in., 3d clear, 1 1/2 to 2 in., and 3d clear, 1 in. with prices per unit.

Table listing prices for PAINTS AND OILS. Includes items like Paris white, English, Zinc, white, Am., in oil, pure and Ochre, French, dry with prices per unit.

Table listing prices for CEMENT. Includes items like Rosendale, Portland, Keene's coarse, and Keene's fine with prices per barrel.

Table listing prices for NAILS. Includes items like 10d., 8d., 6d., 4d., and 3d. with prices per hundred.

Table listing prices for AXLE PULLEYS - Steel. Includes items like 2-in., Pennsylvania make and 2-in., Boston make with prices per dozen.

Table listing prices for SASH WEIGHTS. Includes items like SASH LINE and Best hemp with prices per hundred.

Table listing prices for DOOR BUTTS. Includes items like Japanned Acorn and Plain Ironed Iron with prices per pair.

Table listing prices for ROOFING. Includes items like C roofing, 14 x 20, charcoal, 1 X roofing, 14 x 20, charcoal, and 1 C roofing, 14 x 20, charcoal with prices per unit.

Table listing prices for SHEET IRON. Includes items like No. 24, 3 c. rates, Russia iron, No. 9 to 12, 13c., do. No. 1, stained, 12c., American painted A, 11c., B, 9c., galvanized iron, No. 26, 14c., with discount of 40 per cent.

Table listing prices for PAINTS AND COLORS. Includes items like White Lead, strictly pure, Zinc, French, and Chrome green with prices per unit.

Table listing prices for OILS. Includes items like Linseed, raw, 6c., boiled, 6c., and Turpentine, 3c. with prices per unit.

Table listing prices for PHILADELPHIA. Includes items like Anthracite No. 1 Pig, Anthracite No. 2, Gray Forge, and Scrap No. 1, wrought with prices per unit.

Table listing prices for WHOLESALE PRICES. Includes items like Iron - Duty, Bar 1 to 3 c., Boiler and Plate 1 1/2 c., Sheet, Band, Hoop and Screw 1 1/2 to 1 3/4 c., Pig 5 1/2 to 6 c., Pulver Sheet 3 c., Galvanized 2 1/2 c., all less 10 per cent ad val., No bar iron to pay less duty than 35 per cent ad valorem.

Table listing prices for NAILS - Duty. Includes items like Cut 1 1/2 c., Wrought 2 1/2 c., Horse Shoe 3 c., Standard prices, \$2.30 @ 2.40, All Cut prices, 2c. above 10d., Fencing and Brads, 8d. and 9d., 5c. above 10d., 6d. and 7d., 5c. above 10d., 4d. and 5d., 7c. above 10d., 3d. and 4d. and car nails, \$1.50 above 10d., Fine Nails, 2d. and 3d., \$2.75 above 10d., Lead 1 1/2 c., Pipe and Sheet 2 1/2 c., Oil 1 1/2 c. per cent.

Table listing prices for LUMBER. Includes items like Mich. uppers, 45 @ 50, 40 @ 45, 35 @ 40, Susquehanna Boards, run of log 21 @ 23, Box out, 23 @ 26, Selects and Better, 27 @ 30, Plank, Run of log, 27 @ 30, Selected log, 27 @ 30, 7-8 box, 14 @ 16, Siding 1/2, good, 27 @ 30, Siding 3/4, common, 18 @ 20, Hemlock Board, 14 @ 16, Hemlock 6-in. fencing, 14 @ 16, Yellow Pine Flooring Boards, undressed, heart, 20 @ 22, Flooring Boards, undressed, 16 @ 18, Scantling, 25 @ 30, Sap Pine Boards, Va., 14 @ 16, Walnut Bds. and Plks., No. 1, 71 @ 82, Walnut Bds. and Plks., No. 2, 71 @ 82, Ash Boards and Planks, 40 @ 42, Pennsylvania Ash, 25 @ 30, Western Ash, 37 @ 40, Poplar 4 Boards, 28 @ 30, Poplar Plank, 40 @ 42, Shingles - 30 in. cedar, dressed 35 @ 40, 24 in. cedar, dressed, 18 @ 20, 30 in. cypress, dressed, 26 @ 30, 24 in. cypress, dressed, 12 @ 16, 20 in. cypress, dressed, 8 @ 10, Laths - English and Bangor, 1 @ 2, Calais, 1 @ 2.

Table listing prices for PAINTS AND OILS. Includes items like Paris white, English, Zinc, white, Am., in oil, pure and Ochre, French, dry with prices per unit.

Table listing prices for CEMENT. Includes items like Rosendale, Portland, Keene's coarse, and Keene's fine with prices per barrel.

Table listing prices for NAILS. Includes items like 10d., 8d., 6d., 4d., and 3d. with prices per hundred.

Table listing prices for AXLE PULLEYS - Steel. Includes items like 2-in., Pennsylvania make and 2-in., Boston make with prices per dozen.

Table listing prices for SASH WEIGHTS. Includes items like SASH LINE and Best hemp with prices per hundred.

Table listing prices for DOOR BUTTS. Includes items like Japanned Acorn and Plain Ironed Iron with prices per pair.

Table listing prices for TINNERS' STOCK. Includes items like Tin plate, 1 C 10 x 14, charcoal, Tin plate, 1 X, 10 x 14, charcoal, Tin plate, 1 C, 12 x 12, charcoal, Tin plate, 1 C, 14 x 20, charcoal, Tin plate, 1 X, 14 x 20, charcoal, Tin plate, 1 XX, 14 x 20, charcoal with prices per unit.

Table listing prices for PLASTER - Duty. Includes items like Lamp free, Colored 2c. per cent ad valorem, Soft blue, 2 1/2 c. per ton with prices per unit.

Table listing prices for PAINTS AND OILS. Includes items like Paris white, English, Zinc, white, Am., in oil, pure and Ochre, French, dry with prices per unit.

Table listing prices for CEMENT. Includes items like Rosendale, Portland, Keene's coarse, and Keene's fine with prices per barrel.

Table listing prices for NAILS. Includes items like 10d., 8d., 6d., 4d., and 3d. with prices per hundred.

Table listing prices for AXLE PULLEYS - Steel. Includes items like 2-in., Pennsylvania make and 2-in., Boston make with prices per dozen.

Table listing prices for SASH WEIGHTS. Includes items like SASH LINE and Best hemp with prices per hundred.

Table listing prices for DOOR BUTTS. Includes items like Japanned Acorn and Plain Ironed Iron with prices per pair.

Table listing prices for TINNERS' STOCK. Includes items like Tin plate, 1 C 10 x 14, charcoal, Tin plate, 1 X, 10 x 14, charcoal, Tin plate, 1 C, 12 x 12, charcoal, Tin plate, 1 C, 14 x 20, charcoal, Tin plate, 1 X, 14 x 20, charcoal, Tin plate, 1 XX, 14 x 20, charcoal with prices per unit.

Table listing prices for PLASTER - Duty. Includes items like Lamp free, Colored 2c. per cent ad valorem, Soft blue, 2 1/2 c. per ton with prices per unit.

Table listing prices for PAINTS AND OILS. Includes items like Paris white, English, Zinc, white, Am., in oil, pure and Ochre, French, dry with prices per unit.

Table listing prices for CEMENT. Includes items like Rosendale, Portland, Keene's coarse, and Keene's fine with prices per barrel.

Table listing prices for NAILS. Includes items like 10d., 8d., 6d., 4d., and 3d. with prices per hundred.

Table listing prices for AXLE PULLEYS - Steel. Includes items like 2-in., Pennsylvania make and 2-in., Boston make with prices per dozen.

Table listing prices for SASH WEIGHTS. Includes items like SASH LINE and Best hemp with prices per hundred.

Table listing prices for DOOR BUTTS. Includes items like Japanned Acorn and Plain Ironed Iron with prices per pair.

Table listing prices for TINNERS' STOCK. Includes items like Tin plate, 1 C 10 x 14, charcoal, Tin plate, 1 X, 10 x 14, charcoal, Tin plate, 1 C, 12 x 12, charcoal, Tin plate, 1 C, 14 x 20, charcoal, Tin plate, 1 X, 14 x 20, charcoal, Tin plate, 1 XX, 14 x 20, charcoal with prices per unit.

Table listing prices for PLASTER - Duty. Includes items like Lamp free, Colored 2c. per cent ad valorem, Soft blue, 2 1/2 c. per ton with prices per unit.

Table listing prices for PAINTS AND OILS. Includes items like Paris white, English, Zinc, white, Am., in oil, pure and Ochre, French, dry with prices per unit.

Table listing prices for CEMENT. Includes items like Rosendale, Portland, Keene's coarse, and Keene's fine with prices per barrel.

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms. They recommend, on their own account, and for the sake of the public, that such firms advertise in this paper.

CREOSOTED WOOD. PREPARED AT THE Hayford Patent Creosote Wood Preserving Works. EDWARD R. ANDREWS, Proprietor. OFFICES: No. 4 Post Office Sq., Boston. No. 10 Warren St., N. Y. WORKS: A Street, South Boston. Elizabethport, N. J. The wood is perfectly dried by steam, and the sap withdrawn, before the impregnation of the pores with creosote, rendering decay impossible.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY.



The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

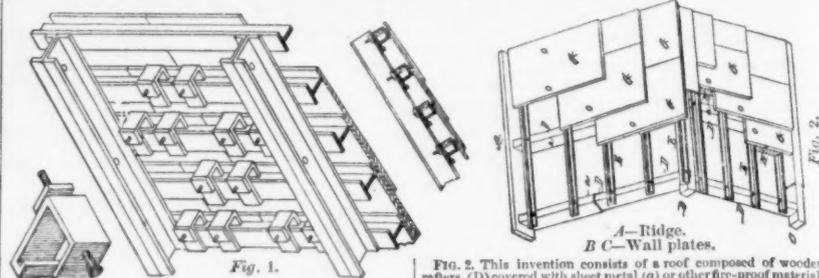
**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, ETC., ETC.

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.  
ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

**ESTABLISHED, 1836.**  
**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Composition Roof known. Also inventors and owners of the following patents:—



**WARMING AND VENTILATION.**  
**FIRE ON THE HEARTH.**  
**FIRE-PLACE HEATERS AND STOVES.**  
VENTILATION of a Fire-Place. RESERVE FORCE of a Close Stove. CIRCULATION of a Furnace.  
Adapted for any kind of Fuel,  
And the only Fireplace Heater perfectly adapted for Soft Coal and Wood.  
**SILVER MEDAL AWARDED, PARIS EXPOSITION, 1878**  
Send for our testimonials from all parts of the United States.  
**OPEN STOVE VENTILATING COMPANY,**  
115 Fulton and 54 Ann Streets, New York.



Section of Fire-Place Heater. Section of Stove.

**GAS**  
**SPRINGFIELD GAS MACHINE.**  
Springfield, Mass.; 75 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

**BUHRER'S INFALLIBLE SEWER GAS TRAP.**  
The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (E) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.  
**S. BUHRER,** Inventor and Manufacturer, Cleveland, Ohio.  
WHOLESALE AGENTS.  
W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O.  
L. WOLFF MFG Co., 109 & 111 West Lake St., Chicago, Ill.  
HAMBLEN & MATHEWS, 82 & 84 North St., Boston, Mass.  
C. A. BLASSING, 44 North Fifth St., Philadelphia, Pa.  
TAS J. L. MOTT IRON WORKS, 88 & 90 Beckman St., N. Y.  
Please send for Circular.



**Brandeis' Seamless Paragon Trap.**  
Safest, Best, Cheapest, and Non-siphoning.  
Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDEIS & WICKERT,** 46 Fulton Street, Brooklyn, N. Y.



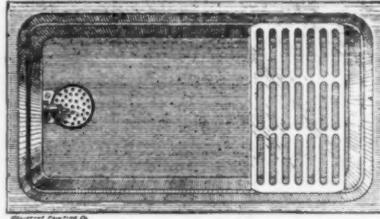
**C. BUTCHER,**  
107  
Devonshire St.  
BOSTON.  
Send for  
Illustrated  
Catalogue.

**PATENT MARQUETRY FLOORING.**  
Specimens at Lawrence, Wilder & Co's, 42 Cornhill, Boston.

**DORCHESTER UNION FREESTONE CO.**  
NEW BRUNSWICK YELLOW FREESTONE.  
The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order.  
24 Pine St., New York. - G P SHERWOOD.

**MENEELY & KIMBERLY,**  
Bell Founders, Troy, N. Y.,  
Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT HOUSE BELLS. Illustrated Catalogue sent free.

Architects and Builders will be quick to appreciate the many New and Practical Features possessed by  
**THE MAGEE PATENT SINK,**  
which commend themselves at once to every household. The escape of noxious and poisonous sewer gases is prevented by the arrangement of the patent trap, it being immovable, while the strainer, being hinged on brass pins, can be raised for the purpose of cleaning the cesspool. The sink is furnished with an improved galvanized shelf or rack for draining dishes, etc., after washing. It is of extra size, and being made with square corners, saves the carpenter much labor in setting. In smoothness of casting it fully sustains the long-established reputation of the Magee goods.  
Particular attention is invited to the Magee Standard Furnace, portable and for setting in brick, guaranteed superior to any in the market for economy, durability, and heating capacity. Estimates furnished for heating all sizes of dwelling-houses and public buildings. Also a full line of Brick and Portable Ranges. Circulars and prices of all the above goods furnished on application.  
**MAGEE FURNACE CO.**  
32 to 38 Union St., Boston



**D. M. MEEKER & SON'S**  
**Malleable Iron Hollow Munten Window Sash.**  
For Insane Hospitals, Fire Proof Buildings, &c.  
End view of Munten for Glazed Sash.  
End view of Munten for Unglazed Sash.  
Hollow Munten.  
The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by  
**D. M. MEEKER & SON,**  
Newark, N. J.  
Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.



**MAKE** GAS GENERATORS FOR LIGHTING Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.  
Send for CIRCULAR **your own**  
**WALWORTH MANUF. CO.**  
No. 69 Kilby Street, BOSTON, MASS. **GAS**

**J. & R. LAMB, 59 CARMINE ST., N. Y.**  
**CHURCH FURNISHERS**  
Practical Workers in Sterling Silver, Brass, and Bronze. Carved Wood, Decorations, etc. Illustrated Catalogues. Furniture, etc.; Metalwork, etc.; Decoration, etc.  
**HOISTING MACHINES**  
EXCLUSIVELY.  
HOTEL STEAM ELEVATORS, HYDRAULIC ELEVATORS, HAND POWER HOISTS, DUMB WAITERS.  
**H. J. REEDY, Manufacturer,**  
128 EAST EIGHTH ST., - Cincinnati, O.



**CRANE, BREED & COMPANY**  
**SAFETY BOILERS**  
FOR HEATING  
STEAM AND HOT WATER.  
MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RADIATORS, PIPE COILS, REGISTERS, FITTINGS, STEAM PUMPS.

**NATIONAL TUBE WORKS CO.**  
PATENT  
Indestructible Enamelled Wrought Iron  
**LAP-WELDED PIPE,**  
From 1/4 inch to 15 inches diameter.  
Now extensively used for  
Water, Gas, Sewerage, and Mining  
It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage.  
**MALLEABLE IRON FITTINGS** (enamelled), and **COMPOSITE ENAMEL**, for making Joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at offices of  
**National Tube Works Co.**  
8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.



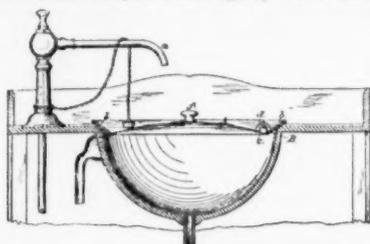
**BUILDING INTELLIGENCE.**

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

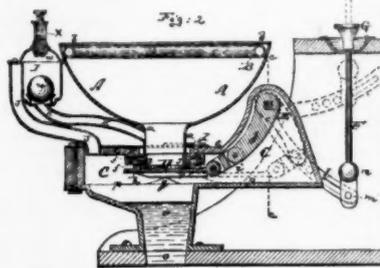
**BUILDING PATENTS.**

**SEALING-COVER FOR SET-BASINS.**—Florion Grosjean, New York, N. Y. This is a removable cover, made of sheet metal, which is placed over the mouth of a set-basin water-closet or sink for the purpose of preventing the entrance of noxious gases. The joint is made tight by a rubber gasket.



pivoted to the under side. To provide for the usual drip from the supply-pipe, a gutter is turned at the edge, as shown by the cut; and an outlet is made which is closed either by a ball-valve kept in place by a wire cage, or by a valve which is hung on the under side and kept forced against the outlet by an adjusted weight at the other end.

**WATER-CLOSET.**—Michael J. McEwan, New York, N. Y. This invention relates to a class of the valve species, the sealing-valve being withdrawn from the lower orifice of the bowl in a generally horizontal position. The overflow also is novel in its construction. A is the orthosiphon bowl, which is contracted at the bottom, so as to form a necking a, which fits into a cast-iron box C, the joints between them being made tight by a rubber gasket f and other suitable packing. The upper rim of the bowl A is made with an internal flange b, which serves at once as a support for the seat and as a protection to the supply-pipe B. The sealing-valve



D is withdrawn from the orifice of the bowl by raising the handle G, the lower end of which is connected with a crank I, the connecting pin m travelling in a slot in its lower end. The upper end of I is connected with a rock-shaft E, with which is connected another crank J, which forms, with the crank I, nearly a right angle. The lower end of this crank is connected with the valve D. The operation of these cranks, and the position of the valve when open, is shown by the dotted lines. As the valve D is closed by the lowering of the handle G, it is forced tightly against the lower rim of the necking a and the turned-down edge of the rubber gasket f by guide-bars in the sides of the iron box C, which are inclined upwards. Suitable packing boxes are provided at the points where the rock-shaft E passes through the shell of the peculiarly-shaped iron receiver. The rod F of the pull-up handle is weighted at n, so that little force is needed to close the valve D. Escape is furnished for an excess of flushing water by means of the pipe H, which, entering the bowl at the top of the necking a, ascends and ends in the chamber I, in which is a ball of wood or other substance, which seals the inlet; from this chamber the overflow passes by the pipe J into the receptacle below the valve. As there is some danger that when the overflow begins to pass through the pipes H and J all the water in A may be siphoned out, a valve opening inwards is placed in the top of the chamber I, which is kept shut only by a delicate spiral spring x, opens easily under the influence of the passing current, and thus allowing air to enter interrupts the siphonic action.

**SASH BALANCE.**—Henry F. Bond, Lynnfield, Mass.

**HASP LOCK.**—C. Collins, Jr., and G. T. Thomas, Jersey City, N. J.

**FIRE-ESCAPE.**—Diedrich L. Dieckmann, New York, N. Y. The escape is essentially a canvas chute raised by a lany tongue, worked by ropes and windlasses attached to the carriage.

**MACHINE FOR MAKING LAMP-BLACK.**—John K. Hallock and Erasmus R. Blood, Erie, Pa. A cylinder revolves above a series of gas-jets, and is provided with a suitable scraper to remove the lamp-black as it is deposited. Below the cylinder is a trough for collecting the material scraped from the cylinder. The whole is enclosed in a suitable case having tubes for the admission of air to the burners. If desired, more than one cylinder may be employed with their corresponding gas-jets.

**WINDOW VENTILATOR.**—Lorenzo D. Harvey, Sheboygan, Wis.

**SPLITTING AND SCRAPING STONE BY MACHINERY.**—Abram W. Andrews, Brooklyn, N. Y.

**WOOD-SCREW.**—George C. Armstrong, Brooklyn, N. Y. The under-side of the head has a thread turned on it.

**WINDOW-SCREENS.**—John B. Ives, Alvarado, Cal. The frame has inclined joints, so that the netting fastened to two sides is tightened by the inclines of the side pieces wedging upon those of the end pieces. The corners are then secured by angle-plates. The screen is also held in position by spring friction-bars.

**VENTILATOR FOR WINDOWS.**—G. R. Buffham, Brooklyn, N. Y.

**CEMENT WASH TUB.**—Dominic Burke, New York, N. Y. The tub is made of hydraulic cement cast in moulds.

**LOCK.**—Alex. Schneider, Youngstown, O.

**PUMP.**—Frank Sheller, Otego Lake, Mich.

**WATER-CLOSET VALVE.**—William Smith, San Francisco, Cal.

ing of one of the doors or windows which are connected with the alarm, a spring-coil releases a catch, and a strong spring operates a system of levers, which cause the sounding of the alarm and the display of a shield, indicating the room in which the door or window was opened.

**PAINTS.**—Martin L. Maione, Washington, D. C. The paint is composed of a varnish of linseed-oil, shellac, and driers, to which are subsequently added asphalt, shellac, copal, dammar, sugar of lead, red lead, crude turpentine, Venetian red, and spirits of turpentine, the whole being dissolved and combined by heat.

**TENSIONING-MACHINES.**—Michael J. Mullin, New York, N. Y. A plank or board is passed lengthwise through the machine, and, at desired spaces, double flat tenons are produced, and the stuff is cut in two in the middle of the double tenon, so as to produce pieces of uniform length, which have tenons at each end. The shoulders of the tenons are automatically bevelled, and the remnants of the stuff which are too short to furnish the desired length of tenoned piece are cut to a uniform desired length.

**COMBINED GUTTER AND CURB-STONE.**—Theodore W. Phinney, Chicago, Ill.

**TIME LOCK.**—Emory Stockwell, Stamford, Conn.

**SAFE AND VAULT FASTENING.**—Emory Stockwell, Stamford, Conn.

**COMPLETED BUILDINGS.**

**CINCINNATI, O.**—The large store of John Shillito & Co. was opened September 2. Mr. J. W. McLaughlin, architect.

**CLEVELAND, O.**—The High School Building, Mr. L. T. South, architect, was dedicated September 3. It has cost about \$75,000.

**DOYLESTOWN, PENN.**—The new court-house for Bucks County was opened September 8. The court room is constructed in amphitheatre style, with the lawyers, prisoners, and jury in the parquette, and the judges on the stage, while the audience fill the parquette.

**EAST ST. LOUIS, ILL.**—The new Presbyterian Church is completed. The cost of the house has been less than \$5,000.

**ELMIRA, N. Y.**—Just completed, the six-story boot and shoe factory for J. Richardson & Co., of this city, at a cost of \$30,000; material, pressed brick and Ohio cut stone, yellow and black brick; style, Italian Gothic; architect, W. H. Hayes.

**FISH LAKE, IND.**—St. John's Lutheran Church will be dedicated on the 6th of October.

**HAMILTON, O.**—On September 20, the Synagogue of B'nai B'rail will be dedicated.

**KOKOMO, IND.**—The Catholic dedicated their new church September 8.

**MARLBOROUGH, MASS.**—The new Reehalthe building, built on the site of the one destroyed in the big fire, was formally dedicated August 31.

**NEWARK, O.**—Our new court-house will be dedicated on the 12th of next month.

**NEW HAVEN, CONN.**—The new Universalist Church of the Messiah was dedicated Septen 4.

**SALISBURY, MD.**—The new Catholic Church was dedicated Sunday, September 15. The *Eastern Shoreman* says it is a beautiful structure, built somewhat in Gothic style.

**SUMMARY OF THE WEEK.**

**Boston.**

**BUILDING PERMITS.**—The following permits have been granted since our last issue:—

**WOODEN BUILDINGS.**

Mechanic.	No.	Stories.	Class.	Size.
Henry Wilson.	1	3	Dwelling and Store.	12' x 34'.
James Brown.	1	1	Green-house.	40' x 20'.
H. L. Hancock.	1	1	Stable.	16' x 29'.
Alex. C. Drake.	1	2	Stable.	40' x 75'.
James F. Smith.	1	1	Dry-house.	22' x 34'.

**FACTORY.**—A storehouse and tin can factory, 150 by 36 feet and 28 feet in height, is being erected on the wharf of the Maverick Oil Works at East Boston.

**HOUSE.**—Mr. Samuel Stubbs is owner and builder of a store and residence on Columbus Avenue. It is of light freestone, three stories high.

**HOUSES.**—A block of three brick houses is to be built in the Highlands for Mr. Ariel Lowe, by Mr. J. H. Besarick, architect. Contract not let. Cost, \$15,000.

**Baltimore.**

**SCHOOL-HOUSE.**—The old city hall is to be remodelled as a school-house for colored children at a cost of \$5,000.

**BUILDING PERMITS.**—The permits for the week ending September 14th are as follows:—  
St. James Catholic Church, two-story brick school building, Asquith St., between Eager and Chase sts.—G. McTeel, additional story on brick back building to dwelling at 248 Druid Hill Avenue.—August Piel, ext-d brick warehouse, Rusee St., between West and Stockholm sts.—Barbara Eichhorn, two-story brick back building to dwelling, 118 Duncan Alley.—Joseph Riemann, three-story warehouse, Clay St., between Howard and Park sts.—W. W. Bover, additional story to brick back building, and bath-house to dwelling, 262 East Baltimore St.—Samuel T. Clark, one-story brick building on Biddle St., near Morton Alley.—Edwin I. Bullock, two-story brick kitchen, to 35 Chester, between Lombard and Pratt sts.—Carl Montag, three-story brick dwelling, and two-story brick building on Biddle, between Washington and Wolfe sts.—Mrs. Frank Stone, additional story to brick building 31 Garden St.—J. W. Boothe, one-half story to dwelling, 259 Eutaw St.—Joseph Oliver, one-story brick office, President, near Pratt St.—John Unverzagt, two-story brick building, Monument St., 15 feet west of Chester St.—Mary Rutts, additional story to dwelling, 165 Franklin St.—Patrick Burns, two-story brick back building, 117 East Hartford Avenue, between Eager and Chase sts.—Edward Cowan, ext-d brick building to dwelling cor. Popelton and Hollins sts.—Ferdinand Verhaert, two-story brick back building, to dwelling 197 S. Broadway, between Canton Ave. and Alice Anna St.—William Schwarz, ext-d brick back building, to dwelling 39 Baltimore St.—Benj. Horn, three-story dwelling, cor. Bloom and Division sts.—Joseph Schreier, additional story to dwelling, 24 Wolfe St.—Peter McGowan, additional story to dwelling 233 Hamburg St.—Francis Drought, one-story brick kitchen, 138 Montgomery St.

**Cincinnati.**

**DWELLINGS.**—Mr. George W. Rapp, architect, is preparing plans for the following houses: Mrs. John Shiff, eight rooms, frame; cost, \$4,000.—George H. Bohren, Clifton Avenue, brick, six rooms; cost, \$3,000.—C. B. Wing, Warsaw; cost, \$3,500.—F. Kushman, two brick houses 25 feet front on Seventh Street, nine rooms each; cost, \$5,000.

Mr. Chas. Campbell, architect, is preparing plans for a ten-room brick dwelling-house to be built at Glendale, a suburb of Cincinnati, for Mr. Wm. B. Keys. Cost about \$10,000.  
G. W. Barger is building a first-class dwelling on Walnut Hills, at a cost of about \$20,000. Mr. L. D. Williams is the architect.

**HOTEL.**—Mr. Jas. W. McLaughlin has prepared plans for a frame hotel, to be built by the Cincinnati Southern Railroad Company, at the crossing of the Kentucky River. The building will cost about \$10,000.

**Louisville.**

**BUILDING PERMITS.**—Pat Monahan, one-story frame building, Bank Street; cost, \$500.—Mike Francis, one-story frame building, Baird Street; cost, \$400.—Andrew Cowan, two-story brick stable, in alley between Fourth and Fifth streets; cost, \$1,245.—John Briner, one-story brick building, Twenty-second Street; cost, \$700.—George A. Schuster, two-and-a-half-story brick building, Mechanic Street; cost, \$3,000.—Mrs. Jane A. Beatty, three-story stone building, Jefferson Street; cost, \$7,375.—Daniel McElenn, two-story double brick hotel, Kentucky Street, \$1,100.—S. Grotzmann, two-story brick dwell. and stable, Caldwell Street, \$1,000.—Martin Burkhardt, two-story brick dwell., Chestnut Street, \$1,500.

**New York.**

**BUILDING PERMITS.**—Eighth Avenue Boulevard, near One Hundred and Thirty-seventh St., iron and glass green-house, 67' x 20'; cost, \$5,000; O. Wald Ottendorfer, owner; Wm. Schickel, architect.—61 East Forty-first St., brick tenement and store, 5' x 90'; cost, \$15,000; Duglin & Crossman, owners and builders.—Cor. Boulevard and Seventy-second St., second-class store, 24' x 50'; cost, \$600; C. M. Puchter, owner; Valentine Gieby, architect and builder.—161 Bank St., in story, 31' x 62'; one story; cost, \$1,400; A. C. Kingsland & Son, owners; E. Sorenson, builder.—Cor. Lexington Ave. and Eighty-first St., 6 first-class dwell., 31' x 62'; brown stone fronts; cost, \$6,000 each; J. Donohue, owner and builder.

**Philadelphia.**

**CHURCH.**—The corner-stone of the Norris Square M. E. Church was laid August 25 with appropriate ceremonies. The church will be erected on Mascher Street, above Susquehanna Avenue, and will cost about \$2,000. Rev. Philip S. Merrill, B. H. Wisler, J. Hanson, J. Mullineau, and R. C. Rimney are the building committee.

**St. Louis.**

**BUILDING PERMITS.**—Thirty-nine permits have been issued for the week ending September 13, 1878. Nine of these are for small frame structures. The rest are for brick buildings, all of moderate size. But five are worth over \$2,500. They are as follows:—

Owners.	Use.	Stories.	Rooms.	Cost.
Samuel Marks.	Dwelling.	2	14	\$5,900
D. H. Selver.	Dwelling.	3	11	5,000
St. Louis School.	School.	2	2	2,850
James Kinsella.	Dwelling.	2	6	3,300
City of St. Louis.	Engine-house.	2	3	4,917

**RAILWAY DEPOT.**—It is understood that Mr. C. B. Clarke, architect, of this city, is preparing plans for a new depot for the St. Louis and Iron Mountain Railway Company, to be built at Little Rock, Ark.

**SCHOOL HOUSE.**—The corner-stone of the "New Madison" school-house was laid September 5. The building will cost about \$12,000. Mr. Edward Thomson, builder.

**TURN HALL.**—On September 8 the corner-stone of the new Turn Hall, on the corner of Thirteenth and Madison streets, was laid. The building is to be three stories in height, and will have a frontage of 79 feet 6 inches on Monroe Street, by a depth 112 feet 6 inches on Thirteenth. A portion of the first floor will be devoted to business purposes, but a hall 90 by 80 feet will be set apart for gymnastic exercises. On the second floor will be the janitor's dwelling, refreshment rooms, kitchens, etc., to be used as accessories to the large hall on the third floor, which will be devoted to balls, parties, and entertainments. The structure, when finished, will have cost \$28,000. Mr. Chas. G. Stifel is President of the Association.

**General Notes.**

**ALFRED CENTRE, N. Y.**—"Kenyon Memorial Hall" is begun. It is of brick and stone, from designs by E. L. Roberts, New York. It will be three stories high, with tower in front.

**ALLEGHENY, PENN.**—The large four-story building just completed on Federal Street, near the Franklin Savings Bank, will have to be torn down. The cross-wall is falling. It rests on a girder.

**BENSON, MINN.**—The town has voted to build a new school-house, at a cost of \$6,000.

**CAMBRIDGE, MASS.**—The Museum of Comparative Zoology is adding to its already large building another section. The building when completed is intended to surround three sides of a quadrangle facing Trinity Avenue. In the second story one room and its gallery will contain collections illustrating the existing fauna of Europe and the other, faunal collections from Asia and Africa. The attic will, as usual, be set apart for the storage of skeletons and other dry specimens. It is intended, if possible, to get the addition under cover this year, and to finish the next.

**CHARLOTTE, N. C.**—Mr. L. Copeland is building a frame residence to cost \$4,500. William Foster, architect, Des Moines, Iowa.

**CONY ISLAND.**—The new hotel projected for Coney Island, to be called the Hotel Scarborough, after the famous English resort and the place where it is located, Scarborough Beach. It will be the largest seaside hotel in the world, having 800 rooms and a dining-hall 350 feet long. The cost is estimated at \$750,000, and work will commence in March.

**DORCHESTER, MASS.**—Messrs. Lord & Fuller, of Boston, are the architects of a house for Mr. Edw. M. Burt. Cost, \$5,000. Beal & Spear are the builders.

Mr. J. H. Besarick, of Boston, is the architect of a house and barn for Mr. A. Morse. Wm. Hunt is the builder; cost, \$25,000.

**DELEWARE, O.**—The Council has awarded the contract for rebuilding the Town Hall to W. C. Hendrickson to rebuild according to plans and specifications, for \$3,400, with slate roof, or \$3,200 with shingle roof, the award being on the condition that the School Board do not join Council from using the ground claimed by both bodies.

**GALT, CAL.**—Nearly enough money has been raised to build a school-house. John McFarland is one of the trustees.

**GRINNELL, IOWA.**—The stone-work of the upper part of the tower of the Grinnell church is to be taken down to the sill of the great windows, and replaced with wood-work, on account of the settling of the towers.

**HARTFORD, CONN.**—The bids for the alteration of the colored school building on Pearl Street, which is to be transformed into the new truck house, were eleven, as follows: Thomas Lawler, \$2,075; Alfred J. Morris, \$2,075; C. C.

Soper, \$2,473; Peter Taylor, \$2,100; Giles Mandeville, \$2,540; George Kibbe, \$2,358; Erasmus Phelps, \$2,900; J. D. Lapaugh, \$2,491; J. M. Dow, \$1,986; Barrett Bros., \$4,531; John C. Mead, \$2,900. The contract was awarded to Mr. J. M. Dow, and calls for alteration of the first story only, the present appropriation of the council being only \$2,000.

**MANCHESTER, N. H.**—The following buildings are under way: The Franklin Street Church, remodelled, cost, \$13,000; The Universalist Church, cost, \$8,000; dwelling-houses for Messrs. G. W. Stevens, cost, \$10,000; and Thomas Wheat, \$5,000. Of these, G. W. Stevens is architect.—Soldiers Monument, cost, \$20,000; George Keller, Hartford, Conn., architect.—Gasometer for Manchester Gas-Light Co., 58 feet in diameter, and 148,000 cubic feet capacity, and building therefor; T. F. Rowland, engineer.—Tenement Block for D. K. Mack, cost, \$5,000; and dwellings for Josiah Taylor, cost, \$4,000; Francis Fuson, \$2,500; Thos. H. Fuson, \$2,500; W. E. Drew, \$5,000; B. E. Davis, \$1,500, A. G. Stevens, architect.

**MARENGO, I.**—The county is building a Paupers' Home and Insane Hospital; frame; cost, \$5,000. The plans are by William Foster, architect, of Des Moines, Iowa.

**MILBURY, MASS.**—Work is progressing on the new River-lyn chisel factory.

**MUSCATINE, I.**—William Foster, architect, of Des Moines, Iowa, is building at this place four school-houses, namely, one high-school of eight rooms, red brick, with black brick and stone finish; cost, \$20,000. One two-story ward-school of two rooms; frame; cost, \$4,000. Two one-story ward-schools of one room each; frame; cost, \$1,000 each.

**NEWPORT, R. I.**—Cottage and stable for Mrs. E. G. Hartshorn; Anderson & Hamilton, architects, New York.

**NEW YORK, N. Y.**—The Church of St. John Baptist, in Thirtieth Street, designed by R. Le Brun, architect, of this city, was commenced in 1871, and is now used for worship, but the tower and spire, as yet unfinished, to be 240 feet high, will be completed in a few years. The style is Thirteenth Century French Gothic; the building 65 feet wide and 175 feet long, with clerestory, nave, apsidal end, etc.

**PROVIDENCE, R. I.**—It is reported that another new first-class hotel is to be built on Westminster Street, just above the corner of Dorrance. It will be five stories high, and will extend from Westminster to Fulton Street. The lower story will have a corridor running the entire length, with the office, bar, and billiard-room on that floor. On the second floor will be the dining-room, parlors, and suites. The other floors will be devoted wholly to lodging-rooms, numbering altogether about seventy-five.

The more important buildings now going on are: New Roman Catholic Cathedral, High and Fender sts., P. C. Keely, architect, Brooklyn, N. Y. Vaughan Building, Custom House Street; Walker & Gould, architects. Waldron, Wightman & Co.'s Building, Pine Street; Walker & Gould, architects. Beckwith Building, Westminster and Fulton sts.; Stone & Carpenter, architects. Brownell Building, Westminster Street and Exchange Place; Bucklin & Son, architects. New houses are building, erected on Thames Street, by Mr. James Conroy, and on corner of High and Constitution sts., by Mr. Archibald Bell.

**ROCHESTER, N. Y.**—Isaac Leomin, architect, is building for Dr. Bartholick two three-story stores which measure 33 by 60 feet. Cost, \$4,500; also, a three-story store for Mrs. Daniel Golding; cost, \$2,000.

**ROCKWELL CITY, I.**—Is building a one-story frame school-house, with one school-room and two class-rooms; cost, \$1,200. William Foster, architect, Des Moines, Iowa.

**ROME, GA.**—Mr. A. Fitzpatrick of Stapleton, Staten Island, N. Y., is executing a handsome memorial window, for Shorter Female College.

**SALEM, MASS.**—The Salem Horse R. R. Co. is owner and builder of a large pavilion at "The Willows," Salem Neck. Cost, \$6,000. Messrs. Lord & Fuller, of Boston, architects.

**SCITUATE, MASS.**—The United States authorities are building a life-saving station at Scituate Neck.

**SUTTON, MASS.**—Mr. James Diveny is to rebuild his house, which was burned a short time ago. The new house will be 30 by 24 feet, with an ell 22 by 16 feet.

**TAUNTON, MASS.**—Jabez Talbot, Jr., is having a new house built on Washington Street.

**UNBRIDGE, MASS.**—Work on the foundation of Samuel W. Scott's new sawmill mill was begun last Thursday. The mill is to be 85 by 35 feet, three stories high. The contract for the foundation and stone-work has been awarded to Mr. Barnabas Dean, of Northbridge, while the contract for the carpenter work has been awarded to Mr. Geo. Thompson, of this place. Mr. Scott expects to have the new mill completed and the machinery ready to start by the first of December.

**WAREHAM, MASS.**—Henry Robbins is having a dwelling-house erected on the east side of the river, on land he has lately purchased.

**WESTLEY, R. I.**—An addition is being made to the armory of the "Westley Rifles," from designs by General Wm. B. Walker of Providence, R. I. The addition will be 40 by 40 feet, three stories high, and will contain an officers' room, armorer's room, and dining-room on the first floor. The second story will contain two company rooms, and the third floor is to be used as a hall and drill room. The contract was awarded to Messrs. C. Maxon & Co.

The Society of Friends are building a meeting-house, from designs by C. C. Maxon, architect, on South Elm Street. W. & H. Langworthy, builders.

The work on the new brick buildings is being rapidly pushed forward, the Price & Langworthy Block being now about closed in.

Besides the above mentioned work, there are three private residences in process of construction, Messrs. C. Maxon & Co. doing the work.

**WILLMANTIC, CONN.**—The work on Mr. T. B. Congdon's new building is being rapidly pushed forward.

**WORCESTER, MASS.**—Messrs Wm. Allen & Sons of the Worcester Boiler Works are building a new bleaching-keir to replace the one destroyed by the explosion at the Saundersdale Print Works in Southbridge, Thursday night.

## INDEX OF CURRENT WORK,

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

### Baltimore, Md.

**CHURCH.**—The Cummings Memorial Church. Mr. Cassell, architect.  
**CHURCH.**—The Pius IX. Memorial Church. G. A. Frederick, architect. Cost \$100,000.  
**CHURCH.**—Church of St. Michael and All Angels. Cost \$80,000. Wyatt & Sperry, architects.  
**HOSPITAL.**—Johns Hopkins Hospital. J. R. Niernsée, consulting architect.

### Boston.

**BANK BUILDING.**—Tremont Bank Building. Carl Fehmer, architect.

**HOTEL.**—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.

**THE MUSEUM OF FINE ARTS.**—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.

**SCHOOL-HOUSE.**—High and Latin School. G. A. Clough, architect.

**ASYLUM.**—Asylum for Aged People, C. J. Bateman, architect. Cost \$5,000.

### Brooklyn, N. Y.

**TENEMENT.**—A. T. White, owner. William Field & Son, architects.

**SOCIETY BUILDING.**—The Long Island Historical Society Building, Mr. G. B. Post, architect. Cost \$100,000.

**CHURCH.**—St. Francis Xavier R. C. Church, West Fifteenth Street. Cost \$150,000. P. Keely, architect.

**HOSPITAL.**—St. John's Hospital, N. L. Derby, New York, architect.

**CHICAGO, ILL.**

**ARMORY.**—Armory for the First Regiment. Messrs. Wheelock & Clay, architects. Cost \$25,000.

**STORE.**—The Singer Building. Cost \$250,000.

### Cincinnati, O.

**U. S. CUSTOM HOUSE AND POST OFFICE.**—S. Hannaford, local superintendent.

**CHILDREN'S HOME.**—J. W. McLaughlin, architect. Cost \$50,000.

**NEWSPAPER OFFICE.**—The Gazette Building. E. Anderson, architect.

**CLUB-HOUSE.**—Allemania Club-House. J. W. McLaughlin, architect. Cost \$30,000.

**UNIVERSITY BUILDING.**—Cincinnati University Building. S. Hannaford, architect. Cost \$50,000.

### Cleveland, O.

**BUSINESS BLOCK.**—Amasa Stone, owner. J. Ireland, architect. Cost \$70,000.

**CHURCH.**—Second Presbyterian. J. Ireland, architect. Cost \$70,000.

**CONVENT.**—Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

### Hartford, Conn.

**SEMINARY.**—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.

**CATHEDRAL.**—R. C. Cathedral of St. Joseph. P. Keely, architect.

**CATHOLIC SCHOOL.**—Brown & Stilson, architects, New Haven. Cost about \$25,000.

### Jersey City.

**CONVENT.**—Convent of the Sisters of St. Dominick. Cost \$40,000.

### New York.

**THE "FLORENCE."**—Emile Grewé, architect. Mrs. Matthews, owner. Cost \$500,000.

**THE BOREEL BUILDING.**—B. D. Hatch, architect. Cost \$250,000.

**COLLEGE.**—Addition to Columbia College. C. C. Haight, architect. Cost \$200,000.

**OFFICE BUILDING.**—Messrs. Stillman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.

**APARTMENT HOUSE.**—Mr. H. J. Hardenburgh, architect. Cost \$300,000.

**PRIVATE RESIDENCE.**—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.

**ARMORY FOR THE SEVENTH REGIMENT.**—Cost \$300,000. C. W. Clinton, architect.

**HOSPITAL.**—Presbyterian Hospital. Wilson Bros., architects.

**OFFICE BUILDING.**—Girard trust.

### Providence, R. I.

**DORMITORY FOR BROWN UNIVERSITY.**—Messrs. Stone & Carpenter, architects.

### St. John, N. B.

**POST OFFICE, CUSTOM HOUSE, AND SAVINGS BANK.**—Mr. Scott, Chief Architect to the Dominion Government.

**BANK.**—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.

**CHURCH.**—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.

**CITY HALL.**—Messrs. McKean & Fairweather, architects.

**CHAPEL.**—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.

**CHURCHES.**—St. James's Church, Croft & Camp, architects, St. John N. B.—St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$60,000.

### St. Louis.

**CHURCH.**—Second Baptist Church. Edward Hilsley, contractor. Cost \$100,000.

**COURT HOUSE FOR THE NEW COUNTY OF ST. LOUIS.**—F. Renwick, architect. Cost \$28,000.

**COLLEGE.**—College for the Christian Brothers. Mr. Jas. McGrath, architect. Cost \$200,000.

**CUSTOM HOUSE AND POST OFFICE.**—Mr. Jas. G. Hill, Supervising Architect of the Treasury Department.

### General.

**CAMBRIDGE, MASS.**—Gymnasium for Harvard College. Messrs. Peabody & Stearns, architects.

**CONCORD, N. H.**—State Prison. Messrs. Dow & Wheeler, architects. Appropriation, \$200,000.

**CROWN POINT, IND.**—Court-House. J. C. Cochrane, architect, Chicago. Cost \$45,000.

**ELMIRA, N. Y.**—Masonic Hall. N. LeBrun, architect, New York. Cost \$60,000.

**FARBIAULT, MINN.**—Deaf, Dumb, and Blind Asylum. J. Babcock & Co., contractors. Cost \$53,730.

**INDEPENDENCE, I.**—Hospital for the Insane. G. Josse-lyn, supervising architect. Cost \$850,000.

**JOLIET, ILL.**—St. Mary's (Roman Catholic) Church. Mr. Kelly, architect, Brooklyn.

**KANKAKEE, ILL.**—Insane Asylum. J. R. Willett, architect, Chicago, Ill.

**LOWELL, MASS.**—Appleton Bank. O. A. Merrill, architect. Cost \$70,000.

**NORRISTOWN, PENN.**—Insane Asylum. Wilson Bros. & Co., architects, Philadelphia.

## Publishers' Department.

### The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY

**HOUGHTON, OSGOOD & CO.,**  
WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year, \$6.00 in advance.

**CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,**

WITH

*Houghton, Osgood & Co.'s other Periodicals.*  
THE ARCHITECT and \*ATLANTIC MONTHLY...\$9.00  
THE ARCHITECT and THE REPORTER...15.00  
THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL...10.00  
THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE...7.00  
\* N. B.—The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

### RATES OF ADVERTISING.

**PAGES NEXT TO READING MATTER,**  
single insertion...12½ cts. per line.  
One inch (14 lines) one insertion...\$1.75  
One inch, six insertions...10.00  
**INSIDE PAGES, single insertion...10 cts. per line**  
One inch, single insertion...\$1.40  
One inch, six insertions...7.00  
For larger space, and for a series of more than six insertions, reduced rates, made known on application to the Publishers.

Special rates for first and last pages.

No extra charge for cuts, or for advertisements that occupy more than a column in width.

Payments should be made directly to the Publishers, either by draft or by post office order.

**HOUGHTON, OSGOOD & CO., Publishers,**

WINTHROP SQUARE, BOSTON.

### Drawings for the American Architect and Building News.

Architects and architectural draughtsmen who desire to contribute drawings for publication will find the following facts of use:

Only pen-and-ink drawings, without brush-work of any kind, can be reproduced.

The space upon a single page allowed for a drawing 7" x 11"; therefore drawings should have approximately these proportions.

The reproductions are most satisfactory when they are from one-third to one-half as large as the originals.

The most satisfactory results are obtained from drawings upon Bristol board, or hot-pressed Whatman.

Tinted paper should not be used.

Tracing cloth upon the dull side, bank-note paper, or tracing paper, provided it is not of a yellowish tinge, may be used in cases of absolute necessity.

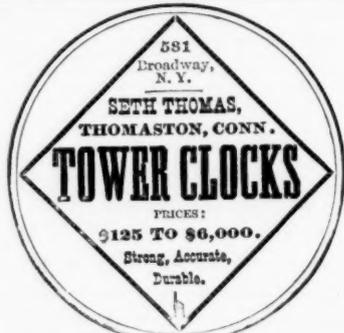
The ink should be black and of uniform strength.

The lines should be firm, sharp, not too coarse, and not unintentionally broken.

Shading and hatching lines must not be too close and crowded, especially where a large surface is to be shaded.

It is very desirable that plans should accompany the drawings.

Drawings of details both constructional and ornamental are also desirable.



**SUBSCRIBERS TO THE AMERICAN ARCHITECT AND BUILDING NEWS who have not already done so will confer a favor on the Publishers by promptly remitting their subscriptions to HOUGHTON, OSGOOD & CO., Winthrop Square, Boston.**

**CLOTH COVERS for Volumes 1 and 2 (1876, 1877) can be obtained at the office in Boston, or will be sent to any address by mail. The price of covers for the yearly volumes is \$1.00 each.**

**To subscribers sending their numbers for binding, prepaid, the Publishers will supply cover and bind for \$2.00 per volume. Complete volumes for 1876 and 1877 can be obtained for \$9.00 per volume, bound, or \$7.50 unbound. Back numbers always on hand.**

*A. Hall & Sons*  
Manufacturers of  
*Architectural Terra Cotta,*  
*Buff and Colored Brick, Fire Brick*  
*Established 1846, South Amboy, N. J.*

**ARCHITECTURAL IRON WORKS.**

**YOUNGLOVE & CO., Propr's,**  
CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW  
CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUT-  
TERS, TIE LIGHT, CRISTING, ETC  
Estimates promptly furnished.

(Established 1848.)

**MARKET ST. ARCHITECTURAL FOUNDRY**  
AND  
**IRON WORKS.**

**SNEAD & CO.**

LOUISVILLE, KY.

Makers of every description of Iron Work for Buildings.

**10 ARCHITECTS AND BUILDERS.**

**MORTAR BLACK,**

Now being used largely as a substitute for Lamp Black  
mixes readily and does not rot the mortar. For sale only  
by *Walspole Color and Chemical Works,*

**HENRY D. DUPEE, Proprietor,**  
79 KILBY STREET, BOSTON

**BOUND VOLUMES**

**OF THE**  
**AMERICAN ARCHITECT.**

We are prepared to fill orders for binding the  
*American Architect and Building News* in styles  
similar to the volume for 1876, at the following  
rates:—

- Price of cover without binding.....\$1.00
- Cover and binding (for subscribers)..... 2 00
- Numbers of 1876 or 1877 without cover or binding 7 50
- Bound volumes of 1876 or 1877..... 9 00

In sending volumes to be bound it should be  
stated whether the illustrations are to be bound  
with their respective numbers, or whether all illus-  
trations are to be placed together at the end of  
volume.

*N. B.*— Volumes bound in both styles are kept in  
stock.

The above will be sent, post paid. Subscribers  
ending their numbers to be bound will prepay  
postage or express charges.

**HOUGHTON, OSGOOD & CO., PUBLISHERS,**  
Winthrop Square, Boston.

**PROPOSALS.**

**DREDGING.**

U. S. ENGINEER OFFICE,  
UNION BANK BUILDING,  
BALTIMORE, Md., September 3, 1878.

Proposals for additional dredging at Cambridge, Md., will  
be received until noon of September 24, 1878, and opened  
immediately thereafter. Blank forms, specifications, and  
any desired information can be had on application to this  
office.  
WM. P. CRAIGHILL,  
143  
Major of Engineers, U. S. A.

**CARPENTER'S WORK.**

BOSTON, MASS.

Sealed proposals will be received at the Branch Office of  
the City Architect, Warren Avenue, until Thursday, Sep-  
tember 26, at 12 o'clock, m., for furnishing all materials and  
doing all the labor required for the carpenter's work in  
framing the roof, and for slating, iron work, coppering, and  
composition in the roof coverings for the new English High  
and Latin School buildings, on Warren Avenue and Mont-  
gomery Street.

Separate proposals are required for the carpenter's work  
and the roof coverings.

Proposals are to be addressed to Lucius Slade, Chairman  
of Committee on Public Buildings, and endorsed "Propo-  
sals for doing the carpenter's work in framing the roof (or  
for the roof coverings) for the English High and Latin  
School buildings."

Each bid deposited must be signed by the bidder, and  
accompanied by a bond for \$500 for the carpenter's work,  
and \$1,000 for the roof coverings, with two satisfactory  
sureties, conditioned for the execution of the contract (with  
a satisfactory bond for its performance) within four days, in  
case the bid be accepted.

The sureties of the bonds, both for the proposals and for  
the contract, must be satisfactory to the Committee on Pub-  
lic Buildings. No bill will be considered which has not re-  
sponsible sureties upon its accompanying bond.

The amount of security required for the performance of  
the contract will be such sum as may be fixed by the Com-  
mittee on Public Buildings, after the proposals are opened;  
said sum not being less than one-fourth nor more than two-  
thirds of the amount of the contract.

The Committee on Public Buildings reserve the right to  
reject any or all bids, and bidders are requested to fill out  
and use the printed form of the proposal, and the bond ac-  
companying the specification and contract.

For plans and specifications apply at the office on the site  
of the building.  
LUCIUS SLADE, Chairman.

**PROPOSALS.**

**UNIVERSITY BUILDING.**

CINCINNATI, O.

Sealed proposals will be received at the office of the Board  
of Directors of the University of Cincinnati, northeast cor-  
ner of Main and Third streets, second story, on Thursday,  
October 10, 1878, from 9 to 12 o'clock m., for the material  
and labor required for each separate and distinct trade or  
kind of mechanic labor necessary for building an addition  
to the University Building, and finishing the fourth story of  
the present building on Clifton Avenue, according to the  
plans and specifications to be seen at the office of S. Ham-  
nafford, architect, Rooms Nos. 37 and 38 Johnston Building,  
southwest corner of Walnut and Fifth streets.

Bids must be upon the blank forms to be obtained at S.  
Hamnafford's office.

No bid will be received for the whole work, or for any  
greater portion than is embraced in one trade or kind of me-  
chanical labor.

Each bid must contain the name of every person inter-  
ested therein, and must be accompanied by a sufficient guaran-  
ty by two disinterested persons as sureties in a sum equal  
to the amount of the bid, that if the bid is accepted a con-  
tract will be entered into and the performance of it properly  
secured.

Each bid must be indorsed with the kind of work bid  
upon.

The right is reserved to reject any or all bids.

By order Board of Directors.

LOUIS BALLAUF,

Chairman Committee on Buildings, Repairs, and Leases.  
145

**IRON BRIDGE.**

LONG ISLAND CITY, N. Y.

The commissioners appointed by and under chapter 326 of  
the laws of New York, of 1874, entitled "An act to pro-  
vide for improvements in and adjoining the First Ward of  
Long Island City," will receive sealed bids or proposals at  
their office in the First Ward of Long Island City, on Ver-  
non Avenue, near Flushing Street, until Thursday, Sep-  
tember 26, 1878, at 3 o'clock p. m., for the construction of an  
iron pivot bridge on Borden Avenue, over Dutch Kills Creek  
and Canal, within said improvement district; also, for com-  
pleting the pier and abutments for said bridge.

Plans and specifications may be seen at the Commis-  
sioners' office on and after the 16th inst.

Such bids or proposals may be for the whole work above  
mentioned, or for the bridge and other work separately.

Blank forms for proposals will be furnished on and after  
the 16th inst., at the Commissioners' office, on application  
of any party desiring to bid.

All proposals received as above will be publicly opened  
and read at the time and place above specified.

Dated, Improvement District in Long Island City, Sep-  
tember 13, 1878.

PETER G. VAN ALST,  
HENRY S. ANABLE,  
K. M. C. GRAHAM,  
WILLIAM BRIDGE,  
JAMES DENNEN, } Commissioners.

**DREDGING.**

PORTLAND, ME.

Proposals for Dredging and removing Sunken Ledges at  
the "Gut" opposite Bath, in Back River, Maine.  
Proposals will be received at the office of the undersigned,  
in Portland, Maine, until 3 o'clock p. m., on Saturday, the  
25th instant, for about 12,000 cubic yards of Dredging, and  
for the removal of about 200 cubic yards of sunken Ledges.  
Specifications and further information will be furnished  
to bidders on their applying to the undersigned, at his office  
in No. 453 1/2 Congress Street, Portland, Me.

Proposals, accompanied by the requisite guaranty, must  
be made in duplicate, on printed forms, which will be fur-  
nished on application at this office; and, when transmitted,  
they must be so indorsed on the sealed envelope as to indi-  
cate, before being opened, the particular work bid for.  
The undersigned reserves the right to reject all bids which,  
in his opinion, are not reasonable; also the bid of any per-  
son known to the Department as a "failing contractor," or  
of any other person who, in his belief, will not faithfully,  
satisfactorily, and promptly perform the contract.

GEORGE THOM,  
Lieut.-Colonel of Engineers,  
Bvt. Brig.-Gen. U. S. A.

U. S. Engineer Office, Portland, Me., Sept. 12, 1878.  
143

**DREDGING.**

U. S. ENGINEER OFFICE,  
1619 CHESTNUT STREET,

PHILADELPHIA, Pa., September 11, 1878.

Sealed proposals in duplicate will be received at this office  
until 12 o'clock m., of Friday, the 27th day of September,  
1878, for continuing the improvement of the channel of the  
Delaware River at Fort Mifflin Bar, by dredging.

For forms of proposals and all information, apply at this  
office.  
J. N. MACOMB,  
143  
Col. of Engineers, U. S. A.

**TILING.**

Proposals for Illuminated Tiling with iron frames fixed  
complete, for the court-yard roof of the U. S. Custom House  
and Post Office at Chicago, Ill.

OFFICE OF THE SUPERVISING ARCHITECT,  
TREASURY DEPARTMENT,  
WASHINGTON, D. C., September 14, 1878.

Sealed proposals will be received at this office until 12 m.  
on the 30th day of September, 1878, for all the Illuminated  
Tiling required for the court-yard roof of the U. S. Custom  
House and Post Office at Chicago, Ill., in accordance with  
drawing and specification, copies of which and any addi-  
tional information may be had on application at this office,  
or the office of the Superintendent.

JAS. G. HILL,  
Supervising Architect.

**IRON BRIDGE.**

CINCINNATI, O.

Sealed proposals will be received at the office of the Board  
of Public Works, until 12 o'clock, noon, of Tuesday, October  
8. A. D. 1878, for constructing the wrought-iron superstruc-  
ture of a bridge over Mill Creek, at Eighth Street, according  
to specifications on file in the office of the Board of Public  
Works.

The Board reserves the right of rejecting any or all the  
bids.

Bidders will indorse their names upon the outside of the  
envelopes containing their bids.

Each bid to be accompanied by two disinterested sureties.  
By order of the Board.

JOHN E. BELL, President.

JOHN D. BANKS, Clerk. 145

**PROPOSALS.**

**LOCKS AND KEYS.**

POST OFFICE DEPARTMENT,  
WASHINGTON, D. C., August 15, 1878.

Separate sealed proposals will be received at this Depart-  
ment until 12 o'clock noon on the 20th day of March, 1879,  
for furnishing four new and different kinds of Locks and  
Keys for the sole and exclusive use of the United States  
mails, including besides those to be used for mail bags such  
as are to be used for the street letter-boxes of the United  
States.

As the public exposure and searching examination neces-  
sary to intelligent bidding on any prescribed model of a  
lock and key would tend to impair, if not entirely destroy,  
the further utility of all such locks and keys for the pur-  
poses of the mails, the Postmaster-General prescribes no  
models or samples for bidders, but relies for a selection on  
the mechanical ingenuity and skill which a fair competition  
among inventors, hereby invited, may develop in samples  
submitted by them.

Specifications of requirements as to proposals, samples,  
kinds and quantities of locks and keys, contracts, etc., will  
be furnished on application by letter to the Second Assistant  
Postmaster-General.

No proposal will be considered which is not submitted in  
accordance with such specifications and forms of prop-osal.  
The contracts which may be made are to be in conform-  
ity with the specifications and accepted proposals.

D. M. KEY, Postmaster-General.

**CANAL AND LOCK.**

OTTAWA, ONT.

Sealed tenders, addressed to the Secretary of Public Works  
and indorsed "Tender for Canal and Lock at St. Anne,"  
will be received at the office of the Department of Public  
Works, Ottawa, Ontario, until the arrival of the eastern and  
western mails on Tuesday, the 8th day of October next, for  
the construction of a Lock and the formation of approaches  
to it on the landward side of the present Lock at St. Anne.  
A map of the locality, together with plans and specifications  
of the works to be done, can be seen at this office and at the  
Resident Engineer's Office, St. Anne, on and after Tuesday,  
the 24th day of September, at either of which places printed  
forms of tender can be obtained. Contractors are requested  
to bear in mind that tenders will not be considered unless  
made strictly in accordance with the printed forms, and, in  
the case of firms, except there are attached the actual signa-  
tures, the nature of the occupation and residence of each  
member of the same; and further, an accepted bank  
check for the sum of \$2,000 must accompany the tender,  
which sum shall be forfeited if the party tendering declines  
entering into contract for the works, at the rates and on the  
terms stated in the offer submitted.

The check thus sent in will be returned to the respective  
parties whose tenders are not accepted. For the due fulfil-  
ment of the contract, satisfactory security will be required  
by the deposit of money to the amount of five per cent on  
the bulk sum of the contract; of which the sum sent in  
with the tender will be considered a part. Ninety per cent  
only of the progress estimates will be paid until the com-  
pletion of the work. To each tender must be attached the  
actual signatures of two responsible and solvent persons,  
residents of the Dominion, willing to become sureties for  
the carrying out of these conditions, as well as the due per-  
formance of the works embraced in the contract. This de-  
partment does not, however, bind itself to accept the lowest  
or any tender.  
By order, F. BRAUM, Secretary.  
145

**FURNITURE.**

BROOKLYN, N. Y.

Sealed proposals will be received at the office of the Super-  
intendent of Repairs, Depot of the Board of Education, un-  
til Tuesday, October 1, 1878, at 4 o'clock p. m., for furniture  
for wings of P. S. No. 32.

Specifications can be seen at the office of the Superintend-  
ent of Repairs. Names of two responsible persons will be  
required for the faithful performance of the contract. The  
Board reserves the right to reject any irregular bids, or any  
which may not be for the interest of the Board.

W. M. THOMAS,  
145  
Chairman Com. on School-Houses.

**CANAL AND CANAL LOCKS.**

U. S. ENGINEER OFFICE,  
PORTLAND, OREGON, August 1, 1878.

Sealed proposals will be received at this office until 11  
o'clock, a. m., Tuesday, October 1, 1878, for furnishing labor  
and materials for the construction of a portion of the canal  
and locks at the Cascades of the Columbia River, Oregon.  
Plans and model of canal can be seen, and specifications and  
forms of proposals obtained, at this office.

JOHN M. WILSON,  
144  
Major of Engineers.

**GAS FIXTURES**

OF EVERY DESCRIPTION.

SPECIAL RATES TO BUILDERS.

R. HOLLINGS & CO 47 Washington St., BOSTON.

**WANTED.**

A position as agent for a stone contractor, or for a com-  
pany manufacturing specialties for building purposes, by a  
young man experienced in business, or any situation requir-  
ing a knowledge of architects' plans, designing, scale, and  
detail drawings, preparing bills of quantities, etc. An ex-  
tensive acquaintance among architects, and means of keep-  
ing informed of building news in New York and Boston.  
Address O WESLEY, 246 E. 25th St., New York.



Terra  
Cotta  
Chimney  
Tops,  
Akron  
Land  
Tile

D. W. LEWIS, 80 Water Street, Boston,  
Manufacturers' Agent.

**CONTRACTORS**

WHO WISH TO MAKE MONEY

Should read the Proposals advertised in

ENGINEERING NEWS,

Published for THREE DOLLARS per year, by GEORGE H.  
FROST, at

153 Washington Street, Chicago, Ill.

MARSHALL'S AMERICAN



LEADED SHEETS. Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila.

PATENT MINERAL WOOL. ENTIRELY FIRE-PROOF AND UNDECAYING. THE BEST INSULATOR OF HEAT, COLD, AND SOUND.

For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc. ALEXANDER D. ELBERS, P. O. Box 4461. 26 1/2 Broadway, New York

McSHANE BELL FOUNDRY

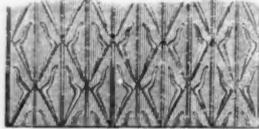
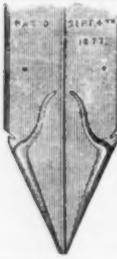
Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free

HENRY McSHANE & CO., Baltimore, Md.

The Useful.

is issued monthly—consists of Perspectives of Interiors, Ornaments of Buildings, Fresco Paintings, Furniture, etc., and is accompanied with full-size working-drawings—of direct use—Price to Subscriber One dollar per number.

Office 28 Pemberton Square, Boston, Mass



METALLIC SHINGLES.

We call the attention of all parties interested in Roofing, and the owner of large buildings, to the above article. It is superior to Slate, Cheaper, Fire proof, about one fourth the weight, lays much closer, therefore is Storm-proof, cannot Crack, etc. Any carpenter can put them on. Send for description and Price List to IRON CLAD MANUFACTURING CO., 60 Greenpoint Ave., Brooklyn, E. D. P. O. Box 2528, N. Y. City

We manufacture Slate Goods, through every operation, from quarry to completion.

THE FAIR HAVEN MARBLE AND MARBLEIZED SLATE CO. FAIR HAVEN, VERMONT.

The oldest and most extensive producers of SLATE MANTELS IN THE UNITED STATES.

We imitate more than fifty rare marbles and woods. Styles and workmanship unsurpassed. Special care given to making Mantels and other goods from architects' drawings. Being in close proximity to the best white American marble quarries, and with rare facilities for selecting stock and doing the work, we are also producing

MARBLE MANTELS

At the very lowest prices, and in the best manner possible. We also produce all kinds of plain slate and marble work

Look over this list and correspond with us and get our Catalogue.

- For: Green, Red, Variegated Roofing Slates. Same Color Slate, also White and Black Marble Tiles. Window Sills. Window Lintels. Water Table. Bell Courses. Ashlar. Solid Steps. Steps and Risers. Laundry Tubs. Urinals. Grave Covers. Vault Work. Carriers' Tables. Counter Tops. Billiard Table Beds. Blackboards. Brewers' Vats. Cisterns. Greenhouse Shelves. Plumbers' Goods, etc.

TO ARCHITECTS.

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the

Scagliola & Marezzo Marble,

Which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall and Altar Work

JAS. T. ALLEN & CO.,

25 North 17th Street, Philadelphia.

Should you want Ornamental Glass, write for particulars to



STEAM PIPE and

THE "AIR SPACE" BOILER COVERINGS

Save 10 to 20 per cent in fuel.

See Am. Architect and Building News, Dec. 15, 1877.

THE CHALMERS-SPENCE COMPANY.

140 Congress Street, Boston. Foot 9th St., E. R., New York.

CLASSIFIED ADVERTISEMENTS.

Table listing various categories and sub-categories such as ARCHITECTS, BRICK, GRANITE, and METALS, with corresponding page numbers.

Main table listing numerous companies and their addresses, including W. J. McPherson, Poulton & Eger, and others, with their respective locations.

**ETNA IRON CO.**

Manufacturers of every description of Wrought and Cast

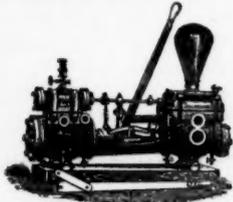
**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**

Patent



Steam

**PUMP**

**THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a speciality.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

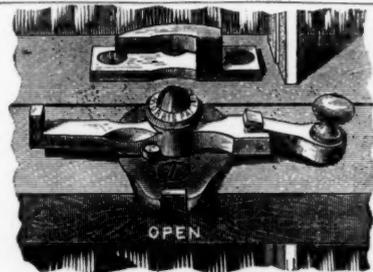
The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

**KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES, { 14 & 16 Federal St., } Boston.  
 { 113 & 115 Congress St., }  
 { 92 & 94 Liberty St., } New York.

Send for Illustrated Catalogue.



OPEN

**THE MORRIS BURGLAR-PROOF SASH LOCK.**

Patented July 2, 1878. The Safest! The Simplest! The Most Reliable! THE BEST!

N. B.—No springs to get out of order. Sold by all hardware jobbers. Manufactured by the MORRIS SASH LOCK MANUFACT'G CO., Office 168 Walnut St., Cincinnati, O. Price List and Samples furnished to the trade on application. A liberal discount to the trade.

**PATENTS.**

F. A. LEHMANN, Solicitor of Patents, Washington, D. C. NO PATENT NO PAY. Send for Circular.

**"ZODTCHY" (BUILDER).**

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

M. JEROME KÜTTNER,

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from EIGHT to SIXTYN pages of letterpress, gr. quarto, with cuts, and at least FIVE autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodychty," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICES FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.

The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address.

**JOURNAL "ZODTCHY,"**

10 OFFICE STREET, ST. PETERSBURG, RUSSIA.



**Carson's Kitchen Sink**

Is an improvement in this fixture that must meet with the approval of every house-keeper as it retains every particle of grease, and prevents the waste being better trapped than any other sink in use.

PAT'D JAN. 24 1877. Signall Mfg. Co., Medina, N. Y., or J. M. Carson, Louisville, Ky., Man'rs.

**NATIONAL**

**FINE ART FOUNDRY,**

318 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze TO ARCHITECTS AND BUILDERS.

**MAHOGANY, FIGURED WALNUTS,**

(all thicknesses) for Doors and Interior Finish.

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

GEO. DWIGHT, JR., & CO.,

Builders in Iron, and Engineers in Fire-Proof Construction,

SPRINGFIELD, MASS.

HAVE for many years given their exclusive attention to FIRE-PROOF CONSTRUCTION; and they now invite the correspondence of Architects to the following specialties which hereafter will constitute the leading items of their business: FIRE-PROOF FLOORS. The only floors that have stood fire in this country.

FIRE-PROOF ROOFS. Refer to Equitable Life Insurance Company's Building at Boston.

FIRE-PROOF SHUTTERS. Have stood many fires in all parts of the country. Over 6000 pairs put up in Boston after the fire. Saved the city of Springfield last year.

FIRE-PROOF LATH. In the words of one of the best-known architects of this country, "Minimum of metal, maximum of stiffness, maximum of clinch; the best lath ever made, either wood or iron." See New York Post-Office; State Department, Washington; Equitable Life Insurance Company's Buildings, and many others.

Mr. HOTT will be pleased to wait upon Architects, when desired, to explain our methods, and to present for inspection construction plans and estimates for any specific work.

**BURDITT & WILLIAMS,**

DEALERS IN

**FINE HARDWARE**

of every material. A specially complete stock of PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.

The Draft of the Chimney increased.

Smoking Chimneys Prevented.

Particularly adapted to Chimneys in exposed positions.

Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR,

70 Grand St., Brooklyn, N. Y.

CATALOGUE OF

**Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO.,

ARCHITECTURAL BOOK PUBLISHERS, 37 WARREN STREET, NEW YORK.



**BICKELHOUP BROS.,**  
 829 West 37th St., New York.

No Leak.



No Putty.

**PATENT METALLIC SKY-LIGHTS.**

BEEHIVE BRAND.

**FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**UNPARALLELED DISCOVERY.**

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the Paint Preserver invented by ASAHEL WHEELER, Boston. It will neither crack, blister, nor scale.



BALTIMORE PRESSED TILES, FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases, DRAIN AND SEWER PIPE, FIRE-BRICK, LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

WALDO BROTHERS, No. 94 WATER STREET, BOSTON.

**PEERLESS BRICKS.**

THE PEERLESS BRICK COMPANY,

OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK

ARCHITECTURAL SHAPES (80 kinds).

ALSO

RED Pressed Fronts.

Extra fine in color and quality

BROWN, Colored throughout

More beautiful than Brown Stone DURABLE

CHOCOLATE,

Same as above; difference in color

FLESH COLOR,

A very popular color.

BUFF, very fine.

Harmonises beautifully with Brown or Black

GRAY, A pleasing shade.

BLACK, Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F. ADAMS,

JOSEPH WOOD, JR.,

PRESIDENT.

TREASURER



DOLIVET, CUTTER, & CO.,

ARTISTIC

**Papier Maché Decorations,**

108 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance





**ROLLING Venetian Blinds.**

Wilson's Patent. For first-class Dwellings and Public Buildings.

These blinds can be fitted either inside or outside the sash, and are operated with ease without machinery or weights. They are made to coil above or below, as shown in cut. Can be furnished in any kind of wood. Unequaled for elegance, durability, and simplicity. Indorsed by many of the leading architects in the country, and in use in some of the handsomest buildings.

**WILSON'S PATENT Rolling Steel Shutters**

These blinds are operated on same principle as above (being self-coiling). They are used for closing store-fronts and all windows and doorways that are required to be perfectly fire and burglar proof.

Also, Rolling Wood Blinds for Store-Fronts, Book-Shelves, School Partitions, and other purposes.

A list of public and private buildings fitted with our Blinds sent on application. Architects and owners are invited to send for working models, catalogues, and price-lists.

WILSON & JAMES, 68 Beekman St., New York. Two Prize Medals at Philadelphia.

**PRIZE MEDALLISTS.** 1862; 1865; 1867; 1872; 1873; AND ONLY AWARD and MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,** ORIGINAL INVENTORS AND SOLE PATENTEES OF **NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Tilford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.

OFFICE AND MANUFACTORY. 162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO,** 76 READE STREET, NEW YORK, WORKS, DARLINGTON, N. J.

Lock and Hardware Manufacturers, DESIGNERS, FOUNDERS, AND WORKERS

**IN BRONZE AND BRASS.**

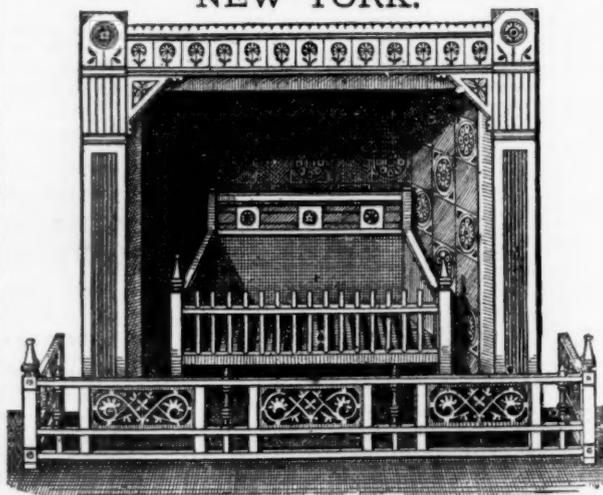
Architects' Designs faithfully executed.

Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side), NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile. HAVE NO OTHER WAREHOUSES.

**VALUABLE ART PUBLICATIONS.**

**HUNT'S** (WILLIAM M.) Talks on Art. 8vo. Paper, \$1.00.  
**CLEMENTS** (CLARA ERSKINE) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a Complete Index. Crown 8vo. Cloth, red edges, \$3.25.  
Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.

HOUGHTON, OSGOOD & COMPANY, Boston.

**A NOVELTY. THE YALE PATENT ANTI-FRICTION ROLLER STRIKE.**

Applicable for use with all Mortise Locks, old and new.

IT ENABLES THE DOOR TO BE SHUT WITHOUT SLAMMING. IT PREVENTS ALL JAR AND NOISE. IT SAVES WEAR OF THE LOCK AND DOOR. IT CAN BE EASILY APPLIED. ITS COST IS BUT TRIFLING.

Architects can obtain a sample strike free by addressing

YALE LOCK MANUFACTURING CO., STAMFORD, CONN. New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,

**SPECIALTIES IN PLUMBING GOODS.** 94 BEEKMAN STREET, NEW YORK.

**JENNINGS' NEW CLOSET, WITH New Valve**

Having for their special object **Cleanliness, Durability,** and the exclusion of Sewer Gas. With non-corrosive Valve Seating and Solid Plunger.

**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer Gas that has yet been invented.

**A POSITIVE SEAL**

Against sewer-gas, absorbed gases, and back water. Seal is not broken by syphonage or evaporation. Self-scouring, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers,

**B. P. BOWER & CO.,** 104 & 106 St. Clair St., Cleveland, O.

**THE EUREKA VENTILATION CO.** OFFICE AND MANUFACTORY, 74 CHARLESTOWN STREET, BOSTON, MASS.

**A. L. FAUCHÉRE & CO.** OFFICE AND WAREHOUSES 1319 and 1321 Broadway, New York,

Importers, Manufacturers, and Dealers in all kinds of foreign and domestic

**MARBLE FOR INTERIOR WORK.** Estimates furnished on application.

**ARCHITECTURAL IRON AND JAIL WORKS.**

**M. CLEMENTS,** MANUFACTURER OF Iron Railing, Bank Vaults, and Jail Cells, Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc. BAYMILLER STREET, near Sixth and C. H. & D. R. R. Depot, CINCINNATI, OHIO.

**STEWART'S SLATE, MARBLE AND HARD WOOD MANTELS.** MIRRORS, ART-TILES FOR MANTELS, HEARTH'S &c. Masotuc Temple 23<sup>d</sup> St & 6<sup>th</sup> Ave N.Y.

**Sewer Pipe, Fire Brick, Terra Cotta, Chimney Tops, Garden Vases, Art Pottery for Decoration.** The strongest and smoothest pipe in the country. Send for tests and Catalogue. Prices as low as any other manufacturer.

**Portland Stone Ware Co.** Geo. C. DUNN, Gen'l Ag't, 50 Kilby Street, Boston.

**LIMMER ROCK ASPHALT CO.** 111 Broadway, Room 105, New York. Rock Asphalt is a natural product, and the ideal material for Paving Roadways, Streets, Yards, and Stables, and for Flooring Cellars in Breweries and other establishments.

**Automatic Signal Telegraph Co.,** CITY OF BOSTON,

OFFICE, 178 DEVONSHIRE STREET, ROOM 20, Is prepared to make contracts for the protection of buildings against fire. DIRECTORS: CHARLES E. CHILD, President. WILLIAM ENDICOTT, JUN JOHN D. W. JOY. WILLIAM B. WATKINS. PATRICK T. JACKSON, Treasurer.

**THEATRICAL SCENERY AND STAGE SUPPLIES.** Theatrical Fresco only. Prices moderate. Refer ences first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited. LAFAYETTE W. SEAVEY. Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK

**THE WELLINGTON PATENT OVERFLOW BASIN**

No sewer gas. No overflow. No leakage around the top of the basin. This thoroughly reliable basin is rapidly taking the place of the ordinary one. It gives perfect satisfaction in every instance. Manufactured by **L. S. MOORE & CO.,** 40 Oliver St., Boston. Send for Circulars.



**SAYLOR'S PORTLAND CEMENT.**

Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R. U. S. Government Works (Forts and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally. For Sale by all dealers in Building Materials. **Johnson & Wilson, Gen'l Agts.** Send for circular. 93 Liberty Street, New York

SEP 20 1878 112587

# THE AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 144.]      SATURDAY, SEPTEMBER 28, 1878.      [PRICE 15 CENTS.

### BUILDERS' SUPPLIES.

**AMERICAN ENCAUSTIC TILE,**  
 Acknowledged by experts to be  
**THE BEST IN THE WORLD.**  
 Manufactured by the  
**AMERICAN ENCAUSTIC TILING CO. (Limited.)**  
 OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.  
 Designs and estimates for Public Buildings, Halls,  
 Churches, Vestibules, and for External Decoration, fur-  
 nished on application.

**WALWORTH MANUFACTURING CO.,**  
 60 KILBY ST., BOSTON.  
**PUBLIC BUILDINGS,**  
**PRIVATE RESIDENCES,**  
**GREENHOUSES, ETC.,**  
 Warmed and ventilated by  
**STEAM OR HOT WATER.**  
 Correspondence solicited. Plans and estimates furnished  
 on application.

**"HOTCHKISS" TOWER CLOCKS,**  
 MANUFACTURED BY  
**SETH THOMAS CLOCK CO., THOMASTON, CONN.**  
 Prices \$100 to \$6,000.  
**WARRANTED ACCURATE, STRONG, DURABLE.**  
 OFFICE, 581 BROADWAY, NEW YORK.  
 Send for Illustrated Catalogue.

**"MINTON'S ART AND ENAMELLED TILES."**  
 (China Works, Stoke-Up-on Trent.) Also, The Campbell  
 Brick and Tile Co.'s  
**ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS,**  
**ETC.**  
 For Churches, Banks, Halls, Vestibules, and Hearths;  
 Outside Decorations, Flower Boxes, Etc.  
**THOS. ASPINWALL & SON,**  
 604 Broadway, New York.  
 The only representatives in the United States for the  
 above firms.

**ASPHALT (FELT) ROOFING.**  
**WARREN'S NEW PATENT**  
**FELT AND GRAVEL ROOFING,**  
 Substitutes NATIVE ASPHALT for Coal-Tar materials for  
 these roofs.  
 The very best and most durable material for flat roofs.  
 Also, Native Asphalt and Asphaltic Cement for Concrete  
 Walks and Pavements.  
 Roofers and pavers supplied with the above, and with War-  
 ren's original Coal-Tar Roofing and Paving Materials.  
 Send for circulars and samples.  
**WARREN CHEMICAL AND MANUFACTURING CO.,**  
 28 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**THE MITCHELL GRANITE WORKS,**  
 QUINCY, MASS.,  
 Has abundant facilities for furnishing the very best work,  
 and all the most celebrated Granites of the New England  
 States, for  
**MONUMENTAL, CEMETERY, AND BUILDING**  
**PURPOSES.**  
**WORK PROMPTLY DONE, AND AT REASONABLE RATES.**  
 Polishing a specialty. Orders solicited.  
 Address G. H. MITCHELL, Agent.

**TILES FROM ALL PARTS OF THE**  
**WORLD,**  
 FOR  
**BANKS, PUBLIC BUILDINGS, AND PRIVATE HOUSES**  
 References given to Tile Work throughout the United  
 States and British Provinces  
 AGENT FOR THE AMERICAN ROOFING TILE  
 Contracts Solicited  
**C. A. WELLINGTON, HOUSEHOLD ART ROOMS,**  
 No. 171 TREMONT STREET, BOSTON.

**OHIO VALLEY PRESS BRICK CO.**  
 Challenge the world for fine stock Brick; also manufac-  
 turers of all kinds of Bricks, octagon and square. Office 63  
 2d St., Yard Preston and Knapp Sts.  
 LOUISVILLE, KY.

**HAWTHORNE & TUCKER,**  
 PLUMBERS,  
 16 PROVINCE STREET, BOSTON  
 Estimates for Plumbing made, and work done in any part  
 of the United States or Provinces.

**J. H. BURT & CO.,** Carpenters and Builders,  
 Blue Hill Avenue Mattapan (Ward 24), Boston.

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY**  
 OF NEW YORK.

**LEONARD F. BECKWITH, Pres't.**      **E. GILLET, Vice-Pres't.**  
 Hollow Blocks of any pattern, uniting strength and re-  
 sistance to fire and water. The Hydraulic Lime of Teil  
 (France), one of the strongest cements known, is largely  
 used in this manufacture. The blocks do not conduct  
 heat, cold, or sound, and weigh 60 per cent less than brick.  
 Fire-proof Partitions, Floor Arches between iron or wooden  
 beams, and ceilings under iron or wooden beams, erected  
 in following buildings:  
 Western Union Telegraph,      Orient, and Queens' Ins.  
 Coal and Iron Exchange,      Museum of Natural Hist.  
 Equitable, Staats Zeitung,      Hudson R. R. Fr. Depot.  
 Wmsburgh Savings Bank,      N. Y. Hospital, Drexel,  
 Windsor, & Wm'tester Hotels,      Cluny, & Young's Hotel, Bos'n,  
 Syracuse Savings Bank,      West Point Military Hosp.,  
 Columbia College, Tribune,      Coryell, & Vancorlar Flats,  
 Baltimore Safe Deposit Co.      Peabody Inst., Baltimore,  
 Peabody Museum, N. Haven,      Westmoreland, & Elisee Flats,  
 Sidewalks laid at Lenox Library, Tribune, etc.  
 Hollow Burnt Clay Bricks, for flat and curved arches,  
 partitions, etc., and Skewbacks for brick arches.  
 Sole agents for the U. S. for **HYDRAULIC LIME OF TEIL,**  
 and **LAFARGE PORTLAND CEMENT.**  
 Sole agents for the U. S. for **METTLACH ENCAUSTIC TILES,**  
 laid in Tribune, Staats Zeitung, Mineral Spa, Central Park,  
 Belvidere Hotel, etc.  
 Sole agents for the Atlantic States for **WIGHT'S FIRE-  
 PROOF COLUMNS.**  
 Our Fire-proof work is the only one approved by the  
 New York Board of Fire Underwriters and the Superin-  
 tendent of Buildings, after severe public tests.  
 Office Room 54 COAL AND IRON EXCHANGE, 21 Courtlandt  
 Street, New York. Represented in Boston by  
**BOORMAN & Co., 5 Doane St.**

**E. HOWARD & CO.**  
 MANUFACTURERS OF CLOCKS AND WATCHES  
**CLOCKS FOR PUBLIC BUILDINGS**  
 114 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**  
**PLAIN AND ENCAUSTIC**  
**FOR PUBLIC BUILDINGS AND DWELLINGS,**  
 As laid by us in  
**THE CAPITOL AT WASHINGTON,**  
 And in numerous Churches, Banks, and Dwellings in every  
 part of the Country,  
 Glazed and Enamelled Tiles for Mantels, Hearths, Wain-  
 scoting, &c., and for Exterior Decoration.  
**MILLER & COATES,**  
 270 PEARL STREET, NEW YORK.

**BARTLETT, ROBBINS & CO.**  
**HEATING AND VENTILATING OF PUBLIC AND**  
**PRIVATE BUILDINGS**  
**A SPECIALTY**  
 PLANS AND SPECIFICATIONS FURNISHED.  
**FOUNDERS, AND MANUFACTURERS OF GAS WORKS,**  
 ETC., ETC.  
 24 LIGHT STREET, BALTIMORE.

**THE NEW ENGLAND GRANITE WORKS**  
 HARTFORD, CONN., and 1521 BROADWAY, N. Y.  
 Quarries at Westery, R. I.  
**MONUMENTAL AND BUILDING WORK**  
 of every description, all the varieties of  
**AMERICAN AND FOREIGN GRANITE.**  
**UNEQUALLED FACILITIES OFFERED TO THE TRADE.**  
**J. G. BATTERSON, Pres't.**      **H. B. BATTERSON, Sec'y.**  
**G. T. BATTERSON, DIRECTORS.**  
**J. G. BATTERSON, C. B. CANFIELD, H. A. BATTERSON**  
**G. T. BATTERSON,**  
**CARL CORNARDS, Sculptor.**

**WHITTIER MACHINE CO.**  
 Manufacturers of Steam and Hydraulic  
**ELEVATORS,**  
**STEAM ENGINES, BOILERS, AND MACHINERY.**  
 No. 1175 Tremont Street, Boston.  
 Office in the New England Mutual Life Insurance Co's  
 Building, Post Office Square,  
 and 120 Broadway, New York  
**CHARLES WHITTIER, Pres't.**      **A. C. WHITTIER, Treas't.**

**OTIS BROTHERS & CO.**  
**SAFETY STEAM AND HYDRAULIC**  
**ELEVATORS.**  
 A specialty for a quarter of a century.  
**BUILDERS OF THE HALE HYDRAULIC ELEVATOR**  
 No. 343 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
**OHIO BUILDING STONE.**  
**GRIND AND SOTTER STONE,**  
 From our **FLORENCE** and **AMHERST QUARRIES.**  
 Also, from **NEW YORK, NEW JERSEY, and MASSACHUSETTS.**  
 111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
 Designers and Manufacturers of  
**GAS FIXTURES,**  
**ORNAMENTAL METAL WORK, CLOCKS AND BRONZE**  
**ARCHITECTS' ORDERS SOLICITED.**  
 Special designs submitted on application.  
**WAREHOUSES, 538 AND 539 BROADWAY, NEW YORK.**  
**MANUFACTORY, 24th AND 25th Sts., AND 10th AVENUE, N. Y.**

**FISHER & BIRD,**  
 Workers in all kinds of Foreign and Domestic  
**MARBLES,**  
 97 TO 103 EAST HOUSTON ST., NEW YORK.  
 Established 1830.

Among our notable decorations are: The Illinois new  
 State House; Palace Hotel, San Francisco; Baldwin's Ho-  
 tel, San Francisco; Insurance Building, 10th and Chestnut  
 Streets, Philadelphia; Mutual Life Insurance Building  
 Boston; Orient Mutual Insurance Building, New York;  
 Union College, Schenectady; and numerous Churches,  
 Private Residences, etc., etc., throughout the country. We  
 solicit the opportunity to estimate upon all classes of work,  
 viz., Tiling, Wainscoting, Staircases, Mantels, etc. Ceme-  
 tery work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
 Are ready to estimate on contracts of any size for  
 furnishing their celebrated Amherst, Ohio,  
**BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS**  
**OR CUT AND SET.**  
 Also,  
**AMHERST AND INDEPENDENCE GRINDSTONES,**  
 And **OHIO MINERAL AND STONE PAINTS**  
 Fire-Proof Stove Cement and Stove Putty ground in Oil  
 OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MO-  
 SAICS." Floor Tiles, beautiful in color and design, for**  
 Dwellings, Churches, and Public Buildings.  
**SPANISH WALL TILES.** White, Glazed, Valencia,  
 Tiles for Walls and for decorative painting.  
**PRINTED FIGURED TILES** of Spanish designs, for  
 Wainscoting, Mantels, Jardinières, etc.  
 Floors of "Nolla Mosaics" can be seen at the "Rock-  
 ingham," corner of Broadway and 56th Street. Imported  
 and for sale by **JOHN CHADWICK, Sole Ag't for U. S.,**  
 49 Broadway, N. Y.  
**C. E. PARKER, Agent, 14 Exchange Place, Boston.**

**TUFTS' ELEVATOR WORKS,**  
 MANUFACTURERS OF "TUFTS' PATENT" COMBI-  
 NATION ROPE ELEVATOR.  
 To be OPERATED EITHER BY STEAM OR WATER.  
 The only safe and reliable machine made for Passenger use  
 in Public Buildings and Hotels, and for business purposes in  
 Warehouses, Stores, &c.  
 37 FOUNDRY STREET, SOUTH BOSTON.  
 OFFICE, 243 Broadway, New York.  
**OTIS TUFTS,**      **L. A. BIGELOW,**  
 President.      Treas'r and Gen'l Manager.

**STEAM WARMING APPARATUS.**  
**HIGH AND LOW PRESSURE.**  
**HOUSE WARMING A SPECIALTY.**  
 Pamphlet with more than 1,900 references sent on appli-  
 cation.  
**WYLLYS H. WARNER,**  
 114 LEONARD STREET, NEW YORK,  
 and 33 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**  
 No. 6 COURTLAND ST., NEW YORK.  
 Works at Paterson, N. J.  
**PATENT SAFETY STEAM ELEVATORS**  
 for Public and Bank Buildings, Hotels, Private Dwell-  
 ings, etc.  
**SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP**  
 GUARANTEED.  
 Send for Circular.

## BUILDERS' SUPPLIES.

## GOLD'S WROUGHT IRON HEATERS.

THE "HEALTH" AND "TUBULAR"  
Manufactured by the  
GOLD'S HEATER MANUFACTURING CO.  
114 LEONARD ST., NEW YORK.

W. E. GOLD, Freet WYLLYS H. WARNER, Tron.

## HUGH SISSON &amp; SON,

Importers, Dealers, and Manufacturers of  
MARBLE.

INTERIOR MARBLE WORK AND MONUMENTAL  
WORK A SPECIALTY.  
Salesrooms, No. 140 W. Baltimore St.; Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.

ELECTRIC BELL, AND ANNUNCIATORS,  
SPEAKING TUBES,  
AND BURGLAR ALARMS.

For Public and Private Buildings.  
THE BEST IN USE.  
S. W. FULLER,  
63 Devonshire Street, Boston.

## ART PAINTED TILES

FOR MANTELS, CABINETS, ETC.

SHARPLESS & WATTS,  
925 MARKET STREET, PHILADELPHIA.  
Agents for  
MINTON'S TILES,  
AND TRESSELLATED PAVEMENTS.

## JOHN MACK, Plain and Ornamental Plasterer.

41 Cambridge Street, Boston.

## BUILDING MARBLE.

Branch yard of the RUTLAND MARBLE CO., 198 Causeway  
Street, Boston. JOHN D. ALLAN, Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Rutland  
and Continental Marble, furnished at low prices.

PRESSED BRICK,  
STOCK AND COMMON

MANUFACTURED BY  
FLETCHER & THOMAS,  
Indianapolis, Ind  
All brick warranted. Send for price list and samples.

## STEAM HEATING

BY

## GILLIS &amp; GEOGHEGAN,

Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 50th St. and 5th Av.;  
Drexel Building, cor Wall and Broad; Bennett Building,  
Fulton and Nassau, etc.  
Architects and owners promptly furnished with specifications  
and estimates.

## ARCHITECTS.

## P. B. WIGHT,

CONSULTING ARCHITECT,

73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.

Consultations on matters pertaining to Fire-Proof Construction,  
Foundations, Drainage, Sanitary Work, Ventilation,  
Machinery, Valuations, Interior Decorations, and  
Furniture. Manager of the Meaker Hatchway Protectors.

## RICHARD M. HUNT,

ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

W. W. GOODRICH, C. E., ARCHITECT  
AND SANITARY ENGINEER

KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes  
of Public or Private Buildings, Monumental Designs, etc.

## CHARLES E. ILLSLEY, A.M., C.E.,

ARCHITECT,  
Room 17, Life Insurance Building,  
ST. LOUIS, MO.

Special attention to Churches, Schools, and other  
public buildings.

WALTER ARCHITECT. PERRY  
DICKSON, Albany, N. Y. BUILDING.

## GEO. E. WARING, JR.,

CONSULTING ENGINEER,  
FOR SANITARY AND AGRICULTURAL WORKS,  
NEWPORT, R.I.

## SANITARY ENGINEERING.

EDWARD S. PHILBRICK, C. E..  
13 West St., Boston, Mass.,  
Offers advice and superintendence in  
CONSTRUCTION OF WORKS,  
PLUMBING, DRAINAGE, AND VENTILATION,  
And has no interest in any patent right.

## BUILDERS' SUPPLIES.

E. VAN NOORDEN,  
887 HARRISON AVENUE . . . . . BOSTON,  
SHEET METAL CORNICES, HAYES'S PATENT  
VENTILATING SKY-LIGHTS,  
WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

## MANTELS AND GRATES.

RANKIN'S PATENT makes the Cleanest, Cheapest,  
and Hottest Fire. Avoid infringements, and send for  
Circular to

C. S. RANKIN & CO.,  
ARCHITECTURAL IRON WORKS,  
Manufacturers of all kinds of Iron Work for  
BUILDINGS, JAILS, ETC.  
187 W. PEARL ST., CINCINNATI, O.

EXCELSIOR  
ROOF PAINT.

This paint has been thoroughly tested throughout the  
Eastern States, and has been found to be a perfect tin or  
metallic preserver. We warrant it neither to crack nor  
blister by HEAT or COLD, and to last

IN ANY CLIMATE TEN YEARS.

Those desiring to use this valuable preparation upon  
their buildings, can secure the same by addressing

C. M. WHEELER, J. M. ROOT,  
Toledo, Ohio.

## DECORATORS.

## W. J. MCPHERSON,

(Established A.D. 1845.)

## MURAL PAINTER,

## DESIGNER,

## Ecclesiastical Decorator,

AND

## ART STAINED GLASS MANUFACTURER,

440 TREMONT STREET,

BOSTON, MASS.

## STAINED GLASS.

Thirty years' experience in Stained Glass enables the  
subscriber to produce Modern and Medieval styles of work  
equal to any European examples, for Churches, Private  
Residences, Halls, etc.

The value of the work is attained by a careful selection  
of colors in Cathedral and French Glass of his own importation.

Designs in accord with architects' plans furnished at  
short notice. Reference of work at office

SAMUEL WEST, 115 Eliot St., Boston

## FRANK HILL SMITH,

117 1/2 TREMONT STREET,

BOSTON . . . . . MASS.

## COOK, REDDING &amp; CO.

149 CONGRESS ST., BOSTON,

## Ornamental, Stained, and Cut Glass,

FOR

Churches, Public Buildings, and  
Private Residences.

## Raphael and Michelangelo.

A Critical and Biographical Essay. By  
CHARLES C. PERKINS. 8vo. Many Illustrations,  
including several Heliotypes. \$5.00.

The long devotion of Mr. Perkins to the study of art  
has borne noble fruit in this beautiful volume. The idea  
of combining in one work a series of interlinked sketches  
of the two great representative artists of the age of Julius  
II. and Leo X. was in every respect fortunate; for they  
respectively illustrate power and beauty, sportive and  
earnest labor, as no other contemporaries. . . . His style  
is that of a scholar and a man of taste—simple, lucid,  
graceful, and even throughout. It has much of the quality  
of that of Hermann Grimm, in his two similar biographies.  
The profuse illustrations—although some of them  
are rather coarsely printed—are a positive boon to the  
reader.—*New York Tribune.*

\* \* \* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Boston.

## DECORATORS.

JOHN LAFARGE,  
MURAL DECORATION,  
51 W. Tenth St., New York, and Newport, R. I.

## SOCIETY OF DECORATIVE ART.

4 East 20th Street,  
NEW YORK.

Architects' designs for panels, tiles and plaques for insertion  
in Cabinet Work, and other decorative uses, and for  
Art Needlework applied to curtains, hangings, portieres,  
screens, table-covers, etc., carefully executed. Original  
designs for any of the above, subject to approval, will be  
gladly received, and paid for by the Society when used.  
Orders are earnestly solicited.

The Society has arranged with Mr. RUSSELL STUBBS,  
Architect, for the Exhibition and Sale of his well-known  
Wall Papers. Some of these are faithful reproductions of  
Japanese decorative papers; some are taken from Oriental  
and other stuffs; some are of original design. New patterns  
will be added from time to time.

## Fresco Decoration.

## EMMART &amp; QUARTLEY,

Designers, Decorators, and Painters,

32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made  
and executed in harmony with the plans of Architects.

## SLATE MANTELS

Of the latest and most beautiful designs, and all other Slate  
work on hand or made to order. No. 1210 Ridge Avenue.  
JOSEPH S. MILLER successor to Wilson & Miller, Philadelphia,  
Pa. Send for Illustrated Price-List

## Donald MacDonald,

## GLASS STAINER AND DECORATOR

No. 6 Hayward Place,

BOSTON



## INLAID WOOD FLOORS.

ORNAMENTAL WOOD BORDERS.

Designs and Estimates free.

National Wood Manufg Co.,  
950 Broadway, near 93d St., New York

## PHILIP A. BUTLER,

DECORATOR AND DESIGNER,

No. 17 FERRISBURY SQUARE,  
BOSTON.

## HENRY B. JONES &amp; CO.

IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS,  
612 WASHINGTON STREET, BOSTON.

## L. HABERSTROH &amp; SON,

FRESCO PAINTERS,  
and INTERIOR DECORATORS,  
No. 12 SCHOOL STREET, BOSTON.

## Discoveries at Ephesus.

Including the Site and Remains of the Great  
Temple of Diana. By J. T. WOOD, F. S. A.,  
Fellow of the Royal Institute of British Architects.  
With numerous Illustrations from Original  
Drawings and Photographs. Imperial 8vo.  
Gilt top, beveled boards. \$20.00.

The story that the explorer here tells has all the fascination  
of heroic romance. He is able to give accurate  
elevations of the building, together with interesting drawings  
of many of its bas-reliefs and other ornamental parts.  
He has unearthed also the Odeum or lyric theatre of Ephesus,  
and the great theatre, laying bare their seats, aisles,  
stage, etc., and discovering there very many inscriptions  
of great historical value, which are now in the British Museum.  
The book is one of surpassing interest.—  
*New York Evening Post.*

Mr. Wood's results have been, if not splendid, at least  
solid and of imperishable value.—*London Academy.*

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.*	Cincinnati.	Indianapolis.	New York.	Ottawa. (Can.)	Philadelphia.	San Francisco	St. Louis.
1 BRICKLAYER.....	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2 Brick Mason (Fronts).....	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50		3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00		3.00
3 CARPENTER.....	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25		1.50 @ 2.00
4 Cabinet Maker.....	2.50 @ 3.25		1.75 @ 2.25			1.50 @ 3.00	1.50 @ 2.00			1.50 @ 2.00
5 Finisher.....	2.00 @ 2.50		1.50 @ 2.00			1.50 @ 3.00	1.25 @ 1.75			1.50 @ 2.00
6 FOUNDBYMAN.....			1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50			2.25 @ 2.50
7 Blacksmith.....	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 2.00			1.50 @ 2.50
8 Whitesmith.....			1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.75			2.25 @ 2.50
9 Galvanized Iron Worker.....	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00			2.25 @ 2.50
10 GAS FITTER.....	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.25	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 2.00	1.75 @ 2.00			2.00 @ 3.00
11 LABORER.....	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50		1.00 @ 2.00
12 PAINTER.....	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13 Glazier.....	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00		2.00 @ 3.00	1.50 @ 1.75	2.00 @ 2.50		3.50
14 Grainer.....	.75 @ 2.50		1.75 @ 2.00			2.00 @ 3.00	1.75 @ 2.50			2.00 @ 3.00
15 Paper-Hanger.....	1.50 @ 2.50	2.00 @ 2.50	1.75 @ 2.00	2.00	1.50 @ 2.00	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00		2.25 @ 2.75
16 PLASTERER.....	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	1.50 @ 2.50		2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
17 Stucco-Worker.....	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	1.50 @ 2.50		2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
18 PLUMBER.....	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.50	2.50 @ 3.50	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50			2.50 @ 3.50
19 QUARRYMAN.....		3.00 @ 3.50	1.10 @ 1.25		1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20 Stone Mason.....	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21 Carver.....	3.00	3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75	8.00	2.00 @ 2.50	3.50 @ 6.00	2.75 @ 3.25		2.00 @ 2.50
22 Pointers and Washers.....		2.25 @ 3.00	1.50 @ 1.75	1.50 @ 1.75		1.50 @ 2.50	1.00 @ 1.25	2.25 @ 2.50		2.00 @ 2.50
23 Rubber.....	1.50 @ 2.00	1.75	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75		2.00 @ 2.50
24 Stone-Cutter.....	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	2.50	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.75		2.00 @ 2.50
25 Stone-Setter.....	3.00	2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	2.75	2.00 @ 2.50	1.50 @ 2.00	2.25 @ 2.75		2.00 @ 2.50
26 ROOFER (Tin).....	2.00 @ 2.35	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25		2.00 @ 2.25
27 Slatier.....	2.50 @ 3.00	2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00	2.00	2.00 @ 2.25	1.25 @ 2.00	1.75 @ 2.25		3.00
28 STAIR BUILDER.....	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25			1.50 @ 2.50
29 STEAM FITTER.....		2.50 @ 3.00	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00

AMERICAN ARCHITECT AND BUILDING NEWS.

PRIZES.

The attention of draughtsmen and architectural students is directed to the following announcement of a way in which valuable and useful books can be added to their professional library.

SUBSCRIPTION PRIZES.

The Publishers will send, postpaid, the following prizes to the draughtsman, student, or regular canvasser, who, complying with the conditions, shall secure subscribers for the *American Architect and Building News* :—

- I. For two new subscribers, a year's subscription to the *American Architect and Building News*..... \$6.00
- Or, "Story of a House," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00
- Or, "Annals of a Fortress," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00
- II. For four new subscribers, a bound volume of the *American Architect and Building News*, vol. i. or ii., price..... 9.00
- Or, "Examples of Ancient and Modern Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 8.00
- Or, "Discourses on Architecture," translated from the French of M. Viollet-le-Duc, illustrated, price..... 8.00
- III. For eight new subscribers, both bound volumes of the *American Architect and Building News*, price..... \$18.00
- Or, "Gothic Forms applied to Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 15.00
- Or, "Art Foliage for Sculpture and Decoration," by J. K. Collins, royal quarto, illustrated by 72 plates, price..... 15.00
- Or, "Examples of Modern Architecture, Ecclesiastical and Domestic," being designs by Messrs. Scott, Street, Liddon, and other noted architects, illustrated by 64 quarto plates, price, 15.00
- IV. For fifteen new subscribers, the "Decoration and Ornamentation of the Nineteenth Century," by Liénard, illustrated by 100 folio plates, price..... 27.00

In lieu of these books the canvasser may obtain books of equal value selected from our trade list, or may obtain as equivalent the value of the prize in Heliotype engravings, selected from our collection, which numbers over three hundred.

The conditions to be observed are :—

1. The subscribers must in all cases be new subscribers.
2. The subscription must be paid in advance directly to the Publishers by check or money order; but in no case to the canvasser.
3. If canvassers adopt the method of sending to us one subscriber at a time, they must state at such time for which one of the before-mentioned prizes they are canvassing.
4. The prizes will not be delivered until all subscribers have paid in full

N.B. — These prizes are not cumulative; i. e., a canvasser who sends us fifteen new subscribers cannot claim successively the prizes I, II, III, and IV; or in other words, to obtain all four prizes a canvasser must send us twenty-nine new subscribers.

A canvasser who has stated that he is trying to secure one of the highest prizes may in the case of failure claim such lesser prize as is warranted by the number of subscriptions actually paid.

No claims will be allowed for subscriptions secured before Jan. 1, 1878.

HOUGHTON, OSGOOD AND COMPANY, Publishers, Boston.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

GALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States.

Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO. 72 & 74 West Monroe St. Chicago, Ill.

A SACHEL GUIDE.

FOR THE VACATION TOURIST IN EUROPE. Revised Edition for 1878. With Maps. 16mo, flexible cloth, \$2.00. HOUGHTON, OSGOOD & CO.



NONESUCH Self-Locking AND Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.

Patented July 10th, 1877

AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT. MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS. Regular Sizes, 2, 3, 4, 5 & 6 inch. SPECIAL SIZES MANUFACTURED TO ORDER. AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS. 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA. WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS. AND WILL BE TREATED AS SUCH.

- PRINCIPAL AGENTS.
- M. Halliday
  - Hicks & Badger
  - James Berry
  - George W. Pitkin & Co.
  - Wasson & Martin
  - McLeod, Beardon & Co.
  - W. H. Scott
  - Kittredge Cornice Co.
  - J. W. Jordan
  - B. G. Carpenter & Co.
  - T. W. Irwin
  - Sellew & Co.
  - New York City
  - Boston, Mass
  - Buffalo, N. Y.
  - Chicago, Ill
  - Albany, N. Y.
  - Troy, N. Y.
  - Portland, Me.
  - Salem, O.
  - Worcester, Mass.
  - Wilkesbarre, Penna.
  - Alleghany City, Penna.
  - Cincinnati, Ohio

RECOMMENDED BY ARCHITECTS AND ENGINEERS. IMPERIAL GAS MACHINE. SEND FOR CIRCULAR. DENNY BROS & CO.



BIBB'S Celebrated Original Baltimore Fire Place Heaters. Mantels and Registers. B. C. BIBB & SON, Baltimore, Md. Best workmanship. Lowest prices guaranteed. Send for circulars.

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the art-workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. P'ANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist, Boston.*

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courant.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVES. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIÉNARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11¼ X 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOthic FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOLETTE-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

The works of the learned and distinguished French Architect, EUGENE VIOLETTE-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

## Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — EUGENE BENSON, in *The College Couant.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

## The New York Sketch-Book of Architecture.

3 vols., 4to, \$6.50 each.

We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

## The American Architect and Building News.

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\* \* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers.

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

(Reported for the American Architect and Building News.)

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, CEMENT, and DOORS. Includes items like 'Pale Jersey', 'Long Island', 'Up-River', 'Haverstraw Bay choice', 'Haverstraw Bay', 'Croton - Brown', 'Croton - Dark', 'Croton - Red', 'Philadelphia', 'Trenton', 'Baltimore'.

Table listing prices for CEMENT. Includes 'Rosendale', 'Portland (Imported)', 'Portland (Saylor's American)', 'Roman', 'Keene's coarse', 'Keene's fine'.

Table listing prices for FIRE BRICK. Includes 'Red Welsh', 'Scotch', 'American'.

Table listing prices for DOORS. Includes 'Raised Panels, two Sides' with various sizes and 'Moulded' with various sizes.

Table listing prices for BLINDS - Outside. Includes 'Per lineal, up to 2.0 wide', 'Per lineal, up to 3.1 wide', 'Per lineal, up to 3.4 wide', 'Per lineal, painted and trimmed'.

Table listing prices for WINDOW FRAMES. Includes 'Up to 3.4 x 7.2, put together', 'HAIR - Duty free', 'Cattle', 'Goat', 'LATH - Cargo rate'.

Table listing prices for LIME. Includes 'State, common, cargo rate', 'State, finishing', 'Rockland, common', 'Rockland, finishing', 'round'.

Table listing prices for LUMBER. Includes 'Pine, choice, extra dry', 'Pine, good', 'Pine, plank, 1/2, 1 1/2, dr's a'ea', 'Spruce boards, dressed', 'Spruce plank, 1/2, dressed', 'Spruce plank, 2 1/2', 'Spruce timber', 'Hemlock boards', 'Ash, good', 'Oak', 'Chestnut', 'Walnut, bl'k, good to choice', 'Walnut, bl'k, choice seasons', 'Cherry, good', 'Whitewood, chair plank', 'Whitewood, inch', 'Shingles extra shaved pine', 'Yellow pine dressed flooring'.

Table listing prices for PAINTS AND OILS. Includes 'Whiting', 'Paris white, English', 'Zinc white, in oil', 'Lead white, in oil', 'Ochre, French, dry', 'Venetian red, English', 'Chrome yellow, in oil', 'Litharge, pure', 'Putty', 'Sienna, in oil', 'Umber, burnt', 'Umber, raw', 'Black Lamp', 'Black Paint, in assorted cans', 'W. Bros. & H's Bay State Colors in kegs or pails'.

Table listing prices for LIME. Includes 'Quoted at 85c. per cask for Rockland and Rockport'.

Table listing prices for CEMENT. Includes 'Rosendale', 'Portland', 'Roman', 'Keene's coarse', 'Keene's fine'.

Table listing prices for NAILS. Includes '10d', '8d', '6d', '4d', '3d', '2d', '1d'.

Table listing prices for AXLE PULLEYS - Steel. Includes '2-in., Pennsylvania make', '2-in., Boston make'.

Table listing prices for SASH WEIGHTS. Includes 'SASH LINE', 'Best hemp', 'Best linen'.

Table listing prices for DOOR BUTTS. Includes 'Japanned Acorn', 'Paris bronze Iron', 'Ornamental Bronzed Iron', 'Ornamental Bronze Metal'.

Table listing prices for STONE. Includes 'Amherst freestone, in rough', 'Berlin freestone, in rough', 'Berca freestone, in rough', 'Brown stone, Belleville, N. J.', 'Granite rough', 'Canaan Marble', 'Dorchester, N. B., stone, rough', 'Dorchester, N. B., stone, smooth'.

Table listing prices for SLATE. Includes 'Purple roofing slate', 'Green slate', 'Red slate', 'Bl'k slate, Penn. (Jersey City)', 'Pitch bottom (nominally)', 'Teach, 1/4 in. rubbed, per sq. ft.'.

Table listing prices for TIN PLATES - Duty, 11-10c. Includes 'I. C. charcoal, 10 x 14 box (cur.)', 'I. C. coke, 10 x 14', 'I. X. charcoal, 10 x 14', 'I. X. charcoal, 14 x 20', 'I. C. coke, 14 x 20', 'I. C. coke, terme, 14 x 20', 'I. C. charcoal, terme, 14 x 20'.

Table listing prices for ZINC. Includes 'Sheet (gold) foreign', 'LEAD', 'Bar', 'Sheet'.

Table listing prices for BOSTON. Includes 'FIRE BRICK', 'BUILDING BRICKS', 'BUILDING STONE', 'LUMBER', 'PAINTS AND OILS'.

Table listing prices for BOSTON. Includes 'Whiting', 'Paris white, English', 'Zinc white, in oil', 'Lead white, in oil', 'Ochre, French, dry', 'Venetian red, English', 'Chrome yellow, in oil', 'Litharge, pure', 'Putty', 'Sienna, in oil', 'Umber, burnt', 'Umber, raw', 'Black Lamp', 'Black Paint, in assorted cans', 'W. Bros. & H's Bay State Colors in kegs or pails'.

Table listing prices for BOSTON. Includes 'Quoted at 85c. per cask for Rockland and Rockport'.

Table listing prices for BOSTON. Includes 'Rosendale', 'Portland', 'Roman', 'Keene's coarse', 'Keene's fine'.

Table listing prices for BOSTON. Includes '10d', '8d', '6d', '4d', '3d', '2d', '1d'.

Table listing prices for BOSTON. Includes '2-in., Pennsylvania make', '2-in., Boston make'.

Table listing prices for BOSTON. Includes 'SASH LINE', 'Best hemp', 'Best linen'.

Table listing prices for BOSTON. Includes 'Japanned Acorn', 'Paris bronze Iron', 'Ornamental Bronzed Iron', 'Ornamental Bronze Metal'.

Table listing prices for MORTISE LOCKS - Brass face and bolt - easy spring. Includes '3/4 to 1 1/2 in.', 'Do., for front doors', 'Factory make, plain front', 'Boston make, plain front'.

Table listing prices for DOOR KNOBS. Includes 'Solid glass', 'Silvered glass', 'Cut glass', 'Nickel plated', 'Bronze metal'.

Table listing prices for SASH FASTS. Includes 'Plain brass', 'Plain brass, self-locking', 'Nickel plated, self-locking', 'Bronze metal, self-locking'.

Table listing prices for SCREWS. Includes 'Rochester, nickel plated', 'for window beads'.

Table listing prices for STORE DOOR HANDLES - With mortise latch. Includes 'Lacquered brass', 'Bronze metal'.

Table listing prices for IRON. Includes 'Wrt-iron I Beams (J. I. Reed & Co.)', 'Wrt-iron I Beams', 'Wrt-iron Chan'l Beams', 'Wrought iron', 'Wrought Girder Plates', 'Wrought Girder Rivets'.

Table listing prices for CHICAGO. Includes 'BRICK, LIME, AND CEMENT', 'Lime, in bulk', 'Chicago building brick', 'Sewer brick', 'Indiana pressed brick', 'Fire brick', 'Cement, Culea and Louisville', 'Cement, Akron', 'Eagle, Portland', 'Portland, English', 'Wagon box boards', 'Plaster paris, Mich.', 'Plaster paris, N. Y.', 'Fire clay', 'Plastering-hair, pig bush'.

Table listing prices for CHICAGO. Includes 'LUMBER (Michigan PINE)', '1st and 2d clear, 1 to 2-in.', '3d clear, 1-in.', 'B stock boards, 10 to 12-in.', 'C stock boards, 10 to 12-in.', 'Common stock boards, 12 in.', 'Common boards, 12 to 20 ft.', 'Fencing, 12 to 16 ft.', 'Round cedar posts', 'Joist and scantling, 12 @ 18 ft.', 'Joist and scantling, 20 ft.', 'Joist, 1st and 2d clear, rough', 'Flooring, 1st common, rough', 'Flooring, 2d common, rough', 'Flooring, 1st common, dressed', 'Flooring, 2d common, dressed', 'Siding, 1st common, dressed', 'Siding, 2d common, dressed', 'Timber, sawed, 12 @ 16 ft.', 'Pickets, sawed', 'Wagon box boards, 12-in. and upward A', 'Shingles, sawed A', 'Shingles, sawed, No. 1', 'Lath', 'Dry A shingles, on track'.

Table listing prices for CHICAGO. Includes 'HARDWOOD LUMBER', 'Whitewood, clear', 'Whitewood box boards, A', 'Whitewood box boards, B', 'Whitewood select', 'Whitewood, common', 'Whitewood cull', 'Ash, clear flooring, 3 and 4-in., dressed and matched', 'Ash, clear flooring, 6-in. dressed and matched', 'Oak, clear', 'Oak, common', 'Hickory', 'Walnut, bl'k counter-tops', 'Walnut, bl'k clear', 'Walnut, bl'k 1st and 2d', 'Walnut, bl'k common', 'Walnut bl'k culls', 'Walnut, bl'k clear flooring, 3 and 4-in. dressed and matched', 'Cherry, first and second', 'Butternut, first and second', 'Maple, clear flooring, 4 and 6-in., dressed and matched', 'Mahogany, 7/8 foot', 'White holly, 7/8 foot'.

Table listing prices for CHICAGO. Includes 'TINNERS' STOCK', 'Tin plate, 1 C 10 x 14, charcoal', 'Tin plate, 1 X, 10 x 14, charcoal', 'Tin plate, 1 C, 12 x 12, cha coal', 'Florida red cedar, 7/8 foot', 'Mahogany, 7/8 foot', 'White holly, 7/8 foot'.

Table listing prices for CHICAGO. Includes 'COPPER', 'Bottoms, 20c.; sheathing copper, 30c.', 'SHEET ZINC', 'Full casks, 7c.; slabs, 8 1/2 @ 9c.', 'SHEET IRON', 'No. 24, 3 c. rates; Russia iron, No. 9 to 12, 13c.; do. No. 1, staled, 12c.; American planished A, 11c.; B, 9c.; galvanized iron, No. 26, 14c., with discount of 40 per cent.', 'WIRE', 'Nos. 1 to 4, 9c.; 5 to 9, 10c.; 10 to 11, 11c.; 12, 11c.; 13 and 14, 12c.; 15 and 16, 14c.; 17, 15c.; 18, 16c.; 19, 18c.; 20, 20c. Discount of 45 per cent.', 'NAILS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coch black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 3.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00', 'OILS', 'Lined, raw, 65c.; boiled, 68c.', 'Turpentine, 38c.', 'PAINTS AND COLORS', 'White Lead, strictly pure, 85.50; fancy brands, 97.50', 'Zinc, French, \$12.50 @ \$13.50; Am. \$11.50', 'Chrome yellow, in oil, \$15.00 @ 20.00', 'Umbers and Siennas, 9.0

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY.



The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING,  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, ETC., ETC.

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.  
ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

**ESTABLISHED, 1836.**  
**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Composition Roof known. Also inventors and owners of the following patents:—

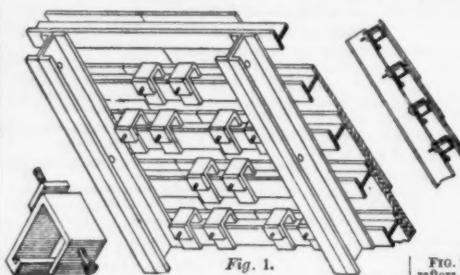


FIG. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the purlins on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the plate, the other end of the bolt being secured by a nut, or otherwise.

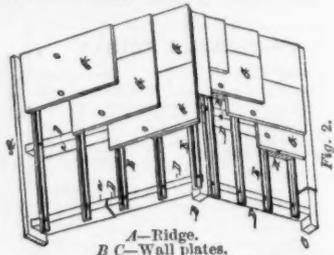


FIG. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or other fire-proof material, and iron purlins (c) or beams, with the slates (G) or other covering secured thereto by claps, (F, G, H) or in any other suitable manner, in connection with a fire-proof cement, (I) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contact with the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point avoiding condensation, contraction and expansion of roofs formed wholly of iron.



Section of Fire-Place Heater.

**WARMING AND VENTILATION.**

**FIRE ON THE HEARTH.**

**FIRE-PLACE HEATERS AND STOVES.**

VENTILATION of a Fire-Place. RESERVE FORCE of a Close Stove. CIRCULATION of a Furnace.

Adapted for any kind of Fuel,

And the only Fireplace Heater perfectly adapted for Soft Coal and Wood.

SILVER MEDAL AWARDED, PARIS EXPOSITION, 1878.

Send for our testimonials from all parts of the United States.

**OPEN STOVE VENTILATING COMPANY,**

115 Fulton and 54 Ann Streets, New York.



Section of Stove.

**GAS**

**SPRINGFIELD GAS MACHINE.**  
Springfield, Mass.; 75 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

**BUHRER'S INFALLIBLE SEWER GAS TRAP.**



The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (E) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.

**S. BUHRER, Inventor and Manufacturer, Cleveland, Ohio.**  
WHOLESALE AGENTS.  
W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O.  
L. WOLFF M'Y Co., 109 & 111 West Lake St., Chicago, Ill.  
HAMBLEN & MATHEWS, 82 & 84 North St., Boston, Mass.  
O. A. BLESSING, 44 North Fifth St., Philadelphia, Pa.  
THE J. L. MOTT IRON WORKS, 85 & 90 Beekman St., N. Y.  
Please send for Circular.

**Brandeis' Seamless Paragon Trap.**  
Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDEIS & WICKERT, 46 Fulton Street, Brooklyn, N. Y.**

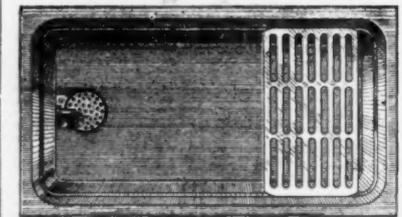
**C. BUTCHER,**  
107  
Devonshire St.  
BOSTON.

**PATENT MARQUETRY FLOORING.**  
Specimens at Lawrence, Wilde & Co.'s, 42 Cornhill, Boston.

**DORCHESTER UNION FREESTONE CO.**  
NEW BRUNSWICK YELLOW FREESTONE.  
The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order.  
34 Pine St., New York. - G. P. SHERWOOD.

**MENEELY & KIMBERLY,**  
Bell Founders, Troy, N. Y.,  
Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT HOUSE BELLS. Illustrated Catalogue sent free.

Architects and Builders will be quick to appreciate the many New and Practical Features possessed by



**THE MAGEE PATENT SINK,** which commend themselves at once to every household.

The escape of noxious and poisonous sewer gases is prevented by the arrangement of the patent trap, it being immovable, while the strainer, being hinged on brass pins, can be raised for the purpose of cleaning the cesspool.

The sink is furnished with an improved galvanized shelf or rack for draining dishes, etc., after washing. It is of extra size, and being made with square corners, saves the carpenter much labor in setting. In smoothness of casting it fully sustains the long-established reputation of the Magee goods.

Particular attention is invited to the Magee Standard Furnace, portable and for setting in brick, guaranteed superior to any in the market for economy, durability, and heating capacity. Estimates furnished for heating all sizes of dwelling houses and public buildings. Also a full line of Brick and Portable Ranges. Circulars and prices of all the above goods furnished on application. **MAGEE FURNACE CO., 32 to 38 Union St., Boston.**

**D. M. MEEKER & SON'S**  
Malleable Iron Hollow Munten Window Sash.

For Insane Hospitals, Fire Proof Buildings, &c.



The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

**D. M. MEEKER & SON,**  
Newark, N. J.  
Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

**MAKE your own GAS**

Send for CIRCULAR.

**WALWORTH MANUF. CO.**  
No. 69 Kilby Street,  
BOSTON, MASS.

**GAS GENERATORS, FOR LIGHTING Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.**

**J. & E. LAMB, 59 CARMINE ST., N. Y. CHURCH FURNISHERS**  
Practical Workers in Sterling Silver, Brass, and Bronze. Carved Wood, Decorations, etc. Illustrated Catalogues. Furniture, 10c.; Metalwork, 10c.; Decoration, 10c.

**HOISTING MACHINES EXCLUSIVELY.**  
HOTEL STEAM ELEVATORS, HYDRAULIC ELEVATORS, HAND POWER HOISTS, DUMB WAITERS.

**H. J. REEDY, Manufacturer,**  
128 EAST EIGHTH ST., - Cincinnati, O.

**CRANE-BREED & COMPANY'S SAFETY BOILERS FOR HEATING STEAM AND HOT WATER.**  
MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPARATUS, SAFETY VALVES, COILS, REGISTERS, FITTINGS, STEAM-PUMPS.

**NATIONAL TUBE WORKS CO.**  
PATENT  
Indestructible Enamelled Wrought Iron  
**LAP-WELDED PIPE,**  
From 4 inch to 15 inches diameter.  
Now extensively used for  
Water, Gas, Sewerage, and Mining.



It is not affected by heat or acid, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage. **MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL** for making Joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at 00c. of

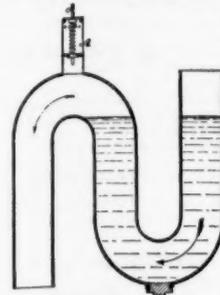
**National Tube Works Co.,**  
8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

BUILDING INTELLIGENCE.

[Reported for the American Architect and Building News.]
[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

SEWER-TRAP VALVE.—Peter J. Convery, Brooklyn, N. Y. The object of this valve is to prevent siphonage in an S-trap.



At the top of the outer bend of an S-trap is a cylinder A, in which is suspended a spindle, around which is coiled a weak spiral spring, which is kept at the proper tension by means of a nut.

At the lower end of the spindle is a tapering plug which fits the cylinder with an air-tight joint. The upper end of the spindle plays through a hole in the top of the cylinder.

Vent-holes in the top and sides of the cylinder, above the valve, allow air to enter as soon as a temporary vacuum has been established in the waste-pipe by the partial siphoning of the trap. The spring can be adjusted so as to preclude the total unsealing of a trap.

FIRE-PLACE.—George Hess, Chicago, Ill. HANDLE FOR SOLDERING-IRON.—Henry K. Hines, Philadelphia, Penn.

CEMENT AND CONCRETE WALKING SURFACE.—T. & T. Hyatt, New York, N. Y.

SASH-FASTENER.—J. S. Matthews, Athens, Tenn., and A. Petersohn, Washington, D. C.

WATER-PROOF CELLARS.—Tobias New, Brooklyn, N. Y. This improvement consists in embedding horizontal iron rods in the concrete floor of a cellar, which bind the mass together, counterbalancing upward pressure of the water beneath, and materially reducing the thickness of concrete necessary for that purpose.

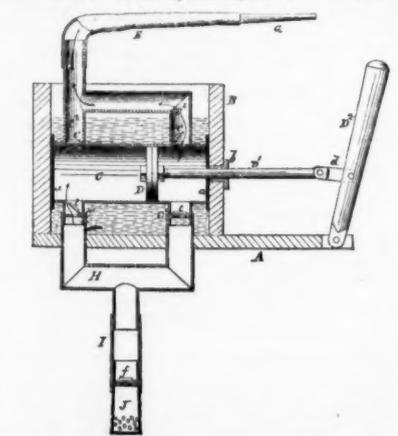
HYDRAULIC ELEVATORS.—William O'Keefe, St. Louis, Mo.

WINDOW-SCREENS.—Frederick W. Wood, New York, N. Y. The frame consists of adjustable top and bottom bars, and side rollers provided with wire trunnions fitting in sockets in the end of the bars. The bars consist of a centre piece having a dovetail projection fitting in grooves in two end-pieces. The set-screws are a little to one side, so that the netting may be clamped in the groove on the opposite side of the bar. The netting is tacked on the rollers. Holding-strips of leather or other slightly elastic material are stretched upon the roller between the trunnions, serving as a brake to prevent the netting from unwinding.

SASH HOLDERS.—William D. Wright, Baltimore, Md. A rod provided with an eye at one end, through which the sash-cord passes, and screw-threaded at the other, is passed through the sash. The sash may be held in any position by tightening the nut on the rod, the effect being to clamp the cord between the ring and a metal plate, which is retained in a groove in the sash.

PENCIL SHARPENER.—William Haskell, Chicago, Ill.

DOUBLE-ACTION PUMP.—Clayton R. Carr, Casey, Ill. The object of this invention is to obtain a simple pump capable of throwing a continuous stream, so that it may be used as a fire extinguisher. Within a box B is fixed a horizontal cylinder C, in which travels a piston D under the impulse of the lever F, which is fastened to the bed-plate A, and to which D is connected by the piston-rod I, and the jointed arm G. In the top of the cylinder are two openings,



each closed by a check-valve, which open in the same direction, upwards. These openings are connected by pipes C2 with the discharge-pipe E. Water enters the cylinder through the openings C1, one at each end, and each closed by a check-valve opening inwards. In its simplest form water is poured into the box B, which holds the cylinder, and at each movement of the handle F water enters the cylinder by one of the openings C1, in the rear of the moving piston, while the water in front of the piston is forced out through one of the openings in the top of the cylinder, the pressure of the air keeping the check-valve of the other opening tightly closed. The return stroke of the piston causes an inverse opening and shutting of valves. The cut shows how the pump may be connected with a well or other water supply by means of the pipe H and the hose I. In this case it is advisable to have a check-valve in the strainer J.

FIRE-PROOF ROOFING COMPOSITION.—Edwin W. Hickman, Lake, Wis. Marble or stone mud, one peck; fine or ground sand, one peck; land plaster or grind-stone dust, one peck; hydrated plaster of Paris, one tenth peck; coal tar, three gallons; pine-tar, one gallon; plastering-hair, one pound.

WATER-PIPE JOINT.—William N. Horton, San Francisco, Cal.

WINDOW-SCREENS.—John Klunert, Allentown, Penn.

ELECTRO-MAGNETIC BUGALAR-ALARM.—Kolossens, New York, N. Y.

CLAMPS FOR GLUING PARQUETRY.—Samuel P. Grocock, New York, N. Y.

SEAL-BOLT.—Charles H. Hopkins, Lyndonville, Vt. BRICK MACHINE.—L. B. Kennedy, Maxahatchie, Tex. ASPHALTUM OR CEMENT PIPE.—Michael Allen, New York, N. Y.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—F. Pfister, additional one-half-sty to dwell, 251 and 253 Charles St. — Matthew O'Reilly, three-sty dwell, and two-sty back building on lot 23 Constitution St., and three-sty dwell, and two-sty back building on lot 45 Low St. — Margaret F. Smith, additional story to back building to dwell, 138 Chew St. — Annie E. Tolson, three-sty dwell, on Square Carrollton Ave. — Walter F. Dunn, additional story to dwell, 88 Gough St. — Michael McDonald, additional story to dwell, 82 East St. — B. H. Keimer, additional story to dwell, 172 Mosher St. — Charles Eagleton, one-sty brick stable on ten-foot alley, 103 and 105 Chester St. — Bernard Malhan, additional story to dwell, 95 Pennsylvania Ave. — W. H. Bevan, two-sty back building, 10 Madison Ave. — Thos. Fitzpatrick, 2 three-sty dwells, and one-sty back building on Oliver St. — C. B. Dunt, 2 three-sty dwells, and one-sty back building on St. Mary St. — James Moore, two-sty back building to dwell, cor. Gough and Castle sts. — P. H. Brommelsick, two-sty stable, 68 McElderry St., to front on Spring St. Where the material is not specified brick is understood.

Boston.

BUILDING PERMITS.—The following permits have been granted since our last issue:—

BRICK BUILDINGS.

Table with 5 columns: Mechanic, No., Stories, Class, Size. Lists building permits for Goldthwait & Chapman, J. Henry Stevenson, and James McNeil.

WOODEN BUILDINGS.

Table with 5 columns: Mechanic, No., Stories, Class, Size. Lists building permits for C. W. H. Boulton, Geo. A. Spear, Frank Clows, James McMahon, James McMahon, and Ross Doherty.

Repairs and alterations active. HOUSE.—Messrs. Kirby & Lewis are the architects of a house on Commonwealth Avenue. A. H. Cason is the builder.

Brooklyn.

BUILDING PERMITS.—Columbus St., cor. Harrison St., 1 four-sty brick tenement, 29 x 50; owner, Timothy Cox, Warren St., cor. Columbus St.; builder, Jno. H. O'Rourke — Front St., cor. Green Lane, 1 three-sty brick store and tenement, 17 3/4 x 45; owner, Johann Buckley, 71 Nassau St.; architect, R. Dixon; builders, D. P. Leydon and P. Gauley. — Greene St., No. 144, 1 three-sty brick factory, 25 x 25 x 9 1/2; owner, Jas. L. Jansen, 156 Meserole Ave.; architect, Fredk. Weber; builder, Jas. Cashman. — Greene St., No. 205, 1 three-sty brick tenement, 25 6/8 x 52; owner, John Bopp, 203 Greene St.; architect, Jas. Mulhall; builders, J. Rooney and J. Dolg, Jr. — Halsey St., 2 three-sty brown stone dwells, 20 x 42; owner, S. E. C. Russell, 558 Grand Ave. — Montague St., No. 69, 1 five-sty brown stone store and tenement, 25 x 80; owner, J. S. Graves, 20 Pierrepont St.; architect, C. F. Riddler, Jr. — Myrtle St., 1 three-sty brick dwell, 25 x 40; owner, Geo. Krebs, Johnson Ave., cor. Graham Ave. — Ten Eyck St., 1 one-sty frame rope-walk, 63 x 200; owners, Waterbury & Marshall. — Union St., 1 four-sty brown stone dwell, 15 x 45; owner, John H. Porter, 1003 Atlantic Ave. — Seventh St., 2 two-sty brick dwells, 18 x 40, extension, 11 3/4 x 18; owner, E. P. Treadwell, Keyport, N. J.; architect, B. Forsthe; builder, J. McLain. — DeKaib Ave., 1 two-sty brick dwell, 22 x 39; owner, J. B. Sharp, 1062 DeKaib Ave.; builder, W. Mitchell. — Hamilton Ave., No. 25, 1 four-sty brick store and tenement, 25 x 60 and 85; owner, G. Fay, 31 Hamilton Ave.; architect, C. Werner; builders, J. J. Bentzen and C. Dietrick. — Harrison Ave., 1 one-sty frame ball-room, 80 x 35, extension, 15 x 72; owner, Henry Winter, Harrison Ave. and Bartlett St.; architects, Jno. Platte and J. Rueger. — Lafayette Ave., 4 three-sty brown stone dwells, 15 x 45; owner, Nathan Stephens, 335 Washington Ave.; architects and builders, Mills & Bush. — Lexington Ave., 12 two-sty brown stone dwells, 20 x 42; owner, William Wright, 129 Eleventh St.; architect, A. V. B. Bush; builder, W. Wright. — Tompkins Ave., cor. Hart St., 1 three-sty brick store and dwell, 24 x 50; owner, Jas. M. Leavitt, 234 Washington Ave.; architect, M. J. Morrill; builders, J. M. Brown and J. L. Scheel. — Tompkins Ave., cor. Hart St., 1 three-sty brick store and dwell, 25 x 25; owner, John K. Bulmer. — Broadway, 1 four-sty iron store and offices, 46 9/8 x 60 and 80; owner, James L. Truslow; architect, Wm. H. Gaylor; builder, Thos. Gibbons. — Columbia St., 1 four-sty brick store and tenement, 21 8/8 x 65; owner, Bernard Kane; architect, John Karney. — Debevoise St., 3 two-sty frame dwellings, 25 x 49; owner, Geo. Loeffler, 197 Floyd St. — Elm St., 1 two-sty frame dwell, 21 x 28; owner, M. Lambert, 137 Elm St.; builder, A. Gimbert. — Keap St., cor. Marcy Ave., 1 three-sty brown stone dwell, 20 x 50; owner, John Wilson, 108 Lee Ave.; architect, John Rose; builder, John Wilson. — Kosciuszko St., 2 two-sty brick dwells, 18 9/8 x 38; owner, Thomas Gordon, 180 Kosciuszko St.; architect, S. W. Oamun. — President St., 1 three-sty brick dwell, 20 4/8 x 45; owner, S. W. Burckett, 43 Prospect Pl.; architect, C. F. Burkett; builder, James Powell. — Stockholm St., 1 two-sty frame dwell, 17 x 25; owner and builder, John Rueger, 498 Broadway. — Union St., Sackett St., 6 (3 on each street) three-sty brown stone dwells, 16 8/8 x 45; owner and builder, P. Donion; architect, Robert Dixon. — North 5th St., No. 110, 1 three-sty frame tenement, 25 x 50; owner, John Schumacher, 110 North 5th St.; builder, John Rueger. — Greene Ave., 5 three-sty brown stone dwells, 20 x 46; owner, J. H. Doherty. — Marcy Ave., 1 four-sty brick dwell, 25 x 49; owner, Wm. J. Hill, Hooper St.; architect, T. F. Houghton. — Mecker Ave., No. 28, 1 three-sty frame tenement, 25 x 49; owner, John Klenke; architects and builders, Samuels & Bedford.

Chicago.

BUILDING PERMITS.—C. B. Blair, two-sty barn on Michigan Ave.; cost, \$1,500. — C. J. Hull, 6 two-sty stone-front dwells, 230 to 230 Ewing St.; cost, \$6,000. — Walker, Oakley & Co., three-sty addition to tanery works; cost, \$6,000. — Frederick S. James, three-sty dwell, Washington St.; cost, \$6,000. — William Kuntz, two-sty dwell, Lowe Ave.; cost, \$1,500. — Jacob Liebrick, three-sty dwell, Granger St.; cost, \$4,100. — A. G. Anderson, two-sty dwell, 641 Roby St.; cost, \$2,000. — J. S. Hoerber, three-

sty addition to brewery; cost, \$5,500. — Patrick Quinn, two-sty dwell, 226 Aberdeen St.; cost, \$1,500. — John J. Delacy, two-sty dwell, 1048 Dearborn St.; cost, \$2,100. — Joseph Hogan, three-sty dwell, and two-sty barn, 621 West Monroe St.; cost, \$8,000. — Mrs. Elizabeth Channon, two-sty brown stone dwell, 569 North La Salle St.; cost, \$5,000. — First Reformed Evangelical Church, two-sty parsonage on Hastings St.; cost, \$2,000. — H. P. Smith, two-sty store and dwell, 350 and 352 Milwaukee Ave.; cost, \$3,500. — Peter Schoenhofen, two-sty ice-house and fermenting-room on Seward St.; cost, \$20,000. — Newberry Estate, 1 four-sty, 6 three-sty dwells, and 7 barns, cor. Dearborn Ave. and Chestnut St.; cost, \$60,000. — H. H. Gage, two-sty store and dwell, cor. Lake and Market sts.; cost, \$3,500. — E. Jennings & Co., three-sty laundry and two-sty barn, 403 and 405 West Madison St.; cost, \$5,000. — Charles H. Reers, 3 two-sty dwells, Superior St.; cost, \$5,000. — Treat & Foiz, three-sty brick dwell, 167 Rush St.; cost, \$12,000. — Patrick Keegan, two-sty dwells, Ohio St.; cost, \$2,100. — Thomas Mackin, 2 three-sty stone front dwells, 272 and 274 Indiana St.; cost, \$7,000. — Chicago West Division Railway Company, two-sty barn, cor. of Ogden Ave. and Thirteenth St.; cost, \$4,500. — John Gibbons, two-sty dwell, 125 Huron St.; cost, \$2,600. — Julian S. Rumsay, 2 three-sty stone front dwells, Cass St.; cost, \$7,500. — J. H. Clough, two-sty ice-house, 1232 and 1234 State St.; cost, \$4,000. The estimated cost of eighteen of the more important buildings is \$152,000.

New York.

BUILDING PERMITS.—Cor. Fifty-fifth St. and Fourth Ave., 6 first-class dwells, 17 x 40; cost, \$14,000 each; W. Noble, owner; C. Baxter, architect. — Also on Fifty-fifth St. 4 similar dwells, 16 x 50; cost, \$12,000 each. — Sixty-ninth St., near First Ave., 6 second-class dwells, 16 x 50; J. E. Ray, owner; cost, \$3,700 each. — One Hundred and Fortieth St., near Willis Ave., 2 frame dwells, 15 x 44; cost, \$3,000 apiece; Mrs. Mary E. Santos, owner; H. S. Baker, architect. — Main St., near Cross St., three-class store, 42 x 50; cost, \$3,000; D. Mays, Jr., owner; L. Pierce, architect. — Tenth Ave., near Fifty-sixth St., 4 stores and tenements, 25 x 50; cost, \$12,000 each; J. Sears, Jr., owner; G. P. Pelham, architect. — One Hundred and Sixth St., near Second Ave., 3 tenement houses, 25 x 50; cost, \$6,000; Barbara Wetsell, owner; J. Boeker, architect. — Sixty-fourth St., near Tenth Ave., brick stable and dwell, 25 x 35; H. Grever, owner; A. W. McDonald, builder. — Cor. Seventy-ninth St. and Madison Ave., five-sty flat, 21 x 80; A. B. Ogden, architect and owner; cost, \$17,000. — One Hundred and Fiftieth St., near Mott Ave., 1 brick stable, 20 x 35; cost, \$1,200; H. S. Morris, owner; J. G. Van Tassel, architect; W. Hargrand, builder. — One Hundred and Twenty-sixth St., near Eighth Ave., 3 first-class dwells, 20 x 50; Cunningham & M. Brownie, owners and builders; Thom & Wilson, architects. — Ninety-fourth St., near Third Ave., 12 first-class dwells, 18 x 48; cost, \$8,000; Duffy Bros., owners and builders; Thom & Wilson, architects. — 363 W. Sixtieth St., brick store and tenement, 22 x 50; A. Schellenberg; C. F. Riddler, Jr., architect. — Fiftieth St., near Tenth Ave., tenement house, 25 x 62; cost, \$10,000; Mrs. Ellen Dwyer, owner; J. M. Forster, architect; O. E. Ferrine, builder. — Sixty-fifth St., near Ninth Ave., 1 second-class dwell, 20 x 58; cost, \$7,500; W. Wellington, owner and builder; W. H. Canvel, architect. — Fiftieth St., near Tenth Ave., tenement, 25 x 62, 4 stores; cost, \$10,000; P. Hansman, owner; Geo. Holzert, architect; V. E. Ferrin, builder. — One Hundred and Thirty-seventh St., west of Third Ave., second-class dwell, 20 x 28; two stories; cost, \$1,500; M. O'Neil, owner and builder. — One Hundred and Thirty-fifth St., near St. Ann's Ave., frame dwell, 20 x 30; cost, \$750; John McPharlan, owner; John McIntire, architect. — W. McKorn, builder. — One Hundred and Tenth St., near Fourth Ave., 3 first-class dwells, 18 x 48; brown stone fronts; cost, \$6,500 each; Wheelan & Curry, owners and builders; J. C. Burns, architect. — Third Ave., near One Hundred and Thirtieth St., 3 second-class dwells, 18 x 55; cost, \$5,000 each; A. B. Davis, owner.

ACTIVITY IN THE UPPER PART OF THE CITY.—Speculative building is taking a new start, and many unoccupied spots in the upper part of the city have been engaged for immediate occupation. The elevated roads have had much to do with bringing this about, and the blocks below the southern line of the Central Park, which have for so many years been covered with the towering rock through which the streets were cut, are now being leveled off, ready for rows of first-class dwellings. On the East side, though rapid transit has not yet reached the Harlem River, there is a great activity in anticipation of its coming. There is some talk of forming a company to secure a plat near the Harlem River, several blocks in extent either way, and covering it with a line of single dwellings small enough for an ordinary family and which can be sold in fee simple. They will have either brick or brown stone fronts, and all so-called modern improvements, constructed in a satisfactory style, for about \$7,000 each. There is a popular turning against French flats, and some of the more expensive structures of this class are suffering because of the ridiculously small rooms into which the suites were divided.

THE GOVERNMENT BARGE OFFICE.—The plans for the new barge office are well advanced, and it is probable that the new building will be constructed of stone and brick, instead of iron, as was originally proposed. A part of the Battery sea-wall will have to be taken down, the foundations carried down, and the bottom dredged and excavated, so as to give a draught of 15 or 16 feet of water where there is now only a depth of 3 to 7 feet. Work will be commenced during the coming fall, and pushed forward rapidly till the building is completed. Out of the \$210,000 appropriated by Congress, \$60,000 will be expended in building a sea-wall, \$4,000 for the site, and \$146,000 in the erection of two passenger depots and a custom office. The buildings will cover about 200 feet of the lower end of the Battery.

Philadelphia.

BUILDING PERMITS.—W. Robinson, two-sty dwell, 29 x 37, Green St., Germantown. — R. Zenzel, 3 two-sty dwells, 14 x 30, Marston St. — Samuel Hall & Son, two-sty front building, 16 x 16, No. 1345 Saverly St. — E. F. Judge, two-sty dwell, 20 x 36, cor. Ann and Salmon sts. — B. Walker, three-sty store and dwell, 20 x 70, cor. Germantown Ave. and Dunton St. — Wm. Yelland, 2 two-sty dwells, 14 x 40, Franklin St., Frankford. — Wm. Yelland, three-sty dwell, 17 x 46, Penn St., Frankford. — P. Schroock, two-sty front building, 24 x 39, No. 3118 Ridge Ave. — F. Gramlich & Son, two-sty dwell, 16 x 16, cor. Fifth and Master sts. — Jacob Ebner, three-sty front building, 18 x 31, Richmond St. — Brown & Register, two-sty dwell, 16 x 28, Palmer St. — E. Krider, three-sty dwell, 38 x 34, cor. Sixtieth St. and Klugessing Ave. — Edward Clegg, three-sty dwell, 20 x 45, No. 159 Sverell St., Manayunk. — Jas. Henderson, 2 three-sty dwells, 18 x 50, Ellsworth St. — C. A. Snyder, two-sty store and dwell, 14 x 32, No. 2027 South Tenth St. — Thos. McCarty, three-sty dwell, 16 x 24, No. 510 Bainbridge St. — Wm. H. Dunton & Bro., three-sty dwell, 16 x 44, No. 513 Spruce St. — Chas. Lafferty, three-sty store and dwell, 20 x 78, cor. Twenty-first and Lombard sts. — E. K. Welsh, three-sty dry-house, 37 x 47, Factory St., Frankford. — John Buckley, three-sty dwell, 16 x 32, Hazel Ave. — Wm. Curry, two-sty stable, 18 1/2 x 28, Muter St. — Julius Keller, two-sty dwell, 16 x 22, Mather St. — W. T. B. Roberts, Supt., 7 three-sty dwells, 16 x 54, Thompson St. — J. J. Eichel,

two-story dry-house, 30' x 30', Waterloo St. — W. T. B. Roberts, Supt., 10 two-story dwell., 12' x 25', Dorsett St. — J. C. Moore, 4 two-story dwell., 12' x 25', Carlisle St. — J. C. Moore, two-story stable, 21' x 35', Ontario St. — J. T. Lewis & Bro., one-story lead factory, 78' x 91', cor. Huntington and Thompson sts. — Andrew Brophy, three-story pickler house, 40' x 25', Amber St. — Samuel Thompson, three-story dwell., 40' x 70', No. 1509 North Sixteenth St. — F. M. Forsyth, three-story dwell., 17' x 41', Sixth St. — H. Tyson, three-story dwell., 10' x 48', Germantown Ave. — Harpt, Montague & Co., three-story addition to factory, 25' x 40', Hope St. — M. Magge, two-story shop, 40' x 40', Front St. — Thos. S. Kelley, 5 two-story dwell., 14' x 25', Story St. — S. S. Myers, three-story shop, 17' x 43', No. 629 North Front St. — J. Staffier, two-story dwell., 18' x 45', Kingsessing Ave. — W. S. Kimball, 2 three-story dwell., 21' x 70', Chestnut St. — W. C. McPherson, three-story coach house and stable, 30' x 40', No. 842 Carlisle St. — Maggie Brown, two-story dwell., 10' x 25', Sixty-third St. and Grays Ave. — Ketcham & Steele, addition to chapel, 44' x 62', Twenty-first St. — W. H. Grove, three-story dwell., 18' x 44', cor. Seventy-first and Loyal sts. — James Harper, three-story dwell., 18' x 48', Terrace St., Borough. — Thomas E. Lutner, three-story dwell., 17' x 30', Tasker St. — Thomas Dixon, two-story warehouse, 29' x 39', Ridge Ave. — W. H. Fulton & Son, addition to warehouse, 29' x 28', 116 Dock St.

**THE POST-OFFICE.** — The iron beams for the third floor of the new Post-office building have been placed on the ground, and the workmen have commenced work on the granite facing of the Chestnut Street side of the third story, the stone for the three faces being all ready for use.

**CHAPEL.** — On September 15th the corner-stone of the Ann Street Gospel Mission Chapel, northwest corner of Ann and Jasper streets, was laid; it will doubtless be completed in a short time.

**Providence.**

**BUILDING PERMITS.** — William H. Dyer, cor. Friendship and Stewart sts. — James Cornell, Angell St. — William J. Arnold Fountain St. — George W. Chapin and wife, Oak St. — Mary E. Rawson, Gano St. — A. C. Barstow and others, cor. Mason and Cove sts. — Mary McEneney, Althoa St. — Almeda M. Boyden, cor. Burnside and Colfax sts.

**St. Louis.**

**BUILDING PERMITS.** — Forty-six permits have been issued for the week ending September 20, 1878. Fifteen of these are for unimportant frame structures. Of the brick buildings, those worth \$2,500 and over are as follows: —

Owners.	Use.	Stories.	Rooms.	Cost.
J. Yeck.	Dwelling.	2	8	\$2,800
J. P. & W. J. Russell.	Stable.	2	2	2,000
Dr. Kane.	Dwelling.	3	14	5,000
Dr. W. G. Moore.	Dwelling.	3	9	3,150
J. Malinckrodt.	Factory.	3	3	4,000
St. Louis School Board.	School.	3	4	3,775
A. Dieffenbach.	Dwelling.	3	12	2,500

**General Notes.**

**ANN ARBOR, MICH.** — The Washtenaw County Court-house Building Committee have adopted the designs of W. H. McPherson for furniture. The contract for making the same will be let to the lowest bidder.

**ATYONDALE, O.** — Dr. J. M. Scudder is rebuilding the house on Ridgeway Avenue that was recently destroyed by fire.

**BATH, ME.** — The Sagadahok Bank Building, which is now building at a cost of \$16,000, was designed by Mr. F. H. Fasset, architect, of Portland. The same architect is building a brick and freestone store for Francis Adams, Esq., which will cost about \$5,000. The contractors for these buildings are J. & J. Philbrook, of Lisbon Falls.

**BUMFIELD, MASS.** — Work on the new town house is being pushed, and it is expected that the building will be roofed by cold weather, and ready for occupancy by February.

**BROWNSTOWN, IND.** — Lubker's new building is nearly ready for the roof.

**CLAREMONT, N. H.** — H. R. Beckwith has designed and is building a two-story house and barn for Mr. J. T. Cossett, upon Broad Street; also a two-story house upon Prospect Street, for Mr. A. P. Bradbury. — Mr. G. H. Stowell is building a cottage upon Sumner Street. — Mr. L. Farwell, 2 two-story houses upon Sumner Street. — Mr. Noyes is building a brick dwelling upon Pleasant Street.

**COLLEGE HILL, O.** — Ground has been broken for Dr. Thornton's new house. It is to be of stone, two stories high, seven rooms.

**EXTON, O.** — Measures are being taken by the members of the First Christian Church, of this place, to raise funds sufficient to build a parsonage.

**FAIR HAVEN, MASS.** — James West is to have a cottage house 24 by 30 feet, with L 15 by 17, built for him on Bridge Street by William Gifford, carpenter, and Martin L. Peirce, mason.

**GORHAM, ME.** — The State Normal School-house is now building from designs prepared by Mr. F. H. Fasset, architect, of Portland. It is built of brick and stone, and will cost about \$25,000. Messrs. J. & O. L. Giddings, of Portsmouth, N. H., are the contractors.

**HARTFORD, CONN.** — George Ribbs is putting up three stores for the Hartford Life and Annuity Insurance Company, on Ann Street, near Asylum. Two of the stores will be but a single story in height; the north store will be two stories in height.

**HOLYOKE, MASS.** — The Newtons are building a frame dwelling on the Manchester grounds. The new grammar school on Bridge Street is above the first story.

**HUNTINGTON, MASS.** — E. Pease is to build two new tenement houses.

**LEBANON, PENN.** — The new town hall at Lebanon will be ready for occupancy by November.

**LONG BRANCH, N. J.** — The pier to be constructed at Long Branch will be of steel. Its cost will be about \$3,000; its length, 1,000 feet; breadth, 100; and height above low water, 40 feet. The carriage drive is 950 feet long and 62 feet wide, protected by a wire balustrade 3 1/2 feet high, and on either side will be foot-paths 12 1/2 feet wide. Gaslights or the electric light will illuminate the entire length of the pier. The engineer, Mr. Kirkup, was the constructor of the Victoria Bridge on the Canada Grand Trunk Railway.

**LOUISVILLE, KY.** — Mr. H. P. McDonald is the architect of a new tobacco warehouse that is to be built for Messrs. White & Edwards, by Lains & Muster.

**MARION, MASS.** — Mr. J. S. Luce, proprietor of the Bay View House, is building a house near the hotel. Luce Bros. are the builders. Mr. W. G. Preston, of Boston, is the architect.

**NASHUA, MASS.** — Mr. C. J. Bateman, of Boston, is the architect of a house and stores for Dr. E. F. McQuesten. It measures 44 by 60 feet. Cost, \$8,000.

**NEW ALBANY, IND.** — S. K. Wolfe, Esq., will build a brick dwelling on Main Street, between Third and Bank.

**NEWPORT, O.** — The following building permits have been issued: Thomas Utz, a two-story brick furniture shop, on Monmouth street, cost, \$500. Peter Reari, a one-story frame addition, Williamson Street, cost, \$400.

**NORTH ADAMS, MASS.** — The contractors, Messrs. Sherwin

& Horton, are now engaged in laying the foundation for the new union depot.

**NORTH ATTLEBORO, MASS.** — F. S. Draper is building two tenement houses, Edmund Cargill, builder.

**OCEAN SPRAY, MASS.** — Mr. C. J. Bateman, of Boston, is making sketches for a house for Mr. J. N. Jessop. **PORTLAND, ME.** — Mr. F. H. Fasset is the architect of the following buildings: A brick and freestone house for Dr. I. T. Dana; cost, about \$13,000; Messrs. Green & Jordan, and L. M. Lovejoy, contractors. — A wooden house for F. A. Smith, Esq.; cost, about \$10,000. — A block of two brick stores for Gen. S. J. Anderson; cost, about \$7,000; contractors, Jas. Cunningham and Simon Sawyer. — A block of two brick houses for C. C. Chapman, Esq.; cost, \$10,000; D. Averil, contractor. — And a brick and freestone school-house for the city of Portland, which will cost about \$20,000; Jas. Cunningham and Spencer Rogers, contractors.

**PORTSMOUTH, O.** — W. G. Beyerly is erecting drop forge works, for the finishing of steel shapes of all kinds for agricultural purposes.

**RALPH, N. C.** — Mr. E. G. Lind, of Baltimore, is the architect of a two-story cottage, 54 feet 6 inches by 43 feet, now building for Dr. R. H. Lewis; cost, \$7,000. He is also building, for Dr. W. H. Hawkins, a three-story house, measuring 45 by 50 feet, with back building, 36 by 17 feet; cost, \$15,000.

**SANDWICH, MASS.** — A freight depot, 26 by 60 feet, is being built.

**SPRINGFIELD, MASS.** — The corner-stone of St. John's Hospital was laid September 15th. The hospital is under the direction of the Sisters of Charity, who established it in 1875.

**SPRINGFIELD, O.** — The following are the principal contracts awarded by the County Commissioners on the new court house and jail: —

D. F. Minahan, Springfield, excavation, cut limestone, brick work, and planing.

Finnegan & Son, Cincinnati, sandstone and freestone work.

William Hullinger, Springfield, plastering.

John Rouzer, Dayton, carpenter and joiner work.

Younglove & Co., Cleveland, iron work for jail.

Motherwell Works, Lancaster, Ohio, other iron work.

N. Cregar, of Springfield, is to be the superintendent of construction, and the buildings are to be completed within a year.

**Tiffin, O.** — Work has commenced on the new engine-house of the water-works, near Dremer's mill, and the work will be pushed as rapidly as possible. Water pipe and mains are arriving at the rate of twenty-one cars a week.

**WATERVILLE, ME.** — A block of six stores, of brick, with granite finish, is now building for P. B. Dunn, Esq., from the designs of Mr. F. H. Fasset, architect, of Portland.

**WESTPORT, MASS.** — Ground has been broken for the new chapel at Kirby's Corner.

**WILBER, NEB.** — C. H. Slocum, Clerk of Saline County, Nebraska, gives notice that on and after September 16, 1878, the plans and specifications for the new Court House for that county will be on exhibition at his office.

**WOOSTER, O.** — The stone-work of the new court-house and of the new Lutheran church is rapidly approaching completion.

**INDEX OF CURRENT WORK,**

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

**Baltimore, Md.**

**CHURCH.** — The Cummings Memorial Church. Mr. Cassell, architect.

**CHURCH.** — The Pius IX. Memorial Church. G. A. Frederick, architect. Cost \$100,000.

**CHURCH.** — Church of St. Michael and All Angels. Cost \$80,000. Wyatt & Sperry, architects.

**HOSPITAL.** — Johns Hopkins Hospital. J. R. Niernsee, consulting architect.

**Boston.**

**BANK BUILDING.** — Tremont Bank Building. Carl Fehmer, architect.

**HOTEL.** — Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.

**THE MUSEUM OF FINE ARTS.** — Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.

**SCHOOL-HOUSE.** — High and Latin School. G. A. Clough, architect.

**ASYLUM.** — Asylum for Aged People, C. J. Bateman, architect. Cost \$50,000.

**Brooklyn, N. Y.**

**TENEMENT.** — A. T. White, owner. William Field & Son, architects.

**SOCIETY BUILDING.** — The Long Island Historical Society Building. Mr. G. B. Post, architect. Cost \$100,000.

**CHURCH.** — St. Francis Xavier R. C. Church, West Fifteenth Street. Cost \$150,000. P. Keely, architect.

**HOSPITAL.** — St. John's Hospital, N. L. Derby, New York, architect.

**Chicago, Ill.**

**ARMORY.** — Armory for the First Regiment. Messrs. Wheelock & Clay, architects. Cost \$25,000.

**STORE.** — The Singer Building. Cost \$250,000.

**Cincinnati, O.**

**U. S. CUSTOM HOUSE AND POST OFFICE.** — S. Hannaford, local superintendent.

**CHILDREN'S HOME.** — J. W. McLaughlin, architect. Cost \$50,000.

**NEWSPAPER OFFICE.** — The Gazette Building. E. Anderson, architect.

**CLUB-HOUSE.** — Allemania Club-House. J. W. McLaughlin, architect. Cost \$60,000.

**UNIVERSITY BUILDING.** — Cincinnati University Building. S. Hannaford, architect. Cost \$50,000.

**Cleveland, O.**

**BUSINESS BLOCK.** — Amasa Stone, owner. J. Ireland, architect. Cost \$70,000.

**CHURCH.** — Second Presbyterian. J. Ireland, architect. Cost \$70,000.

**CONVENT.** — Ursuline Academy. I. A. Heard, architect. Cost \$120,000.

**Hartford, Conn.**

**SEMINARY.** — Theological Seminary. F. H. Kimball, architect. Cost \$75,000.

**CATHEDRAL.** — R. C. Cathedral of St. Joseph. P. Keely, architect.

**GAS FIXTURES**

OF EVERY DESCRIPTION.

SPECIAL RATES TO BUILDERS.

R. HOLLINGS & CO 347 Washington St., BOSTON.

**Publishers' Department.**

**The American Architect and Building News.**

PUBLISHED EVERY SATURDAY BY  
**HOUGHTON, OSGOOD & CO.,**  
WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.  
An Illustrated Journal of Constructive and Decorative Art  
devoted to the Interests of Architects,  
Builders, Decorators, etc.

15 cents per copy; \$7.50 per year, \$6.00 in advance.

**CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,**

WITH

*Houghton, Osgood & Co.'s other Periodicals.*

THE ARCHITECT and ATLANTIC MONTHLY... \$9.00

THE ARCHITECT and THE REPORTER... 15.00

THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL... 10.00

THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE... 7.00

\* N. B. — The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

**RATES OF ADVERTISING.**

PAGES NEXT TO READING MATTER,

single insertion... 12 1/2 cts. per line.

One inch (14 lines) one insertion... \$1.75

One inch, six insertions... 10.00

INSIDE PAGES, single insertion... 10 cts. per line

One inch, single insertion... \$1.40

One inch, six insertions... 7.00

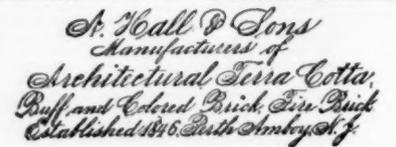
For larger space, and for a series of more than six insertions, reduced rates, made known on application to the Publishers

Special rates for first and last pages

No extra charge for cuts, or for advertisements that occupy more than a column in width.

Payments should be made directly to the Publishers, either by draft or by post office order.

**HOUGHTON, OSGOOD & CO., Publishers,**  
WINTHROP SQUARE, BOSTON.



**ARCHITECTURAL IRON WORKS.**

**YOUNGLOVE & CO., Propr's.**  
CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TIMELY LIGHT, CRISTING, ETC

Estimates promptly furnished.

(Established 1848.)

**MARKET ST. ARCHITECTURAL FOUNDRY**

**AND IRON WORKS.**

**SNEAD & CO..**

LOUISVILLE, KY.

Makers of every description of Iron Work for Buildings.

TO ARCHITECTS AND BUILDERS.

**MORTAR BLACK,**

Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar. For sale only by *Walpole Color and Chemical Works,*

**HENRY D. DUPEE, Proprietor,**

79 KILBY STREET, BOSTON



**D. W. LEWIS, 80 Water Street, Boston,**  
Manufacturers' Agent.

**BAKER'S**

Combined Cornice and Picture Rod Moulding.



(Patented in the United States and Dominion of Canada, 1877.)

For Hanging Pictures, etc.

FOR SALE BY **F. P. BAKER,**

The only Agent in the U. S. and Canada,  
84 BEVERLY STREET . . . BOSTON.

PROPOSALS.

SCHOOL-HOUSE.

Sealed proposals from carpenters and masons will be received at the office of the Superintendent of Repairs, Depot of the Board of Education, until Tuesday, October 1, at 4 o'clock P. M., for building the new School-House on Leonard Street, near Utica Avenue, Greenpoint. Plans and specifications can be seen at the office of the Superintendent of Repairs. Names of two responsible persons will be required for the faithful performance of the contract. The Board reserves the right to reject any irregular bids, or any which may not be for the interest of the Board.

W. M. THOMAS, Chairman of Committee on School-Houses.

LOCKS AND KEYS.

Separate sealed proposals will be received at this Department until 12 o'clock noon on the 20th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as are to be used for the street letter-boxes of the United States.

As the public exposure and searching examination necessary to intelligent bidding on any prescribed model of a lock and key would tend to impair, if not entirely destroy, the further utility of all such locks and keys for the purposes of the mails, the Postmaster-General prescribes no models or samples for bidders, but relies for a selection on the mechanical ingenuity and skill which a fair competition among inventors, hereby invited, may develop in samples submitted by them.

Specifications of requirements as to proposals, samples, kinds and quantities of locks and keys, contracts, etc., will be furnished on application by letter to the second Assistant Postmaster-General.

No proposal will be considered which is not submitted in accordance with such specifications and forms of proposal. The contracts which may be made are to be in conformity with the specifications and accepted proposals.

CANAL AND LOCK.

Sealed tenders, addressed to the Secretary of Public Works and indorsed "Tender for Canal and Lock at St. Anne," will be received at the office of the Department of Public Works, Ottawa, Ontario, until the arrival of the eastern and western mails on Tuesday, the 8th day of October next, for the construction of a Lock and the formation of approaches to it on the landward side of the present Lock at St. Anne. A map of the locality, together with plans and specifications of the works to be done, can be seen at this office and at the Resident Engineer's Office, St. Anne, on and after Tuesday, the 24th day of September, at either of which places printed forms of tender can be obtained. Contractors are requested to bear in mind that tenders will not be considered unless made strictly in accordance with the printed forms, and in the case of firms, except there are attached the actual signatures, the nature of the occupation and residence of each member of the same; and further, an accepted bank check for the sum of \$2,000 must accompany the tender, which sum shall be forfeited if the party tendering declines entering into contract for the works, at the rates and on the terms stated in the offer submitted.

The check thus sent in will be returned to the respective parties whose tenders are not accepted. For the due fulfillment of the contract, satisfactory security will be required by the deposit of money to the amount of five per cent on the built sum of the contract; of which the sum sent in with the tender will be considered a part. Ninety per cent only of the progress estimates will be paid until the completion of the work. To each tender must be attached the actual signatures of two responsible and solvent persons, residents of the Dominion, willing to become sureties for the carrying out of these conditions, as well as the due performance of the works embraced in the contract. This department does not, however, bind itself to accept the lowest or any tender.

FURNITURE.

Sealed proposals will be received at the office of the Superintendent of Repairs, Depot of the Board of Education, until Tuesday, October 1, 1878, at 4 o'clock P. M., for furniture for wings of P. S. No. 32.

Specifications can be seen at the office of the Superintendent of Repairs. Names of two responsible persons will be required for the faithful performance of the contract. The Board reserves the right to reject any irregular bids, or any which may not be for the interest of the Board.

W. M. THOMAS, Chairman Com. on School-Houses.

IRON BRIDGE.

Sealed proposals will be received at the office of the Board of Public Works, until 12 o'clock, noon, of Tuesday, October 8, A. D. 1878, for constructing the wrought-iron superstructure of a bridge over Mill Creek, at Eighth Street, according to specifications on file in the office of the Board of Public Works. The Board reserves the right of rejecting any or all the bids.

Bidders will indorse their names upon the outside of the envelopes containing their bids. Each bid to be accompanied by two disinterested sureties. By order of the Board.

JOHN E. BELL, President. JOHN D. BANKS, Clerk.

TIMBER, ZINC, LEAD, OIL, ETC.

Sealed proposals, in duplicate, to be indorsed, "Proposals for Naval Supplies," will be received at this office until 12 M., the 3d day of October, 1878, for Stationery, Timber, Zinc, Lead, and Lined Oil (lists of which can be procured on application to this office), to be delivered at the Navy Yard, Boston, Mass., free of any expense, and subject to the usual inspection.

Responsible security required on the bids for the prompt and faithful delivery of the articles, samples of which can be seen, and blank forms of bids procured, by applying at this office.

The right to reject any and all bids not considered advantageous to the government is reserved.

C. J. EMERY, Pay Director, U. S. Navy.

PROPOSALS.

WROUGHT AND CAST-IRON WORK.

Proposals for Wrought and Cast-Iron Work for the U. S. Post-Office and Sub-Treasury Extension at Boston, Mass.

Sealed proposals will be received at this office until 12 M., on the 3d day of October, 1878, for furnishing, delivering, fitting, and putting in place complete the Wrought and Cast-Iron Work, comprising Cast-Iron Columns, etc., in basement, and Rolled-Iron Beams, etc., in first story floor of the U. S. Post-Office and Sub-Treasury Extension at Boston, Mass., in accordance with drawings, specification, and schedule, copies of which, and any additional information, may be had on application at this office or the office of the Superintendent.

MASONIC TEMPLE.

Sealed proposals for making the excavation and furnishing materials for and the construction of the foundation walls for the Masonic Temple and Opera House at Fort Wayne, Ind., will be received by the undersigned up to 12 o'clock M., October 1, 1878. Plans and specifications for said work can be seen at the office of T. J. Tolan & Son, architects, in said city. Bids will be opened by the Board of Trustees of the Masonic Temple Association on October 1, 1878. The right is reserved to reject any and all bids. Satisfactory bonds for the performance of the work will be required.

COURT-HOUSE.

The building of a Court-House at Athens, Athens County, Ohio, will be let October 7, 1878. For further information write the County Auditor.

HARDWARE.

Sealed proposals, indorsed "Proposals for Stock, Sawmill, etc." (as the case may be), and addressed to the Commissioner of Indian Affairs, will be received at this office up to 11 o'clock, A. M., of Thursday, October 3, 1878, for the delivery at New York, Chicago, St. Louis, Kansas City, Sioux City, or Yankton, the following supplies for the Red-Cloud and Spotted-Tail Agencies, viz.:

- 1 Portable Sawmill and Fixtures (about 25 horse-power);
1 Heavy Lumber Wagons;
150 Sets Double Harness;
100 Plows, single and double shovel;
60 Breaking Plows;
10 Harrows;
20 Sets Harrow Teeth;
175 Sets Double and Single Trees;
100 Dozen Planters' Hoes;
300 Spades;
100 Shovels, long handles;
50 Cross-Cut Saws;
20 Hand Saws;
400 Augers, assorted sizes;
150 Mattocks, with handles;
300 Garden Rakes;
200 Scythes and Snaths;
600 Scythe Stones;
50 Grindstones (75 to 100 pounds each);
200 Drawing knives;
24 Broad Axes;
505 Washtubs, small sizes;
500 Washboards;
2 Fanning Mills;
400 Log Chains, 3/4 inch iron;
98 Hay Forks;
24 Four-tine Forks;
200 Axes, with handles;
50 Dozen Axle Grease;
200 Carpenters' Hammers.

Also, for the delivery at the Red-Cloud Agency of 500 two-year-old heifers, and at Spotted-Tail 500 two-year-old heifers and 100 milch cows between the ages of three and five years.

Bidders must specify at what point they propose to deliver the articles, except the cattle, which will be required to be delivered at the respective Agencies between March 1 and May 1, 1879.

A certified check on some National Bank or U. S. Depository for a sum equal to at least five per cent of the amount of the proposal, payable to the order of the Commissioner of Indian Affairs, must accompany each bid, to be held by him until the awards are made and contracts and bonds executed.

The right is reserved to reject any or all bids, or any part of any bid; also, to increase or diminish the quantity of any article embraced in the foregoing list.

E. A. HAYT, Commissioner.

ARTESIAN WELLS.

Sealed proposals will be received at this office up to 1st November, 1878, for boring Artesian Wells in the City of Charleston. Plans, drawings, specifications, etc., can be had on application to City Engineer, Charleston, S. C. City Council of Charleston reserves the right to reject any or all bids. Proposals to be directed to COMMITTEE ARTESIAN WELLS AND WATERWORKS, CHARLESTON, S. C.

ASYLUM.

Sealed proposals will be received until Tuesday, October 16th, at 12 o'clock M., by the trustees of the Ohio Institution for the Education of Idiotic and Imbecile Youth, at the office of the Superintendent, for furnishing materials and doing the work required by the plans and specifications for plastering two new wings.

All proposals must be accompanied by proper bond and security, and directed to John A. Shank, President of the Board of Trustees, and left at the office of the Superintendent.

Plans and specifications can be seen at said office from this date.

JOHN A. SHANK, J. M. MONTGOMERY, J. K. RUKENBROD, Trustees.

PROPOSALS.

UNIVERSITY BUILDING.

Sealed proposals will be received at the office of the Board of Directors of the University of Cincinnati, northeast corner of Main and Third streets, second story, on Thursday, October 10, 1878, from 9 to 12 o'clock M., for the material and labor required for each separate and distinct trade or kind of mechanical labor necessary for building an addition to the University Building, and finishing the fourth story of the present building on Clifton Avenue, according to the plans and specifications to be seen at the office of S. Hannaford, architect, Rooms Nos. 37 and 38 Johnston Building, southwest corner of Walnut and Fifth streets.

Bids must be upon the blank forms to be obtained at S. Hannaford's office.

No bid will be received for the whole work, or for any greater portion than is embraced in one trade or kind of mechanical labor.

Each bid must contain the name of every person interested therein, and must be accompanied by a sufficient guaranty by two disinterested persons as sureties in a sum equal to the amount of the bid, that if the bid is accepted a contract will be entered into and the performance of it properly secured.

The right is reserved to reject any or all bids.

By order Board of Directors. LOUIS BALLAUF, Chairman Committee on Buildings, Repairs, and Leases.

CANAL AND CANAL LOCKS.

Sealed proposals will be received at this office until 11 o'clock, A. M., Tuesday, October 1, 1878, for furnishing labor and materials for the construction of a portion of the canal and locks at the Cascades of the Columbia River, Oregon. Plans and model of canal can be seen, and specifications and forms of proposals obtained, at this office.

JOHN M. WILSON, Major of Engineers.

SLATER'S AND GALVANIZED IRON WORK.

Proposals for Slater's and Galvanized Iron Work for the roofs of the U. S. Court-House and Post-Office at Atlanta, Ga.

Sealed proposals will be received at this office until 12 M. on the 12th day of October, 1878, for all the Slater's and Galvanized Iron Work required for the roofs of the U. S. Court-House and Post-Office at Atlanta, Ga., in accordance with drawings and specification, copies of which, form of proposal, and any additional information, may be had on application at this office, or the office of the Superintendent.

JAS. G. HILL, Supervising Architect.

PACKING-HOUSE.

We are now ready to receive proposals for piles, stone, brick, lime, cement, lumber, slate; also, for stone-work, driving-piles, laying brick, to rebuild our pork establishment at Medford Street, Somerville. Plans may be seen at our office, 27 and 29 Faneuil Hall Market, or at our packing-house, Windsor St., Somerville. We reserve the right to reject any or all proposals, as may be for our interest to do.

CHARLES H. NORTH & CO.

COURT-HOUSE.

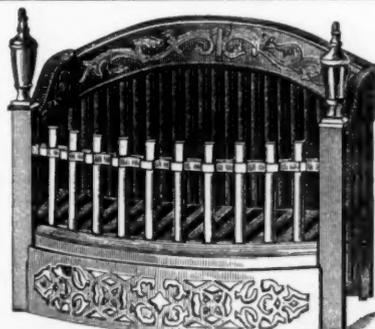
Sealed proposals for the building of the new Montgomery County Court-House will be received until October 4, 1878. These proposals will be opened Saturday, October 5, 1878, by the Court-House Commissioners, who claim the right to reject any and all bids.

Prices proposed, terms, etc., must be included in each bid. The plans and specifications can be seen at the Bank of Clarksville. CHAS. W. TYLER, Chairman Court-House Commissioners, Clarksville, Tenn.

WANTED.

A position as agent for a stone contractor, or for a company manufacturing specialties for building purposes, by a young man experienced in business, or any situation requiring a knowledge of architects' plans, designing, scale, and detail drawings, preparing bills of quantities, etc. An extensive acquaintance among architects, and means of keeping informed of building news in New York and Boston.

O. WESLEY, 246 E. 25th St., New York.



BRASS ANDIRONS, FENDERS,

And all kinds of Brass Work, made to order.

Grates for Parlor & Reception Rooms.

For hard or soft coal, in every variety.

Iron and Brass Fittings for Stables a specialty.

MURDOCK PARLOR GRATE CO., Manufacturers, 21 Washington St., Boston.

MARKS HALL'S AMERICAN



LEADED SHEETS. Cheapest and most durable Metal for Cornice and Roofing.

MARSHALL BROS. & CO., Front and Girard Ave., Phila.

Represented in New England States by T. HOLBROOK, No. 60 UNION STREET, BOSTON.

PATENT MINERAL WOOL.

ENTIRELY FIRE-PROOF AND UNDECAYING. THE BEST INSULATOR OF HEAT, COLD, AND SOUND.

For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc.

ALEXANDER D. ELBERS, P. O. Box 4461. 26 1/2 Broadway, New York

McSHANE BELL FOUNDRY

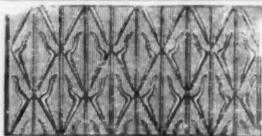
Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free

HENRY McSHANE & CO., Baltimore, Md.

The Useful

is issued monthly—consists of Perspectives of Interiors, Ornaments of Buildings, Fresco Painting, Furniture, etc., and is accompanied with full-size working-drawings—for direct use—Price to Subscriber One dollar per number.

Office 28 Pemberton Square, Boston, Mass



METALLIC SHINGLES.

We call the attention of all parties interested in Roofing, and the owners of large buildings, to the above article. It is superior to Slate, Cheaper, Fire-proof, about one fourth the weight, lays much closer, therefore is Storm-proof, cannot Crack, etc. Any carpenter can put them on. Send for description and Price List to IRON CLAD MANUFACTURING CO., 59 Greenpoint Ave., Brooklyn, E. D. P. O. Box 2528, N. Y. City

We manufacture Slate Goods, through every operation, from quarry to completion.

THE FAIR HAVEN MARBLE AND MARBLEIZED SLATE CO.

FAIR HAVEN, VERMONT.

The oldest and most extensive producers of

SLATE MANTELS IN THE UNITED STATES.

We imitate more than fifty rare marbles and woods. Styles and workmanship unsurpassed. Special care given to making Mantels and other goods from architects' drawings. Being in close proximity to the best white American marble quarries, and with rare facilities for selecting stock and doing the work, we are also producing

MARBLE MANTELS

At the very lowest prices, and in the best manner possible. We also produce all kinds of plain slate and marble work

Look over this list and correspond with us and get our Catalogue.

- Purple, Green, Red, Variegated Roofing Slates. Same Color Slate, also White and Black Marble Tiles. Window Sills. Window Lintels. Water Table. Bell Courses. Mantels. Solid Steps. Steps and Risers. Laundry Tubs. Urinals. Grave Covers. Vault Work. Carriers' Tables. Counter Tops. Billiard Table Beds. Blackboards. Brewers' Vats. Cisterna. Greenhouse Shelves. Plumbers' Goods, etc.

TO ARCHITECTS.

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the

Scagliola & Marezzo Marble,

Which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall and Altar Work

JAS. T. ALLEN & CO.,

25 North 17th Street, Philadelphia.

Should you want Ornamental Glass, write for particulars to



Advertisement for THE HELIOTYPE PRINTING COMPANY, 220 DEVONSHIRE ST BOSTON. Includes logo with 'LUX-FECIT' and 'THE HELIOTYPE PRINTING COMPANY' text.

THE "AIR SPACE" BOILER COVERINGS

Save 10 to 20 per cent in fuel.

See Am. Architect and Building News, Dec. 15, 1877.

THE CHALMERS-SPENCE COMPANY.

140 Congress Street, Boston. 7 Foot 9th St. E. R. New York.

CLASSIFIED ADVERTISEMENTS.

Table listing various architectural and construction services and companies, including Architects, Bricklayers, Carpenters, and others, with their respective locations and page numbers.

**ETNA IRON CO.**

Manufacturers of every description of Wrought and Cast

**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**

Patent



Steam

**PUMP**

**THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a speciality.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

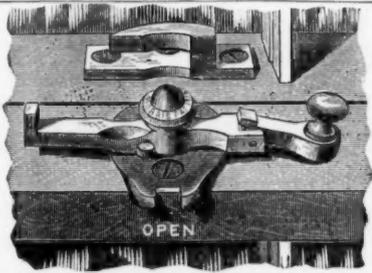
The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

**KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES, { 14 & 16 Federal St., } Boston.  
{ 113 & 115 Congress St., }  
{ 92 & 94 Liberty St., } New York.

Send for Illustrated Catalogue.



THE

**MORRIS BURGLAR-PROOF SASH LOCK.**

Patented July 2, 1875. The Safest! The Simplest! The Most Reliable! THE BEST!

N. B. — No springs to get out of order. Sold by all hardware jobbers. Manufactured by the MORRIS SASH LOCK MANUFACT'G CO., Office 168 Walnut St., Cincinnati, O.

Price List and Samples furnished to the trade on application. A liberal discount to the trade.

**PATENTS.**

F. A. LEHMANN, Solicitor of Patents, Washington, D. C. NO PATENT NO PAY. Send for Circular.

**"ZODTCHY" (BUILDER).**

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

**M. JEROME KÜTTNER,**

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from EIGHT to SIXTEEN pages of letterpress, gr. quarto, with cuts, and at least FIVE autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.

The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts.

For important Advertisements a Discount of ten to thirty per cent.

Address,

**JOURNAL "ZODTCHY,"**

18 OFFICER STREET, ST. PETERSBURG, RUSSIA.



**Carson's Kitchen Sink.**

Is an improvement in this fixture that most meet with the approval of every house-keeper as it retains every particle of grease, and prevents the waste of pipes from filling up; besides being better trapped than any other sink in use.

Biggall Mfg. Co., Modina, N. Y., or J. M. Carson, Louisville, Ky. Man'rs.

**NATIONAL**

**FINE ART FOUNDRY,**

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze TO ARCHITECTS AND BUILDERS.

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

(from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

**GEO. DWIGHT, JR., & CO.,**

Builders in Iron, and Engineers in Fire-Proof Construction,

SPRINGFIELD, MASS.

HAVE FOR MANY YEARS given their exclusive attention to FIRE-PROOF CONSTRUCTION; and they now invite the correspondence of Architects to the following specialities which hereafter will constitute the leading items of their business: FIRE-PROOF FLOORS. The only floors that have stood fire in this country.

FIRE-PROOF ROOFS. Refer to Equitable Life Insurance Company's Building at Boston.

FIRE-PROOF SHUTTERS. Have stood many fires in all parts of the country. Over 6000 pairs put up in Boston after the fire. Saved the city of Springfield last year.

FIRE-PROOF LATH. In the words of one of the best-known architects of this country, "Minimum of metal, maximum of stiffness, maximum of clinch; the best lath ever made, either wood or iron." See New York Post-Office; State Department, Washington; Equitable Life Insurance Company's Buildings, and many others.

Mr. HOYT will be pleased to wait upon Architects, when desired, to explain our methods, and to present for inspection construction plans and estimates for any specific work.

**BURDITT & WILLIAMS,**

DEALERS IN

**FINE HARDWARE**

of every material. A specially complete stock of PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



**The Draft of the Chimney increased.**

Smoking Chimneys Prevented.

Particularly adapted to Chimneys in exposed positions.

Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR, 70 Grand St., Brooklyn, N. Y.

CATALOGUE OF

**Architectural Books**

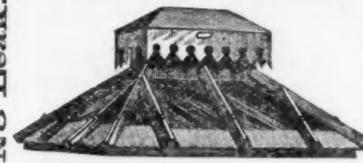
Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO., ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.

**BICKELHOUP BROS.,**  
329 West 37th St., New York.

No Leak.



No Putty.

**PATENT METALLIC SKY-LIGHTS.**

BEEHIVE BRAND.

**FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**UNPARALLELED DISCOVERY.**

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the *Paint Preserver* invented by ASAHEL WHEELER, Boston. It will neither crack, blister, nor scale.



**BALTIMORE PRESSED TILES,**  
FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases,  
DRAIN AND SEWER PIPE, FIRE-BRICK,  
LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

**WALDO BROTHERS,**  
No. 94 WATER STREET, BOSTON.

**PEERLESS BRICKS.**

THE PEERLESS BRICK COMPANY,  
OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK  
ARCHITECTURAL SHAPES (80 kinds).

ALSO

RED Pressed Fronts.

Extra fine in color and quality

**BROWN,** Colored throughout  
More beautiful than Brown Stone DURABLE

**CHOCOLATE,**

Same as above; difference in color

**FLESH COLOR,**

A very popular color.

**BUFF,** very fine.

Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F. ADAMS,

JOSEPH WOOD, JR.,

PRESIDENT.

TREASURER



**DOLIVET, CUTTER, & CO.,**

ARTISTIC

**Papier Maché Decorations,**

108 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING Venetian Blinds.**

*Wilson's Patent.*  
For first-class Dwellings and Public Buildings.  
These blinds can be fitted either inside or outside the sash, and are operated with ease without machinery or weights. They are made to coil above or below, as shown in cut. Can be furnished in any kind of wood. Unequaled for elegance, durability, and simplicity. Indorsed by many of the leading architects in the country, and in use in some of the handsomest buildings.

**WILSON'S PATENT Rolling Steel Shutters**

These blinds are operated on same principle as above (being self-coiling). They are used for closing store-fronts and all arcades and doorways that are required to be perfectly fire and burglar proof. Also, Rolling Wood Blinds for Store-Fronts, Book-Shelves, School Partitions, and other purposes.

A list of public and private buildings fitted with our Blinds sent on application. Architects and owners are invited to send for working models, catalogues, and price-lists.

**WILSON & JAMES,**  
68 Beekman St., New York.  
Two Prize Medals at Philadelphia.

**PRIZE MEDALLISTS.**  
1862; 1865; 1867; 1872; 1873; AND ONLY AWARD AND MEDAL FOR SELF-COILING STEEL SHUTTERS AT CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**  
ORIGINAL INVENTORS AND SOLE PATENTEES OF  
**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

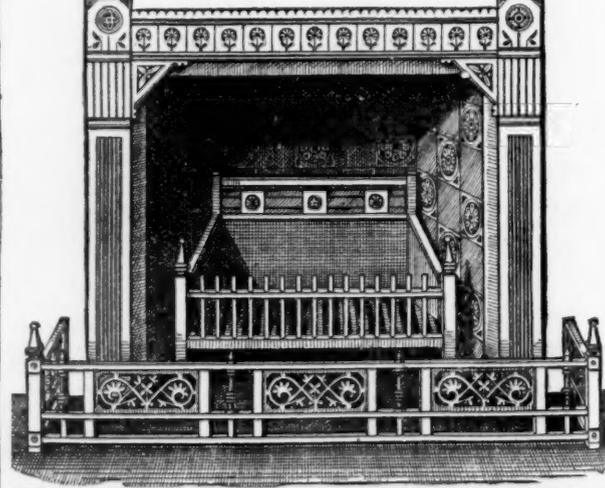
Fire and Burglar Proof. Also, improved Rolling Wood Shutters  
OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Turford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.  
OFFICE AND MANUFACTORY.  
162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO,**  
76 READE STREET, NEW YORK  
WORKS, DARLINGTON, N. J.

*Lock and Hardware Manufacturers,*  
DESIGNERS, FOUNDERS, AND WORKERS  
IN  
**BRONZE AND BRASS.**

Architects' Designs faithfully executed.  
Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**  
(NO CONNECTION WITH ANY OTHER ESTABLISHMENT).  
Union Sq., 2d door from Broadway, (17th St. side),  
NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile  
HAVE NO OTHER WAREHOUSES.

**VALUABLE ART PUBLICATIONS.**  
**HUNT'S** (WILLIAM M.) Talks on Art. 8vo. Paper, \$1.00.  
**CLEMENT'S** (CLARA ERSKINE) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a Complete Index. Crown 8vo. Cloth, red edges, \$3.25.  
Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.  
**HOUGHTON, OSGOOD & COMPANY, Boston.**

**A NOVELTY.**  
**THE YALE PATENT ANTI-FRICTION ROLLER STRIKE.**  
Applicable for use with all Mortise Locks, old and new.  
IT ENABLES THE DOOR TO BE SHUT WITHOUT SLAMMING.  
IT PREVENTS ALL JAR AND NOISE.  
IT SAVES WEAR OF THE LOCK AND DOOR.  
IT CAN BE EASILY APPLIED.  
ITS COST IS BUT TRIFLING.  
Architects can obtain a sample strike free by addressing  
**YALE LOCK MANUFACTURING CO., STAMFORD, CONN.**  
New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,  
94 BEEKMAN STREET, NEW YORK.  
**SPECIALTIES IN PLUMBING GOODS.**  
Having for their especial object  
*Cleanliness, Durability,*  
And the exclusion of Sewer Gas.  
JENNINGS' NEW CLOSET, WITH New Valve  
With non-corrosive Valve Seating and Solid Plunger.

**BOWER'S PATENT SEWER-GAS TRAP.**  
The most perfect barrier against Sewer Gas that has yet been invented.  
**A POSITIVE SEAL**  
Against sewer-gas, absorbed gases, and back water. Seal is not broken by syphonage or evaporation. *Self-scouring,* not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers,  
**B. P. BOWER & CO.,**  
104 & 106 St. Clair St., Cleveland, O.

**THE EUREKA VENTILATION CO.**  
OFFICE AND MANUFACTORY,  
74 CHARLESTOWN STREET, BOSTON, MASS.

**A. L. FAUCHÈRE & CO.**  
OFFICE AND WAREHOUSES  
1319 and 1321 Broadway, New York,  
Exporters, Manufacturers, and Dealers in all kinds of foreign and domestic  
**MARBLE FOR INTERIOR WORK.**  
Estimates furnished on application.

**ARCHITECTURAL IRON AND JAIL WORKS.**  
**M. CLEMENTS,**  
MANUFACTURER OF  
Iron Railing, Bank Vaults, and Jail Cells,  
Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc.  
BAYMILLER STREET, near Sixth and C. H. & D. R. R. Depot, CINCINNATI, OHIO.

**STEWART'S HARD WOOD SLATE, MARBLE AND MANTELS**  
MIRRORS, ART-TILES, HEARTHES &c.  
MANTELS, HEARTHES &c.  
Masonic Temple, 23<sup>d</sup> St & 6<sup>th</sup> Ave N.Y.

**Sewer Pipe, Fire Brick, Terra Cotta, Chimney Tops, Garden Vases, Art Pottery for Decoration.**  
The strongest and smoothest pipe in the country. Prices as low as any other manufacturer.  
**Portland Stone Ware Co.**  
Geo. C. DUNN, Gen'l Ag't,  
80 Kilby Street, Boston.  
400 Federal Street, Boston.

**LIMMER ROCK ASPHALT CO.**  
111 Broadway, Room 105, New York.  
Rock Asphalt is a natural product, and the ideal material for Paving Roadways, Streets, Yards, and Stables, and for Flooring Cellars in Breweries and other establishments.



**SAYLOR'S PORTLAND CEMENT.**  
Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R., U. S. Government Works (Forts and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally.  
For Sale by all dealers in Building Materials. **Johnson & Wilson, Gen'l Agts.**  
Send for circular. 93 Liberty Street, New York.

**Automatic Signal Telegraph Co.,**  
CITY OF BOSTON,  
OFFICE, 178 DEVONSHIRE STREET, ROOM 20,  
Is prepared to make contracts for the protection of buildings against fire.  
DIRECTORS.  
CHARLES E. GUILD, President. WILLIAM ENDICOTT, JR. JOHN D. W. JOY. WILLIAM B. WATKINS. PATRICK T. JACKSON, Treasurer.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**  
Theatrical Fresco only. Prices moderate. References first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.  
LAFAYETTE W. SEAVEY.  
Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK.

**THE WELLINGTON PATENT OVERFLOW BASIN.**  
No sewer gas. No overflow. No leakage around the top of the basin. This thoroughly reliable basin is rapidly taking the place of the ordinary one.  
It gives perfect satisfaction in every instance.  
Manufactured by  
**L. S. MOORE & CO.,**  
Send for Circulars. 40 Oliver St., Boston.

# AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

Vol. IV. No. 145.]

SATURDAY, OCTOBER 5, 1878.

[PRICE 15 CENTS.]

## BUILDERS' SUPPLIES.

**AMERICAN ENCAUSTIC TILE,**  
 Acknowledged by experts to be  
**THE BEST IN THE WORLD.**  
 Manufactured by the  
**AMERICAN ENCAUSTIC TILING CO. (Limited.)**  
 OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.  
 Designs and estimates for Public Buildings, Halls,  
 Churches, Vestibules, and for External Decoration, fur-  
 nished on application.

**WALWORTH MANUFACTURING CO.,**  
 69 KILBY ST., BOSTON.  
**PUBLIC BUILDINGS,  
 PRIVATE RESIDENCES,  
 GREENHOUSES, ETC.,**  
 Warmed and ventilated by  
**STEAM OR HOT WATER.**  
 Correspondence solicited. Plans and estimates furnished  
 on application.

**"HOTCHKISS" TOWER CLOCKS,**  
 MANUFACTURED BY  
**SETH THOMAS CLOCK CO., THOMASTON, CONN.**  
 Prices \$100 to \$6,000.  
**WARRANTED ACCURATE, STRONG, DURABLE.**  
 OFFICE, 581 BROADWAY, NEW YORK.  
 Send for Illustrated Catalogue.

**"MINTON'S ART AND ENAMELLED  
 TILES,"**  
 (China Works, Stoke-Upon Trent.) Also, The Campbell  
 Brick and Tile Co.'s  
**ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS,  
 ETC.**  
 For Churches, Banks, Halls, Vestibules, and Hearths;  
 Outside Decorations, Flower Boxes, Etc.  
**THOS. ASPINWALL & SON,**  
 604 Broadway, NEW YORK.  
 The only representatives in the United States for the  
 above firms.

**ASPHALT (FELT) ROOFING.**  
**WARREN'S NEW PATENT  
 FELT AND GRAVEL ROOFING,**  
 Substitutes NATIVE ASPHALT for Coal-Tar materials for  
 these roofs.  
 The very best and most durable material for flat roofs.  
 Also, Native Asphalt and Asphaltic Cement for Concrete  
 Walks and Pavements.  
 Roofers and pavers supplied with the above, and with War-  
 ren's original Coal Tar Roofing and Faving Materials.  
 Send for circulars and samples.  
**WARREN CHEMICAL AND MANUF'G CO.,**  
 20 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**TILES FROM ALL PARTS OF THE  
 WORLD,**  
 FOR  
**BANKS, PUBLIC BUILDINGS, and PRIVATE HOUSES**  
 References given to Tile Work throughout the United  
 States and British Provinces  
**AGENT FOR THE AMERICAN ROOFING TILE**  
 Contracts Solicited  
**O A. WELLINGTON, HOUSEHOLD ART ROOMS,**  
 No. 171 TREMONT STREET, BOSTON.

**HUGH SISSON & SON,**  
 Importers, Dealers, and Manufacturers of  
**MARBLE.**  
 INTERIOR MARBLE WORK AND MONUMENTAL  
 WORK A SPECIALTY.  
 Salesrooms, No. 140 W. Baltimore St.; Steam Marble  
 Works, North and Monument Streets,  
 BALTIMORE, MD.

**OHIO VALLEY PRESS BRICK CO.**  
 Challenge the world for fine stock Brick; also manufac-  
 turers of all kinds of Bricks, octagon and square. Office &  
 34 St. Yard Preston and Knapp Sts.  
 LOUISVILLE, KY.

**HAWTHORNE & TUCKER,**  
 PLUMBERS,  
 16 PROVINCE STREET, BOSTON  
 Estimates for Plumbing made, and work done in any part  
 of the United States or Provinces.

**J. H. BURT & CO.,** Carpenters and Builders,  
 Blue Hill Avenue Mattapan (Ward 24), Boston.

## BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY**  
 OF NEW YORK.

**LEONARD F. BEKWITH, Pres't. E. GILLET, Vice-Pres't.**  
 Hollow Blocks of any pattern, uniting strength and resis-  
 tance to fire and water. The Hydraulic Lime of Tell  
 (France), one of the strongest cements known, is largely  
 used in this manufacture. The blocks do not conduct  
 heat, cold, or sound, and weigh 60 per cent less than brick.  
 Fire-proof Partitions, Floor Arches between iron or wooden  
 beams, and ceilings under iron or wooden beams, erected  
 in following buildings:  
 Western Union Telegraph, Orient, and Queens' Ins.  
 Coal and Iron Exchange, Museum of Natural Hist.  
 Equitable, Staats Zeitung, Hudson R. R. R. Fr. Depot.  
 W'msb'gh Savings Bank, N. Y. Hospital, Drexel,  
 Windsor, & W'm'ster Hotels, Cluny, & Young's Hotel, Bos'n,  
 Syracuse Savings Bank, West Point Military Hosp.,  
 Columbia College, Tribune, Corsey, & Vancorier Flats,  
 Baltimore Safe Deposit Co. Peabody Inst., Baltimore,  
 Peabody Museum, N. Haven, Westmoreland, & Elise Flats,  
 Sidewalks laid at Lenox Library, Tribune, etc.  
 Hollow Burnt Clay Bricks, for flat and curved arches,  
 partitions, etc., and Skewbacks for brick arches.  
 Sole agents for the U. S. for HYDRAULIC LIME OF TELL,  
 and LAFARGE PORTLAND CEMENT.  
 Sole agents for the U. S. for METTLACH ENCAUSTIC TILES,  
 laid in Tribune, Staats Zeitung, Mineral Spa, Central Park,  
 Belvidere Hotel, etc.  
 Sole agents for the Atlantic States for WIGHT'S FIRE-  
 PROOF COLUMNS.  
 Our Fire-proof work is the only one approved by the  
 New York Board of Fire Underwriters and the Superin-  
 tendent of Buildings, after severe public tests.  
 Office Room 54 COAL AND IRON EXCHANGE, 21 Courtlandt  
 Street, New York. Represented in Boston by  
**BOORMAN & Co., 5 Doane St.**

**E. HOWARD & CO.**  
 MANUFACTURERS OF CLOCKS AND WATCHES  
**CLOCKS FOR PUBLIC BUILDINGS**  
 114 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**  
**PLAIN AND ENCAUSTIC**  
**FOR PUBLIC BUILDINGS AND DWELLINGS,**  
 As laid by us in  
**THE CAPITOL AT WASHINGTON,**  
 And in numerous Churches, Banks, and Dwellings in every  
 part of the Country,  
 Glazed and Enamelled Tiles for Mantels, Hearths, Wain-  
 scoting, &c., and for Exterior Decoration.  
**MILLER & COATES,**  
 279 FEARL STREET NEW YORK.

**BARTLETT, ROBBINS & CO.**  
**HEATING AND VENTILATING OF PUBLIC AND  
 PRIVATE BUILDINGS**  
 A SPECIALTY  
 PLANS AND SPECIFICATIONS FURNISHED.  
 FOUNDERS, AND MANUFACTURERS OF GAS WORKS,  
 ETC., ETC.  
 24 LIGHT STREET, BALTIMORE.

**THE NEW ENGLAND GRANITE WORKS**  
**HARTFORD, CONN., and 1321 BROADWAY, N. Y.**  
 Quarries at Westbury, R.I.  
**MONUMENTAL AND BUILDING WORK**  
 of every description, all the varieties of  
**AMERICAN AND FOREIGN GRANITE.**  
 UNEQUALLED FACILITIES OFFERED TO THE TRADE.  
**J. G. BATTERSON, Pres't. H. B. BATTERSON, Sec'y.**  
 DIRECTORS:  
**J. G. BATTERSON, C. B. CANFIELD, H. A. BATTERSON**  
**G. T. BATTERSON,**  
**CARL CONRADS, Sculptor.**

**WHITTIER MACHINE CO.**  
 Manufacturers of Steam and Hydraulic  
**ELEVATORS,**  
**STEAM ENGINES, BOILERS, AND MACHINERY.**  
 No. 1176 Tremont Street, Boston.  
 Office in the New England Mutual Life Insurance Co's  
 Building, Post Office Square,  
 and 129 Broadway, New York  
**CHARLES WHITTIER, Pres. A. C. WHITTIER, Treas.**

**OTIS BROTHERS & CO.**  
**SAFETY STEAM AND HYDRAULIC  
 ELEVATORS.**  
 A specialty for a quarter of a century.  
**BUILDERS OF THE HALE HYDRAULIC ELEVATOR**  
 No. 348 Broadway, New York.

## BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
**OHIO BUILDING STONE.**  
**GRIND AND SCOTTER STONE,**  
 From our FLORENCE and AMHERST QUARRIES.  
 Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS  
 111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
 Designers and Manufacturers of  
**GAS FIXTURES,  
 ORNAMENTAL METAL WORK, CLOCKS and BRONZES**  
**ARCHITECTS' ORDERS SOLICITED.**  
 Special designs submitted on application.  
**WAREHOUSES, 636 AND 638 BROADWAY, NEW YORK.**  
**MANUFACTORY, 24th AND 25th Sts., AND 10th AVENUE, N. Y.**

**FISHER & BIRD,**  
 Workers in all kinds of Foreign and Domestic  
**MARBLE,**  
 97 to 108 East Houston St., NEW YORK.  
 Established 1830.

Among our notable decorations are: The Illinois New  
 State House; Palace Hotel, San Francisco; Baldwin's Ho-  
 tel, San Francisco; Insurance Building, 10th and Chestnut  
 Streets, Philadelphia; Mutual Life Insurance Building  
 Boston; Orient Mutual Insurance Building, New York;  
 Union College, Schenectady; and numerous Churches,  
 Private Residences, etc., etc., throughout the country. We  
 solicit the opportunity to estimate upon all classes of work,  
 viz., Tiling, Wainscoting, Staircases, Mantels, etc. Ceme-  
 tery work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
 Are ready to estimate on contracts of any size for  
 furnishing their celebrated Amherst, Ohio,  
**BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS  
 OR CUT AND SET.**  
 Also,  
**AMHERST AND INDEPENDENCE GRINDSTONES,**  
 And OHIO MINERAL AND STONE PAINTS  
 Fire-Proof Stove Cement and Stove Putty ground in Oil  
**OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.**

**SPANISH FLOOR TILES. "NOLLA MO-  
 SAICS."** Floor Tiles, beautiful in color and design, for  
 Dwellings, Churches, and Public Buildings.  
**SPANISH WALL TILES.** White, Glazed, Valencia,  
 Tiles for Walls and for decorative painting.  
**PRINTED FIGURED TILES** of Spanish designs, for  
 Wainscoting, Mantels, Jardinières, etc.  
 Floors of "Nolla Mosca" can be seen at the "Rock-  
 ingham," corner of Broadway and 56th Street. Imported  
 and for sale by **JOHN CHADWICK, Sole Ag't for U. S.**  
 49 Broadway, N. Y.  
**C. E. PARKER, Agent, 14 Exchange Place, Boston.**

**TUFTS' ELEVATOR WORKS,**  
 MANUFACTURERS OF "TUFTS' PATENT" COMBI-  
 NATION ROPE ELEVATOR.  
**TO BE OPERATED EITHER BY STEAM OR WATER.**  
 The only safe and reliable machine made for Passenger use  
 in Public Buildings and Hotels, and for business purposes in  
 Warehouses, Stores, &c.  
**37 FOUNDRY STREET, SOUTH BOSTON**  
**OFFICE, 243 Broadway, New York.**  
**OTIS TUFTS, L. A. BIGELOW,**  
 President. Treas'r and Gen'l Manager.

**STEAM WARMING APPARATUS.**  
**HIGH AND LOW PRESSURE.**  
**HOUSE WARMING A SPECIALTY.**  
 Pamphlet with more than 1,000 references sent on appli-  
 cation.  
**WYLLYS H. WARNER,**  
 114 LEONARD STREET, NEW YORK,  
 and 33 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**  
 No. 6 COURTLAND ST., NEW YORK.  
 Works at Paterson, N.J.  
**PATENT SAFETY STEAM ELEVATORS**  
 for Public and Bank Buildings, Hotels, Private Dwel-  
 lings, etc.  
**SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP**  
**GUARANTEED.**  
 Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "HEALTH" AND "TUBULAR"  
Manufactured by the  
GOLD'S HEATER MANUFACTURING CO.  
114 LEONARD ST., NEW YORK.

Send for Pamphlet.  
W. E. GOLD, Pres't WYLLIS H. WARNER, Treas'r

**ELECTRIC BELL, AND ANNUNCIATORS,  
SPEAKING TUBES,  
AND BURGLAR ALARMS,  
For Public and Private Buildings.**  
THE BEST IN USE.  
S. W. FULLER,  
63 Devonshire Street, Boston.

**ART PAINTED TILES  
FOR MANTELS, CABINETS, ETC.**

SHARPLESS & WATTS,  
225 MARKET STREET, PHILADELPHIA.  
Agents for  
MINTON'S TILES,  
AND TERRELLATED PAVEMENTS.

JOHN MACK, Plain and Ornamental Plasterer.  
41 Cambridge Street, Boston.

**MANTELS AND GRATES.**

RANKIN'S PATENT makes the Cleanest, Cheap  
est, and Hottest Fire. Avoid infringements, and send for  
Circular to

C. S. RANKIN & CO.,  
ARCHITECTURAL IRON WORKS,  
Manufacturers of all kinds of Iron Work for  
BUILDINGS, JAILS, ETC.

187 W. PEARL ST., CINCINNATI, O.  
**BUILDING MARBLE.**  
Branch yard of the RUTLAND MARBLE CO., 198 Cal-  
way Street, Boston. JOHN D. ALLAN, Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in A-  
and and Continental Marble, furnished at low prices.

**PRESSED BRICK.  
STOCK AND COMMON**

MANUFACTURED BY  
FLETCHER & THOMAS,  
Indianapolis, Ind  
All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY  
**GILLIS & GEOGHEGAN,**

Nos. 116 & 118 Wooster St., New York.  
See our work at the Cathedral, 50th St. and 5th Av.  
Drexel Building, cor Wall and Broad; Bennett Building,  
Fulton and Nassau, etc.  
Architects and owners promptly furnished with speci-  
fications and estimates.

**ARCHITECTS.**

**P. B. WIGHT,**  
CONSULTING ARCHITECT,  
75 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.  
Consultations on matters pertaining to Fire-Proof Con-  
struction, Foundations, Drainage, Sanitary Work, Ventila-  
tion, Machinery, Valuations, Interior Decorations, and  
Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**  
ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E., ARCHITECT  
AND SANITARY ENGINEER**  
KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes  
of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,  
ARCHITECT,**  
Room 17, Life Insurance Building,  
ST. LOUIS, MO.  
Special attention to Churches, Schools, and other  
public buildings.

WALTER ARCHITECT PERRY  
DICKSON, Albany, N. Y. BUILDING.

**GEO. E. WARING, JR.,  
CONSULTING ENGINEER,  
FOR SANITARY AND AGRICULTURAL WORKS,  
NEWPORT, R.I.**

**SANITARY ENGINEERING.**  
EDWARD S. PHILBRICK, C. E.,  
12 WEST ST., BOSTON, MASS.,  
Offers advice and superintendence in  
CONSTRUCTION OF WORKS,  
PLUMBING, DRAINAGE, AND VENTILATION.  
And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
327 HARRISON AVENUE . . . . . BOSTON,  
SHEET METAL CORNICES, HAYES'S PAT-  
ENT VENTILATING SKY-LIGHTS,  
WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

**EXCELSIOR  
ROOF PAINT.**

This paint has been thoroughly tested throughout the  
Eastern States, and has been found to be a perfect tin or  
metallic preserver. We warrant it neither to crack nor  
blister by **HEAT or COLD**, and to last

**IN ANY CLIMATE TEN YEARS.**

Those desiring to use this valuable preparation upon  
their buildings, can secure the same by addressing

C. M. WHEELER, J. M. ROOT,  
Toledo, Ohio.

**DECORATORS.**

**W. J. MCPHERSON,**

(Established A.D. 1845.)

**MURAL PAINTER,  
DESIGNER,**

**Ecclesiastical Decorator,**

AND  
**ART STAINED GLASS MANUFACTURER,**

440 TREMONT STREET,  
BOSTON, MASS.

Should you want Ornamental Glass, write for particulars to



**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the  
subscriber to produce Modern and Medieval styles of work  
equal to any European examples, for Churches, Pri-  
vate Residences, Halls, etc.

The value of the work is attained by a careful selection  
of colors in Cathedral and French Glass of his own impor-  
tation.

Designs in accord with architects' plans furnished at  
short notice. Reference of work at office

SAMUEL WEST, 115 Eliot St., Boston

**FRANK HILL SMITH,**  
171 1/2 TREMONT STREET,  
BOSTON . . . . . MASS.

**COOK, REDDING & CO.**

149 CONGRESS ST., BOSTON,  
Ornamental, Stained, and Cut Glass,  
FOR  
Churches, Public Buildings, and  
Private Residences.

We manufacture Slate Goods, through every operation, from quarry to completion.

**THE FAIR HAVEN MARBLE AND MARBLEIZED SLATE CO.**

FAIR HAVEN, VERMONT.

The oldest and most extensive producers of

**SLATE MANTELS  
IN THE UNITED STATES.**

We imitate more than fifty rare marbles and woods. Styles and workmanship unsurpassed. Special care given to  
making Mantels and other goods from architects' drawings. Being in close proximity to the best white American  
marble quarries, and with rare facilities for selecting stock and doing the work, we are also producing

**MARBLE MANTELS**

At the very lowest prices, and in the best manner possible. We also produce all kinds of plain slate and marble work

Look over this list and correspond with us and get our Catalogue.

- |  |                   |                   |                      |
|--|-------------------|-------------------|----------------------|
| Purple, Green, Red, Vari-<br>egated Roofing Slates.        | Window Lintels.   | Laundry Tubs.     | Billiard Table Beds. |
| Same Color Slate, also<br>White and Black<br>Marble Tiles. | Water Table.      | Urinals.          | Blackboards.         |
| Window Sills.  | Belt Courses.     | Grave Covers.     | Brewers' Vats.       |
|  | Ashlar.           | Vault Work.       | Cisterns.            |
|  | Solid Steps.      | Carriers' Tables. | Greenhouse Shelves.  |
|  | Steps and Risers. | Counter Tops.     | Plumbers' Goods, etc |

**DECORATORS.**

**JOHN LAFARGE,  
MURAL DECORATION,  
51 W. Tenth St., New York and Newport, R. I.**

**SOCIETY OF DECORATIVE ART.  
4 East 20th Street,  
NEW YORK.**

Architects' designs for panels, tiles and plaques for inser-  
tion in Cabine. Work, and other decorative uses, and for  
Art Needlework applied to curtains, hangings, Portieres,  
screens, table-covers, etc., carefully executed. Original  
designs for any of the above, subject to approval, will be  
gladly received, and paid for by the Society when used.

Orders are earnestly solicited.  
The Society has arranged with Mr. RUSSELL STRAUS,  
Architect, for the Exhibition and Sale of his well-known  
Wall Papers. Some of these are faithful reproductions of  
Japanese decorative papers; some are taken from Oriental  
and other stuffs; some are of original design. New pat-  
terns will be added from time to time.

**Fresco Decoration.**

**EMMART & QUARTLEY,**

Designers, Decorators, and Painters,  
32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made  
and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate  
work on hand or made to order. No. 1210 Ridge Avenue.  
JOSEPH S. MILLER successor to Wilson & Miller, Philadel-  
phia, Pa. Send for Illustrated Price-List

**Donald MacDonald,**

**GLASS STAINER AND DECORATOR**

No. 6 Hayward Place,  
BOSTON



**INLAID WOOD FLOORS.  
ORNAMENTAL WOOD BORDERS.**  
Designs and Estimates free.  
National Wood Manuf'g Co.,  
850 Broadway, near 23d St., New York

**PHILIP A. BUTLER,  
DECORATOR AND DESIGNER,  
No. 17 FENBERTON SQUARE,  
BOSTON.**

**HENRY B. JONES & CO.**  
IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS.  
612 WASHINGTON STREET, BOSTON.

(Established 1848.)  
**L. HABERSTROH & SON,  
FRESCO PAINTERS,  
and INTERIOR DECORATORS,  
No. 12 SCHOOL STREET, BOSTON.**

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa. (Can.)	Philadelphia.	San Francisco	St. Louis.
1 BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2 Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50		3.50 @ 4.50		1.75 @ 2.25	2.50 @ 3.00		3.00
3 CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25		1.50 @ 2.00
4 Cabinet Maker	2.50 @ 3.25		1.75 @ 2.25			1.50 @ 3.00	1.50 @ 2.00			
5 Finisher	2.00 @ 2.50		1.50 @ 2.00			1.50 @ 2.00	1.25 @ 1.75			1.50 @ 2.00
6 FOUNDRYMAN			1.50 @ 2.00			2.00 @ 2.75	2.00 @ 2.50			2.25 @ 2.50
7 Blacksmith	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.50			1.50 @ 2.50
8 Whitesmith			1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.75			
9 Galvanized Iron Worker	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00			2.25 @ 2.50
10 GAS FITTER	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00			2.00 @ 3.00
11 LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50		1.00 @ 2.00
12 PAINTER	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13 Glazier		2.00 @ 2.50	1.75 @ 2.00			1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50		
14 Grainier	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00		2.00 @ 3.00	1.75 @ 2.50			3.50
15 Paper-Hanger	.75 @ 2.50		per roll.	2.00	15c. pr. roll.	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00
16 PLASTERER	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00		2.25 @ 2.75
17 Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	1.50 @ 2.50		2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
18 Plumber	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.50	2.50 @ 3.50		2.00 @ 2.50	2.50 @ 3.50			2.50 @ 3.50
19 QUARRYMEN		3.00 @ 3.50	1.10 @ 1.25			1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20 Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50		2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21 Carver		3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75		8.00	2.00 @ 2.50	3.50 @ 6.00		2.75 @ 3.25
22 Painters and Washers		2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75			1.50 @ 2.50	1.00 @ 1.25		2.25 @ 2.50
23 Rubber	1.50 @ 2.00	1.75	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75		
24 Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50		2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.75		
25 Stone-Setter		2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00		2.00 @ 2.50	1.50 @ 2.00	2.25 @ 2.75		2.00 @ 2.50
26 Roofer (Tin)	2.00 @ 2.35	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25		2.00 @ 2.25
27 Slatier		2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00		2.00 @ 2.25	1.25 @ 2.00	1.75 @ 2.25		3.00
28 STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25			1.50 @ 2.50
29 STEAM FITTER		2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00



ARCHITECTS AND BUILDERS

WILL ADD MUCH TO THE BEAUTY OF THEIR BUILDINGS BY USING

GARDNER'S PERFORATED THREE-PLY VENEER SEATING,

Which is Ornamental, Durable, and Cleanly.

We refer to the following new and elegant buildings fitted up with our goods:—

Morris Plains, N. J., Insane Asylum.  
New York Hospital.  
American Museum of Natural History, New York.  
Institution for Feeble-minded Children, Lincoln, Ill  
Insane Asylum, Oshkosh, Wis.

Opera Chairs in new Music Hall, Lewiston, Me., Providence, R. I., and Brooklyn, N. Y.  
Seats in Depots of the Pennsylvania Railroad, at Philadelphia, Pittsburgh, etc.

Please send for Illustrated Catalogue.

GARDNER & COMPANY,

Patentees and Manufacturers,

376 PEARL STREET.....NEW YORK.

THE BEST PORTRAIT  
OF  
William Cullen Bryant

is the ATLANTIC PORTRAIT, which was published last year expressly for subscribers to the ATLANTIC MONTHLY, and which is unquestionably the best large portrait ever made of him. To show how it is regarded by excellent judges, we append the following extracts:—

I think the picture admirable in its rare and commanding lines, and shall gladly give it the best place I can find in my limited collection. — RALPH WALDO EMERSON.

I hesitate to bestow any praise upon it, for the reason that I should use stronger terms than, as a mere unskilled lover of art, I should have any right to employ. I shall be disappointed, however, if the best judges do not unite in considering it a masterpiece of portraiture and execution. — DR. OLIVER WENDELL HOLMES.

Mr. Baker was singularly fortunate in his subject; he has produced a marvelous likeness of Bryant, and a very noble work of art. If a head like this, in bronze or marble, were found in some Greek or Roman ruin, it would be worth its weight in gold. — T. B. ALDRICH.

This portrait is life-size, on paper 24 x 30. The retail price is \$2.00. With the ATLANTIC MONTHLY for a year, \$5.00; six months, \$3.00.

ATLANTIC PORTRAITS.

Henry Wadsworth Longfellow. It is one of the most admirable likenesses I have ever seen, and I can scarcely imagine a better representation of the poet and the man. — BARBARA TAYLOR.

John Greenleaf Whittier. It is very fine; it is the ideal Whittier. — J. T. TROWBRIDGE.

The above portraits are life-size, and the dimensions of each picture are 24 x 30. Subscribers to the ATLANTIC MONTHLY can obtain either portrait, with the magazine for a year, by remitting \$5.00 to the publishers; for \$6.00 the magazine and two portraits, and for \$7.00 the magazine and all three portraits will be sent. The subscription price of the ATLANTIC alone is \$4.00.

The portraits are sent by mail, carefully rolled, so as to avoid all danger of injury, and will be forwarded to any address on receipt of the price and subscription by the Publishers; they can be obtained through newdealers and booksellers generally.

HOUGHTON, OSGOOD AND COMPANY,  
BOSTON, MASS.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

GALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States.

Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO., 72 & 74 West Monroe St. Chicago, Ill.

A SACHEL GUIDE.

FOR THE VACATION TOURIST IN EUROPE. Revised Edition for 1878. With Maps. 16mo, flexible cloth, \$2.00. HOUGHTON, OSGOOD & CO.



NONESUCH

Self-Locking and Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT,  
733 Broadway, N. Y.

Patented July 10th, 1877

WILL NOT BURST WHEN FROZEN

AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT.

MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS. Regular Sizes, 2, 3, 4, 5 & 6 Inch. SPECIAL SIZES MANUFACTURED TO ORDER.

AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS. 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA.

WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH.

PRINCIPAL AGENTS.

- M. Halliday . . . . . New York City
- Hicks & Badger . . . . . Boston, Mass
- James Berry . . . . . Buffalo, N. Y.
- George W. Pitkin & Co. . . . . Chicago, Ill
- Watson & Martin . . . . . Albany, N. Y.
- McLeod, Reardon & Co. . . . . Troy, N. Y.
- W. H. Scott . . . . . Portland, Me
- Kittredge Cornice Co. . . . . Salem, G
- J. W. Jordan . . . . . Worcester, Mass
- H. G. Carpenter & Co. . . . . Wilkesbarre, Penn.
- I. W. Irwin . . . . . Alleghany City, Penn.
- Sellew & Co. . . . . Cincinnati, Ohio

RECOMMENDED FOR ARCHITECTS AND ENGINEERS

IMPERIAL GAS MACHINE

SEND FOR CIRCULARS

DUNN BROS & CO.



BIBB'S Celebrated Original Baltimore Fire Place Heaters

Mantels and Registers. B. C. BIBB & SON, Baltimore, Md. Best workmanship. Lowest prices guaranteed. Send for circulars.

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLIS ELLIOTT. Containing Helio-type Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, EC-CLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALLEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. I'ANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist*, Boston.

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courant.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVES. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIENARD. Reproduced in facsimile by the Helio-type Process. Folio, boards, (size of page 11 $\frac{1}{2}$  X 15 $\frac{1}{2}$  inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOthic FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOLETTE-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

The works of the learned and distinguished French Architect, EUGENE VIOLETTE-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

## Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — *EUGENE BENSON, in The College Courant.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

## The New York Sketch-Book of Architecture.

3 vols., 4to, \$6.50 each.

We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

## The American Architect and Building News.

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\*\* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers.

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

[Recorded for the American Architect and Building News.]

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, CEMENT, and DOORS. Includes items like Pale, Jersey, Long Island, and various sizes of doors.

Table listing prices for CEMENT, including Rosendale, Portland (Imported), and Portland (Saylor's American).

Table listing prices for DOORS, including Raised Panels, two Sides, in various sizes.

Table listing prices for BLINDS - Outside, including Per lineal, up to 2.10 wide, and various sizes.

Table listing prices for WINDOW FRAMES, including Ep to 3.4 x 7.2, put together.

Table listing prices for HAIR - Duty free, including Fattie and Goat.

Table listing prices for LATH - Cargo rates, including State, common, and Rockland.

Table listing prices for LIME, including State, common, and Rockland.

Table listing prices for LUMBER, including Pine, choice, extra dry, and various other types.

Table listing prices for PAINTS AND OILS, including Whiting, Paris white, and Zinc white.

Table listing prices for CEMENT, including Rosendale, Portland, and Keene's concrete.

Table listing prices for NAILS, including 10d, 8d, and 6d.

Table listing prices for AXLE PULLEYS - Steel, including 2-in. Pennsylvania make.

Table listing prices for SASH WEIGHTS, SASH LINE, and DOOR BUTTS.

Table listing prices for STONE, including Amherst freestone, Berea freestone, and Brown stone.

Table listing prices for SLATE, including Purple roofing slate, Green slate, and Red slate.

Table listing prices for TIN PLATES - Duty, 1-10c, including C. charcoal and I. C. coke.

Table listing prices for ZINC - Duty, sheet, and Sheet (gold) foreign.

Table listing prices for LEAD, including Bar and Sheet.

BOSTON.

Prices to Contractors and Builders.

Table listing prices for FIRE BRICK, including Waldo Bros. Extra and Waldo Bros. No. 2.

Table listing prices for BUILDING BRICKS, including Eastern and Hay State.

Table listing prices for BUILDING STONE, including Rutland Marble.

Table listing prices for LUMBER, including Michigan pine and No. 1.

Table listing prices for PAINTS AND OILS, including Whiting and Zinc white.

Table listing prices for LIME, including Quoted at 85c per cask for Rockland and Rockport.

Table listing prices for CEMENT, including Rosendale and Portland.

Table listing prices for NAILS, including 10d, 8d, and 6d.

Table listing prices for AXLE PULLEYS - Steel, including 2-in. Pennsylvania make.

Table listing prices for SASH WEIGHTS, SASH LINE, and DOOR BUTTS.

Table listing prices for MORTISE LOCKS - Brass face and Do, for front door.

Table listing prices for DOOR KNOBS, including Silvered glass and Cut glass.

Table listing prices for SASH FASTS, including Plain brass and Nickel plated.

Table listing prices for SCREWS, including Round head, nickel plated.

Table listing prices for STORE DOOR HANDLES - With mortise latch.

Table listing prices for IRON, including Wt-iron I Beams and Wt-iron II Beams.

CHICAGO.

Prices to Contractors and Builders.

Table listing prices for BRICK, LIME, AND CEMENT, including Lime in bulk and Chicago building brick.

Table listing prices for LUMBER (MICHIGAN PINE), including 1st and 2d clear.

Table listing prices for HARDWOOD LUMBER, including Whitewood clear and Whitewood box boards.

Table listing prices for PAINTS AND OILS, including Whiting and Zinc white.

Table listing prices for LIME, including Quoted at 85c per cask for Rockland and Rockport.

Table listing prices for CEMENT, including Rosendale and Portland.

Table listing prices for NAILS, including 10d, 8d, and 6d.

Table listing prices for AXLE PULLEYS - Steel, including 2-in. Pennsylvania make.

Table listing prices for SASH WEIGHTS, SASH LINE, and DOOR BUTTS.

Table listing prices for I C roofing, including 14 x 20, charcoal, and 14 x 20, coke.

Table listing prices for COPPER, including Bottoms, 28c, and sheathing copper.

Table listing prices for SHEET ZINC, including Full casks, 7c, slabs, 8c.

Table listing prices for SHEET IRON, including No. 24, c. rates, and No. 12, 13c.

Table listing prices for WIRE, including Nos. 1 to 4, 9c, and Nos. 5 to 10, 11c.

Table listing prices for PAINTS AND COLORS, including White Lead and Chrome yellow.

Table listing prices for OILS, including Linsed, raw, 60c, and Turpentine, 35c.

PHILADELPHIA.

WHOLESALE PRICES.

Table listing prices for IRON - Duty, including Anthracite No. 1 Pig and Anthracite No. 2.

Table listing prices for NAILS - Duty, including 2 1/2c and 3c.

Table listing prices for LUMBER, including Mich. uppers, 45, 50, 40, 45, 35, 40.

Table listing prices for PAINTS AND OILS, including White Lead in oil and Prv, white.

Table listing prices for LIME, including Quoted at 85c per cask for Rockland and Rockport.

Table listing prices for CEMENT, including Rosendale and Portland.

Table listing prices for NAILS, including 10d, 8d, and 6d.

Table listing prices for AXLE PULLEYS - Steel, including 2-in. Pennsylvania make.

Table listing prices for SASH WEIGHTS, SASH LINE, and DOOR BUTTS.

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms.

CREOSOTED WOOD. PREPARED AT THE Hayford Patent Creosote Wood Preserving Works. EDWARD R. ANDREWS, Proprietor.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY.



The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, ETC., ETC.

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.  
ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

**ESTABLISHED, 1836.**  
**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Composition Roof known. Also inventors and owners of the following patents:—

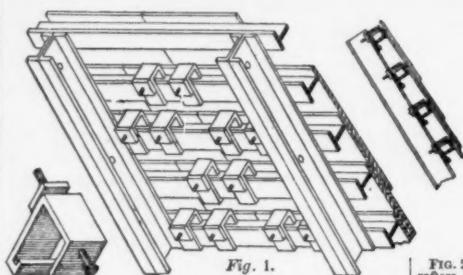


Fig. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the purlins on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

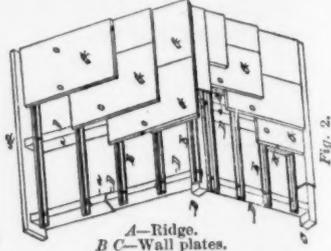


Fig. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or other fire-proof material, and iron purlins (c) or beams, with the slates (G) or other covering secured thereto by claps, (Fig. 1) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contact with the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point avoiding condensation, contraction and expansion of roofs formed wholly of iron.



Section of Fire-Place Heater.

**WARMING AND VENTILATION.**

**FIRE ON THE HEARTH.**  
**FIRE-PLACE HEATERS AND STOVES.**

VENTILATION of a Fire-Place. RESERVE FORCE of a Close Stove. CIRCULATION of a Furnace.

Adapted for any kind of Fuel,

And the only Fireplace Heater perfectly adapted for Soft Coal and Wood.

SILVER MEDAL AWARDED, PARIS EXPOSITION, 1878.

Boston Retail Agency, F. TUDOR & CO., 14 Pemberton Square.

**OPEN STOVE VENTILATING COMPANY,**

115 Fulton and 54 Ann Streets, New York.



Section of Stove.

**GAS**  
SPRINGFIELD GAS MACHINE.  
Springfield, Mass.; 45 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

**BUHRER'S INFALLIBLE SEWER GAS TRAP.**  
The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (B) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.

S. BUHRER, Inventor and Manufacturer, Cleveland, Ohio.  
WHOLESALE AGENTS.

W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O.  
L. WOLFF MFG CO., 109 & 111 West Lake St., Chicago, Ill.  
H. HAMLEN & MATHEWS, 82 & 84 North St., Boston, Mass.  
C. A. BLESSING, 44 North Fifth St., Philadelphia, Pa.  
THE J. L. MOTT IRON WORKS, 88 & 90 Beekman St., N. Y.  
Please send for Circular.

**Brandeis' Seamless Paragon Trap.**  
Safest, Best, Cheapest, and Non-siphoning.  
Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. BARNARD & WICKER, 46 Fulton Street, Brooklyn, N. Y.

**C. BUTCHER,**  
107  
Devonshire St.  
BOSTON.  
Send for  
Illustrated  
Catalogue.

**PATENT MARQUETRY FLOORING.**  
Specimens at Lawrence, Wilde & Co.'s, 42 Cornhill, Boston.

**DORCHESTER UNION FREESTONE CO.**  
NEW BRUNSWICK YELLOW FREESTONE.  
The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order.  
84 Pine St., New York. - G. P. SHERWOOD.

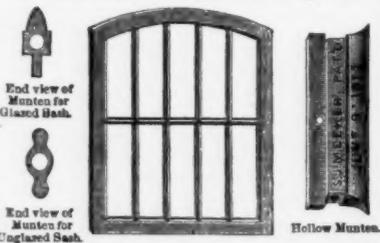
**TO ARCHITECTS.**  
The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the **SCAGLIOLA AND MAREZZO MARBLE**, Which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedicels, Wainscoting, Wall, and Altar Work.  
**JAS. T. ALLEN & CO.,**  
25 North Market Street, Philadelphia.



**BRASS ANDIRONS, FENDERS,**  
And all kinds of Brass Work, made to order.  
**Grates for Parlor & Reception Rooms,**  
For hard or soft coal, in every variety.  
Iron and Brass Fittings for Stables a specialty.

**MURDOCK PARLOR GRATE CO.,**  
Manufacturers,  
21 Washington St., Boston.

**D. M. MEEKER & SON'S**  
**Malleable Iron Hollow Munten Window Sash.**  
For Insane Hospitals, Fire Proof Buildings, &c.



The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

**D. M. MEEKER & SON,**  
Newark, N.J.  
Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

**MAKE YOUR OWN GAS**  
GAS GENERATORS, FOR LIGHTING Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.  
Send for CIRCULAR  
**WALWORTH MANUF. CO.**  
No. 63 Kilby Street, BOSTON, MASS.

**J. & R. LAMB, 59 CARMINE ST., N. Y. CHURCH FURNISHERS.**  
Practical Workers in Sterling Silver, Brass, and Bronze. Carved Wood, Decorations, etc.  
Illustrated Catalogues.  
Furniture, 10c.; Metalwork, 10c.; Decoration, 10c.

**HOISTING MACHINES EXCLUSIVELY.**  
HOTEL STEAM ELEVATORS, HYDRAULIC ELEVATORS, HAND POWER HOISTS, DUMB WAITERS.  
**H. J. REEDY, Manufacturer,**  
128 EAST EIGHTH ST., - Cincinnati, O.

**CRANE BREED & COMPANY CINCINNATI, O.**  
**SAFETY BOILERS FOR HEATING**  
STEAM AND HOT WATER.  
MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RADIATORS, PIPE COILS, REGISTERS, FITTINGS, STEAM PUMPS.

**NATIONAL TUBE WORKS CO.**  
PATENT  
Indestructible Enamelled Wrought Iron  
**LAP-WELDED PIPE,**  
From 1/4 inch to 15 inches diameter.  
Now extensively used for  
Water, Gas, Sewerage, and Mining.  
It is not affected by heat or acid, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage.  
MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making Joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at offices of  
**National Tube Works Co.,**  
8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.



BUILDING INTELLIGENCE.

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

JAIL-BARS.—Calvin J. Coe, Lowell, N. Y. An interior rod of wrought-iron is surrounded by a wrought tube, a space being left between the two, which is filled up with chilled metal, the core, surface, and filling forming one solid bar.

HAMMER-ENGINE.—P. Goodman, Lockport, N. Y. HOT-AIR RADIATOR.—William Parks and George M. Allen, Atkinson, Wis.

DRAG-SAWING MACHINES.—Allen Ransome, The Eukestons, Clapham Common, England. A horizontally-operating drag-saw is driven by a steam cylinder pivoted horizontally upon a bed-plate or frame, adapted to rest flat on the ground and be held up to the tree to be felled.

CONCRETE PAVEMENT.—Andrew B. Dean, Louisville, Ky. Upon a bed of broken stone is spread a layer of smaller broken stone and gravel. Upon this is spread a coating of mastic, which serves to secure the bottom of larger paving stones. The interstices between these stones are filled with the same mastic, which is spread evenly over the top and covered with a thin layer of sand. Rolling and ramming take place at each stage of the process.

RATCHETED GUIDE FOR ELEVATORS.—L. S. Graves, Rochester, N. Y.

LIFT-PUMP.—John E. Leonard, Bay City, Mich. CONDUIT.—Amos Mallory, Mystic Bridge, Conn.

METHOD OF FASTENING FURCULIN DOOR-KNOS TO THEIR SHANKS.—Emory Parker, New Britain, Conn. HATCHWAY.—Isaac Phillips, Pittsburg, Penn.

FIRE-HYDRANT.—Samuel Rainey, San Francisco, Cal. AUTOMATIC WATER CUT-OFF.—Virginia M. Ring, New Orleans, La.

LOCK.—George S. Snell, St. Louis, Mo. SASH HOLDER.—Charles E. Steller, Milwaukee, Wis.

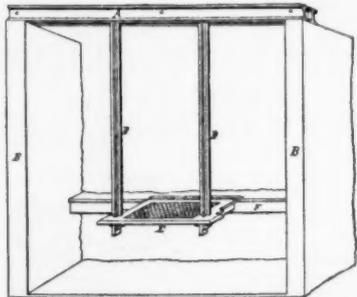
MANUFACTURE OF COMPOUND LUMBER.—William E. Brock, New York. Tongues and grooves are formed in the surfaces of boards, for making what is known as "compound lumber," by means of a longitudinally-reciprocating table, upon which the boards are placed and forced by an upper feed-roll under a rotary cutter-head having knives or cutters, which dress the surface of the board; then under a compressing-roll having V-shaped annular grooves, for forming the V-shaped grooves in the boards; then under another compressing-roll having annular ribs with parallel sides, which completes the tongues and grooves, after which the boards are brought together under pressure, so as to be solidly joined in one piece.

CHANNELLING TOOL.—Edward F. Edgecomb, Mechanics Falls, Me. MODE OF COVERING AND VENTILATING AREAS, VAULTS, ETC.—Thaddeus Hyatt, New York, N. Y.

WOOD-PLANING MACHINE.—William H. Doane, Cincinnati, O. MOLDING AND CARVING MACHINE.—C. F. H. Huff, Covington, Ky.

PAINT.—William H. James, Havana, N. Y. This paint is compounded of boiled linseed oil, rosin, boiled coal-oil, bees-wax, zinc, gliders, Japan drier, and ultramarine blue.

STORE-FRONT.—Charles J. Furst and Charles Randolph, Chicago, Ill. It is the object of this invention to provide a method of building store fronts so that the large plate-glass show-windows may not be broken by any slight unequal settling of the building, a settling which is very likely to occur where columns or posts rising from the foundation help support the lintel beam. This object is effected by



suspending the sill from the lintel beam. In the cut A is the lintel, which may be made of two or more iron beams bolted together, or in any other way. Resting upon the lower flanges of these beams, and occupying the space between them, are iron blocks, which are cut out, so as to receive the threaded suspension-rods D, D, which in section are X-shaped. Secured to the lower ends of these rods by pegs passing through slots in the rods are the sill-plates, whose inner ends are secured to the floor-joints F in the usual way.

COMBINED LADDER AND TRESTLE.—Thomas Mical, Plainfield, Ind. A ladder is hinged in two places, and braces secured by nut and bolt hold the section turned down to the middle section to form a trestle. Props bolted to the end sections swing out laterally. When the sections are to form a ladder the braces and props are adjusted to suitable apertures by the nuts and bolts, and form splices for the hinged joints.

WORK-SUPPORT FOR METAL TURNING LATHES.—Hans Reiss, Jersey City, N. J.

HAVE-TROUGH HANGERS.—John P. Spies, Fairview, Ill. The hanger is riveted centrally beneath the trough to an encircling band, which embraces the inner and outer edge of the trough, and is fastened by screws to the cornice just under the eaves.

STAIR-ROD SECURERS.—Charles E. Stearns, Boston, Mass.

SREAM AND HYDRAULIC PRESSES.—John F. Taylor, Glennville, Conn.

BENCH-PLANES.—Justus A. Trant, New Britain, Conn. A metal bending-plane handle and frame, — having a longitudinal rabbet, against which is placed a series of separately-formed, slotted, and detachable plane-stocks, carrying suitable bits, — is provided with screws having a coarse thread at one end and a fine thread at the other, and carrying levers, by means of which the plane-stocks are securely clamped to the handle.

SAWING-MACHINE.—Elbert F. Wilcox, Hooperton, Ill. SASH-FASTENERS.—James C. Brannon, Independence, Kan.

DREDGING-MACHINES.—Thomas M. Jones, Kansas City, Mo. A dredging-wheel is attached to a frame suspended from a boat or other support in the usual manner; but the cutting-blades, instead of being arranged radially, are arranged at an angle to that diameter of the wheel which coincides with the points of their attachment. The propelling-wheels are placed at the stern of a boat, and their paddles are also arranged at a similar angle to the diameter of the wheels. It is designed that the current created by the propelling-wheels shall cooperate with the current of the dredging-wheel to facilitate the removal of the material. The frame of the dredging-wheel is braced by diagonal chains extending from near the lower ends thereof to a transverse shaft on the boat.

TOOLS FOR REMOVING PINTLES FROM HINGE-JOINTS.—Henry Knickmann, East New York, N. Y. The slide in the lower jaw rides in and out, and keeps the pintle of the hinge which rests on it in line with the finger.

CARPENTER'S VISE.—Emmett H. Brower, Carson City, Nev. The object of this invention is to provide a vise which will hold firmly in its jaws tapering pieces as well as straight. A vise-screw F of the ordinary kind works through a nut fixed as usual in the stationary jaw, while in the loose jaw it works through a tapering mortise which allows the jaw to have a good deal of play. This screw and jaw have a bearing-plate and stops, so that the screw may work through the loose jaw as though the mortise were plain and not tapering. The change can be effected at will by disengaging the stops. At the top, on the inner face of the fixed plate S, a top-plate R, and side-plates P. and R are hinged together at the top, and P is also hinged by its middle to the bed-plate S. A short spiral spring below the central hinge, between the lower part of P and the bed-plate, keeps the face of P parallel to the face of the movable jaw A. When a tapering piece is to be held, P and R are disengaged at the top, which allows P a certain freedom of motion about its central hinge, which, taken in connection with the motion allowed the loose jaw, when the removal of the stops makes the mortise in it a tapering one, will enable the vise to hold securely tapering and oblique objects of many shapes.

ROOFING-PAPER.—Jonathan H. Green, Philadelphia, Penn. This consists of a layer of perforated paper, covered on one or both sides by other paper, and made waterproof.

GRATE FOR OPEN FIRE-PLACES.—Frank N. Hart, Rochester, N. Y.

HAND-PUMP.—James M. Holland, Wilmington, Del. SQUARE.—Stephen Lonergan, Lewistown, Me.

RATCHET DRILL.—James D. McAulis, Beaver Falls, Penn. FASTENERS FOR THE MEETING-RAILS OF SASHES.—Benjamin Lander, Brooklyn, N. Y. A swinging locking-cam having one or more teeth is pivoted in a suitable frame mortised into one of the meeting-rails, and this cam engages and coacts with a fixed surface, having corresponding teeth, attached to the opposite meeting-rail, there being also a vibrating piece, preferably in two parts, a pointed or toothed arm, and a trigger or tripping device, whereby the cam can be forced back so as to clear the moving sash, there being no springs, and the action being mainly automatic.

ROOFING-PAPER.—Jonathan H. Green, Philadelphia, Penn. This consists of a layer of perforated paper, covered on one or both sides by other paper, and made waterproof.

GRATE FOR OPEN FIRE-PLACES.—Frank N. Hart, Rochester, N. Y.

HAND-PUMP.—James M. Holland, Wilmington, Del. SQUARE.—Stephen Lonergan, Lewistown, Me.

RATCHET DRILL.—James D. McAulis, Beaver Falls, Penn. FASTENERS FOR THE MEETING-RAILS OF SASHES.—Benjamin Lander, Brooklyn, N. Y. A swinging locking-cam having one or more teeth is pivoted in a suitable frame mortised into one of the meeting-rails, and this cam engages and coacts with a fixed surface, having corresponding teeth, attached to the opposite meeting-rail, there being also a vibrating piece, preferably in two parts, a pointed or toothed arm, and a trigger or tripping device, whereby the cam can be forced back so as to clear the moving sash, there being no springs, and the action being mainly automatic.

COMPLETED BUILDINGS.

BROOKLYN, N. Y.—The Harrison Avenue German Evangelical Church was dedicated September 22. The church is of brick, and has cost about \$16,000. Work on it was begun two years ago.

CLOVERDALE, CAL.—The new Catholic church at Cloverdale was formally dedicated last Sunday, September 15.

HAMILTON, O.—The dedication of the Jewish Synagogue lately built on Fourth Street, between Chestnut and Walnut took place September 20.

NEW YORK, N. Y.—The new depot of the Dry Dock, East Broadway, and Battery Railroad, at Fourteenth Street and Avenue B, is finished. The building replaces the depot which was destroyed by fire last autumn. It is four stories high, 156 feet in length by 120 in breadth, and is substantially built of brick.

PORTLAND, ME.—The Williston Church, Mr. F. H. Fasse, architect, is finished. It has cost about \$17,000. Messrs. Foster & Dutton, of Waterville, were the contractors.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—The building permits issued for the past week are as follows:—

Wm. Colet, three-story dwell., with two-story back building, cor. Division and Bloom sts. — John Copenhaver, three-story back building to dwell., cor. Monument and Bethel sts. — Mrs. Mary McCurley, additional five feet on wall of back building to dwell., 727 West Baltimore St. — J. B. Burman, one-story back kitchen to dwell., 56 Carrollton Ave. — F. F. Smith, two-story stable (private) on lot on Chew St., between Dallas and Caroline sts. — Robert Crothen, improve back building to dwell., 3 Courtland St. — Edw. J. Green, 2 three-story back buildings, Tyson St., between Madison and Richmond sts. — Wm. Tell Foster, 7 three-story dwells., Washington, between Taylor and Oliver sts. — J. B. Cook, additional story on back building of dwell., 707 West Baltimore St., and to put in new front. — Anna Graham, additional story on dwell., 71 Ann St. — Thomas Hill, two-story stable (private) in rear of lot 142 Lanvale St. — John G. Vaupel, two-story back building to dwell. on Greenwood Ave., beginning 111 feet south of Biddeford St. — James Hazlett, five-story warehouse with iron front, on lot 19 Day St., between Baltimore and Second sts. — Sarah McDonald, two-story back building to dwell., 12 Fell St., between Thames St. and Water-Edge. — Francis Kelly, to extend dwell., 183 Paca St., one house south of Druid Hill Ave., about seven feet on one side. — John A. Dixon, 7 three-story dwells., with two-story back buildings, on Harlem Ave., beginning at east side of Mount St. Where material is not mentioned brick is understood. The ware and packing house of Baker, the glass-manufacturer, is being finished. It is a brick structure, 65 feet, by an average depth of 60 feet, at the foot of Eutaw Street. Hopkins & Marshall, builders and architects; cost, about \$3,500.

Boston.

HOUSES.—A block of two houses is building on Marlborough Street, for Mr. Samuel T. Ames. Goldthwait & Chapin are the builders. Cost, about \$30,000. Mr. A. Bither, architect.

BUILDING PERMITS.—The following permits have been granted since our last issue:—

BRICK BUILDINGS.

Table with columns: Mechanic, No., Stories, Class, Size. Includes entries for S. J. Tuttle, W. L. Sturtevant, James P. Neal.

WOODEN BUILDINGS.

Table with columns: Mechanic, No., Stories, Class, Size. Includes entries for G. Walker, J. H. Wigglesworth, H. P. Oakman, L. A. Medbury, Frank Cole, A. C. Rogers, H. F. Ross, H. E. Ross, M. T. C. Weeks.

Repairs and alterations active. BREWERY.—A five-story brick brewery is to be built on Station Street, Highlands. The building will measure 40 by 100 feet. It is for A. J. Houghton & Co., and is built by S. J. Tuttle.

Brooklyn.

BUILDING PERMITS.—Twenty-third St., 2 two-story frame dwells., 14' x 35'; owner, John Shaw, 132 Twenty-third St.; builder, Wm. Edwards. — Greene Ave., 5 two-and-one-half-story brown stone dwells., 16' x 45'; owner, B. Fowler, 32 St. James Place; architect, Charles Murhler, builders, Sullivan & Fowler. — Putnam Ave. cor. Nostrand Ave., 6 two and three-story brown stone dwells., 16' 4" x 42' and 18' 9" x 48'; owner, Wm. Taylor, 83 Third Place. — Stayevant Ave., cor. Monroe St., 5 three-story brick tenements, 25' x 50' and 18' 9" x 40'; owner, A. M. Kelly, 746 Gates Ave.; builder, J. McGarry. — Fifth Ave., 4 5 (rear), 1 two-story brick shop and stable, 36' x 21'; owner and builder, Selah Tucker, 406 Fifth Ave.; architect, Isaac D. Reynolds. — Fifth Ave., 1 two-story frame store and dwell., 25' x 60'; owner, James Carty, 666 Fifth Ave.; architect, J. F. Wood. — Carroll St., 3 two-story brick dwells., 16' 4" x 35'; owner, G. H. Henjes, 331 Hoyt St. — Magnolia St., 1 two-story frame dwell., 22' x 28'; owner, Elizabeth Bias; builder, Henry Loeffler. — Ross St., 3 three-story brown stone dwells., 22' x 45'; owner, John F. Ryan, 142 Rodney St. — Woodbridge St., 1 three-story frame dwell., 22' x 40'; owner, Jane A. Henderson, cor. Rushwick Ave. and Woodbine St.; builder, Stephen H. Kelly. — Fourth Place, 2 two-story brick dwells., 20' x 40'; owner, Louis Bonert, 87 Fourth Place; builder, — Hannigan. — Tenth St., 1 three-story brick dwell., 20' x 44'; owner and builder, Simon Walsh; architect, Chas. H. Byrne.

Chicago.

BUILDING PERMITS.—William Sharenberg, two-story store and dwell., Wentworth Ave.; cost, \$2,000. — Joseph Barber, three-story dwell., Third Ave.; cost, \$5,000. — J. V. Clarke, three-story stone-front store and dwell., 386 State St.; cost, \$6,000. — M. Adler, two-story stone-front dwell., Indiana St.; cost, \$3,500. — Potwen & Morgan, store and office, 190 Pine St.; cost, \$1,000. — Samuel George, 2 two-story dwells., Center Ave.; cost, \$2,750. — R. H. Ewing, two-story dwell., Van Buren St.; cost, \$1,300. — E. P. Hall, two-story dwell., Michigan Ave.; cost, \$7,500. — Kriven Brothers, one-story store, South Halsted St.; cost, \$1,500. — R. L. Latham, two-story stone-front dwell., Adams St.; cost, \$5,000. — C. J. Hull, three-story stone-front flats, Blue Island St.; cost, \$16,000. — Plans are being made for a fine five-story stone-front building, 65 by 170 feet, to occupy the vacant space on Wabash Avenue between the Fullerton Building and the stables to the south, near Adams Street.

CLUB-HOUSE.—On September 22 the corner-stone of the Catholic Club-House, situated at the corner of May and Eleventh streets, was laid. The new building will have a frontage on May Street of 80 feet by 140 feet on Eleventh Street. The rooms will be elegantly fitted, and the basement will contain a bowling-alley, gymnasium, cloak-room, and apartments for the janitor of the building. The first story will be occupied as a reading-room for the young men, a billiard-room, and a large hall for the accommodation of the different societies connected with the Jesuit Church. The upper stories will be divided into rooms for the accommodation of various religious bodies. It is estimated that the cost of the building will be about \$20,000.

Louisville.

BUILDING PERMITS.—T. Zell, one-story brick dwell., Walnut St.; cost, \$800. — Ferdinand Smith, brick dwell., Maple St.; cost, \$800. — Charles Heybach, one-story brick dwell., Payne St.; cost, \$700. — Henry Hiller, two-story brick store and dwell., Baxter Ave.; cost, \$10,000. — J. Zeller, two-story brick ice-house, Shelby St.; cost, \$5,000. — E. Lammas, one and one-half-story brick dwell., Madison St.; cost, \$1,000. — M. Thomas, trustee, one-story frame dwell., Overhill St.; cost, \$900.

New York.

THE WORK OF THE YEAR.—During the year from September, 1878, to September, 1877, the following structures have been built:—

Table with columns: 1. Private dwellings, first-class, 159; 2. Private dwellings, second-class, 384; 3. Apartment houses without stores, 22; 4. Apartment houses with stores, 2; 5. Stores, warehouses, and office buildings, 3; 6. Factories and shops, 92; 7. Tenements without stores, 249; 8. Tenements with stores, 232; 9. Stables (all kinds), 81; 10. Annexed district, 284; 11. Public buildings, 11.

Total number.....1,585

Philadelphia.

BUILDING PERMITS.—John Mitchell, two-story dwell., 18' x 30', Mascher St. — J. C. Stackhouse, 2 three-story dwells., 18' x 41', Nos. 2231 and 2233 North Front St. — J. C. Stackhouse, one-story stable, 18' x 22', No. 221 East Dauphin St. — Samuel Rain, 10 three-story dwells., 16' x 65', Thirteenth St. — Jas. McCartney, 2 three-story dwells., 15' x 52', Adams St. — Thos. Buckley, 2 two-story dwells., 14' x 30', Somerset St. — Allen Shoemaker, three-story back building, 13' x 20', No. 914 North Eighth St. — Samuel Henderson, two-story back building, 12' x 16', No. 2248 North Front St. — J. V. Mecher, one-story church, 50' x 83', cor. Lehigh Ave. and Lawrence St. — W. H. Tyson, three-story back building, 16' x 16', No. 131 Mechanic St. — Thos. Gillies, three-story store and dwell., 18' x 39', No. 1149 East Cumberland St. — A. T. Richards, two-story dwell., 18' x 40', cor. Huntingdon and Edgemont sts. — George Kessler, two-story stable, etc., 20' x 60', Fifth St. — C. W. Coulston, 2 three-story dwells., 14' x 50', Woodcock St. — H. W. Krouse, two-story stable, 17' x 15', No. 173 West Columbia Ave. — Mark Devine, 8 two-story dwells., 16' 6" x 42', "C" St. — Wilt & McCallan, 4 three-

at'y dwells, 15 7/8 x 42, Marshall St.—Geo. W. Fulmer, two-story dwells, 16 x 28, Berks St.—A. Vankirk, second story addition to church, 48 x 64, Hancock St.—W. McElroy, 2 two-story dwells, 15 x 44, Nos. 3568 and 3510 Warren St.—W. McElroy, two-story back building, 12 x 12, N. 26 North Fortieth St.—W. Wood & Co., four-story addition to factory, 27 x 25, Pennsylvania Ave.—Henry Rush, four-story store and dwell, 18 x 28, No. 834 Race St.—Oliver Bradin, four-story store, 12 x 42, No. 108 North Second St. W. H. Spayd, two-story back building, 18 x 9, No. 135 South Tenth St.—John Shorter, two-story back building, 10 x 12, No. 25 Queen St.—J. V. Crowley, three-story shop, 16 x 7 1/2, No. 1512 Passyunk Ave.—J. V. Crowley, three-story dwell, No. 1512 Passyunk Ave.—Peter Shrock, two-story front building, 24 x 38, No. 3418 Ridge Ave.—Robert Lees, two-story picket-house, 22 x 60, Terrace St., Manayunk.—James H. Young, two-story dwell, 16 x 28, Clarion St.

#### St. Louis.

**BUILDING PERMITS.**—Thirty-eight permits have been issued for the week ending September 27, 1878. Eleven of these are for unimportant frame structures. Of the brick buildings, those worth \$2,500 and over are as follows:—

Owners.	Use.	Stories.	Rooms.	Cost.
Mrs. M. Lucking.	Dwelling.	2	16	\$5,000
L. Burbank.	Dwelling.	2	14	4,000
F. Holczew.	Dwelling.	2	24	6,000
St. Louis Fruit Co.	Store-house.	2	4	5,000
A. Logeman.	Dwelling.	2	16	5,000

#### General Notes.

**BELFAST, ME.**—Building for the Belfast National Bank; brick and stone. Work done by the day. Mr. G. M. Harding, of Boston, is the architect.

**BOSTON, B. I.**—High Street, near Constitution Street, just now presents a busy appearance, many men being employed on the water-pipes, and in digging the cellar, and clearing away, preparatory to the erection of the new block on the corner of High and Constitution streets.

**DES MOINES, IO.**—The first Hebrew synagogue of this city was dedicated September 28, with imposing ceremonies.

**EAST PROVIDENCE, R. I.**—Within a few days the building of a cottage has begun upon Ivy Street; one also near the easterly end of Waterman Avenue, and one south of Warren Avenue. Before winter we are informed that a number of other dwellings will be commenced.

**GENEVA, O.**—The masons have finished the main building of the Western Lumber Company's Building, and the carpenters are at work on the wood-work.

**KANSAS CITY, MO.**—A new 80,000 bushel elevator is to be built.

**LANSING, MICH.**—N. Osborn & Co., contractors for building the new Capitol, closed their contract to-day with the Building Commissioners, who accepted the building. The total amount paid and added to date on this building, furniture, and grounds is \$1,421,859.35. Contracts were awarded to Kappers & Eggers, of Chicago, for furnishing the Supreme Court-Room, and to Samuel J. Creswell, of Philadelphia, for lamps and posts for the Capitol grounds.

**MADISONVILLE, O.**—Dr. P. W. Hill is building a house on Columbus Avenue.

**MANCHSTER, N. H.**—Mr. G. W. Stevens, architect, is building for himself a house which will cost about \$10,000; also, a house for Thomas Wheat, Esq.; cost, \$5,000.—Mr. E. C. Gardner, architect, of Springfield, is building a house for W. T. Rogers, Esq., which will cost \$3,000.—Mr. A. G. Stevens is building several houses, which vary in value from \$1,500 to \$4,000.

**MILFORD, O.**—Mr. B. A. Champion is to build himself a house.

**NAHANT, MASS.**—Mr. J. P. Putnam, of Boston, is the architect of a house for Mr. Geo. Pierrepont. The builders are Philip & Kilian, of Manchester.

**NEWPORT, R. I.**—Messrs. Anderson & Hamilton, of New York, are the architects of the cottage now building for Mrs. E. G. Hartshorn.

**QUINCY, MASS.**—It is reported that the Mitchell Granite Company, one of the largest concerns in the town, has transferred its business to Joliet, Ill., where the work of cutting is to be done by convict labor in the penitentiary at that city. This is one of the most serious results of the granite cutters' strike thus far, as the Mitchell Company has, it is said, employed between fifty and sixty cutters in good times.

**ROCHESTER, MINN.**—The parsonage for Rev. Mr. Rice, of the Methodist church, is nearly finished.

**SPRINGFIELD, ILL.**—George H. Helmle, architect, has completed plans for two dwelling-houses, to be built on the corner of Sixth and Edwards streets. The houses will contain nine rooms, laundry, etc., and will cost \$3,700 each. Alexander McCosker, owner; D. P. Hopping & Co., contractors.

**TACUMSON, MASS.**—At Britanniaville, a large chimney is building, 125 feet in height, to furnish draft for a new casting shop, also being built in brick, 115 feet in length by 34 in width, which the increasing business at Reed & Barton's Britannia Works requires.

**TUCKAHOE, N. Y.**—The parishioners of the Roman Catholic Church of the Immaculate Conception have subscribed \$3,000 toward building a parsonage.

**WASHINGTON, D. C.**—Colonel Casey, Superintendent of Public Buildings and Grounds, states that the western wing of the new State War, and Navy Department building will be ready for occupation by March 1, 1879. According to the rate of appropriations made during the past two years, the building will not be finished within the next five years, whereas, with liberal and adequate appropriations the whole work could be done within two years from this time.

**WATERBURY, MASS.**—Mr. H. J. Preston, of Boston, is the architect of a residence, in the modern Gothic style, for Mr. Geo. N. March.

**WEST WAREHAM, MASS.**—Charles Greer is to build a new house at the site of his old one, which has been removed.

### SUPPLEMENTARY LIST OF CHURCHES.

(See AMERICAN ARCHITECT for September 14.)

**AMHERST, MASS.**—The stone foundation for the new Methodist church is in. Some 70,000 bricks will be laid to carry the walls high enough for the vestry, above which the church proper will be built of wood.

**ANNAPOLIS, MD.**—St. Ann's Mission Chapel, in the Gothic style, brick, with brick exterior finish; open-timber roof, to be covered with Bennett's Baltimore terra-cotta roofing tiles (450 lbs. to square); two stories, the schools and guild occupying lower floor, with chapel proper above. Side walls and ends now finished, and roof timbers ready to be placed. Professor Marshall Oliver, architect. Wood-work by Messrs. Thomas & Son, Baltimore. Building to be covered in and lower story finished without delay.

**ANDERSON, S. C.**—The Presbyterian congregation have formally accepted the plan of W. P. Russell, architect, of Charleston, S. C., for their church, to cost \$6,000. Size 42 feet 9 inches by 72 feet 4 inches; seating capacity, 250; order of architecture, Doric. It is to be built of brick made

on the spot by hand. Basement for Sunday-School room, etc., to be left unfinished for the present. Steeple in centre of front, 69 feet high from ground.

**BOWMANVILLE, ILL.**—Work has at length commenced on the new church. The building will be completed in about a month. It will be built of brick and stone, at a cost of about \$1,500.

**BROWNVILLE, OREG.**—The Presbyterians are building a church.

**CHARLESTON, S. C.**—St. Mark's Episcopal Church, colored congregation, frame building on brick foundation, no basement; John H. Devereux, original architect and contractor; building left unfinished, and Messrs. Simons & Howe, architects, employed to superintend the completion of the work. Size and cost of building not known to us.

**EATON, O.**—Carpenters are busily engaged laying joists for the new Catholic church, which will be completed before cold weather sets in.

**FARGO, D. T.**—The Norwegian Lutherans are about to build a church edifice costing \$10,000 or \$12,000.

**GOLD, CAL.**—There is talk of building a new church.

**HARMONY, MD.**—A Lutheran church is projected in the vicinity of Harmony, Frederick County. It is proposed to build it with brick, at a cost of about \$2,000.

**ITHACA, N. Y.**—New church are now building at Ithaca, Ithaca, and Logan.

**MATTITUCK, N. Y.**—The Rev. Thomas Cook established an Episcopal congregation here about a year ago, and is now erecting a church. The corner-stone was laid on Friday, October 4. It is to be called the Church of the Redeemer.

**OWENSONO, KY.**—The Methodist Episcopal society will commence building early in the spring an edifice to cost \$16,000. Style, Early English Gothic, from drawings by Boyd & Brickley, and under the charge of Brickley & Reid, architects, of Evansville, Ind.

**PAWTUCKET, R. I.**—The work on St. Joseph's Church is being pushed rapidly, and before long it will be ready for dedication.

**PITTSBURGH, PENN.**—Work has commenced on the new Catholic church on the Denny estate, corner Thirty-second and Liberty streets. The work is under the direction of Rev. Father Gibbs, of St. Mary's Church. The building will be 40 by 8 1/2 feet in size, and two stories high. The upper story will be used as a school-house, and will cost \$8,000 when complete and placed in the charge of a resident priest.

**SCHENECTADY, N. Y.**—The Rev. H. H. Northrop's Congregational church are taking steps to buy a lot for a new house of worship.

**URBANA, O.**—The building of the new Grace M. E. Church, on the corner of South Main and Market streets, is being vigorously pushed. The walls have been raised to the level of the corner walls, leaving only the gable walls and tower to be completed.

**WHEATON, ILL.**—Work on the new "Church of Christ" at Wheaton is progressing rapidly, and will be completed ere cold weather sets in. The roof is already finished.

**WOOSTER, O.**—The corner-stone of the English Lutheran church was laid Sunday afternoon, September 22.

### INDEX OF CURRENT WORK,

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

#### Baltimore, Md.

**CHURCH.**—The Cummings Memorial Church. Mr. Casell, architect.

**CHURCH.**—The Pius IX. Memorial Church. G. A. Frederick, architect. Cost \$100,000.

**CHURCH.**—Church of St. Michael and All Angels. Cost \$80,000. Wyatt & Sperry, architects.

**HOSPITAL.**—Johns Hopkins Hospital. J. R. Niernsee, consulting architect.

#### Boston.

**BANK BUILDING.**—Tremont Bank Building. Carl Fehmer, architect.

**HOTEL.**—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.

**THE MUSEUM OF FINE ARTS.**—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.

**SCHOOL-HOUSE.**—High and Latin School. G. A. Clough, architect.

**ASYLUM.**—Asylum for Aged People, C. J. Bateman, architect. Cost \$50,000.

#### Brooklyn, N. Y.

**TENEMENT.**—A. T. White, owner. William Field & Son, architects.

**SOCIETY BUILDING.**—The Long Island Historical Society Building, Mr. G. B. Post, architect. Cost \$100,000.

**CHURCH.**—St. Francis Xavier B. C. Church, West Fifteenth Street. Cost \$150,000. P. Keely, architect.

**HOSPITAL.**—St. John's Hospital, N. L. Derby, New York, architect.

#### Chicago, Ill.

**ARMORY.**—Armory for the First Regiment. Messrs. Wheelock & Clay, architects. Cost \$25,000.

**STORE.**—The Singer Building. Cost \$250,000.

#### Cincinnati, O.

**U. S. CUSTOM HOUSE AND POST OFFICE.**—S. Hannaford, local superintendent.

**CHILDREN'S HOME.**—J. W. McLaughlin, architect. Cost \$50,000.

**NEWSPAPER OFFICE.**—The Gazette Building. E. Anderson, architect.

**CLUB-HOUSE.**—Allemania Club-House. J. W. McLaughlin, architect. Cost \$60,000.

**UNIVERSITY BUILDING.**—Cincinnati University Building. S. Hannaford, architect. Cost \$50,000.

#### Cleveland, O.

**BUSINESS BLOCK.**—Amasa Stone, owner. J. Ireland, architect. Cost \$70,000.

**CHURCH.**—Second Presbyterian. J. Ireland, architect. Cost \$70,000.

**CONVENT.**—Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

#### Hartford, Conn.

**SEMINARY.**—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.

**CATHEDRAL.**—R. C. Cathedral of St. Joseph. P. Keely, architect.

**CATHOLIC SCHOOL.**—Brown & Stilson, architects, New Haven. Cost about \$25,000.

#### Jersey City.

**CONVENT.**—Convent of the Sisters of St. Dominick. Cost \$40,000.

### Publishers' Department.

## The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY

HOUGHTON, OSGOOD & CO.,  
WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year, \$6.00 in advance.

CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,

WITH

Houghton, Osgood & Co.'s other Periodicals.  
THE ARCHITECT and ATLANTIC MONTHLY...\$9.00  
THE ARCHITECT and THE REPORTER...15.00  
THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL...10.00  
THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE...7.00  
\*N. B.—The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

Payments should be made directly to the Publishers, either by draft or by post office order.

HOUGHTON, OSGOOD & CO., Publishers,  
WINTHROP SQUARE, BOSTON.

### WANTS.

**WANTED.** A position as agent for a stone contractor, or for a company manufacturing specialties for building purposes, by a young man experienced in business, or any situation requiring a knowledge of architects' plans, designing, scale, and detail drawings, preparing bills of quantities, etc. An extensive acquaintance among architects, and means of keeping informed of building news in New York and Boston.—Address O. WESLEY, 246 E. 25th St., New York.

**DRAUGHTSMAN.** Wants a situation in an Architect's office. Willing to work for low salary. Address H. F. BURR, Medford, Mass.

*A. Hall & Sons*  
Manufacturers of  
*Architectural Terra Cotta,*  
*Buff and Colored Brick, Fire Brick,*  
*Established 1846, 211th Amboy St., N. J.*

### ARCHITECTURAL IRON WORKS.

**YOUNGLOVE & CO., Prop'r's.**  
CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CRIBBING, ETC.

Estimates promptly furnished.

(Established 1848.)

**MARKET ST. ARCHITECTURAL FOUNDRY**

AND

**IRON WORKS.**

**SNEAD & CO.,**

LOUISVILLE, KY.

Makers of every description of Iron Work for Buildings.

TO ARCHITECTS AND BUILDERS.

### MORTAR BLACK,

Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar. For sale only by *Walpole Color and Chemical Works,*

**HENRY D. DUPEE, Proprietor,**

79 KILBY STREET, BOSTON

### DECORATIVE PAINTING.

New York, N. Y.  
Boulevard and One Hundred and Seventy-ninth Street. New York, September 25, 1878. Water-color painters are invited to submit to the undersigned, at the asylum, sketches for the decorative painting of the assembly room of Bloomingdale Asylum, and estimates of the cost of such work. No obligation will be incurred by the asylum on account of sketches and estimates submitted, but not accepted.

145

C. H. NICHOLS,  
Medical Superintendent.

### IRON WORK.

CINCINNATI, O.  
Sealed proposals will be received at the office of the Board of Public Works until 12 o'clock noon of Thursday, October 10, A. D. 1878, for the construction of the Wrought-Iron Superstructure of a bridge over the West Fork of Mill Creek, at Curd Avenue, according to specifications on file in the office of the Board of Public Works.

The Board reserves the right of rejecting any or all the bids.

Bidders will indorse their names upon the outside of the envelopes containing their bids.

Each bid to be accompanied by two disinterested sureties. By order of the Board.

JOHN E. BELL, President.

JOHN D. BANKS, Clerk.

145

PROPOSALS.

GAS WORKS.

RIO DE JANEIRO, BRAZIL.

By order of the Brazilian Legation at Washington the undersigned makes public that the Imperial Government calls for proposals for the gas illumination of Rio de Janeiro, the present contract expiring in March next. The proposals, addressed to the Envoy Extraordinary and Minister Plenipotentiary of Brazil, must be sent until 3 o'clock in the afternoon of the 1st day of December next to the Brazilian Consulate General, 42 Broadway, New York, where copies of the general conditions and specifications referred to in the fourth clause can be obtained, as well as any information in relation to this matter.

SALVADOR DE MENDONÇA. Brazilian Consul-General.

New York, September 9, 1878.

MINISTRY OF AGRICULTURE, COMMERCE, AND PUBLIC WORKS - DIRECTORY OF PUBLIC WORKS.

By order of his Excellency the Minister of this Department, it is advertised that this Directory receives proposals for the service of the illumination by gas of the Capital of the Empire, in the terms and conditions below specified: - First - The proposals will be presented in a closed letter, until 3 o'clock in the afternoon of the 1st day of December of the present year, in this city, in the Directory of Public Works of the Ministry of Agriculture, and in London, Paris, and Washington, at the respective Brazilian Legations. Second - The proposers must present, outside of the envelopes that shall contain the proposals, documents that will testify their fitness for the service that they propose to contract.

Third - No one can concur without having previously deposited in the National Treasury, in the delegacy of the same Treasury in London, or in either one of the Legations above indicated, a caution, in money or bonds, of the public debt of the Empire, \$50,000, or a corresponding amount in foreign money (25,000, 125,000 francs, or 25,000 in gold).

Fourth - The object of the concurrence will be only the price of furnishing a cubic metre of gas, and the term of the privilege, that in no case shall exceed 33 years. All the other clauses of the contract, excepting whatever may be transitory, will be, without any discrepancy or modification, those proposed by the Government in the general specifications and conditions, which will be distributed separately in the Directory of the Public Works and the above-mentioned Legations.

Fifth - All the proposals will be opened in this city, in the public session of the Directory of Public Works, on the 24 day of January, 1879; and the Government will declare on them within fifteen days of that date.

Sixth - When the choice of the proposal is made, the contract will be considered concluded; being necessary for the preferred proposer to sign only the mentioned general conditions, which will be entered in a competent book of the Department of Agriculture. For greater facility, each proposer who resides out of Rio de Janeiro must constitute in this city, and with a due antecedence, somebody with a power of attorney to sign the general conditions in case the preference falls on him.

Seventh - The proposer who, after having received communication of the acceptance of his proposal, refuses to sign the referred conditions, will forfeit the caution in the benefit of the National Treasury.

Eighth - The Government reserves the right to annul the competition within the period fixed by Clause 5, to decide upon the proposals that were presented.

M. BUARQUE DE MACEDO, Chief of the Directory.

DIRECTORY OF PUBLIC WORKS, Rio de Janeiro, July 22, 1878.

IRON BRIDGE.

CINCINNATI, O.

Sealed proposals will be received at the office of the Board of Public Works, until 12 o'clock, noon, of Tuesday, October 8, A. D. 1878, for constructing the wrought-iron superstructure of a bridge over Mill Creek, at Eighth Street, according to specifications on file in the office of the Board of Public Works.

The Board reserves the right of rejecting any or all the bids.

Bidders will indorse their names upon the outside of the envelopes containing their bids.

Each bid to be accompanied by two disinterested sureties.

By order of the Board. JOHN E. BELL, President.

JOHN D. BANKS, Clerk. 145

ASYLUM.

CINCINNATI, O.

Sealed proposals will be received until Tuesday, October 15th, at 12 o'clock M., by the trustees of the Ohio Institution for the Education of Idiotic and Imbecile Youth, at the office of the Superintendent, for furnishing materials and doing the work required by the plans and specifications for plastering two new wings.

All proposals must be accompanied by proper bond and security, and directed to John A. Shank, President of the Board of Trustees, and left at the office of the Superintendent.

Plans and specifications can be seen at said office from this date.

JOHN A. SHANK, J. M. MONTGOMERY, J. K. RUKENBROD, Trustees.

146

LOCKS AND KEYS.

POST OFFICE DEPARTMENT, WASHINGTON, D. C., August 15, 1878.

Separate sealed proposals will be received at this Department until 12 o'clock noon on the 20th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as keys to be used for the street letter-boxes of the United States.

As the public exposure and searching examination necessary to intelligent bidding on any prescribed model of a lock and key would tend to impair, if not entirely destroy, the further utility of all such locks and keys for the purposes of the mails, the Postmaster-General prescribes no models or samples for bidders, but relies for a selection on the mechanical ingenuity and skill which a fair competition among inventors, hereby invited, may develop in samples submitted by them.

Specifications of requirements as to proposals, samples, kinds and quantities of locks and keys, contracts, etc., will be furnished on application by letter to the Second Assistant Postmaster-General.

No proposal will be considered which is not submitted in accordance with such specifications and forms of proposal. The contracts which may be made are to be in conformity with the specifications and accepted proposals.

170 D. M. KEY, Postmaster-General.

PROPOSALS.

LIFE-SAVING STATIONS.

TREASURY DEPARTMENT, OFFICE OF GENERAL SUPERINTENDENT, U. S. LIFE-SAVING SERVICE, WASHINGTON, D. C., September 21, 1878.

Sealed proposals will be received at this office until 12 o'clock, noon, of Tuesday, the 8th day of October, 1878, for the construction of two life-saving station-houses on the coast of New Jersey; one at Long Branch, and one at Wreck Pond, so-called.

Bidders must specify the earliest date upon which they will agree to complete the buildings ready for occupancy.

Each bid must be accompanied by a bond in the sum of \$1,000, with two good and sufficient sureties, conditioned that the bidder will enter into contract without delay if his bid be accepted.

All proposals must be indorsed, "Proposals for the construction of life-saving stations on the coast of New Jersey," and addressed to the General Superintendent U. S. Life-Saving Service, Treasury Department, Washington, D. C.

Specifications and plans and forms of proposal and bond can be obtained of Captain J. H. Merryman, Inspector of Life-Saving Stations, No. 16 Broadway, New York; of Lieutenant W. C. De Hart, Assistant Inspector Life-Saving Service, Tom's River; and J. G. W. Havens, Superintendent Fourth Life-Saving District, Bricksburg, N. J.; also, upon application to this office.

The right to reject any or all bids, or to waive defects, if it is deemed for the interest of the Government to do so, is reserved. S. I. KIMBALL, General Superintendent.

HEATING APPARATUS.

Proposals for low temperature hot-water Heating Apparatus for the U. S. Court-House and Post-Office, at Covington, Ky.

OFFICE OF SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., September 27, 1878.

Sealed proposals will be received at this office until 12 M., on the 14th day of October, 1878, for supplying and fixing in place complete a low temperature hot-water Heating Apparatus for the U. S. Court-House and Post-Office, at Covington, Ky., in accordance with drawings and specification, copies of which and any additional information may be had on application at this office or the office of the Superintendent.

JAS. G. HILL, Supervising Architect.

UNIVERSITY BUILDING.

CINCINNATI, O.

Sealed proposals will be received at the office of the Board of Directors of the University of Cincinnati, northeast corner of Main and Third streets, second story, on Thursday, October 10, 1878, from 9 to 12 o'clock M., for the material and labor required for each separate and distinct trade or kind of mechanical labor necessary for building an addition to the University Building, and finishing the fourth story of the present building on Clifton Avenue, according to the plans and specifications to be seen at the office of S. Hannaford, architect, Rooms Nos. 37 and 38 Johnston Building, southwest corner of Walnut and Fifth streets.

Bids must be upon the blank forms to be obtained at S. Hannaford's office.

No bid will be received for the whole work, or for any greater portion than is embraced in one trade or kind of mechanical labor.

Each bid must contain the name of every person interested therein, and must be accompanied by a sufficient guaranty by two disinterested persons as sureties in a sum equal to the amount of the bid, that if the bid is accepted a contract will be entered into and the performance of it properly secured.

Each bid must be indorsed with the kind of work bid upon.

The right is reserved to reject any or all bids.

By order Board of Directors. LOUIS BALLAUF, Chairman Committee on Buildings, Repairs, and Lessees.

145

FURNITURE.

BROOKLYN, N. Y.

Sealed proposals will be received at the office of the Superintendent of Repairs, Depot of the Board of Education, until Tuesday, October 1, 1878, at 4 o'clock P. M., for furniture for wings of P. S. No. 32.

Specifications can be seen at the office of the Superintendent of Repairs. Names of two responsible persons will be required for the faithful performance of the contract. The Board reserves the right to reject any irregular bids, or any which may not be for the interest of the Board.

W. M. THOMAS, Chairman Com. on School-Houses.

CANAL AND LOCK.

OTTAWA, ONT.

Sealed tenders, addressed to the Secretary of Public Works and indorsed "Tender for Canal and Lock at St. Anne" will be received at the office of the Department of Public Works, Ottawa, Ontario, until the arrival of the eastern and western mails on Tuesday, the 8th day of October next, for the construction of a Lock and the formation of approaches to it on the landward side of the present Lock at St. Anne. A map of the locality, together with plans and specifications of the works to be done, can be seen at this office and at the Resident Engineer's Office, St. Anne, on and after Tuesday, the 24th day of September, at either of which places printed forms of tender can be obtained. Contractors are requested to bear in mind that tenders will not be considered unless made strictly in accordance with the printed forms, and, in the case of firms, except there are attached the actual signatures, the nature of the occupation and residence of each member of the same; and further, an accepted bank check for the sum of \$2,000 must accompany the tender, which sum shall be forfeited if the party tendering declines entering into contract for the works, at the rates and on the terms stated in the offer submitted.

The check thus sent in will be returned to the respective parties whose tenders are not accepted. For the due fulfillment of the contract, satisfactory security will be required by the deposit of money to the amount of five per cent on the bulk sum of the contract; of which the sum sent in with the tender will be considered a part. Ninety per cent only of the progress estimates will be paid until the completion of the work. To each tender must be attached the actual signatures of two responsible and solvent persons, residents of the Dominion, willing to become sureties for the carrying out of these conditions, as well as the due performance of the works embraced in the contract. This department does not, however, bind itself to accept the lowest or any tender.

By order, F. BRAUM, Secretary.

145

PROPOSALS.

IRON BRIDGE.

CINCINNATI, O.

Sealed proposals will be received at the office of the Board of Public Works until 12 o'clock noon, of Thursday October 10, A. D. 1878, for the construction of an Iron Bridge over the East Fork of Boldface Creek, according to specifications on file in the office of the Board of Public Works. The Board reserves the right of rejecting any or all the bids.

Bidders will indorse their names upon the outside of the envelopes containing their bids.

Each bid to be accompanied by two disinterested sureties.

By order of the Board. JOHN E. BELL, President.

JOHN D. BANKS, Clerk. 145

ARTESIAN WELLS.

CHARLESTON, S. C.

CITY HALL, MAYOR'S OFFICE, September 10, 1878.

Sealed proposals will be received at this office up to 1st November, 1878, for boring Artesian Wells in the City of Charleston. Plans, drawings, specifications, etc., can be had on application to City Engineer, Charleston, S. C. City Council of Charleston reserves the right to reject any or all bids. Proposals to be directed to COMMITTEE ARTESIAN WELLS AND WATERWORKS, CHARLESTON, S. C.

145

SLATER'S AND GALVANIZED IRON WORK.

Proposals for Slater's and Galvanized Iron Work for the roofs of the U. S. Court-House and Post-Office at Atlanta, Ga.

OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., September 23, 1878.

Sealed proposals will be received at this office until 12 M. on the 12th day of October, 1878, for all the Slater's and Galvanized Iron Work required for the roofs of the U. S. Court-House and Post-Office at Atlanta Ga., in accordance with drawings and specification, copies of which, form of proposal, and any additional information, may be had on application at this office, or the office of the Superintendent.

JAS. G. HILL, Supervising Architect.

144\* 145\*



OLD OR NEW BLINDS

FITTED WITH

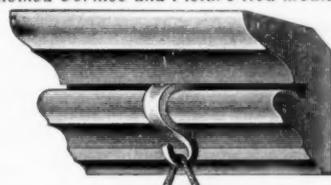
DEARBORN'S

Patent Adjustable Fixtures.

Can be used in either way shown in cut, making an awning at pleasure. Price \$1.00 per window. Includes a perfect fastening for the blinds, when either open or closed. Sold by the hardware trade generally, and by the manufacturers, BOSTON BLOWER CO., 2 Foster's Wharf, Boston.

BAKER'S

Combined Cornice and Picture Rod Moulding.



(Patented in the United States and Dominion of Canada, 1877.)

For Hanging Pictures, etc.

FOR SALE BY P. P. BAKER.

The only Agent in the U. S. and Canada, 84 BEVERLY STREET BOSTON.

MENEELY & KIMBERLY,

Bell Founders, Troy, N. Y.,

Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT-HOUSE BELLS. Illustrated Catalogue sent free.



METALLIC SHINGLES.

We call the attention of all parties interested in Roofing, and the owners of large buildings, to the above article. It is superior to Slate, Cheaper, Fire-proof, about one fourth the weight, lays much closer, therefore is Storm-proof, cannot Crack, etc. Any carpenter can put them on. Send for description and Price List to IRON CLAD MANUFACTURING CO 59 Greenpoint Ave., Brooklyn, E D

P. O. Box 2528, N. Y. City

MARSHALL'S AMERICAN The Useful



LEADED SHEETS. Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Represented in New England States by C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

PATENT MINERAL WOOL. ENTIRELY FIRE-PROOF AND UNDECAYING. THE BEST INSULATOR OF HEAT, COLD, AND SOUND. For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc. ALEXANDER D. ELBERS, P. O. Box 4461. 26 1/2 Broadway, New York

McSHANE BELL FOUNDRY Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free HENRY McSHANE & CO., Baltimore, Md.

is issued monthly—consists of Perspectives of Interiors, Ornaments of Buildings, Fresco Painting, Furniture, etc., and is accompanied with full-size working-drawings—for direct use—Price to Subscriber One dollar per number.

Office 28 Pemberton Square, Boston, Mass.



D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

Terra Cotta Chimney Tops, Akron Land Tile

THE HELIOTYPE PRINTING COMPANY 220 DEVONSHIRE ST BOSTON COR FRANKLIN ST HELIOTYPE PHOTOGRAPHS in Printers Ink HELIOTYPE LITHOGRAPHS printed by Steam HELIOTYPE CUTS to print with Type HELIOTYPE FACSIMILE LETTERS, SHOW CARDS, etc.

THE "AIR SPACE" STEAM and PIPE BOILER COVERINGS Save 10 to 20 per cent in fuel. THE CHALMERS-SPENCE COMPANY. 140 Congress Street, Boston. Foot 9th St., E. R., New York.

CLASSIFIED ADVERTISEMENTS.

Table listing various architectural and construction services and companies, including Architects, Structural Iron Work, Marble, and more.

Table listing various architectural and construction services and companies, including Architects, Structural Iron Work, Marble, and more.

STEEL RIBBON SASH LINE, HOOKHAM'S PATENT. Includes diagrams of the sash line and pulley system, and a list of advantages.

McCoy & Co., Sole Agents, 134 AND 136 DUANE STREET, NEW YORK.

Table listing various architectural and construction services and companies, including Architects, Structural Iron Work, Marble, and more.

**ETNA IRON CO.**

Manufacturers of every description of Wrought and Cast

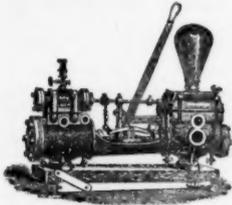
**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**

Patent



Steam

**PUMP THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.  
Noiseless Pumps for Water Elevators.

ALSO,

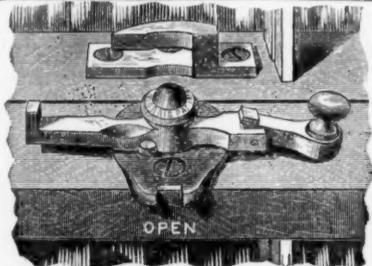
Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.  
The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

**KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES, { 14 & 16 Federal St., } Boston.  
{ 113 & 115 Congress St., }  
{ 92 & 94 Liberty St., } New York.

Send for Illustrated Catalogue.



**MORRIS BURGLAR-PROOF SASH LOCK.**

Patented July 2, 1878. The Safest! The Simplest! The Most Reliable! THE BEST!  
N. B. — No springs to get out of order. Sold by all hardware jobbers. Manufactured by the MORRIS SASH LOCK MANUFACT'G CO., Office 168 Walnut St., Cincinnati, O.  
Price List and Samples furnished to the trade on application. A liberal discount to the trade.

**PATENTS.**

F. A. LEHMANN, Solicitor of Patents, Washington, D. C. NO PATENT NO PAY. Send for Circular.

**"ZODTCHY" (BUILDER).**

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING,

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

**M. JEROME KÜTTNER,**

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from EIGHT to SIXTEEN pages of letterpress, gr. quarto, with cuts, and at least FIVE autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.

The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address.

**JOURNAL "ZODTCHY,"**

18 OFFICER STREET, ST. PETERSBURG, RUSSIA.



**Carson's Kitchen Sink**  
Is an improvement in this fixture that must meet with the approval of every house-keeper as it retains every particle of grease, and prevents the waste of pipes from filling up; besides being better trapped than any other sink in use.

PAT'D JAN. 24 1877.  
Signal Mfg. Co., Medina, N. Y., or J. M. Carson, Louisville, Ky., Man'rs.

**NATIONAL**

**FINE ART FOUNDRY,**

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze.

TO ARCHITECTS AND BUILDERS.

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

**GEO. DWIGHT, JR., & CO.,**

Builders in Iron, and Engineers in Fire-Proof Construction,

SPRINGFIELD, MASS.

HAVE for many years given their exclusive attention to FIRE-PROOF CONSTRUCTION; and they now invite the correspondence of Architects to the following specialties which hereafter will constitute the leading items of their business:  
**FIRE-PROOF FLOORS.** The only floors that have stood fire in this country.

**FIRE-PROOF ROOFS.** Refer to Equitable Life Insurance Company's Building at Boston.

**FIRE-PROOF SHUTTERS.** Have stood many fires in all parts of the country. Over 6000 pairs put up in Boston after the fire. Saved the city of Springfield last year.

**FIRE-PROOF LATH.** In the words of one of the best-known architects of this country, "Minimum of metal, maximum of stiffness, maximum of elch; the best lath ever made, either wood or iron." See New York Post-Office; State Department, Washington; Equitable Life Insurance Company's Buildings, and many others.

Mr. HOYT will be pleased to wait upon Architects, when desired, to explain our methods, and to present for inspection construction plans and estimates for any specific work.

**BURDITT & WILLIAMS,**

DEALERS IN

**FINE HARDWARE**

of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



The Draft of the Chimney increased.

Smoking Chimneys Prevented

Particularly adapted to Chimneys in exposed positions.

Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR,

70 Grand St., Brooklyn, N. Y.

CATALOGUE OF

**Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO.,

ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.

**BICKELHOUP BROS.,**  
829 West 37th St., New York.



**BEEHIVE BRAND. FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**UNPARALLELED DISCOVERY.**

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the *Paint Preserver* invented by ASAHEL WHEELER, Boston. It will neither crack, blister, nor scale.



**BALTIMORE PRESSED TILES,**  
FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases,  
DRAIN AND SEWER PIPE, FIRE-BRICK,  
LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

**WALDO BROTHERS,**  
No. 94 WATER STREET, BOSTON.

**PEERLESS BRICKS.**

**THE PEERLESS BRICK COMPANY,**  
OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK

ARCHITECTURAL SHAPES (80 kinds).

ALSO

**RED Pressed Fronts.**

Extra fine in color and quality

**BROWN,** Colored throughout  
More beautiful than Brown Stone Durable

**CHOCOLATE,**

Same as above; difference in color

**FLESH COLOR,**

A very popular color.

**BUFF,** very fine.

Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

**NORTHEAST COR. FIFTH & CHESTNUT STS.**

THOMAS F. ADAMS,

JOSEPH WOOD, JR.,

PRESIDENT.

TREASURER



**DOLIVET, CUTTER, & CO.,**  
ARTISTIC

**Papier Maché Decorations,**

106 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING Venetian Blinds.**

Wilson's Patent.  
For first-class Dwellings and Public Buildings.

These blinds can be fitted either inside or outside the sash, and are operated with ease without machinery or weights. They are made to roll above or below, as shown in cut. Can be furnished in any kind of wood. Unequaled for elegance, durability, and simplicity. Indorsed by many of the leading architects in the country, and in use in some of the handsomest buildings.

We also manufacture

**WILSON'S PATENT Rolling Steel Shutters**

These blinds are operated on same principle as above (being self-coiling). They are used for closing store-fronts and all windows and doorways that are required to be perfectly fire and burglar proof. Also, Rolling Wood Blinds for Store-Fronts, Book-Shelves, School Partitions, and other purposes.

A list of public and private buildings fitted with our Blinds sent on application. Architects and owners are invited to send for working models, catalogues, and price-list.

**WILSON & JAMES,**  
68 Beekman St., New York.  
Two Prize Medals at Philadelphia.

**VALUABLE ART PUBLICATIONS.**

**HUNT'S** (WILLIAM M.) Talks on Art. 8vo. Paper, \$1.00.  
**CLEMENT'S** (CLARA ERSKINE) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a Complete Index. Crown 8vo. Cloth, red edges, \$3.25.

Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.

**HOUGHTON, OSGOOD & COMPANY,** Boston.

**IMPROVED PRISON LOCKS.**

All Architects should have our 36 page Illustrated Catalogue of Prison Locks.

ADDRESS

**YALE LOCK MFG. CO.,** STAMFORD, CONN.  
New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,

94 BEEKMAN STREET,  
NEW YORK.

**SPECIALTIES IN PLUMBING GOODS.**

Having for their especial object  
**Cleanliness, Durability,**  
And the exclusion of Sewer Gas.

**JENNINGS' NEW CLOSET, WITH New Valve**

With non-corrosive Valve Seating and Solid Plunger.

**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer Gas that has yet been invented.

**A POSITIVE SEAL**

Against sewer-gas, absorbed gases, and back water. Seal is not broken by syphonage or evaporation. Self-scouring, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers,

**B. P. BOWER & CO.,**  
104 & 106 St. Clair St., Cleveland, O.

**THE EUREKA VENTILATION CO.**  
OFFICE AND MANUFACTORY,  
74 CHARLESTOWN STREET,  
BOSTON, MASS.

**A. L. FAUCHÈRE & CO.**  
OFFICE AND WAREHOUSES  
1319 and 1321 Broadway, New York,  
Importers, Manufacturers, and Dealers in all kinds of foreign and domestic

**MARBLE FOR INTERIOR WORK.**  
Estimates furnished on application.

**ARCHITECTURAL IRON AND JAIL WORKS.**

**M. CLEMENTS,**

MANUFACTURER OF  
Iron Railing, Bank Vaults, and Jail Cells,  
Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc.

**SAYMILLER STREET,** near 84th and C. H. & D. R. R. Depot, CINCINNATI, OHIO.

**STEWART'S HARD WOOD SLATE, MARBLE AND MANTELS, MIRRORS, ART-TILES FOR MANTELS, HEARTHES &c**  
Masonic Temple 23<sup>d</sup> St & 6<sup>th</sup> Ave N.Y.

**Sewer Pipe, Fire Brick, Terra Cotta, Chimney Tops, Garden Vases, Art Pottery for Decoration.**  
The strongest and smoothest pipe in the country. Send for tests and Catalogue. Prices as low as any other manufacturer.

**Portland Stone Ware Co.**  
Geo. C. DUNN, Gen'l Ag't,  
50 Kilby Street,  
400 Federal Street, Boston.

**LIMMER ROCK ASPHALT CO.**

111 Broadway, Room 105, New York.  
Rock Asphalt is a natural product, and the ideal material for Paving Roadways, Streets, Yards, and Stables, and for Flooring Cellars in Breweries and other establishments.



**SAYLOR'S PORTLAND CEMENT.**

Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R., U. S. Government Works (Forts and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally. For Sale by all dealers in Building Materials. **Johnson & Wilson, Gen'l Agts.,** 95 Liberty Street, New York. Send for circular.

**PRIZE MEDALLISTS.**

1863; 1865; 1867; 1872; 1873; AND ONLY AWARD AND MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**

ORIGINAL INVENTORS AND SOLE PATENTEES OF

**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters

OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Telford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.

OFFICE AND MANUFACTORY.

162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**

76 READE STREET, NEW YORK,

WORKS, DARLINGTON, N. J.

Lock and Hardware Manufacturers,

DESIGNERS, FOUNDERS, AND WORKERS

**IN BRONZE AND BRASS.**

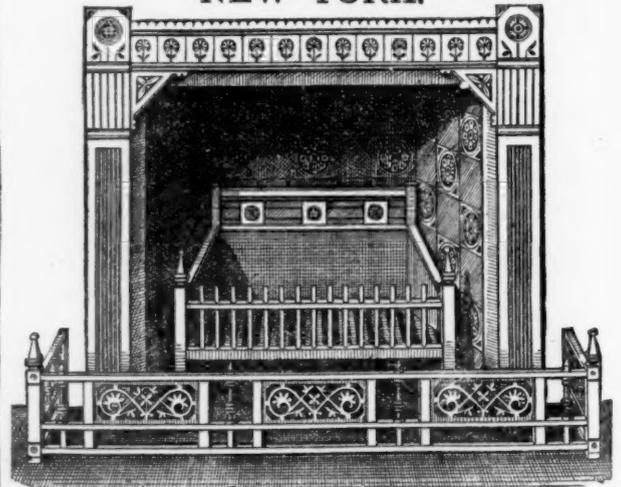
Architects' Designs faithfully executed.

Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side,) NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile.

HAVE NO OTHER WAREHOUSES.

**Automatic Signal Telegraph Co.,**  
CITY OF BOSTON,

OFFICE, 178 DEVONSHIRE STREET, ROOM 20,  
Is prepared to make contracts for the protection of buildings against fire.

DIRECTORS.

CHARLES E. GUILD, President. WILLIAM ENDICOTT, Jun  
JOHN D. W. JOY. WILLIAM B. WATKINS.  
PATRICK T. JACKSON, Treasurer.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

Theatrical Fresco only. Prices moderate. Refer ences first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.

LAFAYETTE W. SEAVEY,  
Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK

**THE WELLINGTON PATENT OVERFLOW BASIN.**

No sewer gas. No overflow. No leakage around the top of the basin. This thoroughly reliable basin is rapidly taking the place of the ordinary one.

It gives perfect satisfaction in every instance.

Manufactured by  
**L. S. MOORE & CO.,**

Send for Circulars. 40 Oliver St., Boston.

# AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

Vol. IV. No. 146.]

SATURDAY, OCTOBER 12, 1878.

[PRICE 15 CENTS]

### BUILDERS' SUPPLIES.

**AMERICAN ENCAUSTIC TILE,**  
Acknowledged by experts to be  
**THE BEST IN THE WORLD.**  
Manufactured by the  
**AMERICAN ENCAUSTIC TILING CO. (Limited.)**  
OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.  
Designs and estimates for Public Buildings, Halls,  
Churches, Vestibules, and for External Decoration, fur-  
nished on application.

**WALWORTH MANUFACTURING CO.,**  
69 KILBY ST., BOSTON.  
**PUBLIC BUILDINGS,**  
**PRIVATE RESIDENCES,**  
**GREENHOUSES, ETC.,**  
Warmed and ventilated by  
**STEAM OR HOT WATER.**  
Correspondence solicited. Plans and estimates furnished  
on application.

**"HOTCHKISS" TOWER CLOCKS,**  
MANUFACTURED BY  
**SETH THOMAS CLOCK CO., THOMASTON, CONN.**  
Prices \$100 to \$6,000.  
WARRANTED ACCURATE, STRONG, DURABLE.  
OFFICE, 581 BROADWAY, NEW YORK.  
Send for Illustrated Catalogue.

**"MINTON'S ART AND TILES."**  
**ENAMELLED**  
(China Works, Stoke-Upon Trent.) Also, The Campbell  
Brick and Tile Co.'s  
**ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS,**  
ETC.  
For Churches, Banks, Halls, Vestibules, and Hearths;  
Outside Decorations, Flower Boxes, Etc.  
**THOS. ASPINWALL & SON,**  
624 Broadway, New York.  
The only representatives in the United States for the  
above firms.

**ASPHALT (FELT) ROOFING.**  
**WARREN'S NEW PATENT**  
**FELT AND GRAVEL ROOFING.**  
Substitutes NATIVE ASPHALT for Coal-Tar materials for  
these roofs.  
The very best and most durable material for flat roofs.  
Also, Native Asphalt and Asphaltic Cement for Concrete  
Walks and Pavements.  
Roofers and pavers supplied with the above, and with War-  
ren's original Coal Tar Roofing and Paving Materials.  
Send for circulars and samples.  
**WARREN CHEMICAL AND MANUF'G CO.,**  
26 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**TILES FROM ALL PARTS OF THE**  
**WORLD,**  
FOR  
**BANKS, PUBLIC BUILDINGS, and PRIVATE HOUSES.**  
References given to Tile Work throughout the United  
States and British Provinces  
**AGENT FOR THE AMERICAN ROOFING TILE**  
Contracts Solicited  
**O. A. WELLINGTON, HOUSEHOLD ART ROOMS,**  
No. 171 TREMONT STREET, BOSTON.

**HUGH SISSON & SON,**  
Importers, Dealers, and Manufacturers of  
**MARBLE.**  
**INTERIOR MARBLE WORK AND MONUMENTAL**  
**WORK A SPECIALTY**  
Salesrooms, No. 140 W. Baltimore St.: Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,**  
**SPEAKING TUBES,**  
**AND BURGLAR ALARMS,**  
For Public and Private Buildings.  
**THE BEST IN USE.**  
**S. W. FULLER,**  
63 Devonshire Street, Boston.

**HAWTHORNE & TUCKER,**  
**PLUMBERS,**  
16 PROVINCE STREET, BOSTON  
Estimates for Plumbing made, and work done in any part  
of the United States or Provinces.

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY**  
OF NEW YORK.

**LEONARD F. BECKWITH, Pres't.**      **E. GILLET, Vice-Pres't.**  
Hollow Blocks of any pattern, uniting strength and resis-  
tance to fire and water. The Hydraulic Lime of Teil  
(France), one of the strongest cements known, is largely  
used in this manufacture. The blocks do not conduct  
heat, cold, or sound, and weigh 60 per cent less than brick.  
Fire-proof Partitions, Floor Arches between iron or wooden  
beams, and ceilings under iron or wooden beams, erected  
in following buildings:  
Western Union Telegraph,      Orient, and Queens' Ins.  
Coal and Iron Exchange,      Museum of Natural Hist.  
Equitable, Staats Zeitung,      Hudson R. R. Fr. Depot.  
Wm.burgh Savings Bank,      N. Y. Hospital, Drexel,  
Windsor, & Wm. 'sler Hotels,      Cluny, & Young's Hotel, Bos'n,  
Syracuse Savings Bank,      West Point Military Hosp.  
Columbia College, Tribune,      Coryell, & Vancorlear Flats,  
Baltimore Safe Deposit Co.      Peabody Inst., Baltimore,  
Peabody Museum, N. Haven,      Westmoreland, & Elise Flats,  
Sidewalks laid at Lenox Library, Tribune, etc.  
Hollow Burnt Clay Bricks, for flat and curved arches,  
partitions, etc., and Skewbacks for brick arches.  
Sole agents for the U. S. for HYDRAULIC LIME OF TEIL,  
and LAFAVRE PORTLAND CEMENT.  
Sole agents for the U. S. for METTLACH ENCAUSTIC TILES,  
laid in Tribune, Staats Zeitung, Mineral Spa, Central Park,  
Belvidere Hotel, etc.  
Sole agents for the Atlantic States for WIGHT'S FIRE-  
PROOF COLUMNS.  
Our Fire-proof work is the only one approved by the  
New York Board of Fire Underwriters and the Superin-  
tendent of Buildings, after severe public tests.  
Office Room 64 COAL AND IRON EXCHANGE, 21 Courtlandt  
Street, New York. Represented in Boston by  
**BOORMAN & Co., 5 Doane St.**

**E. HOWARD & CO.**  
MANUFACTURERS OF CLOCKS AND WATCHES  
**CLOCKS FOR PUBLIC BUILDINGS**  
14 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**  
**PLAIN AND ENCAUSTIC**  
**FOR PUBLIC BUILDINGS AND DWELLINGS,**  
As laid by us in  
**THE CAPITOL AT WASHINGTON,**  
And in numerous Churches, Banks, and Dwellings in every  
part of the Country,  
Glazed and Enamelled Tiles for Mantels, Hearths, Wain-  
scoting, &c., and for Exterior Decoration.  
**MILLER & COATES,**  
279 PEARL STREET, NEW YORK.

**BARTLETT, ROBBINS & CO.**  
**HEATING AND VENTILATING OF PUBLIC AND**  
**PRIVATE BUILDINGS**  
**A SPECIALTY**  
PLANS AND SPECIFICATIONS FURNISHED.  
FOUNDERS, AND MANUFACTURERS OF GAS WORKS,  
ETC., ETC.  
24 LIGHT STREET, BALTIMORE.

**THE NEW ENGLAND GRANITE WORKS**  
**HARTFORD, CONN., and 1821 BROADWAY, N.Y.**  
Quarries at Westery, R.I.  
**MONUMENTAL AND BUILDING WORK**  
of every description, all the varieties of  
**AMERICAN AND FOREIGN GRANITE.**  
UNEQUALLED FACILITIES OFFERED TO THE TRADE.  
**J. G. BATTERSON, Pres't.**      **H. B. BATTERSON, Sec'y.**  
**J. G. BATTERSON, DIRECTOR.**      **H. A. BATTERSON,**  
**G. T. BATTERSON,**  
**CARL CONEADS, Sculptor.**

**WHITTIER MACHINE CO.**  
Manufacturers of Steam and Hydraulic  
**ELEVATORS,**  
**STEAM ENGINES, BOILERS, and MACHINERY.**  
No. 1176 Tremont Street, Boston.  
Office in the New England Mutual Life Insurance Co's  
Building, Post Office Square,  
and 129 Broadway, New York  
**CHARLES WHITTIER, Pres't.**      **A. C. WHITTIER, Treas.**

**OTIS BROTHERS & CO.**  
**SAFETY STEAM AND HYDRAULIC**  
**ELEVATORS.**  
A specialty for a quarter of a century.  
**BUILDERS OF THE HALE HYDRAULIC ELEVATOR.**  
No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
**OHIO BUILDING STONE.**  
**GRIND AND SOFTEN STONE.**  
From our FLORENCE and AMHERST QUARRIES.  
Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS  
111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
Designers and Manufacturers of  
**GAS FIXTURES,**  
**ORNAMENTAL METAL WORK, CLOCKS and BRONZE**  
**ARCHITECTS' ORDERS SOLICITED.**  
Special designs submitted on application.  
WAREHOUSES, 536 AND 538 BROADWAY, NEW YORK.  
MANUFACTORY, 24th AND 25th Sts., AND 10th AVENUE, N.Y.

**FISHER & BIRD,**  
Workers in all kinds of Foreign and Domestic  
**MARBLES,**  
97 to 103 EAST HOUSTON ST., NEW YORK.  
Established 1850.  
Among our notable decorations are: The Illinois New  
State House; Palace Hotel, San Francisco; Baldwin's Ho-  
tel, San Francisco; Insurance Building, 10th and Chestnut  
Streets, Philadelphia; Mutual Life Insurance Building  
Boston; Orient Mutual Insurance Building, New York;  
Union College, Schenectady; and numerous Churches,  
Private Residences, etc., etc., throughout the country. We  
solicit the opportunity to estimate upon all classes of work,  
viz., Tiling, Wainscoting, Staircases, Mantels, etc. Ceme-  
tery work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
Are ready to estimate on contracts of any size for  
furnishing their celebrated Amherst, Ohio,  
**BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS**  
**OR CUT AND SET.**  
Also,  
**AMHERST AND INDEPENDENCE GRINDSTONES,**  
And OHIO MINERAL AND STONE PAINTS  
Fire-Proof Stove Cement and Stove Putty ground in Oil  
OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES.** "NOLLA MO-  
SAICS" Floor Tiles, beautiful in color and design, for  
Dwellings, Churches, and Public Buildings.  
**SPANISH WALL TILES.** White, Glazed, Valencia,  
Tiles for Walls and for decorative painting.  
**PRINTED FIGURED TILES** of Spanish designs, for  
Wainscoting, Mantels, Jardinières, etc.  
Floors of "Nolla Mosaiscs" can be seen at the "Rock-  
ingham," corner of Broadway and 56th Street. Imported  
and for sale by **JOHN CHADWICK, Sole Ag't for U. S.,**  
49 Broadway, N. Y.  
**C. E. PARKER, Agent, 14 Exchange Place, Boston.**

**TUFTS' ELEVATOR WORKS,**  
MANUFACTURERS OF "TUFTS' PATENT" COMBI-  
NATION ROPE ELEVATOR.  
To be OPERATED EITHER BY STEAM OR WATER.  
The only safe and reliable machine made for Passenger use  
in Public Buildings and Hotels, and for business purposes in  
Warehouses, Stores, &c.  
37 FOUNDRY STREET, SOUTH BOSTON.  
OFFICE, 243 Broadway, New York.  
**OTIS TUFTS,**      **L. A. BIGELOW,**  
President.      Treas'r and Gen'l Manager

**STEAM WARMING APPARATUS.**  
**HIGH AND LOW PRESSURE.**  
**HOUSE WARMING A SPECIALTY.**  
Pamphlet with more than 1,000 references sent on appli-  
cation.  
**WYLLYS H. WARNER,**  
114 LEONARD STREET, NEW YORK,  
and 23 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**  
No. 6 COURTLAND ST., NEW YORK.  
Works at Paterson, N.J.  
**PATENT SAFETY STEAM ELEVATORS**  
for Public and Bank Buildings, Hotels, Private Dwell-  
ings, etc.  
**SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP**  
GUARANTEED.  
Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "HEALTH" AND "TUBULAR"  
Manufactured by the  
GOLD'S HEATER MANUFACTURING CO.  
114 LEONARD ST., NEW YORK.  
Send for Pamphlet.

F. GOLD, Pres't WYLLYS H. WARNER, Treas.

**ART PAINTED TILES**

FOR MANTELS, CABINETS, ETC.

SHARPLESS & WATTS,  
212 MARKET STREET, PHILADELPHIA.  
Agents for  
MINTON'S TILES,  
AND TEMPLATED PAVEMENTS.

**J. H. BURT & CO.,** Carpenters and Builders,

Blue Hill Avenue, Mattapan (Ward 24), Boston.

**MENEELY & KIMBERLY,**

Bell Founders, Troy, N. Y.,  
Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT-HOUSE BELLS. Illustrated Catalogue sent free.

**JOHN MACK,** Plain and Ornamental Plasterer.

41 Cambridge Street, Boston.

**MANTELS AND GRATES.**

RANKIN'S PATENT makes the Cleanest, Cheapest, and Hottest Fire. Avoid infringements, and send for Circular to

C. S. RANKIN & CO.,  
ARCHITECTURAL IRON WORKS,  
Manufacturers of all kinds of Iron Work for BUILDINGS, JAILS, ETC.

187 W. PEARL ST., CINCINNATI, O.

**BUILDING MARBLE.**

Branch yard of the RUTLAND MARBLE CO., 198 Broadway Street, Boston. JOHN D. ALLAN, Agent.

Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Italian and Continental Marble, furnished at low prices.

**PRESSED BRICK**

STOCK AND COMMON

MANUFACTURED BY

**FLETCHER & THOMAS,**  
Indianapolis, Ind.

All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY

**GILLIS & GEOGHEGAN,**

Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 50th St. and 5th Av.; Drexel Building, cor Wall and Broad; Bennett Building, Fulton and Nassau, etc.

Architects and owners promptly furnished with specifications and estimates.

**ARCHITECTS.**

**P. B. WIGHT,**

CONSULTING ARCHITECT,  
78 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.

Consultations on matters pertaining to Fire-Proof Construction, Foundations, Drainage, Sanitary Work, Ventilation, Machinery, Valuations, Interior Decorations, and Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**

ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E.,** ARCHITECT

AND SANITARY ENGINEER  
KINGSTON, N. Y.

Plans, Specifications, and Estimates furnished for all classes of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,**

ARCHITECT,  
Room 17, Life Insurance Building,  
ST. LOUIS, MO.

Special attention to Churches, Schools, and other public buildings.

**WALTER ARCHITECT. PERRY BUILDING.**

DICKSON, Albany, N. Y.

**GEO. E. WARING, JR.,**

CONSULTING ENGINEER,  
FOR SANITARY AND AGRICULTURAL WORKS,  
NEWPORT, R.I.

**SANITARY ENGINEERING.**

EDWARD S. PHILBRICK, C. E.,  
12 WEST ST., BOSTON, MASS.

Offers advice and superintendence in CONSTRUCTION OF WORKS,  
PLUMBING, DRAINAGE, AND VENTILATION.  
And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
287 HARRISON AVENUE . . . . BOSTON,  
SHEET METAL CORNICES, HAYES'S PATENT VENTILATING SKY-LIGHTS, WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

**EXCELSIOR ROOF PAINT.**

This paint has been thoroughly tested throughout the Eastern States, and has been found to be a perfect tin or metallic preserver. We warrant it neither to crack nor blister by **HEAT or COLD**, and to last

**IN ANY CLIMATE TEN YEARS.**

Those desiring to use this valuable preparation upon their buildings, can secure the same by addressing

C. M. WHEELER, J. M. ROOT,  
Toledo, Ohio.

**DECORATORS.**

**W. J. MCPHERSON,**

(Established A.D. 1845.)

**MURAL PAINTER,**

**DESIGNER,**

**Ecclesiastical Decorator,**

**AND ART STAINED GLASS MANUFACTURER,**

440 TREMONT STREET,

BOSTON, MASS.

Should you want Ornamental Glass, write for particulars to



**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the subscriber to produce Modern and Medieval styles of work equal to any European examples, for Churches, Private Residences, Halls, etc.

The value of the work is attained by a careful selection of colors in Cathedral and French Glass of his own importation.

Designs in accord with architects' plans furnished at short notice. Reference of work at office

SAMUEL WEST, 115 Eliot St., Boston

**FRANK HILL SMITH,**

171 1/2 TREMONT STREET,  
BOSTON . . . . . MASS.

**COOK, REDDING & CO.**

149 CONGRESS ST., BOSTON,

**Ornamental, Stained, and Cut Glass.**

FOR

Churches, Public Buildings, and Private Residences.

*Raphael and Michelangelo.*

A Critical and Biographical Essay. By CHARLES C. PERKINS. 8vo. Many illustrations, including several Heliotypes. \$5.00.

The long devotion of Mr. Perkins to the study of art has borne noble fruit in this beautiful volume. The idea of combining in one work a series of interlinked sketches of the two great representative artists of the age of Julius II. and Leo X. was in every respect fortunate; for they respectively illustrate power and beauty, sportive and earnest labor, as no other contemporaries. . . . His style is that of a scholar and a man of taste—simple, lucid, graceful, and even throughout. It has much of the quality of that of Hermann Grimm, in his two similar biographies. The profuse illustrations—although some of them are rather coarsely printed—are a positive boon to the reader.—New York Tribune.

For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

**HOUGHTON, OSGOOD AND JOMPANY, Boston.**

**DECORATORS.**

**JOHN LAFARGE,**  
MURAL DECORATION,  
51 W. Tenth St., New York and Newport, R. I.

**SOCIETY OF DECORATIVE ART.**

4 East 20th Street,  
NEW YORK.

The Society is prepared to undertake every kind of Decorative Needle-Work, and special attention is paid to the restoration of Antique Embroidery. Special terms are made and careful estimates given to Artists, Architects, and Decorators generally, who are assured that their designs will be carefully reproduced and their directions carefully followed. Orders are earnestly solicited.

The Society has arranged with Mr. RUSSELL STROBIS, Architect, for the Exhibition and Sale of his well-known Wall Papers. Some of these are faithful reproductions of Japanese decorative papers; some are taken from Oriental and other stuffs; some are of original design. New patterns will be added from time to time.

**Fresco Decoration.**

**EMMART & QUARTLEY,**  
Designers, Decorators, and Painters,  
32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa. (Can.)	Philadelphia.	San Francisco	St. Louis.
1. BRICKLAYER.....	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2. Brick Mason (Fronts).....	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50	3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00	2.50 @ 3.00		3.00
3. CARPENTER.....	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25		1.50 @ 2.00
4. Cabinet Maker.....	2.50 @ 3.25		1.75 @ 2.25			1.50 @ 3.00	1.50 @ 2.00			
5. Finisher.....	2.00 @ 2.50		1.50 @ 2.00		1.50 @ 2.00	1.50 @ 3.00	1.25 @ 1.75			1.50 @ 2.00
6. FOUNDRYMAN.....			1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50			2.25 @ 2.50
7. Blacksmith.....	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 2.00			1.50 @ 2.50
8. Whitesmith.....			1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.75			
9. Galvanized Iron Worker.....	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00			2.25 @ 2.50
10. GAS FITTER.....	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00			2.00 @ 3.00
11. LAHOKER.....	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50		1.00 @ 2.00
12. PAINTER.....	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.25	1.75 @ 2.25	1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13. Glazier.....		2.00 @ 2.50	1.75 @ 2.00			1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50		
14. Grainer.....	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00		2.00 @ 3.00	1.75 @ 2.50			3.50
15. Paper-Hanger.....	.75 @ 2.50		per roll.		15c. pr. roll.	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00
16. PLASTERER.....	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	2.00	1.50 @ 2.00	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00		2.25 @ 2.75
17. Stucco-Worker.....	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	1.50 @ 2.50		2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
18. PLUMBER.....	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.50	2.50 @ 3.50	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50			2.50 @ 3.50
19. QUARRYMAN.....		3.00 @ 3.50	1.10 @ 1.25	1.25 @ 1.50	1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20. Stone Mason.....	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21. Carver.....	3.00	3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75	3.00	2.00 @ 2.50	3.50 @ 6.00	2.75 @ 3.25		
22. Pointers and Washers.....		2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75		1.50 @ 2.50	1.00 @ 1.25	2.25 @ 2.50		
23. Rubber.....	1.50 @ 2.00	1.75	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75		
24. Stone-Cutter.....	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.75		
25. Stone-Setter.....	3.00	2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	2.75	2.00 @ 2.50	1.50 @ 2.00	2.25 @ 2.75		2.00 @ 2.50
26. ROOFER (Tin).....	2.00 @ 2.35	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25		2.00 @ 2.25
27. Slater.....	2.50 @ 3.00	2.00 @ 2.50	2.00 @ 2.25	3.50 @ 4.00	2.00	2.00 @ 2.25	1.25 @ 2.00	1.75 @ 2.25		3.00
28. STAIR BUILDER.....	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25			1.50 @ 2.50
29. STEAM FITTER.....		2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00

AMERICAN ARCHITECT AND BUILDING NEWS.  
PRIZES.

The attention of draughtsmen and architectural students is directed to the following announcement of a way in which valuable and useful books can be added to their professional library.

SUBSCRIPTION PRIZES.

The Publishers will send, postpaid, the following prizes to the draughtsman, student, or regular canvasser, who, complying with the conditions, shall secure subscribers for the *American Architect and Building News*:—

- I. For two new subscribers, a year's subscription to the *American Architect and Building News*..... \$6.00
- Or, "Story of a House," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00
- Or, "Annals of a Fortress," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00
- II. For four new subscribers, a bound volume of the *American Architect and Building News*, vol. i. or ii., price..... 9.00
- Or, "Examples of Ancient and Modern Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 8.00
- Or, "Discourses on Architecture," translated from the French of M. Viollet-le-Duc, illustrated, price..... 8.00
- III. For eight new subscribers, both bound volumes of the *American Architect and Building News*, price..... \$18.00
- Or, "Gothic Forms applied to Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 15.00
- Or, "Art Foliage for Sculpture and Decoration," by J. K. Collins, royal quarto, illustrated by 72 plates, price..... 15.00
- Or, "Examples of Modern Architecture, Ecclesiastical and Domestic," being designs by Messrs. Scott, Street, Liddon, and other noted architects, illustrated by 64 quarto plates, price, 15.00
- IV. For fifteen new subscribers, the "Decoration and Ornamentation of the Nineteenth Century," by Liénard, illustrated by 100 folio plates, price..... 27.00

In lieu of these books the canvasser may obtain books of equal value selected from our trade list, or may obtain as equivalent the value of the prize in Heliotype engravings, selected from our collection, which numbers over three hundred.

The conditions to be observed are:—

1. The subscribers must in all cases be new subscribers.
2. The subscription must be paid in advance directly to the Publishers by check or money order; but in no case to the canvasser.
3. If canvassers adopt the method of sending to us one subscriber at a time, they must state at such time for which one of the before-mentioned prizes they are canvassing.
4. The prizes will not be delivered until all subscribers have paid in full

N.B.—These prizes are not cumulative; i. e., a canvasser who sends us fifteen new subscribers cannot claim successively the prizes I., II., III., and IV.; or in other words, to obtain all four prizes a canvasser must send us twenty-nine new subscribers.

A canvasser who has stated that he is trying to secure one of the highest prizes may in the case of failure claim such lesser prize as is warranted by the number of subscriptions actually paid.

No claims will be allowed for subscriptions secured before Jan. 1, 1878.

HOUGHTON, OSGOOD AND COMPANY, Publishers, Boston.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

GALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States. Our twenty years' experience, and the numerous contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO., 72 & 74 West Monroe St. Chicago, Ill.

A SACHEL GUIDE.

FOR THE VACATION TOURIST IN EUROPE. Revised Edition for 1878. With Maps. 16mo, flexible cloth, \$2.00. HOUGHTON, OSGOOD & CO.



NONESUCH Self-Locking AND Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.

Patented July 10th, 1877

AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT. MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS. Regular Sizes, 2, 3, 4, 5 & 6 Inch. SPECIAL SIZES MANUFACTURED TO ORDER. AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS. 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA. WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS. AND WILL BE TREATED AS SUCH.

- PRINCIPAL AGENTS.
- M. Halliday
  - Hicks & Badger
  - James Berry
  - George W. Pitkin & Co.
  - Wasson & Martin
  - McLeod, Reardon & Co.
  - W. H. Scott
  - Kittredge Corlice Co.
  - J. W. Jordan
  - B. G. Carpenter & Co.
  - T. W. Irwin
  - Rellew & Co.
  - New York City
  - Boston, Mass
  - Buffalo, N. Y
  - Chicago, Ill
  - Albany, N. Y.
  - Troy, N. Y
  - Portland, Me
  - Salem, G
  - Worcester, Mass.
  - Wilkesbarre, Penna.
  - Alleghany City, Penna.
  - Cincinnati, Ohio

RECOMMENDED IMPERIAL GAS MACHINE. SEND FOR DESCRIPTION. ARCHITECTS AND ENGINEERS. SIMPLICITY & RELIABILITY. DENNY BROS & CO.



BIBB'S Celebrated Original Baltimore Fire Place Heaters. Mantels and Registers. B. C. BIBB & SON, Baltimore, Md. Best workmanship. Lowest prices guaranteed. Send for circulars.

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLIS ELLIOTT. Containing Heliotype Views of twenty-two striking interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURNE, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. P'ANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist*, Boston.

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courant.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVIS. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIENARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11½ X 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOthic FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIS. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOLETTE-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

The works of the learned and distinguished French Architect, EUGENE VIOLETTE-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

## Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — EUGENE BENSON, in *The College Courant.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

## The New York Sketch-Book of Architecture.

3 vols., 4to, \$6.50 each.

We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

## The American Architect and Building News.

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\* \* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers.

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

(Reported for the American Architect and Building News.)

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, PALE, LONG ISLAND, UP-RIVER, HAVESTRAW, and FRONTS.

Table listing prices for CEMENT, PORTLAND, ROMAN, KEENE'S COARSE, and KEENE'S FINE.

Table listing prices for FIRE BRICK, RED WELSH, SCOTCH, and AMERICAN.

Table listing prices for DOORS, ENCASED PANELS, and MOULDED.

Table listing prices for BLINDS, INSIDE, and WINDOW FRAMES.

Table listing prices for HAIR, DUTY FREE, and GOAT.

Table listing prices for LATH, CARGO RATE, and LIME.

Table listing prices for LIME, STATE COMMON, STATE FINISHING, and ROCKLAND.

Table listing prices for LUMBER, PINE, SPRUCE, and OAK.

Table listing prices for PAINTS AND OILS, WHITING, and PARIS WHITE.

Table listing prices for PAINTS AND OILS, ZINC, and LEAD.

Table listing prices for PAINTS AND OILS, VERMILION, and CHROME YELLOW.

Table listing prices for PAINTS AND OILS, SIENNA, and UMBER.

Table listing prices for PAINTS AND OILS, BLACK LAMP, and BLACK PAINT.

Table listing prices for PAINTS AND OILS, WHITING, and PARIS WHITE.

Table listing prices for PAINTS AND OILS, ZINC, and LEAD.

Table listing prices for PAINTS AND OILS, VERMILION, and CHROME YELLOW.

Table listing prices for PAINTS AND OILS, SIENNA, and UMBER.

Table listing prices for PAINTS AND OILS, BLACK LAMP, and BLACK PAINT.

Table listing prices for PAINTS AND OILS, WHITING, and PARIS WHITE.

Table listing prices for PAINTS AND OILS, ZINC, and LEAD.

Table listing prices for PAINTS AND OILS, VERMILION, and CHROME YELLOW.

Table listing prices for PAINTS AND OILS, SIENNA, and UMBER.

Table listing prices for PAINTS AND OILS, BLACK LAMP, and BLACK PAINT.

Table listing prices for PAINTS AND OILS, WHITING, and PARIS WHITE.

Table listing prices for PAINTS AND OILS, ZINC, and LEAD.

Table listing prices for PAINTS AND OILS, VERMILION, and CHROME YELLOW.

Table listing prices for PAINTS AND OILS, SIENNA, and UMBER.

Table listing prices for PAINTS AND OILS, BLACK LAMP, and BLACK PAINT.

Table listing prices for STONE, CARGO RATES, DELIVERED AT NEW YORK, AMHERST FREESTONE, and BERLIN FREESTONE.

Table listing prices for SLATE, DELIVERED IN NEW YORK, PURPLE ROOFING SLATE, and RED SLATE.

Table listing prices for TIN PLATES, DUTY, 11-10 CENTS PER LB., L. C. CHARCOAL, and L. C. COKE.

Table listing prices for ZINC, DUTY, SHEET, 24 CENTS PER LB., LEAD, SHEET, and PIPE.

Table listing prices for LEAD, SHEET, and PIPE.

BOSTON.

Prices to Contractors and Builders.

Table listing prices for FIRE BRICK, WALDO BROS. EXTRA, and WALDO BROS. NO. 1.

Table listing prices for BUILDING BRICKS, EASTERN, and HAY STATE.

Table listing prices for BUILDING STONE, BUTLAND MARBLE, and LUMBER.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, EASTERN, and HAY STATE.

Table listing prices for BUILDING STONE, BUTLAND MARBLE, and LUMBER.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, EASTERN, and HAY STATE.

Table listing prices for BUILDING STONE, BUTLAND MARBLE, and LUMBER.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, EASTERN, and HAY STATE.

Table listing prices for BUILDING STONE, BUTLAND MARBLE, and LUMBER.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, EASTERN, and HAY STATE.

Table listing prices for BUILDING STONE, BUTLAND MARBLE, and LUMBER.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, EASTERN, and HAY STATE.

Table listing prices for BUILDING STONE, BUTLAND MARBLE, and LUMBER.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, EASTERN, and HAY STATE.

Table listing prices for BUILDING STONE, BUTLAND MARBLE, and LUMBER.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, EASTERN, and HAY STATE.

Table listing prices for BUILDING STONE, BUTLAND MARBLE, and LUMBER.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for MORTISE LOCKS, BRASS FACE AND BOLT, and FACTORY MAKE.

Table listing prices for DOOR KNOBS, SOLID GLASS, and SILVERED GLASS.

Table listing prices for RASH FASTS, PLAIN BRASS, and NICKEL PLATED.

Table listing prices for SCREWS, ROUND HEAD, and STORE DOOR HANDLES.

Table listing prices for IRON, WR-T-IRON I BEAMS, and WR-T-IRON CHAN I BEAMS.

CHICAGO.

Prices to Contractors and Builders.

Table listing prices for BRICK, LIME, AND CEMENT, LIME IN BULK, and CHICAGO BUILDING BRICK.

Table listing prices for BUILDING BRICKS, PORTLAND, and WHITE SAND.

Table listing prices for BUILDING STONE, PORTLAND, and WHITE SAND.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, PORTLAND, and WHITE SAND.

Table listing prices for BUILDING STONE, PORTLAND, and WHITE SAND.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, PORTLAND, and WHITE SAND.

Table listing prices for BUILDING STONE, PORTLAND, and WHITE SAND.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, PORTLAND, and WHITE SAND.

Table listing prices for BUILDING STONE, PORTLAND, and WHITE SAND.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, PORTLAND, and WHITE SAND.

Table listing prices for BUILDING STONE, PORTLAND, and WHITE SAND.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, PORTLAND, and WHITE SAND.

Table listing prices for BUILDING STONE, PORTLAND, and WHITE SAND.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, PORTLAND, and WHITE SAND.

Table listing prices for BUILDING STONE, PORTLAND, and WHITE SAND.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, PORTLAND, and WHITE SAND.

Table listing prices for BUILDING STONE, PORTLAND, and WHITE SAND.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, PORTLAND, and WHITE SAND.

Table listing prices for BUILDING STONE, PORTLAND, and WHITE SAND.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, PORTLAND, and WHITE SAND.

Table listing prices for BUILDING STONE, PORTLAND, and WHITE SAND.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for C ROOFING, X ROOFING, and Y ROOFING.

Table listing prices for COPPER, BOTTOMS, SHEET ZINC, and FULL SIZES.

Table listing prices for SHEET IRON, NO. 24, and SHEET IRON, NO. 12.

Table listing prices for WIRE, NOS. 1 TO 4, and NAILS.

Table listing prices for PAINTS AND COLORS, WHITE LEAD, and ZINC.

Table listing prices for OILS, LINED RAW, and TURPENTINE.

PHILADELPHIA.

WHOLESALE PRICES.

Table listing prices for IRON, DUTY, and RAILROAD TIE.

Table listing prices for NAILS, DUTY, and HORSE SHOE.

Table listing prices for PAINTS AND COLORS, WHITE LEAD, and ZINC.

Table listing prices for OILS, LINED RAW, and TURPENTINE.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, PORTLAND, and WHITE SAND.

Table listing prices for BUILDING STONE, PORTLAND, and WHITE SAND.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, PORTLAND, and WHITE SAND.

Table listing prices for BUILDING STONE, PORTLAND, and WHITE SAND.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, PORTLAND, and WHITE SAND.

Table listing prices for BUILDING STONE, PORTLAND, and WHITE SAND.

Table listing prices for LUMBER, MICHIGAN PINE, and BLACK WALNUT.

Table listing prices for BUILDING BRICKS, PORTLAND, and WHITE SAND.

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms.

CREOSOTED WOOD. PREPARED AT THE Bayford Patent Creosote Wood Preserving Works. EDWARD R. ANDREWS, Proprietor.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY.

The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, ETC., ETC

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.

ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

**ESTABLISHED, 1836.**  
**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Composition Roof known. Also inventors and owners of the following patents:—

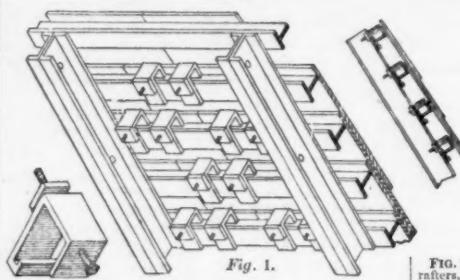


FIG. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the purlins on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

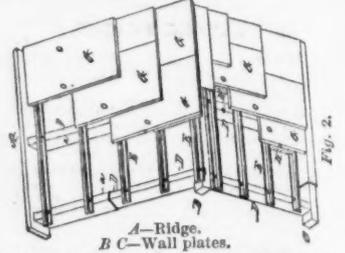


FIG. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or other fire-proof material, and iron purlins (c) or beams, with the slates (G) or other covering secured thereto by claps, (FIG. 1.) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contact with the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point avoiding condensation, contraction and expansion of roofs formed wholly of iron.

**WARMING AND VENTILATION.**  
**FIRE ON THE HEARTH.**  
**FIRE-PLACE HEATERS AND STOVES.**

VENTILATION of a Fire-Place. RESERVE FORCE of a Close Stove. CIRCULATION of a Furnace.  
Adapted for any kind of Fuel,  
And the only Fireplace Heater perfectly adapted for Soft Coal and Wood.

**SILVER MEDAL AWARDED, PARIS EXPOSITION, 1878.**  
Boston Retail Agency, F. TUDOR & CO., 14 Pemberton Square.

**OPEN STOVE VENTILATING COMPANY,**  
115 Fulton and 54 Ann Streets, New York.




25 PER CENT. OF CUSTOMARY OUTLAY CAN BE SAVED BY USE OF  
**H.W. JOHNS' ASBESTOS LIQUID PAINTS**

Pure, Undiluted Paints, Full Body, and Full U. S. Standard Measure.

No other Paints for structural purposes equal these in quality, richness of color, covering capacity, and durability. Sample cards free by mail. ROOF PAINTS for Tin Roofs, Iron Work, etc. FIREPROOF PAINTS for Inside Woodwork.

**H. W. JOHNS M'FG CO., 87 Maiden Lane, New York,**  
Manufacturers of Asbestos Roofing, Boiler Coverings, Sheathings, Cements, etc.

**GAS**

**SPRINGFIELD GAS MACHINE.**  
Springfield, Mass.: 45 Maiden Lane, New York: 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

**BUHRER'S INFALLIBLE SEWER GAS TRAP.**

The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (B) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.

**S. BUHRER, Inventor and Manufacturer, Cleveland, Ohio.**

WHOLESALE AGENTS.  
W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O.  
L. WOLFF M'fg Co., 109 & 111 West Lake St., Chicago, Ill.  
HAMBLEN & MATHEWS, 82 & 84 North St., Boston, Mass.  
C. A. BLESSING, 44 North Fifth St., Philadelphia, Pa.  
THE J. L. MOTT IRON WORKS, 88 & 90 Beekman St., N. Y.

Please send for Circular.



**TO ARCHITECTS.**  
The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the **SCAGLIOLA AND MAREZZO MARBLE**, which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall, and Altar Work.  
**JAS. T. ALLEN & CO.,**  
25 North Market Street, Philadelphia.

**D. M. MEEKER & SON'S**  
Malleable Iron Hollow Munten Window Sash.

For Insane Hospitals, Fire Proof Buildings, &c.



End view of Munten for Glazed Sash.  
End view of Munten for Unglazed Sash.  
Hollow Munten.

The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by  
**D. M. MEEKER & SON,**  
Newark, N.J.

Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

**MAKE your own GAS**

GAS GENERATORS, FOR LIGHTING Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.

Send for CIRCULAR

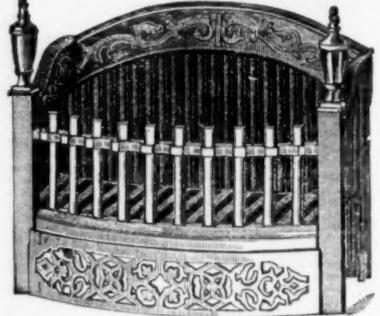
**WALWORTH MANUF. CO.**  
No. 69 Kilby Street, BOSTON, MASS.

**BRASS ANDIRONS, FENDERS,**  
And all kinds of Brass Work, made to order.

**Grates for Parlor & Reception Rooms.**  
For hard or soft coal, in every variety.

Iron and Brass Fittings for Stables a specialty.

**MURDOCK PARLOR GRATE CO.,**  
Manufacturers,  
21 Washington St., Boston.



**SAFETY BOILERS**  
STEAM AND HOT WATER

CRANE BREED & COMPANY  
CINCINNATI, O.

MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RADIATORS, PIPE COILS, REGISTERS, FITTINGS, STEAM-PUMPS

**NON-POISONOUS SILICATE PAINT** { Does not discolor, chalk, or crack off. It is superior to lead. } **PETRIFYING LIQUID**

See article on "Dwellings of the Poor," AM. ARCHITECT, Sept. 21, 1878.

The only cure for damp walls of churches, dwellings, and public buildings, is the

Send for Price List and Testimonials.

**HOWARD FLEMING, Sole Agent in the United States,**  
10 PINE STREET, NEW YORK.



and clay, and for removing about 16,000 cubic yards of sand, gravel, and mud from the channel of Cohoesy Creek, N. J. Three bids were received for each work. For the first, M. F. Brainerd, agent, of Albany, N. Y., offered to do the work at 22 cents per yard; F. B. Colton, of Philadelphia, 25 cents per yard, and American Dredging Company, Philadelphia, 27 1/2 cents per yard. For the improvement of Cohoesy Creek the bidders were the same persons: F. B. Colton, 25 cents; M. F. Brainerd, 24 1/2 cents; and American Dredging Company, 28 1/2 cents. These proposals will be forwarded to Washington, and the contracts will be awarded by the department there.

**St. Louis.**

**BUILDING PERMITS.**—Forty-four permits have been issued for the week ending October 4, 1878. Eight of these are for unimportant frame structures. The rest are for brick buildings with occasional fronts of stone ashlar. Those worth \$2,500 and over are as follows:—

Owners.	Use.	Stories.	Rooms.	Cost.
Rev. Father Brantner.	Church.	1	1	\$3,000
John Buecher.	Dwelling.	3	18	5,000
J. F. Gregg.	Dwelling.	2	24	4,000
Mrs. C. B. Weston.	Dwelling.	3	16	3,000
Croze & Co.	Ice-house.	1	1	2,500
C. Rose.	Dwelling.	6	6	2,500
Dr. J. B. Bandway.	Dwelling.	2	9	10,000
Mrs. S. Frink.	Dwelling.	3	11	5,000
Mrs. E. McNary.	Store.	2	8	3,500

**Washington, D. C.**

**LIFE-SAVING STATIONS.**—The work upon the thirteen new life-saving stations on the coasts of Virginia and North Carolina is being pushed forward rapidly, and they will be completed by the middle of next month. Three other new stations on the Delaware and Maryland coasts will be completed soon afterward. All the old ones on these coasts are now manned and in full operation. Keepers for the new stations will be appointed next month, and in the mean time the department is purchasing surf-boats, guns for throwing the life-line, hawlers, life-cars, etc., to properly equip these stations.

**General Notes.**

**BERKSHIRE, ILL.**—has a new opera house.  
**CHRYSLER, MINN.**—Mr. C. M. Lovell is preparing to build a brick dwelling.  
**CITY ISLAND, WESTCHESTER CO., N. Y.**—The corner-stone has been laid for a new Methodist Episcopal Church.  
**CLEVELAND, O.**—The contract for all the iron used in the extension of the breakwater this season was awarded to W. H. McCurdy & Co. of this city. The government appropriated \$100,000 for the work this year.  
**COLLINGWOOD, O.**—Goodrich Chapel, the new structure erected for railway employes, was dedicated lately.  
**COLUMBUS, OHIO.**—The new cell building of the Penitentiary is completed, and repairs on the right wing of the main edifice are going steadily on. The wall is being raised another story, for the purpose of light and better ventilation; the work, for the most part, being done by the convicts.  
**CROWN POINT, IND.**—A two-story and basement court-house is now building and is to be completed August 1, 1879; size 99 by 110 feet in the extreme. It is in the form of the Greek cross, the width of the wings being 56 feet. It is of brick, with stone finish, including solid stone porticos and steps, galvanized iron cornices, and slate roof. The dome, which is 190 feet high and 32 feet square, is of solid brick to the spring of the arched roof. Entire cost will be \$59,000. John C. C. Crane, of Chicago, is the architect; Thomas and Hugh Colwell, of Ottawa, Ill., are the contractors.  
**CUMBERLAND, ME.**—A new iron bridge is to be built across the river at Cumberland Mills, in place of the old covered wooden one that has just been removed.  
**DANVILLE, ILL.**—The Danville Battery proposes to lease a lot and build an armory and drill room 40x100 feet.  
**DATON, O.**—The Turner Society dedicated their new hall on Commercial Street Sunday.  
**DETROIT, MICH.**—The store No. 81 Woodward Avenue, owned by A. C. McGraw, has been rebuilt. The front is of stone, brick, and iron. The architects were Mason & Rice.  
**EAST BLACKSTONE, MASS.**—The house of F. N. Thayer, Esq., is completed. The building is two stories high, 25 by 31 feet, with an ell 21 by 30 feet. The carpenter work was done by Chas. Desautel, of Woonsocket. Mr. John Gatchell is building a two-story house, and Mr. E. Cook is doing the carpenter work. Mr. George Whipple, of Woonsocket, is also building a two-story house for Mr. Collins Wadsworth.  
**EAST NEWMARKET, DORCHESTER COUNTY, MD.**—The Cabin Creek Baptist Church was dedicated lately.  
**FORT WAYNE, IND.**—J. H. Bass, of the Bass Foundry and Machine Works, is adding to his works a large new foundry, mainly for increasing their capacity for the production of car wheels.  
**GALLIPOLIS, O.**—The brick work on the new Court House is finished, and has been received and paid for by the County Commissioners.  
**GRANDT, MO.**—A new public school building is to be erected at a cost of \$3,500. It will be a frame building, three stories high.  
**HARTFORD, CONN.**—The large tenement house built by Mr. Richard Hicks, at the corner of High School Avenue and Church Street, has been completed, and is already partially occupied.  
**HARTFORD, CONN.**—The old Abbott House is to be replaced by a new cottage.  
**HOBOKEN, N. J.**—The new Roman Catholic Church of Our Lady of Grace, at Hoboken, is nearly completed. It is 200 feet long and 114 feet wide. The cost of the structure will be about \$150,000.  
**INDIANAPOLIS, IND.**—It is probable that the contract for the new State House will have to be relet. The commissioners awarded it some time ago to Kannmischer & Demig, of Columbus, Ohio, their bid, \$1,551,000, being the lowest, but they have thus far failed to file a satisfactory bond of \$225,000, as required by law. Another firm stand ready to take the contract at the same price, and the Board has referred the question to the Attorney-General whether they can thus transfer the contract, or whether they will have to let it to the next lowest bidder.  
**LAKE CITY, MINN.**—Mr. F. D. Keye is rebuilding his flouring mill.  
**LANSING, MICH.**—The State authorities have formally accepted the new State Capitol Buildings, the corner-stone of which was laid October 2, 1875, and made the last payment of \$100,000, which includes \$15,000 for furniture and \$7,500 for steam heating. The cost of the building was first limited to \$1,200,000. The contract-price was \$1,144,057.20. Changes and extras will swell the total cost of building, furnishing, and improvement of grounds to \$1,500,000. The dimensions are: Length, 345 feet; depth, 195 feet; height to lantern, 265 feet; material, sandstone, from Amherst, O., with brick backing. It will be occupied by the State officers early next month.  
**MARtha's VINEYARD, MASS.**—A new cottage for Mrs. Merrill in Central Park, is nearly finished, and many houses are being enlarged for the next season.

**MILBURY, MASS.**—The brick-work on the new Town Hall will be finished this week.  
**NETHERWOOD HEIGHTS, N. J.**—The Netherwood Hotel is lately completed; cost, \$125,000; J. D. Stevens & Son, architects.

**NEW BEDFORD, MASS.**—Mr. James Greenwood is adding to his building at the corner of Will in St and Acushnet Ave. a story which will include four bowling alleys, 63 feet long, and a shooting gallery, 70 feet long. Mr. Robert H. Slack, of Cambridge, is his architect.

**NEW HAVEN, CONN.**—Mr. H. H. Olds is building a new store house, near the foot of Chapel street, which will require about 100,000 brick. It is forty-five feet by thirty, and will be three stories high. Mr. A. J. Ransdell is the builder.  
 The confectionery manufactory of the H. H. Snow Company, lately burned, has been rebuilt, three stories high, with attic.

**NEWPORT, O.—BUILDING PERMITS.**—E. R. Randen, to erect a one-story brick dwell., on the east side of Washington Ave., between Forrest and Williamson; cost, \$8,000.—John Steiner, to erect a two-story brick dwell., on the south side of Madison Street, between York and Columbia streets; cost, \$1,500.—Adam Ebert, to erect a one-story brick dwell. on the south side of Williamson street, between Patterson and Brighton; cost, \$600.

**PAWTUCKET, R. I.**—The residence of Mr. H. B. Metcalf, at the junction of Walcott and Main streets, is nearly completed.  
**PAWTUCKET, R. I.**—Mr. Alfred F. Chase is building a new house on Cherry Street.

**PLAINFIELD, N. J.**—Block of stores, Music Hall, and Masonic Lodge; cost, \$15,000; J. D. Stevens & Son, architects.

**ROBERTVILLE, CAL.**—J. D. Pratt has completed a building 70 by 26 feet, and the Odd Fellows are building a second story upon it, intending it for use as a hall. W. J. Branstetter is erecting a brick warehouse, 140 by 30 feet, providing the brick from his own kiln, and it is understood that Mr. Dudley, who has a kiln on Dry Creek, will also build a large warehouse soon.

**SAN FRANCISCO, CAL.**—Work on the Larkin Street front of the new City Hall has been recommenced, having been stopped for a few days pending the arrival of some iron girders that were needed. It is expected that the work will go on in future without any delay.

**SPRINGFIELD, O.**—The School Board has purchased property for a new colored school building in the north part of the city.

**STANTON, DEL.**—A new Presbyterian Church on the line of the Wilmington and Baltimore Railroad, was dedicated last week.

**ST. BERNHARD, NEB.**—Some Franciscan fathers from Westphalia have resolved to erect a monastery. The B. M. R. H. Company have given them a lot 100 acres for the new foundation. A school-house two stories high is in process of erection.

**WESTPORT, MASS.**—The new chapel at Kirby's Corner is raised and covered and will soon be ready for plastering. S. Booth, William T. Wyatt, and Andrew Hart are the building committee.

**WILMINGTON, DEL.**—The permits for last month are as follows:

Henry Tripp, colored, 1 house, south side of Fourteenth, between Head and Claymont sts.—African Bethel, M. E. Church, east side of Walnut, between Sixth and seventh sts.—Patrick Welsh, 1 house, west side of Seaville, between Front and 8-second sts.—Hart & Bro., a stable and sheds on north side of Fifth, between Poplar and Walnut sts.—Cox & Allen, 6 houses, south side of Front, between Franklin and Broome sts.—Joseph Hamilton, 1 house, north side of Third, between Dupont and Scott sts.—Ebenzer Tilman and Joseph Sanson, 2 houses, northwest corner of Third and Dupont sts.—Patrick O'Toole, 1 stable southeast corner of Spruce and Curlett sts.—Jones, Guthrie & Co., 2 houses on west side of French, between A and B sts.—James Davis, 1 house, south side of Eleventh, between Poplar and Lombard sts.

**WOONSOCKET, MASS.**—A two-story granite court-house is now building from designs prepared by Stephen C. Earle, architect, of Boston. It measures 54 by 87 feet. The estimated cost is \$50,000. The contractors are Joseph W. Coburn & Co., of Boston. The walls are now nearly ready for the roof. The building is in close connection with a handsome Quincy granite court-house, built in 1843, from designs by Ammi B. Young, in severe Grecian style, and is planned to appear as a separate building, but of style and color to harmonize with the other. The inside construction is brick and iron throughout. Doors and wood fittings are to be of oak. It is mainly for the accommodation of the probate court and registry, county treasurer, and law library.

**WOOSTER, O.**—Croford & Saylor, bridge builders, are constructing the iron work for a new court-house.

**WANTS.**

**WANTED.** A position as agent for a stone contractor, or for a company manufacturing specialties for building purposes, by a young man experienced in business, or any situation requiring a knowledge of architects' plans, designing, scale, and detail drawings, preparing bills of quantities, etc. An extensive acquaintance among architects, and means of keeping informed of building news in New York and Boston.—Address O. WESLEY, 246 E. 25th St., New York.

**DRAUGHTSMAN.** Wants a situation in an Architect's office. Willing to work for low salary. Address H. F. BURR, Medford, Mass.

**Double Ratchet Regulators, FOR TRANSOMS, FAN-LIGHTS, ETC.**

These Regulators are for hanging transoms and adjusting them at any desired angle for ventilation, superseding chains, pulleys, hinges, etc.; and are most useful substitutes for the old style of pivots, easily attached to the transom, and wherever used have stood the test.

PELLMAN PALACE CAR CO., CENTRAL DIVISION, }  
 JERSEY CITY, January 30, 1878. }

**DOUBLE RATCHET M'F'G CO., N. Y.**  
 Gentlemen,—I have found the Double Ratchet Regulator a very useful article in my office for keeping the fan-lights in any desired position, having used the same for some three or four years, and are in as good working order as when put up. Very respectfully,  
 C. D. FLAGG, Ass't Sup't.

For sale by hardware dealers. Send for circular.

Agents wanted everywhere.

**DOUBLE RATCHET M'F'G CO. (Limited), 346 & 348 Broadway, New York.**

**Publishers' Department.**

**The American Architect and Building News.**

PUBLISHED EVERY SATURDAY BY

**HOUGHTON, OSGOOD & CO.,**  
 WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year, \$6.00 in advance.

**CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,**

WITH

**Houghton, Osgood & Co.'s other Periodicals.**  
 THE ARCHITECT and ATLANTIC MONTHLY... \$9.00  
 THE ARCHITECT and THE REPORTER... 15.00  
 THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL... 10.00  
 THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE... 7.00  
 \* N. E.—The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

Payments should be made directly to the Publishers, either by draft or by post office order.

**HOUGHTON, OSGOOD & CO., Publishers,**  
 WINTHROP SQUARE, BOSTON.

**BUILDING SPECIALTIES, Etc.**

The carved and moulded brick manufactured by the Peerless Brick Company, of Philadelphia, are rapidly gaining in favor with architects. Among the notable instances in which they have been used may be mentioned the house of Mr. E. N. Dickinson, Thirty-fourth Street, New York, which attracts much attention on account of its ornamental exterior. The panels are of carved brick, as fine in-laid as outside, and, being carved in the wall, produce a very fine effect.

Mr. Asahel Wheeler, of Boston, claims to have proved to every one's satisfaction that by his process of painting the outside of buildings he can increase the durability of paint from two or three years (the ordinary period) to twenty. Thirty years ago Mr. Wheeler conceived the idea of making a paint for inside use in houses which should last perfectly white for a period of ten years, and specimens of it are now extant of twenty or more years' standing, which he claims looks whiter than ordinary paint of two years' wear. These statements are well worth the attention of architects and builders.

The H. W. Johns Manufacturing Company has become universally known as the largest manufacturers of liquid paints in this country. Their productions are used for dwellings and general purposes. The company offer liberal inducements to reliable men as local salesmen for their Asbestos Paints, Roofing, Sheatings, etc. Their card will be found elsewhere.

Attention is directed to the system of heating and ventilation advertised by the Open Stove Ventilation Company, of New York, in their apparatus called "Fire on the Hearth," of which the following is a brief description: "It has a large drum above the fire, surrounded by a jacket, so arranged that a constant supply of fresh air may be brought into contact with greatly expanded surfaces, which absorb the maximum quantity of heat, and impart it rapidly to the in-flowing currents,—thus preventing over-heating, and at the same time supplying the room with an abundant, genial, and invigorating atmosphere. It will be observed that two distinct currents pass through the stove. One enters beneath the grate, ascends to the chamber above, passes over the diaphragm therein, and thence goes to the chimney, furnishing the draft. The other enters under the stove, and becomes heated by contact with the hot surfaces, and rises through the jacket, thus compelling a constant circulation through the latter. The fire is entirely open, so that a large supply of additional heat is radiated therefrom. The construction, evidently, is such that there is no opportunity for leakage of the deadly carbonic acid; nor is there any contact of highly heated plates with the air of the room to generate carbonic oxide. The manufacturers of this house are in great variety, and the building professions have a particular interest in investigating their merits."

**A. Hall & Sons**  
 Manufacturers of  
**Architectural Terra Cotta,**  
 Buff and Colored Brick, Fire Brick,  
 Established 1846, 24th Amboy St.

**ARCHITECTURAL IRON WORKS.**

**YOUNGLOVE & CO., Propr's.**

CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BRACKETS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILES, LIGHT, CHESTING, ETC.

Estimates promptly furnished.

(Established 1848.)

**MARKET ST. ARCHITECTURAL FOUNDRY**

AND

**IRON WORKS.**

**SNEAD & CO.**

LOUISVILLE, KY.

Makers of every description of Iron Work for Buildings.

**GAS FIXTURES**  
 OF EVERY DESCRIPTION.  
 SPECIAL RATES TO BUILDERS.  
**R. HOLLINGS & CO 47 Washington St. BOSTON.**

PROPOSALS.

HEATING APPARATUS.

Proposals for Low Temperature Hot Water Heating Apparatus for the U. S. Court-House and Post-Office at Covington, Ky.

TIMBER.

U. S. ENGINEER'S OFFICE, 26 WASHINGTON AV., DETROIT, MICH., October 1, 1877.

IMPROVEMENT OF HUDSON RIVER.

UNITED STATES ENGINEER'S OFFICE, Room 31 Army Building, cor. Houston and Greene Sts., NEW YORK, September 28, 1878.

NOTICE TO CONTRACTORS.

CLEVELAND, O. OFFICE BOARD OF INFIRMARY DIRECTORS, CLEVELAND, OHIO, October 4, 1878.

REPAIR OF WHARF, WILLET'S POINT, NEW YORK HARBOR.

DEPOT QUARTERMASTER'S OFFICE, HOUSTON ST., COR. GREENE, NEW YORK CITY, October 5, 1878.

ARTESIAN WELLS.

CHARLESTON, S. C. CITY HALL, MAYOR'S OFFICE, September 10, 1878.

HEATING APPARATUS.

Proposals for low temperature hot-water Heating Apparatus for the U. S. Court-House and Post-Office, at Covington, Ky.

LOCKS FOR CUSTOMS BONDED WAREHOUSE.

TREASURY DEPARTMENT, October 2, 1878. Sealed proposals are invited until 12 o'clock m. on Monday, October 14, 1878, for furnishing the Treasury Department locks, suitable for fastening Customs Bonded Warehouses, in such quantities as may be required from time to time.

PROPOSALS.

GAS WORKS.

RIO DE JANEIRO, BRAZIL. By order of the Brazilian Legation at Washington the undersigned makes public that the Imperial Government calls for proposals for the gas illumination of Rio de Janeiro, the present contract expiring in March next.

MINISTRY OF AGRICULTURE, COMMERCE, AND PUBLIC WORKS - DIRECTORY OF PUBLIC WORKS.

By order of His Excellency the Minister of this Department, it is advertised that this Directory receives proposals for the service of the illumination by gas of the Capital of the Empire, in the terms and conditions below specified: - First - The proposals will be presented in a closed letter, until 3 o'clock in the afternoon of the 1st day of December of the present year, in this city, in the Directory of Public Works of the Ministry of Agriculture, and in London, Paris, and Washington, at the respective Brazilian Legations.

Fifth - All the proposals will be opened in this city, in the public session of the Directory of Public Works, on the 24 day of January, 1879; and the Government will declare on them within fifteen days of that date.

ASYLUM.

CINCINNATI, O. Sealed proposals will be received until Tuesday, October 15th, at 12 o'clock m., by the trustees of the Ohio Institution for the Education of Idiotic and Imbecile Youth, at the office of the Superintendent, for furnishing materials and doing the work required by the plans and specifications for plastering two new wings.

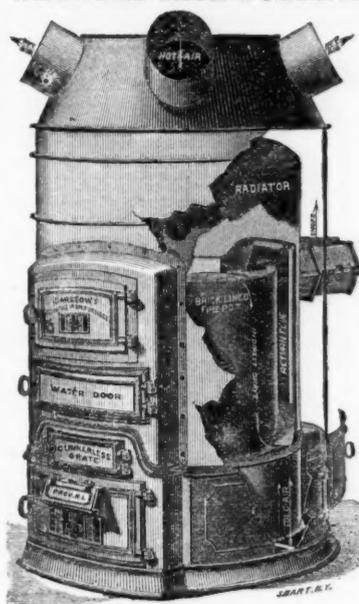
LOCKS AND KEYS.

POST OFFICE DEPARTMENT, WASHINGTON, D. C., August 15, 1878. Separate sealed proposals will be received at this Department until 12 o'clock noon on the 20th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as are to be used for the street letter-boxes of the United States.

Brandeis Seamless Paragon Trap. Safest, Best, Cheapest, and Non-siphonic. Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space.

Superior to a Steam Heater, at one third the cost.

BARSTOW WROUGHT IRON FURNACE.



BARSTOW STOVE CO.,

Providence, R. I.; 66 Union St., Boston; 230 Water Street, New York. Manufacturers of Furnaces, Ranges, Stoves, etc., ADAPTED TO ALL USES.



D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

C. BUTCHER, 107 Devonshire St. BOSTON. PATENT MARQUETRY FLOORING.

Specimens at Lawrence, Wilds & Co.'s, 42 Cornhill, Boston.

HOISTING MACHINES EXCLUSIVELY.

HOTEL STEAM ELEVATORS, HYDRAULIC ELEVATORS, HAND POWER HOISTS, DUMB WAITERS.

H. J. REEDY, Manufacturer, 128 EAST EIGHTH ST. - Cincinnati, O.

NATIONAL TUBE WORKS CO.

Indestructible Enamelled Wrought Iron LAP-WELDED PIPE, From 1/4 inch to 15 inches diameter. Now extensively used for Water, Gas, Sewerage, and Mining.

National Tube Works Co., 8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

ARCHITECTS AND BUILDERS.

MORTAR BLACK,

Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar. For sale only by Walpole Color and Chemical Works, HENRY D. DUPEE, Proprietor, 79 KILBY STREET, BOSTON

MARSHALL'S AMERICAN



LEADED SHEETS. Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Represented in New England States by C. T. HOLBROOK, No. 69 UNION STREET, BOSTON.

PATENT MINERAL WOOL. ENTIRELY FIRE-PROOF AND UNDECAYING. THE BEST INSULATOR OF HEAT, COLD, AND SOUND. For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc.

ALEXANDER D. ELBERS, P. O. Box 4461. 26 1/2 Broadway, New York

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free HENRY McSHANE & CO., Baltimore, Md.

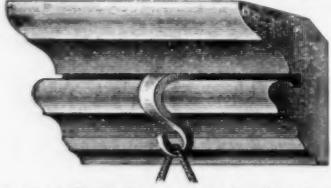
The Useful

is issued monthly—consists of Perspectives of Interiors, Ornaments of Buildings, Fresco Painting, Furniture, etc., and is accompanied with full-size working-drawings—for direct use—Price to Subscriber One dollar per number.

Office 28 Pemberton Square, Boston, Mass

BAKER'S

Combined Cornice and Picture Rod Moulding.



(Patented in the United States and Dominion of Canada, 1877.) For Hanging Pictures, etc. FOR SALE BY F. P. BAKER, The only Agent in the U. S. and Canada, 84 BEVERLY STREET BOSTON.

We manufacture Slate Goods, through every operation, from quarry to completion.

THE FAIR HAVEN MARBLE AND MARBLEIZED SLATE CO.

FAIR HAVEN, VERMONT.

The oldest and most extensive producers of

SLATE MANTELS IN THE UNITED STATES.

We imitate more than fifty rare marbles and woods. Styles and workmanship unsurpassed. Special care given to making Mantels and other goods from architects' drawings. Being in close proximity to the best white American marble quarries, and with rare facilities for selecting stock and doing the work, we are also producing

MARBLE MANTELS

At the very lowest prices, and in the best manner possible. We also produce all kinds of plain slate and marble work

Look over this list and correspond with us and get our Catalogue.

- Purple, Green, Red, Variegated Roofing Slates. Same Color Slate, also White and Black Marble Tiles. Window Sills. Window Lintels. Water Table. Belt Courses. Ashlar. Solid Steps. Steps and Risers. Laundry Tubs. Urinals. Grave Covers. Vault Work. Carriers' Tables. Counter Tops. Billiard Table Beds. Blackboards. Brewers' Vats. Cisterns. Greenhouse Shelves. Plumbers' Goods, etc.

ARCHITECTURAL IRON AND JAIL WORKS.

M. CLEMENTS,

MANUFACTURER OF Iron Railing, Bank Vaults, and Jail Cells, Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc. DAYMILLER STREET, near Sixth and C. H. & D. R. R. Depot, CINCINNATI, OHIO.



J. & R. LAMB, 59 CARMINE ST., N. Y. CHURCH FURNISHERS Practical Workers in Sterling Silver, Brass and Bronze. Carved Wood, Decorations, etc. Illustrated Catalogues. Furniture, etc.; Metalwork, etc.; Decorations, etc.

A. L. FAUCHÈRE & CO.

OFFICE AND WAREHOUSES 1319 and 1321 Broadway, New York, Importers, Manufacturers, and Dealers in all kinds of foreign and domestic MARBLE FOR INTERIOR WORK. Estimates furnished on application.

DORCHESTER UNION FREESTONE CO. NEW BRUNSWICK YELLOW FREESTONE. The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order. 24 Pine Street, New York. G. P. SHERWOOD.

Advertisement for THE HELIOTYPE PRINTING COMPANY. Features a central illustration of a person operating a heliotype printing press. Text includes: LUX-FECIT, THE HELIOTYPE PRINTING COMPANY, 220 DEVONSHIRE ST. BOSTON, COR FRANKLIN ST. HELIOTYPE PHOTOGRAPHS in Printers Ink, HELIOTYPE LITHOGRAPHS printed by Steam, HELIOTYPE CUTS to print with Type, HELIOTYPE FACSIMILE LETTERS, SHOW CARDS, etc.

THE "AIR SPACE" BOILER COVERINGS

Save 10 to 20 per cent in fuel.

See Am. Architect and Building News, Dec. 15, 1877. THE CHALMERS-SPENCE COMPANY. 140 Congress Street, Boston. 2 Fourth St., E. R., New York.

CLASSIFIED ADVERTISEMENTS.

Table listing various advertisements and their page numbers. Includes categories like ARCHITECTS, DECORATORS, HOISTING MACHINES, BOILER COVERINGS, and many others.

**ETNA IRON CO.**

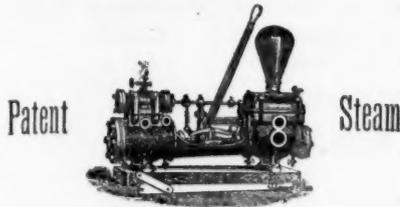
Manufacturers of every description of Wrought and Cast

**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**



**PUMP THE STANDARD.**

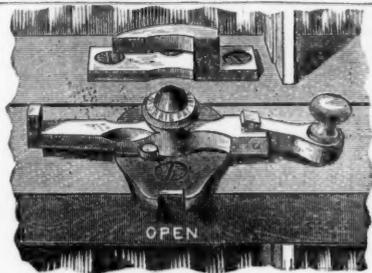
Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.  
Noiseless Pumps for Water Elevators.

Also,  
Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.  
The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE  
**KNOWLES STEAM PUMP WORKS,**  
WARREN, MASS.

WAREHOUSES, { 14 & 16 Federal St., Boston.  
113 & 115 Congress St., }  
82 & 94 Liberty St., New York.

Send for Illustrated Catalogue.



**MORRIS BURGLAR-PROOF SASH LOCK.**

Patented July 2, 1878. The Safest! The Simplest! The Most Reliable! THE BEST!  
N. B.—No springs to get out of order. Sold by all hardware jobbers. Manufactured by the MORRIS SASH LOCK MANUFACT'G CO., Office 168 Walnut St., Cincinnati, O.  
Price List and Samples furnished to the trade on application. A liberal discount to the trade.

**PATENTS.**

F. A. LEHMANN, Solicitor of Patents, Washington, D. C.  
NO PATENT NO PAY. Send for Circular.

**"ZODTCHY" (BUILDER).**  
A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of  
**M. JEROME KÜTTNER,**  
Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.  
Each number contains from EIGHT to SIXTEEN pages of letterpress, gr. quarto, with cuts, and at least FIVE autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICES FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.  
The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

**JOURNAL "ZODTCHY,"**

14 OFFICER STREET, ST. PETERSBURG, RUSSIA.



**Carson's Kitchen Sink**  
Is an improvement in this fixture that must meet with the approval of every house-keeper as it retains every particle of grease, and prevents the waste of pipes from filling up; besides being better trapped than any other sink in use.  
Signal Mfg. Co., Medina, N. Y., or J. M. Carson, Louisville, Ky. Man'rs.

**NATIONAL FINE ART FOUNDRY,**

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze.  
TO ARCHITECTS AND BUILDERS.

**MAHOGANY, FIGURED WALNUTS,**

(all thicknesses) for Doors and Interior Finish.  
(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET. BOSTON.

**GEO. DWIGHT, JR., & CO.,**

Builders in Iron, and Engineers in Fire-Proof Construction,

SPRINGFIELD, MASS.

HAVE for many years given their exclusive attention to FIRE-PROOF CONSTRUCTION; and they now invite the correspondence of Architects to the following specialties which hereafter will constitute the leading items of their business:  
**FIRE-PROOF FLOORS.** The only floors that have stood fire in this country.

**FIRE-PROOF ROOFS.** Refer to Equitable Life Insurance Company's Building at Boston.

**FIRE-PROOF SHUTTERS.** Have stood many fires in all parts of the country. Over 6000 pairs put up in Boston after the fire. Saved the city of Springfield last year.

**FIRE-PROOF LATH.** In the words of one of the best-known architects of this country, "Minimum of metal, maximum of stiffness, maximum of clinch; the best lath ever made, either wood or iron." See New York Post-Office; State Department, Washington; Equitable Life Insurance Company's Buildings, and many others.

Mr. HOTT will be pleased to wait upon Architects, when desired, to explain our methods, and to present for inspection construction plans and estimates for any specific work.

**BURDITT & WILLIAMS,**

DEALERS IN

**FINE HARDWARE**

of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE. BOSTON.



**The Draft of the Chimney increased.**

Smoking Chimneys Prevented  
Particularly adapted to Chimneys in exposed positions.

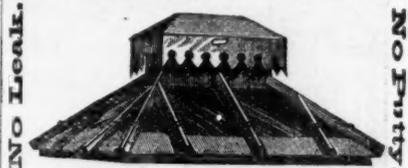
Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR,  
70 Grand St., Brooklyn, N. Y.

**CATALOGUE OF Architectural Books**

Mailed free to any address.  
All architectural and Scientific Books supplied at publishers' prices.  
A. J. BICKNELL & CO.,  
ARCHITECTURAL BOOK PUBLISHERS,  
27 WARREN STREET, NEW YORK.

**BICKELHOUP BROS.,**  
829 West 37th St., New York.



**PATENT METALLIC SKY-LIGHTS.**

**BEEHIVE BRAND. FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**UNPARALLELED DISCOVERY.**

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the *Paint Preserver* invented by ASAHEL WHEELER, Boston. It will neither crack, blister, nor scale.



**BALTIMORE PRESSED TILES, FOR HEARTHES, FLOORS, ETC.**

Chimney Tops and Garden Vases,  
DRAIN AND SEWER PIPE, FIRE-BRICK, LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

WALDO BROTHERS,  
No. 94 WATER STREET, BOSTON.

**PEERLESS BRICKS.**

**THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,**

MANUFACTURES AND KEEPS IN STOCK

**ARCHITECTURAL SHAPES (80 kinds).**

ALSO  
**RED** Pressed Fronts.  
Extra fine in color and quality

**BROWN,** Colored throughout  
More beautiful than Brown Stone DURABLE

**CHOCOLATE,**  
Same as above; difference in color

**FLESH COLOR,**  
A very popular color

**BUFF,** very fine.  
Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.  
The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F. ADAMS, JOSEPH WOOD, JR.,  
PRESIDENT. TREASURER



**DOLIVET, CUTTER, & CO.,**

ARTISTIC

**Papier Maché Decorations,**  
106 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawing strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING Venetian Blinds.**

*Wilson's Patent.*  
For first-class Dwellings and Public Buildings.

These blinds can be fitted either inside or outside the ash, and are operated with ease without machinery or weights. They are made to coil above or below, as shown in cut. *Can be furnished in any kind of wood.* Unequaled for elegance, durability, and simplicity. Indorsed by many of the leading architects in the country, and in use in some of the handsomest buildings.

We also manufacture  
**WILSON'S PATENT Rolling Steel Shutters**

These blinds are operated on same principle as above (being self-coiling). They are used for closing store-fronts and all windows and doorways that are required to be perfectly fire and burglar proof.

Also, Rolling Wood Blinds for Store-Fronts, Book-Shelves, School Partitions, and other purposes.

A list of public and private buildings, fitted with our Blinds sent on application. Architects and owners are invited to send for working models, catalogues, and price-lists.

**WILSON & JAMES,**  
68 Beckman St., New York.  
*Two Prize Medals at Philadelphia.*

**VALUABLE ART PUBLICATIONS.**

**HUNT'S** (WILLIAM M.) Talks on Art. 8vo. Paper, \$1.00.  
**CLEMENT'S** (CLARA ESKINE) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a Complete Index. Crown 8vo. Cloth, red edges, \$3.25.  
Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.

**HOUGHTON, OSGOOD & COMPANY, Boston.**

**IMPROVED PRISON LOCKS.**

All Architects should have our 36 page Illustrated Catalogue of Prison Locks.

ADDRESS

**YALE LOCK MFG. CO., STAMFORD, CONN.**  
New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,  
94 BEEKMAN STREET,  
NEW YORK.

**SPECIALTIES IN PLUMBING GOODS.**  
Having for their especial object  
**Cleanliness, Durability,**  
And the exclusion of Sewer Gas.

**JENNINGS' NEW CLOSET, WITH New Valve**  
With non-corrosive Valve Seating and 2 1/2" Plunger.



**BOYNTON'S FURNACES.**

Cast or Wrought Iron. Suitable for Coal or Wood.  
**BRICK-SET AND PORTABLE.**

Are powerful heaters; remarkably durable; economical in fuel; give universal satisfaction; have no bolted joints; are free from gases.

Thousands have had constant and severe use for over 18 years, and in good condition to-day, without repairs or expense.

The most durable Furnace, the cheapest to buy. Fitted with clinker-cleaning anti-friction grates; ash-sifting grates and ash-pans; lined feed doors, draft-regulator, etc. Have many attractive and practical improvements never before adopted.

Also, **RANGES** for family or hotel use; **Fire-place Heaters**, etc.

Send for Circulars before purchasing others.

**RICHARDSON, BOYNTON & CO., Manufacturers,**  
234 Water Street, New York.

Apply direct to the manufacturers for low prices

**STEWART'S HARD WOOD SLATE, MARBLE AND MANTELS.**  
MIRRORS, ART-TILES, HEARTHES &c.  
MANTELS, HEARTHES &c.  
Masonic Temple 23<sup>rd</sup> St & 6<sup>th</sup> Ave N.Y.

**Automatic Signal Telegraph Co.,**  
CITY OF BOSTON,

OFFICE, 178 DEVONSHIRE STREET, ROOM 20,  
Is prepared to make contracts for the protection of buildings against fire.

**DIRECTORS.**  
CHARLES E. GUILD, President. WILLIAM ENDICOTT, JR.  
JOHN D. W. JOY. WILLIAM B. WATKINS.  
PATRICK T. JACKSON, Treasurer.

**LIMMER ROCK ASPHALT CO.**

111 Broadway, Room 105, New York.

Rock Asphalt is a natural product, and the ideal material for Paving Roadways, Streets, Yards, and Stables, and for Flooring Cellars in Breweries and other establishments.



**SAYLOR'S PORTLAND CEMENT.**

Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R. U. S. Government Works (Forts and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally. For Sale by all dealers in Building Materials. **Johnson & Wilson, Gen'l Agts.**  
Send for circular. 33 Liberty Street, New York.

**PRIZE MEDALLISTS.**

1862; 1865; 1867; 1872; 1873; AND ONLY AWARD and MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**

ORIGINAL INVENTORS AND SOLE PATENTEES OF

**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters

OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Conatable, & Co., and Park & Tilford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.

OFFICE AND MANUFACTORY.

162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**

76 READE STREET, NEW YORK,

WORKS, DARLINGTON, N. J.

*Lock and Hardware Manufacturers,*

DESIGNERS, FOUNDERS, AND WORKERS

**BRONZE AND BRASS.**

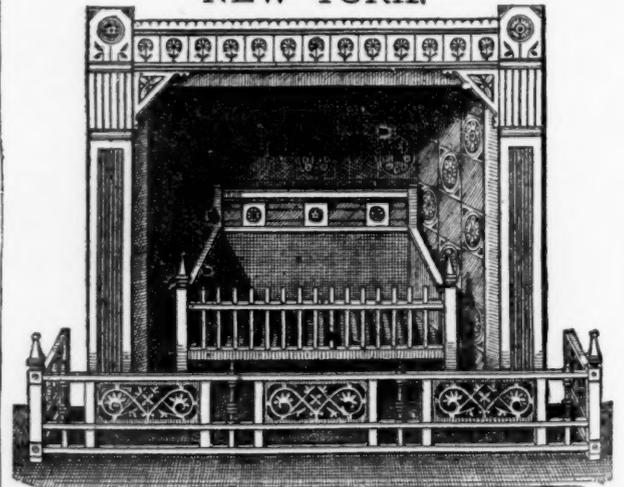
Architects' Designs faithfully executed.

Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side),  
NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tin.

HAVE NO OTHER WAREROOMS.

**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer Gas that has yet been invented.

**A POSITIVE SEAL**

Against sewer-gas, absorbed gases, and back water. Seal is not broken by syphonage or evaporation. *Self-scouring, not injured by freezing,* it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers.

**B. P. BOWER & CO.,**  
104 & 105 St. Clair St., Cleveland, O



**THE EUREKA VENTILATION CO.**

OFFICE AND MANUFACTORY,

74 CHARLESTOWN STREET,  
BOSTON, MASS.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

Theatrical Fresco only. Prices moderate. Refer ences first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.

LAFAYETTE W. SEAVEY,  
Established 1865. NO. 8 LAFAYETTE PLACE, NEW YORK

# AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

Vol. IV. No. 147.]

SATURDAY, OCTOBER 19, 1878.

[PRICE 15 CENTS

### BUILDERS' SUPPLIES.

**AMERICAN ENCAUSTIC TILE.**  
 Acknowledged by experts to be  
**THE BEST IN THE WORLD.**  
 Manufactured by the  
**AMERICAN ENCAUSTIC TILING CO. (Limited.)**  
 OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.  
 Designs and estimates for Public Buildings, Halls,  
 Churches, Vestibules, and for External Decoration, fur-  
 nished on application.

**WALWORTH MANUFACTURING CO.,**  
 69 KILBY ST., BOSTON.  
**PUBLIC BUILDINGS,**  
**PRIVATE RESIDENCES,**  
**GREENHOUSES, ETC.,**  
 Warmed and ventilated by  
**STEAM OR HOT WATER.**  
 Correspondence solicited. Plans and estimates furnished  
 on application.

**"HOTCHKISS" TOWER CLOCKS,**  
 MANUFACTURED BY  
**SETH THOMAS CLOCK CO., THOMASTON, CONN.**  
 Prices \$100 to \$6,000.  
**WARRANTED ACCURATE, STRONG, DURABLE.**  
**OFFICE, 581 BROADWAY, NEW YORK.**  
 Send for Illustrated Catalogue.

**"MINTON'S ART AND ENAMELLED TILES."**  
 (China Works, Stoke-Up-on-Trent.) Also, The Campbell  
 Brick and Tile Co.'s  
**ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS,**  
**ETC.**  
 For Churches, Banks, Halls, Vestibules, and Hearths;  
 Outside Decorations, Flower Boxes, Etc.  
**THOS. ASPINWALL & SON,**  
 604 BROADWAY, NEW YORK.  
 The only representatives in the United States for the  
 above firms.

**ASPHALT (FELT) ROOFING.**  
**WARREN'S NEW PATENT**  
**FELT AND GRAVEL ROOFING,**  
 Substitutes NATIVE ASPHALT for Coal-Tar materials for  
 these roofs.  
 The very best and most durable material for flat roofs.  
 Also, Native Asphalt and Asphaltic Cement for Concrete  
 Walks and Pavements.  
 Roofers and pavers supplied with the above, and with War-  
 ren's original Coal-Tar Roofing and Paving Materials.  
 Send for circulars and samples.  
**WARREN CHEMICAL AND MANUF'G CO.,**  
**25 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.**

**TILES FROM ALL PARTS OF THE**  
**WORLD,**  
 FOR  
**BANKS, PUBLIC BUILDINGS, and PRIVATE HOUSES**  
 References given to Tile Work throughout the United  
 States and British Provinces  
**AGENT FOR THE AMERICAN ROOFING TILE**  
 Contracts Solicited  
**C. A. WELLINGTON, HOUSEHOLD ART ROOMS,**  
 No. 171 TREMONT STREET, BOSTON.

**HUGH SISSON & SON,**  
 Importers, Dealers, and Manufacturers of  
**MARBLE.**  
 INTERIOR MARBLE WORK AND MONUMENTAL  
 WORK A SPECIALTY  
 Salesrooms, No. 140 W. Baltimore St.; Steam Marble  
 Works, North and Monument Streets,  
 BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,**  
**SPEAKING TUBES,**  
**AND BURGLAR ALARMS,**  
 For Public and Private Buildings.  
**THE BEST IN USE.**  
**S. W. FULLER,**  
 43 Devonshire Street, Boston.

**HAWTHORNE & TUCKER,**  
**PLUMBERS,**  
 16 PROVINCE STREET, BOSTON  
 Estimates for Plumbing made, and work done in any part  
 of the United States or Provinces.

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY**  
 OF NEW YORK.

LEONARD F. BUCKWITH, Pres't. E. GILLET, Vice-Pres't.  
 Hollow Blocks of any pattern, uniting strength and re-  
 sistance to fire and water. The Hydraulic Lime of Tell  
 (France), one of the strongest cements known, is largely  
 used in this manufacture. The blocks do not conduct  
 heat, cold, or sound, and weigh 60 per cent less than brick.  
 Fire-proof Partitions, Floor Arches between iron or wooden  
 beams, and ceilings under iron or wooden beams, erected  
 in following buildings:  
 Western Union Telegraph, Orient, and Queens' Ins.  
 Coal and Iron Exchange, Museum of Natural Hist.  
 Equitable, Staats Zeitung, Hudson R. R. Fr. Depot.  
 Wmsburgh Savings Bank, N. Y. Hospital, Drexel,  
 Windsor, & Wm'g'er Hotels, Cluny, & Young's Hotel, Bos'n,  
 Syracuse Savings Bank, West Point Military Hoop,  
 Columbia College, Tribune, Coryell, & Vancorlear Flats,  
 Baltimore Safe Deposit Co. Peabody Inst., Baltimore,  
 Peabody Museum, N. Haven, Westmoreland, & Elise Flats,  
 Sidewalks laid at Lenox Library, Tribune, etc.  
 Hollow Burnt Clay Bricks, for flat and curved arches,  
 partitions, etc., and Skewbacks for brick arches.  
 Sole agents for the U. S. for HYDRAULIC LIME OF TELL,  
 and LAFARGE PORTLAND CEMENT.  
 Sole agents for the U. S. for METTLACH ENCAUSTIC TILES,  
 laid in Tribune, Staats Zeitung, Mineral Spa, Central Park,  
 Belvidere Hotel, etc.  
 Sole agents for the Atlantic States for WIGHT'S FIRE-  
 PROOF COLUMNS.  
 Our Fire-proof work is the only one approved by the  
 New York Board of Fire Underwriters and the Superin-  
 tendent of Buildings, after severe public tests.  
 Office Room 54 COAL AND IRON EXCHANGE, 21 Courtlandt  
 Street, New York. Represented in Boston by  
**BOORMAN & Co., 5 DOANE ST.**

**E. HOWARD & CO.**  
 MANUFACTURERS OF CLOCKS AND WATCHES  
**CLOCKS FOR PUBLIC BUILDINGS**  
 114 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**  
**PLAIN AND ENCAUSTIC**  
**FOR PUBLIC BUILDINGS AND DWELLINGS,**  
 As laid by us in  
**THE CAPITOL AT WASHINGTON,**  
 And in numerous Churches, Banks, and Dwellings in every  
 part of the Country.  
 Glazed and Enamelled Tiles for Mantels, Hearths, Wain-  
 scoting, &c., and for Exterior Decoration.  
**MILLER & COATES,**  
 279 PEARL STREET NEW YORK.

**BARTLETT, ROBBINS & CO.**  
**HEATING AND VENTILATING OF PUBLIC AND**  
**PRIVATE BUILDINGS**  
**A SPECIALTY**  
 PLANS AND SPECIFICATIONS FURNISHED.  
 FOUNDERS, AND MANUFACTURERS OF GAS WORKS,  
 ETC., ETC.  
 24 LIGHT STREET, BALTIMORE.

**THE NEW ENGLAND GRANITE WORKS**  
**HARTFORD, CONN., and 121 BROADWAY, N. Y.**  
 Quarries at Westley, RI.  
**MONUMENTAL AND BUILDING WORK**  
 of every description, all the varieties of  
**AMERICAN AND FOREIGN GRANITE.**  
**UNRIVALLED FACILITIES OFFERED TO THE TRADE.**  
**J. G. BATTERSON, Pres't. H. R. BATTERSON, Sec'y**  
**DIRECTORS:**  
**J. G. BATTERSON, C. B. CANFIELD, H. A. BATTERSON**  
**G. T. BATTERSON,**  
**CARL CONRADS, Sculptor.**

**WHITTIER MACHINE CO.**  
 Manufacturers of Steam and Hydraulic  
**ELEVATORS,**  
**STEAM ENGINES, BOILERS, AND MACHINERY.**  
 No. 1176 Tremont Street, Boston.  
 Office in the New England Mutual Life Insurance Co's  
 Building, Post Office Square,  
 and 120 Broadway, New York  
**CHARLES WHITTIER, Pres. A. C. WHITTIER, Treas.**

**OTIS BROTHERS & CO.**  
**SAFETY STEAM AND HYDRAULIC**  
**ELEVATORS.**  
 A specialty for a quarter of a century.  
**BUILDERS OF THE HALE HYDRAULIC ELEVATOR.**  
 No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
**OHIO BUILDING STONE.**  
**GRIND AND SCITTE STONE,**  
 From our FLORENCE and AMHERST QUARRIES.  
 Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS  
 111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
 Designers and Manufacturers of  
**GAS FIXTURES,**  
**ORNAMENTAL METAL WORK, CLOCKS AND BROCHES**  
**ARCHITECTS' ORDERS SOLICITED.**  
 Special designs submitted on application.  
**WAREHOUSES, 836 AND 838 BROADWAY, NEW YORK**  
**MANUFACTORY, 24th and 25th Sts., and 10th AVENUE, N. Y.**

**FISHER & BIRD,**  
 Workers in all kinds of Foreign and Domestic  
**MARBLES,**  
 97 to 103 EAST HOUSTON ST., NEW YORK.  
 Established 1830.  
 Among our notable decorations are: The Illinois New  
 State House; Palace Hotel, San Francisco; Baldwin's Ho-  
 tel, San Francisco; Insurance Building, 10th and Chestnut  
 Streets, Philadelphia; Mutual Life Insurance Building,  
 Boston; Orient Mutual Insurance Building, New York;  
 Union College, Schenectady; and numerous Churches,  
 Private Residences, etc., etc., throughout the country. We  
 solicit the opportunity to estimate upon all classes of work,  
 viz., Tiling, Wainscoting, Staircases, Mantels, etc. Come  
 tery work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
 Are ready to estimate on contracts of any size for  
 furnishing their celebrated Amherst, Ohio,  
**BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS**  
**OR CUT AND SET.**  
 Also,  
**AMHERST AND INDEPENDENCE GRINDSTONES,**  
 And OHIO MINERAL AND STONE PAINTS  
 Fire-Proof Stove Cement and Stove Putty ground in Oil  
**OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.**

**SPANISH FLOOR TILES. "NOLLA MO-**  
**SAICS."** Floor Tiles beautiful in color and design, for  
 Dwelling, Churches, and Public Buildings.  
**SPANISH WALL TILES.** White, Glazed, Valencia,  
 Tiles for Walls and for decorative painting.  
**PRINTED FIGURED TILES** of Spanish designs, for  
 Wainscoting, Mantels, Jardinières, etc.  
 Floors of "Nolla Mosaics" can be seen at the "Rock-  
 ingham," corner of Broadway and 56th Street. Imported  
 and for sale by **JOHN CHADWICK, Sole Ag't for U. S.**  
 49 Broadway, N. Y.  
**C. E. PARKER, Agent, 14 Exchange Place, Boston.**

**TUFTS' ELEVATOR WORKS,**  
 MANUFACTURERS OF "TUFTS' PATENT" COMBI-  
 NATION ROPE ELEVATOR.  
 To be OPERATED EITHER BY STEAM OR WATER.  
 The only safe and reliable machine made for Passenger use  
 in Public Buildings and Hotels, and for business purposes in  
 Warehouses, Stores, &c.  
**37 FOUNDRY STREET, SOUTH BOSTON**  
**OFFICE, 243 Broadway, New York.**  
**OTIS TUFTS, President L. A. BIGELOW, Treas'r and Gen'l Manager**

**STEAM WARMING APPARATUS.**  
**HIGH AND LOW PRESSURE.**  
**HOUSE WARMING A SPECIALTY.**  
 Pamphlet with more than 1,000 references sent on ap-  
 plication.  
**WYLLYS H. WARNER,**  
 114 LEONARD STREET, NEW YORK,  
 and 33 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**  
 No. 6 COURTLAND ST., NEW YORK.  
 Works at Paterson, N.J.  
**PATENT SAFETY STEAM ELEVATORS**  
 for Public and Bank Buildings, Hotels, Private Dwell-  
 ings, etc.  
**SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP**  
**GUARANTEED.**  
 Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**  
THE "HEALTH" AND "TUBULAR"  
Manufactured by the  
**GOLD'S HEATER MANUFACTURING CO.**  
114 LEONARD ST., NEW YORK.  
Send for Pamphlet.  
F. GOLD, Pres't WYLLIS H. WARNER, Treas'r

**ART PAINTED TILES**  
FOR MANTELS, CABINETS, ETC.

**SHARPLESS & WATTS.**  
225 MARKET STREET, PHILADELPHIA.  
Agents for  
**MINTON'S TILES,**  
AND TRESSELLATED PAVEMENTS.

**J. H. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue, Mattapan (Ward 24), Boston.

**MENEELY & KIMBERLY,**  
Bell Founders, Troy, N. Y.,  
Manufacture a superior quality of Bells. Special attention given to **CHURCH, SCHOOL, and COURT-HOUSE BELLS.** Illustrated Catalogue sent free.

**JOHN MACK,** Plain and Ornamental Plasterer.  
41 Cambridge Street, Boston.

**MANTELS AND GRATES.**

**RANKIN'S PATENT** makes the Cleanest, Cheapest, and Hottest Fire. Avoid infringements, and send for Circular to

**C. S. RANKIN & CO.,**  
**ARCHITECTURAL IRON WORKS,**  
Manufacturers of all kinds of Iron Work for **BUILDINGS, JAILS, ETC.**  
187 W. PEARL ST., CINCINNATI, O.  
**BUILDING MARBLE.**

Branch yard of the **RUTLAND MARBLE CO.,** 195 Cambridge Street, Boston. JOHN D. ALLAN, Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Italian and Continental Marble, furnished at low prices.

**PRESSED BRICK**  
STOCK AND COMMON

MANUFACTURED BY  
**FLETCHER & THOMAS,**  
Indianapolis, Ind  
All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY  
**GILLIS & GEOGHEGAN,**  
Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 50th St. and 5th Av.; Drexel Building, cor Wall and Broad; Bennett Building, Fulton and Nassau, etc.  
Architects and owners promptly furnished with specifications and estimates.

**ARCHITECTS.**

**P. B. WIGHT,**  
CONSULTING ARCHITECT,  
73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.

Consultations on matters pertaining to Fire-Proof Construction, Foundations, Drainage, Sanitary Work, Ventilation, Machinery, Valuations, Interior Decorations, and Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**  
ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E.,** ARCHITECT  
AND SANITARY ENGINEER  
KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,**  
ARCHITECT,  
Room 17, Life Insurance Building,  
ST. LOUIS, MO.  
Special attention to Churches, Schools, and other public buildings.

**WALTER DICKSON,** ARCHITECT, **PERRY BUILDING,**  
Albany, N. Y.

**GEO. E. WARING, JR.,**  
CONSULTING ENGINEER,  
FOR SANITARY AND AGRICULTURAL WORKS.  
NEWPORT, R.I.

**SANITARY ENGINEERING.**  
**EDWARD S. PHILBRICK, C. E.,**  
12 WEST ST., BOSTON, MASS.  
Offers advice and superintendence in **CONSTRUCTION OF WORKS,**  
**PLUMBING, DRAINAGE, AND VENTILATION.**  
And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
387 HARRISON AVENUE . . . . . BOSTON,  
**SHEET METAL CORNICES, HAYES'S PATENT VENTILATING SKY-LIGHTS, WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.**

**EXCELSIOR**  
**ROOF PAINT.**

This paint has been thoroughly tested throughout the Eastern States, and has been found to be a perfect tin or metallic preserver. We warrant it neither to crack nor blister by **HEAT or COLD,** and to last

**IN ANY CLIMATE TEN YEARS.**

Those desiring to use this valuable preparation upon their buildings, can secure the same by addressing

**C. M. WHEELER, J. M. ROOT,**  
Toledo, Ohio.

**DECORATORS.**

**W. J. MCPHERSON,**  
(Established A.D. 1845.)

**MURAL PAINTER,**  
**DESIGNER,**

**Ecclesiastical Decorator,**

AND  
**ART STAINED GLASS MANUFACTURER,**

440 TREMONT STREET,  
**BOSTON, MASS.**

Should you want Ornamental Glass, write for particulars to



**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the subscriber to produce Modern and Medieval styles of work equal to any European examples, for **Churches, Private Residences, Halls, etc.**

The value of the work is attained by a careful selection of colors in Cathedral and French Glass of his own importation.

Designs in accord with architects' plans furnished at short notice. Reference of work at office

**SAMUEL WEST, 115 Eliot St., Boston**

**FRANK HILL SMITH,**  
117 TREMONT STREET,  
BOSTON . . . . . MASS.

**COOK, REDDING & CO.**  
149 CONGRESS ST., BOSTON,

**Ornamental, Stained, and Cut Glass,**  
FOR  
**Churches, Public Buildings, and Private Residences.**

*Raphael and Michelangelo.*

A Critical and Biographical Essay. By **CHARLES C. PERKINS.** 8vo. Many Illustrations, including several Heliotypes. \$5.00.

The long devotion of Mr. Perkins to the study of art has borne noble fruit in this beautiful volume. The idea of combining in one work a series of interlinked sketches of the two great representative artists of the age of Julius II. and Leo X. was in every respect fortunate; for they respectively illustrate power and beauty, sportive and earnest labor, as no other contemporaries. . . . His style is that of a scholar and a man of taste—simple, lucid, graceful, and even throughout. It has much of the quality of that of Hermann Grimm, in his two similar biographies. The profuse illustrations—although some of them are rather coarsely printed—are a positive boon to the reader.—*New York Tribune.*

\* \* \* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

**DECORATORS.**

**JOHN LAFARGE,**  
**MURAL DECORATION,**  
51 W. Tenth St., New York and Newport, R. I.

**SOCIETY OF DECORATIVE ART.**  
4 East 20th Street,  
NEW YORK.

The Society is prepared to undertake every kind of Decorative Needle-Work, and special attention is paid to the restoration of Antique Embroidery.

Special terms are made and careful estimates given to Artists, Architects, and Decorators generally, who are assured that their designs will be carefully reproduced and their directions carefully followed.

Orders are earnestly solicited.  
The Society has arranged with **Mr. RUSSELL STURGIS,** Architect, for the Exhibition and Sale of his well-known Wall Papers. Some of these are faithful reproductions of Japanese decorative papers; some are taken from Oriental and other stuffs; some are of original design. New patterns will be added from time to time.

**Fresco Decoration.**

**EMMART & QUARTLEY,**  
Designers, Decorators, and Painters,  
32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate work on hand or made to order. No. 1210 Ridge Avenue **JOSEPH S. MILLER** successor to Wilson & Miller, Philadelphia, Pa. Send for Illustrated Price-List

**Donald MacDonald,**

**GLASS STAINER AND DECORATOR**

No. 6 Hayward Place,  
**BOSTON**



**INLAID WOOD FLOORS.**  
**ORNAMENTAL WOOD BORDERS.**  
Designs and Estimates free.  
**National Wood Manuf'g Co.,**  
950 Broadway, near 23d St., New York

**PHILIP A. BUTLER,**  
DECORATOR AND DESIGNER,  
No. 17 PENNINGTON SQUARE,  
BOSTON.

**HENRY B. JONES & CO.**  
IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS.  
612 WASHINGTON STREET, BOSTON.

(Established 1848.)  
**L. HABERSTROH & SON,**  
FRESCO PAINTERS,  
and INTERIOR DECORATORS,  
No. 12 SCHOOL STREET, BOSTON.

*Discoveries at Ephesus.*

Including the Site and Remains of the Great Temple of Diana. By **J. T. WOOD, F. S. A.,** Fellow of the Royal Institute of British Architects. With numerous Illustrations from Original Drawings and Photographs. Imperial 8vo. Gilt top, beveled boards. \$20.00.

The story that the explorer here tells has all the fascination of heroic romance. He is able to give accurate elevations of the building, together with interesting drawings of many of its bas-reliefs and other ornamental parts. He has unearthed also the Odeum or lyric theatre of Ephesus, and the great theatre, laying bare their seats, aisles, stage, etc., and discovering there very many inscriptions of great historical value, which are now in the British Museum. . . . The book is one of surpassing interest.—*New York Evening Post.*

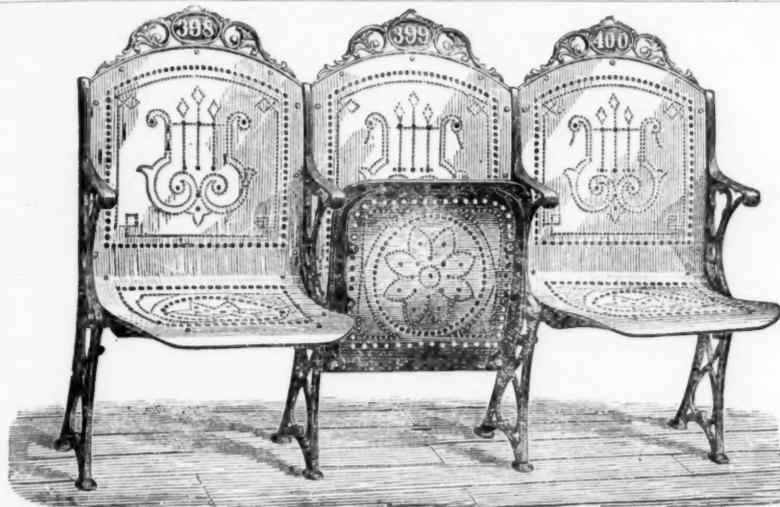
Mr. Wood's results have been, if not splendid, at least solid and of imperishable value.—*London Academy.*

**HOUGHTON, OSGOOD AND COMPANY, Boston.**

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa (Can.)	Philadelphia.	San Francisco	St. Louis.
1 BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2 Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50	2.00 @ 2.25	3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00		3.00
3 CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25		1.50 @ 2.00
4 Cabinet Maker	2.50 @ 3.25		1.75 @ 2.25			1.50 @ 3.00	1.50 @ 2.00			
5 Finisher	2.00 @ 2.50		1.50 @ 2.00			1.50 @ 3.00	1.25 @ 1.75			1.50 @ 2.00
6 FOUNDRYMAN			1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50			2.25 @ 2.50
7 Blacksmith	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 2.00			1.50 @ 2.50
8 Whitesmith			1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.75			
9 Galvanized Iron Worker			2.00 @ 2.25	2.00 @ 3.50	1.75 @ 2.25	1.75 @ 2.00	1.50 @ 2.00			2.25 @ 2.50
10 GAS FITTER	2.00 @ 2.25	1.50 @ 2.75	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00			2.00 @ 3.00
11 LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.25	1.00 @ 1.25	1.50 @ 1.75	.80 @ 1.00	1.20 @ 1.50		1.00 @ 2.00
12 PAINTER	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13 Glazier		2.00 @ 2.50	1.75 @ 2.00			1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50		
14 Graitur	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00		2.00 @ 3.00	1.75 @ 2.50			3.50
15 Paper-Hanger	.75 @ 2.50		per roll.		15c. pr. roll.	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00
16 PLASTERER	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	2.00	1.50 @ 2.00	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00		2.25 @ 2.75
17 Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	1.50 @ 2.50		2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
18 PLUMBER	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.50	2.50 @ 3.50	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50			2.50 @ 3.50
19 QUARRYMAN		3.00 @ 3.50	1.10 @ 1.25		1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20 Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21 CARVEY	3.00	3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75	3.00	2.00 @ 2.50	3.50 @ 6.00	2.75 @ 3.25		
22 Painters and Washers		2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75		1.50 @ 2.50	1.00 @ 1.25	2.25 @ 2.50		
23 Rubber	1.50 @ 2.00	1.00 @ 1.75	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75		
24 Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	2.50	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.75		
25 Stone-Setter	3.00	2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	2.75	2.00 @ 2.50	1.50 @ 2.00	2.25 @ 2.75		2.00 @ 2.50
26 ROOFER (Tin)	2.00 @ 2.35	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25		2.00 @ 2.25
27 Slatier		2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00		2.00 @ 2.25	1.25 @ 2.00	1.75 @ 2.25		3.00
28 STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25			1.50 @ 2.50
29 STEAM FITTER		2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00



ARCHITECTS AND BUILDERS

WILL ADD MUCH TO THE BEAUTY OF THEIR BUILDINGS BY USING

GARDNER'S PERFORATED THREE-PLY VENEER SEATING,

Which is Ornamental, Durable, and Cleanly.

We refer to the following new and elegant buildings fitted up with our goods:—

Morris Plains, N. J., Insane Asylum.  
New York Hospital.  
American Museum of Natural History, New York.  
Institution for Feeble-minded Children, Lincoln, Ill.  
Insane Asylum, Oshkosh, Wis.

Opera Chairs in new Music Halls, Lewiston, Me., Providence, R. I., and Brooklyn, N. Y.  
Seats in Depots of the Pennsylvania Railroad, at Philadelphia, Pittsburgh, etc.

Please send for Illustrated Catalogue.

GARDNER & COMPANY,

Patentees and Manufacturers,

376 PEARL STREET.....NEW YORK.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

CALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States.

Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO. 72 & 74 West Monroe St. Chicago, Ill.

**"AUSTIN'S" PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT**  
MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS.  
Regular Sizes, 2, 3, 4, 5 & 6 Inch.  
SPECIAL SIZES MANUFACTURED ON ORDER.  
**AUSTIN, OBDYKE & CO.**  
SOLE MANUFACTURERS.  
1705 & 1725 CHESTNUT STREET.  
PHILADELPHIA, PENNA.  
WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH.

PRINCIPAL AGENTS.  
M. Halliday New York City  
Hicks & Badger Boston, Mass  
James Berry Buffalo, N. Y.  
George W. Pitkin & Co. Chicago, Ill.  
Wasson & Martin Albany, N. Y.  
McLeod, Reardon & Co. Troy, N. Y.  
W. H. Scott Portland, Me.  
Kittredge Cornice Co. Salem, G.  
J. W. Jordan Worcester, Mass.  
B. G. Carpenter & Co. Wilkesbarre, Penn.  
T. W. Irwin Alleghany City, Penn.  
Sellew & Co. Cincinnati, Ohio

IMPORTANT ART BOOKS.

**THE CERAMIC ART.** A Compendium of the History and Manufacture of Pottery and Porcelain. By JENNIE J. YOUNG. With 464 illustrations. 8vo, cloth, illuminated, \$5.00.

**THE CHINA HUNTERS' CLUB.** By the Youngest Member. Illustrated. Post 8vo, cloth, \$1.75.

**MODERN DWELLINGS IN TOWN AND COUNTRY,** adapted to American Wants and Climate. In a series of One Hundred Original Designs, comprising Cottages, Villas, and Mansions. With a Treatise on Furniture and Decoration. By H. HUDSON HOLLY. 8vo, cloth, \$4.00.

**CYPRUS: its Ancient Cities, Tombs, and Temples.** A Narrative of Researches and Excavations during Ten Years' Residence in that Island. By General LOUIS PALMA DI CESSOLA, Member of the Royal Academy of Sciences, Turin; Hon. Member of the Royal Society of Literature, London, etc. With portrait, maps, and 400 illustrations. 8vo, cloth, extra, gilt tops and uncut edges, \$7.50.

**CARICATURE AND OTHER COMIC ART,** in all Times and Many Lands. By JAMES PARTON. With 203 illustrations. 8vo, cloth, gilt tops and uncut edges, \$5.00; half calf, \$7.25.

**CONTEMPORARY ART IN EUROPE.** By S. G. W. BENJAMIN. Illustrated. 8vo, cloth, illuminated and gilt, \$3.50.

**ART DECORATION APPLIED TO FURNITURE.** By HARRIET PRESCOTT STOFFORD. Illustrated, 8vo, cloth, illuminated and gilt, \$4.00.

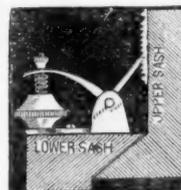
**ART EDUCATION APPLIED TO INDUSTRY.** By Colonel GEORGE WARD NICHOLS. Illustrated, 8vo, cloth, illuminated and gilt, \$4.00.

**POTTERY AND PORCELAIN OF ALL TIMES AND NATIONS.** With Tables of Factory and Artists Marks, for the Use of Collectors. By WILLIAM C. PRIME, LL.D. Illustrated, 8vo, cloth, gilt tops and uncut edges, in a box, \$7.00.

PUBLISHED BY

HARPER & BROTHERS,  
NEW YORK.

HARPER & BROTHERS will send any of the above books by mail [excepting those whose weight excludes them from the mail], postage prepaid, to any part of the United States, on receipt of the price.



**NONESUCH Self-Locking AND Burglar-Proof Window Locks.**

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT,  
733 Broadway, N. Y.

Patented July 19th, 1877

RECOMMENDED FOR ARCHITECTS AND ENGINEERS OF SIMPLICITY & RELIABILITY.  
**IMPERIAL GAS MACHINE**  
SEND FOR DESCRIPTIVE CATALOGUE AND SPECIFICATIONS TO JENNY BROS. & CO.

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and not-worthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURNE, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. L'ANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist*, Boston.

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courant.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVES. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIENARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11½ X 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEARBODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOthic FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOUET-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

The works of the learned and distinguished French Architect, EUGENE VIOUET-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

## Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — *EUGENE BENSON, in The College Courant.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

**The New York Sketch-Book of Architecture.**

3 vols., 4to, \$6.50 each.

We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

**The American Architect and Building News.**

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\*.\* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

[Reported for the American Architect and Building News.]

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, FRONTS, and CEMENT. Includes items like Pale, Jersey, Long Island, and various cement brands.

Table listing prices for FIRE BRICK and DOORS. Includes items like Red Welsh, Scotch, American, and various door styles.

Table listing prices for RAISED PANELS, two Sides. Includes items like 1.0 x 6.0, 1.6 x 6.0, 2.6 x 6.0, etc.

Table listing prices for BLINDS, Outside and Inside. Includes items like Per lineal, up to 2.10 wide, etc.

Table listing prices for WINDOW FRAMES and HAIR. Includes items like Cattle, Goat, and various hair types.

Table listing prices for LATH, LIME, and LUMBER. Includes items like State, common, cargo rate, etc.

Table listing prices for PAINTS AND OILS. Includes items like Paris white, English, Zinc white, etc.

Table listing prices for STONE. Includes items like Amherst freestone, Berlin freestone, etc.

Table listing prices for SLATE. Includes items like Purple roofing slate, Green slate, etc.

Table listing prices for TIN PLATES. Includes items like C. charcoal, 10 x 14, etc.

Table listing prices for LEAD and PIPE. Includes items like Sheet, Pipe, etc.

Table listing prices for FIRE BRICK. Includes items like Waldo Bros Extra, Waldo Bros No. 2, etc.

Table listing prices for BUILDING STONE. Includes items like Rutland Marble, sawed, etc.

Table listing prices for LUMBER. Includes items like Michigan pine, Saps, etc.

Table listing prices for PAINTS AND OILS. Includes items like Whiting, Paris white, etc.

Table listing prices for CEMENT, NAILS, AXLE PULLEYS, SASH WEIGHTS, SASH LINE, DOOR BUTTS, and LIME.

Table listing prices for MORTISE LOCKS. Includes items like Brass face and bolt, Do., for front doors, etc.

Table listing prices for SASH FASTS and SCREWS. Includes items like Plain brass, self-locking, etc.

Table listing prices for STORE DOOR HANDLES and IRON. Includes items like Wrought Iron Beams, etc.

OHIOAGO.

Table listing prices for BRICK, LIME, AND CEMENT. Includes items like Lime, in bulk, Chicago building brick, etc.

Table listing prices for LUMBER (MICHIGAN PINE). Includes items like 1st and 2d clear, 1 to 2-in., etc.

Table listing prices for HARDWOOD LUMBER. Includes items like Whitewood clear, Whitewood boards, etc.

Table listing prices for TINNERS' STOCK. Includes items like Tin plate, 1 C, 10 x 14, charcoal, etc.

Table listing prices for I C roofing, X roofing, and other materials. Includes items like I C roofing, 14 x 20, charcoal, etc.

Table listing prices for SOLDER and LEAD. Includes items like No. 1, 14c; extra, 16c, etc.

Table listing prices for SHEET ZINC and WIRE. Includes items like Full casks, 7c; slabs, 8c, etc.

Table listing prices for PAINTS AND COLORS. Includes items like White Lead, strictly pure, etc.

Table listing prices for OILS. Includes items like Linseed, raw, 68c; boiled, 68c, etc.

Table listing prices for PHILADELPHIA WHOLESALE PRICES. Includes items like IRON, Duty: Bar 1 to 5c, etc.

Table listing prices for PAINTS AND OILS. Includes items like White Lead in oil, Fry, white, etc.

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms.

CREOSOTED WOOD. PREPARED AT THE Hayford Patent Creosote Wood Preserving Works. EDWARD R. ANDREWS, Proprietor.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY.



The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING,  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, ETC., ETC

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.  
ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

**ESTABLISHED, 1836.**  
**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Composition Roof known. Also inventors and owners of the following patents:—

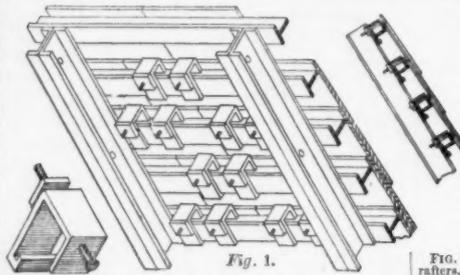


FIG. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the purlins on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

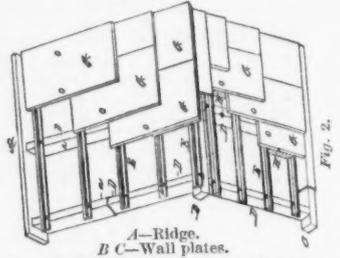


FIG. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or other fire-proof material, and iron purlins (c) or beams, with the slates (G) or other covering secured thereto by clasps, (Fig. 1) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contact with the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point avoiding condensation, contraction and expansion of roofs formed wholly of iron.



Section of Fire-Place Heater.

**WARMING AND VENTILATION.**

**FIRE ON THE HEARTH.**  
**FIRE-PLACE HEATERS AND STOVES.**

VENTILATION of a Fire-Place. RESERVE FORCE of a Close Stove. CIRCULATION of a Furnace.

Adapted for any kind of Fuel,

And the only Fireplace Heater perfectly adapted for Soft Coal and Wood.

**SILVER MEDAL AWARDED,** PARIS EXPOSITION, 1878  
Boston Retail Agency, F. TUDOR & CO., 14 Pemberton Square.

**OPEN STOVE VENTILATING COMPANY,**  
115 Fulton and 54 Ann Streets, New York.



Section of Stove.

**THE STANDARD AND ONLY RELIABLE PORTABLE ROOFING.**



With white Fire Proof Coating, for steep and flat roofs in all climates. In rolls ready for use. Easily applied by any one. No heat required. It weighs only 80 pounds per 100 square feet, and costs only half as much as tin.

**H. W. JOHNS M'F'G CO., 87 Maiden Lane, New York,**

Manufacturers of Asbestos Liquid Paints, Coatings, Cements, Boiler Coverings, etc.

Send for Samples, Descriptive Price Lists, etc.



**SPRINGFIELD GAS MACHINE.**

Springfield, Mass.; 75 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 316 Pine St., San Francisco. Send for Circular.

**BUHRER'S INFALLIBLE SEWER GAS TRAP.**



The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (B) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.

**S. BUHRER,** Inventor and Manufacturer, Cleveland, Ohio.

WHOLESALE AGENTS.

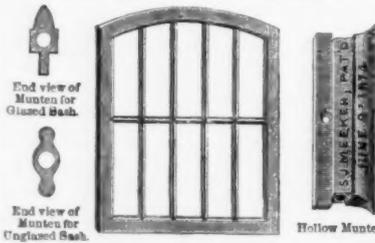
W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O.  
L. WOLFF M'F'G Co., 109 & 111 West Lake St., Chicago, Ill.  
HAMBLEN & MATHEWS, 82 & 84 North St., Boston, Mass.  
C. A. BLESSING, 44 North Fifth St., Philadelphia, Pa.  
THE J. L. MOTT IRON WORKS, 88 & 90 Beckman St., N. Y.  
Please send for Circular.

**TO ARCHITECTS.**

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the **SCAGLIOLA AND MAREZZO MARBLE**, which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall, and Altar Work.  
**JAS. T. ALLEN & CO.,**  
25 North Market Street, Philadelphia.

**D. M. MEEKER & SON'S**  
**Malleable Iron Hollow Muntin Window Sash.**

For Insane Hospitals, Fire Proof Buildings, &c.



The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by  
**D. M. MEEKER & SON,**  
Newark, N.J.

Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

**MAKE** your own **GAS**  
Send for CIRCULAR.  
**WALWORTH MANUF. CO.**  
No. 69 Kilby Street,  
BOSTON, MASS.



**BRASS ANDIRONS, FENDERS,**  
And all kinds of Brass Work, made to order.  
**Grates for Parlor & Reception Rooms,**  
For hard or soft coal, in every variety.  
Iron and Brass Fittings for Stables a specialty  
**MURDOCK PARLOR GRATE CO.,**  
Manufacturers,  
21 Washington St., Boston.

**CRANE, BREED & COMPANY**  
**SAFETY BOILERS**  
FOR **STEAM HEATING**  
**STEAM AND HOT WATER.**  
MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RADIATORS, PIPE COILS, REGISTERS, FITTINGS, STEAM-PUMPS.

**NON-POISONOUS SILICATE PAINT** { Does not discolor, chalk, or crack off. It is superior to lead. } **PETRIFYING LIQUID** { The only cure for damp walls of churches, dwellings, and public buildings, is the }  
See article on "Dwellings of the Poor," AM. ARCHITECT, Sept. 21, 1878. Send for Price List and Testimonials.

**HOWARD FLEMING, Sole Agent in the United States,**  
10 PINE STREET, NEW YORK.

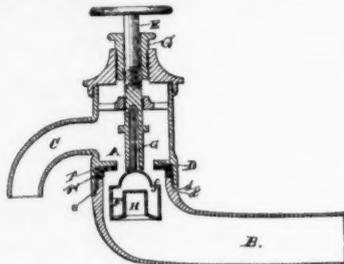
BUILDING INTELLIGENCE.

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

BASIN VALVE.—Thomas Hennessey and Michael H. Dorgan, San Francisco, Cal. The object of this invention is to provide an automatically closing valve which may be used for bibb-cocks, water-closets, and elsewhere.



side, is forced against the flange D by the pressure of the water, and so closes the opening automatically. To assure that the valve shall keep its upright position it has at the top a stem a, which plays in a recess in the spindle E.

THERMOSTAT FOR FIRE-ALARM.—George S. Shute, Boston, Mass. Within a box having two apartments, one of which is more exposed to the atmosphere than the other, are two parallel springs or bars of different degrees of expansibility, one inclosed in each of the apartments, in combination with a circuit-closing finger, connected directly with, and supported and carried by, one of the springs or bars, whereby, when the more exposed bar is moved by heat more rapidly than the other, the finger will connect the two bars to close an electric circuit to give an alarm.

SCROLL-SAW ATTACHMENTS TO LATHES.—Thomas R. Almond, Brooklyn, N. Y. This scroll-sawing machine can be attached to a lathe by means of two pendant arms projecting from the point of the frame, and carrying a driving-shaft the ends of which are provided with cavities to receive the live and dead spindles of the lathe.

MACHINE FOR ATTACHING PAPER FASTENERS.—Charles W. Blake, Lyndon, Kas.

HANDSAW.—William Berney, Somerville, Mass.

ROCK-DRILLING MACHINE.—S. G. Bryer, Saugus, Mass.

FIRE-ENGINE.—Daniel M. Cooper, Dublin, Ind.

WIRE-STRETCHER.—Isaac G. Ericson, Colorado Springs, Col.

TAP-WRENCH.—Charles H. Fowler, Boston, Mass.

BLIND-WIRING MACHINE.—Carl Hinz, San Francisco, Cal.

PIPE-WRENCH.—Benjamin S. Myers, Pekin, Ill.

APPARATUS FOR HANGING WALL-PAPER.—Andrew Johnson, Kewanee, Ill. This apparatus affords a means of hanging wall-paper rapidly and smoothly.

MACHINE FOR ATTACHING PAPER FASTENERS.—Charles W. Blake, Lyndon, Kas.

HANDSAW.—William Berney, Somerville, Mass.

ROCK-DRILLING MACHINE.—S. G. Bryer, Saugus, Mass.

FIRE-ENGINE.—Daniel M. Cooper, Dublin, Ind.

WIRE-STRETCHER.—Isaac G. Ericson, Colorado Springs, Col.

TAP-WRENCH.—Charles H. Fowler, Boston, Mass.

BLIND-WIRING MACHINE.—Carl Hinz, San Francisco, Cal.

PIPE-WRENCH.—Benjamin S. Myers, Pekin, Ill.

APPARATUS FOR HANGING WALL-PAPER.—Andrew Johnson, Kewanee, Ill. This apparatus affords a means of hanging wall-paper rapidly and smoothly.

MACHINE FOR ATTACHING PAPER FASTENERS.—Charles W. Blake, Lyndon, Kas.

HANDSAW.—William Berney, Somerville, Mass.

ROCK-DRILLING MACHINE.—S. G. Bryer, Saugus, Mass.

FIRE-ENGINE.—Daniel M. Cooper, Dublin, Ind.

WIRE-STRETCHER.—Isaac G. Ericson, Colorado Springs, Col.

TAP-WRENCH.—Charles H. Fowler, Boston, Mass.

BLIND-WIRING MACHINE.—Carl Hinz, San Francisco, Cal.

PIPE-WRENCH.—Benjamin S. Myers, Pekin, Ill.

APPARATUS FOR HANGING WALL-PAPER.—Andrew Johnson, Kewanee, Ill. This apparatus affords a means of hanging wall-paper rapidly and smoothly.

MACHINE FOR ATTACHING PAPER FASTENERS.—Charles W. Blake, Lyndon, Kas.

HANDSAW.—William Berney, Somerville, Mass.

ROCK-DRILLING MACHINE.—S. G. Bryer, Saugus, Mass.

FIRE-ENGINE.—Daniel M. Cooper, Dublin, Ind.

WIRE-STRETCHER.—Isaac G. Ericson, Colorado Springs, Col.

TAP-WRENCH.—Charles H. Fowler, Boston, Mass.

BLIND-WIRING MACHINE.—Carl Hinz, San Francisco, Cal.

PIPE-WRENCH.—Benjamin S. Myers, Pekin, Ill.

APPARATUS FOR HANGING WALL-PAPER.—Andrew Johnson, Kewanee, Ill. This apparatus affords a means of hanging wall-paper rapidly and smoothly.

MACHINE FOR ATTACHING PAPER FASTENERS.—Charles W. Blake, Lyndon, Kas.

HANDSAW.—William Berney, Somerville, Mass.

ROCK-DRILLING MACHINE.—S. G. Bryer, Saugus, Mass.

FIRE-ENGINE.—Daniel M. Cooper, Dublin, Ind.

WIRE-STRETCHER.—Isaac G. Ericson, Colorado Springs, Col.

TAP-WRENCH.—Charles H. Fowler, Boston, Mass.

BLIND-WIRING MACHINE.—Carl Hinz, San Francisco, Cal.

PIPE-WRENCH.—Benjamin S. Myers, Pekin, Ill.

APPARATUS FOR HANGING WALL-PAPER.—Andrew Johnson, Kewanee, Ill. This apparatus affords a means of hanging wall-paper rapidly and smoothly.

MACHINE FOR ATTACHING PAPER FASTENERS.—Charles W. Blake, Lyndon, Kas.

HANDSAW.—William Berney, Somerville, Mass.

ROCK-DRILLING MACHINE.—S. G. Bryer, Saugus, Mass.

UPRIGHT METAL DRILL.—Osgood Plummer, Worcester, Mass.

CARVING-MACHINE.—Matthew Rice, Augusta, Ga.

BRUSH.—Seymour Crane, Dalton, Mass. The brush can be reversed and inserted in its hollow handle, which forms a protecting sheath.

WINDOW-HEAD FASTENERS.—G. M. Evans, Pittsburgh, Penn. A staple is journaled in the window-frame, and turns down into slots prepared for its reception after the head is removed.

PORTABLE DERRICK.—Robert McCord and G. W. Alexander, Vincennes, Ind.

BRICK-MAKING MACHINE.—William Mendham, Philadelphia, Penn.

MITRE-CLAMPS.—Felix P. Moser, Salem, Ill. Picture-frame mouldings can be securely held, while being nailed, by means of a frame or plate having flanges at right angles thereto and inclined at any desired angle to each other, and having threaded bosses upon its under side, and slots parallel to a line bisecting the angle of the flanges, a cross-piece carrying sliding serrated jaws and a threaded socket, and a threaded rod working in said bosses and socket, for the purpose of adjusting the jaws in the slots in the plate, so as to clamp the moulding.

WINDOW-SASHES.—Alexander Rudolph, New York, N. Y. Sashes are pivoted on vertically-sliding guide-pieces, and have rounded projections fitting into recesses in the guide-pieces to secure them. The guide-pieces yield transversely in the guideways in the stiles on the pivot-pins, and are held against the sash by springs.

CALIPER.—Anton Schmitter, Paterson, N. J.

DEVICES FOR DRIVING NAILS UNDER WATER.—William Stack, Oakland, Cal. A tube with a serrated lower edge is fastened to the board to be nailed. A nail is then dropped into the tube, and a rod reaching above water is placed on the nail-head and the nail driven by blows on the upper end of the rod.

LOCK.—Warren H. Taylor, Stamford, Conn.

WATER-PROOF CELLARS.—Tobias New, Brooklyn, N. Y. Alternate layers of asphaltic cement and roofing-felt are applied to the bottom and walls of the cellar. Then a layer of hydraulic concrete or cement is applied, of sufficient weight to resist upward pressure of water, the whole being lined with a facing of brick, stone, or the like.

COMPLETED BUILDINGS.

BALTIMORE, Md.—The Monroe Street Methodist Episcopal Church, corner of Ramsay and Monroe streets, was dedicated October 13. It was built at a cost of \$3,186.51. The church is a plain brick structure and stands in the extreme southwestern section of the city.

CAMDEN, O.—The new Presbyterian church was dedicated Saturday, October 5.

FARGO, D. T.—The Presbyterian church is finished.

MARLBOROUGH, MASS.—The Rehabite Building, consisting of stores and the society's halls, is just completed. Cost, \$7,000; Messrs. Appleton & Stephenson, architects, of Boston.

MARYSVILLE, O.—The new city hall, which is now receiving the finishing touches, will have a formal opening on October 21. The hall will seat nearly 1,000.

ROCKFORD, MICH.—The new Temperance Reform Club Building is completed, and was dedicated by a mass temperance meeting on the 17th instant.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Andrew Hoffman, one-story back building, 175 Patterson Park Ave. — St. Plus (parsonage), three-story building, cor. Edmund and Ave. and Schroeder St. — Annie E. Foss, two-story back building, 369 Monument St. — Laffel & Hopper, 20 three-story dwellings, on Townsend St. — Annie Shultz, two-story building on rear of lot 346 Light St. — Henry Stump, one-story back building in rear of 341 Mosher, cor. of Chatsworth St. — High St., Baptist Church, to erect tower and spire to church building. — Jacob Dornbush, two-story dwell., 39 feet from Nicholson St. — Camden Consolidated Oil Co., one-story iron boiler-house on Claggett St. — Joseph Friedenwald, two-story back building, 16 Lloyd St. — Francis White, 5 two-story dwellings, with two-story back buildings, on Spring St. — George Worick, two-story back building, on Alshutt St., 67 feet north of Hoffman St. — James S. Byrne, three-story dwell., 136 Tyson St. — Joseph Shultz, one-half-story stable, 79 Central Ave. — I. J. Lally, three-story house, cor. Edmundson and Arlington aves. — Philip Walsh & Sons, 8 three-story dwellings, Townsend St. — Wm. L. Ridout, three-story back building, cross alley, between Front and Mulberry sts. — Francis Durand, one-story stable, 94 St. Mary St. — Mrs. Ro-a Back, two-story back building, 33 Cambridge St. — Thomas Messer, three-story dwell., Baltimore St. — Michael Swan, three-story building, Green St. — M. W. McClellan, three-story building, Holiday St. — H. I. Thiemeyer, two-story stable in rear of Point Lane. — Horace Crenner, two-story dwell., Myrtle Ave. — Casper Dorr, three-story dwell. — R. M. Fuller, two-story back building, John St. — Louise Weaver, two-story building, 268 Monument St. — John Geo. Smith, one-and-one-half-story stable, 33 Washington St. — John A. Glick, two-story shed, 135 Castle St. — Frank Muth, two-story stable, 253 Walsh St. — J. S. Hogg, 2 three-story dwellings, Baltimore St., and two-story coal office, German St. When material is not mentioned brick is understood.

CHURCH.—The new St. Andrew's Church is built of Baltimore brick, with marble trimmings, and is three stories in height. It fronts on Washington Street 48 feet 8 inches, with a depth of 109 feet. The two upper stories form the church proper, with a height of 42 feet. The lower story will be divided into six school-rooms, capable of accommodating 300 children. Two play-grounds have been laid off, one on each side of the building, for the girls and boys respectively. The total cost of the new building was \$12,000. Mr. William Murphy was the builder.

SCHOOL BUILDING.—Comptroller Vansant and President John T. Morris, of the school board, held a consultation yesterday in regard to the selection of a lot for the new English-German School, No. 3, now located on Trinity Street. The city council has appropriated \$20,000 for the building. The new school, which must be located in the Fourth Ward. The old school is very much crowded.

TOWER AND SPIRE.—Ground was broken last week for a new tower and spire for the High Street Baptist Church. The tower is of brick, 12 feet square, with slated spire, the whole measuring 120 feet from ground level. Architects, J. A. & W. I. Wilson; builder, Jas. McAfee.

SKATING-RINK.—A rink for roller skating is nearly completed on Biddle Street, near Churches. It is of brick and half-timbered construction, 185 feet by 82. The owner is Samuel I. Clark, Esq.; architects, J. A. & W. T. Wilson; builder, Henry C. Smyser.

Boston.

APARTMENT HOUSE.—The dwelling-house, cor. Dover and Abilion streets, is to be altered into an apartment hotel for Mr. George Hooper. David H. Jacobs & Son are the masons; Messrs. Ober & Rand, architects; cost about \$9,000.

BANK BUILDING.—The building for the Howard Bank is approaching completion. The Congress Street front is of light sandstone treated in a free Renaissance style. The inside finish is cherry, with upper stories in ash. Peabody & Stearns, architects; Standish & Woodbury, masons.

FAMILY HOTEL.—On corner of Clarendon Street and Boylston, a hotel, one half for family apartments, entrance on Boylston Street; the other for bachelor chambers, entrance on Clarendon St. Materials brick, stone, and ornamental brick-work. The building is to be built by James T. Eldredge, Esq. The architects are L. Newcomb & Son. Foundations are being put in by Goldthwait & Chapin, masons.

WAREHOUSE.—The large brick building on Commercial Street, formerly occupied by the iron firm of Taylor & Co., is now in process of demolition, also the large wooden building in the rear, on Constitution Wharf. The brick building is to be raised to the height of two stories.

BUILDING PERMITS.—The following permits have been granted since our last issue:—

BRICK BUILDINGS.

Table with 4 columns: Mechanic, No., Stories, Class, Size. James Fagan, 3, 2, Dwelling, 24' 6" x 40'. F. A. Richardson, 1, 1, Church, 30' x 30'.

WOODEN BUILDINGS.

Table with 4 columns: Mechanic, No., Stories, Class, Size. J. Mullen, 1, 1, Stable, 30' x 30'. T. Kelley, 1, 2, Dwelling, 14' x 30'. P. P. Nichols, 2, 1, Ice-house, 32' x 125'. E. B. Haynes, 1, 1, Poultry-hse, 75' x 12'.

Repairs and alterations active.

Brooklyn.

BUILDING PERMITS.—Baltic St., 1 six-story brick tenement, 81' 10" x 35' 4", and extension (for thirty-four families); owner, A. T. White, 63 Broadway, New York; architects, Wm. Field & Son; builders, Moran & Armstrong, and Martin & Lee. — Pacific St., 3 three-story brown stone dwellings, 16' 8" x 42'; owner, J. H. Stephenson, New York Ave., cor. Pacific St.; architect, A. Hill; builders, M. J. Reynolds and A. Miller. — Palmetto St., 3 two-story brick dwellings, 16' 8" x 36'; owners, A. and E. Miller, 72 Stanhope St.; architect, T. Miller; builder, A. Miller. — Powers St., No. 153, 1 two-story frame stable, 21' x 35'; owner, Wm. Krieger, on premises; architect, A. Herbert; builders, V. Bruckhauser and J. Schumacher. — Prospect Place, 1 two-story frame dwell., 17' x 33'; owner, A. Woodruff, 150 State St.; architect, M. O'Brien; builders, Woodruff, Parsons. — Quincy St., 5 two-story brown stone dwellings, 16' x 44'; owner, R. W. Putnam, Vermont; builder, Geo. W. White. — Schermerhorn St., 3 four-story brick dwellings, 16' 8" x 48'; owners and builders, Litchfield & Dickerson, Schermerhorn St.; architect, R. Dixon. — Stagg St., 1 two-story brick store, 50' x 30'; owner, H. Reiners; architect, J. Platte; builders, W. D. Felder, and Jenkins & Gillies. — Sagg St., 1 four-story brick store and tenement, 32' x 50'; owner, H. Reiners, on premises; architect, J. Platte; builders, W. D. Felder, and Jenkins & Gillies. — Warren and Baltic sts., 17 two-story brick dwellings, 11' x 32' and 16' x 25'; owner, A. T. White, 63 Broadway, New York; architects, Wm. Field & Son; builders, J. H. Stevenson, and Martin & Lee. — Warren St., 1 six-story brick tenement (thirty-four families), 87' 10" x 38' 4" and extension; owner, A. T. White, 63 Broadway, New York; architects, W. Field & Son; builders, Moran & Armstrong, and Martin & Lee. — Wyckoff St., 11 three-story brown stone tenements, 24' 4" x 62'; owner, Thomas H. Brush, 155 Lafayette Ave. — Bedford Ave., 1 three-story brown stone dwell., 21' 6" x 48'; owner, George C. Barclay, Bedford Ave., Ross St.; architects, Marius & Gill; builders, W. & T. Lamb, Jr. — Central Ave., 1 two-story frame dwell., 18' 9" x 32'; owner, A. W. Spooner, 353 Central Ave.; builder, J. Phillips. — Clinton Ave., 4 four-story brown stone tenements, 20' x 70'; owner, Geo. W. Brown, Portland Ave.; architect, T. F. Thomas; builders, L. Brown & J. W. Grey. — DeKalb Ave., 5 four-story brown stone stores and flats, 20' x 60'; owner and builder, Wm. F. Edmundston; architects, Parfit Bros. — Fourth Ave., cor. Baltic St., five-story brick store and flat, 20' x 40'; owner, H. S. Stewart, 656 Baltic St.; architect, R. Dixon; builder, H. Woolley.

Chicago.

DETAILED STATEMENT OF NEW BUILDINGS FOR WHICH PERMITS HAVE BEEN ISSUED DURING THE MONTH OF SEPT., 1878.

Large table with columns: Date, Classification of Buildings, Materials Fronts, No. of feet Street Frontage, No. of Buildings, Cost. Rows include Sheds, Basements & Additions, Miscellaneous, Barns and Stables, Public and Office, Churches, Manufactories, Dwellings, Stores and Dwellings, Stores, Stone, Brick, No. of feet Street Frontage, No. of Buildings.

REMARKS.—Cost of additions, basements, and improvements to buildings previously erected, for the month of Sept., 1878, \$42,200. For ditto, 1877, \$402,900. Total cost of new buildings and improvements for Sept., 1878, \$445,100. For ditto, 1877, \$402,900. Total cost of new buildings and improvements from Jan. 1 to Sept. 30, 1878, \$4,300,100. Same period in 1877, \$4,350,400.

BUILDING PERMITS.—E. G. Adams, four-story dwell. and school, 271 Huron; cost, \$5,500. — Charles Rickett, two-story building, 53 Kansas; cost, \$1,000. — Ellen Kiefe, dwell., 488 Western Avenue; cost, \$,500. — J. V. Clarke, four two-story stone front flats on South Halsted; cost, \$3,000 each. — Mary Foster, two-story dwell., 627 North La Salle Street; cost, \$5,000. — Harvey C. Brown, one-story dwell., Webster Avenue; cost, \$1,500. — Ground has been

broken for a five-story building on the corner next to the Journal office; cost about \$75,000.

BRIDGE.—The contract for building a swing bridge at Fullerton Avenue has been awarded to Savin & Leese, for \$33,000.

ENGINE-HOUSE.—The contract for building an engine-house on Maxwell Street, near Canal, was awarded to T. E. Courtney for \$7,200.

OPERA-HOUSE.—It is stated that a project is on foot to build a large opera-house, with Max Strakosch as lessee. The estimated cost of the building is \$150,000.

Cincinnati.

BUILDING PERMITS.—Since our last report the board of Public Works have issued the following building permits:— E. Griewz, four-story brick; cost, \$4,000.—H. Burhrman, one-story frame cost, \$900.—Andrew Sweeney, two-story brick; cost, \$2,500.—John W. Golskamp, two-story brick; cost, \$4,300.—Fellet & Martre, two-story brick; cost, \$2,300.—Fisher & Bro., three-story brick; cost, \$3,000.—Gambrius Stock Co., four-story brick; cost, \$5,000.—Jas. Griffith & Sons, two-story brick; cost, \$7,000.—A. J. Nurre, four-story brick; cost, \$7,000.—M. D. Douglas, double three-story brick; cost, \$5,000.—Stephen Richard, frame; cost, \$3,000.—Palliser Noble, two-story frame; cost, \$1,000.—Neil McKay, three-story brick; cost, \$3,000.—Fisher & Bro., two-story brick; cost, \$3,000.—Thirty-one permits for repairs; cost, \$20,930.—Total permits, 45; total cost, \$71,980.—Total permits to date, 639.—Total cost to date, \$1,188,063.

Cleveland.

GRAMMAR SCHOOL HOUSE.—Work is going on rapidly at the new 12th Ward Grammar School House. It is to be three stories in height, with eighteen session rooms, and several recitation rooms on the upper floors. The walls will be completed to the top of the basement this season. The whole will cost about \$35,000. Messrs. Latimer and Clements are the contractors for the mason's work, Mr. Wm. Waterston for carpenter's work, and Mr. Levi J. Scofield is the architect.

MARBLE SAW-MILL.—Messrs. Lyman Strong & Son, wholesale marble dealers, have just made a large addition to their marble saw-mill, about 125 feet long by 30 feet wide and two stories in height. The cost was about \$5,000.

REPAIRS ON THE CATHEDRAL.—St. John's Roman Catholic Cathedral, on the corner of Superior and Erie sts., is under repair. The unfinished tower is to be completed to a height of 240 feet. The windows in front of the church are also to be enlarged, and next summer the doors and side windows will be reconstructed. Broad stone steps are to be built across the entire front, and the inside and outside are to be painted. The total cost is to be something like \$15,000; Wm. Dunn is the architect.

Louisville.

BUILDING PERMITS.—Patrick Donahue, two-story brick dwell., Chapel St., \$500.—Kaster Wursch, one-story brick dwell., Congress St., \$560.—B. Rudy, one-story brick dwell., Main St., \$650.

Philadelphia.

BUILDING PERMITS.—F. Vogdes, two-story dwell., 17 x 42, No. 3618 Filbert St.—D. Stewart, three-story back building, 12 x 15, No. 215 North Fifth St.—Jas. Beatty, 2 three-story dwells, 20 x 30, Harling St.—R. J. Dobbins, two-story stable, 20 x 84, Lybrand St.—Chas. Boon, one-story storehouse, 50 x 10, Flat Rock Road.—Thos. Lewis, 9 two-story dwells, 14 x 28, Meiden all St.—Chas. O'Neill, 3 two-story dwells, 17 x 44, Nos. 1114, 1115, and 1118 South Thirtieth St.—A. Kern, Jr., three-story store and dwell., 19 x 4, cor. Washington Ave. and Hermitage St.—W. D. Jacoby, three-story store, 19 x 75, No. 124 Dock St.—J. and J. Crowley, three-story picket-house, 20 x 20, No. 1218 South Eighth St.—S. H. Flanagan, three-story dwell., 16 x 41, No. 206 Moore St.—Ellen Schofield, three-story dwell., 20 x 31, cor. Green Lane and Wood St.—H. McCallum, 2 two-story dwells, 14 x 20, Springer St., Germantown.—Isaac Wilson, three-story dwell., 20 x 58, Fifth St.—Wm. Hazel, 2 two-story dwells, 14 x 35, Logan St.—F. Lambrecht, 4 two-story dwells, 12 x 25, Orkney St.—W. Axford, two-story dwell., 17 x 50, Johnston St., Germantown.—Jas. Wilson, one-story factory, 30 x 54, cor. Putnam and Palterthor sts.—Jas. Kinneer & Sons, three-story dwell., 28 x 60, Green St., Germantown.—Jas. Kinneer, three-story dwell., 30 x 60, Green St.—Hensler & Flech, three-story brewery, 70 x 100, cor. Thirty-first and Master sts.—G. Bannan, two-story stable, 14 x 23, No. 3525 North Sixth St.—S. H. Stewart, two-story factory, 30 x 42, Howard St.—Peter Otto, two-story dwell., 16 x 28, Franklin St., Frankford.—Thos. Eddy, three-story store and dwell., 30 x 30, No. 1241 Girard Ave.—C. Bachle, three-story store and dwell., 20 x 71, Germantown Road.—C. Bachle, three-story back building, 12 x 32, Ridge Ave.—John Mulligan, three-story dwell., 20 x 16, No. 1222 Newkirk St.—W. R. Matchett, 7 three-story dwells, 16 x 48, Broad St.—Geo. F. Gibson, 5 three-story dwells, 14 x 44, Master St.—McLaughlin & McNamara, two-story dwell., 16 x 30, Morris St., Germantown.

CONTRACT AWARDED.—At a recent meeting of the School Committee of Councils, in conjunction with the Committee on Property of the Board of Education, bids for the construction of a school-house at Branchtown, Twenty-second Ward, were opened. The following are the bids received: Messrs. Boyer & Parker, \$8,850; Charles L. Looming, \$8,145; Thomas W. Wright, \$8,890; William F. Davis, \$7,775; Samuel H. Collum, \$5,833; Jacob U. Eber, \$8,635; P. H. Somers, \$7,624; James M. Stewart, \$7,653.63; C. Tweed, \$7,463; Charles O'Neill, \$7,619; George None-maker, \$7,495; Jacob None-maker, \$7,774. Mr. Samuel H. Collum being the lowest bidder the contract was so awarded and the committee adjourned.

CHAPEL.—The work on the large stone church now building at the corner of Montgomery Avenue and Bouvier Street, known as the Colligate Free Chapel, in connection with the Alexander Presbyterian Church, has a frontage on Montgomery Avenue of 88 feet and on Bouvier Street of 100 feet. The first floor will be divided into five class-rooms. The main audience-room on the second floor will have a seating capacity of 2,500. The edifice will be ready to be roofed before the end of the present month.

St. Louis.

BUILDING PERMITS.—Twenty-nine permits have been issued for the week ending October 11, 1878, five of which are for unimportant frame structures. Of the rest those worth \$2,500 and over are as follows:—

Table with 5 columns: Owners, Use, Stories, Rooms, Cost. Rows include George Todd (Warehouse, 2 stories, 2 rooms, \$2,000), Dr. Greiner (Dwelling, 2 stories, 2 rooms, \$3,000), F. S. Lemit (Dwelling, 2 stories, 12 rooms, 4,800), H. Hansman (Dwelling, 2 stories, 12 rooms, 4,800), W. Weichman (Dwelling, 2 stories, 12 rooms, 4,800).

General Notes.

ANN ARBOR, MICH.—Bids for supplying furniture for the new court-house at Ann Arbor, upon the plans and specifications drawn by W. H. McPherson, have been received: Mellink & Co., Toledo, \$2,842; Haynes, Spencer & Co., Richmond, Ind., \$1,795; Rapps & Eggers, Chicago, \$1,334;

F. R. Woffinger, Chicago, \$2,765; Feize Bros., East Saginaw, \$3,800. The contract was awarded to the lowest bidders, Haynes, Spencer & Co., of Richmond, Ind.

RAPOSA HILL, IOWA.—The Christian Society is building a frame church to cost \$400; F. M. Ellis, architect.

BRIDGEPORT, CONN.—Cottage for W. F. Morehouse; builder, A. Davis; Henry Lambert, architect; cost, \$1,900.—Bell tower addition to St. Augustine Catholic Church; cost, \$3,000; Palliser, Palliser & Co., architects.—House for Dr. Warner; carpenter, J. H. Burns; masons, Downs & Wood; plumber and steam, F. P. Bradbury; W. R. Briggs, architect; cost, \$12,000.—House for Chas. Palliser, work done by the day; Palliser, Palliser & Co., architects; cost, \$10,000.—New block of stores, one story, just completed, for Henry Sanford, Esq., cor. of Main and Cannon sts., 70 x 90; carpenter, Geo. Tenney; mason, J. Rutherford; Palliser, Palliser & Co., architects; cost, \$12,000.—Pair of brick and stone dwells., Gilbert St.; owner, Samuel E. Todd; carpenter, Burr Curtis; mason, Jno. Rutherford; architects, Palliser, Palliser & Co.; cost, \$5,000.—Frame cottage, 11 rooms; W. S. Huriburt, owner and builder; cost, \$2,000; architects, Palliser, Palliser & Co.—Block of 4 frame tenements, Messrs. Williams & Russell, owners and builders; cost, \$4,000.

BRISTOL, R. I.—The two old houses, one on the corner of High and Constitution streets, and the other on the corner of High and Walley streets, have been torn down, and a new business block is being erected on the site of the former by Benjamin L. Wee, Esq., and preparations are making for the erection of a fine residence by Judge J. Russell Bullock, on the site of the latter.

CANON CITY, CAL.—B. J. Bartlett, architect, is preparing plans for a Methodist church, to cost about \$3,000.

COLUMBUS, O.—The city council has decided to go on in the matter of building a new city prison.

DETROIT, MICH.—An \$1,800 brick residence will be erected by Julius Hovs, at the corner of Larned and Antoine streets.—On St. Louis, at the corner-stone of the new St. Mary's Hospital was laid.

DES MOINES, IO.—Residence for W. W. Carpenter, of wood, brick basement, 11 rooms; cost, \$6,000.—Residence for D. G. Rhoads, of brick, 6 rooms; cost, \$2,500; both by B. J. Bartlett, architect.

DEXTER, IO.—Normal School building of brick, stone trimmings; cost, \$8,000; B. J. Bartlett, architect.

DIXON, CAL.—The contract for the Presbyterian church is said to have been let for \$3,000.

EASTON, O.—There will be no delay in building up the burnt district. Draughtsmen are already at work on plans for a new Old Fellows' Lodge, and for a new hall and market house.

EAST SAGINAW, MICH.—George Graham, a millwright, has taken the contract to erect the new mill for Sears & Holland.

EATON, O.—The masons have begun work on the new Christian church parsonage, and will push it forward so that it will be completed before cold weather.

FALL RIVER, MASS.—The lot corner of North Main Street and Wilson Road, at Steep Brook, has been purchased by Messrs. Winslow & Elsbree, and a building, 35 x 50, is to be erected on it, in the upper part of which there is to be a hall.

FARGO, D. T.—Steps have been taken to organize a Baptist society, and build a church.

GOLDSBORO, N. C.—Three brick blocks are going up.

GREENVILLE, MASS.—The contract for building the new school-house has been awarded to Mr. John Nichols, of Greenville.

INDIANAPOLIS, IND.—The Board of State House Commissioners, October 4, approved the bond of Kannecker & Deing, and ordered them to proceed to work at once.

MARION CITY, IO.—M. V. Robinson has completed his frame residence, cost, \$3,000; F. M. Ellis, architect, Marshalltown, IO.

MARSHALLTOWN, IO.—Just finished, High School building at Monticello, Iowa, with Opera House in first story, cost, \$16,000.—Marion Congregational Church, style, modern Gothic, seating capacity 1,150, brick with stone trimmings, tower 80' high; cost, \$10,000.—Monticello Block of three stores for Col. Jno. O. Duer, two stories and basement, stone trimmings, cost, \$9,000.—Frame residence for S. E. Saries, cost, \$3,000.—Brick residence for S. R. Howard, cost, \$3,500.—J. Forney, and Bentley, and Willoughby have finished a block of stores in the Queen Anne style; cost, \$10,500; also M. W. Bibbins, frame residence, cost, \$3,500; J. W. Oliver, frame residence, cost, \$3,800; A. Miller, cottage, cost, \$2,500; J. T. Upon, Wilber & J. H. Hall, are laying foundations for a block of three stores, two stories and basement, in Queen Anne style, to cost \$10,000; also, Calvin Woodworth is about to commence a fine residence, to cost six or seven thousand dollars; of all these F. M. Ellis is the architect.

MARtha's VINEYARD, MASS.—B. V. Mr. Hamlen is building a parsonage on Co.nty Avenue, for which a brick foundation is already laid.

MAYSVILLE, KY.—The Odd Fellows' building is now about completed. It is three stories high, the front is solid stone, upon which are wrought the prominent symbols of the order. Upon the first floor are two stores. On the third floor is the lodge room.

MCGREGOR, IO.—The Roman Catholics will erect a \$10,000 church in the place of the one destroyed by fire.

MONTGOMERY, TENN.—McCormack & Sweney, of Columbus, O., have received a contract for building the court-house.

MOUNT CARMEL, CONN.—A house is building for W. W. Woodruff; Brown & Clark, New Haven, builders; Palliser, Palliser & Co., Bridgeport, Conn., architects; cost \$4,575.

NEENAH, WIS.—Messrs. H. C. Koch & Co., of Milwaukee, are the architects of the new school-house, which is to cost about \$15,000.

NEW BEDFORD, MASS.—Fourth St., between Wing and Grinnell, two-story dwelling-house, 20 x 50, for James H. Russell; Allen & Robinson, building contractors and carpenters; Wm. B. Jenney, mason.—Grinnell St., between fourth and fifth, two-story dwelling house, 24 x 40, for J. Harvey Sherman; Elihu Briggs, carpenter; Nathaniel H. Greene, mason.—Cor. of Orchard and Grinnell sts., barn, 22 x 25, for Martin Wheeler; Elihu Bri ge, carpenter; George Nelson, mason.—On Rockland St., Elihu C. Kelly, two-story dwelling-house, 24 x 30; James I. Snow, carpenter; Francis H. Vinal, mason.—Foster St. near cor. of Maxfield, Joseph W. Robertson, dwelling-house, 23 x 30; William Bosworth & Son, carpenters; Francis H. Vinal, mason.—Maxfield St., Samuel Thompson, dwelling-house, 22 x 30; Colwell & Lowe, carpenters; Parker Smith, mason.

NEW BRITAIN, CONN.—Augustus Stanley is building a house on Maple Street, Charles Peck one on Whiting Street, Mr. Usher one on Kensington Street, Mr. Folsom one on South Main Street.

NEWBURYPORT, MASS.—Work has commenced on the foundation for the pedestal of the statue of Washington, a gift to the city by Daniel I. Tenney, of New York.

NEWTON, MASS.—Gen. Underwood is building a house to be used as a parsonage for Grace Church. Cost, \$5,000; S. D. Garey, is the carpenter; Messrs. Appleton & Stephenson, architects, of Boston.—A triangular lot of land on Magnolia Avenue is to be the site of the "Ellis Memorial," which will consist of a stone terrace, with drinking fountain. It is proposed to place a monument in the centre of

the terrace, dedicated to the memory of the great Indian missionary. The design will be made by Messrs. Appleton & Stephenson.

OXFORD, MASS.—The passenger depot has been contracted for with Mr. Charles Fuller. The foundations are now in, and it is to be completed in December. The building will be 67 feet by 21 feet. The main waiting-rooms will be 20 feet square each, with an office between them.

PARIS, KY.—The county commissioners are to meet and accept the new jail this week. It is a solid structure, and is considered the best prison in the State.

PATUCKET, R. I.—Messrs. Dispen & Childs, ice merchants, of the place, are about to build an ice-house at Happy Hollow Pond. The contract for the building has been awarded to Messrs. Carpenter and Wilmarth, of this place.

PEORIA, ILL.—W. R. Woodwarl's house, which was destroyed by fire recently, is to be rebuilt.

PITTSBURGH, PENN.—The contract for building the depot south of Smithfield Street Bridge is awarded to a Philadelphia firm.

PROVIDENCE, R. I.—The following notices of intention to build have been received at the City Engineer's office during the week ending October 4: David A. Waldron, on Blundell Street.—John F. Horton, on North Main Street.—John L. Armstrong, on Lockwood Street.—Hugh Carroll, on corner Bay and Eddy streets.—Frank Carpenter, in rear of Branch Avenue.—Charles H. Childs, Jr., on Broad Street.—Daniel McNiff, on Sherwood Street.

ROCHESTER, N. Y.—The Presbyterian Brick Church Society have just expended \$6,000 in the decoration of their edifice, under Mr. James G. Cutler, architect. The auditorium is 63 x 89 x 35' high. A new rostrum and pulpit of black walnut, rather massive in character, have been built, the walls and ceiling tinted and dispersed, and the organ illuminated, as well as the wall behind the pulpit.

SAN BERNARDINO, CAL.—has gone to work energetically to rebuild her "burnt district." It is stated that business houses will be put under immediate contract, and that the new buildings will be better than the old.

WOOD'S HOLL, MASS.—H. H. Fay is building a \$30,000 house east of Nobsque.

Publishers' Department.

The American Architect and Building News. PUBLISHED EVERY SATURDAY BY HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON. NEW YORK OFFICE, 21 ASTOR PLACE. An Illustrated Journal of Constructive and Decorative Art devoted to the Interests of Architects, Builders, Decorators, etc. 15 cents per copy; \$7.50 per year; \$6.00 in advance.

CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS, WITH Houghton, Osgood & Co.'s other Periodicals. THE ARCHITECT AND ATLANTIC MONTHLY... \$9.00 THE ARCHITECT AND THE REPORTER... 15.00 THE ARCHITECT AND BOSTON MEDICAL AND SURGICAL JOURNAL... 10.00 THE ARCHITECT AND UNITED STATES OFFICIAL POSTAL GUIDE... 7.00 \* N. B.—The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

Payments should be made directly to the Publishers, either by draft or by post office order. HOUGHTON, OSGOOD & CO., Publishers, WINTHROP SQUARE, BOSTON

BUILDING SPECIALTIES, Etc.

The contract for furnishing the roofing for the new English High and Latin School Building, Boston, has been awarded to John Farquhar's Sons for \$16,534. The contractors are to furnish the slating, coppering, and composition roofing, the roofing to be the material of the New England Felt Roofing Company, and the coppering Hicks & Badger's. The building will probably be roofed by January 1. Messrs. Farquhar's Sons are owners of valuable roofing patents, to which the attention of architects is directed. Messrs. Waldo Brothers, of Boston, are agents for A. Hall & Sons' Terra-Cotta manufactures, Perth Amboy, N. J.—The "Akron" sewer-pipe, manufactured by the Akron Sewer-Pipe Company, of Ohio, stands very high among architects wherever its merits have been thoroughly tested. Messrs. Fiske & Coleman, 72 Water Street, Boston, are the agents for its sale in New England.

A. Hall & Sons Manufacturers of Architectural Terra-Cotta, Buff and Colored Brick, Fire Brick Established 1816, South Amboy, N. J. ARCHITECTURAL IRON WORKS. YOUNGLOVE & CO., Propr's. CLEVELAND, O. IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TIE LIGHT, CRISTING, ETC. Estimates promptly furnished. (Established 1848.) MARKET ST. ARCHITECTURAL FOUNDRY AND IRON WORKS. SNEAD & CO. LOUISVILLE, KY. Makers of every description of Iron Work for Buildings.

PROPOSALS.

CULVERTS AND DRAINS.

CINCINNATI, O. Sealed proposals will be received at the office of the Board of Public Works until 12 o'clock, noon, of November 4, A. D. 1878, for grading, curbing and guttering, laying crossings, bordering the roadway, and constructing the necessary culverts, drains, or retaining walls, according to specifications on file in the office of the Board of Public Works: Third Avenue, from Charles Street to Center Street, and James Street, from Colerain Avenue to Fifth Avenue, the same to be paid for in cash or in bonds of the city at not less than par, at the option of the Board of Public Works, thirty days after the passage of the ordinance of assessment. The Board reserves the right of rejecting any or all the bids. Bidders will indorse their names upon the outside of the envelopes containing their bids. Each bid to be accompanied by two disinterested sureties. Each bidder will give his post-office address or residence. Bidders to use the printed forms, as no other will be received. By order of the Board.

JOHN E. BELL, President. JOHN D. BANKS, Clerk. 148

WHITE ASH, HARDWARE, ETC.

NAVY PAY OFFICE, 29 BROADWAY, NEW YORK, October 14, 1878. Sealed proposals in duplicate, to be indorsed "Proposals for Naval Supplies," will be received at this office until 12 o'clock m., the 28th day of October, 1878, for White Ash, Hardware, Belting and Packing, and Sheet Rubber (lists of which can be procured on application to this office), to be delivered at the Navy Yard, New York, free of any expense and subject to the usual inspection. Responsible security required on the bids for the prompt and faithful delivery of the articles, samples of which can be seen and blank forms of bids secured by applying at this office. The right to reject any and all bids not considered advantageous to the government is reserved. 148 A. H. GILMAN, Pay Inspector U. S. Navy.

MONUMENT.

HARRISBURG, PENN. Office of the Secretary of the Commonwealth, Harrisburg, Penn., October 12, 1878. Notice is hereby given that the Commission, consisting of the Governor, the Secretary of Internal Affairs, and the Secretary of the Commonwealth, authorized by act of General Assembly approved June 17, 1878, to carry out the provisions of said act, appropriating the sum of five thousand dollars for the erection of a monument over the grave of the late Governor John W. Geary, will meet at the office of the Secretary of the Commonwealth on Friday, November 8, 1878, at 12 m., for the purpose of receiving plans and proposals for the erection of the monument, and will thereupon proceed to determine upon the same. JOHN BLAIR LINN, Secretary of the Commonwealth. 149

TIMBER.

DETROIT, MICH. U. S. ENGINEER'S OFFICE, 26 WASHINGTON AV., DETROIT, MICH., October 1, 1877. Sealed proposals in duplicate will be received at this office until 3 o'clock P. M. of Monday, the 21st day of October, 1878, and opened immediately thereafter, for furnishing timber for the improvement of St. Mary's Falls Canal, Mich. For information on the subject, apply in person at this office. A. MACKENZIE, Captain of Engineers. 147

REPAIR OF WHARF, WILLET'S POINT, NEW YORK HARBOR.

DEPOT QUARTERMASTER'S OFFICE, HOUSTON ST., COR. GREENE, NEW YORK CITY, October 5, 1878. Sealed proposals, in triplicate, will be received at this office until 12 o'clock, noon, October 21, 1878, at which time and place they will be opened in the presence of bidders, for the repair of wharf at Willet's Point, N. Y. Harbor, in accordance with specifications on file in this office, and which can be seen by bidders daily until the bids are opened. Bidders should state the time within which they will guarantee to complete the work. A preference will be given to articles of domestic production. The government reserves the right to reject any or all bids. Blank proposals will be furnished on application to this office. Proposals should be addressed to the undersigned, and be indorsed "Proposals for Repair of Wharf at Willet's Point, New York Harbor." L. C. EASTON, Colonel, and Assistant Quartermaster General, Depot Quartermaster. 147

ARTESIAN WELLS.

CHARLESTON, S. C. CITY HALL, MAYOR'S OFFICE, September 10, 1878. Sealed proposals will be received at this office up to 1st November, 1878, for boring Artesian Wells in the City of Charleston. Plans, drawings, specifications, etc., can be had on application to City Engineer, Charleston, S. C. City Council of Charleston reserves the right to reject any or all bids. Proposals to be directed to COMMITTEE ARTESIAN WELLS AND WATERWORKS, CHARLESTON, S. C. 148

LOCKS AND KEYS.

POST OFFICE DEPARTMENT, WASHINGTON, D. C., August 15, 1878. Separate sealed proposals will be received at this Department until 12 o'clock noon on the 20th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as are to be used for the street letter-boxes of the United States. As the public exposure and searching examination necessary to intelligent bidding on any prescribed model of a lock and key would tend to impair, if not entirely destroy, the further utility of all such locks and keys for the purposes of the mails, the Postmaster-General prescribes no models or samples for bidders, but relies for a selection on the mechanical ingenuity and skill which a fair competition among inventors, hereby invited, may develop in samples submitted by them. Specifications of requirements as to proposals, samples, kinds and quantities of locks and keys, contracts, etc., will be furnished on application by letter to the Second Assistant Postmaster-General. No proposal will be considered which is not submitted in accordance with such specifications and forms of proposal. The contracts which may be made are to be in conformity with the specifications and accepted proposals. 170 D. M. KEY, Postmaster-General.

PROPOSALS.

GAS WORKS.

RIO DE JANEIRO, BRAZIL. By order of the Brazilian Legation at Washington the undersigned makes public that the Imperial Government calls for proposals for the gas illumination of Rio de Janeiro, the present contract expiring in March next. The proposals, addressed to the Envoy Extraordinary and Minister Plenipotentiary of Brazil, must be sent until 3 o'clock in the afternoon of the 1st day of December next to the Brazilian Consulate General, 42 Broadway, New York, where copies of the general conditions and specifications referred to in the fourth clause can be obtained, as well as any information in relation to this matter. SALVADOR DE MENDONCA, Brazilian Consul-General. NEW YORK, September 9, 1878.

MINISTRY OF AGRICULTURE, COMMERCE, AND PUBLIC WORKS—DIRECTORY OF PUBLIC WORKS.

By order of his Excellency the Minister of this Department, it is advertised that this Directory receives proposals for the service of the illumination by gas of the Capital of the Empire, in the terms and conditions below specified:— First—The proposals will be presented in a closed letter, until 3 o'clock in the afternoon of the 1st day of December of the present year, in this city, in the Directory of Public Works of the Ministry of Agriculture, and in London, Paris, and Washington, at the respective Brazilian Legations. Second—The proposer must present, outside of the envelopes that shall contain the proposals, documents that will testify their fitness for the service that they propose to contract. Third—No one can concur without having previously deposited in the National Treasury, in the delegacy of the same Treasury in London, or in either one of the Legations above indicated, a caution, in money or bonds, of the public debt of the Empire, \$50,000, or a corresponding amount in foreign money (£5,000, 125,000 francs, or \$25,000 in gold). Fourth—The object of the concurrence will be only the price of furnishing a cubic metre of gas, and the term of the privilege, that in no case shall exceed 33 years. All the other clauses of the contract, excepting whatever may be transitory, will be, without any discrepancy or modification, those proposed by the Government in the general specifications and conditions, which will be distributed separately in the Directory of the Public Works and the above-mentioned Legations. Fifth—All the proposals will be opened in this city, in the public session of the Directory of Public Works, on the 24 day of January, 1879; and the Government will declare on them within fifteen days of that date. Sixth—When the choice of the proposal is made, the contract will be considered concluded; being necessary for the preferred proposer to sign only the mentioned general conditions, which will be entered in a competent book of the Department of Agriculture. For greater facility, each proposer who resides out of Rio de Janeiro must constitute in this city, and with a due antecedence, somebody with a power of attorney to sign the general conditions in case the preference falls on him. Seventh—The proposer who, after having received communication of the acceptance of his proposal, refuses to sign the referred conditions, will forfeit the caution in the benefit of the National Treasury. Eighth—The Government reserves the right to annul the competition within the period fixed by Clause 5, to decide upon the proposals that were presented. M. BUARQUE DE MACEDO, Chief of the Directory. DIRECTORY OF PUBLIC WORKS, Rio de Janeiro, July 22, 1878.

THE COWLES HARDWARE CO. UNIONVILLE, CONN., U. S. A.

MANUFACTURERS OF (GHEER'S) Single & Double Acting SPRING BUTTS. The Latest and Best. Investigate before you purchase. Large quantities already in use and giving universal satisfaction. Read the following points of superiority:— These Spring Butts differ in principle from all others; having a Spiral Spring for power, and Toggles for Levers in combination, and when applied to the leaves of the Butts, Exert their greatest Power when the door is closed, and are the only Butts in existence that will by actual test perform the labor claimed for them. They offer less resistance the wider the door is opened, until a point past the right angle is reached, where the power is reversed and the door held open. They will not allow the door to sag. We have spared no pains to furnish a perfect article, and trust that their superior merits will demand a preference. Send for Price Lists.

Akron, Ohio. DRAIN PIPE. ALL SIZES. Terra Cotta Chimney Tops, Akron Land Tile. D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

C. BUTCHER, 107 Devonshire St. BOSTON. PATENT MARQUETRY FLOORING. Specimens at Lawrence, Wilds & Co.'s, 42 Cornhill, Boston.

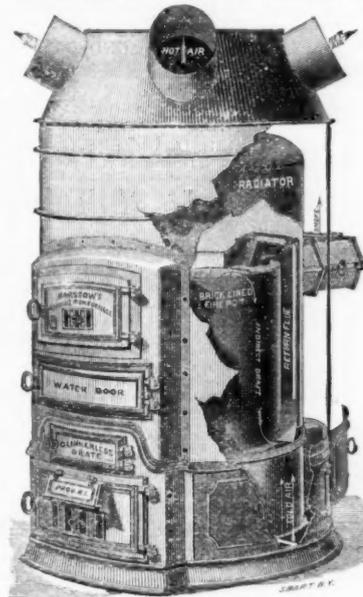
WANTS.

WANTED. A position as agent for a stone contractor, or for a company manufacturing specialties for building purposes, by a young man experienced in business, or any situation requiring a knowledge of architects' plans, designing, scale, and detail drawings, preparing bills of quantities, etc. An extensive acquaintance among architects, and means of keeping informed of building news in New York and Boston.—Address O. WESLEY, 246 E. 25th St., New York.

DRAUGHTSMAN. Wants a situation in an Architect's office. Willing to work for low salary. Address H. F. BURR, Medford, Mass.

Superior to a Steam Heater, at one third the cost.

BARSTOW WROUGHT IRON FURNACE.



BARSTOW STOVE CO., Providence, R. I.; 56 Union St., Boston; 230 Water Street, New York. Manufacturers of Furnaces, Ranges, Stoves, etc., ADAPTED TO ALL USES. The most popular goods ever sold, and for quality and finish the acknowledged standard for more than 30 years. Send for Illustrated Circular.



BOYNTON'S FURNACES. Cast or Wrought Iron. Suitable for Coal or Wood. BRICK-SET AND PORTABLE. are powerful heaters; remarkably durable; economical in fuel; give universal satisfaction; have no bolted joints; are free from gases. Thousands have had constant and severe use for over 18 years, and in good condition to-day, without repairs or expense. The most durable Furnace, the cheapest to buy, fitted with clinker-cleaning anti friction grates, ash-sifting grates and ash-pans; lined feed doors, draft-regulator, etc. Have many attractive and practical improvements never before adopted. Also, RANGES for family or hotel use; Fireplace Heaters, etc. Send for Circulars before purchasing others. RICHARDSON, BOYNTON & CO., Manufacturers, 234 Water Street, New York. Apply direct to the manufacturers for low prices.

TO ARCHITECTS AND BUILDERS. MORTAR BLACK, Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar. For sale only by Walpole Color and Chemical Works, HENRY D. DUPEE, Proprietor, 79 KILBY STREET, BOSTON.

MARSHALL'S AMERICAN



LEADED SHEETS. Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Incorporated in New England States by T. H. BIRNBAUM, No. 60 UNION STREET, BOSTON.

PATENT MINERAL WOOL. ENTIRELY FIRE-PROOF AND UNDECAYING. THE BEST INSULATOR OF HEAT, COLD, AND SOUND.

For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc. ALEXANDER D. ELBERS, P. O. Box 4461. 26 1/2 Broadway, New York

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free

HENRY McSHANE & CO., Baltimore, Md.

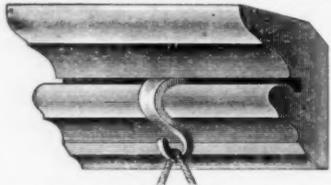
The Useful

is issued monthly—consists of Perspectives of Interiors, Ornaments of Buildings, Fresco Painting, Furniture, etc., and is accompanied with full-size working-drawings—for direct use—Price to Subscriber One dollar per number.

Office 28 Pemberton Square, Boston, Mass

BAKER'S

Combined Cornice and Picture Rod Moulding



(Patented in the United States and Dominion of Canada, 1877.) For Hanging Pictures, etc. FOR SALE BY F. P. BAKER, The only Agent in the U. S. and Canada, 84 BEVERLY STREET . . . BOSTON.

We manufacture Slate Goods, through every operation, from quarry to completion.

THE FAIR HAVEN MARBLE AND MARBLEIZED SLATE CO. FAIR HAVEN, VERMONT. The oldest and most extensive producers of SLATE MANTELS IN THE UNITED STATES.

We imitate more than fifty rare marbles and woods. Styles and workmanship unsurpassed. Special care given to making Mantels and other goods from architects' drawings. Being in close proximity to the best white American marble quarries, and with rare facilities for selecting stock and doing the work, we are also producing

MARBLE MANTELS

At the very lowest prices, and in the best manner possible. We also produce all kinds of plain slate and marble work

Look over this list and correspond with us and get our Catalogue.

- Purple, Green, Red, Variegated Roofing Slates. Same Color Slates, also White and Black Marble Tiles. Window Sills. Window Lintels. Water Table. Belt Courses. Ashes. Solid Steps. Steps and Risers. Laundry Tubs. Urinals. Grave Covers. Vault Work. Carriers' Tables. Counter Tops. Billiard Table Beds. Blackboards. Brewers' Vats. Cisterns. Greenhouse Shelves. Plumbers' Goods, etc.

ARCHITECTURAL IRON AND JAIL WORKS.

M. CLEMENTS,

MANUFACTURER OF Iron Railing, Bank Vaults, and Jail Cells, Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc. BAYMILLER STREET, near Sixth and C. H. & D. R. R. Depot, CINCINNATI, OHIO.



J. & R. LAMB, 59 CARMINE ST., N. Y. CHURCH FURNISHERS Practical Workers in Sterling Silver, Brass and Bronze. Carved Wood Decorations, etc. Illustrated Catalogues. Furniture, 10c. Metalwork, 10c. 1. Descriptions 1.

A. L. FAUCHÈRE & CO.

OFFICE AND WAREHOUSES 1319 and 1321 Broadway, New York,

Importers, Manufacturers, and Dealers in all kinds of foreign and domestic

MARBLE FOR INTERIOR WORK.

Estimates furnished on application.

DORCHESTER UNION FREESTONE CO. NEW BRUNSWICK YELLOW FREESTONE.

The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order. 24 Pine Street, New York. G. P. SHERWOOD.

Advertisement for The Heliotype Printing Company. Features a central illustration of a printing press and the text: 'LUX-FECIT THE HELIOTYPE PRINTING COMPANY 220 DEVONSHIRE ST. BOSTON COR FRANKLIN ST. HELIOTYPE PHOTOGRAPHS in Printers Ink HELIOTYPE LITHOGRAPHS printed by Steam HELIOTYPE CUTS to print with Type HELIOTYPE FACSIMILE LETTERS, SHOW CARDS, etc.'

THE "AIR SPACE" STEAM PIPE and BOLLER COVERINGS

Save 10 to 20 per cent in fuel.

See Am. Architect and Building News, Dec. 15, 1877. THE CHALMERS-SPENCE COMPANY. 140 Congress Street, Boston. Foot 9th St., E. R., New York.

CLASSIFIED ADVERTISEMENTS.

Table listing various trades and services such as ARCHITECTS, DECORATORS, ROOFERS, and others, with corresponding page numbers.

**ETNA IRON CO.**

Manufacturers of every description of Wrought and Cast

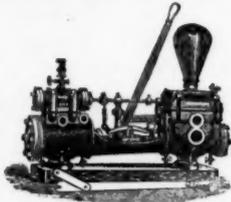
**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**

Patent



Steam

**PUMP**

**THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

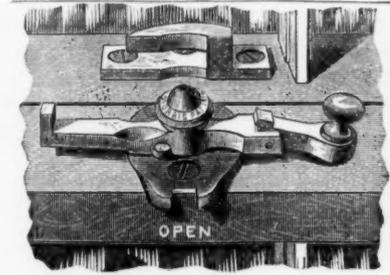
The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

**KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES: { 14 & 16 Federal St., } Boston.  
{ 113 & 115 Congress St., }  
{ 92 & 94 Liberty St., } New York.

Send for Illustrated Catalogue.



**MORRIS BURGLAR-PROOF SASH LOCK.**

Patented July 2, 1878. The Safest! The Simplest! The Most Reliable! THE BEST!

N. B. — No springs to get out of order. Sold by all hardware jobbers. Manufactured by the MORRIS SASH LOCK MANUFACT'G CO., Office 168 Walnut St., Cincinnati, O. Price List and Samples furnished to the trade on application. A liberal discount to the trade.

**PATENTS.**

F. A. LEHMANN, Solicitor of Patents, Washington, D. C. NO PATENT NO PAY. Send for Circular.

**"ZODTCHY" (BUILDER).**

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

M. JEROME KÜTTNER,

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from EIGHT to SIXTYN pages of letterpress, gr. quarto, with cuts, and at least FIVE autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire. Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.

The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address.

JOURNAL "ZODTCHY,"

18 OFFICE STREET, ST. PETERSBURG, RUSSIA.



**Carson's Kitchen Sink**

Is an improvement in this fixture that must meet with the approval of every house-keeper as it retains every particle of grease, and prevents the waste of water from filling up; besides being better trapped than any other sink in use.

PAT'D JAN. 24 1877.

Signal Mfg. Co., Medina, N. Y., or J. M. Carson, Louisville, Ky. Man'rs.

**NATIONAL**

**FINE ART FOUNDRY,**

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze.



**BIBB'S**

Celebrated Original Baltimore

**Fire Place Heaters**

Mantels and Registers.

B. C. BIBB & SON, Baltimore, Md.

Best workmanship. Lowest prices guaranteed. Send for circulars.

**NATIONAL TUBE WORKS CO.**

PATENT

Indestructible Enamelled Wrought Iron

**LAP-WELDED PIPE,**

From 1/2 inch to 15 inches diameter.

Now extensively used for

Water, Gas, Sewerage, and Mining.

It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at our offices of

National Tube Works Co.,

8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

**BURDITT & WILLIAMS,**

DEALERS IN

**FINE HARDWARE**

of every material. A specially complete stock of PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.

**The Draft of the Chimney increased.**

Smoking Chimneys Prevented

Particularly adapted to Chimneys in exposed positions.

Explatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR, 70 Grand St., Brooklyn, N. Y.

CATALOGUE OF

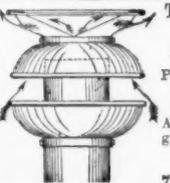
**Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO., ARCHITECTURAL BOOK PUBLISHERS,

37 WARREN STREET, NEW YORK.



TO ARCHITECTS AND BUILDERS.

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

BEEHIVE BRAND.

**FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**UNPARALLELED DISCOVERY.**

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the *Paint Preserver* invented by ASAHIEL WHEELER, Boston. It will neither crack, blister, nor scale.



**BALTIMORE PRESSED TILES.**

FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases,

DRAIN AND SEWER PIPE, FIRE-BRICK, LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

WALDO BROTHERS,

No. 94 WATER STREET, BOSTON.

**PEERLESS BRICKS.**

THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK

ARCHITECTURAL SHAPES (80 kinds).

ALSO

RED Pressed Fronts.

Extra fine in color and quality

BROWN, Colored throughout

More beautiful than Brown Stone DURABLE

CHOCOLATE,

Same as above; difference in color

FLESH COLOR.

A very popular color

BUFF, very fine.

Harmonizes beautifully with Brown or Black

GRAY, A pleasing shade.

BLACK, Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F ADAMS,

JOSEPH WOOD, JR.,

PRESIDENT.

TREASURER



DOLIVET, CUTTER, & CO.

ARTISTIC

**Papier Maché Decorations,**

106 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance





**ROLLING Venetian Blinds.**  
Wilson's Patent.  
For first-class Dwellings and Public Buildings.

These blinds can be fitted either inside or outside the ash, and are operated with ease without machinery or weights. They are made to coil above or below, as shown in cut. Can be furnished in any kind of wood. Unequaled for elegance, durability, and simplicity. Indorsed by many of the leading architects in the country, and in use in some of the handsomest buildings.

We also manufacture  
**WILSON'S PATENT Rolling Steel Shutters**

These blinds are operated on same principle as above (being self-coiling). They are used for closing store-fronts and all entrances and doorways that are required to be perfectly fire and burglar proof.

Also, Rolling Wood Blinds for Store-Fronts, Book-Shelves, School Partitions, and other purposes.

A list of public and private buildings fitted with our Blinds sent on application. Architects and owners are invited to send for working models, catalogues, and price-list.

**WILSON & JAMES,**  
68 Beekman St., New York.  
Two Prize Medals at Philadelphia.

**VALUABLE ART PUBLICATIONS.**

**HUNT'S** (WILLIAM M.) Talks on Art. 8vo. Paper, \$1.00.  
**CLEMENT'S** (CLARA ESKINE) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a Complete Index. Crown 8vo. Cloth, red edges, \$3.25.

Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.

**HOUGHTON, OSGOOD & COMPANY, Boston.**

**IMPROVED PRISON LOCKS.**

All Architects should have our 36 page Illustrated Catalogue of Prison Locks.

ADDRESS

**YALE LOCK MFG. CO., STAMFORD, CONN.**

New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,

94 BEEKMAN STREET,  
NEW YORK.

**SPECIALTIES IN PLUMBING GOODS.**  
Having for their special object  
**Cleanliness, Durability,**  
And the exclusion of Sewer Gas.

**WARING'S SWWER GAS CHECK-VALVE.**  
Made entirely of Brass.

**JENNINGS' NEW CLOSET, WITH New Valve**  
With non-corrosive Valve Seating and Solid Plunger.

**STEWART'S SLATE, MARBLE AND HARD WOOD MANTELS.**  
MIRRORS, ART-TILES, MANTELS, HEARTHES & C.  
Masonic Temple 23rd St & 6th Ave N.Y.

**Automatic Signal Telegraph Co., CITY OF BOSTON,**

OFFICE, 178 DEVONSHIRE STREET, ROOM 20,  
Is prepared to make contracts for the protection of buildings against fire.

DIRECTORS.

CHARLES E. GUILD, President. WILLIAM ENDICOTT, JUN  
JOHN D. W. JOY. WILLIAM B. WATKINS.  
PATRICK T. JACKSON, Treasurer.

**DOUBLE RATCHET REGULATORS, FOR TRANSOMS, FAN-LIGHTS, ETC.**

These Regulators are for hanging transoms and adjusting them at any desired angle for ventilation, superseding chains, pulleys, hinges, etc.; and are most useful substitutes for the old style of pivots, easily attached to the transom, and wherever used have stood the test.

PULLMAN PALACE CAR CO., CENTRAL DIVISION,  
JERSEY CITY, January 30, 1878.

DOUBLE RATCHET M'FG CO., N. Y.  
Gentlemen, — I have found the Double Ratchet Regulator a very useful article in my offices for keeping the fan-lights in any desired position, having used the same for some three or four years, and are in as good working order as when put up.

Very respectfully,  
C. D. FLAGG, Ass't Sup't.

For sale by hardware dealers. Send for circular.  
Agents wanted everywhere.  
**DOUBLE RATCHET M'FG CO. (Limited),**  
346 & 348 Broadway New York.

**HOISTING MACHINES EXCLUSIVELY.**

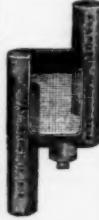
HOTEL STEAM ELEVATORS,  
HYDRAULIC ELEVATORS,  
HAND POWER HOISTS,  
DUMP WAITERS.

**H. J. REEDY, Manufacturer,**

128 EAST EIGHTH ST. - Cincinnati, O.

**GAS FIXTURES OF EVERY DESCRIPTION. SPECIAL RATES TO BUILDERS.**

R. HOLLINGS & CO 347 Washington St., BOSTON.



**Brandeis' Seamless Paragon Trap**

Safest, Best, Cheapest, and Non-siphoning.

Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDEIS & WICKETT 46 Fulton Street, Brooklyn N. Y.**



**SAYLOR'S PORTLAND CEMENT.**

Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R., U. S. Government Works (Forts and Fortifications), New Capitol at Albany, Department of Docks, and Croton Aqueduct Department of New York City, and the trade generally. For Sale by all dealers in Building Materials. **Johnson & Wilson, Gen'l Agts.,** 33 Liberty Street, New York.

**PRIZE MEDALLISTS.**

1862; 1865; 1867; 1872; 1873; AND ONLY AWARD and MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**

ORIGINAL INVENTORS AND SOLE PATENTEES OF

**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters

OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Tilford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.

OFFICE AND MANUFACTORY.

162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**

76 READE STREET, NEW YORK,

WORKS, DARLINGTON, N. J.

*Lock and Hardware Manufacturers,*

DESIGNERS, FOUNDERS, AND WORKERS

**BRONZE AND BRASS.**

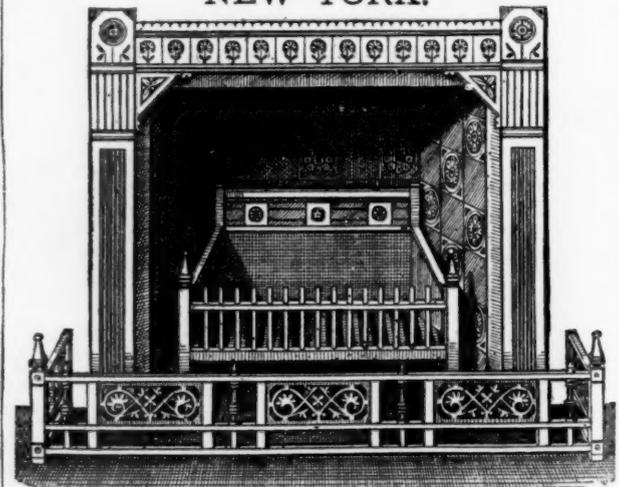
Architects' Designs faithfully executed.

Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side),  
NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tin.

HAVE NO OTHER WAREHOOMS.

**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer Gas that has yet been invented.

**A POSITIVE SEAL**

Against sewer-gas, absorbed gases, and back water. Seal is not broken by siphonage or evaporation. Self-scouring, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers,

**B. P. BOWER & CO.,**  
104 & 106 St. Clair St., Cleveland, O



**THE EUREKA VENTILATION CO.**

OFFICE AND MANUFACTORY,  
74 CHARLESTOWN STREET,  
BOSTON, MASS.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

Theatrical Fresco only. Prices moderate. Refer to first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.

LAFAYETTE W. SEAVEY,  
Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK

# THE AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

Vol. IV. No. 148.]

SATURDAY, OCTOBER 26, 1878.

[PRICE 15 CENTS.]

### BUILDERS' SUPPLIES.

**AMERICAN ENCAUSTIC TILE,**  
Acknowledged by experts to be  
**THE BEST IN THE WORLD.**  
Manufactured by the  
**AMERICAN ENCAUSTIC TILING CO. (Limited.)**  
OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.  
Designs and estimates for Public Buildings, Halls,  
Churches, Vestibules, and for External Decoration, fur-  
nished on application.

**WALWORTH MANUFACTURING CO.,**  
69 KILBY ST., BOSTON.  
**PUBLIC BUILDINGS,  
PRIVATE RESIDENCES,  
GREENHOUSES, ETC.**  
Warmed and ventilated by  
**STEAM OR HOT WATER.**  
Correspondence solicited. Plans and estimates furnished  
on application.

**"HOTCHKISS" TOWER CLOCKS,**  
MANUFACTURED BY  
**SETH THOMAS CLOCK CO., THOMASTON, CONN.**  
Prices \$100 to \$6,000.  
WARRANTED ACCURATE, STRONG, DURABLE.  
OFFICE, 581 BROADWAY, NEW YORK.  
Send for Illustrated Catalogue.

**"MINTON'S ART AND ENAMELLED TILES,"**  
(China Works, Stoke-Upon Trent.) Also, The Campbell  
Brick and Tile Co.'s  
**ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS,  
ETC.**  
For Churches, Banks, Halls, Vestibules, and Hearths;  
Outside Decorations, Flower Boxes, Etc.  
**THOS. ASPINWALL & SON,**  
69 BROADWAY, NEW YORK.  
The only representatives in the United States for the  
above firms.

**ASPHALT (FELT) ROOFING.**  
**WARREN'S NEW PATENT  
FELT AND GRAVEL ROOFING,**  
Substitutes NATIVE ASPHALT for Coal-Tar materials for  
these roofs.  
The very best and most durable material for flat roofs.  
Also, Native Asphalt and Asphaltic Cement for Concrete  
Walks and Pavements.  
Roofers and pavers supplied with the above, and with War-  
ren's original Coal Tar Roofing and Paving Materials.  
Send for circulars and samples.  
**WARREN CHEMICAL AND MANUF'G CO.,**  
80 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**TILES FROM ALL PARTS OF THE  
WORLD,**  
FOR  
**BANKS, PUBLIC BUILDINGS, AND PRIVATE HOUSES.**  
References given to Tile Work throughout the United  
States and British Provinces  
**AGENT FOR THE AMERICAN ROOFING TILE**  
Contracts Solicited  
**C. A. WELLINGTON, HOUSEHOLD ART ROOMS,**  
No. 171 TREMONT STREET, BOSTON.

**HUGH SISSON & SON,**  
Importers, Dealers, and Manufacturers of  
**MARBLE.**  
INTERIOR MARBLE WORK AND MONUMENTAL  
WORK A SPECIALTY  
Salesrooms, No. 140 W. Baltimore St.; Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,  
SPEAKING TUBES,  
AND BURGLAR ALARMS,**  
For Public and Private Buildings.  
**THE BEST IN USE.**  
**H. W. FULLER,**  
63 Devonshire Street, Boston.

**HAWTHORNE & TUCKER,**  
PLUMBERS,  
16 PROVINCE STREET, BOSTON  
Estimates for Plumbing made, and work done in any part  
of the United States or Provinces.

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY  
OF NEW YORK.**

**LEONARD F. BROOKHUIS, Pres't. E. GILLET, Vice-Pres't.**  
Hollow Blocks of any pattern, uniting strength and resis-  
tance to fire and water. The Hydraulic Lime of Tiel  
(France), one of the strongest cements known, is largely  
used in this manufacture. The blocks do not conduct  
heat, cold, or sound, and weigh 60 per cent less than brick.  
Fire-proof Partitions, Floor Arches between iron or wooden  
beams, and ceilings under iron or wooden beams, erected  
in following buildings:  
Western Union Telegraph, Orient, and Queens' Ins.  
Coal and Iron Exchange, Museum of Natural Hist.  
Equitable, Staats Zeitung, Hudson R. R. Fr. Depot.  
Windsor Savings Bank, N. Y. Hospital, Drexel,  
Windsor, & Wm. Steyer Hotels, Cluny, & Young's Hotel, Bos'n,  
Syracuse Savings Bank, West Point Military Hosp.  
Columbia College, Tribune, Coryell, & Vancorlear Flats,  
Baltimore Safe Deposit Co. Peabody Inst., Baltimore,  
Peabody Museum, N. Haven, Westmoreland, & Elise Flats,  
Sidewalks laid at Lenox Library, Tribune, etc.  
Hollow Burnt Clay Bricks, for flat and curved arches,  
partitions, etc., and Skewbacks for brick arches.  
Sole agents for the U. S. for HYDRAULIC LIME OF TIEL,  
and LAFARGE PORTLAND CEMENT.  
Sole agents for the U. S. for METTLACH ENCAUSTIC TILES,  
laid in Tribune, Staats Zeitung, Mineral Spa, Central Park,  
Belvidere Hotel, etc.  
Sole agents for the Atlantic States for WIGHT'S FIRE-  
PROOF COLUMNS.  
Our Fire-proof work is the only one approved by the  
New York Board of Fire Underwriters and the Superin-  
tendent of Buildings, after severe public tests.  
Office Room 54 COAL AND IRON EXCHANGE, 21 Courtlandt  
Street, New York. Represented in Boston by  
**BOORMAN & CO., 5 Doane St.**

**E. HOWARD & CO.**  
MANUFACTURERS OF CLOCKS AND WATCHES  
**CLOCKS FOR PUBLIC BUILDINGS**  
114 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**  
**PLAIN AND ENCAUSTIC  
FOR PUBLIC BUILDINGS AND DWELLINGS,**  
As laid by us in  
**THE CAPITOL AT WASHINGTON,**  
And in numerous Churches, Banks, and Dwellings in every  
part of the Country.  
Glazed and Enamelled Tiles for Mantels, Hearths, Wain-  
scoting, &c., and for Exterior Decoration.  
**MILLER & COATES,**  
279 PEARL STREET NEW YORK.

**BARTLETT, ROBBINS & CO.**  
**HEATING AND VENTILATING OF PUBLIC AND  
PRIVATE BUILDINGS  
A SPECIALTY**  
PLANS AND SPECIFICATIONS FURNISHED.  
FOUNDERS, AND MANUFACTURERS OF GAS WORKS,  
ETC., ETC.  
24 LIGHT STREET, BALTIMORE.

**THE NEW ENGLAND GRANITE WORKS**  
HARTFORD, CONN., and 1321 BROADWAY, N.Y.  
Quarries at Westbury, E.T.  
**MONUMENTAL AND BUILDING WORK**  
of every description, all the varieties of  
**AMERICAN AND FOREIGN GRANITE.**  
UNRIVALLED FACILITIES OFFERED TO THE TRADE.  
**J. G. BATTERSON, Pres't. H. R. BATTERSON, Sec'y.**  
DIRECTORS,  
**J. G. BATTERSON, C. B. CANFIELD, H. A. BATTERSON,**  
**G. T. BATTERSON,**  
**CARL CORNADIS, Sculptor.**

**WHITTIER MACHINE CO.**  
Manufacturers of Steam and Hydraulic  
**ELEVATORS,**  
**STEAM ENGINES, BOILERS, AND MACHINERY.**  
No. 1176 Tremont Street, Boston.  
Office in the New England Mutual Life Insurance Co's  
Building, Post Office Square,  
and 120 Broadway, New York  
**CHARLES WHITTIER, Pres't. A. C. WHITTIER, Treas't.**

**OTIS BROTHERS & CO.**  
**SAFETY STEAM AND HYDRAULIC  
ELEVATORS.**  
A specialty for a quarter of a century.  
**BUILDERS OF THE HALE HYDRAULIC ELEVATOR.**  
No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
**OHIO BUILDING STONE.**  
GRIND AND SOTTER STONE.  
From our FLORENCE and AMHERST QUARRIES.  
Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS.  
111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
Designers and Manufacturers of  
**GAS FIXTURES,  
ORNAMENTAL METAL WORK, CLOCKS AND BRONZE  
ARCHITECTS' ORDERS SOLICITED.**  
Special designs submitted on application.  
**WAREHOUSES, 336 AND 338 BROADWAY, NEW YORK.  
MANUFACTORY, 24th AND 25th Sts., AND 10th AVENUE, N.Y.**

**FISHER & BIRD,**  
Workers in all kinds of Foreign and Domestic  
**MARBLES,**  
97 TO 108 EAST HOUSTON ST., NEW YORK.  
Established 1830.  
Among our notable decorations are: The Illinois New  
State House; Palace Hotel, San Francisco; Baldwin's Ho-  
tel, San Francisco; Insurance Building, 10th and Chestnut  
Streets, Philadelphia; Mutual Life Insurance Building  
Boston; Orient Mutual Insurance Building, New York,  
Union College, Schenectady; and numerous Churches,  
Private Residences, etc., etc., throughout the country. We  
solicit the opportunity to estimate upon all classes of work,  
viz., Tiling, Wainscoting, Staircases, Mantels, etc. Come  
tery work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
Are ready to estimate on contracts of any size for  
furnishing their celebrated Amherst, Ohio,  
**BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS  
OR CUT AND SET.**  
Also,  
**AMHERST AND INDEPENDENCE GRINDSTONES,  
AND OHIO MINERAL AND STONE PAINTS**  
Fire-Proof Stove Cement and Stove Putty ground in Oil  
OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MO-  
SAICS." Floor Tiles, beautiful in color and design, for  
Dwellings, Churches, and Public Buildings.  
SPANISH WALL TILES. White, Glazed, Valencia,  
Tiles for Walls and for decorative painting.  
PRINTED FIGURED TILES of Spanish designs, for  
Wainscoting, Mantels, Jardines, etc.  
Floors of "Nolla Mosaics" can be seen at the "Rock-  
ingham," corner of Broadway and 56th Street. Imported  
and for sale by **JOHN CHADWICK, Sole Ag't for U. S.,**  
49 Broadway, N. Y.  
**C. E. PARKER, Agent, 14 Exchange Place, Boston.****

**TUFTS' ELEVATOR WORKS,**  
MANUFACTURERS OF "TUFTS' PATENT" COMB-  
INATION ROPE ELEVATOR.  
To be OPERATED EITHER BY STEAM OR WATER.  
The only safe and reliable machine made for Passenger use  
in Public Buildings and Hotels, and for business purposes in  
Warehouses, Stores, &c.  
37 FOUNDRY STREET, SOUTH BOSTON.  
OFFICE, 243 Broadway, New York.  
**OTIS TUFTS, President. L. A. BIGLOW, Treas'r and Gen'l Manager.**

**STEAM WARMING APPARATUS.**  
**HIGH AND LOW PRESSURE.**  
**HOUSE WARMING A SPECIALTY.**  
Pamphlet with more than 1,000 references sent on appli-  
cation.  
**WYLLYS H. WARNER,**  
114 LEONARD STREET, NEW YORK,  
and 33 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**  
No. 6 COURTLAND ST., NEW YORK.  
Works at Paterson, N.J.  
**PATENT SAFETY STEAM ELEVATORS**  
for Public and Bank Buildings, Hotels, Private Dwell-  
ings, etc.  
**SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP  
GUARANTEED.**  
Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "HEALTH" AND "TUBULAR"

Manufactured by the

GOLD'S HEATER MANUFACTURING CO.  
114 LEONARD ST., NEW YORK.

Send for Pamphlet.

**ART PAINTED TILES**

FOR MANTELS, CABINETS, ETC.

SHARPLESS & WATTS,  
225 MARKET STREET, PHILADELPHIA.

Agents for  
MINTON'S TILES,  
AND TERRELLATED PAVEMENTS.

**J. H. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue, Mattapan (Ward 24), Boston.

**MENEELY & KIMBERLY,**

Bell Founders, Troy, N. Y.,  
Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT-HOUSE BELLS. Illustrated Catalogue sent free.

**JOHN MACK,** Plain and Ornamental Plasterer.  
41 Cambridge Street, Boston.

**MANTELS AND GRATES.**

RANKIN'S PATENT makes the Cleanest, Cheapest, and Hottest Fire. Avoid infringements, and send for Circular to

**C. S. RANKIN & CO.,**  
ARCHITECTURAL IRON WORKS,  
Manufacturers of all kinds of Iron Work for BUILDINGS, JAILS, ETC.

187 W. PEARL ST., CINCINNATI, O.  
BUILDING MARBLE.

Branch yard of the RUTLAND MARBLE CO., 198 Broadway Street, Boston. JOHN D. ALLAN, Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Italian and Continental Marble, furnished at low prices.

**PRESSED BRICK,  
STOCK AND COMMON**

MANUFACTURED BY  
**FLETCHER & THOMAS,**  
Indianapolis, Ind.

All brick warranted. Send for price list and samples.

**STEAM HEATING**

**GILLIS & GEOGHEGAN,**

Nos. 116 & 118 Wooster St., New York.  
See our work at the Cathedral, 50th St. and 5th Av., Drexel Building, 609 Wall and Broad; Bennett Building, Fulton and Nassau, etc.  
Architects and owners promptly furnished with specifications and estimates.

**ARCHITECTS.**

**P. B. WIGHT,**  
CONSULTING ARCHITECT,

78 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.  
Consultations on matters pertaining to Fire-Proof Construction, Foundations, Drainage, Sanitary Work, Ventilation, Machinery, Valuations, Interior Decorations, and Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**  
ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E.,** ARCHITECT  
AND SANITARY ENGINEER  
KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,**  
ARCHITECT,  
Room 17, Life Insurance Building,  
ST. LOUIS, MO.  
Special attention to Churches, Schools, and other public buildings.

WALTER ARCHITECT. PERRY  
DICKSON, Albany, N. Y. BUILDING.

**GEO. E. WARING, JR.,**  
CONSULTING ENGINEER,  
FOR SANITARY AND AGRICULTURAL WORKS.  
NEWPORT, R.I.

**SANITARY ENGINEERING.**  
**EDWARD S. PHILBRICK, C. E.,**  
12 West St., Boston, Mass.,  
Offers advice and superintendence in CONSTRUCTION OF WORKS,  
PLUMBING, DRAINAGE, AND VENTILATION,  
And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
387 HARRISON AVENUE . . . . . BOSTON,  
SHEET METAL CORNICES, HAYES'S PATENT VENTILATING SKY-LIGHTS, WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

**EXCELSIOR  
ROOF PAINT.**

This paint has been thoroughly tested throughout the Eastern States, and has been found to be a perfect tin or metallic preserver. We warrant it neither to crack nor blister by HEAT or COLD, and to last

**IN ANY CLIMATE TEN YEARS.**

Those desiring to use this valuable preparation upon their buildings, can secure the same by addressing

C. M. WHEELER, J. M. ROOT,  
Toledo, Ohio.

**DECORATORS.**

**W. J. MCPHERSON,**

(Established A. D. 1845.)

**MURAL PAINTER,  
DESIGNER,**

**Ecclesiastical Decorator,**

AND  
**ART STAINED GLASS MANUFACTURER,**

440 TREMONT STREET,  
BOSTON, MASS.

Should you want Ornamental Glass, write for particulars to



**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the subscriber to produce Modern and Medieval styles of work equal to any European examples, for Churches, Private Residences, Halls, etc.

The value of the work is attained by a careful selection of colors in Cathedral and French Glass of his own importation.

Designs in accord with architects' plans furnished at short notice. Reference of work at office

**SAMUEL WEST, 115 Eliot St., Boston**

**FRANK HILL SMITH,**  
171 1/2 TREMONT STREET,  
BOSTON . . . . . MASS.

**COOK, REDDING & CO.**  
149 CONGRESS ST., BOSTON,

**Ornamental, Stained, and Cut Glass,**

FOR  
**Churches, Public Buildings, and  
Private Residences.**

*Raphael and Michelangelo.*

A Critical and Biographical Essay. By CHARLES C. PERKINS. 8vo. Many Illustrations, including several Heliotypes. \$5.00.

The long devotion of Mr Perkins to the study of art has borne noble fruit in this beautiful volume. The idea of combining in one work a series of interlinked sketches of the two great representative artists of the age of Julius II. and Leo X. was in every respect fortunate; for they respectively illustrate power and beauty, sportive and earnest labor, as no other contemporaries. . . . His style is that of a scholar and a man of taste—simple, lucid, graceful, and even throughout. It has much of the quality of that of Hermann Grimm, in his two similar biographies. The profuse illustrations—although some of them are rather coarsely printed—are a positive boon to the reader.—*New York Tribune.*

\* \* \* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

**HOUGHTON, OSGOOD AND COMPANY, Boston.**

**DECORATORS.**

**JOHN LAFARGE,**  
MURAL DECORATION,  
51 W. Tenth St., New York and Newport, R. I.

**SOCIETY OF DECORATIVE ART.**  
4 East 20th Street,  
NEW YORK.

The Society is prepared to undertake every kind of Decorative Needle-Work, and special attention is paid to the restoration of Antique Embroidery.

Special terms are made and careful estimates given to Artists, Architects, and Decorators generally, who are assured that their designs will be carefully reproduced and their directions carefully followed.

Orders are earnestly solicited.  
The Society has arranged with Mr. RUSSELL STUBBS, Architect, for the Exhibition and Sale of his well-known Wall Papers. Some of these are faithful reproductions of Japanese decorative papers; some are taken from Oriental and other stuffs; some are of original design. New patterns will be added from time to time.

**Fresco Decoration.**

**EMMART & QUARTLEY,**

Designers, Decorators, and Painters,  
32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate work on hand or made to order. No. 1210 Ridge Avenue. JOSEPH S. MILLER, successor to Wilson & Miller, Philadelphia, Pa. Send for Illustrated Price-List

**Donald MacDonald,**

**GLASS STAINER AND DECORATOR**

No. 6 Hayward Place,

BOSTON



**INLAID WOOD FLOORS.**  
ORNAMENTAL WOOD BORDERS.  
Designs and Estimates free.  
National Wood Manuf'g Co.,  
850 Broadway, near 23d St., New York

**PHILIP A. BUTLER,**  
DECORATOR AND DESIGNER,  
No. 17 FERRISBTON SQUARE,  
BOSTON.

**HENRY B. JONES & CO.**  
IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS,  
612 WASHINGTON STREET, BOSTON.

(Established 1848.)  
**L. HABERSTROH & SON,**  
FRESCO PAINTERS,  
and INTERIOR DECORATORS,  
No. 11 School Street, BOSTON.

*Discoveries at Ephesus.*

Including the Site and Remains of the Great Temple of Diana. By J. T. WOOD, F. S. A., Fellow of the Royal Institute of British Architects. With numerous Illustrations from Original Drawings and Photographs. Imperial 8vo. Gilt top, beveled boards. \$20.00.

The story that the explorer here tells has all the fascination of heroic romance. He is able to give accurate elevations of the building, together with interesting drawings of many of its bas-reliefs and other ornamental parts. He has unearthed also the Odeum or lyric theatre of Ephesus, and the great theatre, laying bare their seats, aisles, stage, etc., and discovering there very many inscriptions of great historical value, which are now in the British Museum. . . . The book is one of surpassing interest.—*New York Evening Post.*

Mr. Wood's results have been, if not splendid, at least solid and of imperishable value.—*London Academy.*

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa (Can.)	Philadelphia.	San Francisco	St. Louis.
1 BRICKLAYER.....	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2 Brick Mason (Fronts).....	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50		3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00		3.00
3 CARPENTER.....	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25		1.50 @ 2.00
4 Cabinet Maker.....	2.50 @ 3.25		1.75 @ 2.25			1.50 @ 3.00	1.50 @ 2.00			
5 Finisher.....	2.00 @ 2.50		1.50 @ 2.00		1.50 @ 2.00	1.50 @ 3.00	1.25 @ 1.75			1.50 @ 2.00
6 FOUNDRYMAN.....			1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50			2.25 @ 2.50
7 Blacksmith.....	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 2.00			1.50 @ 2.50
8 Whitesmith.....			1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.75			
9 Galvanized Iron Worker.....	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00			2.25 @ 2.50
10 GAS FITTER.....	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00			2.00 @ 3.00
11 LABORER.....	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50		1.00 @ 2.00
12 PAINTER.....	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13 Glasser.....		2.00 @ 2.50	1.75 @ 2.00			1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50		
14 Grainer.....	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00		2.00 @ 3.00	1.75 @ 2.50			3.50
15 Paper-Hanger.....	.75 @ 2.50		per roll.		15c. pr. roll.	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00
16 PLASTERER.....	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00		2.00 @ 2.50	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00		2.25 @ 2.75
17 Stucco-Worker.....	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	1.50 @ 2.50		2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
18 PLUMBER.....	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.50	2.50 @ 3.50	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50			3.50 @ 3.50
19 QUARRYMAN.....		3.00 @ 3.50	1.10 @ 1.25		1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20 Stone Mason.....	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21 Carver.....	3.00	3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75	3.00	2.00 @ 2.50	3.50 @ 6.00	2.75 @ 3.25		
22 Polisher and Washers.....		2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75		1.50 @ 2.50	1.00 @ 1.25	2.25 @ 2.50		
23 Rubber.....	1.50 @ 2.00	1.75 @ 1.90	1.25 @ 1.25		1.90 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75		
24 Stone-Cutter.....	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50		2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.75		
25 Stone-Setter.....	3.00	2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00		2.75 @ 3.00	1.50 @ 2.00	2.25 @ 2.75		2.00 @ 2.50
26 ROOFER (Tin).....	2.00 @ 2.35	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25		2.00 @ 2.25
27 Slatier.....	2.50 @ 3.00	2.00 @ 2.25	2.00 @ 2.25	3.50 @ 4.00		2.00 @ 2.25	1.25 @ 2.00	1.75 @ 2.25		3.00
28 STAIR BUILDER.....	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25			1.50 @ 2.50
29 STEAM FITTER.....		2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00

AMERICAN ARCHITECT AND BUILDING NEWS.

PRIZES.

The attention of draughtsmen and architectural students is directed to the following announcement of a way in which valuable and useful books can be added to their professional library.

SUBSCRIPTION PRIZES.

The Publishers will send, postpaid, the following prizes to the draughtsman, student, or regular canvasser, who, complying with the conditions, shall secure subscribers for the American Architect and Building News:—

- I. For two new subscribers, a year's subscription to the American Architect and Building News..... \$6.00
- Or, "Story of a House," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00
- Or, "Annals of a Fortress," translated from the French of M. Viollet-le-Duc, illustrated, price..... 5.00
- II. For four new subscribers, a bound volume of the American Architect and Building News, vol. i. or ii., price..... 9.00
- Or, "Examples of Ancient and Modern Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 8.00
- Or, "Discourses on Architecture," translated from the French of M. Viollet-le-Duc, illustrated, price..... 8.00
- III. For eight new subscribers, both bound volumes of the American Architect and Building News, price..... \$18.00
- Or, "Gothic Forms applied to Furniture, etc.," by B. J. Talbert, illustrated by 21 folio plates, price..... 15.00
- Or, "Art Foliage for Sculpture and Decoration," by J. K. Colling, royal quarto, illustrated by 72 plates, price..... 15.00
- Or, "Examples of Modern Architecture, Ecclesiastical and Domestic," being designs by Messrs. Scott, Street, Liddon, and other noted architects, illustrated by 64 quarto plates, price, 15.00
- IV. For fifteen new subscribers, the "Decoration and Ornamentation of the Nineteenth Century," by Liénard, illustrated by 100 folio plates, price..... 27.00

In lieu of these books the canvasser may obtain books of equal value selected from our trade list, or may obtain as equivalent the value of the prize in Heliotype engravings, selected from our collection, which numbers over three hundred.

The conditions to be observed are:—

1. The subscribers must in all cases be new subscribers.
2. The subscription must be paid in advance directly to the Publishers by check or money order; but in no case to the canvasser.
3. If canvassers adopt the method of sending to us one subscriber at a time, they must state at such time for which one of the before-mentioned prizes they are canvassing.
4. The prizes will not be delivered until all subscribers have paid in full

N.B. — These prizes are not cumulative; i. e., a canvasser who sends us fifteen new subscribers cannot claim successively the prizes I, II, III, and IV; or in other words, to obtain all four prizes a canvasser must send us twenty-nine new subscribers.

A canvasser who has stated that he is trying to secure one of the highest prizes may in the case of failure claim such lesser prize as is warranted by the number of subscriptions actually paid.

No claims will be allowed for subscriptions secured before Jan. 1, 1873.

HOUGHTON, OSGOOD AND COMPANY, Publishers, Boston.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

CALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States.

Our twenty years' experience, and the numerous contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO., 72 & 74 West Monroe St. Chicago, Ill.



**AUSTIN'S PATENT EXPANDING CONDUCTOR**  
CORRUGATED  
**RAIN-SPOUT**  
MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS.  
Regular Sizes, 2, 3, 4, 5 & 6 Inch.  
SPECIAL SIZES MANUFACTURE TO ORDER.  
**AUSTIN, OBDYKE & CO.**  
SOLE MANUFACTURERS.  
1705 & 1725 CHESTNUT STREET.  
PHILADELPHIA, PENNA.

WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH.

- PRINCIPAL AGENTS.
- M. Halliday
  - Hicks & Badger
  - James Berry
  - George W. Pitkin & Co.
  - Wasson & Martin
  - McLeod, Beardon & Co.
  - W. H. Scott
  - Kittledge Cornice Co.
  - J. W. Jordan
  - B. G. Carpenter & Co.
  - T. W. Irwin
  - Sellew & Co.
  - New York City
  - Boston, Mass.
  - Buffalo, N. Y.
  - Chicago, Ill.
  - Albany, N. Y.
  - Troy, N. Y.
  - Portland, Me.
  - Salem, G.
  - Worcester, Mass.
  - Wilkesbarre, Penn.
  - Alleghany City, Penn.
  - Cincinnati, Ohio

TILTON'S HAND-BOOKS OF DECORATIVE FORM. No. 1.

GREEK ORNAMENT.

Illustrated with TWELVE PLATES printed in the ORIGINAL COLORS. Edited by WILLIAM R. WARE, Professor of Architecture in the Mass. Institute of Technology.

This is a most valuable publication for Architects, Architectural Students, Designers, Interior Decorators, Frescoers, Ornamental Painters, etc.

Sent by mail on receipt of price, \$1.00, by

S. W. TILTON & CO., Publishers, 333 Washington St., Boston.



**NONESUCH Self-Locking AND Burglar-Proof Window Locks.**

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.

Patented July 10th, 1877

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the art-workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Mediæval Foliage.

**EXAMPLES OF ENGLISH MEDIÆVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLIS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLÉSIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. PANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1 50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist*, Boston.

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courier.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVES. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIENARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11½ x 15½ inches), \$27 00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOthic FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOLETTÉ-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

The works of the learned and distinguished French Architect, EUGÈNE VIOLETTÉ-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

## Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — *EUGÈNE BENSON, in The College Courier.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

## The New York Sketch-Book of Architecture.

3 vols., 4to, \$6.50 each.

We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

## The American Architect and Building News.

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\*.\* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers.

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

(Reported for the American Architect and Building News.)

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table with columns for material names (BRICK, FRONTS, CEMENT, FIRE BRICK, DOORS) and prices.

Table with columns for material names (ROSENDALE, PORTLAND, ROMAN, KEENE'S) and prices.

Table with columns for material names (RAISED PANELS, DOORS) and prices.

Table with columns for material names (BLINDS, WINDOW FRAMES) and prices.

Table with columns for material names (HAIR, LATH, LIME) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (STONE, SLATE) and prices.

Table with columns for material names (TIN PLATES, LEAD) and prices.

Table with columns for material names (IRON, ZINC) and prices.

BOSTON.

Table with columns for material names (FIRE BRICK, BUILDING BRICKS) and prices.

Table with columns for material names (BUILDING STONE, LUMBER) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (MORTISE LOCKS, DOR KNOBS) and prices.

Table with columns for material names (SASH FASTS, SCREWS) and prices.

Table with columns for material names (IRON, ZINC) and prices.

CHICAGO.

Table with columns for material names (BRICK, LIME, AND CEMENT) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (LUMBER, PAINTS AND OILS) and prices.

Table with columns for material names (C ROOFING, SOLDER) and prices.

Table with columns for material names (SHEET ZINC, SHEET IRON) and prices.

Table with columns for material names (WIRE, NAILS) and prices.

Table with columns for material names (PAINTS AND COLORS, OILS) and prices.

PHILADELPHIA.

Table with columns for material names (WHOLESALE PRICES, IRON) and prices.

Table with columns for material names (WHOLESALE PRICES, IRON) and prices.

Table with columns for material names (WHOLESALE PRICES, IRON) and prices.

Table with columns for material names (WHOLESALE PRICES, IRON) and prices.

Table with columns for material names (WHOLESALE PRICES, IRON) and prices.

Table with columns for material names (WHOLESALE PRICES, IRON) and prices.

Table with columns for material names (WHOLESALE PRICES, IRON) and prices.

Table with columns for material names (WHOLESALE PRICES, IRON) and prices.

Table with columns for material names (WHOLESALE PRICES, IRON) and prices.

Table with columns for material names (WHOLESALE PRICES, IRON) and prices.

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms.

CREOSOTED WOOD. PREPARED AT THE Hayford Patent Creosote Wood Preserving Works. EDWARD R. ANDREWS, Proprietor.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: 'The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper.'

**FISKE & COLEMAN,**  
*New England Agents for*  
**AKRON**  
 SEWER PIPE COMPANY.



The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
 AKRON ROOFING TILES,  
 VITRIFIED BUILDING BLOCKS,  
 OHIO SAWED FLAGGING  
 ENAMELED BRICK,  
 CHIMNEY TOPS,  
 CEMENT, ETC., ETC

OFFICE, 72 WATER STREET, BOSTON.  
 YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
 217 to 223 W. 51st St., New York.

ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

**ESTABLISHED, 1836.**  
**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Composition Roof known. Also inventors and owners of the following patents:—

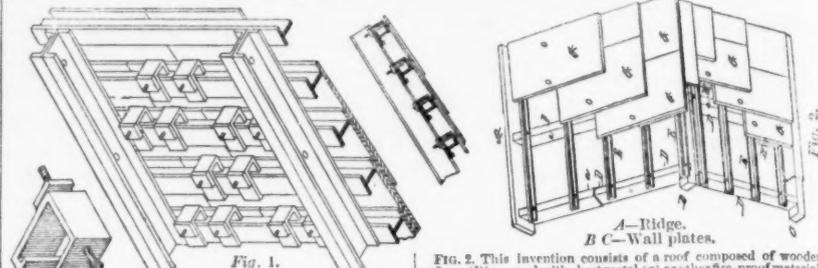
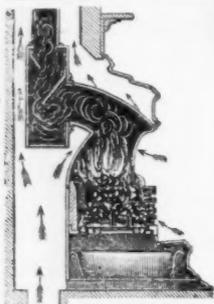


FIG. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the purlins on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

FIG. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or slates (G) or other covering secured thereto by clasps, (Fig. 1) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contact with the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point avoiding condensation, contraction and expansion of roofs formed wholly of iron.



Section of Fire-Place Heater.

**WARMING AND VENTILATION.**

**FIRE ON THE HEARTH.**  
**FIRE-PLACE HEATERS AND STOVES.**

VENTILATION of a Fire-Place. RESERVE FORCE of a Close Stove. CIRCULATION of a Furnace.

Adapted for any kind of Fuel,

And the only Fireplace Heater perfectly adapted for Soft Coal and Wood.

SILVER MEDAL AWARDED, PARIS EXPOSITION, 1878  
 Boston Retail Agency, F. TUDOR & CO., 14 Pemberton Square.

**OPEN STOVE VENTILATING COMPANY,**

115 Fulton and 54 Ann Streets, New York.



Section of Stove.

25 PER CENT. OF CUSTOMARY OUTLAY CAN BE SAVED BY USE OF

**H.W. JOHNS' ASBESTOS LIQUID PAINTS**



Pure, Undiluted Paints, Full Body, and Full U. S. Standard Measure. No other Paints for structural purposes equal these in quality, richness of color, covering capacity, and durability. Sample cards free by mail. ROOF PAINTS for Tin Roofs, Iron Work, etc. FIRE-PROOF PAINTS for Inside Woodwork.

**H. W. JOHNS M'FG CO., 87 Maiden Lane, New York,**  
 Manufacturers of Asbestos Roofing, Boiler Coverings, Sheathings, Cements, etc.

**GAS**

**SPRINGFIELD GAS MACHINE.**  
 Springfield, Mass.: 45 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 316 Pine St., San Francisco. Send for Circular.

**BUHRER'S INFALLIBLE SEWER GAS TRAP.**



The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (B) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.

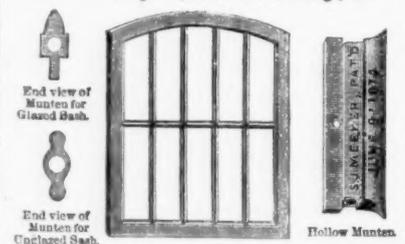
S. BUHRER, Inventor and Manufacturer, Cleveland, Ohio.

WHOLESALE AGENTS.  
 W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O  
 L. WOLFF M'fg Co., 109 & 111 West Lake St., Chicago, Ill  
 HAMBLEN & MATHEWS, 82 & 84 North St., Boston, Mass.  
 C. A. BLESSING, 44 North Fifth St., Philadelphia, Pa.  
 THE J. L. MOTT IRON WORKS, 88 & 90 Beekman St., N. Y.  
 Please send for Circular.

**TO ARCHITECTS.**  
 The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the **SCAGLIOLA AND MAREZZO MARBLE**, which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Vainescoring, Wall, and Altar Work.  
**JAS. T. ALLEN & CO.,**  
 25 North Market Street, Philadelphia.

**D. M. MEEKER & SON'S Malleable Iron Hollow Muntin Window Sash.**

For Insane Hospitals, Fire Proof Buildings, &c.



The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by **D. M. MEEKER & SON,** Newark, N.J.  
 Fine Castings of Malleable and Gray Iron, German Silver and Composition: also Patterns a specialty.

**MAKE your own GAS**

Send for CIRCULAR

**WALWORTH MANUF. CO.**  
 No. 69 Kilby Street, BOSTON, MASS.

GAS GENERATORS, FOR LIGHTING Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.



**BRASS ANDIRONS, FENDERS,**  
 And all kinds of Brass Work, made to order.  
**Grates for Parlor & Reception Rooms,**  
 For hard or soft coal, in every variety.  
 Iron and Brass Fittings for Stables a specialty  
**MURDOCK PARLOR GRATE CO.,**  
 Manufacturers,  
 21 Washington St., Boston.

**CRANE BREED & COMPANY CINCINNATI**

**SAFETY BOILERS**  
 FOR HEATING  
**STEAM AND HOT WATER.**  
 MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RADIATORS, PIPE COILS, REGISTERS, FITTINGS, STEAM PUMPS.

**NON-POISONOUS SILICATE PAINT** { Does not discolor, chalk, or crack off. It is superior to lead. } **PETRIFYING LIQUID** { The only cure for damp walls of churches, dwellings, and public buildings, is the }  
 See article on "Dwellings of the Poor," AM. ARCHITECT, Sept. 21, 1878.  
 Send for Price List and Testimonials.

**HOWARD FLEMING, Sole Agent in the United States,**  
 10 PINE STREET, NEW YORK.

COURT-HOUSES.—PRISONS.

In our issue for November 9 will be printed a special list giving accurate information concerning the court-houses, jails, prisons, etc., now building, or about to be built, in this country and Canada.

Architects, builders, and other informed persons, who have not as yet sent us the information in their possession, are invited to do so without further delay.

BUILDING INTELLIGENCE.

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

STENCH OR BASIN TRAP-VALVE.—W. E. Worth, San Francisco, Cal.

GRATING.—Thomas F. Baker, Cincinnati, O. A rotatable steel core is inclosed in a tube of wrought-iron. For use in prisons.

CARPENTER'S GAUGE.—Emmet H. Dunlap, South Lyon, and G. W. Dunlap, Grand Rapids, Mich.

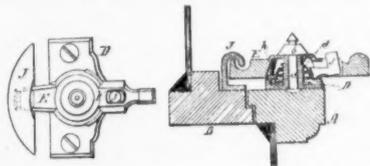
THERMOSTATIC AND ELECTRIC FIRE-ALARM.—Jonathan O. Fowler, Jr., New York, N. Y.

CURTAIN FIXTURE.—Samuel Hodges, Wheeling, W. Va.

LEFT PUMP.—William Loudon, Superior, Neb.

HATCHWAYS.—J. M. Van Osdel, Chicago, Ill.

SASH-LOCK.—William M. Griscorn, Reading, Penn. The peculiarity of this lock lies in the lever E which is in two parts, a locking-part and a lug J, which serves to raise the



lever from its seat, and allows a spiral spring which is coiled about the stem a to swing the lever clear of the locking-flange J on the upper sash.

PNEUMATIC GONG-PULLS.—Henry V. Aiken, Fishkill Landing, N. Y. By the action of a piston the air in a cylinder is compressed and forced through a pipe against a plunger, which is thus made to strike a gong.

WINDOW, DOOR, AND SHUTTER SPRINKLER.—John Bennisson, Galveston, Tex. Is for use in protecting a building from catching fire from a neighboring building in flames.

SEE-BACK SINK.—Charles Copp, New York, N. Y.

BRICK MACHINE.—Cyrus Chambers, Jr., Philadelphia, Penn.

WISE.—Thomas E. Du'ont, Port Jefferson, O.

PERMUTATION LOCK.—Alexander Heilbrun, Cincinnati, Ohio.

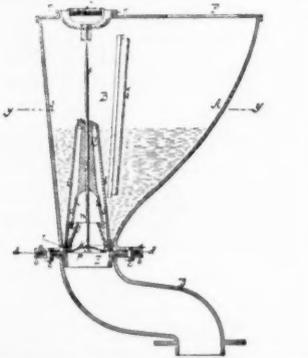
FENDER.—James S. Lester, Atlanta, Ga.

MANUFACTURE OF WHITE LEAD.—John C. Martin, Richmond, England.

WEATHER STRIPS FOR DOOR-SILLS.—George B. Norton, Ellingham, Ill. The weather-strip is located upon the inside of the door, its casting forming a part of the door-sill. As the door is closed a plate attached to the lower corner of the door strikes a curved arm attached to the weather-strip, and turns it up against the door, and as the door is opened it throws the strip down again. A trough in the casting, connecting with outlets extending outside of the door, conducts off any water that may beat in.

VENTILATOR.—Abraham Unger, New York, N. Y. This is a revolving ventilating wheel, the vanes of which are of mica.

WATER-CLOSET.—William Turton, Brooklyn, N. Y. The bowl of this water-closet is cast either in iron or in clay, and is divided into two parts, the bowl proper A and the plunger chamber B, which are separated from one another by the partition C. The bowl is secured to the soil-pipe by the flanges D and is properly packed and screwed. The plunger combines in itself plunger, valve, and overflow. To the lowest end of the stem E is fixed the valve F and the strainer G. When the



handle is raised the whole plunger is raised and the contents of the bowl escape rapidly. When the handle is lowered the plunger comes to a perfect rest on the valve disk F. The overflow takes place through openings in the plunger near the top and escapes through the annular space left between the outer shell A of the plunger and the core. This core has formed in its lower end an inverted cup-like chamber, which closes over the upright nipple I for a certain distance, and thus forms a species of bell-trap which prevents the ingress of sewer gas.

FIRE-ESCAPE.—David F. Hunt, Burlington, Vt. The body is supported in a flexible tube through which the cord passes.

APARATUS FOR HEATING BUILDINGS.—J. Johnson, Lowell, Mass.

PICTURE-FRAME CLAMP.—Edward N. Porter, Hardwick, Vt.

SCREW CUTTING DIE-STOCK.—Truman H. Rose, Miller's Falls, Mass.

CIRCULAR SAW.—G. F. and D. Simonds and A. A. Marshall, Fitchburg, Mass.

JOINTER-CLAMP.—Manfred D. Slocum, Union City, Mich.

COMPLETED BUILDINGS.

ADRIAN, MICH.—The new Roman Catholic Church of St. Joseph, built by the German Catholics, was dedicated October 13. The architect is P. Diehrich, Detroit. It is of brick finished with freestone; is 125 feet long and 45 feet wide. In the rear is a recess for the altar, and a circular tower 100 feet high and 20 feet in diameter. The total cost will be about \$30,000.

BEAVER'S COVE, MD.—The new Catholic church at Beaver's Cove, thirteen miles from Cumberland, was dedicated on Sunday, October 13. It will be in charge of the Capuchin brethren from Cumberland, Md.

BERLIN, ONT.—St. Peter's Lutheran Church, in the English Gothic style, from designs by D. W. Gingrich, architect, was lately dedicated. It measures 52 x 119 with stone basement 13 feet high; the church inside is 37 high, finished with pine and walnut clad. It seats 900. The walls of red brick, with galvanized iron finish. The spire 200 high, slatted with black and a light blue color. Cost, \$20,000.

CHICAGO, ILL.—The First Regiment took possession of its new armory in Jackson Street October 14. Messrs. Wheelock & Clay, architects.

COLUMBUS, O.—On Sunday last the Roman Catholic Cathedral of St. Joseph was dedicated. The building, which is designed in the English Gothic style, has been building during the past ten or twelve years.

NEWARK, O.—The new court-house was dedicated on Saturday last.

NORTHFIELD, MICH.—On Sunday last the new Catholic church was consecrated.

PHILADELPHIA, Pa.—The new Roman Catholic Church of St. Agatha, at Thirty-eighth and Spring Garden streets, was formally dedicated October 20. The building is constructed of light yellow stone from the Fairville quarries, New Jersey, and brown stone finish. The walls of the church are painted in scriptural designs and emblems by Signor Scataglia, of New York. The corner-stone of this building was laid on the feast of the Maternity, in the year 1874.

TEMPLEVILLE, MD.—The Antioch Methodist Episcopal Church of Templeville, Queen Anne's County, was dedicated on Sunday, 13th inst.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Mrs. Mary Schwigg, two-sty building, Philip St.—John C. Parker, two-sty stable, on alley, near Fulton St.—Anton Krigger, three-sty building, cor. Biddle St. and Central Ave.—Jacob Hecht, three-sty dwell., cor. Franklin and Eutaw sts.

Boston.

BUILDING PERMITS.—The following permits have been granted since our last issue:—

BRICK BUILDINGS.

Table with 4 columns: Mechanic, No., Stories, Class, Size. Entry: Samuel J. Tuttle, 1, 1, Boiler House, 21' x 34'.

WOODEN BUILDINGS.

Table with 4 columns: Mechanic, No., Stories, Class, Size. Entries: Ass Burbank, 1, 1, Greenhouse, 30' x 15'; Tobin & McDonald, 1, 1, Cabinet mak-er's shop, 30' x 32'; Laming & Drisko, 1, 1, Store, 32' x 50'; E. E. Piver, 1, 1, Stable, 21' x 17'; L. S. Blake, 1, 1, Stable, 18' x 18'; M. S. Wallis, 1, 1, Boiler House, 20' x 12'; Tobin & McDonald, 1, 1, Stable, 18' x 12'; J. R. Hall, 1, 2, Dwelling, 41' x 32'.

Repairs and alterations active.

HOUSE.—A house for Mr. Rand is to be built on Commonwealth Avenue. It measures 24 by 68 feet. Mr. S. D. Kelley is the architect.

Brooklyn.

BUILDING PERMITS.—Broadway, No. 810, 1 three-sty brick store and dwell., 20' x 45'; owner, A. S. Walsh; builder, Jas. Brittingham.—Floyd St., 2 two-sty frame dwells., 18' 9" x 40'; owner, Anthony Straub, 30 Graham Ave.; builder, George Straub.—Fulton St., No. 1774, 1 two-sty frame store and dwell., 20' x 40'; owner, Mrs. H. Pritchard, 1770 Fulton St.; builder, Robert Given, Jr.—Hart St., 2 three-sty brick one dwells., 20' x 40'; owner and builder, M. C. Baker, 270 Yates Ave.—Melrose St., 1 three-sty frame tenement, 25' x 40'; owner, Henry Schaeffer; builder, Henry Laeller.—President St., 1 two-sty brick dwell., 20' x 40'; owner, Charlot A. Bied; builder, T. H. Bied.—Rapelje St., 1 two-sty brick stable, 20' x 28'; owners, Kern Bros.; builder, Moore & Thompson.—Ninth St. and Gowanus Canal, 1 one-sty brick sulphur factory, 13' 4" x 60'; owner, Daniel H. Gray; architect, Edward Kenny; builder, Patrick J. Carlin.—Ninth St., 8 three-sty brown stone dwells., 18' 9" x 42'; owner, Henry Lansell; architect, A. V. B. Bush; builder, Henry S. Lansell.—Coral Ave., junction De Kalb and Myrtle aves., 1 one-sty frame car-house, 22' x 190'; owner, Brooklyn City and Newtown R. R. Co.—King-lud Ave., cor. Herbert St., 1 two-sty frame store and dwell., 25' x 55'; owner, Julian R. Guthrie; builders, John Farrell and John Numan.—Putnam Ave., 1 two-sty brown stone dwell., 17' x 40'; owner, Michael Walsh, 480 Kosciuszko St.—Stuyvesant Ave., cor. Macon St., 5 three-sty brown stone dwells., 20' x 40'; owner and builder, P. Mullady, 576 Quincey St.; architect, Robert Dixon.—Tompkins Ave., cor. Putnam Ave., 3 three-sty brown stone stores and French flats, 20' x 44'; owner, Michael Walsh, 48 Kosciuszko St.

HOSPITAL.—It is proposed to build a new hospital of St. Mary, for women and children, on St. Mark's Avenue, and covering the whole block between Buffalo and Rochester avenues. The plans for the building have been prepared by Mr. P. C. Keely of this city. Beside the main building, which will have a front of 305 feet, there will be a parochial church and school, and the necessary smaller buildings. It is supposed that the buildings will cost more than \$200,000.

SCHOOL HOUSE.—Mr. J. Morrill is the architect of the new brick school-house now building at the corner of Baltic and Williams avenues. The building measures 52 by 74 feet, and will cost about \$15,000.

Chicago.

BUILDING PERMITS.—Henry Corwith, five-sty building, 204 and 206 Madison St.; cost, \$30,000.—J. V. & C. B. Farwell, three stories on the "Tabernacle," the alterations and improvements to cost \$80,000.—George Watson, four-sty building, 13 La Salle St.; cost, \$5,000.—Downer Bemis Brewing Co., three-sty building, 40 South Park Ave.; cost, \$20,000.—J. F. Woolenack, two-sty dwell., La Salle St.; cost, \$5,000.—Fred. Kollman, two-sty dwells., Leavitt St.; cost, \$4,000.—A. Hagenman, four-sty stone front store, 42 South Clark St.; cost, \$5,000.—W. J. Quan, 5 three-sty stone front dwells., cor. of Ontario and Pine sts.; cost,

\$20,000.—R. W. Hyman, alterations of the Houder Block; cost, \$10,000.—Theodore Freeman, three-sty stone front dwell., 68 Elm St.; cost, \$5,000.—Crilly & Blair, five-sty store, brick front, with stone finish, 140 x 164, on cor. of Dearborn and Monroe sts.; cost \$95,000.—John Philbin, three-sty stone front dwell., La Salle St.; cost, \$5,000.—J. L. Kadi-h, three-sty dwell., 39 Granger St.; cost, \$6,000.—Ladies of the Sacred Heart, chapel, on West Taylor St.; cost, \$18,000.—John H. Ulin, 2 two-sty stone-front dwells., Prairie Ave., near Twenty-eighth St.; cost, \$9,500.—W. A. Passavant, 2 two-sty stone-front dwells., 139 and 141 Dearborn Ave.

CLUB-HOUSE.—The Jesuits' Church in Chicago has laid the corner-stone of a Catholic club-house, which contains a bowling-alley, billiard hall, and society rooms.

Louisville.

BUILDING PERMITS.—Charles H. Shaffer to alter two-sty brick dwell., Chestnut St.; cost, \$1,500.—T. H. Charlton, two-sty brick dwell., College St.; cost, \$2,000.—B. F. Avery & Sons, brick manufactory, Crop St.; cost, \$, 00.

New York.

BUILDING PERMITS.—No. 146 West Seventeenth St., work-shop, 25' x 85', one story; cost, \$775; Jas. H. Laird, owner; Patrick Uheus, builder.—734 East Ninth St., stable, 20' x 15'; cost, \$30; W. Striker, owner; Herman Wild, builder.—Fifty-seventh St., near Ninth Ave., 2 flats, 30' x 100', five stories; cost, \$16,000 each; brown stone fronts; V. K. Stevenson, owner; D. & J. Jardine, architects; Sinclair & Wells, builders.—One Hundred and Sixteenth St., near Second Ave., 6 first-class dwells., 16' x 45'; cost, \$10,000 each; Isaac E. Wright, owner and builder.—J. H. Valentine, cor. Cortlandt Ave. and One Hundred and Sixty-first St., second class dwell., 21' x 50'; cost, \$3,000; John Deitz, owner; H. Holtveder, builder.—Cor. Lexington Ave. and Seventy-fourth St., 8 first-class dwells., brown stone fronts, 18' x 45'; cost, \$9,500 each; W. H. Browning, owner and builder; J. B. Stone, architect.—210 Eleventh Ave., factory, 13' x 31'; cost, \$200; John W. Holgate, owner; Thos. Cassidy, builder.—One Hundred and Twenty-fifth St., near Fourth Ave., third-class store; wood; 25' x 52'; cost, \$1,500; Dr. Raybold, owner; J. E. Turhane, architect; Jos. Thompson, builder.—Avenue A, near Seventy-fourth St., second-class store, 20' x 35'; cost, \$2,000; J. Hohn, owner; John Brunar, architect.—100 Madison St., tenement, 25' x 82'; five stories; cost, \$9,000; Morris Alexander, owner; Julius Bockel, architect; Matthew Powers, builder.—239 Madison St., tenement, 25' x 80'; cost, \$12,000; Thos. Baer, owner; J. B. Snook, architect; Jackson & Johnson, builders.—One Hundred and Fifty-second St., near Tenth Ave., 2 first-class dwells., 20' x 45'; cost, \$7,000 each; Jas. McKenney, owner; J. E. M. Re, architect; Isaac A. Hofer, builder.—Lafayette St., near Marble Place, frame dwell., 18' x 22'; cost, \$750; P. Murphy, owner; H. A. Sherwood, builder.—McCowles Dam Road, near Walnut St., 2 ice-houses, 48' x 90'; cost, \$1,000; Geo. S. Gable, owner; A. Spena, architect.—Seventy-fourth St., near Lexington Ave., 2 first-class dwells., brown stone fronts, 17' x 48'; cost, \$9,000; John McGlynn, owner; J. C. Burges, architect.—Cor. Thirty-ninth St. and Broadway, 10 third-class stores, frame, 12' x 30'; cost, \$1,800; J. Johnson, owner.—D. & J. Jardine, architects; W. H. & C. Gedney, builders.—One Hundred and Nineteenth St., near Avenue A, second-class dwell., 16' x 43'; cost, \$4,500; T. Dunn, owner and builder.—118 West Twenty-third St., flat, 25' x 90'; cost, \$21,000; B. F. Spink, owner and architect; A. A. Andrus & Son, builders.—605 East Fifteenth St., tenement, 25' x 60'; cost, \$10,000; R. Deves, owner and builder.—14 Renwick St. (rear), stable, 25' x 15'; cost, \$500; P. Kennedy, builder; M. Bell, owner.—Fifty-seventh St., near Sixth Ave., 5 first-class dwells., brown stone front; cost, \$17,500 each; 20' x 45'; Jas. Meagher, owner and builder; W. H. Home, architect.—Madison Ave., near Forty-eighth St., second-class store, 45' x 150', one-sty; cost, \$10,000; Am. Express Co., owners; J. H. C. Innes, architect; D. Banker, builder.—Eighty-sixth St. and Second Ave., outhouse in Hebrew Orphan Asylum grounds, 40' x 21'; cost, \$1,200; Thom & Wilson, architects; Jas. A. Frame, builder.—Eighty-third St., near First Ave., 3 tenements, brown stone fronts, 20' x 50'; cost, \$10,000 each; Julius Gilzig, owner; John C. Burns, architect; Jas. Frame, builder.—415 East One Hundred and Seventeenth St., stable, 25' x 25'; cost, \$600; Julia and Thos. Malloy, owners and builders.—432 Washington St., second-class store, 22' x 80'; three stories; cost, \$3,000; John Coyout, owner; W. M. Everett, builder.—Third Ave. and One Hundred and Forty-eighth St., second-class store, 20' x 50'; cost, \$5,800; Sig Hecht, owner; Henry Paring, architect; A. Kaiser, builder.—First Ave., near Sixty-first St., tenement, 20' x 50'; cost, \$5,000; M. Reig, owner; J. hu Brandt, architect; Fred. Schuck, builder.—536 new buildings are now in process of construction, and 130 buildings are in course of alteration.

THE BUILDING DEPARTMENT.—Mr. Walter W. Adams, Superintendent of Buildings, reports the following as the operations of his bureau for the week ending October 12: Nineteen violations of law were reported; 21 unsafe buildings were reported and 13 were made safe; 3 violations were sent for prosecution to the attorney of the board; 15 violations and 51 unsafe building notices were served; 22 buildings were reported as requiring fire-escapes, 6 were provided; 61 notices were issued to provide fire-escapes; plans for the erection of 10 new buildings, embracing 13 structures, were filed, of which 14 were first-class dwellings; 15 plans previously filed were passed upon, 6 were approved, 3 amended and approved, and 4 are still pending.

Philadelphia.

BUILDING PERMITS.—James Young, 2 three-sty dwells., 18' x 30', Howard St.—Samuel Henderson, two-sty dwell., 12' x 28', Hope St.—J. D. Caldwell, two-sty factory, 37' x 50', Miller St.—Richards & Shourds, three-sty bakery, 20' x 40', Craven St.—Eliza J. Divine, 3 two-sty dwells., 16' x 40', cor. Reed and Mt. Holly sts.—John Wilson, 2 two-sty dwells., 16' x 36', Millin St.—J. A. McGee, two-sty dwell., 18' x 30', No. 1835 Gettys St.—Wm. Goodieville, three-sty dwell., 16' 6" x 49', Centre St.—John Wilson, two-sty stable, 16' x 32', Hoffman St.—Peter Burko, two-sty store and dwell., 16' x 40', cor. Fifth and Millin sts.—Marrin, three-sty factory; 41' x 35', cor. Twelfth St. and Washington Ave.—Lewis & Gaubert, 3 two-sty dwells., 14' x 28', Mill-hall St.—Elizabeth Frazer, three-sty store and dwell., 16' x 30', No. 1023 Fourth Street.—John Taylor, one-sty warehouse, 10' x 35', cor. Seventh & Christian sts.—Jas. B. Doyle, three-sty store, 16' x 77', No. 806 Chestnut St.—A. A. Campbell, four-sty store and dwell., 17' x 48', No. 104 South Second St.—J. M. Kirby, one-sty market-house, 30' x 38', cor. Germantown Ave. and Seymour St., Germantown.

CHURCH.—The corner-stone of the Eden M. E. Church, Lehigh Avenue, near Fifth, was laid October 17.

STORE.—The new brick store, 8 1/2 Chestnut Street, is building from the designs of Messrs. Wilson Bros. & Co.

CHAPEL.—Mr. Edward Hazlehurst is the architect of the chapel of the Church of the Reconciliation at Thirteenth and Tacker sts. Size 64 by 55 feet. It is built of brick, with North River flagstone finish; cost, \$6,750.

CORRECTION.—We are requested to state that the stone used for the front of Messrs. Strawbridge & Clothier's new store is not Nova Scotia Pictou stone, but is Dorchester freestone.

## St. Louis.

**BUILDING PERMITS.**—Thirty-two permits have been issued for the week ending October 18, 1878. Eleven of these are for unimportant frame structures; the rest are for brick buildings, all small. But two of these exceed \$2,000 in value. They are as follows:—

Owners.	Use.	Stories.	Rooms.	Cost.
J. T. De Mass.	Dwelling.	3	11	\$5,000
S. Prag.	Store.	2	8	2,100

## Washington, D. C.

**BUILDING PERMITS.**—S. Shellbarger, four-sty and basement dwell., and two-sty stable, Seventeenth St.; cost, \$15,000.—Samuel Ramsey, to build a three-sty dwell., on H St.; cost, \$2,500.—Little Sisters of the Poor, brick carriage house on H St.; cost, \$200.—Peter Scheuch, two-sty dwell., on Eighth St.; cost, \$950.

**HOUSE.**—Messrs. Cbot & Chandler, of Boston, are the architects of a house for Professor Henry, of the Smithsonian Institution; cost, \$15,000.

**MONUMENT.**—The monument to the memory of the late Vice-President Wilson has just been put in place in the rear of the chapel on the grounds of the Soldiers' Home at Washington. It is of granite.

**MUSICAL CONSERVATORY.**—The project of building a National Musical Conservatory here is growing apace. The general committee report that all the musical societies have united in one association to promote this object. Twenty thousand dollars have been subscribed. Mr. Corcoran has promised \$50,000 if \$200,000 can be raised. A committee has been appointed to determine upon a site.

## General Notes.

**ATLANTIC CITY, N. J.**—It is proposed to build a Presbyterian chapel for use in the winter, as the church used in summer is found to be too large and too difficult to heat.

**AUBURNDALE, MASS.**—The M. E. chapel is being enlarged under the direction of Mr. C. E. Parker, of Boston, architect. A tower and transepts will be added. Garey, of Newton Centre, is the builder.

**BERLIN, ONT.**—The jail and jailer's house, in the early English style, are now nearly finished; D. W. Gingrich, architect, of Waterloo; cost, \$8,000.—The corner-stone of the Methodist church in Berlin has been laid. It was an old chapel, but is under repair and enlargement. It measures 55' x 60'. The estimated cost is \$3,500.

**CLINTON, MASS.**—A house is building for the agent of the Lancaster Mills. J. B. Wilson, of Charlestown, is the builder. Messrs. Cbot & Chandler, of Boston, architects; cost, \$14,000.

**COLUMBUS, O.**—A part of the contracts for the improvement of the city hall have already been let.

**CUMBERLAND, R. I.**—The Louisa Company are now erecting a large ice-house on the overflowed meadow land east of the Providence and Worcester railroad track, half a mile north of the depot. Its size is 120 feet long and 40 feet wide, with a stationary engine to haul the ice in from the pond when cut. Its capacity will exceed 2,500 tons.

**EAST PROVIDENCE, R. I.**—E. W. Pierce, of Providence, has made arrangements for the erection of a country house.

**ESSEX, MASS.**—Mr. Henry W. Mears has purchased the Hardy rope-walk, and will build an addition of one hundred and twenty-five feet.

**INDIANAPOLIS, IND.**—Kannacher & Denig now have twenty-five men at work on the foundation concrete of the State-house, which will be made with Howe's Cave Cement, from Scholastic County, New York. Contracts for stone have been closed with the following parties: Henry Wolfe & Co. and Hicks, Holmes & Co., of Jennings County; John Lowe, Decatur County; B. Schwartzler, Owen County. Schwartzler will furnish broken rock for the concrete, and the others broken and foundation stone.

**KANKAKEE, ILL.**—The Illinois State Hospital buildings are nearly ready for the roof, which is expected to be on in a month or less. The boiler-house, laundry-building, engine-house, gas and water works, are already roofed in, and the interiors are being finished and apparatus being put in. The drainage is finished, or very nearly so. All the exterior walls are of rock-faced stone-work. The mason work was commenced in March last by the contractor, James Lillie. It is expected to have the work done by the first of next year. The architect is James K. Willett, of Chicago.

**MARLBOROUGH, MASS.**—A force of government workmen is engaged in building a new dwelling house for the light-keeper at the neck. It is rumored that a new light-house will be built in the spring.

**MACTON, WIS.**—The Baptists have let the contract for a new brick church.

**NEW ALBANY, IND.**—Mrs. M. Mantel is building two cottages on Vincennes St., near the woolen mill.

**PITTSBURGH, PENN.**—The work of remodeling the new penitentiary is going on rapidly.

**QUINCY, MASS.**—A house for Mr. G. A. Barker is nearly completed; cost, \$7,000. Mr. Hancock is the carpenter. Mr. C. E. Parker, of Boston, is the architect.

**RICHMOND, VA.**—The new warehouse, No. 1315, now building on Cary Street, near Palmer, by Mr. James Gray, will fill up the only remaining gap caused by the fire of 1865 in the block between Thirteenth and Cary and Cary and Virginia streets.

**SAN FRANCISCO, CAL.**—Work on the new military quarters at the Presidio is progressing fast. New fronts are being built to the cottages occupied by the officers and their families.—The corner-stone of the B'nal Brith Hall, Eld St., between Mission and Taylor, has been laid. The building will be of brick, four stories, and will cost about \$75,000.

**SEKONK, MASS.**—Mr. Gardner is building a French-roofed, two-story house a short distance from Munroe's Tavern.—Mr. Follett is building a cottage on the Warren Road.

**SHARON, CONN.**—Dwight Hotchkiss is putting up a new house; Palliser, Palliser & Co., architects; cost, \$3,500.

**SOMERVILLE, MASS.**—The town hall is to be strengthened by the introduction of a set of iron columns, extending from the basement up to the third story, supporting iron girders. The cost will be about \$13,000. G. T. Burnham & Co. are the contractors. Mr. S. D. Kelley, of Boston, is the architect.

**SPRINGFIELD, ILL.**—Winfield Freeman has contracted for building a two-story frame cottage containing eight rooms, laundry, etc., on corner Monroe and Walnut streets; cost, \$3,000; George H. Helme, architect; J. H. Porter, contractor.

**SPRINGFIELD, MO.**—Two-story church, designed in early Gothic by Raeder & Ramsey architects, St. Louis, for the Calvary Presbyterian congregation; is to seat 430 persons. Shape of plan, Greek cross, near stem octagonal; extreme width, 32 feet, extreme length, 74 feet, height of basement, 13 feet in clear, height of audience room, 18 feet at sides, and 32 feet in centre; tower to line of cornice, 58 feet high, steeple from cornice to pinnacle, 51 feet high. Basement built of limestone, broken ashlar, upper parts of brick with gray sandstone trimmings. Estimated cost, \$14,000.

**STERLING, ILL.**—Mr. N. Carpenter is soon to erect a ten-room cottage at a cost of \$4,000; Palliser, Palliser & Co., Bridgeport, Conn., architects.

**STONINGTON, R. I.**—N. H. Gates, building contractor, is erecting a two-story building for E. Tift, 22 x 50 feet, the lower floor to be used for a dry-goods store. The building stands on Water St.

**TOLLAND, CONN.**—F. H. Underwood is building a new house; work is being done by the day; Palliser, Palliser & Co., Bridgeport, Conn., architects; cost, \$7,500.

**TOPEKA, KS.**—The plans for the government building here have been completed, and proposals invited for doing the excavating. It is the intention to put in the foundations and basement story this fall.

**TROY, N. Y.**—Martin Payne will build the new dock for the city at the foot of Division Street. The Troy and Boston Dock is nearly completed.

**VILLA NOVA, PENN.**—Messrs. Wilson Bros. & Co., of Philadelphia, are the architects of the new stone dwelling now building for Edwin Smith, Esq.

**WATERBURY, CONN.**—Building operations active; the following buildings are just commenced: Two frame houses on Prospect St.; owner, F. L. Adams; carpenter, E. Armstrong; mason, Gilbert & Co.; R. Hill, architect; cost, \$3,500 each.—Block of 5 brick dwells., cor. Willow and East Main sts.; owner, J. D. Kingsbury; carpenter, Geo. Tracey; mason, Chaffield Bros.; plumbing, Booth & Son; M. L. Fritchard, architect; cost, \$15,000.—Frame dw-ll., Prospect St.; C. M. Platt; owner, Eldridge & Hurlbutt, builders; B. Hill, architect; cost, \$6,500.—Three stores and tenements, Bank St.; owners, Atkins & Latham; mason, Jno. Gaffney; carpenter work by owners; R. Hill, architect; cost, \$14,000.—Residence on Hillside Ave. for Hon. Chas. Benedict; carpenter, A. B. West; mason, J. Rutherford; sister, McLevy; Palliser, Palliser & Co., Bridgeport, Conn., architects; cost, \$20,000.—Residence on Hillside Ave. for Mrs. Mitchell; also, stable and carriage-house for Mrs. Mitchell; carpenter, A. B. West; mason, J. Rutherford; sister, McLevy; Palliser, Palliser & Co., Bridgeport, Conn., architects; cost, \$15,000.

**WELLSINGTON, O.**—The Congregational church, of brick sandstone finish, will cost \$25,000; B. J. Bartlett, architect.

**WILLIMANTIC, CONN.**—Messrs. Whiting & Hayden have broken ground for a new block on the vacant lot next to the bank build-ig.

**WILMINGTON, DEL.**—The Odd Fellows' Hall at Third and King streets is being thoroughly overhauled and remodelled. Wm. H. Foull, Esq., is the contractor.—On Sunday, October 13, the corner-stone of the A. M. E. church was laid.

**WINCHESTER, MASS.**—Messrs. Ober & Rand, of Boston, are the architects of a house for Mr. W. J. Stewart.

**WOOSOCKET, R. I.**—The contract for building the school-house in District No. 9, Bernon, has been awarded to C. B. Aldrich. At a recent meeting in District No. 8, Globe, the committee to prospect for and purchase a lot reported they had bought the Dr. Ballou lot, 100 by 150 feet, at fourteen cents per foot. They also showed plans and specifications and bids for a school-house, which were put into the hands of a building committee, consisting of Wm. E. Grant, Gilbert E. Staples, and Charles Genereux, and the meeting adjourned for one week.

**YORK, ME.**—Work has commenced on the new light-house on the Nubble at Cape Neddick. It is expected to be ready before winter sets in.

## Publishers' Department.

## The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY  
HOUGHTON, OSGOOD & CO.,  
WINTHROP SQUARE, BOSTON.  
NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year; \$6.00 in advance.

## CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,

WITH

Houghton, Osgood & Co.'s other Periodicals.  
THE ARCHITECT and \*ATLANTIC MONTHLY...\$9.00  
THE ARCHITECT and THE REPORTER...15.00  
THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL...10.00  
THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE...7.00  
\*N. B.—The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

☞ Payments should be made directly to the Publishers, either by draft or by post office order.

HOUGHTON, OSGOOD & CO., Publishers,  
WINTHROP SQUARE, BOSTON.

## BUILDING SPECIALTIES, Etc.

—The Dorchester Union Freestone Co., of 24 Pine Street, New York, are supplying stone for the interior of the State Capitol at Albany, N. Y.

—Gheer's Single and Double Acting Spring Butts are made by the Cowles Hardware Company of Unionville, Conn. The following points of superiority are claimed for this article by the manufacturers: First, These butts differ from all others in principle and action, combining the toggle arm with the spiral spring, which, by actual test, gives out from 60 to 80 per cent more force at the closing point than when opened to a right angle, thus holding the door firmly in place, and not allowing it to be moved by currents of air.

Second, They will allow the door to be opened clear back to the wall, and the spring retains it there; thus the toggle and spring fill two important offices,—that of holding the door closed and also open. Third, It is impossible to strain the spring, as there is not more than 60 per cent of its elasticity used in swinging the door clear back to the wall; therefore it will not become weak by constant use. Fourth, The bearings are all faced with hardened steel, which is much superior to common cast-iron or brass, both in regard to friction and durability. Fifth, They will hold the door firmly up to its place on the top and not allow it to open off, thus obviating all danger to sag. Sixth, These butts are so constructed that there is no right and left hand. When adjusted to the door they need no taking up or letting out, as they are perfectly adapted for either summer or winter, without any change whatever.

*A. Hall & Sons*  
Manufacturers of  
*Architectural Terra-Cotta,*  
*Buff and Colored Brick, Fire Brick*  
*Established 1816, North Amboy, N. J.*

## ARCHITECTURAL IRON WORKS.

YOUNGLOVE & CO., Propr's.  
CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CRESTING, ETC

Estimates promptly furnished.

(Established 1848.)

## MARKET ST. ARCHITECTURAL FOUNDRY

AND

## IRON WORKS.

## SNEAD &amp; CO..

LOUISVILLE, KY.

Makers of every description of Iron Work for Buildings.

## WANTS.

**POSITION** as agent for a stone contractor, or for a company manufacturing specialties for building purposes, by a young man experienced in business, or any situation requiring a knowledge of architects' plans, designing, scale, and detail drawings, preparing bills of quantities, etc. An extensive acquaintance among architects, and means of keeping informed of building news in New York and Boston.—Address O WESLEY, 246 E. 25th St., New York.

**DRAUGHTSMAN.** Wants a situation in an Architect's office. Willing to work for low salary. Address H. F. BURR, Medford, Mass.

RUBY & PEARL  
Surface-Burning Self-Feeding

## FURNACES.

CLINTON } Wrought Iron, with Brick Lined Fire-Pot.

CRYSTAL } Wrought Iron, with Cast Iron Fire-Pot.

MANUFACTURED BY

## FULLER, WARREN &amp; CO.,

Troy, New York, Cleveland, Chicago.

THE COWLES HARDWARE CO.  
UNIONVILLE, CONN., U. S. A.

MANUFACTURERS OF

(GHEER'S)

Single & Double Acting SPRING BUTTS.  
The Latest and Best.

Investigate before you purchase.

Large quantities already in use and giving universal satisfaction.

Read the following points of superiority:—

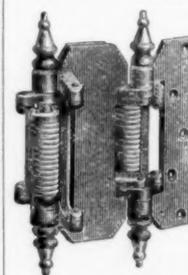
These Spring Butts differ in principle from all others; having a Spiral Spring for power, and Toggles for Levers in combination, and when applied to the leaves of the Butts, exert

their greatest Power when the door is closed, and are the only Butts in existence that will by actual test perform the labor claimed for them.

They offer less resistance the wider the door is opened, until a point past the right angle is reached, where the power is reversed and the door held open.

They will not allow the door to sag. We have spared no pains to furnish a perfect article, and trust that their superior merits will demand a preference.

Send for Price Lists.



## NOTICE.

In our issue for November 9 will be printed a special list giving accurate information concerning COURT-HOUSES, PRISONS, JAILS etc., now building.

TO ARCHITECTS AND OTHERS.

TO BE LET—A large Room, with smaller attached, if wanted, quiet, light, and pleasant, up one flight only. Will be let low to responsible parties. WALWORTH M'FG CO., 73 Kilby Street.

PROPOSALS.

STONE WALL.

Proposals will be received for the building of a stone wall around the Taylor Cemetery until the 1st of November. Specifications can be seen at the drug store of Wm. Nock & Son. The usual rights to reject all bids. HANCOCK TAYLOR, Chairman Commissioners.

FURNITURE.

Sealed proposals will be received at the office of the Superintendent of Repairs, Depot of the Board of Education, until Tuesday, November 12, 1878, at 4 o'clock P. M., for furniture for P. S. No. 13. Specifications can be seen at the office of the Superintendent of Repairs. Names of two responsible persons will be required for the faithful performance of the contract. The Board reserves the right to reject any irregular bids, or any which may not be for the interest of the Board. W. M. THOMAS, Chairman Com. on School-Houses.

ALTERATIONS.

Sealed proposals will be received by the School Trustees of the Twenty-second Ward, at the Hall of the Board of Education, corner of Grand and Elm street, until Monday, the 28th day of October, 1878, and until 4 o'clock P. M. on said day, for enlarging Grammar School-House No. 51, on West Forty-fourth Street, near Eleventh Avenue. Plans and specifications may be seen, and blanks for proposals obtained, at the office of the Superintendent of School Buildings, No. 145 Grand Street, third floor.

Proposals must state the estimate for each branch of the work separately, and be indorsed, "Proposal for Mason Work," "Proposal for Carpenter Work," "Proposal for Painting." The party submitting a proposal, and the parties proposing to become sureties, must each sign his own name and place of residence on said proposal. Two responsible and approved sureties, residents of this city, are required in all cases.

No proposal will be considered from persons whose character and antecedent dealings with the Board of Education renders their responsibility doubtful.

No substitution by the accepted contractor will be permitted without first obtaining, in writing, permission from the Committee on Buildings of the Board of Education.

The Trustees reserve the right to reject any or all of the proposals submitted. JOEL W. MASON, DAVID F. BAKER, WALTER CARTER, JOHN MORGAN, JAMES R. CUMING, Board of School Trustees, Twenty-second Ward. Dated New York, October 14, 1878. 148

JOEL W. MASON, DAVID F. BAKER, WALTER CARTER, JOHN MORGAN, JAMES R. CUMING, Board of School Trustees, Twenty-second Ward. Dated New York, October 14, 1878. 148

MONUMENT.

HARRISBURG, PENN. Office of the Secretary of the Commonwealth, Harrisburg, Penn., October 12, 1878.—Notice is hereby given that the Commission, consisting of the Governor, the Secretary of Internal Affairs, and the Secretary of the Commonwealth, authorized by act of General Assembly approved June 17, 1878, to carry out the provisions of said act, appropriating the sum of five thousand dollars for the erection of a monument over the grave of the late Governor John W. Geary, will meet at the office of the Secretary of the Commonwealth on Friday, November 1, 1878, at 12 M., for the purpose of receiving plans and proposals for the erection of the monument, and will thereupon proceed to determine upon the same. JOHN BLAIR LINN, Secretary of the Commonwealth. 149

CULVERTS AND DRAINS.

CINCINNATI, O. Sealed proposals will be received at the office of the Board of Public Works until 12 o'clock, noon, of November 4, A. D. 1878, for grading, curbing and guttering, laying crossings, bowdoring the roadway, and constructing the necessary culverts, drains, or retaining walls, according to specifications on file in the office of the Board of Public Works—Third Avenue, from Charles Street to Center Street, and James Street, from Colerain Avenue to Fifth Avenue, the same to be paid for in cash or in bonds of the city at not less than par, at the option of the Board of Public Works, thirty days after the passage of the ordinance of assessment. The Board reserves the right of rejecting any or all the bids. Bidders will indorse their names upon the outside of the envelopes containing their bids. Each bid to be accompanied by two disinterested sureties. Each bidder will give his post-office address or residence. Bidders to use the printed forms, or no other will be received. By order of the Board. JOHN E. BELL, President. JOHN D. BANKS, Clerk. 148

JOHN E. BELL, President. JOHN D. BANKS, Clerk. 148

JOHN E. BELL, President. JOHN D. BANKS, Clerk. 148

WHITE ASH, HARDWARE, ETC.

NAVY PAY OFFICE, 29 BROADWAY, NEW YORK, October 14, 1878. Sealed proposals, to be indorsed "Proposals for Naval Supplies," will be received at this office until 12 o'clock M., the 28th day of October, 1878, for White Ash, Hardware, Belting and Packing, and Sheet Rubber (lists of which can be procured on application to this office), to be delivered at the Navy Yard, New York, free of any expense and subject to the usual inspection. Responsible security required on the bids for the prompt and faithful delivery of the articles, samples of which can be seen and blank forms of bids secured by applying at this office. The right to reject any and all bids not considered advantageous to the government is reserved. A. H. GILMAN, Pay Inspector U. S. Navy. 145

A. H. GILMAN, Pay Inspector U. S. Navy. 145

ARTESIAN WELLS.

CHARLESTON, S. C. CITY HALL, MAYOR'S OFFICE, September 10, 1878. Sealed proposals will be received at this office up to 1st November, 1878, for boring Artesian Wells in the City of Charleston. Plans, drawings, specifications, etc., can be had on application to City Engineer, Charleston, S. C. City Council of Charleston reserves the right to reject any or all bids. Proposals to be directed to COMMITTEE ARTESIAN WELLS AND WATERWORKS, CHARLESTON, S. C. 143

COMMITTEE ARTESIAN WELLS AND WATERWORKS, CHARLESTON, S. C. 143

PROPOSALS.

WROUGHT AND CAST-IRON WORK.

Proposals for protecting the U. S. Sub-Treasury Building in New York City. OFFICE OF THE SUPERINTENDENT, U. S. COURT-HOUSE AND POST-OFFICE, NEW YORK, October 21, 1878.

Sealed proposals will be received at this office until 12 M., on the 4th day of November, 1878, for furnishing, delivering, and fixing in place complete all the Wrought and Cast-Iron Work, etc., required for protecting the U. S. Sub-Treasury Building in New York City, in accordance with the drawings and specification. Copies of specification, and any additional information, may be obtained on application at this office, where drawings may be seen. THOMAS R. JACKSON, Superintendent of Repairs. 149\*

THOMAS R. JACKSON, Superintendent of Repairs. 149\*

HOT-WATER APPARATUS.

Proposals for a low temperature Hot-Water Apparatus for the U. S. Court-House and Post-Office, at Grand Rapids, Mich. OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., October 17, 1878.

Sealed proposals will be received at this office until 12 M., on the 5th day of November, 1878, for supplying and fixing in place complete a low temperature hot-water Heating Apparatus in the U. S. Court-House and Post-Office, at Grand Rapids, Mich., in accordance with drawings and specification, copies of which and any additional information may be had on application at this office or the office of the Superintendent by them. JAS. G. HILL, Supervising Architect. 149\*

JAS. G. HILL, Supervising Architect. 149\*

JAS. G. HILL, Supervising Architect. 149\*

LOCKS AND KEYS.

POST OFFICE DEPARTMENT, WASHINGTON, D. C., August 15, 1878.

Separate sealed proposals will be received at this Department until 12 o'clock noon on the 20th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as are to be used for the street letter-boxes of the United States.

As the public exposure and searching examination necessary to intelligent bidding on any prescribed model of a lock and key would tend to impair, if not entirely destroy, the further utility of all such locks and keys for the purposes of the mails, the Postmaster-General prescribes no models or samples for bidders, but relies for a selection on the mechanical ingenuity and skill which a fair competition among inventors, hereby invited, may develop in samples submitted by them.

Specifications of requirements as to proposals, samples, kinds and quantities of locks and keys, contracts, etc., will be furnished on application by letter to the Second Assistant Postmaster-General.

No proposal will be considered which is not submitted in accordance with such specifications and forms of proposal. The contracts which may be made are to be in conformity with the specifications and accepted proposals. D. M. KEY, Postmaster-General. 170

D. M. KEY, Postmaster-General. 170

GAS WORKS.

RIO DE JANEIRO, BRAZIL. By order of the Brazilian Legation at Washington the undersigned makes public that the Imperial Government calls for proposals for the gas illumination of Rio de Janeiro, the present contract expiring in March next. The proposals, addressed to the Envoy Extraordinary and Minister Plenipotentiary of Brazil, must be sent until 3 o'clock in the afternoon of the 1st day of December next to the Brazilian Consulate General, 42 Broadway, New York, where copies of the general conditions and specifications referred to in the fourth clause can be obtained, as well as any information in relation to this matter. SALVADOR DE MENDONCA, Brazilian Consul-General. New York, September 9, 1878.

SALVADOR DE MENDONCA, Brazilian Consul-General. New York, September 9, 1878.

MINISTRY OF AGRICULTURE, COMMERCE, AND PUBLIC WORKS—DIRECTORIO OF PUBLIC WORKS.

By order of his Excellency the Minister of this Department, it is advertised that this Directory receives proposals for the service of the illumination by gas of the Capital of the Empire, in the terms and conditions below specified:—

First—The proposals will be presented in a closed letter, until 3 o'clock in the afternoon of the 1st day of December of the present year, in this city, in the Directory of Public Works of the Ministry of Agriculture, and in London, Paris, and Washington, at the respective Brazilian Legations.

Second—The proposals must be presented, outside of the envelopes that shall contain the proposals, documents that will testify their fitness for the service that they propose to contract.

Third—No one can concur without having previously deposited in the National Treasury, in the delegacy of the same Treasury in London, or in either one of the Legations above indicated, a caution, in money or bonds, of the public debt of the Empire, \$50,000, or a corresponding amount in foreign money (£5,000, 125,000 francs, or \$25,000 in gold).

Fourth—The object of the concurrence will be only the price of furnishing a cubic metre of gas, and the term of the privilege, that in no case shall exceed 33 years. All the other clauses of the contract, excepting whatever may be transitory, will be, without any dispense, or modification, those proposed by the Government in the general specifications and conditions, which will be distributed separately in the Directory of the Public Works and the above-mentioned Legations.

Fifth—All the proposals will be opened in this city, in the public session of the Directory of Public Works, on the 2d day of January, 1879; and the Government will declare on them within fifteen days of that date.

Sixth—When the choice of the proposal is made, the contract will be considered concluded; being necessary for the preferred proposer to sign only the mentioned general conditions, which will be entered in a competent book of the Department of Agriculture. For greater facility, each proposer who resides out of Rio de Janeiro must constitute in this city, and with a due antecedence, somebody with a power of attorney to sign the general conditions in case the preference falls on him.

Seventh—The proposer who, after having received communication of the acceptance of his proposal, refuses to sign the referred conditions, will forfeit the caution in the benefit of the National Treasury.

Eighth—The Government reserves the right to annul the competition within the period fixed by Clause 6, to decide upon the proposals that were presented. M. BUARQUE DE MACEDO, Chief of the Directory. DIRECTORIO OF PUBLIC WORKS—Rio de Janeiro, July 22, 1878.

M. BUARQUE DE MACEDO, Chief of the Directory. DIRECTORIO OF PUBLIC WORKS—Rio de Janeiro, July 22, 1878.

PROPOSALS.

DREDGING.

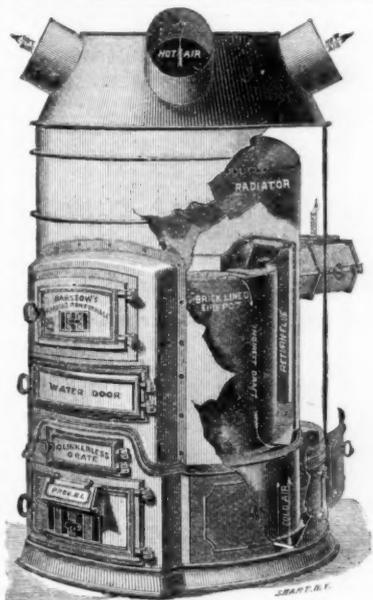
U. S. ENGINEER'S OFFICE, 1907 PENNSYLVANIA AVENUE, WASHINGTON, D. C., October 7, 1878. Sealed proposals for dredging in the following rivers will be received at this office until 12 M., on Wednesday, October 30, 1878, and opened immediately thereafter.

1. Rappahannock River, Virginia. 2. Chickahominy River, Virginia. Specifications and blank forms for proposals can be obtained on application to this office. S. T. ABERT, U. S. Civil Engineer. 148

S. T. ABERT, U. S. Civil Engineer. 148

Superior to a Steam Heater, at one third the cost.

BARSTOW WROUGHT IRON FURNACE.

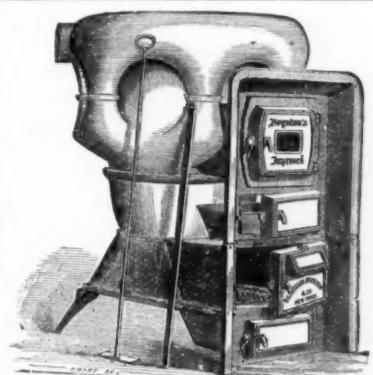


BARSTOW STOVE CO.,

Providence, R. I.: 56 Union St., Boston; 230 Water Street, New York.

Manufacturers of Furnaces, Ranges, Stoves, etc., ADAPTED TO ALL USES

The most popular goods ever sold, and for quality and finish the acknowledged standard for more than 30 years. Send for Illustrated Circular.



BOYNTON'S FURNACES.

Cast or Wrought Iron. Suitable for Coal or Wood. BRICK-SET AND PORTABLE.

Are powerful heaters; remarkably durable; economical in fuel; give universal satisfaction; have no bolted joints; are free from gases.

Thousands have had constant and severe use for over 18 years, and in good condition to-day, without repairs or expense.

The most durable Furnace, the cheapest to buy. Fitted with clinker-cleaning and friction grates; ash-sifting grates and ash-pans; lined feed doors, draft-regulator, etc. Have many attractive and practical improvements never before adopted.

Also, RANGES for family or hotel use; Fireplace Heaters, etc. Send for Circulars before purchasing others.

RICHARDSON, BOYNTON & CO., Manufacturers, 234 Water Street, New York. Apply direct to the manufacturers for low prices.

TO ARCHITECTS AND BUILDERS.

MORTAR BLACK,

Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar. For sale only by Walpole Color and Chemical Works, HENRY D. DUPEE, Proprietor, 79 KILBY STREET, BOSTON

HENRY D. DUPEE, Proprietor, 79 KILBY STREET, BOSTON

MARSHALL'S AMERICAN



LEADED SHEETS. Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila.

PATENT MINERAL WOOL. ENTIRELY FIRE-PROOF AND UNDECAYING. THE BEST INSULATOR OF HEAT, COLD, AND SOUND.

ALEXANDER D. ELBERS, P. O. Box 4461. 26 1/2 Broadway, New York

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free

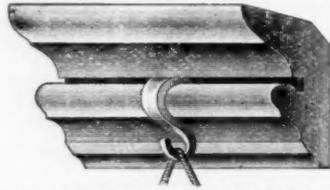
HENRY McSHANE & CO., Baltimore, Md.



D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

BAKER'S

Combined Cornice and Picture Rod Moulding.



(Patented in the United States and Dominion of Canada, 1877.)

For Hanging Pictures, etc.

FOR SALE BY F. P. BAKER,

The only Agent in the U. S. and Canada, 84 BEVERLY STREET BOSTON.

We manufacture Slate Goods, through every operation, from quarry to completion.

THE FAIR HAVEN MARBLE AND MARBLEIZED SLATE CO.

FAIR HAVEN, VERMONT.

The oldest and most extensive producers of

SLATE MANTELS IN THE UNITED STATES.

We imitate more than fifty rare marbles and woods. Styles and workmanship unsurpassed. Special care given to making Mantels and other goods from architects' drawings.

MARBLE MANTELS

At the very lowest prices, and in the best manner possible. We also produce all kinds of plain slate and marble work

Look over this list and correspond with us and get our Catalogue.

Table listing various marble and slate products such as Purple, Green, Red, Variegated Roofing Slates, Window Lintels, Laundry Tubs, etc.

ARCHITECTURAL IRON AND JAIL WORKS.

M. CLEMENTS,

MANUFACTURER OF Iron Railing, Bank Vault, and Jail Cells, Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc.

BAYMILLER STREET, near Sixth and C. H. & D. R. R. Depot. CINCINNATI, OHIO.



J. & R. LAMB, 59 CARMINE ST., N. Y.

CHURCH FURNISHERS

Practical Workers in Sterling Silver, Brass and Bronze, Carved Wood, Decorations, etc. Illustrated Catalogues.

A. L. FAUCHÈRE & CO.

OFFICE AND WAREHOUSES

1319 and 1321 Broadway, New York,

Importers, Manufacturers, and Dealers in all kinds of foreign and domestic

MARBLE FOR INTERIOR WORK.

Estimates furnished on application.

DORCHESTER UNION FREESTONE CO.

NEW BRUNSWICK YELLOW FREESTONE.

The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order. 24 Pine Street, New York. G. P. SHERWOOD.

Advertisement for THE HELIOTYPE PRINTING COMPANY, featuring a central illustration of a person operating a heliotype machine and text describing their services in Boston.

THE "AIR SPACE" BOILER COVERINGS

Save 10 to 20 per cent in fuel.

THE CHALMERS-SPENCE COMPANY. 140 Congress Street, Boston, 100th St., E. L., New York.

CLASSIFIED ADVERTISEMENTS.

Table listing various categories of advertisements such as ARCHITECTS, BRASS WORK, DECORATORS, etc., with corresponding page numbers.

Main table listing individual advertisements and their page numbers, including entries for Barstow Stove Co., Fuller, Warren & Co., The Heliotype Printing Co., etc.

**ETNA IRON CO.**

Manufacturers of every description of Wrought and Cast

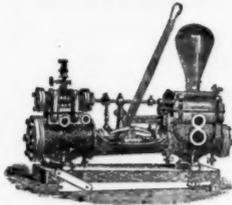
**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**

Patent



Steam

**PUMP THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.

Noiseless Pumps for Water Elevators.

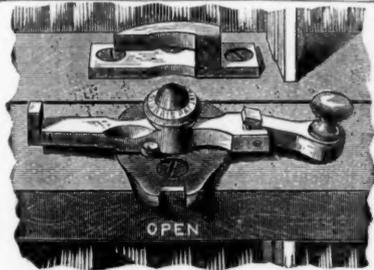
Also, Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE **KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES, { 14 & 16 Federal St., } Boston.  
{ 113 & 115 Congress St., }  
{ 92 & 94 Liberty St., } New York.

Send for Illustrated Catalogue.



**MORRIS BURGLAR-PROOF SASH LOCK.**

Patented July 2, 1878. The Safest! The Simplest! The Most Reliable! THE BEST!

N. B. — No springs to get out of order. Sold by all hardware jobbers. Manufactured by the MORRIS SASH LOCK MANUFACT'G CO., Office 168 Walnut St., Cincinnati, O.

Price List and Samples furnished to the trade on application. A liberal discount to the trade.

**PATENTS.**

F. A. LEHMANN, Solicitor of Patents, Washington, D. C. NO PATENT NO PAY. Send for Circular.

**"ZODTCHY" (BUILDER).**

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

M. JEROME KÜTTNER,

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from eight to sixteen pages of letterpress, gr. quarto, with cuts, and at least five autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.

The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address,

JOURNAL "ZODTCHY,"

18 OFFICER STREET, ST. PETERSBURG, RUSSIA.



**Carson's Kitchen Sink** Is an improvement in this fixture that must meet with the approval of every house keeper as it retains every particle of grease, and prevents the waste of pipes from filling up; besides being better trapped than any other sink in use.

PAT'D JAN. 24 1877. Bignall Mfg. Co., Medina, N. Y., or J. M. Carson, Louisville, Ky. Manf's.

**NATIONAL**

**FINE ART FOUNDRY,**

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze.



**BIBB'S** Celebrated Original Baltimore **Fire Place Heaters** Mantels and Registers. **B. C. BIBB & SON,** Baltimore, Md. Best workmanship. Lowest prices guaranteed. Send for circulars.



**NATIONAL TUBE WORKS CO.**

PATENT

Indestructible Enamelled Wrought Iron

**LAP-WELDED PIPE,**

From 1/4 inch to 15 inches diameter.

Now extensively used for

Water, Gas, Sewerage, and Mining.

It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at offices of

National Tube Works Co.,

8 Pemberton Square, Boston; 118 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

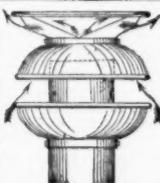
**BURDITT & WILLIAMS, FINE HARDWARE**

of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



**The Draft of the Chimney increased.**

Smoking Chimneys Prevented

Particularly adapted to Chimneys in exposed positions.

Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR, 70 Grand St., Brooklyn, N. Y.

**CATALOGUE OF Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices. A. J. BICKNELL & CO., ARCHITECTURAL BOOK PUBLISHERS, 37 WARREN STREET, NEW YORK.

TO ARCHITECTS AND BUILDERS.

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

**BEEHIVE BRAND.**

**FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**UNPARALLELED DISCOVERY.**

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the *Paint Preserver* invented by ASAHEL WHEELER, Boston. It will neither crack, blister, nor scale.



**BALTIMORE PRESSED TILES,**

FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases,

DRAIN AND SEWER PIPE, FIRE-BRICK, LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

WALDO BROTHERS,

No. 94 WATER STREET, BOSTON.

**PEERLESS BRICKS.**

**THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,**

MANUFACTURES AND KEEPS IN STOCK

**ARCHITECTURAL SHAPES (80 kinds).**

ALSO

**RED Pressed Fronts.**

Extra fine in color and quality

**BROWN,** Colored throughout

More beautiful than Brown Stone DURABLE

**CHOCOLATE,**

Same as above; difference in color

**FLESH COLOR,**

A very popular color

**BUFF,** very fine.

Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F ADAMS,

JOSEPH WOOD, JR.,

PRESIDENT.

TREASURER



**DOLIVET, CUTTER, & CO.,**

ARTISTIC

**Papier Maché Decorations,**

108 West 25th St., New York.

House, Theatre, and Church Work. Artists' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING Venetian Blinds.**

Wilson's Patent. For first-class Dwellings and Public Buildings.

These blinds can be fitted either inside or outside the ash, and are operated with ease without machinery or weights. They are made to coil above or below, as shown in cut. Can be furnished in any kind of wood. Unequaled for elegance, durability, and simplicity. Indorsed by many of the leading architects in the country, and in use in some of the handsomest buildings.

**WILSON'S PATENT Rolling Steel Shutters**

These blinds are operated on same principle as above (being self-coiling). They are used for closing store-fronts and all windows and doorways that are required to be perfectly fire and burglar proof. Also, Rolling Wood Blinds for Store-Fronts, Book-Shelves, School Partitions, and other purposes.

A list of public and private buildings fitted with our Blinds sent on application. Architects and owners are invited to send for working models, catalogues, and price-lists.

WILSON & JAMES, 68 Beekman St., New York. Two Prize Medals at Philadelphia.

**VALUABLE ART PUBLICATIONS.**

**HUNT'S** (WILLIAM M.) Talks on Art. 8vo. Paper, \$1.00.  
**CLEMENTS'S** (CLARA ERSKINE) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a Complete Index. Crown 8vo. Cloth, red edges, \$3.25.  
 Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.  
**HOUGHTON, OSGOOD & COMPANY, Boston.**

**IMPROVED PRISON LOCKS.**

All Architects should have our 36 page Illustrated Catalogue of Prison Locks.

ADDRESS

**YALE LOCK MFG. CO., STAMFORD, CONN.**  
 New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,

94 BEEKMAN STREET, NEW YORK.



**SPECIALTIES IN PLUMBING GOODS.**

Having for their special object Cleanliness, Durability, and the exclusion of Sewer Gas.

**JENNINGS' NEW CLOSET, WITH New Valve**

With non-corrosive Valve Seating and Solid Plunger.



**STEWART'S SLATE, MARBLE AND HARD WOOD MANTELS.**  
 MIRRORS, ART-TILES, HEARTHS &c.  
 Masonic Temple, 23<sup>d</sup> St & 6<sup>th</sup> Ave N.Y.

**Automatic Signal Telegraph Co., CITY OF BOSTON,**

OFFICE, 178 DEVONSHIRE STREET, ROOM 20, Is prepared to make contracts for the protection of buildings against fire.

DIRECTORS.

CHARLES E. GUILD, President. WILLIAM EDDICOTT, JUN. JOHN D. W. JOY. WILLIAM B. WATKINS. PATRICK T. JACKSON, Treasurer.

**Double Ratchet Regulators, FOR TRANSOMS, FAN-LIGHTS, ETC.**

These Regulators are for hanging transoms and adjusting them at any desired angle for ventilation, superseding chains, pulleys, hinges, etc.; and are most useful substitutes for the old style of pivots, easily attached to the transom, and wherever used have stood the test.

PULLMAN PALACE CAR CO., CENTRAL DIVISION, } JERSEY CITY, January 30, 1878.

DOUBLE RATCHET M'FG CO., N. Y.

Gentlemen,—I have found the Double Ratchet Regulator a very useful article in my offices for keeping the fan-lights in any desired position, having used the same for some three or four years, and are in as good working order as when put up.

Very respectfully, C. D. FLAGG, Ass't Sup't.

For sale by hardware dealers. Samples 50 cents. Send for circular.

Agents wanted everywhere. DOUBLE RATCHET M'FG CO. (Limited), 346 & 348 Broadway, New York.

**C. BUTCHER,** 107 Devonshire St. BOSTON.

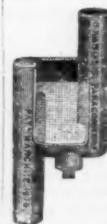
Send for Illustrated Catalogue.

**PATENT MARQUETRY FLOORING.**

Specimens at Lawrence, Wilde & Co.'s, 42 Cornhill, Boston.

**GAS FIXTURES OF EVERY DESCRIPTION. SPECIAL RATES TO BUILDERS.**

K. HOLLINGS & CO 547 Washington St., BOSTON.



**Brandeis' Seamless Paragon Trap**

Safest, Best, Cheapest, and Non-siphoning. Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. BRANDIS & WICKLEY 46 Fulton Street, Brooklyn N. Y.



**SAYLOR'S PORTLAND CEMENT.**

Indorsed and now being used by New York and Brooklyn Bridge, N.Y. Elevated R.R. U. S. Government Works (Forts and Fortifications), New Capitol at Albany, Departments of Decks, and Croton Aqueduct Department of New York City, and the trade generally. For Sale by all dealers in Building Materials. Johnson & Wilson, Gen'l Agts. Send for circular. 83 Liberty Street, New York.

**PRIZE MEDALLISTS.**

1863; 1865; 1867; 1872; 1873; AND ONLY AWARD and MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**

ORIGINAL INVENTORS AND SOLE PATENTEES OF

**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters

OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Tilford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.

OFFICE AND MANUFACTORY.

162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**

76 READE STREET, NEW YORK,

WORKS, DARLINGTON, N. J.

*Lock and Hardware Manufacturers,*

DESIGNERS, FOUNDERS, AND WORKERS

IN

**BRONZE AND BRASS.**

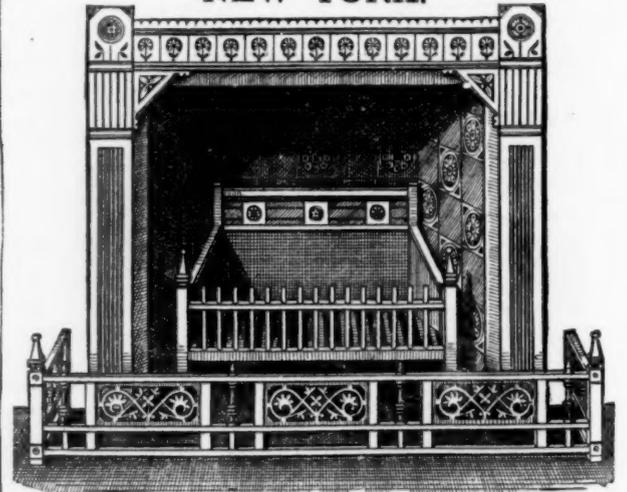
Architects' Designs faithfully executed.

Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side), NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tin.

HAVE NO OTHER WAREHOUSES.

**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer gas that has yet been invented.

**A POSITIVE SEAL**

Against sewer-gas, absorbed gases, and back water. Seal is not broken by siphonage or evaporation. Self-scouring, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers,

B. P. BOWER & CO., 104 & 106 St. Clair St., Cleveland, O.

**THE EUREKA VENTILATION CO.**

OFFICE AND MANUFACTORY,

74 CHARLESTOWN STREET, BOSTON, MASS.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

Theatrical Fresco only. Prices moderate. Refer to our first-class Scenery and Supplies delivered at any point, however distant. Correspondence solicited. LAFAYETTE W. SEAVEY. Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK.

# THE AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 149.]

SATURDAY, NOVEMBER 2, 1878.

[PRICE 15 CENTS.

### BUILDERS' SUPPLIES.

**AMERICAN ENCAUSTIC TILE,**  
Acknowledged by experts to be  
**THE BEST IN THE WORLD.**  
Manufactured by the  
**AMERICAN ENCAUSTIC TILING CO. (Limited.)**  
OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.  
Designs and estimates for Public Buildings, Halls,  
Churches, Vestibules, and for External Decoration, fur-  
nished on application.

**WALWORTH MANUFACTURING CO.,**  
69 KILBY ST., BOSTON.  
**PUBLIC BUILDINGS,  
PRIVATE RESIDENCES,  
GREENHOUSES, ETC.,**  
Warmed and ventilated by  
**STEAM OR HOT WATER.**  
Correspondence solicited. Plans and estimates furnished  
on application.

**"HOTCHKISS" TOWER CLOCKS,**  
MANUFACTURED BY  
**BETH THOMAS CLOCK CO., THOMASTON, CONN.**  
Prices \$100 to \$6,000.  
**WARRANTED ACCURATE, STRONG, DURABLE.**  
OFFICE, 581 BROADWAY, NEW YORK.  
Send for Illustrated Catalogue.

**"MINTON'S ART AND TILES."**  
(China Works, Stoke-Upon Trent.) Also, The Campbell  
Brick and Tile Co.'s  
**ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS,  
ETC.**  
For Churches, Banks, Halls, Vestibules, and Hearths;  
Outside Decorations, Flower Boxes, Etc.  
**THOS. ASPINWALL & SON,**  
604 Broadway, NEW YORK.  
The only representatives in the United States for the  
above firms.

**ASPHALT (FELT) ROOFING.**  
**WARREN'S NEW PATENT  
FELT AND GRAVEL ROOFING,**  
Substitutes NATIVE ASPHALT for Coal-Tar materials for  
these roofs.  
The very best and most durable material for flat roofs.  
Also, Native Asphalt and Asphaltic Cement for Concrete  
Walks and Pavements.  
Roofers and pavers supplied with the above, and with War-  
ren's original Coal Tar Roofing and Paving Materials.  
Send for circulars and samples.  
**WARREN CHEMICAL AND MANUF'G CO.,**  
25 MAIDEN LANE, NEW YORK. 137 STATE STREET, BOSTON.

**TILES FROM ALL PARTS OF THE  
WORLD,**  
FOR  
**BANKS, PUBLIC BUILDINGS, and PRIVATE HOUSES.**  
References given to Tile Work throughout the United  
States and British Provinces  
**AGENT FOR THE AMERICAN ROOFING TILE**  
Contracts Solicited  
**O. A. WELLINGTON, HOUSEHOLD ART ROOMS,**  
No. 171 TREMONT STREET, BOSTON.

**HUGH SISSON & SON,**  
Importers, Dealers, and Manufacturers of  
**MARBLE.**  
**INTERIOR MARBLE WORK AND MONUMENTAL  
WORK A SPECIALTY**  
Salesrooms, No. 140 W. Baltimore St.; Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,  
SPEAKING TUBES,  
AND BURGLAR ALARMS,**  
For Public and Private Buildings.  
**THE BEST IN USE.**  
**S. W. FULLER,**  
22 Devonshire Street, Boston.

**HAWTHORNE & TUCKER,**  
**PLUMBERS,**  
16 PROVINCE STREET, BOSTON  
Estimates for Plumbing made, and work done in any part  
of the United States or Provinces.

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY  
OF NEW YORK.**  
**LEONARD F. BECKWITH, Pres't. E. GILLET, Vice-Pres't.**  
Hollow Blocks of any pattern, uniting strength and resis-  
tance to fire and water. The Hydraulic Lime of Teil  
(France), one of the strongest cements known, is largely  
used in this manufacture. The blocks do not conduct  
heat, cold, or sound, and weigh 50 per cent less than brick.  
Fire-proof Partitions, Floor Arches between iron or wooden  
beams, and ceilings under iron or wooden beams, erected  
in following buildings:  
Western Union Telegraph, Orient, and Queens' Ins.  
Coal and Iron Exchange, Museum of Natural Hist.  
Equitable, Staats Zeitung, Hudson R. R. R. Fr. Depot.  
W'msbrough Savings Bank, N. Y. Hospital, Drexel,  
Windsor, & Westminster Hotels, Cluny, & Young's Hotel, Bos'n,  
Syracuse Savings Bank, West Point Military Hosp.  
Columbia College, Tribune, Coryell, & Vancorlear Flats,  
Baltimore Safe Deposit Co. Peabody Inst., Baltimore,  
Peabody Museum, N. Haven, Westmoreland, & Elise Flats,  
Sidewalks laid at Lenox Library, Tribune, etc.  
Hollow Burnt Clay Bricks, for flat and curved arches,  
partitions, etc., and Skewbacks for brick arches.  
Sole agents for the U. S. for HYDRAULIC LIME OF TIEL,  
and LAFARGE PORTLAND CEMENT.  
Sole agents for the U. S. for METLACH ENCAUSTIC TILES,  
laid in Tribune, Staats Zeitung, Mineral Spa, Central Park,  
Belvidere Hotel, etc.  
Sole agents for the Atlantic States for WIGHT'S FIRE-  
PROOF COLUMNS.

Our Fire-proof work is the only one approved by the  
New York Board of Fire Underwriters and the Superin-  
tendent of Buildings after severe public tests.  
Office Room 54 COAL AND IRON EXCHANGE, 21 Courtlandt  
Street, New York. Represented in Boston by  
**BOORMAN & Co., 5 Doane St.**

**E. HOWARD & CO.**  
MANUFACTURERS OF CLOCKS AND WATCHES  
**CLOCKS FOR PUBLIC BUILDINGS**  
114 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**  
**PLAIN AND ENCAUSTIC  
FOR PUBLIC BUILDINGS AND DWELLINGS.**  
As laid by us in  
**THE CAPITOL AT WASHINGTON,**  
And in numerous Churches, Banks, and Dwellings in every  
part of the Country.  
Glazed and Enamelled Tiles for Mantels, Hearths, Wain-  
scoting, &c., and for Exterior Decoration.  
**MILLER & COATES,**  
379 FEARL STREET NEW YORK.

**BARTLETT, ROBBINS & CO.**  
**HEATING AND VENTILATING OF PUBLIC AND  
PRIVATE BUILDINGS  
A SPECIALTY**  
PLANS AND SPECIFICATIONS FURNISHED.  
**FOUNDERS, AND MANUFACTURERS OF GAS WORKS,  
ETC., ETC.**  
24 LIGHT STREET, BALTIMORE.

**THE NEW ENGLAND GRANITE WORKS**  
**HARTFORD, CONN., and 121 BROADWAY, N.Y.**  
Quarries at Westbury, R.I.  
**MONUMENTAL AND BUILDING WORK**  
of every description, all the varieties of  
**AMERICAN AND FOREIGN GRANITE.**  
UNEQUALLED FACILITIES OFFERED TO THE TRADE.  
**J. G. BATTERSON, Pres't. H. R. BATTERSON, Sec'y.**  
DIRECTORS: C. B. CANFIELD, H. A. BATTERSON,  
G. T. BATTERSON,  
**CARL CONRAD, Sculptor.**

**WHITTIER MACHINE CO.**  
Manufacturers of Steam and Hydraulic  
**ELEVATORS,**  
**STEAM ENGINES, BOILERS, and MACHINERY.**  
No. 1176 Tremont Street, Boston.  
Office in the New England Mutual Life Insurance Co's  
Building, Post Office Square,  
and 129 Broadway, New York  
**CHARLES WHITTIER, Pres. A. C. WHITTIER, Treas.**

**OTIS BROTHERS & CO.**  
**SAFETY STEAM AND HYDRAULIC  
ELEVATORS.**  
A specialty for a quarter of a century.  
**BUILDERS OF THE HALE HYDRAULIC ELEVATOR.**  
No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
**OHIO BUILDING STONE.**  
**GRIND AND SCITTE STONE,**  
From our FLORENCE AND AMHERST QUARRIES.  
Also, from New York, New Jersey, and Massachusetts  
111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
Designers and Manufacturers of  
**GAS FIXTURES,  
ORNAMENTAL METAL WORK, CLOCKS AND BRASSES**  
ARCHITECTS' ORDERS SOLICITED.  
Special designs submitted on application.  
**WAREHOUSES, 635 AND 638 BROADWAY, NEW YORK.**  
**MANUFACTORY, 24th and 25th Sts., and 16th AVENUE, N. Y.**

**FISHER & BIRD,**  
Workers in all kinds of Foreign and Domestic  
**MARBLES,**  
97 to 108 EAST HOUSTON ST., NEW YORK.  
Established 1830.  
Among our notable decorations are: The Illinois New  
State House; Palace Hotel, San Francisco; Baldwin's Ho-  
tel, San Francisco; Insurance Building, 10th and Chestnut  
Streets, Philadelphia; Mutual Life Insurance Building  
Boston; Orient Mutual Insurance Building, New York;  
Union College, Schenectady; and numerous Churches,  
Private Residences, etc., etc., throughout the country. We  
solicit the opportunity to estimate upon all classes of work,  
viz., Tiling, Wainscoting, Staircases, Mantels, etc. Come  
tery work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
Are ready to estimate on contracts of any size for  
furnishing their celebrated Amherst, Ohio,  
**BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS  
OR CUT AND SET.**  
Also,  
**AMHERST AND INDEPENDENCE GRINDSTONES,  
And OHIO MINERAL AND STONE PAINTS**  
Fire-Proof Stove Cement and Stove Putty ground in Oil  
OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MO-  
SAICS." Floor Tiles, beautiful in color and design, for  
Dwellings, Churches, and Public Buildings.  
SPANISH WALL TILES. White, Glazed, Valencia,  
Tiles for Walls and for decorative painting.  
PRINTED FIGURED TILES of Spanish designs, for  
Wainscoting, Mantels, Jardinieres, etc.  
Floors of "Nolla Mosaics" can be seen at the "Rock-  
ingham," corner of Broadway and 56th Street. Imported  
and for sale by **JOHN CHADWICK, Sole Ag't for U. S.,**  
49 Broadway, N. Y.  
**C. E. PARKER, Agent, 14 Exchange Place, Boston.****

**TUFTS' ELEVATOR WORKS,**  
**MANUFACTURERS OF "TUFTS' PATENT" COMBI-  
NATION ROPE ELEVATOR.**  
TO BE OPERATED EITHER BY STEAM OR WATER.  
The only safe and reliable machine made for Passenger use  
in Public Buildings and Hotels, and for business purposes in  
Warehouses, Stores, &c.  
**37 FOUNDRY STREET, SOUTH BOSTON.**  
OFFICE, 243 Broadway, New York.  
**OTIS TUFTS, President. L. A. BIGLOW, Treas'r and Gen'l Manager.**

**STEAM WARMING APPARATUS.**  
**HIGH AND LOW PRESSURE.**  
**HOUSE WARMING A SPECIALTY.**  
Pamphlet with more than 1,000 references sent on appli-  
cation.  
**WYLLYS H. WARNER,**  
114 LEONARD STREET, NEW YORK,  
and 33 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**  
No. 6 COURTLAND ST., NEW YORK.  
Works at Paterson, N.J.  
**PATENT SAFETY STEAM ELEVATORS**  
for Public and Bank Buildings, Hotels, Private Dwell-  
ings, etc.  
**SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP  
GUARANTEED.**  
Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "HEALTH" AND "TUBULAR"  
Manufactured by the

**GOLD'S HEATER MANUFACTURING CO.**  
114 LEONARD ST., NEW YORK.

Send for Pamphlet.

W. E. GOLD, Pres't WYLLIS H. WARNER, Treas'r

**MINTON'S ENCAUSTIC TILES.**

**SHARPLESS & WATTS,**

1325 Market St., Philadelphia,

ESTABLISHED 1850 AS AGENTS FOR

Minton's Tiles and Tesselated Pavements.

Specialties in Glazed, Encaustic, Majolica, and Art Painted Tiles, for Furniture, Hearths, Fireplaces, etc. New and original designs continually received.

**J. H. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue, Mattapan (Ward 24), Boston.

**MENEELY & KIMBERLY,**

Bell Founders, Troy, N. Y.,

Manufacture a superior quality of Bells. Special attention given to **CHURCH, SCHOOL, and COURT-HOUSE BELLS.** Illustrated Catalogue sent free.

**JOHN MACK,** Plain and Ornamental Plasterer,  
41 Cambridge Street, Boston.

**MANTELS AND GRATES.**

**RANKIN'S PATENT** makes the Cleanest, Cheapest, and Hottest Fire. Avoid infringements, and send for Circular to

**C. S. RANKIN & CO.,**

**ARCHITECTURAL IRON WORKS,**

Manufacturers of all kinds of Iron Work for

**BUILDINGS, JAILS, ETC.**

187 W. PEARL ST., CINCINNATI, O.

**BUILDING MARBLE.**

Branch yard of the **RUTLAND MARBLE CO.,** 198 Cambridge Street, Boston. **JOHN D. ALLAN,** Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Italian and Continental Marble, furnished at low prices.

**PRESSED BRICK.**

**STOCK AND COMMON**

MANUFACTURED BY

**FLETCHER & THOMAS,**

Indianapolis, Ind.

All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY

**GILLIS & GEOGHEGAN,**

Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 50th St. and 5th Av.; Drexel Building, cor Wall and Broad; Bennett Building, Fulton and Nassau, etc.

Architects and owners promptly furnished with specifications and estimates.

**ARCHITECTS.**

**P. B. WIGHT,**

CONSULTING ARCHITECT,

73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.

Consultations on matters pertaining to Fire-Proof Construction, Foundations, Drainage, Sanitary Work, Ventilation, Machinery, Valuations, Interior Decorations, and Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**

ARCHITECT,

COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E.,** ARCHITECT

AND SANITARY ENGINEER

KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,**

ARCHITECT,

Room 17, Life Insurance Building,  
ST. LOUIS, MO.

Special attention to Churches, Schools, and other public buildings.

**WALTER DICKSON,** ARCHITECT, **PERRY BUILDING,**  
Albany, N. Y.

**GEO. E. WARING, JR.,**

CONSULTING ENGINEER,

FOR SANITARY AND AGRICULTURAL WORKS,  
NEWPORT, R.I.

**SANITARY ENGINEERING.**

**EDWARD S. PHILBRICK, C. E.,**

12 WEST ST., BOSTON, MASS.,

Offers advice and superintendence in

**CONSTRUCTION OF WORKS,**

**PLUMBING, DRAINAGE, AND VENTILATION,**  
And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
827 HARRISON AVENUE . . . BOSTON,  
**SHEET METAL CORNICES, HAYES'S PATENT VENTILATING SKY-LIGHTS, WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.**

**EXCELSIOR ROOF PAINT.**

This paint has been thoroughly tested throughout the Eastern States, and has been found to be a perfect tin or metallic preserver. We warrant it neither to crack nor blister by **HEAT or COLD,** and to last

**IN ANY CLIMATE TEN YEARS.**

Those desiring to use this valuable preparation upon their buildings, can secure the same by addressing

**C. M. WHEELER, J. M. ROOT,**  
Toledo, Ohio.

**DECORATORS.**

**W. J. MCPHERSON,**

(Established A.D. 1845.)

**MURAL PAINTER,**

**DESIGNER,**

**Ecclesiastical Decorator,**

AND

**ART STAINED GLASS MANUFACTURER,**

440 TREMONT STREET,

**BOSTON, MASS.**

Should you want Ornamental Glass, write for particulars to



**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the subscriber to produce Modern and Medieval styles of work equal to any European examples, for Churches, Private Residences, Halls, etc.

The value of the work is attained by a careful selection of colors in Cathedral and French Glass of his own importation.

Designs in accord with architects' plans furnished at short notice. Reference of work at office

**SAMUEL WEST, 115 Eliot St., Boston**

**FRANK HILL SMITH,**

117N TREMONT STREET,

BOSTON . . . . . MASS.

**COOK, REDDING & CO.**

149 CONGRESS ST., BOSTON,

**Ornamental, Stained, and Cut Glass,**

FOR

**Churches, Public Buildings, and Private Residences.**

We manufacture Slate Goods, through every operation, from quarry to completion.

**THE FAIR HAVEN MARBLE AND MARBLEIZED SLATE CO.**

FAIR HAVEN, VERMONT.

The oldest and most extensive producers of

**SLATE MANTELS**

IN THE UNITED STATES.

We imitate more than fifty rare marbles and woods. Styles and workmanship unsurpassed. Special care given to making Mantels and other goods from architects' drawings. Being in close proximity to the best white American marble quarries, and with rare facilities for selecting stock and doing the work, we are also producing

**MARBLE MANTELS**

At the very lowest prices, and in the best manner possible. We also produce all kinds of plain slate and marble work

Look over this list and correspond with us and get our Catalogue.

- |  |                   |                   |                       |
|--|-------------------|-------------------|-----------------------|
| Purple, Green, Red, Variegated Roofing Slates.       | Window Lintels.   | Laundry Tubs.     | Billiard Table Beds.  |
| Same Color Slate, also White and Black Marble Tiles. | Water Table.      | Urinals.          | Blackboards.          |
| Window Sills.  | Belt Courses.     | Grave Covers.     | Brewers' Vats.        |
|  | Ashlar.           | Vault Work.       | Cisterns.             |
|  | Solid Steps.      | Carriers' Tables. | Greenhouse Shelves.   |
|  | Steps and Risers. | Counter Tops.     | Plumbers' Goods, etc. |

**DECORATORS.**

**JOHN LAFARGE,**

**MURAL DECORATION,**

51 W. Tenth St., New York and Newport, R. I.

**SOCIETY OF DECORATIVE ART.**

34 East 19th Street.

NEW YORK.

The Society is prepared to undertake every kind of Decorative Needle-Work, and special attention is paid to the restoration of Antique Embroidery.

Special terms are made and careful estimates given to Artists, Architects, and Decorators generally, who are assured that their designs will be carefully reproduced and their directions carefully followed.

Orders are earnestly solicited. The Society has arranged with Mr. RUSSELL STURGIS, Architect, for the Exhibition and Sale of his well-known Wall Papers. Some of these are faithful reproductions of Japanese decorative papers; some are taken from Oriental and other stuffs; some are of original design. New patterns will be added from time to time.

**Fresco Decoration.**

**EMMART & QUARTLEY,**

Designers, Decorators, and Painters,

32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate work on hand or made to order. No. 1210 Ridge Avenue. **JOSEPH S. MILLER** successor to Wilson & Miller, Philadelphia, Pa. Send for Illustrated Price-List

**Donald MacDonald,**

**GLASS STAINER AND DECORATOR**

No. 6 Hayward Place,

BOSTON



**INLAID WOOD FLOORS.**

ORNAMENTAL WOOD BORDERS.

Designs and Estimates free.

National Wood Manuf'g Co.,

950 Broadway, near 23d St., New York

**PHILIP A. BUTLER,**

DECORATOR AND DESIGNER,

No. 17 FERRISBURY SQUARE,

BOSTON.

**HENRY B. JONES & CO.**

IMPORTERS, JOBBERS, AND RETAILERS OF

PAPER HANGINGS.

612 WASHINGTON STREET, BOSTON.

(Established 1848.)

**L. HABERSTROH & SON,**

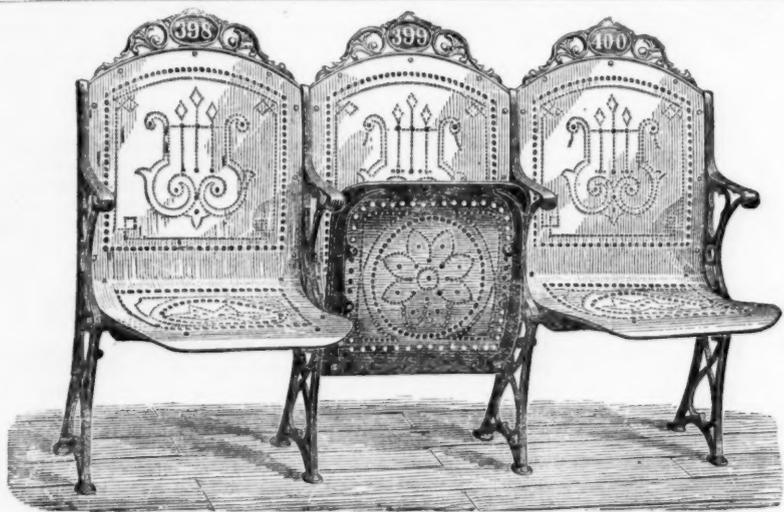
FRESCO PAINTERS,

and INTERIOR DECORATORS,  
No. 17 SCHOOL STREET, BOSTON.

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa. (Can.)	Philadelphia.	San Francisco	St. Louis.
1 BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2 Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50		3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00		3.00
3 CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25		1.50 @ 2.00
4 Cabinet Maker	2.50 @ 3.25		1.75 @ 2.25			1.50 @ 3.00	1.50 @ 2.00			
5 Finisher	2.00 @ 2.50		1.50 @ 2.00			1.50 @ 3.00	1.25 @ 1.75			
6 FOUNDRYMAN			1.25 @ 1.50	1.50 @ 2.50		2.00 @ 2.75	2.00 @ 2.50			1.50 @ 2.00
7 Blacksmith	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.75			2.25 @ 2.50
8 Whitesmith			1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.00 @ 1.50			1.50 @ 2.00
9 Galvanized Iron Worker	2.00 @ 2.85	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00			2.25 @ 2.50
10 GAS FITTER	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00			2.00 @ 3.00
11 LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50		1.00 @ 2.00
12 PAINTER	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13 Glazier		2.00 @ 2.50	1.75 @ 2.00			1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50		
14 Grainer	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00		2.00 @ 3.00	1.75 @ 2.50			3.50
15 Paper-Hanger	.75 @ 2.50		per roll.		15c. pr. roll.	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00
16 PLASTERER	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	2.00	1.50 @ 2.00	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00		2.00 @ 2.75
17 Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.50	1.50 @ 2.50		2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
18 PLUMBER	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.50	2.50 @ 3.50		2.00 @ 2.50	1.50 @ 2.50			2.50 @ 3.50
19 QUARRYMAN	2.00 @ 2.50	3.00 @ 3.50	1.10 @ 1.25		1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20 Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21 Carver		3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75		3.00	2.00 @ 2.50	3.50 @ 6.00		2.75 @ 3.25
22 Painters and Washers	2.50 @ 3.00	3.00 @ 4.00	1.50 @ 1.75	1.50 @ 1.75		1.50 @ 2.50	1.00 @ 1.25	2.25 @ 2.50		
23 Rubber	1.50 @ 2.00	1.75	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75		
24 Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50		2.50	2.00 @ 3.00	2.00 @ 2.50		2.25 @ 2.75
25 Stone-Setter		2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00		2.75	2.00 @ 2.50	1.50 @ 2.00		2.25 @ 2.75
26 ROOFER (Tin)	2.00 @ 2.35	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25		2.00 @ 2.50
27 Slater		2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00		2.00 @ 2.25	1.25 @ 2.00	1.75 @ 2.25		3.00
28 STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25			1.50 @ 2.50
29 STEAM FITTER		2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00



ARCHITECTS AND BUILDERS

WILL ADD MUCH TO THE BEAUTY OF THEIR BUILDINGS BY USING

GARDNER'S PERFORATED THREE-PLY VENEER SEATING,

Which is Ornamental, Durable, and Cleanly.

We refer to the following new and elegant buildings fitted up with our goods:—

Morris Plains, N. J., Insane Asylum.  
New York Hospital.  
American Museum of Natural History, New York.  
Institution for Feeble-minded Children, Lincoln, Ill  
Insane Asylum, Oshkosh, Wis.

Opera Chairs in new Music Halls, Lewiston, Me., Providence, R. I., and Brooklyn, N. Y.  
Seats in Depots of the Pennsylvania Railroad, at Philadelphia, Pittsburgh, etc.

Please send for Illustrated Catalogue.

GARDNER & COMPANY,

Patentees and Manufacturers,

376 PEARL STREET.....NEW YORK.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

CALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States.

Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO. 72 & 74 West Monroe St. Chicago, Ill.

WILL NOT BURN WHEN FROZEN

AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR

RAIN-SROUT

MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS

Regular Sizes, 2, 3, 4, 5 & 6 Inch.

SPECIAL SIZES MANUFACTURED TO ORDER.

AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS.

1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA.

WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH.

PRINCIPAL AGENTS.

- M. Halliday
- Hicks & Badger
- James Berry
- George W. Pitkin & Co.
- Wasson & Martin
- McLeod, Reardon & Co.
- W. H. Scott
- Kittredge Cornice Co.
- J. W. Jordan
- B. G. Carpenter & Co.
- T. W. Irwin
- Seliew & Co.
- New York City
- Boston, Mass
- Buffalo, N. Y
- Chicago, Ill
- Albany, N. Y
- Troy, N. Y
- Portland, Me
- Salem, O
- Worcester, Mass
- Wilkesbarre, Penn
- Alleghany City, Penn
- Cincinnati, Ohio

RECOMMENDED FOR

IMPERIAL GAS MACHINE

SEND FOR CATALOGUE

FOR

ARCHITECTS

ENGINEERS

MECHANICS

SMPLICITY & RELIABILITY

DEWY BROS & CO.

MORTON'S

Copper and Iron SASH CHAIN,

PATENTED

Aug. 15, 1871.

I would call the attention of Architects and Builders to my

SASH CHAIN,

Manufactured from the best

NORWAY IRON.

This Chain is stronger and cheaper than the copper, and will last as long; all that is necessary is to paint the Chain the same color as the frame.

For terms and further information apply to

THOS. S. MORTON,

65 ELIZABETH ST., NEW YORK CITY.

NOTICE.

In our issue for November 9 will be printed a special list giving accurate information concerning

COURT-HOUSES, PRISONS, JAILS, etc., now building.

TILTON'S HAND-BOOKS OF DECORATIVE FORM. No. 1.

GREEK ORNAMENT.

Illustrated with TWELVE PLATES printed in the ORIGINAL COLORS. Edited by WILLIAM R. WARE, Professor of Architecture in the Mass. Institute of Technology. This is a most valuable publication for Architects, Architectural Students, Designers, Interior Decorators, Preservers, Ornamental Painters, &c.

Sent by mail on receipt of price, \$1.00, by

S. W. TILTON & CO., Publishers, 333 Washington St., Boston.



NONESUCH Self-Locking

Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.

Patented July 10th, 1877

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the art-workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. P'ANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist, Boston.*

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courant.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVES. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIÉNARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11¼ X 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOthic FORMS (First Series), applied to Furniture, Metal Work, and Decoration for Domestic Purposes.** By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series), Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c.** By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOLETTÉ-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

The works of the learned and distinguished French Architect, EUGÈNE VIOLETTÉ-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

## Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — EUGÈNE BENSON, in *The College Courant.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

**The New York Sketch-Book of Architecture.**

3 vols., 4to, \$6.50 each.

We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

**The American Architect and Building News.**

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\* \* \* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

[Reported for the American Architect and Building News.]

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, SLATE, and FRONTS. Includes items like Pale Jersey, Long Island, and various slate types.

Table listing prices for CEMENT, including Rosendale, Portland (Imported), and Roman.

Table listing prices for FIRE BRICK, including Red Welsh and Scotch.

Table listing prices for DOORS, including raised panels and moulded doors.

Table listing prices for BLINDS, including outside and inside blinds.

Table listing prices for WINDOW FRAMES, including up to 3.4 x 7.2.

Table listing prices for LATH, including common and extra.

Table listing prices for LIME, including state common and finishing.

Table listing prices for PAINTS AND OILS, including various colors and finishes.

Table listing prices for PAINTS AND OILS, including various colors and finishes.

Table listing prices for PAINTS AND OILS, including various colors and finishes.

Table listing prices for STONE, including Amherst freestone and Berlin freestone.

Table listing prices for SLATE, including Purple roofing slate and Green slate.

Table listing prices for TIN PLATES, including C. C. charcoal and I. C. charcoal.

Table listing prices for ZINC, including sheet and pipe.

BOSTON.

Table listing prices for FIRE BRICK, including Waldo Bros Extra.

Table listing prices for BUILDING BRICKS, including Eastern and Bay State.

Table listing prices for BUILDING STONE, including Rutland Marble.

Table listing prices for LUMBER, including Michigan pine and Spruce.

Table listing prices for PAINTS AND OILS, including various colors and finishes.

Table listing prices for PAINTS AND OILS, including various colors and finishes.

Table listing prices for PAINTS AND OILS, including various colors and finishes.

Table listing prices for MORTISE LOCKS, including brass face and bolt.

Table listing prices for SASH FASTS, including plain brass and nickel plated.

Table listing prices for STORE DOOR HANDLES, including wrought iron and lacquered brass.

Table listing prices for IRON, including wrought iron beams and plates.

CHICAGO.

Table listing prices for BRICK, LIME, AND CEMENT, including Chicago building brick.

Table listing prices for LUMBER (MICHIGAN PINE), including 1st and 2d clear.

Table listing prices for PAINTS AND OILS, including various colors and finishes.

Table listing prices for PAINTS AND OILS, including various colors and finishes.

Table listing prices for PAINTS AND OILS, including various colors and finishes.

Table listing prices for ROOFING, including 14 x 20 charcoal and 12 x 14.

Table listing prices for SHEET ZINC, including full casks and slabs.

Table listing prices for SHEET IRON, including No. 24 and No. 12.

Table listing prices for PAINTS AND COLORS, including white lead and zinc.

PHILADELPHIA.

Table listing prices for WHOLESALE PRICES, including iron and steel.

Table listing prices for WHOLESALE PRICES, including iron and steel.

Table listing prices for WHOLESALE PRICES, including iron and steel.

Table listing prices for WHOLESALE PRICES, including iron and steel.

Table listing prices for WHOLESALE PRICES, including iron and steel.

Table listing prices for WHOLESALE PRICES, including iron and steel.

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms.

DORCHESTER UNION FREESTONE CO. NEW BRUNSWICK YELLOW FREESTONE. The strongest, most durable, and cheapest light colored Building Stone.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: 'The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper.'

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY



The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING,  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, ETC., ETC

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.  
ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

**ESTABLISHED, 1836.**  
**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Composition Roof known. Also inventors and owners of the following patents:—

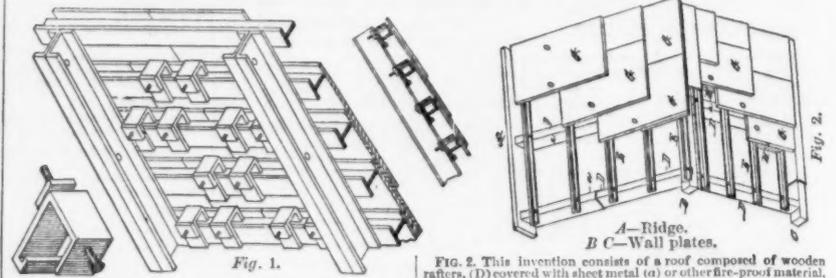


FIG. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the purlin on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

FIG. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or other fire-proof material, and iron purlins (c) or beams, with the slates (G) or other covering secured thereto by clamps, (Fig. 1) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contact with the slates or a covering of the roof, by which construction the roof boards are dispensed with, and a roof is produced thoroughly fire-proof at every point avoiding condensation, contraction and expansion of roofs formed wholly of iron.

**THE AMERICAN ARCHITECT AND BUILDING NEWS SENT FREE!**

draughtsmen and architectural students

Will do well to remember that a collection of architectural illustrations is not a thing of momentary interest; that there may come a time when an odd volume of the AMERICAN ARCHITECT will be of priceless value to them, and that now is the time to subscribe, since we

Send Free the Nos. for November and December, 1878, to new subscribers paying before December 15, 1878.

builders and mechanics

In search of a trade paper will do well to weigh the fact that in the first six months of this year we published fine illustrations of

- |                        |                     |                     |                     |                   |
|------------------------|---------------------|---------------------|---------------------|-------------------|
| 24 Country Houses,     | 13 Churches,        | 10 Staircases,      | 4 Details,          | 2 Bridges,        |
| 9 City Houses,         | 5 Cathedrals,       | 9 Wall Decorations, | 2 Tombs,            | 1 Police Station, |
| 4 Hospital Buildings,  | 5 Church Interiors, | 7 Bay-Windows,      | 2 Fountains,        | 1 Engine House,   |
| 4 School Buildings,    | 2 Hotels,           | 4 Furniture,        | 1 Shop Arcade,      | 1 Market House,   |
| 3 Library Buildings,   | 1 Court House,      | 1 City Hall,        | 1 Cemetery Gateway, | 1 Stable,         |
| 2 Insurance Buildings, | 1 Opera House,      | 1 State Prison,     | 1 Castle,           | 1 Studio.         |
| 4 Stores,              | 1 Music Hall,       |                     |                     |                   |

Besides perspective diagrams, foreign sketches, and numerous cuts illustrating building appliances. Terms \$6.00 per year. Remittances to be made by check, draft or money-order to the Publishers,

HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON.

Send for specimen copy.

**THE STANDARD AND ONLY RELIABLE PORTABLE ROOFING.**



With white Fire Proof Coating, for steep and flat roofs in all climates. In rolls ready for use. Easily applied by any one. No heat required. It weighs only 80 pounds per 100 square feet, and costs only half as much as tin.

H. W. JOHNS M'F'G CO., 87 Maiden Lane, New York,

Manufacturers of Asbestos Liquid Paints, Coatings, Cements, Boiler Coverings, etc.

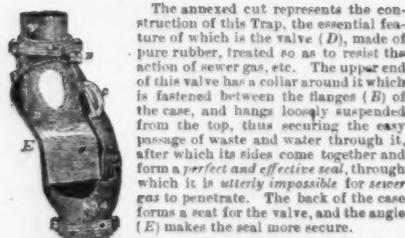
Send for Samples, Descriptive Price Lists, etc.

**GAS**

SPRINGFIELD GAS MACHINE.

Springfield, Mass.: 75 Maiden Lane, New York: 117 and 119 Court St., Boston: and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

**BUHRER'S INFALLIBLE SEWER GAS TRAP.**



S. BUHRER, Inventor and Manufacturer, Cleveland, Ohio.

WHOLESALE AGENTS.

W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O  
L. WOLFF M'F'G CO., 109 & 111 West Lake St., Chicago, Ill  
HAMBLEN & MATHEWS, 82 & 84 North St., Boston, Mass.  
C. A. BLESSING, 44 North Fifth St., Philadelphia, Pa.  
THE J. L. MOIT IRON WORKS, 88 & 90 Beckman St., N. Y.  
Please send for Circular.

**TO ARCHITECTS.**

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the SCAGLIOLA AND MAREZZO MARBLE, Which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall, and Altar Work. JAS. T. ALLEN & CO., 25 North Market Street, Philadelphia.

**D. M. MEEKER & SON'S Malleable Iron Hollow Muntin Window Sash.**

For Insane Hospitals, Fire Proof Buildings, &c.



The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

D. M. MEEKER & SON, Newark, N.J.

Fine Castings of Malleable and Gray Iron, German Silver and Composition: also Patterns a specialty.

**MAKE YOUR OWN GAS**

Send for CIRCULAR

WALWORTH MANUF. CO.  
No. 69 Kilby Street,  
BOSTON, MASS.

GAS GENERATORS, FOR LIGHTING Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.



**BRASS ANDIRONS, FENDERS,**  
And all kinds of Brass Work, made to order.

Grates for Parlor & Reception Rooms,  
For hard or soft coal, in every variety.

Iron and Brass Fittings for Stables a specialty

MURDOCK PARLOR GRATE CO.,  
Manufacturers,  
21 Washington St., Boston.

CRANE, BREED & COMPANY  
CINCINNATI, O.  
**SAFETY BOILERS**  
FOR HEATING  
STEAM AND HOT WATER  
MOST ECONOMICAL & RELIABLE METHOD OF HEATING  
AUTOMATIC APPLIANCES, RADIATORS, BOILERS, REGISTERS, FITTINGS, STEAM-PUMPS

**NON-POISONOUS**

**SILICATE PAINT**

Does not discolor, chalk, or crack off. It is superior to lead.

The only cure for damp walls of churches, dwellings, and public buildings, is the

**PETRIFYING LIQUID**

See article on "Dwellings of the Poor," AM. ARCHITECT, Sept. 21, 1878.

Send for Price List and Testimonials.

HOWARD FLEMING, Sole Agent in the United States,

10 PINE STREET, NEW YORK.

**COURT-HOUSES.—PRISONS.**

In our issue for November 9 will be printed a special list giving accurate information concerning the court-houses, jails, prisons, etc., now building, or about to be built, in this country and Canada.

Architects, builders, and other informed persons, who have not as yet sent us the information in their possession, are invited to do so without further delay.

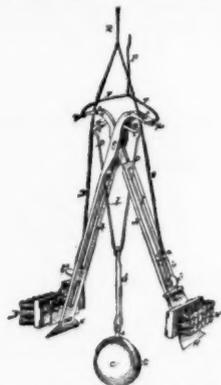
**BUILDING INTELLIGENCE.**

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

**BUILDING PATENTS.**

**CHIMNEY-CLEANER.**—Michael Hobbs, St. Paul, Minn. Two arms, A A, are pivoted together at a, above which point their upper ends are bent to a right angle with their main parts. To these ends, at x, is attached the cord P, by which the closed apparatus is lowered into a chimney flue; d d are eyes to which is attached the flexible V-shaped rod D, to the lower end of which is secured the heavy spherical weight C, which serves to pull the apparatus down a flue, and by means of its swivel-connections can make it pass



through a somewhat crooked flue. The V-shaped rod D works freely in slots cut in the arms A A. Near the lower end of the arms A A, at the points c, are attached the two ends of the rope R, by which the apparatus is raised, the positions of the points of attachment c c with reference to the fulcrum a causing the lower ends of the arms A A to separate from one another, and to bring the straps H H and the brushes B B against the sides of the flue. Scrapers of different sizes can be used at will; and the brushes can be adjusted so as to press against the sides of the flue at any angle desired.

**SECURING ROOFING-SLATES.**—Lawrence E. Gannon, Washington, D. C.

**AUGER-HANDLE.**—James D. W. Lovett, Boston, Mass.

**CURTAIN-FIXTURE.**—Otto Steinbohr, Baltimore, Md.

**SAND-PAPERING MACHINE.**—Joseph Taylor, New Orleans, La.

**HINGE.**—Sagwick M. Wade, Andover, O.

**FIRE-ESCAPE.**—Edward M. Ball, Stanstead, Canada.

**WRENCH.**—Hobart W. Brett, Boston, Mass.

**WOOD-POLISHING MACHINE.**—Jonathan Creager, Cincinnati, O.

**BIT FOR CARVING MACHINE.**—Chauncey T. H. Hoff, Covington, Ky.

**KILN FOR BAKING LIME, PLASTER, ETC.**—Paul F. Mabille, Paris, France.

**DOOR-HANGER.**—S. H. and E. V. Moore, Chicago, Ill.

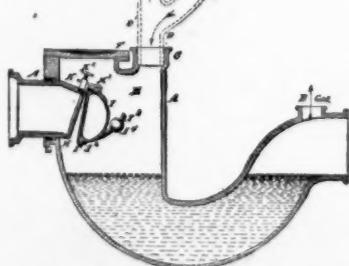
**POWDER.**—William Prescott, Albany, N. Y.

**TOOL HANDLE.**—David Steele, New Britain, Conn.

**BRUSH-MAKING.**—John L. Whiting, Boston, Mass.

**SEWER-TRAP.**—William F. Downey, Washington, D. C.

The chief object of this trap is to prevent the inflow of water through back-pressure. The trap is made in one piece, the seal being formed by the running trap in the lower part. B is an outlet on the sewer side of the trap for the escape of sewer-gas by means of a pipe carried above the roof.



On the house side of the trap is a chamber E, which has a suitable hand-hole cover F, and a connection C, for a rain-water conductor, which has a ventilating pipe D, branched into it. The main inlet pipe H has its inner end turned downwards, so that the upper edge shall overhang the lower. To this is hinged, by suitable contrivances, a semi-spherical valve made of sheet metal, which is to hang, always partly open, as shown in the cut, but at such an angle that any back pressure will close it tightly upon its seat. The arm I and the weight L serve to adjust it as desired.

**MACHINE FOR EDGING LUMBER.**—Marshall J. Egery, Bangor, Me.

**BENCH-PLANE.**—H. A. Foss, Pine Meadow, Conn.

**SHEET-METAL PIPE.**—George W. Ketcham, Newark, N. J.

**PERMUTATION LOCK.**—Stephen A. Maon, Reno, Nev.

**HOLLOW-SCREW PIN VISE.**—Julius Parmelee, Des Moines, Iowa.

**LATCH.**—Benjamin R. White, Trenton, N. J.

**BENDING WOOD.**—Hawley C. White, North Bennington, Vt.  
**SCROLL-SAWING MACHINE.**—W. F. & J. Barnes, Rockford, Ill.  
**SHUTTER.**—Ashar Bijur, New York, N. Y.  
**SEWER-TRAP.**—Joseph Clark, Brooklyn, N. Y.  
**FAUCET.**—Eugene Duchamp, St. Martinsville, La.  
**PORTABLE PITCH KETTLE.**—George H. Evans, Brooklyn, N. Y.

**COMPLETED BUILDINGS.**

**CLEVELAND, O.**—The new Second Presbyterian Church was dedicated last Sunday. The building has a frontage of 84 feet on Prospect Street, and 160 feet on Sterling Avenue. It is built in the early Norman style. The height of the main building is 72 feet, but the Prospect and Sterling corner is topped by a tower which rises 152 feet from the ground. The building is of undressed stone, very heavy and massive. There are altogether nine entrances or places of egress from the building. The main audience-room of the church measures 100 by 84 feet. The seats are arranged on the amphitheatrical plan, facing the pulpit on the west side of the church. In the centre the ceiling is shaped like a dome, from which depends a chandelier of 72 burners, lighted by electricity. In the floor of each pew are three small registers, bringing heat from the basement. The gallery of the church is 20 by 132 feet. The entire seating capacity of the auditorium will be about 1,300. The building also contains a lecture-room, 54 feet square, connected by folding-doors with the ladies' society-room, 28 by 32 feet, with a kitchen 11 by 18 feet, attached. Over the lecture-room is the Sunday-school room, 40 by 54 feet. At the northwest corner is the library-room, 8 by 24 feet in size. The building is heated by steam. There is also a hydraulic engine used for the organ bellows, this being under the control of the organist. The outside work has been in charge of Captain Jerry Ensworth. Mr. Joseph Ireland is the architect, and Mr. E. Freeman has had the superintendency of the building.

**DEDHAM, MASS.**—St. Raphael's Church was consecrated Sunday, October 27, by Archbishop Williams, of Boston; Charles J. Bateman, of Boston, architect.

**MARYSVILLE, O.**—The public school-house was dedicated October 19.

**NEW VIENNA, O.**—A public school building, which has cost \$11,000, has just been finished by W. R. Brown, architect, Xenia, O.

**ST. LOUIS, MO.**—The new German Protestant Orphan Asylum on the Natural Bridge Plank Road was dedicated October 20.

**TROY, N. Y.**—The new Presbyterian church on Pawling Avenue was dedicated last Thursday with appropriate exercises.

**SUMMARY OF THE WEEK.**

**Baltimore.**

**BUILDING PERMITS.**—Hannah Hoover, three-story dwelling, 337 Columbia St.; Joseph H. I. Pfister, three-story dwelling, 169 South Washington St.; David M. Reiger, three-story store, cor. Cumberland and Chatham sts.; Ellis Carter, three-story building, iron front, Gay and Fayette sts., 69' x 60'.—H. A. Cole, 2 three-story dwellings, Madison St.—Material, brick, where not mentioned.

**Boston.**

**BUILDING PERMITS.**—The following permits have been granted since our last issue:—

**BRICK BUILDINGS.**

Mechanic.	No.	Stories.	Class.	Size.
Morton & Chesley.	1	1	Store.	25' x 68'.
L. M. Merrill.	2	2	Dwellings.	22' x 44'.
G. H. Cahan.	1	3	Manufactory.	29' x 25'.
Lynch Bros.	1	3	Storage.	97' x 44'.

**WOODEN BUILDINGS.**

Mechanic.	No.	Stories.	Class.	Size.
H. P. Bisell.	1	1	Freight-shed.	39' x 40'.
Jas. Kendall.	1	2	Stable.	36' x 27'.
John Jones.	1	1	Stable.	13' x 21'.
Beal & Spear.	1	1	Stable.	30' x 40'.
G. E. Wood.	1	1	Poultry-h'se.	48' x 15'.
W. H. Manxey.	1	1	Carriage-h'se.	20' x 26'.
G. A. Spear.	1	1	Manufactory.	29' x 25'.
G. A. Spear.	1	1	Manufactory.	29' x 25'.
Seth Perkins.	1	1	Work-shed.	150' x 24'.
L. Connor.	1	1	Poultry-h'se.	15' x 15'.
A. McDonald.	3	1	Dwellings.	21' x 32'.

**REPAIRS.**—Repairs and alterations active, two hundred and twenty-five permits having been issued for the month of October, ending the 28th.

**FIRE-ESCAPES.**—The Board of Inspectors are now busily engaged in examining buildings on which fire-escapes are required. One hundred and seventy-five requisitions have been made during the year ending October 28.

**STORE.**—A one-story structure is building by the side of the Old South Church. Morton & Chesley, contractors.

**Brooklyn.**

**SOCIETY BUILDING.**—Work has begun on the new building for the Historical Society, under the direction of Mr. G. B. Post, architect. The building measures 75 by 85 feet, is three stories high, and is to be built of brick, with stone finish. The contractors are: mason and carpenter work, D. H. King, Jr.; cut stone work, Geo. Brown & Co.; iron work, A. Schweiger; steam heating, Baker & Co.; slate roofing, Geo. Fisher & Bro.; granite and marble work, French & Co. The building will cost \$30,000, and will be completed by October 1, 1879.

**BUILDING PERMITS.**—Calyer St., 5 two-story brick dwellings, 18' x 35'; owner, D. W. L. Moore, 119 Kent St.; architect, Fredk. Weber; builder, C. M. Moore.—Dupont St., 1 two-story frame stable, 20' x 25'; owner, Richard Batchelor; builders, J. Smith and J. Szesen.—Koselusko St., 1 two-story brick dwelling, 20' x 32'; owner, A. S. Walsh, 412 West Fifty-seventh St., New York; architect, J. E. Brittingham; builder, A. McKnight.—Leonard St., 1 two-story brick school building, 46' x 92'; owner, Board of Education, city of Brooklyn; architect, S. B. Leonard; mason, James Rooney.—Nelson St., 1 two-story brick dwelling, 30' x 35'; owner, Edward Keogh; builder, Thomas Keogh.—Walden St., 1 two-story frame shop and dwelling, 25' x 28'; owner, A. Koehler; architect, J. J. Hoepfer; builder, J. G. Hoepfer.—De Kalb Ave., cor. Vanderbilt Ave., 5 three-story brown stone dwellings, 16' 6" and 20' 8" x 48'; owner, Mrs. M. L. Brundage; architect, G. L. Morse; builder, E. P. Crane.—Montrose Ave., cor. Humboldt St., 1 one-story frame store, 28' x 40'; owner, Conrad Goldbach; architect, Ulrich

Maurer, Jr.; builder, Ulrich Maurer.—Putnam Av., No. 280, 1 two-story brown stone dwelling, 19' 10" x 42'; owner, John S. Bogart.—Schenectady Ave., 1 two-story frame dwelling, 18' 9" x 30'; owner, B. Winslow.—Willoughby Ave., 4 two-story brown stone dwellings, 20' x 42'; owner, R. C. Addy, 167 Hart St.

**Chicago.**

**BUILDING PERMITS.**—John Branan, 2 two-story dwellings, Franklin St.; cost, \$3,000.—John Bromester, two-story dwelling, Ogden Ave.; cost, \$3,500.—J. G. Grier, a two-story and a three-story building, Ashland Ave.; cost, \$8,000.—Wolfer & Zeiger, two-story ice-house, 35 Chicago Ave.; cost, \$2,000.—D. S. Morgan & Co., two-story warehouse, Johnson St.; cost, \$6,000.—Rosanna O'Brien, two-story dwelling, 128 Forquer St.; cost, \$1,500.—Abraham Scudle, two-story stone-front dwelling, 456 North La Salle St.; cost, \$4,000.—N. Monroe, two-story dwelling, Indiana Ave.; cost, \$3,500.—Public School, cor. of Washab Ave. and Ida St.; cost, \$20,000.—H. H. Karstens, 2 three-story stores and dwelling, Chicago Ave.; cost, \$6,000.—William Burmester, two-story dwelling, Twomey St.; cost, \$2,000.—C. R. Kieckok, two-story dwelling, 43 and 45 Forest Ave.; cost, \$2,000.

**Cincinnati.**

**BUILDING PERMITS.**—The following building permits have been issued by the Board of Public Works since our last report:—

Adam Kline, two-story frame; cost, \$1,500.—J. W. Cotteral & Son, four-story brick; cost, \$7,000.—Thos. Callaghan, two-story brick; cost, \$1,200.—Harrison & McAvoy, two-story brick; cost, \$2,000.—K. Klein, two-story frame; cost, \$1,200.—J. W. & T. G. Robinson, two-story brick; cost, \$2,000.—Fred. Luecke, three-story brick; cost, \$4,500.—Fred. Luecke, one-story frame; cost, \$700.—16 permits for repairs; total cost, \$6,750.—Total number permits, 24.—Total cost, \$33,250.—Total permits to date, 715.—Total cost to date, \$1,221,313.

**DWELLING.**—Mr. S. Hannaford is the architect of the brick house which is to be built for Thomas Scanlan, Esq., at Walnut Hills, at a cost of about \$5,000.

**Cleveland.**

**DWELLING.**—A new summer residence for Amasa Stone is nearing completion. It is built of brick, with stone trimmings. The cost, when completed, will be about \$1,000. Mr. Joseph Ireland is the architect, and Mr. John T. Waterson is the contractor for the work.

**PACKING-HOUSE.**—Rose & Prentiss, provision dealers of this city, are about to build a large packing-house. The building is to be 130 by 180 feet in size, and will be of heavy oak and ash timber. The contract was let to Mr. Scott, at \$5.65 per 1,000 feet. The building, when completed, will cost in the neighborhood of \$15,000. Mr. J. M. Blackburn is the architect.

**Louisville.**

**BUILDING PERMITS.**—A. Kahler, two-story brick dwelling, Walnut St.; cost, \$1,350.—John H. Whalen, to extend one-story brick and frame hall, Preston St.; cost, \$350.—John Duffy, three-story brick store and dwelling, Jefferson St.; cost, \$4,000.—Nick Schmitt, frame stable, Payne St.; cost, \$50.—Charles Hebel, alter frame dwelling, Washington St.; cost, \$200.

**New York.**

**BUILDING PERMITS.**—Thirty-first St., near First Ave., 2 tenements, 25' x 50'; cost, \$7,500 each; Jos. Muligan, owner and builder; Jardine Bros., architects.—Sixty-fourth St., near Madison Ave., 2 first-class dwellings, 25' x 60' each, brown stone front; cost, \$20,000 each; Johnson & Jarline, owners; Jardine Bros., architects; J. W. Hogenocny & Son, builders.—One Hundred and Forty-fifth St., near Colby Ave., 2 second-class dwellings, 72' x 50'; cost, \$3,000; A. Keefer, owner; A. E. Fontaine, builder.—Stiney Place, cor. Independence Ave., frame stable; cost, \$500; P. Chauncey, owner; J. P. Seymour, architect; M. Harrington, builder.—Tenth St., near Washington St., three-story office building, 35' x 27'; cost, \$6,000; Beadeston & Weisz, owners; A. Pfund, architect; John Weber, builder.—Lexington Ave., near Seventy-seventh St., 3 first-class dwellings, 17' x 45'; cost, \$5,000 each; J. F. Malcolm, owner; John C. Burne, architect; Wm. Picken, builder.—Eightieth St., near Lexington Ave., 3 first-class dwellings, 16' x 50'; cost, \$3,000 each; Francis Crowfursta, owner; F. Barnes, architect; W. Corner, build r.—Cor. First St. and Extra Place, 2 tenements, 20' x 60'; five stories; cost, \$6,000 each; H. Bruns, owner; F. W. Dent, architect.—One Hundred and Fortieth St., near Third Ave., 3 wooden tenements, 25' x 50'; cost, \$3,500 each; John Muller, owner and builder.—Cor. West and Horatio sts., factory, 100' x 81', one-story brick; cost, \$3,700; Chas. E. Dodge, owner.—Fifty-eighth and Fifty-ninth sts. and Ave. to East River, 24 first-class dwellings, 16' x 40', with extension, three stories high, brown stone fronts; cost, \$6,000 each; A. J. Kerwin, owner and builder; John Sexton, architect.—227 West Nineteenth St., third-class store, 47' x 29'; cost, \$300; Mary Walsh, owner.—Thirty-ninth St., near Second Ave., tenement, 25' x 60', four stories; cost, \$3,000; J. B. Smith, owner; W. R. Smith, architect; Chas. Bade, builder.

**Philadelphia.**

**BUILDING PERMITS.**—F. Gramlich, two-story stable, 18' x 22', Mutter St.—E. J. Devin, two-story dwelling, 20' x 44', cor. K' St. and Erie Ave.—Jacob Kraft, two-story brick building, 14' x 96', No. 2509 North Second St.—Evans & Patterson, two-story dwelling, 16' x 30', Baird St., Germantown.—Aug. Schreiber, two-story stable, 16' x 70', Palmer St.—Fredk. Repp, two-story store and dwelling, 19' x 62', No. 1514 North Twenty-fifth St.—Thos. McCracken, three-story dwelling, 14' 6" x 32', Adams St.—Jas. B. Doyle, one-story addition, 24' x 100', Thirtieth St.—Samuel R. Stewart, four-story factory, 36' x 40', Howard St.—J. M. Sharp, 2 two-story dwellings, 14' x 37', Ninth St.—T. W. Wright, three-story picket-house, 29' x 49', Armat St.—George Miller, three-story brick building, 18' x 40', No. 1931 Germantown Ave.—Thomas Wagner, two-story store, 16' x 16', No. 1219 Thompson St.—L. H. Eckhard, three-story dwelling, 18' x 53', Sixteenth St.—W. Silence, 6 two-story dwellings, 12' x 7', Twentieth St.—David Murtha, 4 three-story dwellings, 16' x 50', 15' 6" x 50', 13' 6" x 50', cor. Eleventh and Sansraset sts.—John Dallas' Sons, four-story factory, 130' x 47', Huntingdon St.—John Diggle, 2 two-story dwellings, 14' x 30', Fifty-ninth St.—Phares Young, two-story stable, 25' x 60', No. 848 North Fourth St.—R. Varnall, two-story stable, 16' 6" x 35', No. 3211 Chestnut St.—A. C. Jones, 4 two-story dwellings, 14' x 28', Ludlow St.—W. S. Williamson, three-story dwelling, 18' x 24', Miles Alley.—Henry Miller, 2 three-story dwellings, 18' x 39', Martin St., Roxborough.—E. B. Farrell, two-story dwelling, 16' x 32', Peachin St.—R. Manly, two-story dwelling, 16' x 34', Thirty-fifth St.—Mrs. S. Wammanaker, two-story dwelling, 16' x 28', Lafayette St.—W. J. Welsh, three-story dwelling, 16' x 28', No. 1027 Newton St.—T. Mealy, three-story store and dwelling, 20' x 22', 525 Bainbridge St.—M. J. Conroy, 3 two-story dwellings, 14' x 48', Juniper St.—John McGrainger, two-story store and dwelling, 17' 6" x 40', cor. Bailey and Oxford sts.

**St. Louis.**

**BUILDING PERMITS.**—Thirty-five permits have been issued for the week ending October 25, 1878. Five permits are for unimportant frame structures; the rest are for brick buildings, all small. Those worth \$2,500 and over are as follows:—

Owners.	Use.	Stories.	Rooms.	Cost.
C. Mallinckrodt.	Chemical factory.	3	3	\$4,000
T. Walker.	Dwelling.	2	14	4,500
J. Morrison.	Dwelling.	2	16	2,700
Mrs. N. McCosh.	Dwelling.	2	8	2,700
J. Murphy.	Ice-house.	2	3	3,500

**Washington, D. C.**

**BUILDING PERMITS.**—Epiphany Church, to repair outside of church and spire, on G St.; cost, \$1,200.—A. M. Gibson, stable, Concord St.; cost, \$450.—John H. Knoch, 2 dwells., Four-and-a-half St.; cost, \$200.—J. D. Clary, one-story factory, Twenty-seventh St.; cost, \$1,500.

**General Notes.**

**ANDARCO, IND. TER.**—Proposals for building a school-house and a commissary building have just been received.

**ANN ARBOR, MICH.**—The building committee of the new court-house unanimously recommend that the building be heated by steam. The supervisors have instructed them to ascertain and report the comparative cost of heating by steam and stoves.

**BEAVER FALLS, PENN.**—They have commenced work on the round-house of the new P. & L. E. R. R., and will begin soon on the station.

**BIRMINGHAM, MICH.**—Two-story brick dwelling, with stone finish and mansard slate roof. Size 40 by 44 feet, with an L 16 by 16 feet. Frank Ford, Esq., owner, and A. C. Varney, Detroit, Mich., architect. Up to second story.

**CAHO, MICH.**—Messrs. Montague & Washburn are building a brick opera-house.—The German Lutheran Society is building a church.

**CHARLESTOWN, W. VA.**—The Board of Public Works has selected as the site upon which to erect the necessary buildings for the use of the State in this city, the future capital, the lot conveyed by the State House Company and others to the Board some time since.

**CHATTANOOGA, TENN.**—Wildbergers Peir & Co.'s cotton factory, burned lately, will be rebuilt on an enlarged scale.

**CLIFTON, O.**—Mr. Samuel Hannaford, architect, Cincinnati, is preparing plans for a first-class villa for George W. McAlpin, Esq., to be erected at this beautiful and well kept suburb of Cincinnati. The house is to be of brick, and will measure on plan 88 by 68 feet. Five rooms on a floor, arranged so as to be well thrown together. The exterior is designed in strict conformity with the prevailing revival of the Queen Anne style. The exterior will probably be of pressed brick. The cost will be about \$25,000.

**DELHI, O.**—Mr. Zinn has begun a new house on the lot back of the church.

**DETROIT, MICH.**—Dwelling-house, 35 by 36 feet, and L 18 by 21 feet, two stories, mansard slate roof, brick with stone finish, and also a stable two stories high, brick, 23 by 36 feet. John Waterfall, owner and builder; A. C. Varney, Detroit, Mich., architect. Not yet commenced.

**FEDERALSBURG, MD.**—Building is brick.

**GERMANTOWN, O.**—A substantial brick building for the use of the fire department, adjoining our town hall, is now approaching completion. The new United Brethren Church is now under roof, and will be left until spring, when the interior will be handsomely fitted up.

**LEFFERSBURG, MD.**—The new Reformed church now building will cost \$6,000.

**LYNN, MASS.**—Mr. H. J. Preston, of Boston, is the architect of a house for Hon. T. P. Richardson; cost, \$7,000.

**MANCHESTER, MASS.**—A summer residence is soon to be built for Mr. Henry Higginson. Messrs. Cabot & Chandler, architects, of Boston.

**MIAMISVILLE, O.**—Mr. Hannaford, architect, of Cincinnati, has in hand plans for a frame house to be built for E. E. Chamption, Esq.; ten rooms, frame; cost, about \$5,000.

**MILFORD, O.**—Mr. Geo. Rusk is erecting a fine residence in new South Milford (Townsend's addition).

**NEW BEDFORD, MASS.**—J. T. Edgerton is building a three-story building, 30 by 60 feet, at the corner of Purchase and Linden streets. The second and upper stories will be used as a hall and club-rooms respectively.

**NEW HARTFORD, CONN.**—Dr. E. D. Carter has laid the foundations for a house in the rear of his office, and proposes to build at once.

**NEWTON, MASS.**—A house in the Renaissance style is now building for Mr. Benj. J. Leeds; cost, \$6,000. Mr. Henry J. Preston, of Boston, is the architect.

**NORFOLK, MASS.**—The Wheaton Female Seminary has been enlarged by the addition of three wings. The original structure was 64 feet by 44 feet, and two stories high, classic, with Grecian details. The wings now added change the plan to a Greek cross, having a length of 124 feet and a width of 101 feet. The new wings are in style uniform with the original building, two of them being two stories high, and the third wing partially two and partially one story in height. At the intersection is an octagonal cupola of ornate architecture. The coloring of the exterior is carefully elaborated. The principal features of the interior are the large recitation and exhibition hall, and the principal staircase, which is contained within an area of 30 by 41 feet, with a clear height of 22 feet. The ceiling of this area is covered and finished in ribbed coffer and entablature, terminating in a central light in the centre. The staircase is of hard wood, with square landings, and a gallery surrounds it at the level of the second story, and in one of the four sides of the stairway an inscribed marble tablet has been placed. The architect is Gridley J. F. Bryant, of Boston. The contractors, Messrs. Cressey & Noyes, of Boston. The improvements, which cost upwards of \$25,000, were at the expense of Mrs. E. B. Wheaton, of Norton.

**PITTSBURGH, PENN.**—On Saturday last the corner-stone of the new Catholic church at the corner of Liberty and Thirty-third streets was laid.

**PONTIAC, MICH.**—A block of brick stores and offices is in course of erection for Mr. Wm. Willett, galvanized iron and stone finish, two stories and basement high, 42 by 90 feet; Heitsch & Son, builders; A. C. Varney, Detroit, Mich., architect. Up to second story.—Double two-story flat-roof brick dwelling-house, 44 by 35 feet, and two L's 16 by 18 feet; cost, \$4,000; T. Turk, Esq., owner; A. C. Varney, Detroit, Mich., architect.

**SEATTLE, W. T.**—The Tribune says that Mr. Wheeler has just finished the survey of Point Wilson preparatory to the construction of the new light-house.

**SLEEPT EYE, MINN.**—Between 100 and 200 workmen are engaged in building a round-house and machine-shops for the Winona and St. Peter Railroad Company.

**WANTS.**

A POSITION as agent for a stone contractor or for a company manufacturing specialties for building purposes, by a young man experienced in business, or any situation requiring a knowledge of architects' plans, designing, scale, and detail drawings, preparing bills of quantities, etc. An extensive acquaintance among architects, and means of keeping informed of building news in New York and Boston.—Address O. WESLEY, 246 E. 25th St., New York.

**Publishers' Department.**

**The American Architect and Building News.**

PUBLISHED EVERY SATURDAY BY

HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year; \$6.00 in advance.

**CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,**

WITH

Houghton, Osgood & Co.'s other Periodicals.  
 THE ARCHITECT and \*ATLANTIC MONTHLY...\$9.00  
 THE ARCHITECT and THE REPORTER...15.00  
 THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL...10.00  
 THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE...7.00  
 \* N. E.—The Atlantic portraits of Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

Payments should be made directly to the Publishers, either by draft or by post office order.

HOUGHTON, OSGOOD & CO., Publishers, WINTHROP SQUARE, BOSTON.

**BUILDING SPECIALTIES, Etc.**

—Sash chain from Norway Iron is an article manufactured by Thomas S. Morton, of New York. His advertisement will be found elsewhere.

—The Yale Lock Co. received the award of a Gold Medal at the Paris Exposition of 1878. The announcement is no surprise to those conversant with the merits of their list of manufactures.

—Creosoted wood, prepared by the Hayford process, is in favor among architects, engineers, etc., and will doubtless soon come into general use, as similarly prepared woods have in Europe. There they are largely used for railroad ties with the greatest success, and for many other purposes, such as piles, cellar floors, etc., where architects and builders are interested. Good authorities assert that in the creosoting process the wood is rendered practically imperishable, its destruction from worms and from the alternation of wet and dry surroundings being prevented. The subject is well worth the attention of all persons engaged in building, and we commend to them the card elsewhere of Mr. E. R. Andrews, who owns the Hayford patent, and has offices in New York and Boston. A pamphlet, giving particulars of the process, will be furnished on application at 4 Post Office Square, Boston, or 10 Warren Street, New York.

*A. Hall & Sons*  
 Manufacturers of  
 Architectural Terra Cotta,  
 Buff and Colored Brick, Fire Brick,  
 Established 1846, South Amboy, N. J.

**ARCHITECTURAL IRON WORKS. YOUNGLOVE & CO., Prop'r's. CLEVELAND, O.**

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CRESTING, ETC.

Estimates promptly furnished. (Established 1848.)

**MARKET ST. ARCHITECTURAL FOUNDRY AND IRON WORKS. SNEAD & CO., LOUISVILLE, KY.**

**RUBY & PEARL**  
 Surface-Burning Self-Feeding  
**FURNACES.**

**CLINTON** Wrought Iron, with Brick Lined Fire-Pot.  
 Reversible Fine Furnace.  
**CRYSTAL** Wrought Iron, with Cast Iron Fire-Pot.  
 Surface Burning Furnace.

MANUFACTURED BY FULLER, WARREN & CO., Troy, New York, Cleveland, Chicago.

IRON STABLE FITTINGS. RUBIER & CO., 23 Exchange St., BOSTON.

**Drawings for the American Architect and Building News.**

Architects and architectural draughtsmen who desire to contribute drawings for publication will find the following facts of use:—

Only pen-and-ink drawings, without brush-work of any kind, can be reproduced. The space on a single page allowed for a drawing is 7" x 11"; therefore drawings should have approximately these proportions.

The reproductions are most satisfactory when they are from one-third to one-half as large as the originals. The most satisfactory results are obtained from drawings upon Bristol board, or hot-pressed Whatman. Tinted paper should not be used.

Tracing cloth upon the dull side, bank-note paper, or tracing paper, provided it is not of a yellowish tinge, may be used in cases of absolute necessity.

The ink should be black and of uniform strength. The lines should be firm, sharp, not too coarse, and not unintentionally broken.

Shading and hatching lines must not be too close and crowded, especially where a large surface is to be shaded.

It is very desirable that plans should accompany the drawings.

Drawings of details both constructional and ornamental are also desirable.

**BOUND VOLUMES**

**AMERICAN ARCHITECT.**

We are prepared to fill orders for binding the American Architect and Building News in styles similar to the volume for 1876, at the following rates:—

- Price of cover without binding.....\$1.00
- Cover and binding (for subscribers).....2.00
- Numbers of 1876 or 1877 without cover or binding 7.50
- Bound volumes of 1876 or 1877.....9.00

In sending volumes to be bound it should be stated whether the illustrations are to be bound with their respective numbers, or whether all illustrations are to be placed together at the end of the volume.

N. B.—Volumes bound in both styles are kept in stock.

The above will be sent, post paid. Subscribers sending their numbers to be bound will prepay postage or express charges.

HOUGHTON, OSGOOD & CO., PUBLISHERS, Winthrop Square, Boston.

**WROUGHT IRON BEAMS & GIRDERS**

THE UNION IRON MILLS, Pittsburgh, Pa. Manufacturers of Improved Wrought Iron Beams and Girders (patented).

The great fall which has taken place in the prices of Iron, and especially in Beams used in the construction of FIRE-PROOF BUILDINGS, induces us to call the special attention of Engineers, Architects, and Builders to the undoubted advantages of now erecting fire-proof structures; and by reference to pages 52 and 54 of our Book of Sections—which will be sent on application to those contemplating the erection of fire-proof buildings—THE COST CAN BE ACCURATELY CALCULATED, the cost of insurance avoided, and the serious losses and interruption to business caused by fire. These and like considerations fully justify any additional first cost. It is believed that, were owners fully aware of the small difference which now exists between the use of Wood and Iron, in many cases the latter would be adopted. We shall be pleased to furnish estimates for all the Beams complete, for any specific structure, so that the difference in cost may at once be ascertained. Address CARNEGIE BROS. & CO., Pittsburgh, Pa.

"Wood thoroughly creosoted is practically imperishable."

**CREOSOTED WOOD,**

PREPARED AT THE Hayford Patent Creosote Wood Preserving Works, ELIZABETHPORT, N. J., and A St., So. BOSTON.

Offices: 10 Warren St., New York, and 4 Post Office Sq., Boston.

EDWARD R. ANDREWS, Proprietor. ARCHITECTS, ENGINEERS, and BUILDERS are reminded that wood prepared by the Hayford process is rendered PRACTICALLY IMPERISHABLE, being protected from decay, marine worms, etc. It should be used for Ties, Bridges, Piles, Piers, Wharves, Pavements, Stable and Cellar Floors, and wherever wood is exposed to alternate dryness and moisture. Pamphlets, fully explaining the creosoting process, furnished on application.

**DOUBLE RATCHET REGULATORS, FOR TRANSOMS, FAN-LIGHTS, ETC.**

These R-gulators are for hanging transoms and adjusting them at any desired angle for ventilation, superseding chains, pulleys, hinges, etc.; and are most useful substitutes for the old style of pivots, easily attached to the transom, and wherever used have stood the test.

PULLMAN PALACE CAR CO., CENTRAL DIVISION, JERSEY CITY, January 30, 1878.

DOUBLE RATCHET M'FG CO., N. Y. Gentlemen,—I have found the Double Ratchet Regulator a very useful article in my office for keeping the fan-lights in any desired position, having used the same for some three or four years, and are in as good working order as when put up. Very respectfully, C. D. FLAGG, Asst Sup't.

For sale by hardware dealers. Send for circular. Agents wanted everywhere. DOUBLE RATCHET M'FG CO. (Limited), 346 & 348 Broadway New York.

**TO ARCHITECTS AND OTHERS.**

TO BE LET — A large Room, with smaller attached, if wanted, quiet, light, and pleasant, up one flight only. Will be let low to responsible parties.  
WALWORTH M'FG CO.,  
73 Kilby Street.

**PROPOSALS.**

**DITCH AND LEVEE.**

GLENWOOD, IOWA.  
Sealed proposals will be received by me up to 2 P. M. of Monday, November 18, 1878, at my office in Glenwood, Mills County, Iowa, for the construction of a ditch and levee on the Missouri River bottom in said county, in separate sections, numbered 1 to 17, inclusive, and of kind and amount of work upon each section, as per profiles and complete specifications thereof, to be found on exhibition for inspection at my office on and after the 25th inst.  
151  
H. F. WILSON, County Auditor.

**IRON BRIDGE.**

NEW HAVEN, CONN.  
Sealed proposals will be received at the office of the City Surveyor, Room 9, City Hall, New Haven, Conn., until 7 1/2 o'clock, Thursday evening, November 7, 1878, for furnishing the materials and constructing the superstructure of a wrought iron bridge over Quinnipiac River at the crossing of Middletown Avenue, known as Lewis Bridge. The bridge will be a single span of 150 feet between centres of support, and 18 feet width of roadway. The specifications and contract can be seen, and blank forms of proposal, with the eurities' bond attached, can be obtained upon application. An abstract of the specifications will be furnished to all applicants. No proposals will be received after the time specified, and all proposals not properly filled out will be rejected. The right to reject any or all bids will be reserved.  
149  
CHARLES E. FOWLER, City Surveyor.

**MASON-WORK.**

CINCINNATI, O.  
Sealed proposals will be received at the office of the Board of Public Works, until 12 o'clock, noon, of Thursday, November 7, A. D. 1878, for putting in repair the Eighth Street Bridge abutments, ready for the iron superstructure, according to specifications on file in the office of the Board of Public Works.  
The Board reserves the right of rejecting any or all the bids.  
Bidders will indorse their names upon the outside of the envelopes containing their bids.  
Each bid to be accompanied by two disinterested sureties. By order of the Board.  
JOHN E. BELL, President.  
JOHN D. BANKS, Clerk. 149

**SCHOOL-HOUSE.**

NEW YORK, N. Y.  
Sealed proposals will be received by the School Trustees of the Eleventh Ward, at the Hall of the Board of Education, corner of Grand and Elm streets, until Tuesday, the 5th day of November, 1878, and until 4 o'clock P. M. on said day, for the erection of a new School-House on the south side of Seventh Street, between Avenues B and C, on lots Nos. 186, 188, 190, 192.  
Plans and specifications may be seen at the office of the Superintendent of School Buildings, No. 146 Grand Street, third floor.  
Proposals must state the estimate for each branch of the work separately, and be indorsed, "Proposal for Mason Work," "Proposal for Carpenter Work," "Proposal for Painting."  
The party submitting a proposal, and the parties proposing to become sureties, must each write his name and place of residence on said proposal.  
Two responsible and approved sureties, residents of this city, are required in all cases.  
No proposal will be considered from persons whose character and antecedent dealings with the Board of Education renders their responsibility doubtful.  
No substitution by the accepted contractor will be permitted without first obtaining, in writing, permission from the Committee on Buildings of the Board of Education.  
The Trustees reserve the right to reject any or all of the proposals submitted.  
GEO. B. RHODES,  
S. GREGAL, M. D.,  
JOHN POWERS,  
JOHN C. LIMBECK,  
JOSEPH WANGLEL,  
Board of School Trustees, Eleventh Ward.  
New York, October 21, 1878. 149

**DITCH.**

HYDE PARK, ILL.  
Proposals will be received by the undersigned at the village hall, Hyde Park, until November 11, 1878, for the construction of a ditch on Stony Island Avenue, from Eighty-seventh Street to Lake Calumet, of a width of thirty feet at the bottom.  
Also, for enlarging the ditch on Eighty-seventh Street, from Stony Island Avenue to Cottage Grove Avenue, to a width of thirty feet at the bottom, both to be in accordance with the plans and specifications on file in the office of the village engineer, and payments for both to be made only out of the proceeds of the special assessments when collected.  
Bids for each to be made separately, and the Board reserves the right to reject any and all bids.  
By order of the Board of Trustees of Hyde Park.  
150  
JOHN I. BENNETT, President.

**CHURCH.**

LOUISVILLE, KY.  
The plans and specifications for rebuilding Green Street colored Baptist church, between Floyd and Preston, will be ready for contractors to inspect, in order to make sealed proposals, after 1 o'clock October 22, 1878. 149

**MONUMENT.**

HARRISBURG, PENN.  
Office of the Secretary of the Commonwealth, Harrisburg, Penn., October 12, 1878. — Notice is hereby given that the Commission, consisting of the Governor, the Secretary of Internal Affairs, and the Secretary of the Commonwealth, authorized by act of General Assembly approved June 17, 1878, to carry out the provisions of said act, appropriating the sum of five thousand dollars for the erection of a monument over the grave of the late Governor John W. Geary, will meet at the office of the Secretary of the Commonwealth on Friday, November 2, 1878, at 12 M., for the purpose of receiving plans and proposals for the erection of the monument, and will thereupon proceed to determine upon the same.  
JOHN BLAIR LINN,  
Secretary of the Commonwealth. 149

**PROPOSALS.**

**WROUGHT AND CAST-IRON WORK.**

Proposals for protecting the U. S. Sub-Treasury Building in New York City.  
OFFICE OF THE SUPERINTENDING ARCHITECT,  
U. S. COURT-HOUSE AND POST-OFFICE,  
NEW YORK, October 21, 1878.  
Sealed proposals will be received at this office until 12 M., on the 4th day of November, 1878, for furnishing, delivering, and fixing in place complete all the Wrought and Cast-Iron Work, etc., required for protecting the U. S. Sub-Treasury Building in New York City, in accordance with the drawings and specification.  
Copies of specification, and any additional information, may be obtained on application at this office, where drawings may be seen.  
THOMAS R. JACKSON,  
Superintendent of Repairs. 149\*

**HOT-WATER APPARATUS.**

Proposals for a low temperature Hot-Water Apparatus for the U. S. Court-House and Post-Office, at Grand Rapids, Mich.  
OFFICE OF THE SUPERVISING ARCHITECT,  
TREASURY DEPARTMENT,  
WASHINGTON, D. C., October 17, 1878.  
Sealed proposals will be received at this office until 12 M., on the 5th day of November, 1878, for supplying and fixing in place complete a low temperature hot-water Heating Apparatus in the U. S. Court-House and Post-Office, at Grand Rapids, Mich., in accordance with drawings and specification, copies of which and any additional information may be had on application at this office or the office of the Superintendent.  
JAS. G. HILL,  
Supervising Architect. 149\*

**LOCKS AND KEYS.**

POST OFFICE DEPARTMENT,  
WASHINGTON, D. C., August 15, 1878.  
Separate sealed proposals will be received at this Department until 12 o'clock noon on the 26th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as are to be used for the street letter-boxes of the United States.  
As the public exposure and searching examination necessary to intelligent bidding on any prescribed model of a lock and key would tend to impair, if not entirely destroy, the further utility of all such locks and keys for the purposes of the mails, the Postmaster-General prescribes no models or samples for bidders, but relies for a selection on the mechanical ingenuity and skill which a fair competition among inventors, hereby invited, may develop in samples submitted by them.  
Specifications of requirements as to proposals, samples, kinds and quantities of locks and keys, contracts, etc., will be furnished on application by letter to the Second Assistant Postmaster-General.  
No proposal will be considered which is not submitted in accordance with such specifications and forms of proposal. The contracts which may be made are to be in conformity with the specifications and accepted proposals.  
170  
D. M. KEY, Postmaster-General

**GAS WORKS.**

RIO DE JANEIRO, BRAZIL.  
By order of the Brazilian Legation at Washington the undersigned makes public that the Imperial Government calls for proposals for the gas illumination of Rio de Janeiro, the present contract expiring in March next. The proposals, addressed to the Envoy Extraordinary and Minister Plenipotentiary of Brazil, must be sent until 3 o'clock in the afternoon of the 1st day of December next to the Brazilian Consulate General, 42 Broadway, New York, where copies of the general conditions and specifications referred to in the fourth clause can be obtained, as well as any information in relation to this matter.  
SALVADOR DE MENDONCA,  
Brazilian Consul-General  
New York, September 9, 1878.

**MINISTRY OF AGRICULTURE, COMMERCE, AND PUBLIC WORKS — DIRECTORY OF PUBLIC WORKS.**

By order of his Excellency the Minister of this Department, it is advertised that this Directory receives proposals for the service of the illumination by gas of the Capital of the Empire, in the terms and conditions below specified: —  
First — The proposals will be presented in a closed letter, until 3 o'clock in the afternoon of the 1st day of December of the present year, in this city, in the Directory of Public Works of the Ministry of Agriculture, and in London, Paris, and Washington at the respective Brazilian Legations.  
Second — The proposers must present, outside of the envelopes that shall contain the proposals, documents that will testify their fitness for the service that they propose to contract.  
Third — No one can concur without having previously deposited in the National Treasury, in the delegacy of the same Treasury in London, or in either one of the Legations above indicated, a caution, in money or bonds, of the public debt of the Empire, \$50,000, or a corresponding amount in foreign money (£5,000, 125,000 francs, or \$25,000 in gold).  
Fourth — The object of the concurrence will be only the price of furnishing a cubic metre of gas, and the term of the privilege, that in no case shall exceed 33 years. All the other clauses of the contract, excepting whatever may be transitory, will be, without any discrepancy or modification, those proposed by the Government in the general specifications and conditions, which will be distributed separately in the Directory of the Public Works and the above-mentioned Legations.  
Fifth — All the proposals will be opened in this city, in the public session of the Directory of Public Works, on the 24 day of January, 1879; and the Government will declare on them within fifteen days of that date.  
Sixth — When the choice of the proposal is made, the contract will be considered concluded; being necessary for the preferred proposer to sign only the mentioned general conditions, which will be entered in a competent book of the Department of Agriculture. For greater facility, each proposer who resides out of Rio de Janeiro must constitute in this city, and with a due antecedence, somebody with a power of attorney to sign the general conditions in case the preference falls on him.  
Seventh — The proposer who, after having received communication of the acceptance of his proposal, refuses to sign the referred conditions, will forfeit the caution in the benefit of the National Treasury.  
Eighth — The Government reserves the right to annul the competition within the period fixed by Clause 5, to decide upon the proposals that were presented.  
M. BUARQUE DE MACEDO,  
Chief of the Directory.  
DIRECTORY OF PUBLIC WORKS, Rio de Janeiro, July 22, 1878.

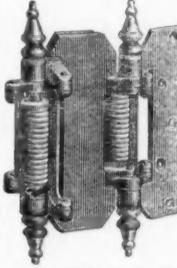
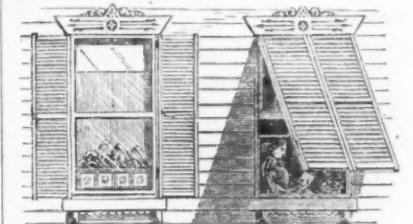
**PROPOSALS.**

**FURNITURE.**

BROOKLYN, N. Y.  
Sealed proposals will be received at the office of the Superintendent of Repairs, Depot of the Board of Education, until Tuesday, November 12, 1878, at 4 o'clock P. M., for furniture for P. S. No. 13.  
Specifications can be seen at the office of the Superintendent of Repairs. Names of two responsible persons will be required for the faithful performance of the contract. The Board reserves the right to reject any irregular bids, or any which may not be for the interest of the Board.  
W. M. THOMAS,  
Chairman Com. on School-Houses. 150

**THE COWLES HARDWARE CO.**  
UNIONVILLE, CONN., U. S. A.

MANUFACTURERS OF  
(GHEE'S)  
**Single & Double Acting SPRING BUTTS.**  
The Latest and Best.  
Investigate before you purchase.  
Read the following points of superiority: —  
These Spring Butts differ in principle from all others: having a Spiral Spring for power, and Toggles for Levers in combination, and when applied to the leaves of the Butts, Exert their greatest Power when the door is closed, and are the only Butts in existence that will by actual test perform the labor claimed for them. They offer less resistance the wider the door is opened, until a point past the right angle is reached, where the power is reversed and the door held open. They will not allow the door to sag. Send for Price Lists.

**OLD OR NEW BLINDS**  
FITTED WITH  
**DEARBORN'S**  
**Patent Adjustable Fixtures.**  
Can be used in either way shown in cut, making an awning at pleasure. Price \$1.00 per window.  
Includes a perfect fastening for the blinds, when either open or closed. Sold by the hardware trade generally, and by the manufacturers, **BOSTON BLOWER CO.,** 2 Foster's Wharf, Boston.



**BOYNTON'S FURNACES.**  
Cast or Wrought Iron. Suitable for Coal or Wood.  
**BRICK-SET AND PORTABLE.**  
Are powerful heaters; remarkably durable; economical in fuel; give universal satisfaction; have no bolted joints; are free from gases.  
Thousands have had constant and severe use for over 15 years, and in good condition to-day, without repairs or expense.  
The most durable Furnace, the cheapest to buy. Fitted with clinker-cleaning anti-friction grates, ash-sifting grates and ash-pans; lined feed doors, draft-regulator, etc. Have many attractive and practical improvements never before adopted.  
Also, **RANGES** for family or hotel use; **Fire-place Heaters**, etc.  
Send for Circulars before purchasing others.  
**RICHARDSON, BOYNTON & CO.,** Manufacturers,  
234 Water Street, New York.  
Apply direct to the manufacturers for low prices

**TO ARCHITECTS AND BUILDERS.**  
**MORTAR BLACK,**  
Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar. For sale only by **Walpole Color and Chemical Works,**  
**HENRY D. DUPEE, Proprietor,**  
79 KILBY STREET, BOSTON

MARSHALL'S AMERICAN



LEADED SHEETS. Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Represented in New England States by C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

PATENT MINERAL WOOL. ENTIRELY FIRE-PROOF AND UNDECAYING. THE BEST INSULATOR OF HEAT, COLD, AND SOUND. For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc. ALEXANDER D. ELBERS, P. O. Box 4461. 26 1/2 Broadway, New York

McSHANE BELL FOUNDRY. Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free HENRY McSHANE & CO., Baltimore, Md.

ARCHITECTURAL IRON AND JAIL WORKS. M. CLEMENTS, MANUFACTURER OF Iron Railing, Bank Vaults, and Jail Cells, Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc. BAYMILLER STREET, near Sixth and C. H. & D. R. H. Depot, CINCINNATI, OHIO.

A. L. FAUCHÈRE & CO. OFFICE AND WAREHOUSES 1319 and 1321 Broadway, New York, Importers, Manufacturers, and Dealers in all kinds of foreign and domestic MARBLE FOR INTERIOR WORK. Estimates furnished on application.

THE HELIOTYPE PRINTING COMPANY. LUX-FECIT. 220 DEVONSHIRE ST. BOSTON. COR FRANKLIN ST. HELIOTYPE PHOTOGRAPHS in Printers Ink HELIOTYPE PHOTOGRAPHS printed by Steam HELIOTYPE CUTS to print with Type HELIOTYPE FACSIMILE LETTERS, SHOW CARDS, &c.

THE "AIR SPACE" STEAM PIPE and BOILER COVERINGS. Save 10 to 20 per cent in fuel. THE CHALMERS-SPENCE COMPANY. 140 Congress Street, Boston, 209th St., E. R., New York.

CLASSIFIED ADVERTISEMENTS.

Table listing various architectural and building materials, including architects, iron works, and decorative items, with corresponding page numbers.

Table listing various building materials and services, including marble, stone, and iron works, with corresponding page numbers.

STEEL RIBBON SASH LINE, HOOKHAM'S PATENT. Includes detailed diagrams of the sash line mechanism, instructions for fixing, and a list of advantages. Also includes contact information for McCoy & Co., Sole Agents, 134 and 136 Duane Street, New York.

**ETNA IRON CO.**

Manufacturers of every description of Wrought and Cast

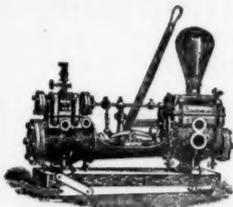
**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**

Patent



Steam

**PUMP THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a speciality.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

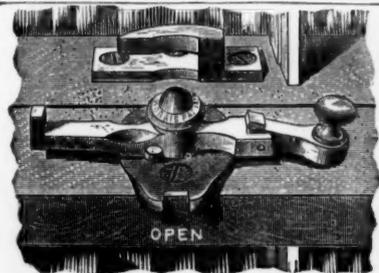
The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

**KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES, { 14 & 16 Federal St., } Boston.  
{ 113 & 115 Congress St., }  
{ 92 & 94 Liberty St., } New York.

Send for Illustrated Catalogue.



**MORRIS BURGLAR-PROOF SASH LOCK.**

Patented July 2, 1878. The Safest! The Simplest! The Most Reliable! THE BEST!

N. B.—No springs to get out of order. Sold by all hardware jobbers. Manufactured by the MORRIS SASH LOCK MANUFACT'G CO., Office 108 Walnut St., Cincinnati, O. Price List and Samples furnished to the trade on application. A liberal discount to the trade.

**PATENTS.**

F. A. LEHMANN, Solicitor of Patents, Washington, D. C. NO PATENT NO PAY. Send for Circular.

**"ZODTCHY" (BUILDER).**

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1873, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

M. JEROME KÜTTNER,

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from EIGHT to SIXTEEN pages of letterpress, gr. quarto, with cuts, and at least FIVE autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodych," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICES FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.

The "Zodych" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address, **JOURNAL "ZODTCHY,"**

18 OFFICER STREET, ST. PETERSBURG, RUSSIA.



Terza Cotta Chimney Tops, Akron Land Tile

D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

**NATIONAL**

**FINE ART FOUNDRY,**

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze.



**BIBB'S** Celebrated Original Baltimore Fire Place Heaters. Mantels and Registers. B. C. BIBB & SON, Baltimore, Md. Best workmanship. Lowest prices guaranteed. Send for circulars.



**NATIONAL TUBE WORKS CO.**

PATENT

Indestructible Enamelled Wrought Iron

**LAP-WELDED PIPE,**

From 1/4 inch to 15 inches diameter.

Now extensively used for

Water, Gas, Sewerage, and Mining.

It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making Joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at offices of

National Tube Works Co.,

8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

**BURDITT & WILLIAMS,**

DEALERS IN

**FINE HARDWARE**

of every material. A specially complete stock of PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



**The Draft of the Chimney increased.**

Smoking Chimneys Prevented

Particularly adapted to Chimneys in exposed positions.

Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR, 70 Grand St., Brooklyn, N. Y.

**CATALOGUE OF Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices. A. J. BICKNELL & CO., ARCHITECTURAL BOOK PUBLISHERS, 37 WARREN STREET, NEW YORK.

**TO ARCHITECTS AND BUILDERS.**

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

**BEEHIVE BRAND.**

**FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**UNPARALLELED DISCOVERY.**

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the *Paint Preserver* invented by ASAHEL WHEELER, Boston. It will neither crack, blister, nor scale.



**BALTIMORE PRESSED TILES,**

FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases,

DRAIN AND SEWER PIPE, FIRE-BRICK, LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

WALDO BROTHERS,

No. 94 WATER STREET, BOSTON.

**PEERLESS BRICKS.**

**THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,**

MANUFACTURES AND KEEPS IN STOCK

**ARCHITECTURAL SHAPES (80 kinds).**

ALSO

**RED Pressed Fronts.**

Extra fine in color and quality

**BROWN, Colored throughout**

More beautiful than Brown Stone DURABLE

**CHOCOLATE,**

Same as above; difference in color

**FLESH COLOR,**

A very popular color

**BUFF, very fine.**

Harmonizes beautifully with Brown or Black

**GRAY, A pleasing shade.**

**BLACK, Velvety jet face.**

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

**NORTHEAST COR. FIFTH & CHESTNUT STS.**

THOMAS F. ADAMS, JOSEPH WOOD, JR., PRESIDENT. TREASURER



**DOLIVET, CUTTER, & CO.,**

ARTISTIC

**Papier Maché Decorations,**

108 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING Venetian Blinds.**

Wilson's Patent. For first-class Dwellings and Public Buildings.

These blinds can be fitted either inside or outside the sash, and are operated with ease without machinery or weights. They are made to coil above or below, as shown in cut. Can be furnished in any kind of wood. Unequaled for elegance, durability, and simplicity. Indorsed by many of the leading architects in the country, and in use in some of the handsomest buildings.

We also manufacture WILSON'S PATENT Rolling Steel Shutters

These blinds are operated on same principle as above (being self-coiling). They are used for closing store-fronts and all windows and doorways that are required to be perfectly fire and burglar proof.

Also, Rolling Wood Blinds for Store-Fronts, Book-Shelves, School Partitions, and other purposes. A list of public and private buildings fitted with our Blinds sent on application. Architects and owners are invited to send for working models, catalogues, and price-lists.

WILSON & JAMES, 68 Beekman St., New York. Two Prize Medals at Philadelphia.

**VALUABLE ART PUBLICATIONS.**

HUNT'S (WILLIAM M.) Talks on Art. 8vo. Paper, \$1.00. CLEMENT'S (CLARA ERSKINE) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a Complete Index. Crown 8vo. Cloth, red edges, \$3.25.

Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.

HOUGHTON, OSGOOD & COMPANY, Boston.

**IMPROVED PRISON LOCKS.**

All Architects should have our 36 page Illustrated Catalogue of Prison Locks.

ADDRESS

YALE LOCK MFG. CO., STAMFORD, CONN. New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,

94 BEEKMAN STREET, NEW YORK.

**SPECIALTIES IN PLUMBING GOODS.**

Having for their special object **Cleanliness, Durability, and the exclusion of Sewer Gas.**

WARING'S Sewer Gas Check Valve. Made entirely of Brass.

JENNINGS' NEW CLOSET, WITH New Valve

With non-corrosive Valve Seating and Solid Plunger.



**PRIZE MEDALLISTS.**

1862; 1865; 1867; 1872; 1873; AND ONLY AWARD AND MEDAL FOR SELF-COILING STEEL SHUTTERS AT CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**

ORIGINAL INVENTORS AND SOLE PATENTEES OF **NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters

OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Connable, & Co., and Park & Tilford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.

OFFICE AND MANUFACTORY. 162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**

76 READE STREET, NEW YORK, WORKS, DARLINGTON, N. J.

Lock and Hardware Manufacturers, DESIGNERS, FOUNDERS, AND WORKERS

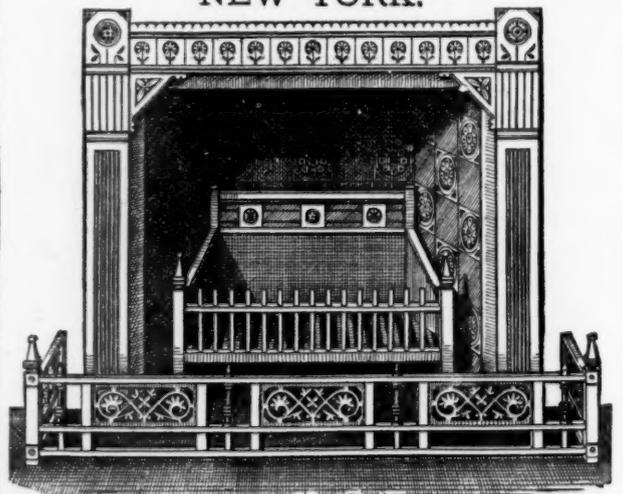
IN **BRONZE AND BRASS.**

Architects' Designs faithfully executed. Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side,) NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile. HAVE NO OTHER WAREHOUSES.

**STEWART'S SLATE, MARBLE AND HARD WOOD MANTELS.**

MIRRORS, ART-TILES, MANTELS, HEARTHS & C.

Masonic Temple 23<sup>d</sup> St & 6<sup>th</sup> Ave N.Y.

C. BUTCHER, 107 Devonshire St. BOSTON.

Send for Illustrated Catalogue.

**PATENT MARQUETRY FLOORING.**

Specimens at Lawrence, Wilde & Co's, 42 Cornhill, Boston.

**GAS FIXTURES OF EVERY DESCRIPTION.** SPECIAL RATES TO BUILDERS. R. HOLLINGS & CO 347 Washington St. BOSTON.



**Brandeis' Seamless Paragon Trap** Safest, Best, Cheapest, and Non-siphoning. Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. BRANDEIS & WICKERT 46 Fulton Street, Brooklyn N. Y.

**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer Gas that has yet been invented.

**A POSITIVE SEAL** Against sewer-gas, absorbed gases, and back water. Seal is not broken by siphonage or evaporation. Self-scouring, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and efficient. Send for full descriptive Circulars to the Manufacturers, B. P. BOWER & CO., 104 & 106 St. Clair St., Cleveland, O

**THE EUREKA VENTILATION CO.** OFFICE AND MANUFACTORY, 74 CHARLESTOWN STREET, BOSTON, MASS.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

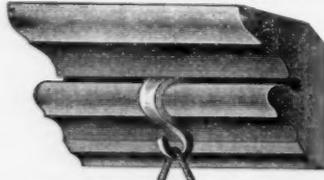
Theatrical Fresco only. Prices moderate. References first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited. LAFAYETTE W. SEAVEY. Established 1863. NO. 8 LAFAYETTE PLACE, NEW YORK

**Automatic Signal Telegraph Co., CITY OF BOSTON,**

OFFICE, 178 DEVONSHIRE STREET, ROOM 20, Is prepared to make contracts for the protection of buildings against fire.

DIRECTORS. CHARLES E. GUILD, President. WILLIAM ENDICOTT, JUN JOHN D. W. JOY. WILLIAM B. WATKINS. PATRICK T. JACKSON, Treasurer.

**BAKER'S Combined Cornice and Picture Rod Moulding.**



(Patented in the United States and Dominion of Canada, 1877.) For Hanging Pictures, etc. FOR SALE BY F. P. BAKER, The only Agent in the U. S. and Canada, 84 BEVERLY STREET . . . BOSTON.



**SAYLOR'S PORTLAND CEMENT.**

Approved, recommended, and used by Architects, Engineers, and Builders of the highest authority. New York and Brooklyn Bridge, Department of Docks, and Croton Aqueduct, New York; new Capitol at Albany; U. S. Government Works (forts, light-house foundations, canal locks, etc.); floors for breweries, sugar-houses, ice-houses, cellars, and stables, and for heavy foundations, etc. For sale by all dealers in masons' materials. JOHNSON & WILSON, Gen'l Agents, 93 Liberty St., New York.

# AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 150.] SATURDAY, NOVEMBER 9, 1878. [PRICE 15 CENTS.

### BUILDERS' SUPPLIES.

**AMERICAN ENCAUSTIC TILE,**  
Acknowledged by experts to be  
**THE BEST IN THE WORLD.**  
Manufactured by the  
**AMERICAN ENCAUSTIC TILING CO. (Limited.)**  
OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.  
Designs and estimates for Public Buildings, Halls,  
Churches, Vestibules, and for External Decoration, fur-  
nished on application.

**WALWORTH MANUFACTURING CO.,**  
69 KILBY ST., BOSTON.  
PUBLIC BUILDINGS,  
PRIVATE RESIDENCES,  
GREENHOUSES, ETC.,  
Warmed and ventilated by  
**STEAM OR HOT WATER.**  
Correspondence solicited. Plans and estimates furnished  
on application.

**"HOTCHKISS" TOWER CLOCKS,**  
MANUFACTURED BY  
**BETH THOMAS CLOCK CO., THOMASTON, CONN.**  
Prices \$100 to \$6,000.  
WARRANTED ACCURATE, STRONG, DURABLE.  
OFFICE, 581 BROADWAY, NEW YORK.  
Send for Illustrated Catalogue.

**"MINTON'S ART AND ENAMELLED TILES."**  
(China Works, Stoke-Upon Trent.) Also, The Campbell  
Brick and Tile Co.'s  
**ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS,**  
ETC.  
For Churches, Banks, Halls, Vestibules, and Hearths;  
Outside Decorations, Flower Boxes, Etc.  
**THOS. ASPINWALL & SON,**  
604 BROADWAY, NEW YORK.  
The only representatives in the United States for the  
above firms.

**ASPHALT (FELT) ROOFING.**  
**WARREN'S NEW PATENT**  
**FELT AND GRAVEL ROOFING.**  
Substitutes NATIVE ASPHALT for Coal-Tar materials for  
these roofs.  
The very best and most durable material for flat roofs.  
Also, Native Asphalt and Asphaltic Cement for Concrete  
Walks and Pavements.  
Roofers and pavers supplied with the above, and with War-  
ren's original Coal-Tar Roofing and Paving Materials.  
Send for circulars and samples.  
**WARREN CHEMICAL AND MANUF'G CO.,**  
20 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**TILES FROM ALL PARTS OF THE**  
**WORLD,**  
FOR  
**BANKS, PUBLIC BUILDINGS, AND PRIVATE HOUSES.**  
References given to Tile Work throughout the United  
States and British Provinces  
AGENT FOR THE AMERICAN ROOFING TILE  
Contracts Solicited  
**O. A. WELLINGTON, HOUSEHOLD, ART ROOMS,**  
No. 171 TREMONT STREET, BOSTON.

**HUGH SISSON & SON,**  
Importers, Dealers, and Manufacturers of  
**MARBLE.**  
INTERIOR MARBLE WORK AND MONUMENTAL  
WORK A SPECIALTY  
Salesrooms, No. 140 W. Baltimore St.: Steam Marble  
Works, North and Monument Streets,  
BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,**  
SPEAKING TUBES,  
AND BURGLAR ALARMS,  
For Public and Private Buildings.  
THE BEST IN USE.  
**S. W. FULLER,**  
43 Devonshire Street, Boston.

**HAWTHORNE & TUCKER,**  
PLUMBERS,  
16 PROVINCE STREET, BOSTON  
Estimates for Plumbing made, and work done in any part  
of the United States or Provinces.

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY**  
OF NEW YORK.

**LEONARD F. BECKWITH, Pres't.** **E. GILLET, Vice-Pres't.**  
Hollow Blocks of any pattern, uniting strength and resis-  
tance to fire and water. The Hydraulic Lime of Teil  
(France), one of the strongest cements known, is largely  
used in this manufacture. The blocks do not conduct  
heat, cold, or sound, and weigh 60 per cent less than brick.  
Fire-proof Partitions, Floor Arches between iron or wooden  
beams, and ceilings under iron or wooden beams, erected  
in following buildings:  
Western Union Telegraph, Orient, and Queens' Ins.  
Coal and Iron Exchange, Museum of Natural Hist.  
Equitable, Staats Zeitung, Hudson R. R. Fr. Depot.  
Windsor Savings Bank, N. Y. Hospital, Drexel,  
Windsor, & Wm'ter Hotels, Cluny, & Young's Hotel, Bos'n,  
Syracuse Savings Bank, West Point Military Hosp.  
Columbia College, Tribune, Coryell, & Vanoclear Flats,  
Baltimore Safe Deposit Co. Peabody Inst., Baltimore,  
Peabody Museum, N. Haven, Westmoreland, & Elisee Flats,  
Sidewalks laid at Lenox Library, Tribune, etc.  
Hollow Burnt Clay Bricks, for flat and curved arches,  
partitions, etc., and Skewbacks for brick arches.  
Sole agents for the U. S. for HYDRAULIC LIME OF TILES,  
and LAFARGE PORTLAND CEMENT.  
Sole agents for the U. S. for MITTLICH ENCAUSTIC TILES,  
laid in Tribune, Staats Zeitung, Mineral Spa, Central Park,  
Belvidere Hotel, etc.  
Sole agents for the Atlantic States for WIGHT'S FIRE-  
PROOF COLUMNS.  
Our Fire-proof work is the only one approved by the  
New York Board of Fire Underwriters and the Superin-  
tendent of Buildings, after severe public tests.  
Office Room 54 COAL AND IRON EXCHANGE, 21 Courtlandt  
Street, New York. Represented in Boston by  
**BOORMAN & Co., 5 Doane St.**

**E. HOWARD & CO.**  
MANUFACTURERS OF CLOCKS AND WATCHES  
**CLOCKS FOR PUBLIC BUILDINGS**  
114 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**  
PLAIN AND ENCAUSTIC  
FOR PUBLIC BUILDINGS AND DWELLINGS.  
As laid by us in  
**THE CAPITOL AT WASHINGTON,**  
And in numerous Churches, Banks, and Dwellings in every  
part of the Country,  
Glazed and Enamelled Tiles for Mantels, Hearths, Wain-  
scoting, &c., and for Exterior Decoration.  
**MILLER & COATES,**  
279 PEARL STREET NEW YORK.

**BARTLETT, ROBBINS & CO.**  
HEATING AND VENTILATING OF PUBLIC AND  
PRIVATE BUILDINGS  
A SPECIALTY  
PLANS AND SPECIFICATIONS FURNISHED.  
FOUNDERS, AND MANUFACTURERS OF GAS WORKS,  
ETC., ETC.  
24 LIGHT STREET, BALTIMORE.

**THE NEW ENGLAND GRANITE WORKS**  
HARTFORD, CONN., and 1321 BROADWAY, N.Y.  
Quarries at Westbury, N.Y.  
MONUMENTAL AND BUILDING WORK  
of every description, all the varieties of  
AMERICAN AND FOREIGN GRANITE.  
UNEQUALLED FACILITIES OFFERED TO THE TRADE.  
**J. G. BATTERSON, Pres't.** **H. R. BATTERSON, Sec'y.**  
**J. G. BATTERSON, DIRECTORS, H. A. BATTERSON,**  
**G. T. BATTERSON,**  
**CARL CORNBAD, Sculptor.**

**WHITTIER MACHINE CO.**  
Manufacturers of Steam and Hydraulic  
**ELEVATORS,**  
STEAM ENGINES, BOILERS, AND MACHINERY.  
No. 1176 Tremont Street, Boston.  
Office in the New England Mutual Life Insurance Co's  
Building, Post Office Square,  
and 120 Broadway, New York  
**CHARLES WHITTIER, Pres.** **A. C. WHITTIER, Treas.**

**OTIS BROTHERS & CO.**  
SAFETY STEAM AND HYDRAULIC  
**ELEVATORS.**  
A specialty for a quarter of a century.  
**BUILDERS OF THE HALE HYDRAULIC ELEVATOR**  
No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
**OHIO BUILDING STONE.**  
GRIND AND SOYTH STONE.  
From our FLORENCE and AMHERST QUARRIES.  
Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS  
111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
Designers and Manufacturers of  
**GAS FIXTURES,**  
ORNAMENTAL METAL WORK, CLOCKS AND BROWERS  
ARCHITECTS' ORDERS SOLICITED.  
Special designs submitted on application.  
WAREHOUSES, 535 AND 538 BROADWAY, NEW YORK.  
MANUFACTORY, 24th AND 25th Sts., AND 10th AVENUE, N. Y.

**FISHER & BIRD,**  
Workers in all kinds of Foreign and Domestic  
**MARBLE,**  
97 TO 108 EAST HOUSTON ST., NEW YORK.  
Established 1830.  
Among our notable decorations are: The Illinois New  
State House; Palace Hotel, San Francisco; Baldwin's Ho-  
tel, San Francisco; Insurance Building, 10th and Chestnut  
Streets, Philadelphia; Mutual Life Insurance Building  
Boston; Orient Mutual Insurance-Building, New York;  
Union College, Schenectady; and numerous Churches,  
Private Residences, etc., etc.; throughout the country. We  
solicit the opportunity to estimate upon all classes of work,  
viz., Tiling, Wainscoting, Staircases, Mantels, etc. Come  
tery work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
Are ready to estimate on contracts of any size for  
furnishing their celebrated Amherst, Ohio,  
**BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS**  
OR CUT AND SET.  
Also,  
**AMHERST AND INDEPENDENCE GRINDSTONES,**  
And OHIO MINERAL AND STONE PAINTS  
Fire-Proof Stove Cement and Stove Putty ground in Oil  
OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES.** "NOLLA MO-  
SAICS" Floor Tiles, beautiful in color and design, for  
Dwellings, Churches, and Public Buildings.  
**SPANISH WALL TILES.** White, Glazed, Valencia,  
Tiles for Walls and for decorative painting.  
PRINTED FIGURED TILES of Spanish designs, for  
Wainscoting, Mantels, Jardinières, etc.  
Floors of "Nolla Mosaics" can be seen at the "Rock-  
ingham," corner of Broadway and 56th Street. Imported  
and for sale by **JOHN CHADWICK, Sole Ag't for U. S.,**  
49 Broadway, N. Y.  
**C. E. PARKER, Agent, 14 Exchange Place, Boston.**

**TUFTS' ELEVATOR WORKS,**  
MANUFACTURERS OF "TUFTS' PATENT" COMBI-  
NATION ROPE ELEVATOR.  
To be OPERATED EITHER BY STEAM OR WATER.  
The only safe and reliable machine made for Passenger use  
in Public Buildings and Hotels, and for business purposes in  
Warehouses, Stores, &c.  
37 FOUNDRY STREET, SOUTH BOSTON.  
OFFICE, 243 Broadway, New York.  
**OTIS TUFTS,** President. **L. A. BIGELOW,** Treas'r and Gen'l Manager.

**STEAM WARMING APPARATUS.**  
HIGH AND LOW PRESSURE.  
HOUSE WARMING A SPECIALTY.  
Pamphlet with more than 1,000 references sent on app-  
lication.  
**WYLLYS H. WARNER,**  
114 LEONARD STREET, NEW YORK,  
and 32 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**  
No. 6 COURTLAND ST., NEW YORK.  
Works at Paterson, N.J.  
PATENT SAFETY STEAM ELEVATORS  
for Public and Bank Buildings, Hotels, Private Dwell-  
ings, etc.  
SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP  
GUARANTEED.  
Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "HEALTH" AND "TUBULAR"  
Manufactured by the

GOLD'S HEATER MANUFACTURING CO.  
114 LEONARD ST., NEW YORK.

Send for Pamphlet.

W. F. GOLD, Pres't WYLLYS H. WARNER, Treas'r

**MINTON'S ENCAUSTIC TILES.**

SHARPLESS & WATTS,

1325 Market St., Philadelphia,

ESTABLISHED 1850 AS AGENTS FOR

Minton's Tiles and Tesselated Pavements.

Specialties in Glazed, Encaustic, Majolica, and Art Painted Tiles, for Furniture, Hearths, Fireplaces, etc. New and original designs continually received.

J. H. BURT & CO., Carpenters and Builders,

Blue Hill Avenue, Mattapan (Ward 24), Boston.

**MENEELY & KIMBERLY,**

Bell Founders, Troy, N. Y.,

Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT-HOUSE BELLS. Illustrated Catalogue sent free.

JOHN MACK, Plain and Ornamental Plasterer.  
41 Cambridge Street, Boston.

**MANTELS AND GRATES.**

RANKIN'S PATENT makes the Cleanest, Cheapest, and Hottest Fire. Avoid infringements, and send for Circular to

C. S. RANKIN & CO.,

**ARCHITECTURAL IRON WORKS,**

Manufacturers of all kinds of Iron Work for

BUILDINGS, JAILS, ETC.

187 W. PEARL ST., CINCINNATI, O.

**BUILDING MARBLE.**

Branch yard of the RUTLAND MARBLE CO., 128 Cambridge Street, Boston. JOHN D. ALLAN, Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Italian and Continental Marble, furnished at low prices.

**PRESSED BRICK.**

STOCK AND COMMON

MANUFACTURED BY

FLETCHER & THOMAS,

Indianapolis, Ind

All brick warranted. Send for price list and samples.

**STEAM HEATING.**

BY

**GILLIS & GEOGHEGAN,**

Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 50th St. and 5th Av.; Drexel Building, cor Wall and Broad; Bennett Building, Fulton and Nassau, etc.

Architects and owners promptly furnished with specifications and estimates.

**ARCHITECTS.**

P. B. WIGHT,

CONSULTING ARCHITECT,

73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.

Consultations on matters pertaining to Fire-Proof Construction, Foundations, Drainage, Sanitary Work, Ventilation, Machinery, Valuations, Interior Decorations, and Furniture. Manager of the Meaker Hatchway Protectors.

RICHARD M. HUNT,

ARCHITECT,

COAL AND IRON EXCHANGE,

NEW YORK CITY.

W. W. GOODRICH, C. E., ARCHITECT AND SANITARY ENGINEER  
KINGSTON, N. Y.

Plans, Specifications, and Estimates furnished for all classes of Public or Private Buildings, Monumental Design, etc.

CHARLES E. ILLSLEY, A.M., C.E.,

ARCHITECT,

Room 17, Life Insurance Building,

ST. LOUIS, MO.

Special attention to Churches, Schools, and other public buildings.

WALTER ARCHITECT. FERRY BUILDING.  
DICKSON, Albany, N. Y.

GEO. E. WARING, JR.,

CONSULTING ENGINEER,

FOR SANITARY AND AGRICULTURAL WORKS,

NEWPORT, R.I.

**SANITARY ENGINEERING.**

EDWARD S. PHILBRICK, C. E.,

12 WEST ST., BOSTON, MASS.

Offers advice and superintendence in

CONSTRUCTION OF WORKS,

PLUMBING, DRAINAGE, AND VENTILATION,

And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

E. VAN NOORDEN,

357 HARRISON AVENUE . . . BOSTON,  
SHEET METAL CORNICES, HAYES'S PATENT VENTILATING SKY-LIGHTS,  
WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

**EXCELSIOR ROOF PAINT.**

This paint has been thoroughly tested throughout the Eastern States, and has been found to be a perfect tin or metallic preserver. We warrant it neither to crack nor blister by HEAT or COLD, and to last

IN ANY CLIMATE TEN YEARS.

Those desiring to use this valuable preparation upon their buildings, can secure the same by addressing

C. M. WHEELER, J. M. ROOT,

Toledo, Ohio.

**IRON STABLE FITTINGS. BUBIER & CO. 23 Exchange St. BOSTON.**

**PATENTS.**

F. A. LEHMANN, Solicitor of Patents, Washington, D. C.  
NO PATENT NO PAY. Send for Circular.

**FIRE ON THE HEARTH STOVES & HEATERS.**

COMBINATION OF

FIRE-PLACE, CLOSE STOVE, AND FURNACE.

The attention of Architects and Builders is especially invited to our new

**FIRE-PLACE HEATERS,**

Adapted for the use of any kind of fuel, and the only heater especially adapted for the use of SOFT COAL and WOOD. Send for description to

THE OPEN STOVE VENTILATING CO.,

115 Fulton St., New York.

**DECORATORS.**

**W. J. MCPHERSON,**

(Established A.D. 1848.)

MURAL PAINTER,

DESIGNER,

Ecclesiastical Decorator,

AND

ART STAINED GLASS MANUFACTURER,

440 TREMONT STREET,

BOSTON, MASS.

Should you want Ornamental Glass, write for particulars to



**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the subscriber to produce Modern and Medieval styles of work equal to any European examples, for Churches, Private Residences, Halls, etc.

The value of the work is attained by a careful selection of colors in Cathedral and French Glass of his own importation.

Designs in accord with architects' plans furnished at short notice. Reference of work at office

SAMUEL WEST, 115 Eliot St., Boston

FRANK HILL SMITH,

111M TREMONT STREET,

BOSTON . . . . . MASS.

**COOK, REDDING & CO.**

149 CONGRESS ST., BOSTON,

Ornamental, Stained, and Cut Glass,

FOR

Churches, Public Buildings, and Private Residences.

**DECORATORS.**

JOHN LAFARGE,

MURAL DECORATION,

51 W. Tenth St., New York and Newport, R. I.

**Society of Decorative Art,**

34 East 19th Street,

NEW YORK.

The Society is prepared to undertake every kind of DECORATIVE NEEDLEWORK, and special attention is paid to the RESTORATION of ANTIQUE EMBROIDERY.

Special terms are made and careful estimates given to ARTISTS, ARCHITECTS, AND DECORATORS

Generally, who are assured that their designs will be carefully reproduced, and their directions carefully followed. Orders are earnestly solicited.

**Fresco Decoration.**

**EMMART & QUARTLEY,**

Designers, Decorators, and Painters,

32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

**SLATE MANTELS**

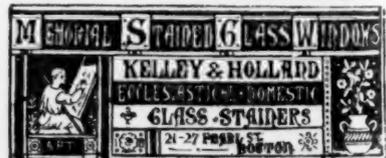
Of the latest and most beautiful designs, and all other Slate work on hand or made to order. No. 1210 Ridge Avenue. JOSEPH S. MILLER successor to Wilson & Miller, Philadelphia, Pa. Send for Illustrated Price-List

**Donald MacDonald,**

**GLASS STAINER AND DECORATOR**

No. 6 Hayward Place,

BOSTON



**INLAID WOOD FLOORS.**

ORNAMENTAL WOOD BORDERS.

Designs and Estimates free.

National Wood Manuf'g Co.,

960 Broadway, near 23d St., New York

PHILIP A. BUTLER,

DECORATOR AND DESIGNER,

No. 17 FENNERTON SQUARE,

BOSTON.

HENRY B. JONES & CO.

IMPORTERS, JOBBERS, AND RETAILERS OF

PAPER HANGINGS,

612 WASHINGTON STREET, BOSTON.

(Established 1848.)

L. HABERSTROH & SON,

FRESKO PAINTERS,

and INTERIOR DECORATORS,

No. 12 SCHOOL STREET, BOSTON.

*Raphael and Michelangelo.*

A Critical and Biographical Essay. By CHARLES C. PERKINS. 8vo. Many Illustrations, including several Heliotypes. \$5.00.

The long devotion of Mr Perkins to the study of art has borne noble fruit in this beautiful volume. The idea of combining in one work a series of interlinked sketches of the two great representative artists of the age of Julius II. and Leo X. was in every respect fortunate; for they respectively illustrate power and beauty, sportive and earnest labor, as no other contemporaries. . . . His style is that of a scholar and a man of taste—simple, lucid, graceful, and even throughout. It has much of the quality of that of Hermann Grimm, in his two similar biographies. The profuse illustrations—although some of them are rather coarsely printed—are a positive boon to the reader.—New York Tribune.

HOUGHTON, OSGOOD & CO., Boston.

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa (Can.)	Philadelphia.	San Francisco	St. Louis.
1. BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2. Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50	3.00 @ 3.50	3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00		3.00
3. CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.25		1.50 @ 2.00
4. Cabinet Maker	2.50 @ 3.25		1.75 @ 2.25		1.50 @ 2.00	1.50 @ 3.00	1.25 @ 1.75			1.50 @ 2.00
5. Finisher	2.00 @ 2.50		1.50 @ 2.00		2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50			2.25 @ 2.50
6. FOUNDRYMAN			1.25 @ 1.50		1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.75			1.50 @ 2.00
7. Blacksmith	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 2.00			1.50 @ 2.50
8. Whitesmith			1.50 @ 2.00	1.50 @ 2.50	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.75			2.25 @ 2.50
9. Galvanized Iron Worker	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00			2.00 @ 3.00
10. GAS FITTER	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00			2.00 @ 2.00
11. LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.25	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50		1.00 @ 2.00
12. PAINTER	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13. Glazier			1.75 @ 2.00			1.50 @ 2.00	1.50 @ 1.75			2.00 @ 2.50
14. Grainer	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00		2.00 @ 3.00	1.75 @ 2.50			3.50
15. Paper-Hanger	.75 @ 2.50	2.00 @ 2.50	1.75 @ 2.00	per roll.	15c. pr. roll.	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00
16. PLASTERER	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	1.50 @ 2.00	1.50 @ 2.00	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00		2.25 @ 2.75
17. Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	2.50 @ 3.00	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
18. PLUMBER	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.00	2.50 @ 3.50	2.50 @ 3.50	2.50 @ 3.50	1.50 @ 2.50			2.50 @ 3.50
19. QUARRYMAN			3.00 @ 3.50	1.10 @ 1.25		1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20. Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21. Carver	3.00	3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75		3.00	3.50 @ 6.00	2.75 @ 3.25		
22. Pointers and Washers			1.50 @ 1.75	1.50 @ 1.75		1.50 @ 2.50	1.00 @ 1.25	2.25 @ 2.50		
23. Rubber	1.50 @ 2.00	1.75	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75		
24. Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.75		
25. Stone-Setter	3.00	2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00	2.25 @ 2.75		2.00 @ 2.50
26. ROOFER (Tin)	2.00 @ 2.35	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25		2.00 @ 2.25
27. Slater		2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00	2.00 @ 2.00	2.00 @ 2.25	1.25 @ 2.00	1.75 @ 2.25		3.00
28. STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25		1.50 @ 2.50
29. STEAM FITTER		2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00

The Automatic Fire Alarm Telegraph IS OPERATED BY THE HEAT OF THE FIRE.

The apparatus is placed on the ceiling of every room, office, and closet in the building, so that a fire can in no instance be more than fifteen or twenty feet from it. It can be adapted to all temperatures. The alarm is almost instantaneous. It is given directly to the Fire and Protective companies and to the City Fire Alarm Office. It may also be given in the building protected. It may be given by hand. It tells the Department the exact location of the fire before the companies leave their stations, thus preventing the delay and loss caused by breaking into rooms where there is no fire. A break in the wire instantly signals itself; but, by a combination of the metallic and earth circuits, does not prevent an alarm of fire, even while the wire is broken. An incendiary cannot, therefore, prevent an alarm by cutting the line.

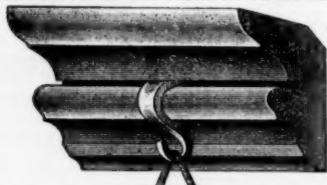
The Automatic Fire Alarm Telegraph

Prevents the possibility of a large loss. It saves the drenching a building with water. It saves the breaking up of business. It saves the loss of contracts and customers. It saves insurance. It saves a watchman. It saves the books, and the many other losses that insurance never covers. The returns of the New York Patrol Committee show that the loss by fires originating in buildings equipped with the AUTOMATIC TELEGRAPH has been diminished over 76 per cent. by the use of this system.

Company's Office: 178 Devonshire St., Room 20, Where the apparatus can be seen. C. E. GUILD, Pres. P. T. JACKSON, Treas.

BAKER'S

Combined Cornice and Picture Rod Moulding.



(Patented in the United States and Dominion of Canada, 1877.)

For Hanging Pictures, etc.

FOR SALE BY F. P. BAKER, The only Agent in the U. S. and Canada, 84 BEVERLY STREET BOSTON.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

GALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States.

Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO., 72 & 74 West Monroe St. Chicago, Ill.



MORTON'S

Copper and Iron SASH CHAIN, PATENTED

Aug. 15, 1871.

I would call the attention of Architects and Builders to my

SASH CHAIN,

Manufactured from the best

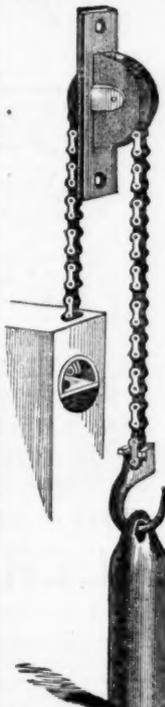
NORWAY IRON.

This Chain is stronger and cheaper than the copper, and will last as long; all that is necessary is to paint the Chain the same color as the frame.

For terms and further information apply to

THOS. S. MORTON,

65 ELIZABETH ST., NEW YORK CITY.



GAS

SPRINGFIELD GAS MACHINE.

Springfield, Mass.; 16 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.

AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT, MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS. Regular Sizes, 2, 3, 4, 5 & 6 Inch. SPECIAL SIZES MANUFACTURED TO ORDER. AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS. 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA. WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH.

PRINCIPAL AGENTS.

- M. Halliday New York City
- Hicks & Badger Boston, Mass
- James Berry Buffalo, N. Y
- George W. Pitkin & Co. Chicago, Ill
- Wasson & Martin Albany, N. Y
- McLeod, Reardon & Co. Troy, N. Y
- W. H. Scott Portland, Me
- Kittredge Cornice Co. Salem, O
- J. W. Jordan Worcester, Mass
- H. G. Carpenter & Co. Wilkesbarre, Penn.
- T. W. Irwin Alleghany City, Penn.
- Sellew & Co. Cincinnati, Ohio

W. & J. SLOANE,

IMPORTERS OF

FINE CARPETS AND RUGS

FROM

INDIA, PERSIA, RUSSIA, SMYRNA, and TURKEY.

649, 651 655 BROADWAY, NEW YORK.

D. M. MEEKER & SON'S

Malleable Iron Hollow Munten Window Sash.

For Insane Hospitals, Fire Proof Buildings, &c.



The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

D. M. MEEKER & SON, Newark, N.J.

Fine Castings of Malleable and Gray Iron, German Silver, and Composition; also Patterns a specialty.

THE COWLES HARDWARE CO.

UNIONVILLE, CONN., U. S. A.

MANUFACTURERS OF

(GHEE'S)

Single & Double Acting SPRING BUTTS.

The Latest and Best.

Investigate before you purchase.

Read the following points of superiority:—

These Spring Butts differ in principle from all others; having a Spiral Spring for power, and Toggles for Levers in combination, and when applied to the leaves of the Butts, Exert their greatest Power when the door is closed, and are the only Butts in existence that will by actual test perform the labor claimed for them.

They offer less resistance the wider the door is opened, until a point past the right angle is reached, where the power is reversed and the door held open. They will not allow the door to sag. Send for Price List.

NONESUCH

Self-Locking

AND

Burglar-Proof

Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.



Patented July 10th, 1877

MARSHALL'S AMERICAN



LEADED SHEETS. Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Re-presented in New England States by 17 T HOLLBROOK, No. 60 UNION STREET, BOSTON.

PATENT MINERAL WOOL.

ENTIRELY FIRE-PROOF AND UNDECAYING. THE BEST INSULATOR OF HEAT, COLD, AND SOUND. For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc. ALEXANDER D. ELBERS, P. O. Box 4461. 26 1/2 Broadway, New York

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free HENRY McSHANE & CO., Baltimore, Md.

"ZODTCHY" (BUILDER).

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING. Published since 1871, by the St. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of M. JEROME KÜTTNER, Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg. MONTHLY EDITION.

Each number contains from EIGHT to SIXTY-SIX pages of letterpress, gr. quarto, with cuts, and at least FIVE artistic graphic chrono-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodtchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM. The "ZODTCHY" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.

Address, JOURNAL "ZODTCHY," 13 OFFICER STREET, ST. PETERSBURG, RUSSIA.

we manufacture Slate Goods, through every operation, from quarry to completion.

THE FAIR HAVEN MARBLE AND MARBLEIZED SLATE CO.

FAIR HAVEN, VERMONT.

The oldest and most extensive producers of

SLATE MANTELS IN THE UNITED STATES.

We imitate more than fifty rare marbles and woods. Styles and workmanship unsurpassed. Special care given to making Mantels and other goods from architects' drawings. Being in close proximity to the best white American marble quarries, and with rare facilities for selecting stock and doing the work, we are also producing

MARBLE MANTELS

At the very lowest prices, and in the best manner possible. We also produce all kinds of plain slate and marble work

Look over this list and correspond with us and get our Catalogue.

- Purple, Green, Red, Variegated Roofing Slates. Same Color Slate, also White and Black Marble Tiles. Window Sills. Window Lintels. Water Table. Belt Courses. Ashlar. Solid Steps. Steps and Risers. Laundry Tubs. Urinals. Grave Covers. Vault Work. Carriers' Tables. Counter Tops. Billiard Table Beds. Blackboards. Brewers' Vats. Cisterns. Greenhouse Shelves. Plumbers' Goods, etc.

DORCHESTER UNION FREESTONE CO.

NEW BRUNSWICK YELLOW FREESTONE. The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order. 24 Pine Street, New York. G. P. SHERWOOD.

ARCHITECTURAL IRON AND JAIL WORKS.

M. CLEMENTS,

MANUFACTURER OF Iron Railing, Bank Vaults, and Jail Cells, Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc. BAYMILLER STREET, near Sixth and C. H. & D. R. H. Depot. CINCINNATI, OHIO.



J. & R. LAMB, 59 CARMINE ST., N. Y.

CHURCH FURNISHERS. Practical Workers in Sterling Silver, Brass and Bronze. Carved Wood, Decorations, etc. Illustrated Catalogues. Furniture, etc. Metalwork, etc. Decorations.

A. L. FAUCHÈRE & CO.

OFFICE AND WAREHOUSES

1319 and 1321 Broadway, New York,

Importers, Manufacturers, and Dealers in all kinds of foreign and domestic

MARBLE FOR INTERIOR WORK.

Estimates furnished on application.

Advertisement for THE HELIOTYPE PRINTING COMPANY. Features a central illustration of a person operating a heliotype printing press. Text includes: LUX-FECIT, THE HELIOTYPE PRINTING COMPANY, 220 DEVONSHIRE ST. BOSTON, COR FRANKLIN ST. HELIOTYPE PHOTOGRAPHS in Printers Ink, HELIOTYPE LITHOGRAPHS printed by Steam, HELIOTYPE CUTS to print with Type, HELIOTYPE FACSIMILE LETTERS, SHOW CARDS, &c.

THE "AIR SPACE" STEAM and PIPE and BOILER COVERINGS

Save 10 to 20 per cent in fuel.

See Am. Architect and Building News, Dec. 13, 1877. THE CHALMERS-SPENCE COMPANY. 140 Congress Street, Boston. Foot 9th St., E. E. New York.

CLASSIFIED ADVERTISEMENTS.

ARCHITECTS.

Table listing architects and their locations: Frank Hill Smith, Boston; W. W. Goodrich, Kingston, N. Y.; Charles E. Hiley, St. Louis; Walter Dickson, Albany, N. Y.; Richard M. Hunt, New York; P. B. Wight, Chicago; A. J. Bicknell & Co., New York; Houghton, Osgood & Co., Boston; Zodtchy, St. Petersburg; Cassell, Fetter & Gispin, New York; Plumber and Sanitary Engineer, New York; ARCHITECTURAL IRON WORK; Younglove & Co., Cleveland, O.; M. Clements, Cincinnati; Sneed & Co., Louisville, Ky.; Edna Iron Co., New York; Carnegie Bros. & Co., Pittsburgh, Pa.; BELLS FOUNDERS; Menely & Kimberly, Troy, N. Y.; Henry McShane & Co., Baltimore; BLIND FIXTURES; Boston Blower Co., Boston; BOILER COVERING; The Chalmers-Spence Co.; BRICK (ORNAMENTAL); Peerless Brick Co., Phil.; (FIRE); Waldo Brothers, Boston; (PRESSED); Fletcher & Thomas, Indianapolis; A. Hall & Sons; BRONZE DECORATIONS; National Fine Art Foundry, New York; CARPENTERS; J. H. Burt & Co., Boston; CARPETS; W. & J. Sloane, New York; CEMENT; Johnson & Wilson, New York; CHIMNEY TOPS; Joseph W. Taylor, Brooklyn; CHURCH FURNITURE; J. & R. Lamb, New York; CLOCKS FOR PUBLIC BUILDINGS; Seth Thomas Clock Co.; CONDUCTORS (IRON); Austin, Oddy & Co., Philadelphia; COXES AND PICTURE ROD MOLDING; F. P. Baker, Boston.

Table listing various construction materials and services: CROSBOTED WOOD; EDWARDS & QUARLEY, Baltimore; PHILIP A. BUTLER, Boston; L. HABERSTROH & SON, Boston; W. J. McPHERSON, Boston; Wm. H. JACKSON & CO., New York; DONALD MACDONALD, Boston; Society of Decorative Art, New York; JOHN LAFARGE, New York; DESIGNING AND WOOD ENGRAVING; W. J. DENA, Boston; DOOR BUTTS (SPRING); Charles Hardware Co., Unionville, Conn.; DOUBLE RATCHET REGULATORS; Double Ratchet Mfg. Co., New York; DRAIN PIPE; D. W. LEWIS, Boston; Waldo Brothers, Boston; FISKE & COLEMAN, Boston; ELECTRIC BELLS, ANNUNCIATORS, ETC.; S. W. FULLER, Boston; ELEVATORS, STEAM ENGINES, ETC.; Whittier Machine Co., Boston; Tufts' Elevator Works, Boston; Cooke & Beggs; Otis Brothers & Co.; ENGINEER (SANITARY); Geo. E. Waring, Jr., Newport, R. I.; E. S. PHILLIPS, Boston; FIRE-PROOF BUILDINGS; Fire-Proof Building Co., New York; FREESTONE; Dorchester Union Freestone Co., New York; GAS FIXTURES; Mitchell, Vance & Co., New York; R. HILLINGS & CO., Boston; GAS MACHINES; Denny Bros. & Co., New York; Springfield Gas Machine, Springfield, Mass.; Walworth Manufacturing Co., Boston; GRANITE; New England Granite Works, New York; GRATES, ETC.; W. H. JACKSON & CO., New York; HARDWARE; Burditt & Williams, Boston; HEATING APPARATUS; Bartlett, Robbins & Co., Baltimore; Crane, Breed, & Co., Cincinnati, O.; Gold's Heater Manufacturing Co., New York; Gilley & Geesagan, New York; Walworth Manufacturing Co.; Wyllys H. Warner, New York and Syracuse; B. C. BIBB & SON, Baltimore.

Table listing various construction materials and services: Fuller, Warren & Co., Troy, New York; Cleveland, and Chicago; Open Stone Ventilating Co., Boston; HEDDING; The Heliotype Printing Co., Boston; IRON STABLE FITTINGS; Hubler & Co., Boston; IRON STAIRS; Palmer, Parker & Co., Boston; IRON WINDOW SASHES; D. M. MECKER & SON, Newark, N. J.; LEADING SHEETS; Marshall Bros. & Co.; LESTER SAW; Millers Falls Co., New York; LOCKS AND BRIDGE HARDWARE; Hopkins & Dickinson Manufacturing Co., New York; Yale Lock Manufacturing Co., Stamford, Ct.; MARTELS; Stewart's, New York; C. S. HANKIN & CO., Cincinnati, O.; JOSEPH S. MILLER, Philadelphia; MARBLE; Rutland Marble Co., Boston; MARBLE WORKERS; S. KLEBER & CO., New York; A. L. FAUCHÈRE & CO.; FISHER & BIRD; Hugh Sison & Son, Baltimore; MARBLE AND SLATE WORKERS; FAIR HAVEN MARBLE AND MARBLEIZED SLATE CO., FAIR HAVEN, VT.; MARQUETTE FLOORING (PATENT); C. BUTCHER, Boston; MORTAR BLACK; Henry D. Dupee, Boston; PAINTS; Aschel Wheeler, Boston; C. M. WHEELER, and J. M. ROOT, Toledo, O.; HOWARD FLEMING, New York; H. W. JOHN MFG CO., New York; PAPEL (LAP WELDED); H. B. JONES & CO., Boston; PAPER MACHE DECORATIONS; Doliver, Cutler & Co.; F. A. LEHMAN, Washington, D. C.; PATENT MINERAL WOOL; A. D. ELBERS, New York; PIPE (LAP WELDED); National Tube Works Co.; PLASTERER; John Mack, Boston; PLUMBERS; Howborne & Tucker, Boston; PLUMBERS' SUPPLIES; Jennings' Sanitary Depot, New York.

Table listing various construction materials and services: ROLLING VENETIAN BLINDS; Wilson & James, New York; ROOFS; John Farquhar's Sons; John Knolly & Co., Chicago; ROOFING FELT; N. E. FELT ROOFING CO., Boston; Asphalt and other Felt; Warren Chemical and Man'g Co., Boston and New York; SASH LINES AND CHAIRS; Thomas S. Morton, New York; SCROLLING AND MARRIAGE MARBLE; James T. Allen & Co., Philadelphia; SEATING (PERFORATED); Gardner & Co., New York; SEWER GAS TRAPS; B. P. BOWER & CO., Cleveland, O.; S. BUHRER, Cleveland, O.; Brandeis & Wickert, Brooklyn, N. Y.; SHUTTERS (STEEL); Clark & Co., New York; Wilson & James, New York; SKYLIGHTS, ETC.; G. HAYES, New York; E. VAN NOORDEN, Boston; SLATE; Clement, Higbee & Co., Boston; STAINED AND ORNAMENTAL GLASS; Kelley & Holland; W. J. McPHERSON, Boston; Samuel West, Boston; Cook, Redding & Co., Boston; J. H. GRATAGAP, New York; STEAM PUMP, KNOWLES' PATENT; Knowles Steam Pump Works; STONE (BUILDING); Nicholl & Miller, New York and Amherst, O.; Wilson & Hughes Stone Co., Cleveland, O.; TELEGRAPH; Automatic Fire Alarm, Boston; THEATRICAL SCENERY; Lafayette W. Seavey, New York; TILES; John Chadwick; Miller & Coates, New York; American Encaustic Tiling Co., New York; T. ASPINWALL, New York; Waldo Brothers, Boston; C. A. WELLINGTON, Boston; Sharpless & Watts, Philadelphia; VENTILATION; Eureka Ventilation Co., Boston; WINDOW LOCKS; F. J. HOYT, New York; Morris Sash Lock Manuf. Co., Cincinnati; XI; WOOD CARPETING; National Wood Manufacturing Co., New York.

BUILDING MATERIALS.

[Reported for the American Architect and Building News.]

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, CEMENT, and FIRE BRICK. Includes items like 'Purple roofing slate', 'Red slate', and 'Rosendale' cement.

Table listing prices for DOORS and BLINDS. Includes 'Raised Panels, two Sides' and 'Blinds - Outside'.

Table listing prices for LATH and LIME. Includes 'State, common, cargo rate' and 'Lime, finishing'.

Table listing prices for LUMBER. Includes 'Michigan pine - Nos. 1 and 2', 'Spruce - random cargoes', and 'White pine'.

Table listing prices for PAINTS AND OILS. Includes 'Whiting', 'Paris white, English', and 'Zinc white, Am. dry'.

Table listing prices for AXLE PULLEYS, SASH WEIGHTS, SASH LINES, and DOOR BUTTS.

Table listing prices for STONE. Includes 'Amberst freestone, in rough', 'Berlin freestone, in rough', and 'Brown stone, Portland, Ct.'.

Table listing prices for SLATE. Includes 'Purple roofing slate', 'Green slate', and 'Red slate'.

Table listing prices for TIN PLATES. Includes 'C. charcoal, 10 x 14 box', 'I. C. charcoal, 10 x 14', and 'I. C. charcoal, 14 x 20'.

Table listing prices for ZINC and LEAD. Includes 'Zinc - Duty, sheet', 'Sheet (gold) foreign', and 'Lead'.

BOSTON.

Table listing prices for FIRE BRICK and BUILDING BRICKS. Includes 'Waldo Bros Extra', 'Waldo Bros No. 1', and 'Eastern'.

Table listing prices for BUILDING STONE and LUMBER. Includes 'Rutland Marble, sawed' and 'Michigan pine'.

Table listing prices for PAINTS AND OILS. Includes 'Whiting', 'Paris white, English', and 'Zinc white, in oil'.

Table listing prices for CEMENT. Includes 'Rosendale', 'Portland (Imported)', and 'Portland (Saylor's American)'.

Table listing prices for AXLE PULLEYS, SASH WEIGHTS, SASH LINES, and DOOR BUTTS.

Table listing prices for MORTISE LOCKS and POOR KNOBS. Includes 'Mortise locks - Brass face and bolt' and 'Poor knobs'.

Table listing prices for SASH FASTS and SCREWS. Includes 'Sash fasts' and 'Screws'.

Table listing prices for STORE DOOR HANDLES and IRON. Includes 'Store door handles' and 'Iron'.

CHICAGO.

Table listing prices for BRICK, LIME, AND CEMENT. Includes 'Lime, in bulk', 'Lime, in bbls', and 'Cement'.

Table listing prices for LUMBER (MICHIGAN PINE). Includes '1st and 2d clear, 1 to 2-in.', '3d clear, 1 to 2-in.', and 'Select, 1-in. B'.

Table listing prices for HARDWOOD LUMBER. Includes 'Whitewood, clear', 'White wood box boards', and 'White wood, common'.

Table listing prices for PAINTS AND OILS. Includes 'Whiting', 'Paris white, English', and 'Zinc white, in oil'.

Table listing prices for TINNERS' STOCK. Includes 'Tin plate, 1 C, 10 x 14, charcoal', 'Tin plate, 1 X, 12 x 14, charcoal', and 'Tin plate, 1 C, 12 x 12, charcoal'.

Table listing prices for ROOFING. Includes '1 C roofing, 14 x 20, charcoal', '1 X roofing, 14 x 20, charcoal', and '1 C roofing, 20 x 28, charcoal'.

Table listing prices for SHEET ZINC and SHEET IRON. Includes 'Sheet zinc' and 'Sheet iron'.

Table listing prices for NAILS and PAINTS AND COLORS. Includes 'Nails' and 'Paints and colors'.

PHILADELPHIA.

Table listing prices for WHOLESALE PRICES. Includes 'Iron - Duty', 'Lime', and 'Cement'.

Table listing prices for LUMBER. Includes 'Michigan pine', 'Spruce', and 'White pine'.

Table listing prices for PAINTS AND OILS. Includes 'Whiting', 'Paris white, English', and 'Zinc white, in oil'.

Table listing prices for PLASTER. Includes 'Plaster, duty free, calcined'.

Table listing prices for TINNERS' STOCK. Includes 'Tin plate, 1 C, 10 x 14, charcoal', 'Tin plate, 1 X, 12 x 14, charcoal', and 'Tin plate, 1 C, 12 x 12, charcoal'.

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms.

Inventors and manufacturers of Steam Heating Apparatus, Hot Air Furnaces, etc., should not fail to advertise in the paper which prints a weekly list of all the new buildings projected in the country, and a record of important ones being built.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY

The AKRON Pipe is superior, both in quality and finish, to any manufactured in this country.

**FIRE BRICK,**  
AKRON ROOFING TILES,  
VITRIFIED BUILDING BLOCKS,  
OHIO SAWED FLAGGING  
ENAMELED BRICK,  
CHIMNEY TOPS,  
CEMENT, ETC., ETC

OFFICE, 72 WATER STREET, BOSTON.  
YARD AT BERKELEY STREET

**S. KLABER & CO.**  
**STEAM MARBLE WORKS,**  
217 to 223 W. 51st St., New York.

ESTIMATES MADE ON ALL KINDS OF MARBLE WORK

**ESTABLISHED, 1836.**  
**JOHN FARQUHAR'S SONS, ROOFERS, 20 and 22 EAST ST., BOSTON.**

Roofs covered with Slate, Copper, Tin, and Composition. Agents for Warren's New Patent Asphalt Roof, acknowledged by competent Architects and Builders the best and most durable Composition Roof known. Also inventors and owners of the following patents:—

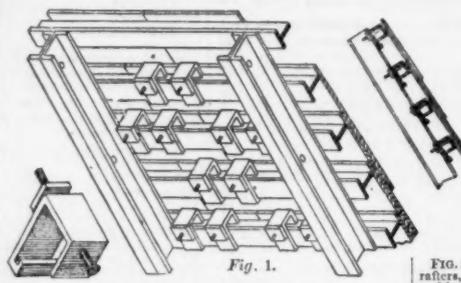


FIG. 1. The above invention relates to the manner of securing slates to iron roofs. It consists of a bent plate of suitable metal, which hooks around or under the purlins on which the slate rests, and is provided with a bolt passing through it and the bent plate, one end of the bolt having a head, which is countersunk in the upper side of the slate, the other end of the bolt being secured by a nut, or otherwise.

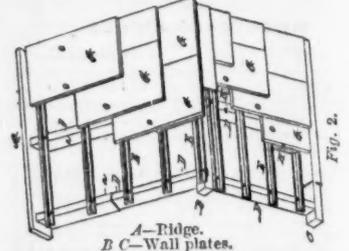


FIG. 2. This invention consists of a roof composed of wooden rafters, (D) covered with sheet metal (a) or other fire-proof material, and iron purlins (c) or beams, with the slates (G) or other covering secured thereto by clamps, (Fig. 1.) or in any other suitable manner, in connection with a fire-proof cement, (H) or composition rendered or laid within the space enclosed by the rafters and purlins immediately under and in contact with the slates or a covering of the roof, by which construction the roof-wards are dispensed with, and a roof is produced thoroughly fire-proof at every point avoiding condensation, contraction and expansion of roofs formed wholly of iron.

**B** Studies in Design, for Manufacturers, Architects, Builders, Designers, House Decorators, etc. By CHRISTOPHER DRESSER, Ph. D., F. L. S., F. E. B. S., consisting of Sixty Original Designs, elaborately produced in combined Colors, and in Gold and Colors; with Descriptive Letterpress, and 20 Chapters on Principles of Designing. In handsome cloth binding, folio, \$25.00. The present work is submitted to those who desire to decorate houses in a manner that shall reveal their knowledge; but it will be most useful to that man who can use the ideas as aids to his own mind, give to the forms set forth new features and individuality of expression, throwing aside all that in his judgment is not true and right. "The plates which are lithographed in gold and colors by A. Goates, Nottingham, England, should be in the hands of all decorative artists."—*Glasgow Herald*.

**O** Principles of Ornamental Art. By F. EDWARD HULME, F. L. S., F. S. A., author of "Plants, their Natural Growth and Ornamental Treatment," "Freehand Ornament," etc. With 32 Plates, containing 431 Illustrations. Royal 4to, cloth, \$10.00.

**O** Principles of Decorative Design. By CHRISTOPHER DRESSER, Ph. D. Illustrated with two Colored Plates and numerous Designs and Diagrams. Extra crown 4to, cloth, gilt, \$3.50.

**S** Sketching from Nature in Water-Colors. By AARON PENLEY. With Illustrations in Chromo-Lithography, after original water color drawings. Super-royal 4to, cloth, gilt, \$7.50. A very attractive as well as a very useful volume, indispensable to all learners, and of much service to advanced practitioners in the art.—*Art Journal*.

**K** Sepia Painting, A Course of. With 24 Plates in Sepia, from Designs by R. P. LEITCH, and full instructions to the learner. Oblong 4to, cloth, \$2.50. Those who wish to see sepia painting thoroughly well treated in respect to form, color, light, and shade, and the best method of producing effect with ease of manner, will do themselves a kindness by consulting these pages.—*Standard* (English).

**S** Water-Color Painting, A Course of. With 24 Colored Plates, by R. P. LEITCH, and full instructions to the learner. Oblong 4to, cloth, \$2.50. The "Water-color" illustrations alone are worth triple the cost of the volume, and the printed instructions are concise and clear.—*Birmingham Post*.

**S** Painting in Neutral Tint, A Course of. With 24 Plates in Neutral Tint, by R. P. LEITCH, and full instructions to the learner. Oblong 4to, cloth, \$2.50. The directions to the students are ample, and the twenty-four plates are admirably varied for the purposes to which they are devoted.—*Daily News* (English). If not for sale by your bookseller, we will send, prepaid, on receipt of price.

CASELL, PETER & GALPIN, 590 Broadway, New York.

**THE AMERICAN ARCHITECT AND BUILDING NEWS SENT FREE!**

We send Free the Nos. for November and December, 1878, to new subscribers paying before December 15, 1878.

**BUILDERS AND MECHANICS**

In search of a trade paper will do well to weigh the fact that in the first six months of this year we published fine illustrations of

- |                        |                     |                     |                     |                   |
|------------------------|---------------------|---------------------|---------------------|-------------------|
| 24 Country Houses,     | 13 Churches,        | 10 Staircases,      | 4 Details,          | 2 Bridges,        |
| 9 City Houses,         | 5 Cathedrals,       | 9 Wall Decorations, | 2 Tombs,            | 1 Police Station, |
| 4 Hospital Buildings,  | 5 Church Interiors, | 7 Bay-Windows,      | 2 Fountains,        | 1 Engine House,   |
| 4 School Buildings,    | 2 Hotels,           | 4 Furniture,        | 1 Shop Arcade,      | 1 Market House,   |
| 3 Library Buildings,   | 1 Court House,      | 1 City Hall,        | 1 Cemetery Gateway, | 1 Stable,         |
| 2 Insurance Buildings, | 1 Opera House,      | 1 State Prison,     | 1 Castle,           | 1 Studio.         |
| 4 Stores,              | 1 Music Hall,       |                     |                     |                   |

Besides perspective diagrams, foreign sketches, and numerous cuts illustrating building appliances. Terms \$6.00 per year. Send for specimen copy. Remittances to be made by check, draft, or money-order to the Publishers, HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON.

25 PER CENT. OF CUSTOMARY OUTLAY CAN BE SAVED BY USE OF



Pure, Undiluted Paints, Full Body, and Full U. S. Standard Measure.

No other Paints for structural purposes equal these in quality, richness of color, covering capacity, and durability. Sample cards free by mail. ROOF PAINTS for Tin Roofs, Iron Work, etc. FIREPROOF PAINTS for Inside Woodwork

H. W. JOHNS M'FG CO., 87 Maiden Lane, New York, Manufacturers of Asbestos Roofing, Boiler Coverings, Sheathings, Cements, etc.



FROM MONSON AND BROWNVILLE, MAINE.

**CLEMENT, HIGBEE & CO.**

GENERAL AGENTS,  
Piper's Wharf, 474 Atlantic Avenue,  
BOSTON, MASS.

These Maine Slates are the best and cheapest in the market. They are also the strongest, smoothest, and most uniform, and the only perfectly unfauling slate in the world.

**NON-POISONOUS**

**SILICATE PAINT**

Does not discolor, chalk, or crack off. It is superior to lead.

See article on "Dwellings of the Poor," AM. ARCHITECT, Sept. 21, 1878

The only cure for damp walls of churches, dwellings, and public buildings, is the

**PETRIFYING LIQUID**

Send for Price List and Testimonials.

HOWARD FLEMING, Sole Agent in the United States,

10 PINE STREET, NEW YORK.

**TO ARCHITECTS.**

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the SCAGLIOLA AND MAREZZO MARBLE, which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall, and Altar Work. JAS. T. ALLEN & CO., 25 North Market Street, Philadelphia

**MAKE YOUR OWN GAS**

FOR LIGHTING Dwellings-Houses, Public Buildings, Churches, Factories, etc., etc.

Send for CIRCULAR

WALWORTH MANUF. CO. No. 69 Kilby Street, BOSTON, MASS.

CRANE, BREED & COMPANY CINCINNATI, O.

**SAFETY BOILERS** FOR STEAM AND HOT WATER HEATING

MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RADIATORS, PIPE COILS, REGISTERS, FITTINGS, STEAM-PUMPS

COURT-HOUSES AND PRISONS.

PRESENT CONDITION OF COURT-HOUSES AND PRISONS, NOW BUILDING IN THE UNITED STATES AND CANADA.

(Collected for the American Architect and Building News.)

Court-Houses and Prisons Completed in 1878.

BLOOMFIELD, IO. — The new Davis County court-house was finished early in the summer.

CHILLICOTHE, O. — The new jail was finished in August.

COLUMBIA, CAL. — A two-story brick jail, 48' x 60', has just been finished by Mr. A. A. Cook, architect, of Sacramento, Cal. Cost, \$15,733.

CONCORD, MASS. — The new state prison completed last spring was designed by Mr. Ropes, architect, of Boston. It has 725 common cells which measure 8 feet 10 inches by 5 feet 4 1/2 inches by 7 feet 11 inches. Besides these there are 15 solitary cells and 72 cells for the insane. The wall surrounding the buildings is 22 feet high.

CRANFORD, N. J. — The Rhode Island state prison, which has been in process of erection for a little more than four years, is now just ready for occupation and will be occupied this month. The buildings are: the central building, with a north and south wing, which constitutes the prison proper; the mess-room, kitchen, hospital, a boiler-house, the work-shops, and the house for the warden and deputy warden. The central building is three stories high, and contains the usual offices on the first story; the guard-rooms in the second story; and the chapel, with rooms for officers, witnesses held for want of bail, and debtors, in the third story. The prison wings contain each 126 graded cells, 5 by 8 feet, 6 feet 6 inches by 8 feet, and 8 by 8 feet, and are built to sit on the true meridian, so that the cells may receive as nearly as possible an equal amount of sunlight. The hospital is placed over the kitchen, with windows on the north, south, and west, and with four open fire-places around the main chimney, which runs up through the centre of the room. The smoke from the boilers and ovens is carried in the core of the chimney, while the smoke from the fire-places and the ventilation is carried in the space surrounding the core. The warden's residence is outside of the prison yard and is connected with the guard-room by a covered bridge, and the guard-room is connected with the hospital and the gallery of the mess-room by a similar bridge. The prison yard, 400 by 600 feet, is inclosed by a stone wall 20 feet high, 5 feet thick, capped with granite to form a walk for the sentinels, with octagonal sentry towers at the corners. The entire expenditure for the erection of the buildings and for furnishing the prison, the warden's and the deputy warden's residences, and including gas, steam-heating, plumbing, grading, etc., will be \$450,000. The architects are Stone & Carpenter, of Providence, R. I.

NEWARK, O. — On October 19, the new court-house for Licking County was dedicated.

PARIS, KY. — The new jail was finished in October.

PARKERSBURG, W. VA. — The U. S. court-house, which has been building under the charge of Mr. J. G. Hill, Supervising Architect of the Treasury Department, is finished. The total appropriation for site and building was \$28,000.

RICHMOND, N. C. — The U. S. court-house, which has been building under the charge of Mr. J. G. Hill, Supervising Architect of the Treasury Department, is finished.

SAN ANTONIO, TEX. — A two-story, hard rock (lime-stone) jail (design of front in the Norman style) has been finished and was turned over to the county authorities October 10. The building was planned and designed by Alfred Giles, architect, of this city. It measures 54 by 106 feet. The cost was \$31,98. Mr. Henry Pauly, of this city, was the contractor for the building, and Messrs. P. J. Pauly & Bros., of St. Louis, were contractors for the iron-work. All cell work and lattice is of their patent saw-and-file-proof steel bars (wrought iron centres). The capacity of the jail is 84 prisoners.

Court-Houses.

ALBANY, N. Y. — Work on the basement of the U. S. court-house building is now in progress, under the direction of Mr. J. G. Hill, Supervising Architect of the Treasury Department. The total appropriation for site and building is \$95,000.

ATLANTA, GA. — The new court-house, of which Mr. H. E. Meyer is architect, will be a two-story building, measuring 60 by 111 feet. The final on the tower will be 133 feet above the ground. It is to be of brick, with stone finish, and is to be fire-proof; estimated cost, \$43,000. Contracts were let early last month.

ATLANTA, GA. — Work on the U. S. court-house, Mr. J. G. Hill, Supervising Architect of the Treasury Department, has advanced so far that on October 13 proposals were received for the galvanized iron work on the roof. The building was designed by Mr. W. A. Potter, of New York.

AUSTIN, TEX. — Work on the U. S. court-house and post-office, Mr. J. G. Hill, Supervising Architect of the Treasury Department, architect, is progressing fairly.

BARNSTABLE, MASS. — An extension of 24 feet on the rear of the present court-house is now building, from design prepared by Samuel D. Kelley, architect, of Boston. The estimated cost is \$6,000. Messrs. Page & Littlefield are the contractors. At the present time the roof is on.

BELLEVILLE, MO. — Proposals for building a court-house and public offices were received August 12 by A. E. Outerbridge & Co., New York.

BRECKENRIDGE, TEX. — Mr. T. H. Connor is building the court-house, which is to cost about \$10,000.

CAMBRIDGE, ILL. — A two-story pressed brick court-house, with stone basement, designed in the French Renaissance style, is now building from designs prepared by Messrs. T. J. Tolan & Son, architects, of Fort Wayne, Ind. It measures 99 by 93 feet. The contract price is \$75,000. Mr. J. W. Hinkley, of Indianapolis, is the contractor. At the present time the first story is half built. The work will be carried out without delay.

CHATTANOOGA, TENN. — A two-story brick court-house, with stone basement, is building from designs and under the supervision of Mr. A. C. Bruce, architect, of Knoxville. It measures 80 by 120 feet, and was contracted to Messrs. Patton & McInturf, of Nashville, at \$40,000. The roof is now being put on; building to be finished by March next. It is in the Italian style, with pressed brick front, stone finish, galvanized iron cornices, the roof covered with slate. First story office rooms all fire-proof.

CHICAGO, ILL. — The new court-house for Cook County is building under the direction of Mr. J. J. Egan, architect. It is impossible to say when or how this costly building will be finished.

CLEVELAND, TENN. — On August 3, plans were received by the county commissioners for the new court-house for Montgomery County. The proposals for building were received October 5.

COLUMBUS, O. — At a competition held last June for a new court-house and jail, fourteen sets of designs were submitted, and recently the city council has resumed its intention of building a new city prison. — At the penitentiary the new cell-building is finished, and another story is being

added to the right wing of the main building. The work is being done by the convicts.

COLUMBIA, CAL. — Messrs. Carle & Croly, contractors, of Sacramento, are making extensive improvements in the county court-house.

COVINGTON, KY. — The U. S. court-house and post-office which has been building under the charge of Mr. J. G. Hill, Supervising Architect of the Treasury Department, is nearly finished, the hot-water heating apparatus being now installed. The total appropriation for site and building was \$395,000. The building was designed by Mr. W. A. Potter.

CROWN POINT, IND. — A two-story and basement court-house is now building, and is to be completed August 1, 1879. Size, 99 by 110 feet in the extreme. It is in the form of the Greek cross, the width of the wings being 56 feet. It is of brick, with stone finish, including solid stone porches and steps, galvanized iron cornices, and slate roof. The dome, which is 160 feet high, and 32 feet square, is of solid brick to the spring of the arched roof. Entire cost will be \$50,000. John C. Cochrane, of Chicago, is the architect; Thomas and Hugh Colwell, of Ottawa, Ill., are the contractors.

GALLIPOLIS, O. — The brick work on the new court-house is all finished.

GRAND RAPIDS, MICH. — The U. S. court-house, which has been building under the charge of Mr. J. G. Hill, Supervising Architect of the Treasury Department, is nearly finished. Proposals for the hot-water heating apparatus were received November 5. The total appropriation for the site and building was \$155,000.

HARRISBURG, PENN. — The U. S. court-house and post-office, building under the direction of Mr. J. G. Hill, Supervising Architect of the Treasury Department, is built up above the first floor.

HENDERSON, TEX. — The architect of the new court-house is S. E. Huffel, of Austin, Tex.

HAWAIIA, KANS. — A two-story court-house of irregular outline, and measuring about 45' x 80', of brick and stone, and costing \$20,000, is building from the designs of Messrs. Ropes & Carr, architects, of Kansas City, Mo. The foundation is now built, and ready for the superstructure, which will be completed next year.

LAGRANGE, IND. — The new court-house is building from plans prepared by Messrs. T. J. Tolan & Son, of Fort Wayne. It will cost about \$68,000. The foundations are completed.

LEXINGTON, MICH. — Mr. Julius Hess, of Detroit, Mich., is the architect of the new court-house for Sanilac County.

LITTLE ROCK, ARK. — The U. S. court-house, for which the total appropriation was \$100,000, has been built up to the third floor. Mr. J. G. Hill Supervising Architect of the Treasury Department.

MAUNTON, WIS. — The new court-house, which is to cost about \$12,500, was designed by Messrs. H. C. Koch & Co., architects, of Milwaukee.

MONTGOMERY, TENN. — Messrs. McCormack & Sweeney, of Columbus, Ky., have been awarded lately the contract for building the new court-house.

NASHVILLE, ILL. — The question of building a court-house for Washington County is now before the community.

NICHOLASVILLE, KY. — Mr. Thomas N. Boyd, architect, of Pittsburgh, Penn., is building the new court-house, which will cost about \$30,000.

NOBLESTVILLE, IND. — A two-story pressed brick court-house, with stone basement, designed in the French Renaissance style, is now building from designs furnished by Mr. Edwin May, architect, of Indianapolis. It measures 80 by 120 feet. The contract price is \$100,00. At the present time the slate roof is being put on. The work will be carried out without delay.

PEORIA, ILL. — The entire cost of the court-house, including improvement of grounds, will be about \$300,000; the contractors, with the contractor, P. H. Decker, of Chicago, which at one time looked as if it would be settled only by a long and tedious lawsuit, has been amicably arranged by allowing the balance due him, amounting to \$24,791.11.

PHILADELPHIA, PENN. — The U. S. court-house and post-office, designed by Mr. A. B. Mullett, and building under the charge of Mr. J. G. Hill, Supervising Architect of the Treasury Department, has reached the level of the third-story floor. The total appropriation for this building and its site is \$3,750,000.

RAPA CITY, CAL. — A court-house is building here.

SALISBURY, MD. — Mr. E. M. Butz, of Allegheny, Penn., is the architect of the new court-house. The contract was taken by M. V. Hughes, of Bellefontaine, Penn., for about \$22,000.

SALT SP. MARIE, MICH. — The new court-house now nearly finished measures 60' x 86'. It is built of Drummond Island limestone, relieved with Marquette brown sandstone. Cost, \$22,500, including clock and bell. Designed in classic style by Wm. Scott & Co., architects, Detroit, Mich.

SHELBYVILLE, IND. — A two-story brick court-house, with basement, is now building, from designs prepared by R. P. Daggett, of Indianapolis. It measures 60 by 100 feet. The contract price is \$31,000; plastering just finished. Will be completed without delay.

SPRINGFIELD, O. — Messrs. T. J. Tolan & Co., of Fort Wayne, Ind., are the architects of the new court-house, jail, and sheriff's house, — three separate buildings, — for which proposals were received on September 12. The court-house will cost \$74,000, and the other buildings will cost about \$33,000. The following are the principal contracts awarded by the county commissioners on the new court-house and jail: D. F. Minahan, Springfield, excavation, cut limestone, brick work, and plumbing; Finnegan & Son, Cincinnati, sandstone and freestone work; William Haulinger, Springfield, plastering; John Rouser, Dayton, carpenter and joiner work; Younglove & Co., Cleveland, iron work for jail; Motherwell Works, Lancaster, Ohio, other iron work. N. Cregar, of Springfield, is to be the superintendent of construction, and the buildings are to be completed within a year.

STURGEON BAY, WIS. — A court-house for Door County is building here.

TOLEDO, O. — The county commissioners are going to build a \$2,000 addition to the court-house.

UFICA, N. Y. — Work on the superstructure of the new U. S. court-house and post-office has begun, under the direction of Mr. J. G. Hill, Supervising Architect of the Treasury Department. The total appropriation for site and building is \$270,000.

WARREN, IND. — The architects of the new court-house are B. V. Enos & Son. The cost of the building is about \$101,000.

WASHINGTON, IND. — A two-story pressed brick court-house, with stone basement, designed in the new Grecian style, is now building from designs prepared by Mr. Geo. W. Bunting, of Indianapolis. It measures 75' by 120'. The

contract price is \$75,000. Messrs. McCormick & Sweeney are the contractors. The building is almost completed. — The same design was adopted for a court-house at Clarksville, Tennessee; proposals received, but work not awarded. — The same design was adopted for a court-house at Ann Arbor, Mich., McCormick & Sweeney, of Chicago, contractors. The contract price is \$90,000. The building is being plastered. The work will be finished without delay.

WICOMICO, VA. — The new court-house is progressing.

WILBER, NEV. — A new court-house and jail for Salina County are to be built here. C. H. Slocum, county clerk.

WOOSTER, O. — Mr. Thomas N. Boyd, of Pittsburgh, Penn., is the architect of the new court-house for Wayne County. The contract for the entire building was let to W. M. Keller, of New Brighton, Penn., for \$64,975. The iron work has been made by Coffrode & Saylor, bridge-builders.

WORCESTER, MASS. — A two-story granite court-house is now building from designs prepared by Stephen C. Earle, architect, of Boston. It measures 54 by 87 feet. The estimated cost is \$50,000. The contractors are Jas. W. Coburn & Co., of Boston. The walls are now nearly ready for the roof. The building is in close connection with a handsome Quincy granite court-house built in 1843, from designs by Ammi B. Young, in severe Grecian style, and is planned to appear as a separate building, but of style and color to harmonize with the other. The inside construction is of brick and iron throughout; doors and wood fittings are to be of oak. It is mainly for the accommodation of the probate court and registry, county treasurer, and law library.

YORK (ONTARIO), CAN. — One third of the cost of the new court-house will be borne by the county, the remainder will be paid by the city.

Prisons.

BARNSTABLE, MASS. — A two-story brick jail and keeper's house connected, designed in the Renaissance style, is now building from designs prepared by S. D. Kelley, architect, of Boston. It measures over all 28 by 74 feet. Estimated cost, \$14,000. Messrs. Page & Littlefield, of Boston, are the contractors. At present the walls are half built. The cells are of dressed granite with North River stone floors. Cell doors secured with Harris's prison locks. Messrs. Kohr & Ripley contractors of the iron work. The Walworth Mfg. Co. for the steam heating.

BROOKLYN, N. Y. — A strenuous effort is making by the Women's Christian Temperance Union to secure the building of a new county jail.

CARO, MICH. — The jail and sheriff's house are building from designs prepared by Messrs. Watkins & Hilden, architects, of Bay City, Mich. They are nearly finished.

CASSOPOLIS, MICH. — The cost of the new county jail now building, from designs by T. J. Tolan & Son, of Fort Wayne, Ind., will be about \$19,000.

CONCORD, N. H. — The new state prison, now building under the charge of Messrs. Dow & Wheeler, architects, of this city, will probably cost some \$200,000. The central building is three stories high and measures 54 by 66 feet, to which are connected three wings, which measure respectively 40 by 80 feet, 48 by 183 feet, and 45 by 75 feet. The male ward will contain 184 cells, which measure 6 by 8 by 8 feet. The warden's house, a separate building, measures 48 by 55 feet. A wall twenty feet high incloses the buildings.

COVINGTON, KY. — On October 25 the special committee of the City Council received plans from architects for building in the city of Covington a jail to cost not over \$30,000.

DORCHESTER, CAN. — Near the head of the Bay of Fundy is being built by the Dominion Government a large penitentiary for the use of the maritime provinces. The material used is freestone, and the design is modelled on Renaissance forms. The plans were prepared by Mr. Thos. S. Scott, of the Department of Public Works, at Ottawa. A lofty guard-room, 50 by 60 feet on plan, forms the centre of a group of buildings. The cells (115 in number) are arranged back to back in a double line four tiers in height, and a clear space is left between them and the outer walls of the containing building. They are built along the centre of a rectangular building 100 feet long and 50 feet wide, which extends backwards from the rear of the central hall. Beneath the floor of the central guard-room a number of dungeons for confining refractory prisoners are provided. In front of, and adjoining the central hall, is an irregularly shaped building 150 feet in depth, and 120 feet extreme width across the front. This block is two stories in height, with basement and mansard roof, and contains the offices, kitchens, dwelling apartments for wardens, etc., and a large chapel. These works are under contract with Jas. G. McDonald & Co., and are now well advanced. The cost will probably reach \$120,000. To complete the scheme two additional cell buildings, extending right and left from the centre, will be built as required. Work-shops, etc., will be erected, and a wall, twenty feet in height, inclosing an area of twelve acres, will surround the whole.

ELKHORN, WIS. — Messrs. H. C. Koch & Co., of Milwaukee, are the architects of the county jail now building. Its estimated cost is \$10,000.

ELLCOTT CITY, MD. — Mr. Laing, of Baltimore, is the architect for the jail. It is a granite structure, 40 by 50 feet, two stories in height, containing sixteen cells, and is being built adjoining the old jail, and is perfectly fire-proof. Messrs. Wilson & Rowles are the builders, and have proposed to build it for \$7,000.

ELMIRA, N. Y. — The New York State Reformatory is now being completed from designs prepared by J. R. Thomas, architect, Rochester, N. Y. It is built in the Romanesque style, the material being stone and brick. It measures 300 by 525 feet, and will cost \$1,300,000.

FAYETTEVILLE, GA. — Information as to the building of the new jail can be obtained from Mr. S. F. Blalock, county commissioner.

FOLSOM, CAL. — The new penitentiary, which measures 85' x 400', is building from the design of Mr. A. A. Bennett, architect, of San Francisco. It is built of stone, and besides the 302 cells contains quarters for officers and guards. The entire appropriation is \$205,000. The contract price is \$164,000. Denis Jordan, contractor.

FORT LEAVENWORTH, KAN. — Mr. E. T. Carr, architect, is building for the government military prison here a chapel, school room, etc.

GALENA, ILL. — A new jail is to be built here. It will cost about \$10,000.

GRAHAM, TEX. — Mr. T. H. Connor is building the Young County jail here. The cost will be between \$5,000 and \$10,000.

GREENCASTLE, IND. — Mr. Edwin May, of Indianapolis, is the architect of the new jail.

HARRISVILLE (ALCONA CO.), MICH. — Jail and sheriff's residence, built of brick and relieved with Ohio sandstone; cells made of wrought iron; cost, \$8,000. Wm. Scott & Co., architects, Detroit, Mich.

HARTFORD CITY, IND. — The Blackford County jail, of

which the architects are Messrs. T. J. Tolan & Son, of Fort Wayne, Ind., will cost about \$15,000.

**HILLSBORO, O.**—Within a week or two the grand jury has recommended the county commissioners to build a jail here.

**HUNTINGDON, PENN.**—This town has been selected by the Middle Penitentiary Commission as the site for the new state penitentiary.

**JONESBORO, GA.**—In July last proposals for building the jailer's house and jail for Clayton County were let.

**LINCOLN, KY.**—Money to pay for the new county jail is to be raised by an issue of county bonds to the value of \$12,000.

**MAUSTON, WIS.**—The drawings for the new county jail and jailer's house were prepared by Messrs. H. C. Koch & Co., architects, of Milwaukee.

**NEW BRAUNFELS, TEX.**—Mr. S. E. Ruffini, of Austin, Tex., is the architect of the new jail for Comal County. It will probably be finished early in the winter.

**PITTSBURGH, PENN.**—The penitentiary is now being remodelled.

**PROVIDENCE, R. I.**—Proposals for building a Reform School were received in July last.

**ROME, GA.**—A small jail having eight cells has been building here.

**STANFORD, KY.**—The architect of the new brick and stone jail is Mr. H. P. McDonald, of Louisville, Ky.

**TORONTO, CAN.**—The new building for the Andrew Mercer Reformatory for Females, now building here, was designed in the office of the Department of Public Works.

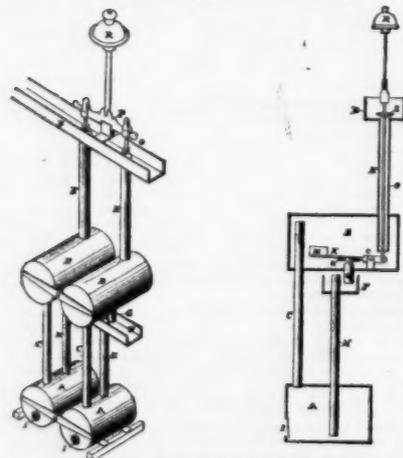
**BUILDING INTELLIGENCE.**

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

**BUILDING PATENTS.**

**AUTOMATIC WATER-LIFTER.**—Abraham Gregg, Forest City, Cal. This apparatus, which is constructed after the principle of Hero's Fountain, is to be used for lifting water out of mines or pits where a good water-supply or elevated flume is accessible. At the bottom of the mine, and immersed in the water which is to be removed, are two cylinders or chambers, A, into which the water has access by the valve-closed opening I. From the top of each chamber a pipe C leads nearly to the top of another chamber, B, at the level of the ground. These chambers B are connected with the elevated flume D by the pipes E E, which descend nearly to the bottom of the chamber. The chambers A are emptied by the pipes H H, which begin near the bottom of the cham-



bers and empty into the discharging flume F, which carries off not only the water that is raised from the mine, but also the waste-water from the upper flume. The apparatus works thus: Water from the upper flume enters the chamber B by the tube E, when the valve S is open. The air in the chamber B is compressed by the entering column of water, and passing through C forces the water in A up through the pipe H, till it discharges itself into the flume F. Water from the upper flume continues to enter B until enough has entered to float up the end M, of the lever K, so far that the valve N is raised from the outlet G, and the water in B can escape into F. As M rises, the short end of the lever, to which is attached the valve-capped rod O, is depressed until the inflow of water is stopped by the closing of S. The rods O O are connected at the top by the cross-head P, which is pivoted at its centre and carries above it the weight R, which as it inclines to one side or another tightly closes the valve S on that side. The effect of this connection of the valve-rods is to bring one side of the apparatus into operation as the other ceases to act, and in this movement the apparatus is automatic.

**WINDOW-SASHES.**—Stephen R. Easton, Charleston, Ill. The sash is grooved to receive the panes; the bottom rail is fixed; the middle one pivoted, while the upper rail is made in two parts, one half fixed and the other pivoted, so that the edges of the top panes are retained between them.

**SHLEF-SUPPORT.**—John L. Gunther, Newark, N. J.

**WRENCH.**—John M. Marty, Fairbault, Minn.

**WINDOW-SCREEN.**—Edward Neary, Neshauc, N. J.

**GATE HANGER.**—John S. Smith, Jackson, Mich.

**TACKING-MACHINE.**—James W. Carver, Lynn, Mass. This machine has a reservoir for holding tacks in bulk, secured to one end of the lever, which has at its other end the piston which drives the tack home. As the piston is driven down the reservoir is raised and a tack is thrown on to an inclined race-way and slides under the piston, ready for the next stroke.

**SCREW-CUTTING LATHE.**—Alphens F. Cherry, Albany, Oreg.

**DRAUGHTING-PENCIL.**—Frederick W. McGee, Rutherford, N. J. The pencil carries a variable number of points for making parallel lines simultaneously.

**ROCK-DRILLING MACHINE.**—Aaron J. Mershon, Warsaw, Ind.

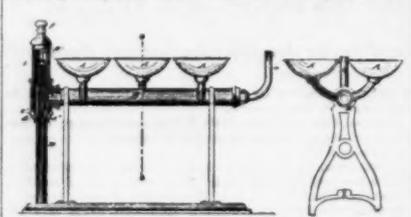
**COMBINED BEDSTEAD AND FIRE-ESCAPE.**—Henry B. Scholze, Brooklyn, N. Y.

**SASH-FASTENER.**—Nathan Thompson, Brooklyn, N. Y.

**BUTEL.**—Francis L. Cork, Fairfield, Io.

**WIRE-TIGHTENER.**—W. W. Marsh and C. Bergquest, Sycamore, Ill.

**FACTORY WASH-STAND.**—William Humphrey, Jackson, Mich. This apparatus is intended for use in factories, jails, etc., where a number of persons have occasion to wash at the same time. Bowls of the ordinary pattern are placed vertically over, or in two rows one on each side of a com-



mon supply-pipe B, and are filled and emptied through the orifice in the bottom, while the pipe B serves alternately as a supply-pipe and a waste-pipe. The overflow takes place through the tube which serves as a plug or valve to prevent the water passing directly into the waste-pipe D. The basins are emptied simultaneously by lifting this tubular plug by means of the handle F.

**FIRE-PLACE STOVE.**—Michael McNamara, Buffalo, N. Y.

**HYDRAULIC CRANE.**—Samuel T. Wellman, Cleveland, O.

**PUMP.**—Amos H. Ashley, Stayvossent Falls, N. Y. This pump is designed for pumping hot water.

**WRENCH.**—August Beck, New York, N. Y.

**WRENCH.**—John S. Bird, Orange, N. J.

**ACUER.**—William Harey, East Haven, Conn.

**RATCHET BIT-STOCK.**—Hubert C. Hart, Unionville, Conn.

**CURTAIN-ROLLER AND BRACKET.**—Eos T. Higham, Philadelphia, Penn.

**STATIONARY WASH-TUB OF CLAY OR PORCELAIN.**—Bernhard Morahan, Broo Jyn.

**METALLIC SHINGLE.**—Henry W. Shepard, Brooklyn, N. Y.

**FORTABLE PARQUETRY FLOOR.**—Albin Slemroth, Bohlen, Rudolstadt, Germany.

**FIRE AND WATER PROOF ROOFS.**—Tobias New, New York, N. Y.

**COMPLETED BUILDINGS.**

**NEW YORK, N. Y.**—The Hahnemann Homoeopathic Hospital was formally opened November 1. It has cost \$75,000, and can care for one hundred patients. Mr. A. B. Ogden, architect.

**SUMMARY OF THE WEEK.**

Baltimore.				
<b>BUILDING PERMITS.</b> —Dr. Bernhard Myer, one-and-one-half-story stable, lot 14 Hanover St. — Geo. W. Lemon, one-story stable, lot 59 George St. — F. Diddo, 5 two-story dwellings, Castle St. — Jas. T. Willis, 14 two-story dwellings, cor. Bengeid Alley, west of Ironout St. — C. I. Hull, 2 three-story dwellings, Greenmount Ave. — John Heitcike, two-story building, cor. West & Clarkson sts. — Sarah Lanke, two-story office, 142 German St.				
Boston.				
<b>BUILDING PERMITS.</b> —The following permits have been granted since our last issue: —				
BRICK BUILDINGS.				
Mechanic.	No.	Stories.	Class.	Size.
Jas. P. Neal.	1	3	Mercantile.	28' x 24'.
Geo. A. Patrick.	1	3	Mercantile.	124' x 48'.
Wm. S. Rand.	1	3	Dwelling.	24' x 70'.
Jonas Fitch.	1	4	Tenement-h'os.	34' x 32' 6 1/2'.
WOODEN BUILDINGS.				
Mechanic.	No.	Stories.	Class.	Size.
Alex. McDonald.	3	1	Dwellings.	21' x 32'.
W. S. Mitchell.	1	1	Stable.	25' x 35'.
H. R. Burdick.	1	1	Stable.	29' x 29'.
G. M. Starbird.	1	1	Wagon-shed.	25' x 49'.
J. S. Meserve.	1	1	Wagon-shed.	38' x 24'.
A. & J. McLaren.	1	1	Storage.	28' x 28'.
Geo. D. Cox.	3	2	Dwellings.	38' x 38'.

**REPAIRS.**—Repairs and alterations active.

**POST OFFICE.**—The appropriation of \$450,000 for the Boston Post Office is already nearly half expended. It is the desire of the Secretary of the Treasury to have the estimates for the next fiscal year kept down to the appropriations for the present year, and Congress will be asked next winter to appropriate only \$450,000 each for Boston, St. Louis, Chicago, Cincinnati, and Philadelphia.

**HOUSE.**—A house is now building for Dr. Cheever, on Boylston Street; A. H. Caton, builder; Messrs. Kirby & Lewis, architects.

**STORE.**—Mr. O. F. Smith is the architect of a building on Cambridge Street; Jas. P. Neil, mason.

**STORE.**—A store is soon to be built cor. Broad and High streets for Mr. Wm. H. Adams, of brick and freestone; Geo. A. Patrick, builder; Mr. Frank W. Weston, architect; cost, about \$12,000.

**THE LUMBER MARKET.**—The inquiry for lumber during the past month has been steady, and owing to very light shipments on the market, more than usual for this season has been ordered, especially in Eastern. There has also been a considerable reduction in the amount of Western pine which has been stored for some months. Prices continue low. The stocks are light, and should there be a mild winter, and trade continue as good as it is at present, there would have to be a large amount ordered by cars, especially in the coarser grades of framing lumber. With the close of November the Eastern mills will have generally stopped sawing, and shipments by water will be less. There has been a little advance already in freights. The present rates of freight on Western, and the low prices, have reduced shipments from that direction, especially in hard woods. Southern lumber continue quiet, with a light demand, but mostly in flooring and step-plank. There is scarcely any movement in timber or yard orders.

**Brooklyn.**

**BUILDING PERMITS.**—Bergen St., 5 two-story brick dwellings 29' x 40'; owner, G. F. Newton, 1480 Pacific St.; builder, S. Newell. — Bremen St., cor. Prospect St., 1 four-story brick ice-house, 50' x 82'; owners, Obermeyer & Liebmam, Bushwick Ave.; architect, Charles Steil. — Bridge St., 1 one-story brick iron rolling mill, 50' x 100'; and extension, 11' x 13', for office; owner, John Lenard, 550 West St. New York; architect, J. H. Van Winkle; builder, Isaac B. Jacobs. — Broadway, No. 1021, 1 three-story frame store and

dwell.; owner, L. Ohls, 1017 Broadway; builders, E. Lorch and E. U. Bauer. — Chauncey St., 1 two-story frame dwell., 22' x 32'; owner, Louis Machold, 201 Chauncey St.; builders, C. Baur and J. Dhuy. — Ewen St., near Scholes St., 1 two-story frame brewery, 25' x 37'; owner, Mrs. Dahbender; architect, John Platte; Grand St., 1 two-story brick store and dwell.; owner, Isah Pittman, Elizabethport, N. J.; builder, Alanson Hays. — Harrison St., 4 four-story brown stone tenements, 21' 4 1/2' x 60'; owner, George B. Dearing, 467 Illicks St.; architects, Parfit Bros.; builder, E. B. Dearing. — Herkimer St., 3 three-story frame dwellings, 29' x 34' 6 1/2'; owner, L. R. Dossy, 607 Herkimer St.; builder, T. Smith. — Hooper St. (Nos. 141, 143, and 145), 3 three-and-a-half-story brick dwellings, 22' x 40'; owners, Du Bois Bros., 311 South 5th St.; builder, C. L. Johnson. — Meserole St., 1 two-story brick ice-house, 38' x 55'; owner, Joseph Fallert, 68 Meserole St.; architect, John Platte; builders, B. Rauth & Brother. — Monroe St., 3 two-story frame dwellings, 16' 8 1/2' x 38'; owner, A. M. Reilly, 746 Gates Ave.; builder, John McGarry. — Warren St., 1 two-story frame dwell., 20' x 36'; owner and builder, J. A. Lawrence, 132 Buffalo Ave. — Woodbine St., No. 61, 1 two-story frame dwell., 22' x 32'; owner, S. Esquil, 62 Woodbine St.; builder, Mr. Wright. — First St., 6 two-story brick dwellings, 16' 8 1/2' x 36'; owner, Chester Bedell, 375 Smith St. — First St., 1 two-story brick stable, 35' x 16'; owners, Henry Vogt & Bros.; architect, G. A. Kingsland; builders, Barker & Berton. — Third Pl. (Nos. 17 and 19), 2 three-story brick dwellings, 18' x 42'; owners, J. & J. Williamson, 21 and 23 Third Pl.; architect, T. Dixon; builders, Moore & Thompson. — De Kalb Ave., cor. Schenck St., 1 three-story brick store and dwell., 20' x 50'; owner, Richard Taylor, foot of Clymer St.; builder, E. Davison. — Division Ave., cor. Fifth St., 4 four-story brick stores and dwellings, 18' 3 1/2' x 50'; owner, C. H. Paul; builders, M. Freeman & Son. — Evergreen Ave., cor. Bleeker St., 1 two-story frame dwell., 25' x 35'; owner, F. Doring, 58 Leonard St. — Flushing Ave., 1 two-story frame dwell., 25' x 34'; owner, George Loeffler, 197 Floyd St. — Graham Ave., No. 14, 1 one-story brick packing house, 30' x 70', and extension, 20' x 25'; owner, J. Schulthies, 881 Park Ave.; architect, John Platte; builders, B. Rauth & Bro. — Lexington Ave., 4 two-story brick dwellings, 18' 9 1/2' x 42'; owner, John Cregier, 212 Keap St. — Nostrand Ave., No. 45, 1 one-story frame stable, 20' x 16'; owner, J. Meckler, 60 Nostrand Ave.; builder, J. Schneider. — Rogers Ave., near Warren St., 1 three-story brick tenement, 20' x 46'; owner, Martin Healy; architect, Mr. McKinsian; builder, Thos. Donnelly. — Vernon Ave., 5 two-and-a-half-story frame dwellings; owner, F. R. Boerum; architect, Alex. W. Dickie; builder, Thos. Greenland. — Willoughby Ave., 5 three-story brown stone dwellings, 20' x 48'; owner, John Hayer, 125 Stockton St.

**Chicago.**

**BUILDING PERMITS.**—J. W. Reidy, three-story factory, 85 and 91 Illinois St.; cost \$7,500. — Home of the Good Shepherd, four-story building, Kim St.; cost \$7,000. — Charles F. Grey, two-story store and dwell., 426 Wells St.; cost \$3,000. — W. J. Thele, two-story store and dwell., 205 West Twelfth St.; cost \$3,000. — C. F. Lindsay, two-story dwell., 733 West Chicago Avenue; cost \$1,500. — Peter Fox, two-story store and dwell., 114 Archer Ave.; cost \$3,000. — D. H. McDan- jels, two-story store, 48 and 48 Dearborn Ave.; cost \$6,000. — P. Smith, two-story dwell., 196 Fourth Ave.; cost \$2,500. — Hannah Martin, 8 two-story dwellings, cor. of Western and Park Aves.; cost \$6,000. — Jacob Gramer, 2 two-story dwellings, West Twelfth St.; cost \$2,600 each. — P. Leyl, two-story dwell., 13 Lincoln Ave.; cost \$2,000. — Thomas L. Parker, two-story dwell., cor. of Congress and Winchester Aves.; cost \$2,400. — Bernard Baum, saloon, music hall, and dwell., cor. of Cottage, Grove, and Indiana Aves.; cost \$10,000.

**DETAILED STATEMENT OF NEW BUILDINGS FOR WHICH PERMITS HAVE BEEN ISSUED DURING THE MONTH OF OCT., 1878.**

Date.	No. of Buildings.		No. of feet Street Frontage.		Cost.
	1878.	1877.	1878.	1877.	
Oct. 1.	110	152	5,538	9,111	\$672,500
Oct. 2.	1	1	10	10	\$100,000
Oct. 3.	1	1	10	10	\$100,000
Oct. 4.	1	1	10	10	\$100,000
Oct. 5.	1	1	10	10	\$100,000
Oct. 6.	1	1	10	10	\$100,000
Oct. 7.	1	1	10	10	\$100,000
Oct. 8.	1	1	10	10	\$100,000
Oct. 9.	1	1	10	10	\$100,000
Oct. 10.	1	1	10	10	\$100,000
Oct. 11.	1	1	10	10	\$100,000
Oct. 12.	1	1	10	10	\$100,000
Oct. 13.	1	1	10	10	\$100,000
Oct. 14.	1	1	10	10	\$100,000
Oct. 15.	1	1	10	10	\$100,000
Oct. 16.	1	1	10	10	\$100,000
Oct. 17.	1	1	10	10	\$100,000
Oct. 18.	1	1	10	10	\$100,000
Oct. 19.	1	1	10	10	\$100,000
Oct. 20.	1	1	10	10	\$100,000
Oct. 21.	1	1	10	10	\$100,000
Oct. 22.	1	1	10	10	\$100,000
Oct. 23.	1	1	10	10	\$100,000
Oct. 24.	1	1	10	10	\$100,000
Oct. 25.	1	1	10	10	\$100,000
Oct. 26.	1	1	10	10	\$100,000
Oct. 27.	1	1	10	10	\$100,000
Oct. 28.	1	1	10	10	\$100,000
Oct. 29.	1	1	10	10	\$100,000
Oct. 30.	1	1	10	10	\$100,000
Oct. 31.	1	1	10	10	\$100,000
<b>Total.</b>	<b>110</b>	<b>152</b>	<b>5,538</b>	<b>9,111</b>	<b>\$672,500</b>

**REMARKS.**—Cost of additions, basements, and improvements to buildings previously erected, for the month of Oct., 1878, \$122,000. For ditto, 1877, \$48,400. Total cost of new buildings and improvements for Oct., 1878, \$794,500. For ditto, 1877, \$498,000. Total cost of new buildings and improvements from Jan. 1 to Oct. 30, 1878, \$5,784,000. Same period in 1877, \$5,500,000.

**Cincinnati.**

**CONTRACT.**—Krieger & Co., to whom the award was made by the board of directors of Longview Asylum on Tuesday, for work and material for the new system of sewerage and drainage upon the plan of irrigation, at the asylum, at the sum of \$2,132, have declined the award, upon the ground that their offer did not embrace the entire work. They said that their offer did not include making the lead joints. Hence the committee made the award to the next lowest bidders, who are Wm. Kirkup & Sons, at the sum of \$2,380, which includes the entire plan of pipes, hydrants, cistern, and steam pump. The work must be completed within the next ensuing thirty days, according to the contract.

**Cleveland.**

**CHURCH.**—The Tabernacle Baptist Church, now building at the corner of Wilson Avenue and Quincy Street, will be completed in about six weeks. It is built of brick, with heavy stone finish, and will cost about \$9,000 complete. J. H. Bradder has the contract for the carpenter work, and J. J. King for the mason work. Messrs. Heard & Smith are the architects.

**FACTORY.**—The Nut and Bolt Works are building an addition to their extensive works. The building is of brick, one story in height, and 50 by 100 feet in size. John McMahon is the contractor for the masonry, and R. McQuinn

for the carpentry. J. M. Blackburn and Charlott are the architects; cost about \$3,000.

DWELLING.—A double dwelling-house for Mr. John Goodman is building on the corner of Prospect Street and Case Ave. It is two stories high, built of brick, with stone finish. The inside finish is of oak and pine. It is 62 by 59 feet in size. Messrs. Heard & Smith are the architects.

MACHINE-SHOP.—Mr. C. D. Ransome is building a large brick block on Centre Street, to be used as a machine power block. It will be of brick, two stories in height, and will contain about 10,000 square feet of floor room.

Louisville.

BUILDING PERMITS.—Louisville and Nashville Railroad Company, one-story frame paint-shop, Kentucky St.; cost, \$3,000.—Charles E. Mengel, Jr., one-story brick, Main St.; cost, \$200.—John Pfeiffer, one-story frame dwell., cor. of Brook and St. Joseph Sts.; cost, \$1,500.—Ernest Beuchtel, one-story frame dwell., Case St.; cost, \$200.

Philadelphia.

BUILDING PERMITS.—George Miller, three-story back building, 18' x 40', No. 1831 Germantown Ave.—T. W. Wright, three-story picket-house, 22' x 40', Armat St.—John McGrainer, two-story dwell., 17' x 40', cor. Bailey and Oxford Sts.—W. Steel, three-story dwell., 17' x 40', Otis St.—Elego & Quigley, two-story stable, 16' x 17', Capewell St.—John Kieba, 6 two-story dwells., 16' x 25', cor. Eleventh and Nevada Sts.—L. K. Slifer, 2 two-story dwells., 16' 9/4' x 42', Nos. 912 and 914 Arizona St.—John Gleason, two-story shop, 19' x 49', Palethorp St.—Joseph Steel, three-story dwell., 18' x 40', York St.—John J. Deery, four-story convent, 43' x 204', Thirty-fifth St.—S. T. Hill, theatre, 60' x 70', Eighth St.—Wm. Orr, 2 three-story dwells., 12' x 3', Nos. 21 and 23 State St.—A. J. Hook, three-story ware-house, 18' x 30', Crosby St.—W. Harshaw, three-story dwell., 16' x 45', No. 2123 Fitzwater St.—Lewis & Gaubert, 3 two-story dwells., 16' x 28', Jackson St.—Lewis & Gaubert, 5 two-story dwells., 14' x 28', Jackson St.—John Henon, two-story dwell., 16' x 39', Millin St.—Samuel B. Snell, two-story stable, 18' x 20', No. 1914 South Fifth St.—E. Struse & Sons, two-story dwells., 18' x 32', Cresson St., Manayunk.—L. W. Goodman, 2 two-story dwells., 12' x 31', cor. Thirty-seventh and Center Sts.—W. B. Allen, two-story dwell., 16' x 54', No. 721 York St.—Benjamin Walker, three-story dwell., 24' x 70', Germantown Ave.

CORNER-STONE LAID.—The corner-stone of the new building on Silverton Avenue and Thirty-fifth Street was laid by the Archbishop, with appropriate ceremonies, on Sunday afternoon, November 3.

ALTERATION.—The new building of the Church Extension Board, located at 1026 Arch Street, this city, is now being altered and remodelled for its use, and will soon be ready for occupancy.

SCHOOL-HOUSE.—Proposals were received on Thursday last for building a public school-house in the Twenty-sixth Ward, in accordance with the design prepared by L. H. Esler, architect.

A MEMORIAL CHAPEL.—The late Morris Patterson's will directs that after the death of his wife his trustees shall pay over to the trustees of the West Spruce Street Presbyterian Church the sum of \$30,000 in trust, to build, at their discretion as to time and place, a mission-chapel to the memory of his deceased daughter, Mary Elizabeth Patterson.

TRUST COMPANY'S BUILDING.—The Girard Life and Trust Co.'s Building, Chestnut Street, by Mr. Geo. W. Hewitt, architect, is just being roofed in. It has a base course 8 feet 6 inches high, of polished Quincy granite. Above this are buff enameled brick, and blue marble. The building is entirely fire-proof. Size, 42 feet front, 115 feet deep. Cost \$32,000.

WORK OF THE PAST MONTH.—During the month of October, 1878, 364 building permits were granted. The following statement will show the character of the work to be done:—

Dwelling-houses, two-story, 105; dwelling-houses, three-story, 82; stores and dwellings, two-story, 4; stores and dwellings, three-story, 5; stores and dwellings, four-story, 2; stores, two-story, 5; stores, three-story, 1; churches, 1; stables, 14; shops, 6; factories, 1; brewery, 1; market-house, 1; slaughter houses, 3; picket-houses, 2; sheds, 2; bakery, 1; convent, 1; theatre, 1; store-houses, 5; green-house, 1; vestry, 1; offices, 2; additions and alterations, 112; back-buildings, 31; total, 391.

GRAIN ELEVATOR.—Another grain elevator will be erected at the foot of Willow Street, to accommodate the grain trade which comes over the North Penn., Reading and Western routes.

St. Louis.

BUILDING PERMITS.—During the week ending November 1, seventeen permits have been issued, nine of which are for cheap frame erections. Of the rest, those worth \$2,500 and over are as follows:—

Table with 5 columns: Owners, Use, Stories, Rooms, Cost. Includes entries for Dr. John W. Thrall, Mrs. Debenhart, Mrs. Rebecca Sire, and S. Leonard.

WORK IN PROGRESS.—Dr. Brooks's Presbyterian church is now under roof. The outside of the Second Baptist church is completed, and the plastering is about done inside. A slated wooden spire has been built in place of the stone spire originally designed. This church has a nave and aisles with groined ceilings.—Shickle, Harrison & Co. are the owners of a large iron-front store, now being built for the Simmons Hardware Company, on the corner of Washington Avenue and Ninth Street.

Washington, D. C.

BUILDING PERMITS.—S. C. Clark, two-story stable, Stanton Place; cost, \$250.—Hugh McCaffrey, two-story dwell., A St.; cost, \$1,500.—T. W. James, two-story dwell., Seventeenth St.; cost, \$1,000.—A. H. Herr, 6 two-story dwells., Grace St., Georgetown; cost, \$3,200.

A CONTRACT AWARDED.—The bids for the furnishing, delivery, fitting, and putting in place complete the rolled iron beams, etc., for first tier of the proposed building for the Bureau of Printing and Engraving, have been opened, and the award has been made to Mr. W. H. H. Robinson, of Washington, the lowest bidder. The following is the list of bids in the order of their order: W. H. H. Robinson, \$3,207.43; Gray & Noyes, Washington, \$3,453.23; S. J. Crewell, Philadelphia, \$5,403.80; Bartlett, Robbins & Co., Baltimore, \$3,410; Stewart & Stevens, Philadelphia, \$3,525.25; Charles A. Schneider & Sons, Washington, \$3,556.73; Phoenix Iron Co., Trenton, \$3,713.87; Sneed & Co., Louisville, Ky., \$3,819.21; Pettit & Dripps, Washington, \$3,948.64; Morris & Marshall, Pittsburg, \$4,146.

THE NAVAL OBSERVATORY SITE.—The commission, of which Admiral Ammen is chairman, which was appointed by Congress at the last session, to select a site for a new naval observatory, has examined eighty different sites, and will report in favor of the estate known as Clifton, on Georgetown Heights. Can be had for \$30,000.

General Notes.

ARLINGTON, N. J.—Frame cottage, eight rooms, for Chas. Bird; builder, K. A. Ball; architects, Palliser, Palliser & Co., of Bridgeport, Conn.; cost, \$4,500.

AUGUSTA, GA.—A Confederate monument was unveiled October 3. The monument was made in Italy.

BARNESVILLE, O.—The plans for the Belmont County Children's Home, which will be located near this town, are now ready and awaiting bids.

BELMONT, MASS.—Messrs. Hartwell & Tilden, of Boston, are the architects of a house for Mr. W. E. Stowe. The building will be of brick and stone, and will cost \$6,500. J. W. Emery, of Belmont, is the contractor.

BLOCK ISLAND, R. I.—Quite a large business is going on here in the lumber trade.—Mr. Thomas O. Wilcox, of Westerly has the contract for the work on the Ocean View Hotel.—Mr. A. T. Card, of the Island, has contracted to build the addition to the Highland House.—Mr. Stephen Kimball superintends the building of the hotel which Mr. James E. Ross is to build.—Mr. Edward Mott is building a large house immediately south of the Providence House, and Mr. C. C. Ball is building a large and fine store immediately north of his present place of business. Several other buildings are to go up this winter.

BRIDGEPORT, CONN.—Block of three stores and six tenements, frame, for Geo. Wagner; mason, J. Rutherford; carpenter, J. Reed; architects, Lambert & Bunnell; cost, \$5,500.—St. Joseph's German R. C. Church, brick and frame, Madison Avenue; mason, J. Rutherford; carpenter, Spargo & Longstaff; architects, Palliser, Palliser & Co.; cost, \$3,725.—Cottage, two-story and basement, J. Jones, owner and builder; cost, \$2,500.—Three-story brick and stone dwelling for Dr. King; mason, J. Rutherford; carpenter, Burr Curtis; architects, Palliser, Palliser & Co.; cost, \$4,500.

CAMBRIDGE, MASS.—Drawings for a new chapel for the Prospect Street Congregational society have been prepared by T. W. Silloway, architect, Boston.

CAMDEN, N. J.—Mr. T. Roney Williamson, of Philadelphia, has just made plans for twelve dwelling houses of brick, to be commenced this week, on Eleventh and Cooper Streets, for Messrs. Cox & Sons. The houses measure about 16 feet on the front.

CATLETSBURGH, KY.—The Ironon Register states that Mr. Witman has extensive contracts for galvanized cornices, window-caps, etc., for new buildings going up here.

CHESTER, VT.—The Congregational church is to be remodelled by Mr. T. W. Silloway, architect, Boston.

COLUMBUS, O.—Mr. E. T. Mihoff has purchased the Athenaeum Building, and the property lying between it and the city hall, and, it is said, intends to build a hotel on the premises.

DORCHESTER, MASS.—In process of erection, four first-class wooden dwellings, 33 by 38 feet, on corner of Howland and Warren Streets, near Grove Hall, to cost about \$8,000 each. Two more of about the same cost, and of different style, are to be commenced at once. Geo. D. Cox is the owner; M. D. Safford, the architect and superintendent.

EAST PROVIDENCE, R. I.—The plans are completed for the house which Mr. Elieha W. Pierce, of Providence, is to build near Armington's Corner, and the building will soon be commenced.

FAIRHAVEN, MASS.—Sullivan Rogers is building two cottage houses on Bridge Street.

FORT LEAVENWORTH, KAN.—Mr. E. T. Carr is the architect of the chapel, which will cost \$5,000, and of the U. S. commissary building, which will cost \$10,000.

GREELEY, COL.—Work on a brick and stone church for the Congregational society is to begin at once in accordance with the designs of Mr. T. W. Silloway, architect, Boston, Mass.

INDEPENDENCE, KAN.—Mr. E. T. Carr, of Leavenworth, is the architect of the new school-house, which is to cost about \$7,000.

LA GRANGE, ILL.—A new hotel is to be built at a cost of \$6,500.

LEESBURG, O.—The long-talked-of Town Hall is to be built at once. The Council are looking after the most suitable sites, when they will submit them to a vote of the citizens to choose the most favorable. They expect to push the matter, and complete the hall next season.

LINCOLN, ILL.—C. E. Ross's new building, to be occupied by the Times, is making fair progress.

LODI, CAL.—A contract has been let for building a Congregational church.

MECHANICSBURG, O.—Bates Brothers have the contract for erecting the necessary buildings for our new gas company. Chas. Zanone is to do the masonry.

NEWCASTLE, DEL.—A Baptist church is building here.

NEWPORT, R. I.—The plans for the alteration of Engine House No. 3 into a hose-house have been drawn, and the Fire Department Committee are awaiting bids, which are coming in very slowly. The alterations include an addition to the building of 24 by 20 feet, and a tower.

NORTH ADAMS, MASS.—The State has ordered an appropriation of \$20,000 for a station on the Troy and Greenfield Road at this place. The building, which is of brick, is also an accommodation for the Fitchburg R. R. Horton & Sherman, of North Adams, are the contractors. Messrs. Hartwell & Tilden, of Boston, are the architects.

OSCEOLA, IO.—A large creamery is to be built here.

PAWTUCKET, R. I.—Messrs. Despean and Childs, ice-dealers, have commenced work upon the foundation of a large ice-house adjoining their old one, on the west bank of the Abbott Run.

PITTSBURGH, PENN.—A. M. Byers & Co., iron manufacturers, are building a large brick addition to their pipe department, in which they will place machinery for the manufacture of lap-weld tubes.—Shoenberger & Co., iron, nail, and horse-shoe manufacturers, have decided to manufacture Siemens-Martin steel. They will erect a building on the bank of the Allegheny River, near their mill, and place two furnaces in it for the present.—An old building on Almond Alley, in the rear of Mr. Schmidt's drug store, on Butler Street, is being torn down. Some tenement houses will be put up instead.

READING, PENN.—Eighty tons of stone have been presented to this city by a citizen of Vermont, to be used in the construction of a fountain in the new park. One of the features of this park will be an artificial lake, 150 feet in length and 70 feet broad at its widest part.

SACRAMENTO, CAL.—The old brick building on Front Street, known as the Marysville Hotel, and also certain buildings adjoining it, are being pulled down to make room for a brick building, 55 by 150 feet, one story and basement in height, which Baker & Hamilton are going to add to their already extensive premises. Carl & Croy have the contract. It is also rumored that Mrs. J. T. Mier, owner of the adjoining building, now used as a hotel, will soon rebuild. Huntington, Hopkins & Co. intend to enlarge their store by an addition in the rear, 80 by 140 feet.

SOUTHBRIDGE, MASS.—A good amount of building has been done in the town the present year. S. K. Edwards has begun building a new brick block on Main Street. It is to be 25 by 75, three stories high. The first floor will be for a store, the second for tenements, the third for a hall.

TUCUMSON, MICH.—A 55 by 90 feet brick opera-house, Style, Gothic; cost, about \$10,000; A. C. Varney, Detroit, Mich., architect.

VERMILION, O.—The German Methodists are building a

new church, making the sixth place of worship here, a village of about \$1,200 inhabitants.

WARASHA, MINN.—Dr. F. H. Milligan has begun to build a new two-story brick block.

WARREN, R. I.—Another house is to be built on the "Annex" territory soon, which shows the popularity of that part of the town, a larger number of houses having been erected there than in any other, if not all other, localities since the annexation.

WAVELLET, MASS.—Mr. T. W. Silloway, architect, Boston, is preparing the drawings for a new Masonic hall building.

WETHERSFIELD, CONN.—The Catholics are making slow headway in the erection of their new church.

WILLIMANTIC, CONN.—The foundation work of Mr. W. Hayden's block is now being rapidly pushed.

ZANESVILLE, O.—Schultz & Co., soap manufacturers, have determined to build an opera-house here in the spring, and are already negotiating with an architect for the plans and specifications.

Publishers' Department.

The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY

HOUGHTON, OSGOOD & CO.,

WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year; \$6.00 in advance.

CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,

WITH

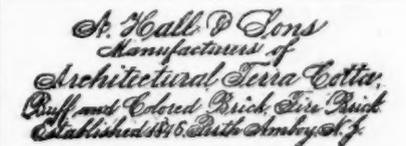
- Houghton, Osgood & Co.'s other Periodicals. THE ARCHITECT and ATLANTIC MONTHLY... \$9.00 THE ARCHITECT and THE REPORTER... 15.00 THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL... 10.00 THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE... 7.00 THE ARCHITECT and DWIGHT'S JOURNAL OF MUSIC... 7.00 \* N. E.—The Atlantic portraits of Lowell, Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

Payments should be made directly to the Publishers, either by draft or by post office order.

HOUGHTON, OSGOOD & CO., Publishers, WINTHROP SQUARE, BOSTON.

WANTS.

A POSITION as agent for a stone contractor, or for a company manufacturing specialties for building purposes, by a young man experienced in business, or any situation requiring a knowledge of architects' plans, designing, scale, and detail drawings, preparing bills of quantities, etc. An extensive acquaintance among architects, and means of keeping informed of building news in New York and Boston.—Address O. WESLEY, 246 E. 25th St., New York.



ARCHITECTURAL IRON WORKS.

YOUNGLOVE & CO., Propr's.

CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDES, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CRESTING, ETC.

Estimates promptly furnished.

(Established 1848.)

MARKET ST. ARCHITECTURAL FOUNDRY

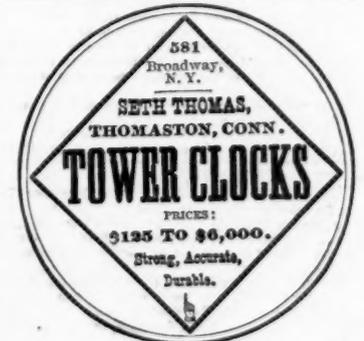
AND

IRON WORKS.

SNEAD & CO..

LOUISVILLE, KY.

Makers of every description of Iron Work for Buildings



**PROPOSALS.**

**DREDGING.**

SAVANNAH, GA.  
U. S. ENGINEER OFFICE,  
ARMY BUILDING, New York, October 26, 1878.  
Sealed proposals for the removal by dredging of 65,000 to 80,000 cubic yards in the Savannah River, Georgia, and 35,000 to 40,000 cubic yards in the Harbor of Darien, Georgia, will be received at this office until noon of November 23, 1878, and opened immediately thereafter. For full information apply at this office.

152

Q. A. GILLMORE,  
Lieut. Col. of Engineers.

**ENGINE HOUSE.**

BROOKLYN, N. Y.  
DEPARTMENT OF FIRE AND BUILDINGS,  
No. 387 JAY STREET, BROOKLYN, November 1, 1878.  
Sealed proposals will be received at this office until November 14, 1878, at 12 m., for building a brick fire engine house on the northerly side of Dean Street, one hundred and seventy-five (175) feet westerly from the northwesterly corner of Dean Street and Underhill Avenue, Brooklyn.

Plans and specifications may be seen, and forms of proposals can be procured, on application at the Department of Fire and Buildings.

Proposals will not be considered unless accompanied by the deposit aforesaid, and also by an undertaking in writing, of two sureties on each proposal (who shall qualify as to their responsibility, in the sum of \$5,000), that if the contract be awarded to the party or parties proposing, they will become bound as his or their surety for its faithful performance; and in case he or they shall neglect or refuse to execute the contract if so awarded them that they will pay to the City of Brooklyn the difference between the price so proposed and the price at which the contract may be made with any other person or persons. Proposals to be indorsed "To the Department of Fire and Buildings" (specifying work). The said proposals will be publicly opened and announced at the next meeting of the said Board, which will be held on the 15th day of November, 1878, at the hour of 12 o'clock m.; or in case there should be no quorum present on that day, then on the day of the next meeting of the Board.

By order of the Common Council.  
Dated Brooklyn, November 1, 1878.

DAVID WILLIAMS,  
JAMES RYAN,  
BERNARD GALLAGHER,  
Commissioners of Department of Fire and Buildings.  
Attest: JAMES LANGAN, Secretary. 150.

**PILING.**

BRUSH CREEK, IO.  
Notice is hereby given that bids will be received by A. Probasco, at Brush Creek, Iowa, or J. A. Stevens, at Maynard, Iowa, till November 15, 1878, for delivering bridge piling at Brush Creek, or the following places, viz: At Maynard, 50 piles—twenty 20 feet long, fifteen 16 feet long, and fifteen 14 feet long. At Oswein, 60 piles—twenty-five 20 feet long, twenty-five 16 feet long, and fifteen 14 feet long. At Randall, 40 piles—twenty 18 feet long, ten 16 feet long, and ten 14 feet long. Said piles to be of sound white or burr oak timber not less than eight inches at the top, and twelve inches at the butt; bids to specify the price per foot (lineal) if delivered at either of the above-named places, and to be delivered on or before March 1, 1879.

A. PROBASCO,  
J. A. STEVENS,  
O. B. DOOD,  
Board of Supr. 150

**WHARF.**

BALTIMORE, MD.  
Proposals will be received for building a wharf. Plans and Specifications to be seen at the office of  
CHARLES TREUSCH,  
Foot of Broadway. 150

**LOCKS AND KEYS.**

POST OFFICE DEPARTMENT,  
WASHINGTON, D. C., August 15, 1878.  
Separate sealed proposals will be received at this Department until 12 o'clock noon on the 20th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as are to be used for the street letter-boxes of the United States.

As the public exposure and searching examination necessary to intelligent bidding on any prescribed model of a lock and key would tend to impair, if not entirely destroy, the further utility of all such locks and keys for the purposes of the mails, the Postmaster-General prescribes no models or samples for bidders, but relies for a selection on the mechanical ingenuity and skill which a fair competition among inventors, hereby invited, may develop in samples submitted by them.

Specifications of requirements as to proposals, samples, kinds and quantities of locks and keys, contracts, etc., will be furnished on application by letter to the Second Assistant Postmaster-General.

No proposal will be considered which is not submitted in accordance with such specifications and forms of proposal. The contracts which may be made are to be in conformity with the specifications and accepted proposals.

170 D. M. KEY, Postmaster-General.

**DITCH.**

HYDE PARK, ILL.  
Proposals will be received by the undersigned at the village hall, Hyde Park, until November 11, 1878, for the construction of a ditch on Stony Island Avenue, from Eighty-seventh Street to Lake Calumet, of a width of thirty feet at the bottom.

Also, for enlarging the ditch on Eighty-seventh Street, from Stony Island Avenue to Cottage Grove Avenue, to a width of thirty feet at the bottom, both to be in accordance with the plans and specifications on file in the office of the village engineer, and payments for both to be made only out of the proceeds of the special assessments when collected.

Bids for each to be made separately, and the Board reserves the right to reject any and all bids.

By order of the Board of Trustees of Hyde Park.  
150 JOHN I. BENNETT, President.

**DITCH AND LEVEE.**

GLENWOOD, IO.  
Sealed proposals will be received by me up to 12 m. of Monday, November 18, 1878, at my office in Glenwood, Mills County, Iowa, for the construction of a ditch and levee on the Missouri River bottom in said county, in separate sections, numbered 1 to 17, inclusive, and of kind and amount of work upon each section, as per profiles and complete specifications thereof, to be found on exhibition for inspection at my office on and after the 25th inst.

151 H. F. WILSON, County Auditor.

**PROPOSALS.**

**FURNITURE.**

BROOKLYN, N. Y.  
Sealed proposals will be received at the office of the Superintendent of Repairs, Depot of the Board of Education, until Tuesday, November 12, 1878, at 4 o'clock p. m., for furniture for P. S. No. 13.  
Specifications can be seen at the office of the Superintendent of Repairs. Names of two responsible persons will be required for the faithful performance of the contract. The Board reserves the right to reject any irregular bids, or any which may not be for the interest of the Board.

150

W. M. THOMAS,  
Chairman Com. on School-Houses.

**GAS WORKS.**

RIO DE JANEIRO, BRAZIL.  
By order of the Brazilian Legation at Washington the undersigned makes public that the Imperial Government calls for proposals for the gas illumination of Rio de Janeiro, the present contract expiring in March next. The proposals, addressed to the Envoy Extraordinary and Minister Plenipotentiary of Brazil, must be sent until 3 o'clock in the afternoon of the 1st day of December next to the Brazilian Consulate General, 42 Broadway, New York, where copies of the general conditions and specifications referred to in the fourth clause can be obtained, as well as any information in relation to this matter.

SALVADOR DE MENDONCA,  
Brazilian Consul-General  
New York, September 9, 1878.

**MINISTRY OF AGRICULTURE, COMMERCE, AND PUBLIC WORKS—DIRECTORY OF PUBLIC WORKS.**

By order of His Excellency the Minister of this Department, it is advertised that this Directory receives proposals for the service of the illumination by gas of the Capital of the Empire, in the terms and conditions below specified:—

First—The proposals will be presented in a closed letter, until 3 o'clock in the afternoon of the 1st day of December of the present year, in this city, in the Directory of Public Works of the Ministry of Agriculture, and in London, Paris, and Washington, at the respective Brazilian Legations.

Second—The proposers must present, outside of the envelopes that shall contain the proposals, documents that will testify their fitness for the service that they propose to contract.

Third—No one can concur without having previously deposited in the National Treasury, in the delegacy of the same Treasury in London, or in either one of the Legations above indicated, a caution, in money or bonds, of the public debt or the Empire, \$50,000, or a corresponding amount in foreign money (£5,000, 125,000 francs, or \$25,000 in gold).

Fourth—The object of the concurrence will be only the price of furnishing a cubic meter of gas, and the term of the privilege, that in no case shall exceed 35 years. All the other clauses of the contract, excepting whatever may be transitory, will be without any discrepancy or modification.

Fifth—All the proposals will be opened in this city, in the public session of the Directory of Public Works, on the 2d day of January, 1879; and the Government will declare on them within fifteen days of that date.

Sixth—When the choice of the proposal is made, the contract will be considered concluded; being necessary for the preferred proposer to sign only the mentioned general conditions, which will be entered in a competent book of the Department of Agriculture. For greater facility, each proposer who resides out of Rio de Janeiro must constitute in this city, and with a due antecedence, somebody with a power of attorney to sign the general conditions in case the preference fall on him.

Seventh—The proposer, who after having received communication of the acceptance of his proposal, refuses to sign the referred conditions, will forfeit the caution in the benefit of the National Treasury.

Eighth—The Government reserves the right to annul the competition within the period fixed by Clause 5, to decide upon the proposals that were presented.

M. BUARQUE DE MACEDO,  
Chief of the Dir. ry.  
DIRECTORY OF PUBLIC WORKS, Rio de Janeiro, July 22, 1878.

**CHURCH.**

LOUISVILLE, KY.  
The plans and specifications for rebuilding Green Street colored Baptist church, between Floyd and Preston, will be ready for contractors to inspect, in order to make sealed proposals, after 1 o'clock October 22, 1878. 149

**TO ARCHITECTS AND OTHERS.**

TO BE LET—A large Room, with smaller attached, if wanted, quiet, light, and pleasant, up one flight only. Will be let low to responsible parties.

WALWORTH M'FG CO.,  
73 Kilby Street.

**TO ARCHITECTS AND BUILDERS.**

**MORTAR BLACK,**

Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar. For sale only by *Walpole Color and Chemical Works,*

HENRY D. DUPEE, Proprietor,  
79 KILBY STREET, BOSTON

**DOUBLE RATCHET REGULATORS, FOR TRANSOMS, FAN-LIGHTS, ETC.**

These R regulators are for hanging transoms and adjusting them at any desired angle for ventilation, superseding chains, pulleys, hinges, etc.; and are most useful substitutes for the old style of pivots, easily attached to the transom, and wherever used have stood the test.

PULLEMAN PALACE CAR CO., CENTRAL DIVISION,  
JERSEY CITY, January 20, 1878.

DOUBLE RATCHET M'FG CO., N. Y.

Gentlemen,—I have found the Double Ratchet Regulator a very useful article in my office for keeping the fan-lights in any desired position, having used the same for some three or four years, and are in as good working order as when put up. Very respectfully,  
C. D. FLAAG, Ass't Sup't.

For sale by hardware dealers. Send for circular.

Agents wanted everywhere.

DOUBLE RATCHET M'FG CO. (Limited),  
346 & 348 Broadway New York.

**BUHRER'S INFALLIBLE SEWER GAS TRAP.**



The annexed cut represents the construction of this Trap, the essential feature of which is the valve (D), made of pure rubber, treated so as to resist the action of sewer gas, etc. The upper end of this valve has a collar around it which is fastened between the flanges (E) of the case, and hangs loosely suspended from the top, thus securing the easy passage of waste and water through it, after which its sides come together and form a perfect and effective seal, through which it is utterly impossible for sewer gas to penetrate. The back of the case forms a seat for the valve, and the angle (E) makes the seal more secure.

S. BUHRER, Inventor and Manufacturer, Cleveland, Ohio.

WHOLESALE AGENTS.

W. & J. B. GIBSON, 17 & 19 East Ninth St., Cincinnati, O.  
L. WOLFF M'FG CO., 109 & 111 West Lake St., Chicago, Ill.  
HAMBLEN & MATHEWS, 82 & 84 North St., Boston, Mass.  
C. A. BLESSING, 44 North Fifth St., Philadelphia, Pa.  
THE J. L. MOTT IRON WORKS, 88 & 90 Beekman St., N. Y.

Please send for Circular

**WROUGHT IRON BEAMS & GIRDERS.**

THE UNION IRON MILLS, Pittsburgh, Pa. Manufacturers of Improved Wrought Iron Beams and Girders (patented).

The great fall which has taken place in the prices of iron, and especially in Beams used in the construction of FIRE-PROOF BUILDINGS, induces us to call the special attention of Engineers, Architects, and Builders to the undoubted advantages of now erecting fire-proof structures; and by reference to pages 52 and 54 of our Book of Sections—which will be sent on application to those contemplating the erection of fire-proof buildings—THE COST CAN BE ACCURATELY CALCULATED, the cost of insurance avoided, and the serious losses and interruption to business caused by fire. These and like considerations fully justify any additional first cost. It is believed that, were owners fully aware of the small difference which now exists between the use of Wood and Iron, in many cases the latter would be adopted. We shall be pleased to furnish estimates for all the Beams complete, for any specific structure, so that the difference in cost may at once be ascertained. Address  
CARNEGIE BROS. & CO., Pittsburgh, Pa.

**"Wood thoroughly creosoted is practically imperishable." CREOSOTED WOOD,**

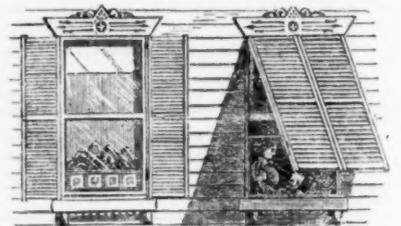
PREPARED AT THE  
Hayford Patent Creosote Wood Preserving Works,  
ELIZABETHPORT, N. J., and A St., So. BOSTON.

Offices: 10 Warren St., New York, and 4 Post Office Sq., Boston.

EDWARD R. ANDREWS, Proprietor.

ARCHITECTS, ENGINEERS, and BUILDERS are reminded that wood prepared by the Hayford process is rendered PRACTICALLY IMPERISHABLE, being protected from decay, marine worms, etc. It should be used for *Vies, Bridges, Piles, Piers, Wharves, Pavements, Stable and Cellar Floors,* and wherever wood is exposed to alternate dryness and moisture.

Pamphlets, fully explaining the creosoting process, for nished on application.



**OLD OR NEW BLINDS**

FITTED WITH  
DEARBORN'S

**Patent Adjustable Fixtures.**

Can be used in either way shown in cut, making an awning at pleasure. Price \$1.00 per window.

Includes a perfect fastening for the blinds, when either open or closed. Sold by the hardware trade generally, and by the manufacturers, BOSTON BLOWER CO., 2 Foster's Wharf, Boston.

**BOUND VOLUMES**

OF THE  
**AMERICAN ARCHITECT.**

We are prepared to fill orders for binding the *American Architect and Building News* in styles similar to the volume for 1876, at the following rates:—

Price of cover without binding.....\$1.00  
Cover and binding (for subscribers).....2.00  
Numbers of 1876 or 1877 without cover or binding 7.50  
Bound volumes of 1876 or 1877.....9.00

In sending volumes to be bound it should be stated whether the illustrations are to be bound with their respective numbers, or whether all illustrations are to be placed together at the end of the volume.

N. B.—Volumes bound in both styles are kept in stock.

The above will be sent, post paid. Subscribers sending their numbers to be bound will prepay postage or express charges.

HOUGHTON, OSGOOD & CO., PUBLISHERS,  
Winthrop Square, Boston.

# ETNA IRON CO.

Manufacturers of every description of Wrought and Cast

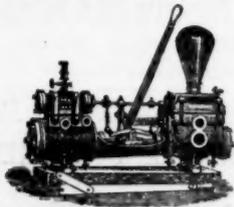
## ARCHITECTURAL IRON WORK FOR BUILDINGS.

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

### KNOWLES

Patent



Steam

### PUMP

## THE STANDARD.

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.

Noiseless Pumps for Water Elevators.

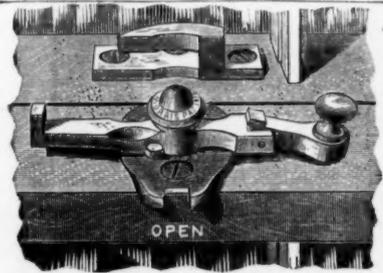
Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE KNOWLES STEAM PUMP WORKS, WARREN, MASS.

WAREHOUSES, (14 & 16 Federal St., } Boston.  
(113 & 115 Congress St., }  
(92 & 94 Liberty St., New York.

Send for Illustrated Catalogue.



THE

### MORRIS BURGLAR-PROOF SASH LOCK.

Patented July 2, 1878. The Safest! The Simplest! The Most Reliable! THE BEST!

N. B. — No springs to get out of order. Sold by all hardware jobbers. Manufactured by the MORRIS SASH LOCK MANUFACT'G CO., Office 168 Walnut St., Cincinnati, O.

Price List and Samples furnished to the trade on application. A liberal discount to the trade.

## Every Architect and Builder

Who is not already a subscriber to "The Plumber and Sanitary Engineer" should send for a sample copy, which will be mailed free on application.

In its pages will be found careful and comprehensive treatment of questions of drainage, water supply, heating, and lighting. The illustrated articles on plumbing, gas and steam fitting, together with the statements by practical men of their experience in actual work, will prove invaluable in writing specifications for this important and intricate work. The form of specifications for plumbing a first class house, in our February number, and of a country dwelling in our September issue, are alone worth several years' subscription to an architect.

### REGULAR CONTRIBUTORS.

Edw. S. Philbrick, C. E., of Boston; Col. Geo. E. Waring, Jr., C. E., of Newport; Robert Briggs, C. E., of Philadelphia; Prof. Henry Morton, Ph. D., Stevens Institute of Technology; T. O'Connor Sloane, Ph. D., of Brooklyn; and other eminent specialists.

Subscription price \$1.50 per year. Address THE PLUMBER AND SANITARY ENGINEER, P. O. Box 3087, New York.



Terra Cotta Chimney Tops, Akron Land Tile

D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

### NATIONAL

## FINE ART FOUNDRY,

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze.



## BIBB'S

Celebrated Original Baltimore Fire Place Heaters "Mantels and Registers. B. C. BIBB & SON, Baltimore, Md. Best workmanship. Lowest prices guaranteed. Send for circulars.



## NATIONAL TUBE WORKS CO.

PATENT

Indestructible Enamelled Wrought Iron

### LAP-WELDED PIPE,

From 1/2 inch to 15 inches diameter.

Now extensively used for

Water, Gas, Sewerage, and Mining.

It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making JOINTS, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at offices of

National Tube Works Co.,

8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

## BURDITT & WILLIAMS,

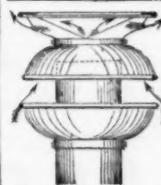
DEALERS IN

## FINE HARDWARE

of every material. A specially complete stock of PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



### The Draft of the Chimney increased.

Smoking Chimneys Prevented Particularly adapted to Chimneys in exposed positions.

Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR, 70 Grand St., Brooklyn, N. Y.

### CATALOGUE OF

## Architectural Books

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO., ARCHITECTURAL BOOK PUBLISHERS, 37 WARREN STREET, NEW YORK.

TO ARCHITECTS AND BUILDERS.

## MAHOGANY,

(all thicknesses) for Doors and Interior Finish.

## FIGURED WALNUTS,

(1-4 inch thick), for Doors, etc.

## VENEERS,

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

### BEEHIVE BRAND.

## FELT ROOFING.

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 MUK STREET, BOSTON.

## UNPARALLELED DISCOVERY.

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the Paint Preserver invented by ASAHIEL WHEELER, Boston. It will neither crack, blister, nor scale.



### BALTIMORE PRESSED TILES.

FOR HEARTHES, FLOORS, ETC.

Chimney Tops and Garden Vases,

DRAIN AND SEWER PIPE, FIRE-BRICK, LAND TILE,

ENGLISH ROMAN, AND PORTLAND CEMENT.

WALDO BROTHERS,

No. 94 WATER STREET, BOSTON.

# PEERLESS BRICKS.

## THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK

ARCHITECTURAL SHAPES (80 kinds).

ALSO

RED Pressed Fronts.

Extra fine in color and quality

BROWN, Colored throughout

More beautiful than Brown Stone DURABLE

CHOCOLATE,

Same as above; difference in color

FLESH COLOR,

A very popular color

BUFF, very fine.

Harmonizes beautifully with Brown or Black

GRAY, A pleasing shade.

BLACK, Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F. ADAMS, JOSEPH WOOD, JR., PRESIDENT. TREASURER



## DOLIVET, CUTTER, & CO.,

ARTISTIC

## Papier Maché Decorations,

106 West 28th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING Venetian Blinds.**

*Wilson's Patent.*  
For first-class Dwellings and Public Buildings.

These blinds can be fitted either inside or outside the sash, and are operated with ease without machinery or weights. They are made to coil above or below, as shown in cut. Can be furnished in any kind of wood. Unequaled for elegance, durability, and simplicity. Indorsed by many of the leading architects in the country, and in use in some of the handsomest buildings.

We also manufacture  
**WILSON'S PATENT Rolling Steel Shutters**

These blinds are operated on same principle as above (being self-coiling). They are used for closing store-fronts and all windows and doorways that are required to be perfectly fire and burglar proof. Also, Rolling Wood Blinds for Store-Fronts, Book-Shelves, School Partitions, and other purposes.

A list of public and private buildings fitted with our Blinds sent on application. Architects and owners are invited to send for working models, catalogues, and price-lists.

**WILSON & JAMES,**  
68 Beekman St., New York.  
Two Prize Medals at Philadelphia.

**VALUABLE ART PUBLICATIONS.**

**HUNT'S** (WILLIAM M.) Talks on Art. 8vo. Paper, \$1.00.  
**CLEMENT'S** (CLARA ERSKINE) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a Complete Index. Crown 8vo. Cloth, red edges, \$3.25.  
Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.  
**HOUGHTON, OSGOOD & COMPANY,** Boston.

**IMPROVED PRISON LOCKS.**

All Architects should have our 36 page Illustrated Catalogue of Prison Locks.

ADDRESS

**YALE LOCK MFG. CO.,** STAMFORD, CONN.  
New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,



94 BEEKMAN STREET, NEW YORK.  
**JENNINGS' NEW CLOSET,** WITH New Valve  
With non-corrosive Valve Seating and Solid Plunger.

**STEWART'S HARD WOOD SLATE, MARBLE AND MANTELS.**  
MIRRORS, ART-TILES, MANTELS, HEARTH'S & C.  
Masonic Temple 23<sup>d</sup> St & 6<sup>th</sup> Ave N.Y.

**RUBY & PEARL**  
Surface-Burning Self-Feeding  
**FURNACES.**

**CLINTON** Wrought Iron, with Brick Lined Fire-Pot.  
Reversible Fine Furnace.  
**CRYSTAL** Wrought Iron, with Cast Iron Fire-Pot.  
Surface Burning Furnace.

MANUFACTURED BY  
**FULLER, WARREN & CO.,**  
Troy, New York, Cleveland, Chicago.

**BUY THE LESTER SAW.**  
MILLERS FALLS CO.  
74 Chambers Street, New York.

**C. BUTCHER,**  
107 Devonshire St. BOSTON.

Send for Illustrated Catalogue.

**PATENT MARQUETRY FLOORING.**

Specimens at Lawrence, Wilde & Co.'s, 42 Cornhill, Boston.

**GAS FIXTURES** OF EVERY DESCRIPTION.  
SPECIAL RATES TO BUILDERS.  
R. HOLLINGS & CO 57 Washington St. BOSTON.

**Brandeis' Seamless Paragon Trap**  
Safest, Best, Cheapest, and Non-siphoning.  
Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDEIS & WICKERY** 46 Fulton Street, Brooklyn N. Y.



Send for Circular.

**PRIZE MEDALLISTS.**

1862; 1865; 1867; 1872; 1873; AND ONLY AWARD AND MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**

ORIGINAL INVENTORS AND SOLE PATENTEES OF

**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters

OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Tiford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.

OFFICE AND MANUFACTORY.

162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**

76 READE STREET, NEW YORK,

WORKS, DARLINGTON, N. J.

*Lock and Hardware Manufacturers,*

DESIGNERS, FOUNDERS, AND WORKERS

**BRONZE AND BRASS.**

Architects' Designs faithfully executed.

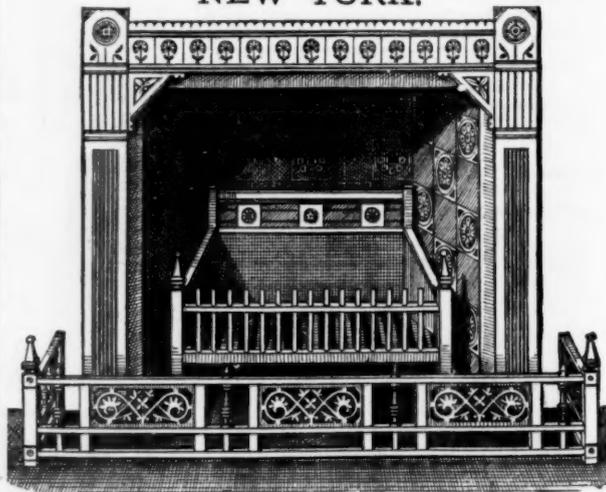
Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side,)

NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile.

HAVE NO OTHER WAREHOUSES.

**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer Gas that has yet been invented.

**A POSITIVE SEAL**

Against sewer-gas, absorbed gases, and back water. Seal is not broken by siphonage or evaporation. Self-scouring, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers.

**B. P. BOWER & CO.,**  
104 & 106 St. Clair St., Cleveland, O

**THE EUREKA VENTILATION CO.**

OFFICE AND MANUFACTORY,  
74 CHARLESTOWN STREET,  
BOSTON, MASS.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

Theatrical Fresco only. Prices moderate. Refer to first-class Scenery and Supplies delivered at any point, however distant. Correspondence solicited.  
LAFAYETTE W. SEAVEY,  
Established 1865. NO. 8 LAFAYETTE PLACE, NEW YORK

**SAYLOR'S PORTLAND CEMENT.**

Approved, recommended, and used by Architects, Engineers, and Builders of the highest authority. New York and Brooklyn Bridge, Department of Docks, and Croton Aqueduct, New York; new Capitol at Albany; U. S. Government Works (forts, light-house foundations, canal locks, etc.); floors for breweries, sugar-houses, ice-houses, cellars, and stables, and for heavy foundations, etc. For sale by all dealers in masons' materials.  
**JOHNSON & WILSON, Gen'l Agents,** 93 Liberty St., New York.

# THE AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 151.]

SATURDAY, NOVEMBER 16, 1878.

[PRICE 15 CENTS

### BUILDERS' SUPPLIES.

**BARTLETT, ROBBINS & CO.**

ARCHITECTURAL IRON WORK AND GAS MACHINES.

HEATING AND VENTILATING OF PUBLIC AND PRIVATE BUILDINGS A SPECIALTY.

24 LIGHT STREET, BALTIMORE.

**WALWORTH MANUFACTURING CO.,**  
60 KILBY ST., BOSTON.

PUBLIC BUILDINGS, PRIVATE RESIDENCES, GREENHOUSES, ETC.,

Warmed and ventilated by STEAM OR HOT WATER.

Correspondence solicited. Plans and estimates furnished on application.

"HOTCHKISS" TOWER CLOCKS,

MANUFACTURED BY

85TH THOMAS CLOCK CO., THOMASTON, CONN.

Prices \$100 to \$6,000.

WARRANTED ACCURATE, STRONG, DURABLE.

OFFICE, 581 BROADWAY, NEW YORK.

Send for Illustrated Catalogue.

"MINTON'S ART AND ENAMELLED

BRICK AND TILE CO.'s

ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS, ETC.

For Churches, Banks, Halls, Vestibules, and Hearths; Outside Decorations, Flower Boxes, Etc.

THOS. ASPINWALL & SON,

604 BROADWAY, NEW YORK.

The only representatives in the United States for the above firms.

ASPHALT (FELT) ROOFING.

WARREN'S NEW PATENT

FELT AND GRAVEL ROOFING,

Substitutes NATIVE ASPHALT for Coal-Tar materials for these roofs.

The very best and most durable material for flat roofs.

Also, Native Asphalt and Asphaltic Cement for Concrete

Walks and Pavements.

Roofers and pavers supplied with the above, and with Warren's original Coal Tar Roofing and Paving Materials.

Send for circulars and samples.

WARREN CHEMICAL AND MANUFACTURING CO.,

28 MAIDEN LANE, NEW YORK. 137 STATE STREET, BOSTON.

TILES FROM ALL PARTS OF THE

WORLD, FOR

BANKS, PUBLIC BUILDINGS, and PRIVATE HOUSES.

References given to Tile Work throughout the United States and British Provinces

AGENT FOR THE AMERICAN ROOFING TILE

Contracts Solicited

O. A. WELLINGTON, HOUSEHOLD ART ROOMS,

No. 171 TREMONT STREET, BOSTON.

HUGH SISSON & SON,

Importers, Dealers, and Manufacturers of

MARBLE.

INTERIOR MARBLE WORK AND MONUMENTAL

WORK A SPECIALTY

Salesrooms, No. 140 W. Baltimore St.; Steam Marble

Works, North and Monument Streets,

BALTIMORE, MD.

ELECTRIC BELL, AND ANNUNCIATORS,

SPEAKING TUBES,

AND BURGLAR ALARMS,

For Public and Private Buildings.

THE BEST IN USE.

R. W. FULLER,

25 Devonshire Street, Boston.

HAWTHORNE & TUCKER,

PLUMBERS,

16 PROVINCE STREET, BOSTON

Estimates for Plumbing made, and work done in any part of the United States or Provinces.

### BUILDERS' SUPPLIES.

THE FIRE-PROOF BUILDING COMPANY OF NEW YORK.

LEONARD F. BECKWITH, Pres't. E. GILLET, Vice-Pres't.

Hollow Blocks of any pattern, uniting strength and resistance to fire and water. The Hydraulic Lime of Tell (France), one of the strongest cements known, is largely used in this manufacture. The blocks do not conduct heat, cold, or sound, and weigh 60 per cent less than brick. Fire-proof Partitions, Floor Arches between iron or wooden beams, and ceilings under iron or wooden beams, erected in following buildings:

Western Union Telegraph, Orient, and Queens' Ins. -  
Coal and Iron Exchange, Museum of Natural Hist.  
Equitable, Staats Zeitung, Hudson R. R. Fr. Depot.  
Windsor, & Westminster Hotels, N. Y. Hospital, Drexel,  
Syracuse Savings Bank, Cluny, & Young's Hotel, Bos'n,  
Columbia College, Tribune, West Point Military Hosp.  
Baltimore Safe Deposit Co. Peabody Inst., Baltimore,  
Peabody Museum, N. Haven, Westmoreland, & Elisee Flats,  
Sidewalks laid at Lenox Library, Tribune, etc.

Hollow Burnt Clay Bricks, for flat and curved arches, partitions, etc., and Skewbacks for brick arches.

Sole agents for the U. S. for HYDRAULIC LIME OF TELL, and LAFARGE PORTLAND CEMENT.

Sole agents for the U. S. for METTLACH ENCAUSTIC TILES, laid in Tribune, Staats Zeitung, Mineral Spa, Central Park, Belvidere Hotel, etc.

Sole agents for the Atlantic States for WIGHT'S FIRE-PROOF COLUMNS.

Our Fire-proof work is the only one approved by the

New York Board of Fire Underwriters and the Superintendent of Buildings, after severe public tests.

Office Room 54 COAL AND IRON EXCHANGE, 21 Courtlandt Street, New York. Represented in Boston by

BOOKMAN & Co., 5 Doane St.

AMERICAN ENCAUSTIC TILE,

Acknowledged by experts to be

THE BEST IN THE WORLD.

Manufactured by the

AMERICAN ENCAUSTIC TILING CO. (Limited.)

OFFICE, 325 AND 327 GREENWICH ST., NEW YORK

Designs and estimates for Public Buildings, Hall-Churches, Vestibules, and for External Decoration, furnished on application.

E. HOWARD & CO.

MANUFACTURERS OF CLOCKS AND WATCHES

CLOCKS FOR PUBLIC BUILDINGS

14 Tremont Street, Boston, and 692 Broadway, New York

MINTON'S TILES.

PLAIN AND ENCAUSTIC

FOR PUBLIC BUILDINGS AND DWELLINGS.

As laid by us in

THE CAPITOL, AT WASHINGTON,

and in numerous Churches, Banks, and Dwellings in every

part of the Country.

Glazed and Enamelled Tiles for Mantels, Hearths, Wainscoting, &c., and for Exterior Decoration.

MILLER & COATES,

279 PEARL STREET, NEW YORK.

THE NEW ENGLAND GRANITE WORKS

HARTFORD, CONN., and 1221 BROADWAY, N.Y.

Quarries at Westbury, B.I.

MONUMENTAL AND BUILDING WORK

of every description, all the varieties of

AMERICAN AND FOREIGN GRANITE.

UNEQUALLED FACILITIES OFFERED TO THE TRADE.

J. G. BATTERSON, Pres't. H. R. BATTERSON, Sec'y.

J. G. BATTERSON, DIRECTORS.

C. B. CANFIELD, H. A. BATTERSON

G. T. BATTERSON,

CARL CONRAD, Sculptor.

WHITTIER MACHINE CO.

Manufacturers of Steam and Hydraulic

ELEVATORS,

STEAM ENGINES, BOILERS, and MACHINERY.

No. 117 1/2 Tremont Street, Boston.

Office in the New England Mutual Life Insurance Co's

Building, Post Office Square,

and 120 Broadway, New York

CHARLES WHITTIER, Pres. A. C. WHITTIER, Treas.

OTIS BROTHERS & CO.

SAFETY STEAM AND HYDRAULIC

ELEVATORS.

A specialty for a quarter of a century.

BUILDERS OF THE HALE HYDRAULIC ELEVATOR.

No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

NICHOLL & MILLER,

OHIO BUILDING STONE.

GRIND AND SUTHER STONE,

From our FLORENCE and AMHERST QUARRIES.

Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS

111 Broadway, NEW YORK, and AMHERST, O.

MITCHELL, VANCE, & CO.,

Designers and Manufacturers of

GAS FIXTURES,

ORNAMENTAL METAL WORK, CLOCKS AND BROSERS

ARCHITECTS' ORDERS SOLICITED.

Special designs submitted on application.

WAREHOUSES, 236 AND 238 BROADWAY, NEW YORK.

MANUFACTORY, 24th and 25th Sts., and 10th AVENUE, N. Y.

FISHER & BIRD,

Workers in all kinds of Foreign and Domestic

MARBLES,

97 to 108 EAST HOUSTON ST., NEW YORK.

Established 1830.

Among our notable decorations are: The Illinois New

State House; Palace Hotel, San Francisco; Baldwin's Ho-

tel, San Francisco; Insurance Building, 10th and Chestnut

Streets, Philadelphia; Mutual Life Insurance Building

Boston; Orient Mutual Insurance Building, New York;

Union College, Schenectady; and numerous Churches,

Private Residences, etc., etc., throughout the country. We

solicit the opportunity to estimate upon all classes of work,

viz., Tiling, Wainscoting, Staircases, Mantels, etc. Ceme-

try work and marble work of every description.

WILSON & HUGHES STONE CO.

Are ready to estimate on contracts of any size for

furnishing their celebrated Amherst, Ohio,

BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS

OR CUT AND SET.

Also,

AMHERST AND INDEPENDENCE GRINDSTONES, and OHIO MINERAL AND STONE PAINTS

Fire-Proof Stove Cement and Stove Putty ground in Oil

OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

SPANISH FLOOR TILES. "NOLLA MO-

SAICS." Floor Tiles beautiful in color and design, for

Dwellings, Churches, and Public Buildings.

SPANISH WALL TILES. White, Glazed, Valencia,

Tiles for Walls and for decorative painting.

PRINTED FIGURED TILES of Spanish designs, for

Wainscoting, Mantels, Jardinieres, etc.

Floors of "Nolla Mosaics" can be seen at the "Rock-

ingham," corner of Broadway and 56th Street. Imported

and for sale by JOHN CHADWICK, Sole Ag't for U. S.

49 Broadway, N. Y.

C. E. PARKER, Agent, 14 Exchange Place, Boston.

TUFTS' ELEVATOR WORKS,

MANUFACTURERS OF "TUFTS' PATENT" COMBI-

NATION ROPE ELEVATOR.

To be OPERATED EITHER BY STEAM OR WATER.

The only safe and reliable machine made for Passenger use

in Public Buildings and Hotels, and for business purposes in

Warehouses, Stores, &c.

37 FOUNDRY STREET, SOUTH BOSTON.

Office, 243 Broadway, New York.

OTIS TUFTS, President. L. A. BIGLOW, Treas'r and Gen'l Manager.

STEAM WARMING APPARATUS.

HIGH AND LOW PRESSURE.

HOUSE WARMING A SPECIALTY.

Pamphlet with more than 1,000 references sent on app-

lication.

WYLLIS H. WARNER,

114 LEONARD STREET, NEW YORK,

and 23 West Railroad Street, Syracuse.

ELEVATORS.—COOKE & BEGGS.

No. 6 COURTLAND ST., NEW YORK.

Works at Paterson, N.J.

PATENT SAFETY STEAM ELEVATORS

for Public and Bank Buildings, Hotels, Private Dwell-

ings, etc.

SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP GUARANTEED.

Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "HEALTH" AND "TUBULAR"  
Manufactured by the  
**GOLD'S HEATER MANUFACTURING CO.**  
114 LEONARD ST., NEW YORK.  
Send for Pamphlet.

W. E. GOLD, Pres't WYLLIS H. WARREN, Treas'r

**MINTON'S ENCAUSTIC TILES.**

**SHARPLESS & WATTS,**  
1325 Market St., Philadelphia,  
ESTABLISHED 1850. AGENTS FOR

**Minton's Tiles and Tesselated Pavements.**  
Specialties in Glazed, Encaustic, Majolica, and Art Painted  
Tiles, for Furniture, Hearths, Fireplaces, etc. New and  
original designs continually received.

**J. H. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue, Mattapan (Ward 24), Boston.

**MENEELY & KIMBERLY,**

Bell Founders, Troy, N. Y.,  
Manufacture a superior quality of Belle. Special attention  
given to **CHURCH, SCHOOL, and COURT-  
HOUSE BELLS.** Illustrated Catalogue sent free.

**JOHN MACK,** Plain and Ornamental Plasterer,  
41 Cambridge Street, Boston.

**MANTELS AND GRATES.**

**RANKIN'S PATENT** makes the Cleanest, Cheap  
est, and Hottest Fire. Avoid infringements, and send for  
Circular to

**C. S. RANKIN & CO.,**  
**ARCHITECTURAL IRON WORKS,**  
Manufacturers of all kinds of Iron Work for  
**BUILDINGS, JAILS, ETC.**  
187 W. PEARL ST., CINCINNATI, O.

**BUILDING MARBLE.**  
Branch yard of the RUTLAND MARBLE CO., 108 Cam-  
bridge Street, Boston. JOHN D. ALLEN, Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Eu-  
rope and Continental Marble, furnished at low prices.

**PRESSED BRICK.**

**STOCK AND COMMON**

MANUFACTURED BY  
**FLETCHER & THOMAS,**  
Indianapolis, Ind.  
All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY  
**GILLIS & GEOGHEGAN,**  
Nos. 116 & 118 Wooster St., New York.  
See our work at the Cathedral, 50th St. and 5th Av.;  
Drexel Building, cor Wall and Broad; Bennett Building,  
Fulton and Nassau, etc.  
Architects and owners promptly furnished with speci-  
fications and estimates.

**ROBERT LOGAN,**  
Importer and Dealer in Foreign and Domestic  
**Granite Monuments, Columns, etc.**  
Also, GRANITE FOR BUILDING PURPOSES,  
And Encaustic and Marble Tiling.  
120 FULTON STREET . . . NEW YORK.

**ARCHITECTS.**

**P. B. WIGHT,**  
CONSULTING ARCHITECT,  
73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.  
Consultations on matters pertaining to Fire-Proof Con-  
struction, Foundations, Drainage, Sanitary Work, Ventila-  
tion, Machinery, Valuations, Interior Decorations, and  
Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**  
ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E.,** ARCHITECT  
AND SANITARY ENGINEER  
KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes  
of Public or Private Buildings, Monumental Designs, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,**  
ARCHITECT,  
Room 17, Life Insurance Building,  
ST. LOUIS, MO.  
Special attention to Churches, Schools, and other  
public buildings.

**WALTER ARCHITECT. PERRY**  
**DICKSON, Albany, N. Y. BUILDING.**

**SANITARY ENGINEERING.**  
**EDWARD S. PHILBRICK, C. E.,**  
12 West St., Boston, Mass.  
Offers advice and superintendence in  
CONSTRUCTION OF WORKS,  
AND PLUMBING, DRAINAGE, AND VENTILATION.  
And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
887 HARRISON AVENUE . . . BOSTON,  
**SHEET METAL CORNICES, HAYES'S PAT-  
ENT VENTILATING SKY-LIGHTS,  
WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.**

**EXCELSIOR  
ROOF PAINT.**

This paint has been thoroughly tested throughout the  
Eastern States, and has been found to be a perfect tin or  
metallic preserver. We warrant it neither to crack nor  
blister by **HEAT or COLD,** and to last

**IN ANY CLIMATE TEN YEARS.**

Those desiring to use this valuable preparation upon  
their buildings, can secure the same by addressing

**C. M. WHEELER, J. M. ROOT,**  
Toledo, Ohio.

**IRON STABLE FITTINGS.** BUBIER & CO.  
25 Exchange St. BOSTON.

**PATENTS.**

**F. A. LEHMANN,** Solicitor of Patents, Washington, D. C.  
NO PATENT NO PAY. Send for Circular.

**FIRE ON THE HEARTH  
STOVES & HEATERS.**

COMBINATION OF  
**FIRE-PLACE, CLOSE STOVE, AND FURNACE.**  
The attention of Architects and Builders is especially  
invited to our new

**FIRE-PLACE HEATERS,**  
Adapted for the use of any kind of fuel, and the only  
heater especially adapted for the use of **SOFT COAL**  
and **WOOD.** Send for description to  
**THE OPEN STOVE VENTILATING CO.,**  
115 FULTON ST., New York.

**DECORATORS.**

**W. J. MCPHERSON,**

(Established A.D. 1845.)

**MURAL PAINTER,  
DESIGNER,**

**Ecclesiastical Decorator,**

AND  
**ART STAINED GLASS MANUFACTURER,**

440 TREMONT STREET,

**BOSTON, MASS.**

Should you want Ornamental Glass, write for particulars to



**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the  
subscriber to produce Modern and Medieval styles of work  
equal to any European examples, for Churches, Pri-  
vate Residences, Halls, etc.

The value of the work is attained by a careful selection  
of colors in Cathedral and French Glass of his own impor-  
tation.  
Designs in accord with architects' plans furnished at  
short notice. Reference of work at office

**SAMUEL WEST, 115 Eliot St., Boston**

**FRANK HILL SMITH,**  
171 1/2 TREMONT STREET,  
BOSTON . . . . . MASS.

**COOK, REDDING & CO.**

149 CONGRESS ST., BOSTON,

**Ornamental, Stained, and Cut Glass,**

FOR  
**Churches, Public Buildings, and  
Private Residences.**

**DECORATORS.**

**JOHN LAFARGE,**  
**MURAL DECORATION,**  
51 W. Tenth St., New York and Newport, R. I.

**Society of Decorative Art,**  
34 East 19th Street,  
NEW YORK.

The Society is prepared to undertake every kind of  
**DECORATIVE NEEDLEWORK,**  
And special attention is paid to the RESTORATION of  
**ANTIQUÉ EMBROIDERY.**

Special terms are made and careful estimates given to  
**ARTISTS, ARCHITECTS, AND DECORATORS**  
Generally, who are assured that their designs will be care-  
fully reproduced, and their directions carefully followed.  
Orders are earnestly solicited.

**Fresco Decoration.**

**EMMART & QUARTLEY,**

Designers, Decorators, and Painters,  
32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made  
and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate  
work on hand or made to order. No. 1210 Ridge Avenue  
JOSEPH S. MILLER successor to Wilson & Miller, Philadel-  
phia, Pa. Send for Illustrated Price-List

**Donald MacDonald,**

**GLASS STAINER AND DECORATOR**

No. 6 Hayward Place,

**BOSTON**



**INLAID WOOD FLOORS.**  
**ORNAMENTAL WOOD BORDERS**  
Designs and Estimates free.  
**National Wood Manuf'g Co.,**  
950 Broadway, near 33d St., New York

**PHILIP A. BUTLER,**  
DECORATOR AND DESIGNER,  
No. 11 FENNERTON SQUARE,  
BOSTON.

**HENRY B. JONES & CO.**  
IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS,  
612 WASHINGTON STREET, BOSTON.

(Established 1845.)  
**L. HABERSTROH & SON,**  
FRESCO PAINTERS,  
AND INTERIOR DECORATORS,  
No. 12 SCHOOL STREET, BOSTON.

**Raphael and Michelangelo.**

A Critical and Biographical Essay. By  
**CHARLES C. PERKINS.** 8vo. Many illustra-  
tions, including several Heliotypes. \$5.00.

The long devotion of Mr Perkins to the study of art  
has borne noble fruit in this beautiful volume. The idea  
of combining in one work a series of interlinked sketches  
of the two great representative artists of the age of Julius  
II. and Leo X. was in every respect fortunate; for they  
respectively illustrate power and beauty, sportive and  
earnest labor, as no other contemporaries. . . . His style  
is that of a scholar and a man of taste—simple, lucid,  
graceful, and even throughout. It has much of the qual-  
ity of that of Hermann Grimm, in his two similar biogra-  
phies. The profuse illustrations—although some of them  
are rather coarsely printed—are a positive boon to the  
reader.—*New York Tribune.*

**HOUGHTON, OSGOOD & CO., Boston.**

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa. (Can.)	Philadelphia.	San Francisco	St. Louis.
1 BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2 Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50		3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00		3.00
3 CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25		1.50 @ 2.00
4 Cabinet Maker	2.50 @ 3.25		1.75 @ 2.25			1.50 @ 3.00	1.50 @ 1.75			
5 Finisher	2.00 @ 2.50		1.50 @ 2.00			1.50 @ 2.00	1.00 @ 1.50			
6 FOUNDRYMAN			1.25 @ 1.50			2.00 @ 2.75	2.00 @ 2.50			
7 Blacksmith	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 2.00			1.50 @ 2.00
8 Whitesmith			1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.75			
9 Galvanized Iron Worker	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00			2.25 @ 2.50
10 GAS FITTER	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00			2.00 @ 3.00
11 LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50		1.00 @ 2.00
12 PAINTER	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13 Glazier		2.00 @ 2.50	1.75 @ 2.00			1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50		
14 Grainer	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00		2.00 @ 3.00	1.75 @ 2.50			3.50
15 Paper-Header	.75 @ 2.50		per roll		1.50 pr. roll.	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00
16 PLASTERER	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	2.00	1.50 @ 2.00	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00		2.00 @ 2.75
17 Scaffolding Worker	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	1.50 @ 2.50		2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
18 PLUMBER	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50			2.50 @ 3.50
19 QUARRYMAN		3.00 @ 3.50	1.10 @ 1.25		1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20 Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21 Carver	3.00	3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75		3.00	3.50 @ 6.00	2.75 @ 3.25		2.00 @ 2.50
22 Pointers and Washers		2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75		1.50 @ 2.50	1.00 @ 1.25	2.25 @ 2.50		
23 Rubber	1.50 @ 2.00	1.75	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75		
24 Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50		2.50	2.00 @ 3.00	2.00 @ 2.50		2.25 @ 2.75
25 Stone-Setter	3.00	2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00		2.75	2.00 @ 2.50	1.50 @ 2.00		2.00 @ 2.50
26 ROOFER (Tin)	2.00 @ 2.35	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25		2.00 @ 2.25
27 Slater		2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00		2.00 @ 2.25	1.25 @ 2.00	1.75 @ 2.25		2.00
28 STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25			1.50 @ 2.50
29 STEAM FITTER		2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00



ARCHITECTS AND BUILDERS

WILL ADD MUCH TO THE BEAUTY OF THEIR BUILDINGS BY USING

GARDNER'S PERFORATED THREE-PLY VENEER SEATING, Which is Ornamental, Durable, and Cleanly.

We refer to the following new and elegant buildings fitted up with our goods: —  
 Morris Plains, N. J., Insane Asylum.  
 New York Hospital.  
 American Museum of Natural History, New York.  
 Institution for Feeble-minded Children, Lincoln, Ill.  
 Insane Asylum, Oshkosh, Wis.  
 Messrs. GARDNER & CO.:  
 Gents. — The Perforated Opera Chairs put in my Brooklyn Music Hall have proved a great success. They not only furnish the hall in a very attractive style, but for comfort and convenience they are far superior to any upholstered seat I have ever seen. We have the best audiences that Brooklyn can produce, and as yet I have heard nothing but the highest commendation of our seat.  
 Yours very truly,  
 O. G. WALBRIDGE.

GARDNER & COMPANY, Patentees and Manufacturers,

376 PEARL STREET, NEW YORK.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

GALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States.

Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO., 72 & 74 West Monroe St. Chicago, Ill.



AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT. MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS. Regular Sizes, 2, 3, 4, 5 & 6 Inch. SPECIAL SIZES MANUFACTURED TO ORDER. AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS. 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA. WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH.

PRINCIPAL AGENTS:  
 M. Halliday, New York City  
 Hicks & Badger, Boston, Mass.  
 James Berry, Buffalo, N. Y.  
 George W. Pitkin & Co., Chicago, Ill.  
 Watson & Martin, Albany, N. Y.  
 McLeod, Reardon & Co., Troy, N. Y.  
 W. H. Scott, Portland, Me.  
 Kittredge Corning Co., Salem, O.  
 I. W. Jordan, Worcester, Mass.  
 H. C. Carpenter & Co., Wilkesbarre, Penn.  
 W. Irwin, Pottsville, Pa.  
 Slosser & Co., Cincinnati, Ohio.

W. & J. SLOANE, IMPORTERS OF

FINE CARPETS AND RUGS

FROM

INDIA, PERSIA, RUSSIA, SMYRNA, and TURKEY.

649, 651, 655 BROADWAY, NEW YORK.

D. M. MEEKER & SON'S

Malleable Iron Hollow Munten Window Sash.

For Insane Hospitals, Fire Proof Buildings, &c.



The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

D. M. MEEKER & SON, Newark, N.J.

Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

THE COWLES HARDWARE CO.

UNIONVILLE, CONN., U. S. A.

MANUFACTURERS OF

(GEER'S)

Single & Double Acting SPRING BUTTS. The Latest and Best.

Investigate before you purchase. Read the following points of superiority: —

These Spring Butts differ in principle from all others: having a Spiral Spring for power, and Toggles for Levers in combination, and when applied to the leaves of the Butts, Exert their greatest Power when the door is closed, and are the only Butts in existence that will by actual test perform the labor claimed for them. They offer less resistance the wider the door is opened, until a point past the right angle is reached, where the power is reversed and the door held open. They will not allow the door to sag. Send for Price List.



NONESUCH Self-Locking AND Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.

Patented July 19th 1877

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the art-workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Mediæval Foliage.

**EXAMPLES OF ENGLISH MEDIÆVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

**Examples of Modern Architecture. EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. P'ANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist*, Boston.

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courant.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVIS. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIENARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11½ X 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOTHIC FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOLETTE-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

The works of the learned and distinguished French Architect, EUGENE VIOLETTE-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

## Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — *EUGENE BENSON, in The College Courant.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

**The New York Sketch-Book of Architecture.**

3 vols., 4to, \$6.50 each. We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

**The American Architect and Building News.**

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\*\* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

[Reported for the American Architect and Building News.]

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, CEMENT, and DOORS. Includes items like 'Pale Jersey', 'Rosendale', and 'American' with their respective prices.

Table listing prices for FIRE BRICK and DOORS. Includes items like 'Red Welsh' and 'American'.

Table listing prices for DOORS, including 'Raised Panels, two Sides' and 'Blinds—Outside'.

Table listing prices for LIME, LUMBER, and PAINTS AND OILS. Includes items like 'State, common, cargo rate' and 'Whiting'.

Table listing prices for PAINTS AND OILS, including 'Paris white, English' and 'Zinc white, Am. dry'.

Table listing prices for PAINTS AND OILS, including 'Zinc white, Am. in oil' and 'Lead, white, Am. in oil'.

Table listing prices for PAINTS AND OILS, including 'Ochre, French, dry' and 'Ven. red, Eng. (gold)'.

Table listing prices for STONE, including 'Amherst freestone, in rough' and 'Berlin freestone, in rough'.

Table listing prices for SLATE, including 'Purple roofing slate' and 'Red slate'.

Table listing prices for TIN PLATES, including 'C. charcoal, 10 x 14' and 'I. C. charcoal, 10 x 14'.

Table listing prices for ZINC, including 'Sheet (gold) foreign' and 'Lead'.

BOSTON.

Prices to Contractors and Builders.

Table listing prices for FIRE BRICK, BUILDING BRICKS, and BUILDING STONE.

Table listing prices for LUMBER, including 'Michigan pine—Nos. 1 and 2' and 'Saps'.

Table listing prices for PAINTS AND OILS, including 'Whiting' and 'Paris white, English'.

Table listing prices for PAINTS AND OILS, including 'Zinc white, Am. in oil' and 'Lead, white, Am. in oil'.

Table listing prices for PAINTS AND OILS, including 'Ochre, French, dry' and 'Ven. red, Eng. (gold)'.

Table listing prices for MORTISE LOCKS, DOOR KNOBS, and SASH FASTS.

Table listing prices for SCREWS, STORE DOOR HANDLES, and IRON.

Table listing prices for IRON, including 'Wrought Iron Beams' and 'Wrought Iron Plates'.

CHICAGO.

Prices to Contractors and Builders.

Table listing prices for BRICK, LIME, AND CEMENT, including 'Lime, in bulk' and 'Chicago building brick'.

Table listing prices for LUMBER (MICHIGAN PINE), including '1st and 2d clear, 1 to 2-in.' and '3d clear, 1 to 2-in.'.

Table listing prices for HARDWOOD LUMBER, including 'Whitewood, clear' and 'White oak, clear'.

Table listing prices for PAINTS AND OILS, including 'Whiting' and 'Paris white, English'.

Table listing prices for PAINTS AND OILS, including 'Zinc white, Am. in oil' and 'Lead, white, Am. in oil'.

Table listing prices for PAINTS AND OILS, including 'White Lead, strictly pure' and 'Zinc yellow, in oil'.

Table listing prices for PAINTS AND OILS, including 'Wrought Iron Plates' and 'Wrought Girder Rivets'.

Table listing prices for PAINTS AND OILS, including 'White Lead, strictly pure' and 'Zinc yellow, in oil'.

Table listing prices for WHOLESALE PRICES, including 'IRON—Duty: Bar 1 to 1/2' and 'Railroad 7/8'.

Table listing prices for WHOLESALE PRICES, including 'NAILS—Duty: Cut 1 1/2' and 'Wrought 1 1/2'.

Table listing prices for WHOLESALE PRICES, including 'LUMBER' and 'Mich. uppers, 45'.

Table listing prices for WHOLESALE PRICES, including 'PAINTS AND OILS' and 'White Lead in oil'.

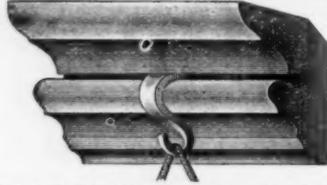
Table listing prices for WHOLESALE PRICES, including 'TIN—Duty: Pig Bars and Blocks free' and 'Tin Plates and Sheets'.

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms.

Inventors and manufacturers of Steam Heating Apparatus, Hot Air Furnaces, etc., should not fail to advertise in the paper which prints a weekly list of all the new buildings projected in the country.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres."

**BAKER'S**  
Combined Cornice and Picture Rod Moulding.



(Patented in the United States and Dominion of Canada, 1877.)  
For Haaging Pictures, etc.  
**FOR SALE BY F. P. BAKER.**  
The only Agent in the U. S. and Canada,  
84 BEVERLY STREET . . . BOSTON.

**The Automatic Fire Alarm Telegraph**  
IS OPERATED BY THE HEAT OF THE FIRE.

The apparatus is placed on the ceiling of every room, of-  
fice, and closet in the building, so that a fire can in no in-  
stance be more than fifteen or twenty feet from it.

It can be adapted to all temperatures.  
The alarm is almost instantaneous.  
It is given directly to the Fire and Protective companies  
and to the City Fire Alarm Office. It may also be given in  
the building protected. It may be given by hand.

It tells the Department the exact location of the fire be-  
fore the companies leave their stations, thus preventing the  
delay and loss caused by breaking into rooms where there  
is no fire.

A break in the wire instantly signals itself; but, by a com-  
bination of the metallic and earth circuits, does not prevent  
an alarm of fire, even while the wire is broken.

An incendiary cannot, therefore, prevent an alarm by  
cutting the line.

**The Automatic Fire Alarm Telegraph**  
Prevents the possibility of a large loss.

It saves the drenching a building with water.  
It saves the breaking up of business.  
It saves the loss of contracts and customers.  
It saves insurance. It saves a watchman.  
It saves the books, and the many other losses that insur-  
ance never covers.

The returns of the New York Patrol Committee show that  
the loss by fires originating in buildings equipped with the  
AUTOMATIC TELEGRAPH has been diminished over 76 per  
cent. by the use of this system.

Company's Office: 178 Devonshire St., Room 20,  
Where the apparatus can be seen.  
C. E. GUILD, Pres. P. T. JACKSON, Treas.

**ESTABLISHED 1836.**  
**JOHN FARQUHAR'S SONS,**  
**SLATE, METAL, AND COMPOSITION ROOFERS,**  
NOS. 20 AND 22 EAST STREET, BOSTON.  
Order Box, No. 83 Mechanics Exchange, No. 35 Hawley Street.

Agents for Warren's Patent Natural Asphalt Roofing. Special attention given to repairs of all kinds of  
Roofing.

**Inventors and Owners of the following Patents:** First. Patent Fastener for securing Slates or other  
covering to Iron Purlines where the roof is wholly of Iron. Second. A Roof composed of Wooden Rafters encased in  
Asbestos, Sheet Metal, or other fire-proof material, to which Iron Purlines are fastened, and the slates or other cover-  
ing secured by our Patent Fastener. The slates are then rendered underside with hair mortar or any other material.  
The object intended being a Light Fire proof Roof, avoiding all condensation and preventing leakage.

**EASTERN ROOFING SLATES**

FROM MONSON AND BROWNVILLE, MAINE.

**CLEMENT, HIGBEE & CO.**

GENERAL AGENTS,  
Piper's Wharf, 474 Atlantic Avenue,  
BOSTON, MASS.

These Maine Slates are the best and cheapest in the market They are also the strongest, smoothest, and most uni-  
form, and the only perfectly unfading slate in the world.

**WROUGHT  
IRON  
BEAMS & GIRDERS**

**THE UNION IRON MILLS, Pittsburgh, Pa., Man-  
ufacturers of Improved Wrought Iron Beams and  
Girders (patented).**

The great fall which has taken place in the prices of  
iron, and especially in Beams used in the construction of  
FIRE-PROOF BUILDINGS, induces us to call the special  
attention of Engineers, Architects, and Builders to the un-  
doubted advantages of now erecting fire-proof structures;  
and by reference to pages 52 and 54 of our Book of Sec-  
tions — which will be sent on application to those con-  
templating the erection of fire-proof buildings — THE COST  
CAN BE ACCURATELY CALCULATED, the cost of in-  
surance avoided, and the serious losses and interruption of  
business caused by fire. Those and like considerations  
fully justify any additional first cost. It is believed that,  
were owners fully aware of the small difference which  
now exists between the use of Wood and Iron, in many  
cases the latter would be adopted. We shall be pleased to  
furnish estimates for all the Beams complete, for any spec-  
ific structure, so that the difference in cost may at once  
be ascertained. Address  
CARNEGIE BROS. & CO., Pittsburgh, Pa.

**Bound Volumes of the American Architect.**

We are prepared to fill orders for binding the  
American Architect and Building News in styles  
similar to the volume for 1876, at the following  
rates: —

Price of cover without binding . . . . . \$1.00  
Cover and binding (for subscribers) . . . . . 2.00  
Numbers of 1876 or 1877 without cover or binding 7.50  
Bound volumes of 1876 or 1877 . . . . . 9.00

In sending volumes to be bound it should be  
stated whether the illustrations are to be bound  
with their respective numbers, or whether all il-  
lustrations are to be placed together at the end of  
the volume.

N. B. — Volumes bound in both styles are kept in  
stock.

The above will be sent, post paid. Subscribers  
sending their numbers to be bound will prepay  
postage or express charges.

HOUGHTON, OSGOOD & CO., PUBLISHERS,  
Winthrop Square, Boston.

**THE AMERICAN ARCHITECT AND BUILDING NEWS SENT FREE!**

We send Free the Nos. for November and December, 1878, to new subscribers paying before December 15, 1878.

**BUILDERS AND MECHANICS**

In search of a trade paper will do well to weigh the fact that in the first six months of this year we published fine illustrations of

- |                        |                     |                     |                     |                   |
|------------------------|---------------------|---------------------|---------------------|-------------------|
| 24 Country Houses,     | 13 Churches,        | 10 Staircases,      | 4 Details,          | 2 Bridges,        |
| 9 City Houses,         | 5 Cathedrals,       | 9 Wall Decorations, | 2 Tombs,            | 1 Police Station, |
| 4 Hospital Buildings,  | 5 Church Interiors, | 7 Bay-Windows,      | 2 Fountains,        | 1 Engine House,   |
| 4 School Buildings,    | 2 Hotels,           | 4 Furniture,        | 1 Shop Arcade,      | 1 Market House,   |
| 3 Library Buildings,   | 1 Court House,      | 1 City Hall,        | 1 Cemetery Gateway, | 1 Stable,         |
| 2 Insurance Buildings, | 1 Opera House,      | 1 State Prison,     | 1 Castle,           | 1 Studio.         |
| 4 Stores,              | 1 Music Hall,       |                     |                     |                   |

Besides perspective diagrams, foreign sketches, and numerous cuts illustrating building appliances. Terms \$6.00 per year. Send for specimen copy.  
Remittances to be made by check, draft, or money-order to the Publishers, HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON.

**THE STANDARD AND ONLY RELIABLE PORTABLE ROOFING.**



With white Fire Proof Coating, for steep and flat roofs in all climates. In rolls ready for use.  
Easily applied by any one. No heat required. It weighs only 80 pounds per 100 square feet, and  
costs only half as much as tin.

**H. W. JOHNS M'F'G CO., 87 Maiden Lane, New York,**

Manufacturers of Asbestos Liquid Paints, Coatings, Cements, Boiler Coverings, etc.  
Send for Samples, Descriptive Price Lists, etc.

**THE AKRON PIPE**

Is superior both in quality and finish to any manufactured in this country, and is recommended by architects, engineers, etc., familiar with its merits.

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY,  
107 N. STATE STREET, BOSTON.

**FIRE BRICK,**  
Enamelled Brick,  
CHIMNEY TOPS,  
Flag Stones,  
Terra Cotta Goods,  
A full line of  
Fire Building  
Materials.

**TO ARCHITECTS.**

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the  
**SCAGLIOLA AND MAREZZO MARBLE,**  
Which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall, and Altar Work.  
**JAS. T. ALLEN & CO.,**  
25 North Market Street, Philadelphia

**MAKE** GAS GENERATORS,  
FOR LIGHTING  
Dwelling-Houses, Pub-  
lic Buildings, Churches,  
Factories,  
etc., etc.

Send for CIRCULAR **YOUR OWN**

**WALWORTH MANUF. CO.**  
No. 6 Kilby Street,  
BOSTON, MASS. **GAS**

**CRANE, BREED & COMPANY**  
CINCINNATI, O.  
**SAFETY BOILERS**  
FOR  
**SAFETY HEATING**  
STEAM AND HOT WATER.  
MOST ECONOMICAL & RELIABLE METHOD WITH  
AUTOMATIC APPLIANCES, RA DIATORS, PIPE  
SOLDS, REGISTERS, FITTINGS, STEAM-PUMPS

**NON-POISONOUS**

**SILICATE PAINT** (Does not discolor, chalk, or crack off. It is superior to lead.) **PETRIFYING LIQUID** (The only cure for damp walls of churches, dwellings, and public buildings, is the)

See article on "Dwellings of the Poor," AM. ARCHITECT, Sept. 21, 1878.

Send for Price List and Testimonials.

**HOWARD FLEMING, Sole Agent in the United States,**  
10 PINE STREET, NEW YORK.

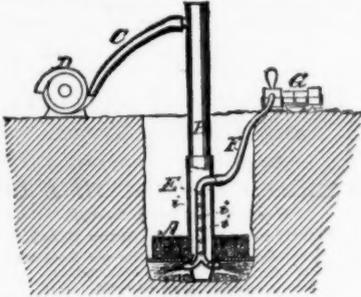
BUILDING INTELLIGENCE.

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

EXCAVATOR.—Charles Pontes, Omaha, Neb. This invention provides for the easy sinking of a pile in sandy or gravelly soil. A disk A, of wood, stone, or metal, having a hole through its centre large enough to allow of the passage of a pile, is placed on the ground at the desired spot. In this hole, and resting its lower end upon the ground, is placed a tube, which can be lengthened as needed by additional lengths of pipe. This tube is closed at the top, and is connected with a suction-engine D, by the flexible pipe C. The lowest length of the tube is of a larger diameter than the others, and contains within itself a perforated tube E,

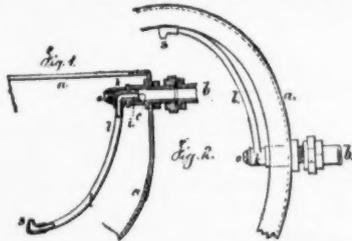


which is connected, by the pipe F, with the force pump G. The lower end of this perforated pipe finishes in two branches which open in opposite directions. In operation, when the tube B is in place the suction-pump is set in motion, and at once creates a partial vacuum, the effect of which is to tend to drive the tube into the ground, and at the same time to allow the soil immediately below the tube to be forced up into it by atmospheric pressure. Simultaneously with the action of the suction-pump the force pump is put in motion, which forces water below the disk, and so disintegrates the soil that it is easily sucked up into the tube B, where it is still further dissolved by the water passing through the perforations in E, so that it passes freely through the pipe C and is discharged at D.

PENCIL-CLASP.—Arthur Christie, Buffalo, N. Y. This device combines a point-protector and a hook for hanging the pencil to the button-hole or elsewhere.

WEATHER-STRIP.—Edward Conklin, Channahon, Ill. FIRE-ESCAPES.—Friedrich B. Fuchs, New York, N. Y. A flexible tube, made of canvas or other material, is provided with rings at its ends, the upper ring having a clamp secured thereto for attachment to a building, and the lower ring having a cushion or mattress to receive the persons or goods. Intermediate rings are attached to the tube to keep it properly expanded, and a cord attached to the lower ring passes up over the upper ring, and by it the ends can be drawn together when the tube is to be folded up for storage or transportation.

DRAG-SAW.—William W. Giles, St. Louis, Mo. BIDET WATER-CLOSET.—John Reid, Brooklyn, N. Y. A bidet water-closet is one which directs a jet of water against the person. In the present case this is effected through a



tube I, which is attached to the spreader or deflector c, so that water may pass through it at the time the bowl is flushed. As the tube I is fitted to the sleeve k, it can be revolved out of the way as shown in the plan Fig. 2. In this position the water does not pass through it.

CUTTERS FOR PIPE-CUTTERS OR WRENCHES.—Charles Ferguson, New York, N. Y. PADLOCK.—Morris Jacobs, Fort Clark, Tex. SASH-CORD FASTENER.—Samuel J. Joyce, New York, N. Y.

REFLECTOR.—Simon P. Kase, Philadelphia, Penn. SUCTION-PIPE FOR PUMPS.—Eric O. Lermio, Gold Hill, Nev.

WELL-TUBING.—Noah K. Ludlow, Mobile, Ala. BR-BRACE.—Edward C. Merriman, Monkton, Md. MEANS FOR HEATING AND VENTILATING BUILDINGS.—William E. Pratt, Washington, D. C.

ART OF PRESERVING WOOD.—Archibald E. Tripler, New York, N. Y. MANUFACTURE OF AUGERS.—William Tucker, Brookfield, Mass.

COMBINED KNIFE AND MEASURING-RULE.—G. Waldman and D. Frank, Allentown, Penn. PLANING-MACHINE.—J. Goodrich and H. J. Colburn, Fitchburg, Mass.

COMPLETED BUILDINGS.

CHESTER TOWN, Md.—The Church of the Sacred Heart (R. C.), a Gothic structure recently built, will be ready for dedication about December 1.

HOBOKEN, N. J.—The dedication of the new church, Our Lady of Grace, Fourth Avenue and Willow Street, Hoboken, took place last Sunday.

NEW YORK, N. Y.—The new dome and tower of the City Lunatic Asylum have been finished according to Mr. Dunn's drawings.

WILMINGTON, DEL.—The new Mt. Salem M. E. church was dedicated November 3.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—H. A. Keizer, three-story building, 70 Greenmount Ave.—Daniel Donnelly, two-story dwell., Keyser St.—Jos. A. Butt, two-story stable, cor. Oliver and Washington sta.—Col. Crichton, two-story warehouse, Holliday St.—Wm. C. Crane, three-story dwell., Fayette St.—Wm. Miles, two-story dwell., 41 St. Mary St.—J. Feast, 4 two-story buildings, Monumental Alley, in rear of 285 Lexington St.—Josephine E. Thomas, three-story store, 709 Baltimore St.—All of brick.

Boston.

BUILDING PERMITS.—The following permits have been granted since our last issue:—

WOODEN BUILDINGS.

Table with 4 columns: Mechanic, Stories, Class, Roof. Rows include Thos. Burke, Jas. Pope, M. H. Fossett & Co., H. J. Blaisdell, M. N. Hubbard.

REPAIRS.—Repairs and alterations active.

NEW SCHOOL-HOUSES.—Work progresses upon the new Latin and English High School Building on Warren Avenue. The brickwork is nearly on a level with the plates. The pavilion roofs will be slated by January 1. All the large contracts have been let at a total cost of \$241,000. The City Architect is now preparing drawings and specifications for the interior finish.—The Polk Street school-house in Charlestown will be roofed in and slated in another week.

MERCHANT'S BANK BUILDING.—This historic building, having undergone a thorough alteration and enlargement in 1856, is now being again remodelled, in consequence of the recent fire. This will consist in rendering the walls and floors as nearly fire-proof as possible, continuing the granite attic along the Devonshire and Exchange street sides, and giving room for additional offices by the construction of a wrought-iron roof over the whole building. Mr. Gridley J. F. Bryant, the son of the master mason of the original building (erected in 1824) is the architect.

Brooklyn.

CHURCH.—A new edifice is building for the congregation of the Reformed Episcopal Church of the Atonement, at the corner of Marcy Avenue and Keap Street, by Mr. W. H. Gaylor, architect. It will be of brick, with Nova Scotia stone finish, on a lot 40 by 90 feet. It is expected the basement will be ready for occupancy by Christmas. Mr. Givens is the builder, and Mr. R. B. Ferguson is doing the carpenter work.

BUILDING PERMITS.—Brevoort Place, 3 three-story brown stone dwells., 167 1/2 x 45; owner and builder, John S. Frost, 1097 Pacific St.; architect, Robert Dixon.—McDonough St., 2 two-story frame dwells., 17 x 27; owner, Albert Woodruff, 130 State St.; architect, Walter Laidlaw; builder, C. M. Trimble.—Second St., 1 three-story brick store and dwell., 20 x 45; owner, John D. Froehlich; architect, John Platte; builder, F. J. Seelenbach.—Twelfth St., 1 two-story brick stable, 25 x 20; owner, G. Fricke, 519 Third Ave.; builder, John Straubler.—Twelfth St., 4 three-story brick dwells., 20 x 30; owner, U. Matthey; builder, Pat Hughes.—Gates Ave., 1 three-story brown stone dwell., 167 x 42; owner, Jas. A. Thompson, 310 Quincy St.—Lee Ave., cor. Hooper St., 2 one-story glass stores, 15 x 40; owner, G. F. Simpson, 146 Rutledge St.; builder, C. Concauon.—Marcy Ave., cor. Pulaski St., 7 two-story frame dwells., 17 1/2 x 40; owner, H. O. Pearce, 741 De Kalb Ave.; builder, Wm. Josiah.—Putnam Ave., 15 two-and-a-half-story brown stone dwells., 17 1/2 x 42; owner, T. W. Swimm, 389 Putnam Ave.; builder, D. Cunningham.

HOSPITAL.—The new St. John's Hospital and Chapel has been building for about eighteen months under the supervision of Nelson L. Derby, architect, New York. The entire roof is now nearly slated and tinned, and the dormer windows are in place. The building thus far has cost about \$43,000, and will probably be continued next spring. The material is Philadelphia brick, with Belleville, N. J., brown stone coigns, etc. It has three stories, each four or five feet in the clear, a ten-foot basement, a high attic, and cellar. The chapel floor is on the level of the second story, and has the height of this and the third story, opening into the wards in both, and is to have a gallery at the level of third story. It has a plain open-timbered roof of yellow pine. The floors are framed of yellow pine throughout, in general of 3 by 14-inch stuff. It is to be heated by a combination of direct and indirect radiation. It will have also an elevator of about 6 by 11 feet. The style is simple, and while somewhat eclectic in the treatment of the front of the chapel, partakes of the Renaissance.

Chicago.

BUILDING PERMITS.—W. L. Butterfield, 4 two-story dwells., Michigan St.; cost, \$16,000.—P. McNally, 2 two-story stone-front dwells., Van Buren St.; cost, \$3,000.—Anton Carlson, 8 two-story dwells., 388 to 402 Wisconsin St.; cost, \$24,000.—Martha M. Kempster, six-story stone-front apartment house, 160 x 165, corner of Wabash Ave. and Hubbard Court; cost, \$150,000. There will be seventy-two apartments in the house, each having from two to nine rooms. Each suite of rooms has a bath-room and closet. There will be a restaurant and laundry in the basement, and private dining-rooms throughout the house.—Ludwig Meyer, two-story stone-front dwell., Milwaukee Ave.; cost, \$5,500.—Chicago and Northwestern Railroad Company, barn, corner of Kinzie and Kingsbury sts.; cost, \$1,500.—J. M. Garvey, 3 three-story stone-front stores and dwells., 733 to 737 South Halsted St.; cost, \$2,500 each.—William Galbraith, five-story store, 42 x 82, Franklin St.; cost, \$15,000.—E. Harri, two-story dwell., 248 West Congress St.; cost, \$2,000.

Cincinnati.

BUILDING PERMITS.—The Board of Public Works have issued the following building permits since our last report:—A. Metz, two-story brick; cost, \$3,500.—Street Railroad Co., frame stable; cost, \$1,500.—Woods & Conahan, two-story brick; cost, \$5,000.—John Reinlein, two-story brick; cost, \$1,200.—J. W. & T. G. Robinson, two-story brick; cost, \$3,000.—Chas. Witte & Bro., two-story brick; cost, \$3,700.—Herman Losche, two-story brick; cost, \$1,600.—Jas. Loftus, two-story brick; cost, \$1,200.—Phillip Edler, two-story brick; cost, \$1,200.—C. F. Stegemeyer, two-story brick; cost, \$2,000.—Twenty-one permits for repairs, total

cost, \$7,200.—Total permits, \$1.—Total cost, \$27,500.—Total permits to date, 744.—Total cost to date, \$1,248,813. FACTORY.—Mr. Andrew Erkenbrecher intends to build a new starch factory, and has engaged Mr. Jas. W. McLaughlin, who has the preparation of the necessary drawings now in hand. The building will be 305 feet long, 81 feet wide, with the front building 113 feet wide, forming a T-shape. The central building is one high story above basement, and the ends two stories above basement. The cost of the building will be about \$30,000.

PHOTOGRAPH GALLERY.—Mr. Jas. W. McLaughlin, architect, is preparing plans for a photograph gallery to be built corner of Seventh Street and Central Avenue, for Mr. W. S. Porter. The lot is 33 by 73 feet. There will be three small shops on the ground floor for renting, besides the photographer's reception-room. On the second floor will be six rooms for living purposes, and the operating rooms will occupy the third floor. The façades, designed in the prevailing Queen Anne style, will be of brick.

HOUSES.—Mr. James K. Wilson, architect, has just completed plans for a double frame house of six rooms each, to be built on Walnut Hills for James Daniels, Esq., at a cost of about \$5,000.

Rumor has it that the Wiggins Estate will commence, immediately after the first of January next, to carry out the long contemplated improvements at the southeast corner Fifth and Vine streets. The building will be 90 feet on Fifth Street and 75 feet on Vine Street, and six stories high. The designing of this important building has been intrusted to the hands of Mr. James W. McLaughlin, but the drawings are not sufficiently forward as yet to give a description of the building. The site is one of the most important corners in Cincinnati.

Louisville.

BUILDING PERMITS.—F. A. Steffner, one-story brick store, Market St.; cost, \$1,050.—Worth, Lang & Co., one-story brick lannery, Brent St.; cost, \$500.—John Whitworth, one-story brick dwell., Pirtle St.; cost, \$1,500.—L. Breed & Fosdick, to alter four-story brick storehouse, Main St.; cost, \$4,500.

New York.

BUILDING PERMITS.—Cor. Canal and Church sts., first-class store, 25 x 47; cost, \$12,000; Lorillard Spencer, owner; John B. Snook, architect.—One Hundred and Twelfth St. and Fourth Ave., 6 second-class dwells., 17 x 47; cost, \$4,000 each; T. E. Dwyer, owner and builder; John Rogers, builder.—129 West Twenty-seventh St., tenement, 25 x 37; cost, \$5,500; S. H. Barvey, owner; Jas. R. Hay, architects; J. C. Nutler, builder.—Albany Road, near McCowles St., 2 frame dwells., 19 x 26; cost, \$600 each; J. H. Godwin, owner; S. L. Berrian, builder.—One Hundred and Fourteenth St., near Fourth Ave., 8 first-class dwells., 16 x 45; cost, \$7,500 each; A. Snyth, owner; J. C. Burns, architect.—Seventieth St., near Third Ave., 2 first-class dwells., 12 x 55; cost, \$7,500; B. Hennessy, owner; J. E. Ware, architect.—Jane St., near West, second-class dwell., 32 x 70; cost, \$4,500; J. C. McLean, owner; C. E. Hadden, architect; Wm. C. Howard, builder.—Third Ave., near Eighty-first St., second-class store and dwell., 16 x 46; cost, \$3,000; Chas. Harbeck, owner; W. E. Waring, architect.—32 Thompson St., first-class dwell., 18 x 60 feet; cost, \$3,000; Chas. Harbeck, owner; A. B. Ogden, architect; John Davidson, builder.—Eighty-fourth St., near Avenue A, 4 first-class dwells., 18 x 45; cost, \$5,500; Johnson Bros., Agents, owners; A. B. Ogden, architect.—One Hundred and Fifth St., near Third Ave., 2 second-class dwells., 16 x 48; two-story and basement brown stone fronts; cost, \$4,500; T. Johnson, owner; A. B. Ogden, architect.—Fifty-eighth St., near Tenth Ave., 2 stores and stable, 11 x 24; Chas. Bruning, owner; G. B. Pelham, architect; cost, \$500 each.—Seventy-fourth St., near Lexington Ave., 4 first-class dwells., 17 x 48; cost, \$7,000; Jas. R. Smith, owner; J. B. Snook, architect.—231 East Third St., tenement, 20 x 60; cost, \$7,000; Jacob Vetter, owner and builder; A. H. Blankenstein, architect.—Cor. Third Ave. and Ninety-fifth St., 2 third-class stores, 20 x 30; cost, \$2,500; T. C. Warner, owner; Duffy Bros., builders.—351 and 353 East Twenty-ninth St., workshop, 70 x 100; 5 stories; cost, \$11,000; R. W. Myers, owner; John McIntyre, architect; Conoly & Son, builders.—609 East Eleventh St., tenement, 25 x 72, five stories; cost, \$9,000; Schwartzchild & Sulzberger, owners; John McIntyre, architect; John F. Morse, builder.—One Hundred and Twenty-fourth St., near Eighth Ave., first-class dwell., 25 x 46; cost, \$7,000; Harry Green, owner; P. McKegey, builder.—Twenty-sixth St., near First Ave., hospital pavilion at Bellevue Hospital, 30 x 126, one-story; cost, \$10,500; Jas. M. Dunne, architect; M. B. O'Meara, builder.—One Hundred and Fifty-sixth St., near Courtlandt Ave., frame dwell., 22 x 35; cost, \$1,250; F. C. Burgiere, owner; J. C. Sticker, builder.—220 West Twenty-ninth St., workshop, 70 x 27; 3 stories; cost, \$3,000; Bartlett Smith, owner; Jas. Thompson, builder.—One Hundred and Twenty-third St., near Sixth Ave., 3 first-class dwells., 16 x 50; each; brown stone fronts; cost, \$7,000; A. M. Reynolds, owner; J. E. Darragh, architect; Thos. Darragh, builder.—Cor. Fifty-seventh St. and Ninth Ave., 2 tenements, 25 x 25 and 35 x 65; five stories high; cost, \$8,000 and \$20,000; brown stone fronts; John Hober, owner; Theo. G. Smith, architect; John Ruck, builder.—326 East Fifty-seventh St., flat building, 18 x 48; cost, \$7,000; estate of Jas. Mullins, owners; James Barrett, architect.

Philadelphia.

BUILDING PERMITS.—Adam Gilbert, two-story dwell., 16 x 42, Tioga St.—Jas. B. Doyle, two-story ice-house, 70 x 82, cor. Thirty-second and Master sts.—W. Dickson & Bro., three-story store and dwell., 12 x 51, Frankford Road.—Shegog & Quigley, two-story back building, 23 x 17, No. 134 North Front St.—W. L. Atkinson, two-story dye-house, 91 x 107, cor. Emerald and Taylor sts.—John McBride, two-story dwell., 14 x 28, Amber St.—Emil Wahl, three-story factory, 16 x 28, Seventh St.—James B. Doyle, int. rebuilding brewery, 70 x 100, Twenty-ninth and Brown sts.—Benj. Ketcham, 2 two-story dwell., 10 x 25, Eighth St.—Benj. Ketcham, three-story store, 18 x 50, Eighth St.—J. S. Culbertson, two-story factory, 18 x 45, No. 719 North Second St.—Chas. O'Neill, Jr., three-story store and dwell., 20 x 65, cor. Tenth and Tasker sts.—Gamon, Harris & Co., four-story factory, 17 x 137, cor. Seventeenth and Catharine sts.—J. C. D. Smith, 6 two-story dwells., 16 x 20, Raneys Ave.—T. J. Martin, one-story boiler-house, 28 x 28, Washington Ave.—T. J. Martin, four-story factory, 41 x 95, Washington Ave.—Alfred Baker, two-story store, 23 x 145, No. 708 Chestnut St.—Dan'l Wieman, two-story brewery, 18 x 34, No. 805 South Eleventh St.—O. P. F. Fisher, three-story dwell., 20 x 46, cor. Marten and Fleming sts., Roxborough.—J. D. Caldwell, two-story coach-house, 32 x 16, Wistar St., Germantown.—J. D. Caldwell, two-story dye-house, 40 x 70, Wistar St.—J. D. Caldwell, two-story dry-house, 18 x 25, Wistar St.—J. D. Caldwell, four-story factory, 28 x 71, Wistar St.—W. St. Bell, three-story back building, 18 x 31, Ois St.—Whiteside & Sons, 2 three-story dwells., 19 x 82, Chestnut St. CHURCHES.—St. Joachim's (R. C.) Church, at Frankford, Philadelphia, built of Trenton brown stone, has just been roofed in.—Church of The Messiah (Lutheran), on Sixteenth and Jefferson streets, built of Trenton brown stone is nearly completed. The pews are being put in place. Mr. Edwin F. Darang is the architect of both these churches.

**CONVENT**—The new Convent of the Good Shepherd is to be built of dark pressed brick, with buff Ohio stone finish. The building, which is cruciform in shape, is bounded by Thirty-fifth and Thirty-sixth streets, Silverton Avenue, and Grape Street. It measures, from Silverton Avenue to Grape Street, 100 feet, and is 294 feet long. The building will be thoroughly ventilated. The fresh air will be forced through the underground ducts by a large steam fan. In winter the fresh air will be forced through radiating boxes, where it will be heated by steam. All necessary improvements and appliances will be introduced. The hall will be fire-proof, the staircases throughout being of iron. Fire plugs with hose permanently attached will be in various parts of the building and on every floor. The cost will be \$110,000. Mr. John J. Deery is the architect.

#### St. Louis.

**BUILDING PERMITS.**—Twenty-seven permits have been issued for the week ending November 8, 1878, eight of which are for frame structures of no importance. Of the rest, those worth \$2,500 and over are as follows:—

Owners.	Use.	Stories.	Rooms.	Cost.
W. L. Hase.	Dwelling.	3	12	\$15,000
J. H. Westphal.	Dwelling.	3	11	2,000
Robert E. Carr.	Dwelling.	3	11	5,000
Mrs. Weber.	Store and	2	6	2,500
Chas. McClear.	Dwelling.	2	8	4,000

**SCHOOL-HOUSES.**—On November 8th proposals for building two small public school-houses were received; Thomas J. Furlong, architect.

#### Washington, D. C.

**BUILDING PERMITS.**—J. C. and H. A. Willard to build a rotunda in the Willard Hotel; cost, \$4,500.—W. H. H. Cissel, brick addition to 1132 Seventh St.; cost, \$350.—Bernard Geier, private stable on H St.; cost, \$200.—Samuel L. Phillips, 7 four-story dwellings, Connecticut Ave.; cost, \$50,500.—Riggs & Evans, to repair house corner of Third St. and Pennsylvania Ave.; cost, \$800.—James Eliot, three-story and cellar dwell., Rhode Island Ave.; cost, \$1,000.—Samuel C. Carter, three-story and a basement dwell., Connecticut Ave.; cost, \$6,700.

#### General Notes.

**ASBURY PARK, N. J.**—Mr. U. S. Grant, Jr., has contracted for the erection of a cottage here. The structure is to be finished for occupation next summer.

**ATTLEBOROUGH, MASS.**—Providence contractors are building a house and stable for A. W. Sturdy on South Main Street. The buildings are up and boarded in, but it is not intended to finish them this season.—Mr. Richard Crawford is building a large two-tenement house on Park Street, between Union and Pine. W. F. Shattuck has the contract.—Mr. Thomas L. Gay is building a cottage on Perrin Street.—Mr. Wm. H. Goff has just broken ground for a two-tenement house on Dunham Street, Mr. Goff himself being the builder.—J. A. Courtney has just begun a cottage for Mr. Martin Berry on Starkey Avenue.

**AVONDALE, O.**—Now that Avon Hall has been cut up for school-rooms, an earnest endeavor is making to build a town hall. A joint meeting of the school board and village council has chosen as the site the corner of the school-house lot on Main and Rockdale avenues.

**CHESTER, PENN.**—The roof is being put on St. Michael's R. C. Church here. The building is of stone; size, 56 by 167 feet. Mr. Edwin F. Durang of Philadelphia is the architect.

**COLUMBIA, PENN.**—Mr. Edwin F. Durang of Philadelphia is the architect of the brick convent just being finished here; size, 40 by 55 feet.

**COVINGTON, KY.**—Messrs. Lenour & Noonan are about to build a tobacco factory near the suspension bridge.

**INDIANAPOLIS, IND.**—P. Schertz & Co., brewers, are building a mammoth new brewery, and C. Maus is making extensive additions to his.

**LANCASTER, PENN.**—St. Joseph's Roman Catholic Hospital (German), 80 by 126 feet, is now being plastered. There is a chapel connected with the building. Mr. Edwin F. Durang of Philadelphia is the architect.

**LONG BRANCH, N. J.**—Work has been commenced on the ocean pier.

**MATWON, PENN.**—A fine house is building for Mr. D. Grove. It is to be two-story, with mansard roof; estimated cost, \$7,000; Jno. M. Sauder, architect and builder. There is also in process of erection a large building for James B. Henderson, designed for store-room and dwelling. It is to be two-story, brick; estimated cost, \$7,000; architect, Jno. M. Sauder; builder, J. Hiller.

**MOUNT WASHINGTON, O.**—The Trustees of the Mount Washington Cemetery have given out the contract for the mortuary chapel, to be built of hard stone. The work is fairly under way.

**NAPA CITY, CAL.**—The second-story walls of the court-house are almost completed, and the building will be roofed in before long.

**NEWPORT, R. I.**—Mr. Philip Taggart is about to build a commodious house on Broadway and Mr. John Easton will build a two-story French-roof cottage on Friendship Street. Mr. Thos. Sharpe is building a cottage on the corner of Broadway and Friendship Street.

**OSTERVILLE, MASS.**—A summer residence will soon be built for Mr. J. P. Tolman, from the designs of Mr. W. G. Preston, architect, of Boston.

**POLK CO., IO.**—Polk County is building a \$5,000 asylum for the insane.

**READING, PENN.**—Mr. Edwin F. Durang of Philadelphia is the architect of the brick dwelling-house for Mr. Geo. F. Baer.

**RUSHFORD, MINN.**—The Norwegian Lutherans will erect a \$7,000 church at Rushford.

**SACRAMENTO, CAL.**—City Assessor Shepherd finds that during the last year over 200 new buildings were erected in the city, at an average value of \$2,000 each.

**SPRINGFIELD, ILL.**—A movement is on foot to construct a large temperance tabernacle here.

**WESTERLY, R. I.**—The work of driving the piles for Captain A. B. Rodger's new building, west end of Pawcatuck Bridge, was begun on Saturday last.

**WELINGTON, DASH.**—During the month of October twenty permits were issued by Chief Engineer Conwell of the Engineering and Surveying Department for the erection of buildings, as follows: Daniel H. Kent, two houses on Franklin St.—Patrick Reynolds, one house on Reed St.—Daniel H. Kent, four houses on Eighth St.—Elijah Black, one house on Rodney St.—Charles E. Dornan, four houses on Railroad Ave.—Holstein Harvey, two houses and one stable on Sixth St.—Matthias Maloney, one stable on Fifth St.—Sophia J. Qui n, one house on Jack-on St.—Elizabeth O'Burnett, one house on David St.—Henry G. Gare, one house, cor. of Buttonwood and B Sts.—John Cook, one house on Lomb and St.

**WILLOWS, CAL.**—The foundation-stone of a new Roman Catholic church was laid by Right Rev. Bishop O'Connell, on the 27th ult. Over \$4,000 have already been subscribed.

**WINCHESTER, KAN.**—The new school-house is building from the plans of Mr. E. T. Carr, architect, of Leavenworth. It will cost \$5,000.

## INDEX OF CURRENT WORK,

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

#### Baltimore, Md.

**CHURCH.**—The Cummings Memorial Church. Mr. Cassell, architect.

**CHURCH.**—The Pius IX. Memorial Church. G. A. Frederick, architect. Cost \$100,000.

**HOSPITAL.**—Johns Hopkins Hospital. J. B. Niernsæe, consulting architect.

#### Boston.

**BANK BUILDING.**—Tremont Bank Building. Carl Fehmer, architect.

**HOTEL.**—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.

**THE MUSEUM OF FINE ARTS.**—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.

**SCHOOL-HOUSE.**—High and Latin School. G. A. Clough, architect.

**ASYLUM.**—Asylum for Aged People, C. J. Bateman, architect. Cost \$50,000.

#### Brooklyn, N. Y.

**TENEMENT.**—A. T. White, owner. William Field & Son, architects.

**SOCIETY BUILDING.**—The Long Island Historical Society Building, Mr. G. B. Post, architect. Cost \$100,000.

**CHURCH.**—St. Francis Xavier R. C. Church, West Fifteenth Street. Cost \$150,000. P. C. Keely, architect.

**HOSPITAL.**—St. John's Hospital, N. L. Derby, New York, architect.

**HOSPITAL.**—Hospital of St. Mary, Mr. P. C. Keely, architect. Cost \$200,000.

#### Cincinnati, O.

**U. S. CUSTOM HOUSE AND POST OFFICE.**—S. Hannaford, local superintendent.

**CHILDREN'S HOME.**—J. W. McLaughlin, architect. Cost \$50,000.

**NEWSPAPER OFFICE.**—The Gazette Building. E. Anderson, architect.

**CLUB-HOUSE.**—Allemania Club-House. J. W. McLaughlin, architect. Cost \$60,000.

**UNIVERSITY BUILDING.**—Cincinnati University Building. S. Hannaford, architect. Cost \$50,000.

#### Cleveland, O.

**CONVENT.**—Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

#### Hartford, Conn.

**SEMINARY.**—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.

**CATHEDRAL.**—R. C. Cathedral of St. Joseph. P. C. Keely, Brooklyn, architect.

**CATHOLIC SCHOOL.**—Brown & Stilson, architects, New Haven. Cost about \$25,000.

#### Jersey City.

**CONVENT.**—Convent of the Sisters of St. Dominick. Cost \$40,000.

#### New York.

**THE "FLORENCE."**—Emile Grewé, architect. Mrs. Matthews, owner. Cost \$500,000.

**BAEGE OFFICE.**—Building by the United States Government. Cost \$140,000.

**THE BOBBEL BUILDING.**—S. D. Hatch, architect. Cost \$250,000.

**CHURCH.**—St. Paul's (R. C.). Mr. J. O'Rourke, architect, Newark, N. J. Cost \$500,000.

**COLLEGE.**—Addition to Columbia College. C. C. Haight, architect. Cost \$200,000.

**OFFICE BUILDING.**—Messrs. Silliman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.

**APARTMENT HOUSE.**—Mr. H. J. Hardenburgh, architect. Cost \$300,000.

**PRIVATE RESIDENCE.**—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.

**ARMORY** for the Seventh Regiment.—Cost \$300,000. C. W. Clinton, architect.

#### Philadelphia.

**HOSPITAL.**—Presbyterian Hospital. Wilson Bros., arch'ts.

**OFFICE BUILDING.**—Girard trust.

#### Providence, R. I.

**DORMITORY** for Brown University.—Messrs. Stone & Carpenter, architects.

#### St. John, N. B.

**POST OFFICE, Custom House, and Savings Bank.**—Mr. Scott, Chief Architect to the Dominion Government.

**BANK.**—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.

**CHURCH.**—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.

**CITY HALL.**—Messrs. McKean & Fairweather, architects.

**CHAPEL.**—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.

**CHURCHES.**—St. James's Church, Croff & Camp, architects, St. John N. B.—St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$60,000.

#### St. Louis.

**CHURCH.**—Second Baptist Church. Edward Illsley, contractor. Cost \$100,000.

**COURT HOUSE** for the new county of St. Louis.—F. Rendwick, architect. Cost \$28,000.

**COLLEGE.**—College for the Christian Brothers. Mr. Jas. McGrath, architect. Cost \$200,000.

**CUSTOM HOUSE AND POST OFFICE.**—Mr. Jas. G. Hill, Supervising Architect of the Treasury Department.

#### General.

**ATHENS, O.**—Court House, Mr. H. E. Myers, architect. Cost \$90,000.

**CAMBRIDGE, MASS.**—Gymnasium for Harvard College. Messrs. Peabody & Stearns, architects, Boston.

**CONCORD, N. H.**—State Prison. Messrs. Dow & Wheeler, architects. Appropriation, \$200,000.

**CROWN POINT, IND.**—Court-House. J. C. Cochrane, architect, Chicago. Cost \$45,000.

**ELMIRA, N. Y.**—Masonic Hall. N. LeBrun, architect, New York. Cost \$60,000.

**FARIBAULT, MINN.**—Deaf, Dumb, and Blind Asylum. J. Babcock & Co., contractors. Cost \$53,730.

**INDEPENDENCE, IO.**—Hospital for the insane. G. Josselyn, supervising architect. Cost \$850,000.

**INDIANAPOLIS, IND.**—State House, Mr. E. May, architect. Cost \$2,000,000.

**JOLIET, ILL.**—St. Mary's (Roman Catholic) Church. Mr. Keely, architect, Brooklyn.

**KANKAKEE, ILL.**—Insane Asylum. J. R. Willett, architect, Chicago, Ill.

**LOWELL, MASS.**—Appleton Bank. O. A. Merrill, architect. Cost \$70,000.

**NEWARK, N. J.**—St. Michael's Church (R. C.). Mr. J. O'Rourke, architect. Cost \$25,000.

**NORRISTOWN, PENN.**—Insane Asylum. Wilson Bros. & Co., architects, Philadelphia.

**OAKLAND, CAL.**—First Congregational Church. Mr. L. B. Valk, New York, architect. Cost \$60,000.

## Publishers' Department.

### The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY

HOUGHTON, OSGOOD & CO.,

WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year; \$6.00 in advance.

### CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,

WITH

Houghton, Osgood & Co.'s other Periodicals.

THE ARCHITECT and ATLANTIC MONTHLY...\$9.00

THE ARCHITECT and THE REPORTER...15.00

THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL...10.00

THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE...7.00

THE ARCHITECT and DWIGHT'S JOURNAL OF MUSIC...7.00

\* N. B.—The Atlantic portraits of Lovell, Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

Payments should be made directly to the Publishers, either by draft or by post office order.

HOUGHTON, OSGOOD & CO., Publishers,

WINTHROP SQUARE, BOSTON.

## WANTS.

A POSITION as agent for a stone contractor, or for a company manufacturing specialties for building purposes, by a young man experienced in business, or any situation requiring a knowledge of architects' plans, designing, scale, and detail drawings, preparing bills of materials, etc. An extensive acquaintance among architects, and a means of keeping informed of building news in New York and Boston.—Address O. WESLEY, 246 E. 25th St., New York.

*A. Hall & Sons*  
Manufacturers of  
*Architectural Terra Cotta,*  
*Buff and Colored Brick, Fire Brick*  
*Established 1845, South Amboy, N. J.*

### ARCHITECTURAL IRON WORKS.

YOUNGLOVE & CO., Prop'r's.

CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CRISTING, ETC.

Estimates promptly furnished.

(Established 1848.)

MARKET ST. ARCHITECTURAL FOUNDRY

AND

IRON WORKS.

SNEAD & CO.,

LOUISVILLE, KY.

Makers of every description of Iron Work for Buildings

OUR ADVERTISERS and others who are in the habit of using business circulars, will find in our columns of "Building Intelligence" a continually new directory of names and addresses of those persons who, being at present actively engaged in building, are the ones who are most desirous of receiving circulars setting forth the advantages and qualities of all classes of building appliances.

An hour spent in mailing circulars to the persons mentioned above cannot fail of being profitable to the business man.

PROPOSALS.

SAFE.

COUNTY AUDITOR'S OFFICE, COMMISSIONERS' DEPARTMENT, CINCINNATI, November 2, 1878. Sealed proposals will be received at this office until Wednesday, November 27, 1878, at 12 o'clock m., to build for, and place into position, in the County Treasurer's Office of Hamilton County, Ohio, a Burglar-proof Safe. Drawing and specifications can be seen at this office. The right is reserved to reject any or all bids. By order of Commissioners. W. S. CAPPELLER, County Auditor, 152 And Clerk Board of County Commissioners.

LOCKS AND KEYS.

POST OFFICE DEPARTMENT, WASHINGTON, D. C., August 15, 1878. Separate sealed proposals will be received at this Department until 12 o'clock noon on the 20th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as to be used for the street letter-boxes of the United States. As the public exposure and searching examination necessary to intelligent bidding on any prescribed model of a lock and key would tend to impair, if not entirely destroy, the further utility of all such locks and keys for the purposes of the mails, the Postmaster-General prescribes no models or samples for bidders, but relies for a selection on the mechanical ingenuity and skill which a fair competition among inventors, hereby invited, may develop in samples submitted by them. Specifications of requirements as to proposals, samples, kinds and quantities of locks and keys, contracts, etc., will be furnished on application by letter to the Second Assistant Postmaster-General. No proposal will be considered which is not submitted in accordance with such specifications and forms of proposal. The contracts which may be made are to be in conformity with the specifications and accepted proposals. 170 D. M. KEY, Postmaster-General.

GAS WORKS.

RIO DE JANEIRO, BRAZIL. By order of the Brazilian Legation at Washington the undersigned makes public that the Imperial Government calls for proposals for the gas illumination of Rio de Janeiro, the present contract expiring in March next. The proposals, addressed to the Envoy Extraordinary and Minister Plenipotentiary of Brazil, must be sent until 3 o'clock in the afternoon of the 1st day of December next to the Brazilian Consulate General, 42 Broadway, New York, where copies of the general conditions and specifications referred to in the fourth clause can be obtained, as well as any information in relation to this matter. SALVADOR DE MENDONCA, Brazilian Consul-General. NEW YORK, September 9, 1878.

MINISTRY OF AGRICULTURE, COMMERCE, AND PUBLIC WORKS - DIRECTORY OF PUBLIC WORKS.

By order of His Excellency the Minister of this Department, it is advertised that this Directory receives proposals for the service of the illumination by gas of the Capital of the Empire, in the terms and conditions below specified: - First - The proposals will be presented in a closed letter, until 3 o'clock in the afternoon of the 1st day of December of the present year, in this city, in the Directory of Public Works of the Ministry of Agriculture, and in London, Paris, and Washington, at the respective Brazilian Legations. Second - The proposals must present, outside of the envelopes that shall contain the proposals, documents that will testify their fitness for the service that they propose to contract. Third - No one can concur without having previously deposited in the National Treasury, in the delegacy of the same Treasury in London, or in either one of the Legations above indicated, a caution, in money or bonds, of the public debt of the Empire, \$50,000, or a corresponding amount in foreign money (45,000, 125,000 francs, or \$25,000 in gold). Fourth - The object of the concurrence will be only the price of furnishing a cubic meter of gas, and the term of the privilege, that in no case shall exceed 33 years. All the other clauses of the contract, excepting whatever may be transitory, will be without any disclaimer or modification, those proposed by the Government in the general specifications and conditions, which will be distributed separately in the Directory of the Public Works and the above-mentioned Legations. Fifth - All the proposals will be opened in this city, in the public session of the Directory of Public Works, on the 2d day of January, 1879; and the Government will declare on them within fifteen days of that date. Sixth - When the choice of the proposal is made, the contract will be considered concluded; being necessary for the preferred proposer to sign only the mentioned general conditions, which will be entered in a competent book of the Department of Agriculture. For greater facility, each proposer who resides out of Rio de Janeiro must constitute in this city, and with a due antecedence, somebody with a power of attorney to sign the general conditions in case the preference fall on him. Seventh - The proposer, who after having received communication of the acceptance of his proposal, refuses to sign the referred conditions, will forfeit the caution in the benefit of the National Treasury. Eighth - The Government reserves the right to annul the competition within the period fixed by Clause 5, to decide upon the proposals that were presented. M. BUARQUE DE MACEDO, Chief of the Directory. DIRECTORY OF PUBLIC WORKS, Rio de Janeiro, July 22, 1878.

WROUGHT AND CAST-IRON WORK.

Proposals for Wrought and Cast-Iron Work for the Building for the U. S. Bureau of Engraving and Printing, Washington, D. C. OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., November 8, 1878. Sealed proposals will be received at this office until 12 m. on the 20th day of November, 1878, for furnishing, delivering, fitting, and putting in place complete, the wrought and cast-iron work, comprising Cast-Iron Columns, etc., in basement story, and Heated Iron Beams, etc., in (second tier) first-story floor of the Building for the U. S. Bureau of Engraving and Printing, in Washington, D. C., in accordance with drawings, specification, and schedule, copies of which and any additional information may be had on application at this office or the office of the Superintendent. JAS. G. HILL, Supervising Architect. 161\*

PROPOSALS.

LEVEE.

WHITEWATER, O. COUNTY AUDITOR'S OFFICE, COMMISSIONERS' DEPARTMENT, CINCINNATI, O., November 2, 1878. Sealed proposals will be received at this office until Wednesday, December 4, 1878, at 12 o'clock m., for the construction of a Levee and approach to the north end of the Elizabethtown Bridge, in Whitewater Township, said levee to be across the Miami Bottom, between the said bridge and the Indianapolis & Cincinnati Railroad. The Levee will be about 2,600 feet in length, and will contain about 75,000 cubic yards, more or less. Specifications, profile, and cross-sections of said work can be seen at this office. All bids not in accordance with specifications will be rejected. The right to reject any or all bids is reserved. Persons desiring to remonstrate against said improvement will file their objections with the County Auditor, and said remonstrances will be considered on Wednesday, December 4, 1878, at 12 o'clock m. By order of the Commissioners. W. S. CAPPELLER, County Auditor, And Clerk of Board County Commissioners.

BREAKWATER.

SWANTON, VT. U. S. ENGINEER OFFICE, ROOM NO. 31, ARMY BUILDING, CORNER HOUSTON AND GREENE STS., NEW YORK, November 4, 1878. Sealed proposals will be received until noon of November 18, 1878, for the repair of the Breakwater at Swanton, Vt. For forms of bids and other information, apply to this office. JOHN NEWTON, Lieut.-Col. of Engineers.

COPPER.

NAVY PAY OFFICE, WASHINGTON, D. C., November 8, 1878. Sealed proposals, in duplicate, to be indorsed "Proposals for Copper," will be received at this office until 12 o'clock m. on the third day of December, 1878, to furnish and deliver at the Washington Navy Yard, BUREAU CONSTRUCTION AND REPAIR: 100,000 pounds of American Copper. This copper will be required as follows: - 50,000 pounds best quality American Copper, about 31 inches long, 4 inches wide, and 3/4 inches thick, to weigh not less than 110 pounds. 50,000 pounds best quality American Copper, 16 inches long, 12 inches wide, and 2 1/2 inches thick, to weigh about 150 pounds. One half of each kind of copper to be delivered on or before the 31st day of January, 1879, and the second half on or before the 28th day of February, 1879, with the privilege of delivering the whole at as early a day as the successful bidder may desire. The whole of this copper will be subject to the tests and inspections of the proper officers of the Washington Navy Yard, to whom bidders are referred. No proposal will be considered unless from a manufacturer or regular dealer in copper. The right is reserved to reject any or all offers should it be considered to the interest of the Government to do so. Blank forms for bids to be had at this office. W. W. WILLIAMS, Pay Inspector, U. S. Navy. 153

WROUGHT AND CAST-IRON WORK.

Proposals for Wrought and Cast-Iron Work for the U. S. Custom-House, etc., at Chicago, Ill. OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., November 6, 1878. Sealed proposals will be received at this office until 12 m., on the 3d day of December, 1878, for furnishing, delivering, fitting, and putting in place complete the wrought and cast-iron work, comprising window-frames, shutter-casings, sills, trimmings, door-frames, thresholds, skirting, etc., for the U. S. Custom-House, etc., at Chicago, Ill., in accordance with drawings, specification, and schedule, copies of which and any additional information may be had on application at this office or the office of the Superintendent. JAMES G. HILL, Supervising Architect. 153\*

DITCH AND LEVEE.

GLENWOOD, IO. Sealed proposals will be received by me up to 12 m. of Monday, November 18, 1878, at my office in Glenwood, Mills County, Iowa, for the construction of a ditch and levee on the Missouri River bottom in said county, in separate sections, numbered 1 to 17, inclusive, and of kind and amount of work upon each section, as per profiles and complete specifications thereof, to be found on exhibition for inspection at my office on and after the 25th inst. H. F. WILSON, County Auditor. 151

TO ARCHITECTS AND OTHERS.

TO BE LET - A large Room, with smaller attached, if wanted, quiet, light, and pleasant, up one flight only. Will be let low to responsible parties. WALWORTH MFG CO., 78 Kilby Street.

"Wood thoroughly creosoted is practically imperishable." CREOSOTED WOOD,

PREPARED AT THE Hayford Patent Creosote Wood Preserving Works, ELIZABETHPORT, N. J., and A St., So. BOSTON. Offices: 10 Warren St., New York, and 4 Post Office Sq., Boston. EDWARD R. ANDREWS, Proprietor. ARCHITECTS, ENGINEERS, and BUILDERS are reminded that wood prepared by the Hayford process is rendered PRACTICALLY IMPERISHABLE, being protected from decay, marine worms, etc. It should be used for Docks, Bridges, Piers, Wharves, Pavements, Stable and Cellar Floors, and wherever wood is exposed to alternate dryness and moisture. Pamphlets, fully explaining the creosoting process, furnished on application.

S. KLABER & CO. STEAM MARBLE WORKS, 217 to 223 W. 51st St., New York. ESTIMATES MADE ON ALL KINDS OF MARBLE WARE

DEVER & SHORTLIDGE,

Ledger Building, PHILADELPHIA, PA. Law and Collection Offices.

City Collections, Interest, Mercantile Bills, and Foreign Claims promptly made. Liens filed, Mortgages foreclosed, Ground Rents sued out, and all other Legal Business will receive careful attention. Reports made on Claims whenever desired, and cashed as soon as collected.

ROBERT DEVER, Solicitor.

JOHN WALKER SHORTLIDGE, Attorney and Counsellor at Law. ROOMS 6 AND 7, FIRST FLOOR.

THE PENRHYN SLATE CO. MANTELS, And General Slate Manufacturers, (Quarries and Manufactory, Middle Granville, N. Y.) 50 UNION SQUARE. . . . NEW YORK, Corner of Fourth Avenue and 17th Street, W. H. KIRTLAND, Secretary.

Weather Strips. BROWN'S METALLIC AND RUBBER WEATHER-STRIPS - the oldest, the best, the cheapest in market. Stood the test 15 YEARS. They exclude COLD DRAFTS around windows and doors in winter, keep out dust in summer, and stop rattling sashes. We employ experienced and responsible workmen, and guarantee entire satisfaction. We send, free of charge, men with samples and prices to measure and give cost. We warrant them good for 5 YEARS. Patent Metallic Weather-Strip Co. 812 BROADWAY - N. Y.

TO ARCHITECTS AND BUILDERS. MORTAR BLACK, Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar. For sale only by Walpole Color and Chemical Works, HENRY D. DUPEE, Proprietor, 79 KILBY STREET, BOSTON.

MORTON'S Copper and Iron SASH CHAIN, PATENTED Aug. 15, 1871. I would call the attention of Architects and Builders to my SASH CHAIN, Manufactured from the best NORWAY IRON. This Chain is stronger and cheaper than the copper, and will last as long; all that is necessary is to paint the Chain the same color as the frame. For terms and further information apply to THOS. S. MORTON, 65 ELIZABETH ST., NEW YORK CITY.

**MARSHALL'S AMERICAN**



**LEADED SHEETS.**  
Cheapest and most durable Metal for Cornice and Roofing.  
**MARSHALL BROS. & CO.,**  
Front and Girard Ave., Phila.  
Represented in New England States by  
C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

**PATENT MINERAL WOOL.**  
ENTIRELY FIRE-PROOF AND UNDECAYING.  
**THE BEST INSULATOR OF HEAT, COLD, AND SOUND.**  
For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc.  
**ALEXANDER D. ELBERS,**  
P. O. Box 4461. 26 1/2 Broadway, New York

**McSHANE BELL FOUNDRY**  
Manufacture those celebrated *Bells for Churches, Academies, etc.* Price-List and Circulars sent free  
**HENRY McSHANE & CO.,**  
Baltimore, Md.

**"ZODTCHY" (BUILDER).**  
A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.  
Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of  
**M. JEROME KÜTTNER,**  
Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.  
MONTHLY EDITION.  
Each number contains from eight to sixty pages of letterpress, gr. quarto, with cuts, and at least five autographic chromo-lithographic plates, the titles in both Russian and French.  
The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zodych," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.  
SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES \$12.50 PER ANNUM.  
The "Zodych" exchanges with all Architectural and Technical Journals.  
Price for Advertisements: One Line, each insertion, 8 cts. For important Advertisements a Discount of ten to thirty per cent.  
Address,  
**JOURNAL "ZODTCHY,"**  
10 OFFICE STREET, ST. PETERSBURG, RUSSIA.

We manufacture Slate goods, through every operation, from quarry to completion.  
**THE FAIR HAVEN MARBLE AND MARBLEIZED SLATE CO.**  
FAIR HAVEN, VERMONT.  
*The oldest and most extensive producers of*  
**SLATE MANTELS**  
IN THE UNITED STATES.

We imitate more than fifty rare marbles and woods. Styles and workmanship unsurpassed. Special care given to making Mantels and other goods from architects' drawings. Being in close proximity to the best white American marble quarries, and with rare facilities for selecting stock and doing the work, we are also producing

**MARBLE MANTELS**

At the very lowest prices, and in the best manner possible. We also produce all kinds of plain slate and marble work

Look over this list and correspond with us and get our Catalogue.

Purple, Green, Red, Variegated Roofing Slates. Same Color Slate, also White and Black Marble Tiles.	Window Lintels. Water Table. Belt Courses. Ashlar. Solid Steps. Steps and Risers.	Laundry Tubs. Urinals. Vault Covers. Vault Work. Carriers' Tables. Counter Tops.	Billiard Table Beds. Blackboards. Brewers' Vats. Cisterns. Greenhouse Shelves. Plumbers' Goods, etc.
---	---	--	--

**DORCHESTER UNION FREESTONE CO.**  
NEW BRUNSWICK YELLOW FREESTONE  
The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order.  
84 Pine Street, New York. G. P. SHERWOOD.

**ARCHITECTURAL IRON AND JAIL WORKS.**  
**M. CLEMENTS,**  
MANUFACTURER OF  
Iron Railing, Bank Vaults, and Jail Cells, Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc.  
BAYMILLER STREET, near Sixth and C. H. & D. R. R. Depot, CINCINNATI, OHIO.

**J. & R. LAMB, 59 CARMINE ST., N. Y. CHURCH FURNISHERS**  
Practical Workers in Sterling Silver, Brass and Bronze. Carved Wood, Decorations, etc. Illustrated Catalogues. Furniture, etc. Metalwork etc. Decisions, 1

**A. L. FAUCHÈRE & CO.**  
OFFICE AND WAREHOUSES  
1319 and 1321 Broadway, New York,  
Importers, Manufacturers, and Dealers in all kinds of foreign and domestic  
**MARBLE FOR INTERIOR WORK.**  
Estimates furnished on application.

**LUX-FECIT**  
**THE HELIOTYPE PRINTING COMPANY**  
220 DEVONSHIRE ST. BOSTON  
COR FRANKLIN ST.  
HELIOTYPE PHOTOGRAPHS in Printers Ink  
HELIOTYPE LITHOGRAPHS printed by Steam  
HELIOTYPE CUTS to print with Type  
HELIOTYPE FACSIMILE LETTERS, SHOW CARDS, &c.

**THE "AIR SPACE" BOILER COVERINGS**  
Save 10 to 20 per cent in fuel.  
**THE CHALMERS-SPENCE COMPANY.**  
140 Congress Street, Boston. Foot 9th St., E. R., New York.

**CLASSIFIED ADVERTISEMENTS.**

<b>ARCHITECTS.</b> Frank Hill Smith, Boston.....ii W. W. Goodrich, Kingston, N. Y.....ii Charles E. Halsey, St. Louis.....ii Walter Dickson, Albany, N. Y.....ii Richard M. Hunt, New York.....ii P. B. Wight, Chicago.....ii	<b>ARCHITECTURAL BOOKS, ETC.</b> A. J. Bicknell & Co., New York.....xi Houghton, Osgood & Co., Boston, U. S. & F. H. Zodych, St. Petersburg.....xi	<b>ARCHITECTURAL IRON WORK.</b> Younglove & Co., Cleveland, O.....xii M. Clements, Cincinnati.....ix Snead & Co., Louisville, Ky.....xiii Zina Iron Co., New York.....xi Carnegie Bros. & Co., Pittsburgh, Pa.....xi	<b>BELL FOUNDERS.</b> Menely & Kimberly, Troy, N. Y.....ii Henry McShane & Co., Baltimore.....ix	<b>BOILER COVERINGS.</b> The Chalmers-Spence Co.....ix	<b>BRICK.</b> (ORNAMENTAL.) Peerless Brick Co., Phila. (PA.) (FIRE.) Waldo Brothers, Boston (PRESSER.) Fletcher & Thomas, Indianapolis.....ii	<b>BRONZE DECORATIONS.</b> National Fine Art Foundry, New York.....xi	<b>CARPENTERS.</b> J. H. Hunt & Co., Boston.....ii	<b>CARPETS.</b> W. & J. Sloane, New York.....iii	<b>CHEMIST.</b> Johnson & Wilson, New York.....xii	<b>CHEMIST TAPS.</b> Joseph W. Taylor, Brooklyn.....xii	<b>CHURCH FURNITURE.</b> J. & R. Lamb, New York.....ix Seth Thomas Clock Co.....ii E. Howard & Co., Boston.....ii	<b>CONDUCTORS (RODS).</b> Austin, Oldys & Co., Philadelphia.....iii	<b>CORNICE AND PICTURE ROD MOUNTING.</b> F. P. Baker, Boston.....ix	<b>CROQUETED WOOD.</b> Edward R. Andrews, Boston.....ix	<b>DECORATORS.</b> Emmat & Quartley, Baltimore.....ii	Philip A. Butler, Boston.....ii I. Haberstroh & Son, Boston.....ii W. J. McPherson, Boston.....ii Win. H. Jackson & Co., New York.....xii Donald MacDonald, Boston.....ii Society of Decorative Art, New York.....ii John Lafarge, New York.....ii	<b>DESIGNING AND WOOD ENGRAVING.</b> W. J. Dana, Boston.....ii DOOR BUTTS (SYSTEMS). Cowles Hardware Co., Unionville, Conn.....xiii	<b>DRAIN PIPE.</b> Waldo Brothers, Boston.....xi Fluke & Coleman, Boston.....vi	<b>ELECTRIC BELLS, ASSURCIATORS, ETC.</b> S. W. Fuller, Boston.....ii	<b>ELEVATORS, STEAM ENGINES, ETC.</b> Whittier Machine Co., Boston.....i Tuffe Elevator Works, Boston.....ii	<b>ENGINEER (SANITARY).</b> E. S. Philbrick, Boston.....ii	<b>FIRE-PROOF BUILDINGS.</b> Fire-Proof Building Co., New York.....i	<b>FREESTONE.</b> Dorchester Union Freestone Co., New York.....x	<b>GAS FIXTURES.</b> R. Hollings & Co., Boston.....xii	<b>GAS MACHINES.</b> Denny Bros. & Co., New York.....xiii Springfield Gas Machine, Springfield, Mass.....x Walworth Manufacturing Co., Boston.....xvi	<b>GRANITE.</b> New England Granite Works, New York.....i Robert Logan, New York.....i	<b>GRATES, ETC.</b> W. H. Jackson & Co., New York.....xii	<b>HARDWARE.</b> Burditt & Williams, Boston.....xi	<b>HEATING APPARATUS.</b> Bartlett, Robbins & Co., Baltimore.....i Crane, Breed, & Co., Cincinnati, O.....vi Gold's Heater Manufacturing Co., New York.....vi	<b>GLASS.</b> Gillis & Goodenough, New York.....ii Walworth Manufacturing Co.....ii	<b>WYLYS H. WARNER, New York and Syracuse Fuller, Warren &amp; Co., Troy, New York Cleveland, and Chicago.</b>	<b>HELIOTYPES.</b> The Heliotype Printing Co., Boston.....x	<b>IRON STABLE FITTINGS.</b> Buhler & Co., Boston.....ix	<b>INTERIOR FINISHING WOOD.</b> Palmer, Parker & Co., Boston.....xi IRON WINDOW SASHES. D. M. Meeker & Son, Newark, N. J.....iii	<b>LAW AND COLLECTIONS.</b> Dever & Shortidge, Philadelphia.....ix	<b>LEADED SHEETS.</b> Marshall Bros. & Co.....ix	<b>LETTER SAW.</b> Shiloh Falls Co., New York.....xii	<b>LOCKS AND BRONZE HARDWARE.</b> Hopkins & Dickinson Manufacturing Co., New York.....xii York Lock Manufacturing Co., Stamford, Conn.....ii	<b>MANTELS.</b> Stewart's, New York.....xii C. S. Rankin & Co., Cincinnati, O.....ii Joseph S. Miller, Philadelphia.....ii Penrhyn Slate Co., New York.....ix	<b>MARBLE.</b> Roland Marble Co., Boston.....ii	<b>MARBLE WORKERS.</b> S. Kisher & Co., New York.....ix A. L. Fauchère & Co.....ix Fisher & Bird.....ii Hugh Sisson & Son, Baltimore.....ii	<b>MARBLE AND SLATE WORKERS.</b> Fair Haven Marble and Marbleized Slate Co., Fair Haven, Vt.....ix MARQUETTY FLOORING (PATENT). C. Butcher, Boston.....xii MORTAR BLACK. Henry D. Dupree, Boston.....ix	<b>PAINTS.</b> Aschel Wheeler, Boston.....xii C. M. Wheeler, and J. M. Bond, Toledo, O.....ii Howard Fleming, New York.....ii	<b>PAPER HANGINGS.</b> H. B. Jones & Co., Boston.....ii	<b>PAPER MACHINERY DECORATIONS.</b> Dolivet, Cutler & Co.....ix	<b>PATENTS.</b> F. A. Lehman, Washington, D. C.....ii JENNINGS' Sanitary Depot, New York.....xii A. D. Elbers, New York.....ix PIPE (LAP WELDED). National Tube Works Co.....xi PATER MACHINERY DECORATIONS. Plummer, John Mack, Boston.....ii	<b>PLUMBERS.</b> Hawthorne & Tucker, Boston.....i PLUMBERS' SUPPLIES. Jennings' Sanitary Depot, New York.....xii	<b>ROLLING VENETIAN BLINDS.</b> Wilson & James, New York.....xii	<b>ROOFS.</b> John Farquhar's Sons.....vi A. Knusely & Co., Chicago.....iii	<b>ROOFING (ASBESTOS).</b> H. W. Johns Mfg Co., New York.....vi ROOFING FELLS. N. E. Felt Roofing Co., Boston.....xi Asphalt and other (Felt). Warren Chemical and Mfg Co., Boston and New York.....xi	<b>SASH LINES AND CHAINS.</b> Thomas S. Morton, New York.....ix	<b>SCALLOLA AND MARBLEZED MARBLE.</b> James T. Allen & Co., Philadelphia.....vi	<b>SEATING (PERFORATED).</b> Gardner & Co., New York.....iii	<b>SEWER GAS TRAP.</b> B. P. Bower & Co., Cleveland, O.....xii S. Buhler, Cleveland, O.....x Brundage & Wickert, Brooklyn, N. Y.....xii	<b>SHUTTERS (STEEL).</b> Clark & Co., New York.....xii Wilson & James, New York.....xii	<b>SKYLIGHTS, ETC.</b> G. Hayes, New York.....xi E. Van Noorden, Boston.....ii	<b>SLATE.</b> Clement, Higbee & Co., Boston.....vi	<b>STAINED AND ORNAMENTAL GLASS.</b> Kelley & Holland.....ii W. J. McPherson, Boston.....ii Samuel West, Boston.....ii Cook, Redding & Co., Boston.....ii J. H. Gratacap, New York.....ii	<b>STEAM PUMP, KNOWLES PATENT.</b> Knowles Steam Pump Works.....xi	<b>STONE (BUILDING).</b> Nicholl & Miller, New York and Amherst, O. i Wilson & Hughes Stone Co., Cleveland, O. i	<b>TERRAZZO.</b> Automatic Fire Alarm, Boston.....vi	<b>THEATRICAL SCENERY.</b> Lafayette W. Seavey, New York.....xii	<b>TILES.</b> John Chadwick.....ii Miller & Coates, New York.....ii American Encaustic Tiling Co., New York.....i T. Ashpwell, New York.....ii Waldo Brothers, Boston.....xi C. A. Wellington, Boston.....ii Sharpless & Watts, Philadelphia.....ii	<b>VENTILATION.</b> Eureka Ventilation Co., Boston.....xii Patent Metallic Weather Strip Co., N. York.....ix WINDUP LOCKS. F. J. Hoyt, New York.....iii Morris Sash Lock Manuf. Co., Cincinnati.....xi WOOD CARPETING. National Wood Manufacturing Co., New York.....ii
---	--	---	--	---	--	--	---	---	---	--	--	--	--	--	--	--	--	---	--	--	---	---	---	---	--	--	--	---	--	---	--	--	---	---	---	---	--	--	---	--	---	--	--	--	--	---	---	---	---	--	--	--	---	--	---	--	---	--	---	--	---	---	--	--

**ETNA IRON CO.**

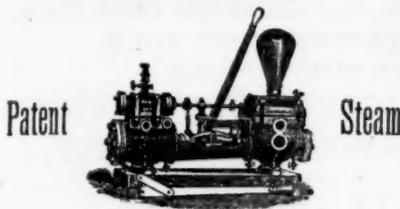
Manufacturers of every description of Wrought and Cast

**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**



**PUMP THE STANDARD.**

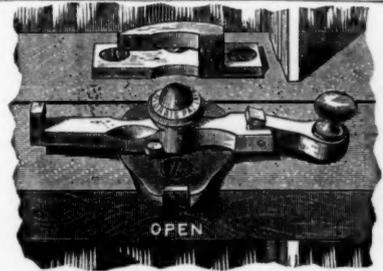
Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.  
Noiseless Pumps for Water Elevators.

ALSO,  
Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.  
The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE  
**KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES: { 14 & 16 Federal St., } Boston.  
{ 113 & 115 Congress St., }  
{ 82 & 94 Liberty St., } New York.

Send for Illustrated Catalogue.



**MORRIS BURGLAR-PROOF SASH LOCK.**

Patented July 2, 1878. The Safest! The Simplest! The Most Reliable! THE BEST!  
N. B.—No springs to get out of order. Sold by all hardware jobbers. Manufactured by the MORRIS SASH LOCK MANUFACT'G CO., Office 168 Walnut St., Cincinnati, O.  
Price List and Samples furnished to the trade on application. A liberal discount to the trade.

**The College Book.**

Edited by CHARLES F. RICHARDSON and HENRY ALDEN CLARK. 4to. Full gilt, \$15.00.

A royal volume, comprising historical and descriptive accounts, principally by professors or graduates of twenty-four leading American Universities, Colleges, and the United States Military and Naval Academies, with 60 full-page heliotype illustrations of buildings connected with these institutions.

**Painters, Sculptors, Architects, Engravers, and their Works.**

A Handbook. By CLARA ERSKINE CLEMENT. A new, revised, and enlarged edition. 1 vol. Crown 8vo. \$3.25.

**British Poets. Riverside Edition.**

English and Scottish Ballads. Edited by Prof. F. J. CHILD. 4 vols. Crown 8vo. Gilt top, \$7.00.

\* \* \* For sale by all Booksellers. Sent, post-paid, on receipt of the price by the Publishers,

HOUGHTON, OSGOOD & CO., Boston.



Terra Cotta Chimney Tops, Akron Land Tile

D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

**NATIONAL**

**FINE ART FOUNDRY,**

318 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze.

**GAS**

**SPRINGFIELD GAS MACHINE.**

Springfield, Mass.; 45 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.



**NATIONAL TUBE WORKS CO.**

PATENT

Indestructible Enamelled Wrought Iron  
**LAP-WELDED PIPE,**

From 1/4 inch to 15 inches diameter.

Now extensively used for

Water, Gas, Sewerage, and Mining.

It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at offices of

National Tube Works Co.,

8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh. Penn.; and McKeesport, Penn.

**BURDITT & WILLIAMS,**

DEALERS IN

**FINE HARDWARE**

of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



**The Draft of the Chimney increased.**

Smoking Chimneys Prevented

Particularly adapted to Chimneys in exposed positions.

Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR,  
70 Grand St., Brooklyn, N. Y.

**CATALOGUE OF Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO., ARCHITECTURAL BOOK PUBLISHERS, 37 WARREN STREET, NEW YORK.

TO ARCHITECTS AND BUILDERS.

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

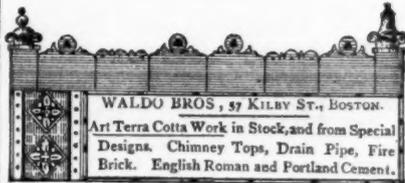
**BEEHIVE BRAND.**

**FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**UNPARALLELED DISCOVERY.**

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the *Paint Preserver* invented by ASAHIEL WHEELER, Boston. It will neither crack, blister, nor scale.



WALDO BROS., 57 KILBY ST., BOSTON.

Art Terra Cotta Work in Stock, and from Special Designs. Chimney Tops, Drain Pipe, Fire Brick. English Roman and Portland Cement.

**PEERLESS BRICKS.**

**THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,**

MANUFACTURES AND KEEPS IN STOCK

**ARCHITECTURAL SHAPES (80 kinds).**

ALSO

**RED Pressed Fronts.**

Extra fine in color and quality

**BROWN,** Colored throughout

More beautiful than Brown Stone DURABLE

**CHOCOLATE,**

Same as above; difference in color

**FLESH COLOR,**

A very popular color

**BUFF,** very fine.

Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F. ADAMS, PRESIDENT.

JOSEPH WOOD, JR., TREASURER



**DOLIVET, CUTTER, & CO.**

ARTISTIC

**Papier Maché Decorations,**

108 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING Venetian Blinds.**

*Wilson's Patent.*  
For first-class Dwellings and Public Buildings.

These blinds can be fitted either inside or outside the sash, and are operated with ease without machinery or weights. They are made to coil above or below, as shown in cut. Can be furnished in any kind of wood. Unequalled for elegance, durability, and simplicity. Indorsed by many of the leading architects in the country, and in use in some of the handsomest buildings.

We also manufacture  
**WILSON'S PATENT Rolling Steel Shutters**

These blinds are operated on same principle as above (being self-coiling). They are used for closing store-fronts and all windows and doorways that are required to be perfectly fire and burglar proof.

Also, Rolling Wood Blinds for Store-Fronts, Book-Shelves, School Partitions, and other purposes.  
A list of public and private buildings fitted with our Blinds sent on application. Architects and owners are invited to send for working models, catalogues, and price-lists.

**WILSON & JAMES,**  
68 Beekman St., New York.  
*Two Prize Medals at Philadelphia.*

**VALUABLE ART PUBLICATIONS.**

**HUNT'S** (WILLIAM M.) Talks on Art. 8vo. Paper, \$1.00.  
**CLEMENT'S** (CLARA ESKRINE) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a Complete Index. Crown 8vo. Cloth, red edges, \$3.25.

Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.

**HOUGHTON, OSGOOD & COMPANY,** Boston.

**IMPROVED PRISON LOCKS.**

All Architects should have our 36 page Illustrated Catalogue of Prison Locks.

ADDRESS

**YALE LOCK MFG. CO.,** STAMFORD, CONN.

New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,

SPECIALTIES

94 BEEKMAN STREET,  
NEW YORK.

**PLUMBING GOODS.**



Having for their especial object  
**Cleanliness, Durability,**  
And the exclusion of Sewer Gas.

**JENNINGS' NEW CLOSET, WITH New Valve**

With non-corrosive Valve Seating and Sol. Plunger.



**STEWART'S**  
SLATE, MARBLE AND HARD WOOD  
**MANTELS**  
MIRRORS, ART-TILES  
MANTELS, HEARTHS &c.  
Masonic Temple 23<sup>d</sup> St & 6<sup>th</sup> Ave N.Y.

**RUBY & PEARL**  
Surface-Burning Self-Feeding  
**FURNACES.**

**OLINTON** } Wrought Iron, with Brick Lined Fire-Pot.  
Reversible Fine Furnace.  
**CRYSTAL** } Wrought Iron, with Cast Iron Fire-Pot.  
Surface Burning Furnace.

MANUFACTURED BY

**FULLER, WARREN & CO.,**

Troy, New York, Cleveland, Chicago.

**BUY THE LESTER SAW.**

MILLERS FALLS CO.

74 Chambers Street, New York.

**C. BUTCHER,**  
107  
Devonshire St.  
BOSTON.

Send for Illustrated Catalogue.

**PATENT MARQUETRY FLOORING.**

Specimens at Lawrence, Wilds & Co.'s, 42 Cornhill, Boston.

**GAS FIXTURES**  
OF EVERY DESCRIPTION.  
SPECIAL RATES TO BUILDERS.  
R. HOLLINGS & CO 47 Washington St., BOSTON.



**Brandeis' Seamless Paragon Trap**

*Safest, Best, Cheapest, and Non-siphoning.*

Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDEIS & WICKER** 46 Fulton Street, Brooklyn N. Y.



**SAYLOR'S PORTLAND CEMENT.**

Approved, recommended, and used by Architects, Engineers, and Builders of the highest authority. New York and Brooklyn Bridge, Department of Docks, and Croton Aqueduct, New York; new Capitol at Albany; U. S. Government Works (forts, light-house foundations, canal locks, etc.); floors for breweries, sugar-houses, ice-houses, cellars, and stables, and for heavy foundations, etc. For sale by all dealers in masons' materials.  
**JOHNSON & WILSON, Gen'l Agents,** 38 Liberty St., New York.

**PRIZE MEDALLISTS.**

1863; 1865; 1867; 1872; 1873; AND ONLY AWARD AND MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**

ORIGINAL INVENTORS AND SOLE PATENTEES OF

**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters

OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Tilford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.

OFFICE AND MANUFACTORY.

162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**

76 READE STREET, NEW YORK,

WORKS, DARLINGTON, N. J.

*Lock and Hardware Manufacturers,*

DESIGNERS, FOUNDERS, AND WORKERS

**BRONZE AND BRASS.**

*Architects' Designs faithfully executed.*

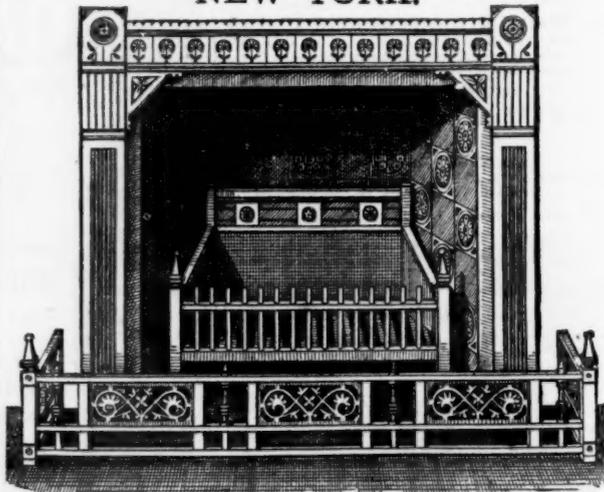
Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side,)

NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile.

HAVE NO OTHER WAREHOUSES.

**BOWER'S PATENT SEWER-GAS TRAP.**

*The most perfect barrier against Sewer Gas that has yet been invented.*

**A POSITIVE SEAL**

Against sewer-gas, absorbed gases, and back water. Seal is not broken by siphonage or evaporation. *Self-scouring, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective.* Send for full descriptive Circulars to the Manufacturers,

**B. P. BOWER & CO.,**  
194 & 106 St. Clair St., Cleveland, O



**THE EUREKA VENTILATION CO.**

OFFICE AND MANUFACTORY,  
74 CHARLESTOWN STREET,  
BOSTON, MASS.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

**Theatrical Fresco only.** Prices moderate. Refer to our first-class Scenery and Supplies delivered by any point, however distant. Correspondence solicited.  
**LAFAYETTE W. SEAVEY,**  
Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK

# THE AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 152.]

SATURDAY, NOVEMBER 23, 1878.

[PRICE 15 CENTS

### BUILDERS' SUPPLIES.

**BARTLETT, ROBBINS & CO.**  
**ARCHITECTURAL IRON WORK AND GAS MACHINES.**  
 HEATING AND VENTILATING OF PUBLIC AND PRIVATE BUILDINGS A SPECIALTY.  
 24 LIGHT STREET, BALTIMORE.

**WALWORTH MANUFACTURING CO.,**  
 69 Kilby Street, Boston,  
 ENGINEERS AND CONTRACTORS FOR  
 STEAM AND HOT WATER WARMING AND VENTILATION IN PUBLIC BUILDINGS, PRIVATE RESIDENCES, GREENHOUSES, ETC.  
 MANUFACTURERS OF SOLAR GAS MACHINES.  
 Correspondence solicited. Plans and estimates furnished on application.

**"HOTCHKISS" TOWER CLOCKS,**  
 MANUFACTURED BY  
**SETH THOMAS CLOCK CO., THOMASTON, CONN.**  
 Prices \$100 to \$6,000.  
 WARRANTED ACCURATE, STRONG, DURABLE.  
 OFFICE, 581 BROADWAY, NEW YORK.  
 Send for Illustrated Catalogue.

**"MINTON'S ART AND ENAMELLED TILES."**  
 (China Works, Stoke-Upon Trent.) Also, The Campbell Brick and Tile Co.'s  
**ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS, ETC.**  
 For Churches, Banks, Halls, Vestibules, and Hearths; Outside Decorations, Flower Boxes, Etc.  
**THOS. ASPINWALL & SON,**  
 604 Broadway, NEW YORK.  
 The only representatives in the United States for the above firms.

**ASPHALT (FELT) ROOFING.**  
**WARREN'S NEW PATENT FELT AND GRAVEL ROOFING,**  
 Substitutes NATIVE ASPHALT for Coal-Tar materials for these roofs.  
 The very best and most durable material for flat roofs. Also, Native Asphalt and Asphaltic Cement for Concrete Walks and Pavements.  
 Roofers and pavers supplied with the above, and with Warren's original Coal Tar Roofing and Paving Materials.  
 Send for circulars and samples.  
**WARREN CHEMICAL AND MANUF'G CO.,**  
 20 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**TILES FROM ALL PARTS OF THE WORLD,**  
 FOR  
 BANKS, PUBLIC BUILDINGS, AND PRIVATE HOUSES.  
 References given to Tile Work throughout the United States and British Provinces  
 AGENT FOR THE AMERICAN ROOFING TILE  
 Contracts Solicited  
**O. A. WELLINGTON, HOUSEHOLD ART ROOMS,**  
 No. 171 TREMONT STREET, BOSTON.

**HUGH SISSON & SON,**  
 Importers, Dealers, and Manufacturers of  
**MARBLE.**  
 INTERIOR MARBLE WORK AND MONUMENTAL WORK A SPECIALTY  
 Salesrooms, No. 140 W. Baltimore St.: Steam Marble Works, North and Monument Streets,  
 BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS, SPEAKING TUBES, AND BURGALAR ALARMS,**  
 For Public and Private Buildings:  
 THE BEST IN USE.  
**S. W. FULLER,**  
 63 Devonshire Street, Boston.

**HAWTHORNE & TUCKER,**  
 PLUMBERS,  
 16 PROVINCE STREET, BOSTON.  
 Estimates for Plumbing made, and work done in any part of the United States or Provinces.

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY**  
 OF NEW YORK.

LEONARD F. BECKWITH, Pres't. E. GILLET, Vice-Pres't.  
 Hollow Blocks of any pattern, uniting strength and resistance to fire and water. The Hydraulic Lime of Tell (France), one of the strongest cements known, is largely used in this manufacture. The blocks do not conduct heat, cold, or sound, and weigh 60 per cent less than brick. Fire-proof Partitions, Floor Arches between iron or wooden beams, and ceilings under iron or wooden beams, erected in following buildings:  
 Western Union Telegraph, Orient, and Queens' Ins. Museum of Natural Hist. Hudson R. R. Fr. Depot. Windsor, & W'm'ster Hotels, Cluny, & Young's Hotel, Bos'n, Syracuse Savings Bank, West Point Military Hosp. Columbia College, Tribune, Coryell, & Vancorlear Flats, Baltimore Safe Deposit Co. Peabody Inst., Baltimore. Peabody Museum, N. Haven, Westmoreland, & Elise Flats, Sidewalks laid at Lenox Library, Tribune, etc.  
 Hollow Burnt Clay Bricks, for flat and curved arches, partitions, etc., and Skewbacks for brick arches.  
 Sole agents for the U. S. for HYDRAULIC LIME OF TELL, and LAFARGE PORTLAND CEMENT.  
 Sole agents for the U. S. for METTLACH ENCAUSTIC TILES, laid in Tribune, Staats Zeitung, Mineral Spa, Central Park, Belvidere Hotel, etc.  
 Sole agents for the Atlantic States for WIGHT'S FIRE-PROOF COLUMNS.

Our Fire-proof work is the only one approved by the New York Board of Fire Underwriters and the Superintendent of Buildings, after severe public tests.  
 Office Room 54 GOAL AND IRON EXCHANGE, 21 Courtlandt Street, New York. Represented in Boston by  
**BOORMAN & CO., 5 DOANE ST.**

**AMERICAN ENCAUSTIC TILE,**  
 Acknowledged by experts to be  
**THE BEST IN THE WORLD.**  
 Manufactured by the  
**AMERICAN ENCAUSTIC TILING CO. (Limited.)**  
 OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.  
 Designs and estimates for Public Buildings, Halls, Churches, Vestibules, and for External Decoration, furnished on application.

**E. HOWARD & CO.**  
 MANUFACTURERS OF CLOCKS AND WATCHES  
**CLOCKS FOR PUBLIC BUILDINGS**  
 14 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**  
**PLAIN AND ENCAUSTIC**  
 FOR PUBLIC BUILDINGS AND DWELLINGS,  
 AS LAID BY US IN  
**THE CAPITOL AT WASHINGTON,**  
 And in numerous Churches, Banks, and Dwellings in every part of the Country,  
 Glazed and Enamelled Tiles for Mantels, Hearths, Wainscoting, &c., and for Exterior Decoration.  
**MILLER & COATES,**  
 70 PEARL STREET NEW YORK.

**THE NEW ENGLAND GRANITE WORKS**  
**HARTFORD, CONN., and 1321 BROADWAY, N.Y.**  
 Quarries at Westery, R.I.  
**MONUMENTAL AND BUILDING WORK**  
 of every description, all the varieties of AMERICAN AND FOREIGN GRANITE.  
 UNEQUALLED FACILITIES OFFERED TO THE TRADE.  
**J. G. BATTERSON, Pres't. H. R. BATTERSON, Sec'y.**  
 DIRECTORS:  
**J. G. BATTERSON, C. B. CANFIELD, H. A. BATTERSON**  
**G. T. BATTERSON,**  
**CARL COSBARD, Sculptor.**

**WHITTIER MACHINE CO.**  
 Manufacturers of Steam and Hydraulic  
**ELEVATORS,**  
**STEAM ENGINES, BOILERS, AND MACHINERY.**  
 No. 1176 Tremont Street, Boston.  
 Office in the New England Mutual Life Insurance Co's Building, Post Office Square, and 120 Broadway, New York  
**CHARLES WHITTIER, Pres. A. C. WHITTIER, Treas.**

**OTIS BROTHERS & CO.**  
**SAFETY STEAM AND HYDRAULIC ELEVATORS.**  
 A specialty for a quarter of a century.  
**BUILDERS OF THE HALE HYDRAULIC ELEVATOR.**  
 No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**  
**OHIO BUILDING STONE.**  
 GRIND AND SCOTCH STONE,  
 From our FLORENCE and AMHERST QUARRIES.  
 Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS  
 111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**  
 Designers and Manufacturers of  
**GAS FIXTURES,**  
**ORNAMENTAL METAL WORK, CLOCKS AND BRONZE ARCHITECTS' ORDERS SOLICITED.**  
 Special designs submitted on application.  
**WAREHOUSES, 838 AND 838 BROADWAY, NEW YORK. MANUFACTORY, 24th and 25th Sts., and 10th AVENUE, N. Y.**

**FISHER & BIRD,**  
 Workers in all kinds of Foreign and Domestic  
**MARBLES,**  
 97 to 103 EAST HOUSTON ST., NEW YORK.  
 Established 1830.  
 Among our notable decorations are: The Illinois New State House; Palace Hotel, San Francisco; Baldwin's Hotel, San Francisco; Insurance Building, 10th and Chestnut Streets, Philadelphia; Mutual Life Insurance Building, Boston; Orient Mutual Insurance Building, New York; Union College, Schenectady; and numerous Churches, Private Residences, etc., etc., throughout the country. We solicit the opportunity to estimate upon all classes of work, viz., Tiling, Wainscoting, Staircases, Mantels, etc. Cementary work and marble work of every description.

**WILSON & HUGHES STONE CO.**  
 Are ready to estimate on contracts of any size for furnishing their celebrated Amherst, Ohio,  
**BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS OR CUT AND SET.**  
 Also,  
**AMHERST AND INDEPENDENCE GRINDSTONES, AND OHIO MINERAL AND STONE PAINTS**  
 Fire-Proof Stove Cement and Stove Putty ground in Oil  
 OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MOSAICS."** Floor Tiles, beautiful in color and design, for Dwellings, Churches, and Public Buildings.  
**SPANISH WALL TILES.** White, Glazed, Valencia, Tiles for Walls and for decorative painting.  
**PRINTED FIGURED TILES** of Spanish designs, for Wainscoting, Mantels, Jardinières, etc.  
 Floors of "Nolla Mosaics" can be seen at the "Rockingham," corner of Broadway and 86th Street. Imported and for sale by **JOHN CHADWICK, Sole Ag't for U. S.,** 49 Broadway, N. Y.  
**C. E. PARKER, Agent, 14 Exchange Place, Boston.**

**TUFTS' ELEVATOR WORKS,**  
 MANUFACTURERS OF "TUFTS' PATENT" COMBINATION ROPE ELEVATOR,  
 TO BE OPERATED EITHER BY STEAM OR WATER.  
 The only safe and reliable machine made for Passenger use in Public Buildings and Hotels, and for business purposes in Warehouses, Stores, &c.  
**37 FOUNDRY STREET, SOUTH BOSTON.**  
**OTIS TUFTS, L. A. HIGHLOW,**  
 President. Treas'r and Gen'l Managers.

**STEAM WARMING APPARATUS.**  
**HIGH AND LOW PRESSURE.**  
**HOUSE WARMING A SPECIALTY.**  
 Pamphlet with more than 1,000 references sent on application.  
**WYLLIS H. WARNER,**  
 114 LEONARD STREET, NEW YORK,  
 and 23 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**  
 No. 6 COURTLAND ST., NEW YORK.  
 Works at Paterson, N.J.  
**PATENT SAFETY STEAM ELEVATORS**  
 for Public and Bank Buildings, Hotels, Private Dwellings, etc.  
**SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP GUARANTEED.**  
 Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "HEALTH" AND "TUBULAR"  
Manufactured by the

**GOLD'S HEATER MANUFACTURING CO.**  
114 LEONARD ST., NEW YORK.

Send for Pamphlet.

F. GOLD, Pres't WYLLIS H. WAENER, Treas'r

**MINTON'S ENCAUSTIC TILES.**

**SHARPLESS & WATTS,**

1325 Market St., Philadelphia,  
ESTABLISHED 1860 AS AGENTS FOR

Minton's Tiles and Tesselated Pavements.

Specialties in Glazed, Encaustic, Majolica, and Art Painted Tiles, for Furniture, Hearths, Fireplaces, etc. New and original designs continually received.

**J. H. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue, Mattapan (Ward 24), Boston.

**MENEELY & KIMBERLY,**

Bell Founders, Troy, N. Y.,

Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT-HOUSE BELLS. Illustrated Catalogue sent free.

**JOHN MACK,** Plain and Ornamental Plasterer.  
41 Cambridge Street, Boston.

**MANTELS AND GRATES.**

**RANKIN'S PATENT** makes the Cleanest, Cheap est, and Hottest Fire. Avoid infringements, and send for Circular to

**C. S. RANKIN & CO.,**

**ARCHITECTURAL IRON WORKS,**  
Manufacturers of all kinds of Iron Work for BUILDINGS, JAILS, ETC.

187 W. PEARL ST., CINCINNATI, O.  
**BUILDING MARBLE.**

Branch yard of the RUTLAND MARBLE CO., 198 Cauway Street, Boston. JOHN D. ALLAN, Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Rio and and Continental Marble, furnished at low prices.

**PRESSED BRICK.**

STOCK AND COMMON

MANUFACTURED BY

**FLETCHER & THOMAS,**

Indianapolis, Ind

All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY

**GILLIS & GEOGHEGAN,**

Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 50th St. and 5th Av.; Drexel Building, cor Wall and Broad; Bennett Building, Fulton and Nassau, etc.

Architects and owners promptly furnished with specifications and estimates.

**ROBERT LOGAN,**

Importer and Dealer in Foreign and Domestic Granite Monuments, Columns, etc.

Also, GRANITE FOR BUILDING PURPOSES, And Encaustic and Marble Tiling.

129 FULTON STREET . . . NEW YORK.

**ARCHITECTS.**

**P. B. WIGHT,**

CONSULTING ARCHITECT,

78 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.

Consultations on matters pertaining to Fire-Proof Construction, Foundations, Drainage, Sanitary Work, Ventilation, Machinery, Valuations, Interior Decorations, and Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**

ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E.,** ARCHITECT  
AND SANITARY ENGINEER  
KINGSTON, N. Y.

Plans, Specifications, and Estimates furnished for all classes of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,**

ARCHITECT,

Room 17, Life Insurance Building,  
ST. LOUIS, MO.

Special attention to Churches, Schools, and other public buildings.

WALTER  
DICKSON,

ARCHITECT,  
Albany, N. Y.

FERRY  
BUILDING.

**SANITARY ENGINEERING.**

**EDWARD S. PHILBRICK, C. E.,**

13 WEST ST., BOSTON, MASS.

Offers advice and superintendence in

CONSTRUCTION OF WORKS,

IN PUMPS, DRAINAGE, AND VENTILATION.

And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
837 HARRISON AVENUE . . . BOSTON,  
SHEET METAL CORNICES, HAYES'S PAT-  
ENT VENTILATING SKY-LIGHTS,  
WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

**EXCELSIOR  
ROOF PAINT.**

This paint has been thoroughly tested throughout the Eastern States, and has been found to be a perfect tin or metallic preserver. We warrant it neither to crack nor blister by **HEAT or COLD**, and to last

**IN ANY CLIMATE TEN YEARS.**

Those desiring to use this valuable preparation upon their buildings, can secure the same by addressing

**C. M. WHEELER, J. M. ROOT,**  
Toledo, Ohio.

**IRON STABLE FITTINGS.** BUBIER & CO.  
23 Exchange St. BOSTON.

**PATENTS.**

**F. A. LEHMANN,** Solicitor of Patents, Washington, D. C.  
NO PATENT NO PAY. Send for Circular.

**FIRE ON THE HEARTH  
STOVES & HEATERS.**

COMBINATION OF

**FIRE-PLACE, CLOSE STOVE, AND FURNACE.**

The attention of Architects and Builders is especially invited to our new

**FIRE-PLACE HEATERS,**  
Adapted for the use of any kind of fuel, and the only heater especially adapted for the use of **SOFT COAL** and **WOOD.** Send for description to

**THE OPEN STOVE VENTILATING CO.,**  
115 Fulton St., New York.

**DECORATORS.**

**W. J. MCPHERSON,**

(Established A.D. 1845.)

**MURAL PAINTER,**

**DESIGNER,**

**Ecclesiastical Decorator,**

AND

**ART STAINED GLASS MANUFACTURER,**

440 TREMONT STREET,

**BOSTON, MASS.**

Should you want Ornamental Glass, write for particulars to



**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the subscriber to produce Modern and Medieval styles of work equal to any European examples, for Churches, Private Residences, Halls, etc.

The value of the work is attained by a careful selection of colors in Cathedral and French Glass of his own importation.

Designs in accord with architects' plans furnished at short notice. Reference of work at office

**SAMUEL WEST, 115 Eliot St., Boston**

**FRANK HILL SMITH,**

1117 TREMONT STREET,

BOSTON . . . . . MASS.

**COOK, REDDING & CO.**

149 CONGRESS ST., BOSTON,

**Ornamental, Stained, and Cut Glass,**

FOR

**Churches, Public Buildings, and  
Private Residences.**

**DECORATORS.**

**JOHN LAFARGE,**

**MURAL DECORATION,**

51 W. Tenth St., New York and Newport, R. I.

**Society of Decorative Art,**

34 East 19th Street,

**NEW YORK.**

The Society is prepared to undertake every kind of

**DECORATIVE NEEDLEWORK,**

And special attention is paid to the RESTORATION of

**ANTIQUE EMBROIDERY.**

Special terms are made and careful estimates given to

**ARTISTS, ARCHITECTS, AND DECORATORS**

Generally, who are assured that their designs will be carefully reproduced, and their directions carefully followed

Orders are earnestly solicited.

**Fresco Decoration.**

**EMMART & QUARTLEY,**

Designers, Decorators, and Painters,

32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate work on hand or made to order. No. 1210 Ridge Avenue. JOSEPH S. MILLER, successor to Wilson & Miller, Philadelphia, Pa. Send for Illustrated Price-List

**Donald MacDonald,**

**GLASS STAINER AND DECORATOR**

No. 6 Hayward Place,

**BOSTON**



**INLAID WOOD FLOORS.**

**ORNAMENTAL WOOD BORDERS**

Designs and Estimates free.

**National Wood Manuf'g Co.,**

850 Broadway, near 23d St., New York

**PHILIP A. BUTLER,**

DECORATOR AND DESIGNER,

No. 17 PRIBBON SQ.,

**BOSTON.**

**HENRY B. JONES & CO.**

IMPORTERS, JOBBERS, AND RETAILERS OF

PAPER HANGINGS.

612 WASHINGTON STREET, BOSTON.

(Established 1848.)

**L. HABERSTROH & SON,**

FRESCO PAINTERS,  
and INTERIOR DECORATORS,

No. 12 SCHOOL STREET, BOSTON.

*Raphael and Michelangelo.*

A Critical and Biographical Essay. By CHARLES C. PERKINS. 8vo. Many illustrations, including several Heliotypes. \$5.00.

The long devotion of Mr Perkins to the study of art has borne noble fruit in this beautiful volume. The idea of combining in one work a series of interlinked sketches of the two great representative artists of the age of Julius II. and Leo X. was in every respect fortunate; for they respectively illustrate power and beauty, sportive and earnest labor, as no other contemporaries. . . . His style is that of a scholar and a man of taste—simple, lucid, graceful, and even throughout. It has much of the quality of that of Hermann Grimm, in his two similar biographies. The profuse illustrations—although some of them are rather coarsely printed—are a positive boon to the reader.—New York Tribune.

**HOUGHTON, OSGOOD & CO., Boston.**

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa. (Can.)	Philadelphia.	San Francisco	St. Louis.
1 BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50	.....	2.25 @ 2.50
2 Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50	3.50 @ 4.50	3.00 @ 3.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00	.....	3.00
3 CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	1.50 @ 2.00	1.50 @ 2.00	1.50 @ 2.00	.....	1.50 @ 2.00
4 Cabinet Maker	2.50 @ 3.25	.....	1.50 @ 2.00	.....	1.50 @ 2.00	1.50 @ 3.00	1.25 @ 1.75	.....	.....	1.50 @ 2.00
5 Finisher	2.00 @ 2.50	.....	1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50	.....	.....	2.25 @ 2.50
6 FOUNDRYMAN	.....	.....	1.50 @ 2.00	1.50 @ 2.50	.....	2.00 @ 2.50	1.25 @ 2.00	.....	.....	1.50 @ 2.50
7 Blacksmith	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50	.....	2.00 @ 2.50	1.25 @ 2.00	.....	.....	1.50 @ 2.50
8 Whitesmith	.....	.....	1.50 @ 2.00	1.50 @ 2.50	.....	2.00 @ 2.50	1.25 @ 1.75	.....	.....	.....
9 Galvanized Iron Worker	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00	.....	.....	.....
10 GAS FITTER	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00	.....	.....	2.00 @ 3.00
11 LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50	.....	2.00 @ 2.00
12 PAINTER	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.25	1.75 @ 2.25	1.50 @ 2.25	1.00 @ 1.75	2.00 @ 2.50	.....	2.00 @ 2.50
13 Glazier	.....	2.00 @ 2.50	1.75 @ 2.00	.....	.....	1.50 @ 2.00	1.50 @ 1.75	.....	.....	.....
14 Grainger	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00	.....	1.50 @ 2.00	1.75 @ 2.50	.....	.....	.....
15 Paper-Hanger	.....	.....	1.50 @ 2.00	.....	.....	2.00 @ 2.50	1.50 @ 2.00	.....	.....	.....
16 PLASTERER	.....	.....	1.75 @ 2.00	.....	.....	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00	.....	.....
17 Stucco-Worker	.....	.....	2.00 @ 2.25	1.50 @ 2.50	.....	2.00 @ 2.50	1.50 @ 2.25	.....	.....	.....
18 PLUMBER	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.50	2.50 @ 3.50	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50	.....	.....	.....
19 QUARRYMAN	2.25 @ 3.00	3.00 @ 3.50	1.10 @ 1.25	.....	.....	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75	.....	3.50
20 Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25	.....	2.50 @ 3.50
21 Carver	.....	3.00	2.50 @ 3.00	1.25 @ 1.75	.....	3.00	2.00 @ 2.50	3.50 @ 6.00	.....	1.50 @ 1.75
22 Pointers and Washers	.....	2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75	.....	1.50 @ 2.50	1.00 @ 1.25	2.25 @ 2.50	.....	.....
23 Rubber	1.50 @ 2.00	1.75	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75	.....	.....
24 Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	.....	2.50	2.00 @ 3.00	2.25 @ 2.75	.....	.....
25 Stone-Setter	.....	3.00	2.00 @ 2.50	2.50 @ 3.00	.....	2.75	2.00 @ 2.50	2.25 @ 2.75	.....	2.00 @ 2.50
26 ROOFER (Tin)	2.00 @ 2.35	2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25	.....	2.00 @ 2.25
27 Slater	.....	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25	.....	.....	3.00
28 STAIR BUILDER	2.25 @ 3.00	.....	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00	.....	.....	1.50 @ 2.50
29 STEAM FITTER	.....	2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00	.....	.....	2.00 @ 3.00

The Automatic Fire Alarm Telegraph

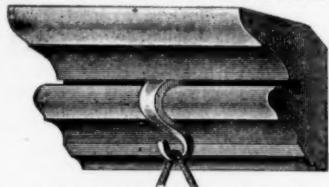
IS OPERATED BY THE HEAT OF THE FIRE. The apparatus is placed on the ceiling of every room, office, and closet in the building, so that a fire can in no instance be more than fifteen or twenty feet from it. It can be adapted to all temperatures. The alarm is almost instantaneous. It is given directly to the Fire and Protection companies and to the City Fire Alarm Office. It may also be given in the building protected. It may be given by hand. It tells the Department the exact location of the fire before the companies leave their stations, thus preventing the delay and loss caused by breaking into rooms where there is no fire. A break in the wire instantly signals itself; but, by a combination of the metallic and earth circuits, does not prevent an alarm of fire, even while the wire is broken. An incendiary cannot, therefore, prevent an alarm by cutting the line.

The Automatic Fire Alarm Telegraph Prevents the possibility of a large loss.

It saves the drenching a building with water. It saves the breaking up of business. It saves the loss of contracts and customers. It saves insurance. It saves a watchman. It saves the books, and the many other losses that insurance never covers. The returns of the New York Patrol Committee show that the loss by fires originating in buildings equipped with the AUTOMATIC TELEGRAPH has been diminished over 75 per cent. by the use of this system. Company's Office: 178 Devonshire St., Room 20, Where the apparatus can be seen. C. E. GUILD, Pres. P. T. JACKSON, Treas.

BAKER'S

Combined Cornice and Picture Rod Moulding.



(Patented in the United States and Dominion of Canada, 1877.) For Hanging Pictures, etc. FOR SALE BY F. P. BAKER. The only Agent in the U. S. and Canada, 84 BEVERLY STREET . . . BOSTON.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited. GALVANIZED IRON CORNICES. Send for Illustrated Catalogues. Estimates furnished on application. HAYES'S PATENT SKY-LIGHTS. All work warranted. CORRUGATED IRON CEILINGS. Contracts taken in any part of the United States. Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled. A. KNISELY & CO., 72 & 74 West Monroe St. Chicago, Ill.



MORTON'S

Copper and Iron SASH CHAIN, PATENTED

Aug. 15, 1871.

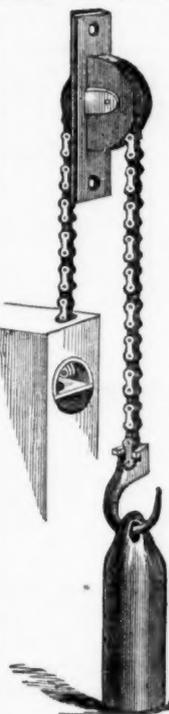
I would call the attention of Architects and Builders to my

SASH CHAIN, Manufactured from the best NORWAY IRON.

This Chain is stronger and cheaper than the copper, and will last as long; all that is necessary is to paint the Chain the same color as the frame.

For terms and further information apply to

THOS. S. MORTON, 63 ELIZABETH ST., NEW YORK CITY.



TO ARCHITECTS AND BUILDERS.

MORTAR BLACK,

Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar. For sale only by Walpole Color and Chemical Works, HENRY D. DUPEE, Proprietor, 79 KILBY STREET, BOSTON

AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT. MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS. Regular Sizes, 2, 3, 4, 5 & 6 Inch. SPECIAL SIZES MANUFACTURED TO ORDER. AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS. 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA. WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH. PRINCIPAL AGENTS: M. Halliday, H. & Badger, James Berry, George W. Pitkin & Co., Wasson & Martin, McLeod, Beardon & Co., W. H. Scott, Kittredge Cornice Co., J. W. Jordan, H. G. Carpenter & Co., T. W. Irwin, Sollow & Co., New York City, Boston, Mass, Buffalo, N. Y., Chicago, Ill., Albany, N. Y., Troy, N. Y., Portland, Me., Salem, O., Worcester, Mass., Wilkesbarre, Penn., Alleghany City, Penn., Cincinnati, Ohio.

W. & J. SLOANE,

IMPORTERS OF

FINE CARPETS AND RUGS

FROM

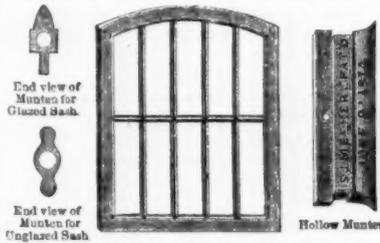
INDIA, PERSIA, RUSSIA, SMYRNA, and TURKEY.

649, 651, 655 BROADWAY, NEW YORK.

D. M. MEEKER & SON'S

Malleable Iron Hollow Munten Window Sash.

For Insane Hospitals, Fire Proof Buildings, &c.



The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

D. M. MEEKER & SON, Newark, N.J.

Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

THE COWLES HARDWARE CO. UNIONVILLE, CONN., U. S. A.

MANUFACTURERS OF

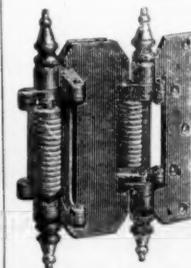
(GEER'S)

Single & Double Acting SPRING BUTTS. The Latest and Best.

Investigate before you purchase

Read the following points of superiority:—

These Spring Butts differ in principle from all others; having a Spiral Spring for power, and Toggles for Levers in combination, and when applied to the leaves of the Butts, Exert their greatest Power when the door is closed, and are the only Butts in existence that will by actual test perform the labor claimed for them. They offer less resistance the wider the door is opened, until a point past the right angle is reached, where the power is reversed and the door held open. They will not allow the door to sag. Send for Price Lists.



Patented July 10th 1877

NONESUCH Self-Locking

Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.



# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIAEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. P'ANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist*, Boston.

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courant.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVES. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIÉNARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11¼ X 15¼ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASOX, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOthic FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOLETTE-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

The works of the learned and distinguished French Architect, EUGENE VIOLETTE-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

## Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — *EUGENE BENSON, in The College Courant.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

## The New York Sketch-Book of Architecture.

3 vols., 4to, \$6.50 each.

We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

## The American Architect and Building News.

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\*.\* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers.

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

(Reported for the American Architect and Building News.)

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, PALE, JERSEY, LONG ISLAND, UP-RIVER, HAYSTACK, and HAYSTACK.

Table listing prices for CEMENT, including Rosendale, Portland (Imported), Portland (Saylor's American), Roman, Keene's coarse, and Keene's fine.

Table listing prices for FIRE BRICK, including Red Welsh, Scotch, and American.

Table listing prices for DOORS, including Raised Panels, two Sides, and Moulded.

Table listing prices for BLINDS, including Per lineal, up to 2.10 wide, and Inside.

Table listing prices for WINDOW FRAMES, including Hair and Lath.

Table listing prices for LIME, including state, common, cargo rate, and Rockland.

Table listing prices for LUMBER, including Pine, choice, extra dr, and various other types.

Table listing prices for PAINTS AND OILS, including Whiting, Paris white, English, and Zinc white.

Table listing prices for AXLE PULLEYS, SASH WEIGHTS, SASH LINE, and BEST HEMP.

Table listing prices for DOOR BUTTS, including Japanned Acorn and Plain Ironed Iron.

Table listing prices for STONE, including Amherst freestone, Berlin freestone, Berea freestone, and others.

Table listing prices for SLATE, including Purple roofing slate, Green slate, and Red slate.

Table listing prices for TIN PLATES, including C. charcoal, I. C. coke, and others.

Table listing prices for LEAD, including Bar, Sheet, and Pipe.

BOSTON.

Table listing prices for FIRE BRICK, including Waldo Bros Extra, Waldo Bros No. 2, and others.

Table listing prices for BUILDING BRICKS, including Eastern and Bay State.

Table listing prices for BUILDING STONE, including Rutland Marble and Michigan pine.

Table listing prices for LUMBER, including Michigan pine, Saps, and various other types.

Table listing prices for PAINTS AND OILS, including Paris white, English, and Zinc white.

LIME.

CEMENT.

Table listing prices for CEMENT, including Rosendale, Portland (Imported), and others.

NAILS.

AXLE PULLEYS - Steel.

SASH WEIGHTS.

SASH LINE.

BEST HEMP.

DOOR BUTTS.

Table listing prices for MORTISE LOCKS, including Brass face and Boston make.

DOOR KNOBS.

SASH FASTS.

SCREWS.

STORE DOOR HANDLES.

IRON.

Wrought Iron Beams.

Wrought Iron Plates.

Wrought Iron Rivets.

CHICAGO.

BRICK, LIME, AND CEMENT.

LUMBER (MICHIGAN PINE).

Table listing prices for LUMBER (MICHIGAN PINE), including 1st and 2d clear, 1 to 2-in., and others.

Table listing prices for HARDWOOD LUMBER, including Whitewood, clear, and others.

Table listing prices for PAINTS AND OILS, including Paris white, English, and Zinc white.

LIME.

CEMENT.

NAILS.

AXLE PULLEYS - Steel.

SASH WEIGHTS.

SASH LINE.

BEST HEMP.

DOOR BUTTS.

Table listing prices for I C roofing, X roofing, and others.

SOLDER.

LEAD.

COPPER.

SHEET ZINC.

SHEET IRON.

PAINTS AND COLORS.

OILS.

PHILADELPHIA.

WHOLESALE PRICES.

IRON.

NAILS.

LEAD.

LUMBER.

PAINTS AND OILS.

LIME.

CEMENT.

NAILS.

AXLE PULLEYS - Steel.

SASH WEIGHTS.

SASH LINE.

BEST HEMP.

DOOR BUTTS.

TINNERS' STOCK.

ZINC.

PAINTS AND OILS.

TIN.

A Word to Manufacturing Firms.

Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms. They recommend, on their own account, and for the sake of the public, that such firms advertise in this paper.

Inventors and manufacturers of Steam Heating Apparatus, Hot Air Furnaces, etc., should not fail to advertise in the paper which prints a weekly list of all the new buildings projected in the country, and a record of important ones being built.

The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

TO ADVERTISERS.

The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

## Bound Volumes of the American Architect.

We are prepared to fill orders for binding the *American Architect and Building News* in styles similar to the volume for 1876, at the following rates:—

Price of cover without binding.....	\$1.00
Cover and binding (for subscribers).....	2.00
Numbers of 1876 or 1877 without cover and binding.....	7.50
Bound volumes of 1876 or 1877.....	9.00

In sending volumes to be bound it should be stated whether the illustrations are to be bound with their respective numbers, or whether all illustrations are to be placed together at the end of the volume.

N. B.— Volumes bound in both styles are kept in stock.

The above will be sent, post paid. Subscribers sending their numbers to be bound will prepay postage or express charges.

HOUGHTON, OSGOOD & CO., PUBLISHERS,  
Winthrop Square, Boston.

ESTABLISHED 1836.

## JOHN FARQUHAR'S SONS, SLATE, METAL, AND COMPOSITION ROOFERS, NOS. 20 AND 22 EAST STREET, BOSTON.

Order Box, No. 83 Mechanics Exchange, No. 35 Hawley Street.

Agents for Warren's Patent Natural Asphalt Roofing. Special attention given to repairs of all kinds of Roofing.

*Inventors and Owners of the following Patents:* FIRST. Patent Fastener for securing Slates or other covering to Iron Purlines where the roof is wholly of Iron. SECOND. A Roof composed of Wooden Rafters encased in Asbestos, Sheet Metal or other fire-proof material, to which Iron Purlines are fastened, and the slates or other covering secured by our Patent Fastener. The slates are then rendered underside with hair mortar or any other material. The object intended being a Light Fire-proof Roof, avoiding all condensation and preventing leakage.

### EASTERN ROOFING SLATES

FROM MONSON AND BROWNVILLE, MAINE.

## CLEMENT, HIGBEE & CO.

GENERAL AGENTS,

Piper's Wharf, 474 Atlantic Avenue,  
BOSTON, MASS.

These Maine Slates are the best and cheapest in the market They are also the strongest, smoothest, and most uniform, and the only perfectly unfading slate in the world.

- B** Studies in Design, for Manufacturers, Architects, Builders, Designers, House Decorators, etc. By CHRISTOPHER DRESSER, Ph. D., F. L. S., F. E. B. S., consisting of Sixty Original Designs, elaborately produced in combined Colors, and in Gold and Colors; with Descriptive Letterpress, and 20 Chapters on Principles of Designing. In handsome cloth binding, folio, \$25.00. The present work is submitted to those who desire to decorate houses in a manner that shall reveal their knowledge; but it will be most useful to that man who can use the ideas as aids to his own mind, give to the forms set forth new features and individuality of expression, throwing aside all that in his judgment is not true and right. "The plates which are lithographed in gold and colors by A. Gousses, Nottingham, England, should be in the hands of all decorative artists."—*Glasgow Herald*.
- O** Principles of Ornamental Art. By F. EDWARD HULME, F. L. S., F. S. A., author of "Plants, their Natural Growth and Ornamental Treatment," "Freeland Ornament," etc. With 32 Plates, containing 431 Illustrations. Royal 4to, cloth, \$10.00.
- O** Principles of Decorative Design. By CHRISTOPHER DRESSER, Ph. D. Illustrated with two Colored Plates and numerous Designs and Diagrams. Extra crown 4to, cloth, gilt, \$3.50.
- O** Sketching from Nature in Water-Colors. By AARON PENLEY. With Illustrations in Chromo-Lithography, after original water color drawings. Super-royal 4to, cloth, gilt, \$7.50. A very attractive as well as a very useful volume, indispensable to all learners, and of much service to advanced practitioners in the art.—*Art Journal*
- S** Sepia Painting, A Course of. With 24 Plates in Sepia, from Designs by R. P. LEITCH, and full instructions to the learner. Oblong 4to, cloth, \$2.50. Those who wish to see sepia painting thoroughly well treated in respect to form, color, light, and shade, and the best method of producing effect with ease of manner, will do themselves a kindness by consulting these pages.—*Standard* (English).
- K** Water-Color Painting, A Course of. With 24 Colored Plates, by R. P. LEITCH, and full instructions to the learner. Oblong 4to, cloth, \$2.50. The "Water-color" illustrations alone are worth treble the cost of the volume, and the printed instructions are concise and clear.—*Birmingham Post*
- S** Painting in Neutral Tint, A Course of. With 24 Plates in Neutral Tint, by R. P. LEITCH, and full instructions to the learner. Oblong 4to, cloth, \$2.50. The directions to the students are ample, and the twenty-four plates are admirably varied for the purposes to which they are devoted.—*Daily News* (English). If not for sale by your bookseller we will send, prepaid, on receipt of price.

CASSELL, PETTER &amp; GALPIN, 590 Broadway, New York.

## THE AMERICAN ARCHITECT AND BUILDING NEWS SENT FREE!

We send Free the Nos. for November and December, 1878, to new subscribers paying before December 15, 1878.

## BUILDERS AND MECHANICS

In search of a trade paper will do well to weigh the fact that in the first six months of this year we published fine illustrations of

24 Country Houses,	13 Churches,	10 Staircases,	4 Details,	2 Bridges,
9 City Houses,	5 Cathedrals,	9 Wall Decorations,	2 Tombs,	1 Police Station,
4 Hospital Buildings,	5 Church Interiors,	7 Bay-Windows,	2 Fountains,	1 Engine House,
4 School Buildings,	2 Hotels,	4 Furniture,	1 Shop Arcade,	1 Market House,
3 Library Buildings,	1 Court House,	1 City Hall,	1 Cemetery Gateway,	1 Stable,
2 Insurance Buildings,	1 Opera House,	1 State Prison,	1 Castle,	1 Studio.
4 Stores,	1 Music Hall,			

Besides perspective diagrams, foreign sketches, and numerous cuts illustrating building appliances. Terms \$6.00 per year. Send for specimen copy. Remittances to be made by check, draft, or money-order to the Publishers, HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON.

25 PER CENT. OF CUSTOMARY OUTLAY CAN BE SAVED BY USE OF

## H. W. JOHNS' ASBESTOS LIQUID PAINTS

Pure, Undiluted Paints, Full Body, and Full U. S. Standard Measure.

No other Paints for structural purposes equal these in quality, richness of color, covering capacity, and durability. Sample cards free by mail. ROOF PAINTS for Tin Roofs, Iron Work, etc. FIREPROOF PAINTS for Inside Woodwork.

H. W. JOHNS M'FG CO., 87 Maiden Lane, New York,  
Manufacturers of Asbestos Roofing, Boiler Coverings, Sheathings, Cements, etc.

## TO ARCHITECTS.

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the SCAGLIOLA AND MAREZZO MARBLE, which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall, and Altar Work. JAS. T. ALLEN & CO., 25 North Market Street, Philadelphia.

## MAKE

GAS GENERATORS,  
FOR LIGHTING  
Dwelling-Houses, Public  
Buildings, Churches, Factories,  
etc., etc.

Send for  
CIRCULAR **your own**

WALWORTH MAT'F CO.  
No. 69 Kilby Street,  
BOSTON, MASS.

**GAS**

CRANE, BREED & COMPANY  
CINCINNATI, O.  
**SAFETY BOILERS**  
FOR  
**STEAM AND HOT WATER**  
MOST ECONOMICAL & RELIABLE METHOD WITH  
AUTOMATIC APPLIANCES, RADIATORS, PIPE  
BOILERS, REGISTERS, FITTINGS, STEAM-PUMPS

THE  
AKRON PIPE

is superior both in quality and finish to any manufactured in this country, and is recommended by architects, engineers, etc., familiar with its merits.



FISKE & COLEMAN,  
New England Agents for

**AKRON**

SEWER PIPE COMPANY,

72 WATER STREET, BOSTON.



**FIRE BRICK,**  
Enameled Brick,  
CHIMNEY TOPS,  
Flag Stones,  
Terra Cotta Goods,  
A full line of  
Fancy Building  
Materials.

## NON-POISONOUS

### SILICATE PAINT

Does not discolor, chalk, or crack off.  
It is superior to lead.

The only cure for damp walls of churches, dwellings, and public buildings, is the

### PETRIFYING LIQUID

See article on "Dwellings of the Poor," AM. ARCHITECT, Sept. 21, 1878.

Send for Price List and Testimonials.

HOWARD FLEMING, Sole Agent in the United States,

10 PINE STREET, NEW YORK.



and Spruce sts.—John Scott, two-sty shop, 20' x 32', Twenty-fourth St.—Chas. McCaul, two-sty dwell., 16' x 40', Eleventh St.—Mrs. M. McHenry, four-sty dwell., 17' x 84', Twenty-seond St.—Robert Connolly, 2 two-sty dwells., 16' x 28', Garrett St.—E. B. Marley, 2 three-sty dwells., 16' x 32', Marilla St.—Thomas Livingston, four-sty store and dwell., 20' x 52', No. 518 South St.

CHURCH-BUILDING.—Plans are now being prepared for the erection by the Society of Emmanuel Church, of a stone building for parish purposes.

HOSPITAL.—The erection of an annex to the Municipal Hospital was awarded to Mr. Hogg, he being the lowest bidder. The committee agreed to recommend to the Board of Health an ordinance requesting of council an appropriation of \$10,000 for free baths on the Schuylkill.

POST OFFICE.—James G. Hill, Supervising Architect of the United States Treasury, in his annual report, says of the new post office building in this city: "The third story will be completed this season. Iron floor beams for the third and fourth stories have been contracted for. The balance of appropriations available on September 30 was \$197,984."

Louisville.

BUILDING PERMITS.—Brick tannery, for Messrs. Wirt & Lamb, on Brent St.—George Scott, frame stable.—Mattie Lucas, frame dwell.—Chas. Platz, frame shed.—Edward Speed, frame dwell.

St. Louis.

BUILDING PERMITS.—Thirty-four permits have been issued for the week ending November 15, 1878, nine of which are for cheap frame structures. Of the rest, those worth \$2,500 and over are as follows:—

Table with 5 columns: Owners, Use, Stories, Rooms, Cost. Lists various building permits with details like 'W. McClean, Dwelling, 2, 8, \$3,000'.

CHURCH.—The contract for finishing the interior of the basement of Dr. Brooks's church was let recently. It is to be completed about January 1, 1879.

General Notes.

BRIDGEPORT, CONN.—House of P. C. Calhoun, Esq., of New York, N. Y., is being remodelled by Gould Bros., builders; cost about \$5,000.

CANTON, MASS.—Mr. F. W. Copeland, of Boston, is the architect of a house for Mr. E. C. Graves. The building measures 38 by 28 feet, is of wood, two stories high, with hip roof. Edw. Shippleigh, of South Boston, is the contractor. Mr. Copeland is also the architect of another dwelling of about the same size and style.

CHARLESTON, S. C.—Work on the national jetties in Charleston Harbor will begin on December 1. The Sullivan Island or north jetty will be constructed first. General Gilmore has been here for some days making arrangements for the transportation of the granite and other material.

CROW CREEK AGENCY, D. T.—G. G. Hudson, postmaster, is building a house, nine rooms; cost about \$3,000; the architects are Palliser, Palliser & Co., Bridgeport, Conn.

COVINGTON, KY.—An appropriation of \$500,000 was made for the construction of the Covington Post Office. The building has been completed, it is said, at a cost of only \$250,000, and thus \$250,000 remains to be covered into the Treasury.

EAST ST. LOUIS, ILL.—The difficulty between the Council and the O. and M. Railway Company, relative to the latter building a round-house on Brooklyn Street, appears to have been amicably adjusted, as the work of building is progressing rapidly, and the council is taking no further action in the premises.

EVERETT, MASS.—A large brick block is now building cor. Everett Square and Chelsea Street, for Messrs. Whittier & Dearborn. The building measures 60 by 75 feet, and is constructed in accordance with the Building Act of the City of Boston. The first floor will be used for stores, the second for offices, and the third will contain a large public hall, measuring about 60 by 65 feet. The masons are Fessenden & Libby. Mr. Geo. F. Wallis, of Boston, is the architect.

FINDLAY, O.—A jail is to be built next season in this town by Mr. J. C. Johnson, architect, of Fremont, O. The style is French Gothic, and the cost will be about \$25,000.

FORT WAYNE, IND.—The building improvements in Fort Wayne the coming season, it is stated, will aggregate \$200,000.

HENRY, ILL.—The foundations for the new elevator are being put in.

JUNKAU, WIS.—The new court-house is very nearly finished, and will probably be delivered to the county during the present session of the board, the entire cost being less than \$24,000.

LITCHFIELD, ILL.—There are six business houses in process of construction on one street in this town.

MAPLE RAPIDS, MICH.—Jas. A. Forman, carpenter, is building for himself a cottage of seven rooms. Palliser, Palliser & Co., Bridgeport, Conn., architects; cost about \$1,500.

MIDDLETOWN, O.—The large building being erected by the Middletown Wood Pulp Company is rapidly approaching completion.

NOBLESVILLE, IND.—Mr. J. C. Johnson, of Fremont, O., is the architect of the new two-story court-house, which is now under roof. The contract was taken by Aaron G. Campfield for \$89,560.

PITTSBURGH, PENN.—The foundation is being prepared for an extension of St. Joseph's convent, as the present building is not sufficiently commodious.

PROVIDENCE, R. I.—The following notices of intention to build have been received: W. Hantton, cor. of Courtland and Carpenter sts.—John Miles, cor. of Power and Ives sts.—D. N. Graffam, cor. of Providence and Dudley sts.—I. E. Pabodie, on Sprague St.—George Livesey, on Pavilion Ave.

PROVIDENCE, R. I.—The Providence Press says: "It is with great satisfaction that the graduates of Brown University and the public of this State will learn that the plans for the new Alumni Hall of the college have been completed and accepted. The erection of this new building has been entrusted to Mr. A. C. Morse, in itself a guaranty that the building will be a work of art and an ornament to College Hill."

RIDGEFIELD, CONN.—Mr. Edgar Smith, carpenter, is building for himself a cottage of five rooms with slate roof. Palliser, Palliser & Co., Bridgeport, Conn., architects; cost \$1,200.

RIVER POINT, R. I.—W. H. R. Whitman, Esq., has a new building ready to plaster on the site of the one destroyed by fire in September. Charles H. Young also has a house well under way near the road leading from Birch Hill to Arctic.

TORONTO, CAN.—The corner-stone of the Church of the Redeemer has been laid. The church will comprise a nave

47 by 93 feet, corresponding transepts, and will seat 850 persons. It is to be in Gothic style, built of stone.

VALLEY FALLS, R. I.—It is thought that this village will soon have a new passenger-station, freight-house, and other accommodations.

VINCENNES, IND.—The Bayard Block, on Main Street, is fast approaching completion. There are several other buildings going up.

WARREN, IND.—The court-house contractors have been notified that no extension of time will be granted them. It must be completed January 1, 1879, or the penalty must be paid. The roof is about one third on, and plastering and floor-laying are going on rapidly.

WACO, TEXAS.—The St. Paul Episcopal Society is now building a Gothic church from designs of Mr. W. P. Wentworth, architect, of Boston, Mass. The building is of wood, and will cost \$10,000.

VALLINGFORD, CONN.—The Rev. Father Mallon has awarded the contract for the brickwork of the new church of the Holy Trinity to Lynch Brothers, of Holyoke, Mass., at the rate of \$5 75 per thousand for brick laid; and the contract for the carpenter work to Patrick Kennedy, of New Haven. The plans for the new building were furnished by Messrs. Brown & Stillson. The building will stand on the stone foundations laid some three years ago, and will be in dimensions about 65 by 150 feet. The work is to be begun immediately, and to progress as fast as the weather will permit. It is proposed to prepare the basement, which will extend under the whole church, for occupancy without delay, leaving the interior of the audience-room above to finish afterward. The walls of the building are of brick, with fine stone finish in the English Gothic style. The building is to be surmounted by a spire resting on a square tower, and extending nearly 180 feet from the ground.

WARREN, MASS.—The new town hall is well under way, and its completion is expected January 1.

WARREN, R. I.—Work on the new building of the Warren Ice Company is being pushed rapidly forward. It will be 40 by 60 feet, and is to be of 2,500 tons capacity.

WINDSOR, CAN.—The owners of buildings now standing on the site of the new government building refuse to remove them, and work is temporarily stopped.

Xenia, O.—The house of J. F. Ely is being altered under the direction of W. R. Brown, architect.

INDEX OF CURRENT WORK,

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

Baltimore, Md.

CHURCH.—The Cummings Memorial Church. Mr. Cassell, architect.
CHURCH.—The Pius IX. Memorial Church. G. A. Frederick, architect. Cost \$100,000.
HOSPITAL.—Johns Hopkins Hospital. J. R. Niernsée, consulting architect.

Boston.

BANK BUILDING.—Tremont Bank Building. Carl Fehmer, architect.
HOTEL.—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.
THE MUSEUM OF FINE ARTS.—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.
SCHOOL-HOUSE.—High and Latin School. G. A. Clough, architect.
ASYLUM.—Asylum for Aged People, C. J. Bateman, architect. Cost \$50,000.

Brooklyn, N. Y.

TENEMENT.—A. T. White, owner. William Field & Son, architects.
SOCIETY BUILDING.—The Long Island Historical Society Building, Mr. G. B. Post, architect. Cost \$100,000.
CHURCH.—St. Francis Xavier B. C. Church, West Fifteenth Street. Cost \$150,000. P. C. Keely, architect.
HOSPITAL.—St. John's Hospital, N. L. Derby, New York, architect.
HOSPITAL.—Hospital of St. Mary, Mr. P. C. Keely, architect. Cost \$200,000.

Cincinnati, O.

U. S. CUSTOM HOUSE AND POST OFFICE.—S. Hannaford, local superintendent.
CHILDREN'S HOME.—J. W. McLaughlin, architect. Cost \$50,000.
NEWSPAPER OFFICE.—The Gazette Building. E. Anderson, architect.
CLUB-HOUSE.—Allemania Club-House. J. W. McLaughlin, architect. Cost \$80,000.
UNIVERSITY BUILDING.—Cincinnati University Building. S. Hannaford, architect. Cost \$50,000.

Cleveland, O.

CONVENT.—Ursuline Academy. I. A. Heard, architect. Cost \$120,000.

Hartford, Conn.

SEMINARY.—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.
CATHEDRAL.—R. C. Cathedral of St. Joseph. P. C. Keely, Brooklyn, architect.
CATHOLIC SCHOOL.—Brown & Stillson, architects New Haven. Cost about \$25,000.

Jersey City.

CONVENT.—Convent of the Sisters of St. Dominick. Cost \$40,000.

New York.

THE "FLORENCE."—Emile Grewé, architect. Mrs. Matthews, owner. Cost \$50,000.
BARGE OFFICE.—Building by the United States Government. Cost \$146,000.

THE BOREEL BUILDING.—S. D. Hatch, architect. Cost \$250,000.
CHURCH.—St. Paul's (R. C.). Mr. J. O'Rourke, architect, Newark, N. J. Cost \$500,000.

St. John, N. B.

POST OFFICE, Custom House, and Savings Bank.—Mr. Scott, Chief Architect to the Dominion Government.
BANK.—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.
CHURCH.—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.
CITY HALL.—Messrs. McKean & Fairweather, architects.
CHAPEL.—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.
CHURCHES.—St. James's Church, Croft & Camp, architects, St. John N. B.—St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$60,000.

St. Louis.

CHURCH.—Second Baptist Church. Edward Hilsley, contractor. Cost \$100,000.
COURT HOUSE for the new county of St. Louis.—F. Renwick, architect. Cost \$28,000.
COLLEGE.—College for the Christian Brothers. Mr. Jas. McGrath, architect. Cost \$200,000.
CUSTOM HOUSE AND POST OFFICE.—Mr. Jas. G. Hill, Supervising Architect of the Treasury Department.

Publishers' Department.

The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY

HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year; \$6.00 in advance.

CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,

WITH

Houghton, Osgood & Co.'s other Periodicals.

Table listing subscription rates for various publications like 'THE ARCHITECT and ATLANTIC MONTHLY', 'THE ARCHITECT and THE REPORTER', etc.

Payments should be made directly to the Publishers, either by draft or by post office order.

HOUGHTON, OSGOOD & CO., Publishers,

WINTHROP SQUARE, BOSTON.

BUILDING SPECIALTIES, Etc.

—Dr. Egbert Guernsey says within the past year they have saved nearly two hundred tons of coal at the Homeopathic Asylum for the Insane at Middletown, N. Y., by use of H. W. Johns' Asbestos Pipe Coverings.

St. Hall & Sons, Manufacturers of Architectural Terra Cotta, Buff and Colored Brick, Fire Brick, Established 1846, South Amboy, N. J.

ARCHITECTURAL IRON WORKS.

YOUNGLOVE & CO., Prop'r's. CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CRESTING, ETC.

Estimates promptly furnished.

(Established 1848.)

MARKET ST. ARCHITECTURAL FOUNDRY

AND

IRON WORKS.

SNEAD & CO.

LOUISVILLE, KY.

Makers of every description of Iron Work for Buildings

OUR ADVERTISERS and others who are in the habit of using business circulars, will find in our columns of "Building Intelligence" a continually new directory of names and addresses of those persons who, being at present actively engaged in building, are the ones who are most desirous of receiving circulars setting forth the advantages and qualities of all classes of building appliances. An hour spent in mailing circulars to the persons mentioned above cannot fail of being profitable to the business man.

PROPOSALS.

BRIDGE.

DEPARTMENT OF CITY WORKS, MUNICIPAL DEPARTMENT BUILDING, BROOKLYN, November 14, 1878.

Sealed proposals will be received at this office until Tuesday, November 23, 1878, at 11 A. M., for rebuilding the Union Avenue Bridge (over Bushwick Creek); also, for building a new bulkhead and for filling said avenue to the new bulkhead.

Plans and specifications may be seen, and forms of proposals can be procured on application at the Department of City Works.

Proposals will not be considered unless accompanied by the deposit aforesaid, and also by an undertaking in writing, of two sureties on each proposal (who shall qualify as to their responsibility in the sum of \$1,000), that if the contract be awarded to the party or parties proposing, they will become bound as his or their surety for its faithful performance; and in case he or they shall neglect or refuse to execute the contract, if so awarded them, that they will pay to the city of Brooklyn the difference between the price so proposed, and the price at which the contract may be made with any other person or persons. Proposals to be indorsed, "To the Board of City Works" (specifying work). The said proposals will be publicly opened and announced at the next meeting of the said Board, which will be held on the 26th day of November, 1878, at the hour of 12 o'clock M., or in case there should be no quorum present on that day, then on the day of the next meeting of the Board.

By order of the Common Council.

Dated Brooklyn, October 14, 1878.

F. L. MASSEY,  
JOHN W. FLAHERTY,  
GEO. C. BENNETT,  
Commissioners of City Works.

Attest: D. L. NORTIUP, Secretary. 152

SCHOOL-HOUSE.

PHILADELPHIA, PENN.

Sealed proposals, indorsed "Proposals for building a Public School-House in the Twenty-fifth Ward," will be received by the Committee on Property of the Board of Public Education, at the Chamber of Select Council, Chestnut Street, above Fifth, on Wednesday, November 27th, at 1 o'clock P. M., for building a Public School-House on a lot of ground situate on the southwest corner of Broad and MacFarran streets, Twenty-fifth Ward, at which time said proposals will be opened by the Committee on Property.

Said school-house to be built in accordance with the plans and specifications of L. H. Esler, Architect and Superintendent of School Buildings, to be seen at the office of the Board of Public Education.

No bids will be considered unless accompanied by a certificate from the City Solicitor that the provisions of an ordinance approved May 26, 1869, have been complied with.

The contract will be awarded only to known master builders.

By order of the Committee on Property.

H. W. HALLIWELL, Secretary. 152

SCHOOL-HOUSE.

PHILADELPHIA, PENN.

Sealed proposals, indorsed "Proposals for building two School-Houses in the Twenty-sixth Ward," will be received by the Committee on Property of the Board of Public Education at the Chamber of Select Council, Chestnut Street, above Fifth, on Wednesday, November 27, 1878, at 1 o'clock P. M., for building a public school-house on a lot of ground situate on the southeast corner of Twelfth and Federal streets, and on the lot of ground corner of Twenty-seventh and Passyunk Road, Twenty-sixth Ward, at which time said proposals will be opened by the Committee on Property.

Said school-houses to be built in accordance with the plans and specifications of L. H. Esler, Architect and Superintendent of School Buildings, to be seen at the office of the Board of Public Education.

No bids will be considered unless accompanied by a certificate from the City Solicitor that the provisions of an ordinance, approved May 26, 1869, have been complied with.

The contract will be awarded only to known master builders.

By order of the Committee on Property.

H. W. HALLIWELL, Secretary. 152

SAFE.

COUNTY AUDITOR'S OFFICE, COMMISSIONERS' DEPARTMENT, CINCINNATI, November 2, 1878.

Sealed proposals will be received at this office until Wednesday, November 27, 1878, at 12 o'clock M., to build for and place into position, in the County Treasurer's Office of Hamilton County, Ohio, a Burglar-proof Safe.

Drawing and specifications can be seen at this office. The right is reserved to reject any or all bids.

By order of Commissioners.

W. S. CAPPELLER, County Auditor,  
And Clerk Board of County Commissioners. 152

COPPER.

NAVY PAY OFFICE, WASHINGTON, D. C. November 8, 1878.

Sealed proposals, in duplicate, to be indorsed "Proposals for Copper," will be received at this office until 12 o'clock M. on the third day of December, 1878, to furnish and deliver at the Washington Navy Yard,

BUREAU CONSTRUCTION AND REPAIR:

100,000 pounds of American Copper.

This copper will be required as follows:—

50,000 pounds best quality American Copper, about 31 inches long, 4 inches wide, and 3/4 inches thick, to weigh not less than 110 pounds.

50,000 pounds best quality American Copper, 16 inches long, 12 inches wide, and 2 1/4 inches thick, to weigh about 150 pounds.

One half of each kind of copper to be delivered on or before the 31st day of January, 1879, and the second half on or before the 28th day of February, 1879, with the privilege of delivering the whole at as early a day as the successful bidder may desire.

The whole of this copper will be subject to the tests and inspections of the proper officers of the Washington Navy Yard, to whom bidders are referred.

No proposal will be considered unless from a manufacturer or regular dealer in copper.

The right is reserved to reject any or all offers should it be considered to the interest of the government to do so.

Blank forms for bids to be had at this office.

W. W. WILLIAMS,  
Pay Inspector, U. S. Navy. 153

PROPOSALS.

HARDWARE.

NAVY PAY OFFICE, PHILADELPHIA, PA., November 12, 1878.

Sealed proposals, in duplicate, to be indorsed "Proposals for Naval Supplies," will be received at this office until 12 o'clock M., the 27th day of November, 1878, for

Screws of Brass and Iron.

Dry Goods for Upholstering.

Tools for use in Yards and Shops.

Hardware.

(Lists of which can be procured on application to this office.)

To be delivered at the Navy Yard, League Island, Pa., free of any expense and subject to the usual inspection.

Responsible security required on the bids for the prompt and faithful delivery of the articles, samples of which can be seen, and blank forms of bids procured by applying at this office.

The right to reject any and all bids not considered advantageous to the government is reserved.

JOHN S. GULICK,  
Pay Director, U. S. N. 152

IRON AND STEEL.

NAVY PAY OFFICE, PHILADELPHIA, PA., November 15, 1878.

Sealed proposals, in duplicate, to be indorsed "Proposals for Naval Supplies," will be received at this office until 12 o'clock M., 29th day of November, 1878, for

Square, Flat, and Thimble Iron.

Round Cast Steel.

(Lists of which can be procured on application to this office.)

To be delivered at the Navy Yard, League Island, Pa., free of any expense and subject to the usual inspection.

Responsible security required on the bids for the prompt and faithful delivery of the articles, samples of which can be seen, and blank forms of bids procured by applying at this office.

The right to reject any and all bids not considered advantageous to the government is reserved.

JOHN S. GULICK,  
Pay Director, U. S. N. 152

GAS WORKS.

RIO DE JANEIRO, BRAZIL.

By order of the Brazilian Legation at Washington the undersigned makes public that the Imperial Government calls for proposals for the gas illumination of Rio de Janeiro, the present contract expiring in March next. The proposals, addressed to the Envoy Extraordinary and Minister Plenipotentiary of Brazil, must be sent until 8 o'clock in the afternoon of the 1st day of December next to the Brazilian Consulate General, 42 Broadway, New York, where copies of the general conditions and specifications referred to in the fourth clause can be obtained, as well as any information in relation to this matter.

SALVADOR DE MENDONÇA,  
Brazilian Consul-General  
New York, September 9, 1878.

MINISTRY OF AGRICULTURE, COMMERCE, AND PUBLIC WORKS—DIRECTORY OF PUBLIC WORKS.

By order of his Excellency the Minister of this Department, it is advertised that this Directory receives proposals for the service of the illumination by gas of the Capital of the Empire, in the terms and conditions below specified:—

First—The proposals will be presented in a closed letter, until 3 o'clock in the afternoon of the 1st day of December of the present year, in this city, in the Directory of Public Works of the Ministry of Agriculture, and in London, Paris, and Washington, at the respective Brazilian Legations.

Second—The proposer must present, outside of the envelopes that shall contain the proposals, documents that will testify their fitness for the service that they propose to contract.

Third—No one can concur without having previously deposited in the National Treasury, in the design of the same Treasury in London, or in either one of the Legations above indicated, a caution, in money or bonds, of the public debt or the Empire, \$50,000, or a corresponding amount in foreign money (£5,000, 125,000 francs, or \$25,000 in gold).

Fourth—The object of the concurrence will be only the price of furnishing a cubic meter of gas, and the term of the privilege, that in no case shall exceed 33 years. All the other clauses of the contract, excepting whatever may be transitory, will be without any discrepancy or modification, those proposed by the Government in the general specifications and conditions, which will be distributed separately in the Directory of the Public Works and the above-mentioned Legations.

Fifth—All the proposals will be opened in this city, in the public session of the Directory of Public Works, on the 24 day of January, 1879; and the Government will declare on them within fifteen days of that date.

Sixth—When the choice of the proposal is made, the contract will be considered concluded; being necessary for the preferred proposer to sign only the mentioned general conditions, which will be entered in a competent book of the Department of Agriculture. For greater facility, each proposer who resides out of Rio de Janeiro must constitute in this city, and with a due antecedence, somebody with a power of attorney to sign the general conditions in case the preference fall on him.

Seventh—The proposer, who after having received communication of the acceptance of his proposal, refuses to sign the referred conditions, will forfeit the caution in the benefit of the National Treasury.

Eighth—The Government reserves the right to annul the competition within the period fixed by Clause 5, to decide upon the proposals that were presented.

M. BUARQUE DE MACEDO,  
Chief of the Directory.  
DIRECTORY OF PUBLIC WORKS, Rio de Janeiro, July 22, 1878.

WROUGHT AND CAST-IRON WORK.

Proposals for Wrought and Cast-Iron Work for the U. S. Custom-House, etc., at Chicago, Ill.

OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., November 6, 1878.

Sealed proposals will be received at this office until 12 M., of the 3d day of December, 1878, for furnishing, delivering, fitting, and putting in place complete the wrought and cast-iron work, comprising window-frames, shutter-casings, sills, trimmings, door-frames, thresholds, skirting, etc., of the U. S. Custom-House, etc., at Chicago, Ill., in accordance with drawings, specification, and schedule, copies of which and any additional information may be had on application at this office or the office of the Superintendent.

JAMES G. HILL,  
Supervising Architect. 153\*

PROPOSALS.

TIMBER.

U. S. ENGINEER'S OFFICE, 26 WASHINGTON AVENUE, DETROIT, MICH., November 16, 1878.

Sealed proposals, in duplicate, will be received at this office until 3 o'clock P. M., Wednesday, the 4th day of December, 1878, and opened immediately thereafter, for furnishing timber for crib work at Harbor of Refuge, Sand Beach, Mich.

For information on this subject apply to this office.

G. WEITZEL, Major of Engineers.

HEATING APPARATUS.

LOUISVILLE, KY.

The Building Committee of the Masonic Widows' and Orphans' Home and Infirmary, will receive proposals for the erection of the requisite apparatus for heating the Home by steam, according to a specification and plans made for same by Henry Whitestone, architect, which may be seen at the office of the undersigned, No. 139 Main Street, Louisville, Ky., and to whom sealed proposals are to be delivered on or before noon of the 12th day of December next. The Committee reserve the right to reject any or all bids.

GEO. W. WICKS,  
Chairman Building Committee. 154

TO ARCHITECTS AND OTHERS.

TO BE LET—A large Room, with smaller attached, if wanted, quiet, light, and pleasant, up one flight only. Will be let low to responsible parties.

WALWORTH M'FG CO.,  
73 Kilby Street.

CREOSOTED WOOD.

PREPARED AT THE  
Hayford Patent Creosote Wood Preserving Works,  
ELIZABETHTOWN, N. J., and A St., So. BOSTON.  
Offices: 10 Warren St., New York, and 4 Post Office Sq., Boston.

EDWARD R. ANDREWS, Proprietor.

ARCHITECTS, ENGINEERS, and BUILDERS are reminded that wood prepared by the Hayford process is rendered PRACTICALLY IMPERISHABLE, being protected from decay, marine worms, etc. It should be used for *Hives, Bridges, Piles, Piers, Wharves, Rafters, Trusses, Stable and Cellar Floors*, and wherever wood is exposed to alternate dryness and moisture.

Pamphlets, fully explaining the creosoting process, for pished on application.

S. KLABER & CO.

STEAM MARBLE WORKS,

217 to 223 W. 51st St., New York.

ESTIMATES MADE ON ALL KINDS OF MARBLE WORK

DEVER & SHORTLIDGE,

Ledger Building,

PHILADELPHIA, PA.

Law and Collection Offices.

City Collections, Interest, Mercantile Bills, and Foreign Claims promptly made. Liens filed, Mortgages foreclosed, Ground Rents sued out, and all other Legal Business will receive careful attention. Reports made on Claims whenever desired, and cashed as soon as collected.

ROBERT DEVER,  
Solicitor.

JOHN WALKER SHORTLIDGE,  
Attorney and Counsellor at Law.

ROOMS 6 AND 7, FIRST FLOOR.

Weather Strips.

BROWNE'S METALLIC AND RUBBER WEATHER-STRIPS—the oldest, the best, the cheapest in market. Stood the test 15 YEARS. They exclude COLD DRAFTS around windows and doors in winter, keep out dust in summer, and stop rattling sashes. We employ experienced and responsible workmen, and guarantee entire satisfaction. We send, free of charge, men with samples and prices to measure and give cost. We warrant them good for 5 YEARS.

Patent Metallic Weather-Strip Co.

812 BROADWAY, N. Y.

THE PENRHYN SLATE CO.

MANTELS,

And General Slate Manufacturers,

(Quarries and Manufactory, Middle Granville, N. Y.)

50 UNION SQUARE, . . . NEW YORK,

Corner of Fourth Avenue and 17th Street.  
W. H. KIRTLAND, Secy.

MARSHALL'S AMERICAN



LEADED SHEETS.

Cheapest and most durable Metal for Cornice and Roofing. MARSHALL BROS. & CO., Front and Girard Ave., Phila. Represented in New England States by C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

PATENT MINERAL WOOL.

ENTIRELY FIRE-PROOF AND UNDECAYING. THE BEST INSULATOR OF HEAT, COLD, AND SOUND.

For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc. ALEXANDER D. ELBERS, P. O. Box 4461. 26 1/2 Broadway, New York

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free

HENRY McSHANE & CO., Baltimore, Md.

"ZODTCHY" (BUILDER).

A JOURNAL OF ARCHITECTURE, FINE ARTS, AND ENGINEERING.

Published since 1872, by the ST. PETERSBURG SOCIETY OF ARCHITECTS, under the Editorship of

M. JEROME KÜTTNER,

Professor of Architecture in the Imperial Academy of the Fine Arts at St. Petersburg.

MONTHLY EDITION.

Each number contains from EIGHT to SIXTY-SIX pages of letterpress, etc. quarto, with cuts, and at least FIVE autographic chromo-lithographic plates, the titles in both Russian and French.

The "ZODTCHY" publishes a WEEKLY SUPPLEMENT called "Leaves of the Zoltchy," which contains the current Building News, Public Competitions, Exhibitions, Proceedings of Architectural Societies, of Technical Institutes of the Academy and School of the Fine Arts in the Empire, Prices of Building-Materials, New Private Buildings in the Capital, Advertisements, &c.

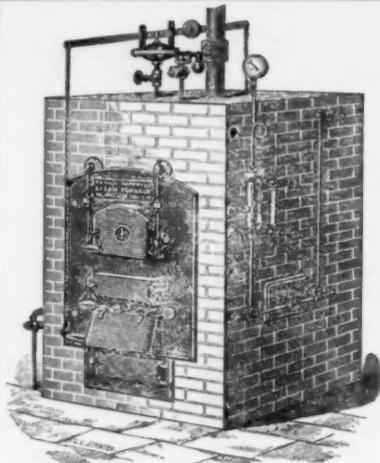
SUBSCRIPTION PRICE FOR EUROPE AND THE UNITED STATES \$1.50 PER ANNUM.

The "Zodtchy" exchanges with all Architectural and Technical Journals.

Price for Advertisements: One Line, each insertion, 3 cts. For important Advertisements a Discount of ten to thirty per cent.

Address, JOURNAL "ZODTCHY,"

13 OFFICE STREET, ST. PETERSBURG, RUSSIA.



BROWN'S IMPROVED STEAM HEATERS.

The attention of Architects and Builders is directed to this NEW AND VALUABLE INVENTION FOR HEATING

PUBLIC AND PRIVATE BUILDINGS,

MANUFACTURED BY

RUFUS G. BROWN & CO.

WALTHAM, MASS.

Boston Office, 59 Bromfield St.

Send for Circular.

DORCHESTER UNION FREESTONE CO.

NEW BRUNSWICK YELLOW FREESTONE. The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order. 24 Pine Street, New York. G. P. SHERWOOD.

ARCHITECTURAL IRON AND JAIL WORKS.

M. CLEMENTS,

MANUFACTURER OF Iron Railing, Bank Vaults, and Jail Cells, Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc

BAYMILLER STREET, near Sixth and C. H. & D. R. R. Depot, CINCINNATI, OHIO.



J. & R. LAMB, 59 CARMINE ST., N. Y.

CHURCH FURNISHERS. Practical Workers in Sterling Silver, Brass and Bronze. Carved Wood, Decorations, etc. Illustrated Catalogues. Furniture, etc. Metalwork. Dec. 1, 1872.

A. L. FAUCHÈRE & CO.

OFFICE AND WAREHOUSES

1319 and 1321 Broadway, New York,

Importers, Manufacturers, and Dealers in all kinds of foreign and domestic

MARBLE FOR INTERIOR WORK.

Estimates furnished on application.

Advertisement for THE HELIOTYPE PRINTING COMPANY. Features a central illustration of a printing press and text: LUX-FECIT THE HELIOTYPE PRINTING COMPANY 220 DEVONSHIRE ST. BOSTON COR FRANKLIN ST. HELIOTYPE PHOTOGRAPHS in Printers Ink HELIOTYPE LITHOGRAPHS printed by Steam HELIOTYPE CUTS to print with Type HELIOTYPE FACSIMILE LETTERS, SHOW CARDS, &c.

STEAM and PIPE and BOILER COVERINGS

Save 10 to 20 per cent in fuel.

See Am. Architect and Building News, Dec. 15, 1872. THE CHALMERS-SPENCE COMPANY. 140 Congress Street, Boston. Foot 1/2 St. E. R. New York.

CLASSIFIED ADVERTISEMENTS.

Table listing various categories and their corresponding page numbers: ARCHITECTS, BRICK, CARPENTERS, CEMENT, CHURCH FURNITURE, CLOCKS FOR PUBLIC BUILDINGS, CONDUCTORS (HOVS), CORNICE AND PICTURE ROD MOUNTING, DECORATORS, ELECTRIC BELLS, ANNUCIATORS, ETC., ELEVATORS, STEAM ENGINES, ETC., ENGINEER (SANITARY), FIRE-PROOF BUILDINGS, FREESTONE, GAS FIXTURES, GAS MACHINES, GRANITE, GRATES, ETC., HARDWARE, HEATING APPARATUS, IRON WORK, MARBLE, PAINTS, PATENTS, PIPE (LAP WELDED), PLASTERERS, PLUMBERS' SUPPLIES, ROLLING VENETIAN BLINDS, ROOFS, ROOFING FELT, STAINED AND ORNAMENTAL GLASS, STONE (BUILDING), STEAM PUMPS, KNOWLES' PATENT, KNOWLES STEAM PUMP WORKS, STOVE (BUILDING), TILES, TRADE MARKS, TRAVELLING BAGS, WAREHOUSES, WEATHER STRIPS, WINDOW LOCKS, WINDOW SASHES, WOOD CARPENTERS, WOODWORKING MACHINES, WROUGHT IRON.

Table listing names and page numbers: GEORGETOWN WOOD, EDWARD R. ANDREWS, BOSTON, ix; DECORATORS, ENMART & QUARTLEY, BALTIMORE, ii; PHILIP A. BUTLER, BOSTON, ii; J. HABERSTROH & SON, BOSTON, ii; W. J. McPHERSON, BOSTON, ii; Wm. Jackson & Co., New York, ii; DONALD MACDONALD, BOSTON, ii; SOCIETY OF DECORATIVE ART, NEW YORK, ii; JOHN LAFARGE, NEW YORK, ii; DESTROYER AND WOOD ENGRAVING, W. J. DANA, BOSTON, ii; DOOR BUTTS (SPRING), COWLES HARDWARE CO., UNIONVILLE, CONN., iii; DRAIN PIPE, D. W. LEWIS, BOSTON, xi; WALDO BROTHERS, BOSTON, xi; F. & COLEMAN, BOSTON, xi; ELECTRIC BELLS, ANNUNCIATORS, ETC., S. W. FULLER, BOSTON, i; ELEVATORS, STEAM ENGINES, ETC., WHITNEY MACHINE CO., BOSTON, i; TUFTS ELEVATOR WORKS, BOSTON, i; COOKE & BEGGS, OMAHA, NEB., i; OMAHA BROTHERS & CO., OMAHA, NEB., i; ENGINEER (SANITARY), E. S. PHILBRICK, BOSTON, i; FIRE-PROOF BUILDINGS, FIRE-PROOF BUILDING CO., NEW YORK, i; FREESTONE, DORCHESTER UNION FREESTONE CO., NEW YORK, i; GAS FIXTURES, MITCHELL, VANCE & CO., NEW YORK, i; R. HOLLINGS & CO., BOSTON, i; DENNY BROS. & CO., NEW YORK, ii; SPRINGFIELD GAS MACHINE, SPRINGFIELD, MASS., i; WALWORTH MANUFACTURING CO., NEW YORK, i; GRANITE, NEW ENGLAND GRANITE WORKS, NEW YORK, i; ROBERT LOGAN, NEW YORK, i; GRATES, ETC., W. H. JACKSON & CO., NEW YORK, ii; HARDWARE, BURDICK & WILLIAMS, BOSTON, ii; HEATING APPARATUS, BARTLETT, ROBBINS & CO., BALTIMORE, i; CRANE, BROS. & CO., CINCINNATI, O., i; GOLD'S HEATER MANUFACTURING CO., NEW YORK, i; GILLS & GEORGEAN, NEW YORK, ii; WATSON'S MANUFACTURING CO., NEW YORK, ii; WYLLIS H. WARNER, NEW YORK AND SYRACUSE, i; OPEN STOVE VENTILATING CO., BOSTON, ii; RUFUS G. BROWN & CO., WALTHAM, MASS., ii; HELIOTYPES, THE Heliotype Printing Co., Boston, x; IRON STABLE FITTINGS, BABLER & CO., BOSTON, ii; INTERIOR FINISHING WORK, PALMER, PARKER & CO., BOSTON, xi; IRON WINDOW SASHES, D. M. MECKER & SON, NEWARK, N. J., iii; LAW AND COLLECTIONS, DEVER & SHORTIDGE, PHILADELPHIA, ix; LEADED SHEETS, MARSHALL BROS. & CO., ii; LESTER SAW, MILLERS FALLS CO., NEW YORK, ii; LOCKS AND BRONZE HARDWARE, HOPKINS & DICKINSON MANUFACTURING CO., NEW YORK, ii; YALE LOCK MANUFACTURING CO., STAMFORD, CT., ii; MARBLE, WALTON MARBLE CO., BOSTON, ii; MARBLE WORKERS, S. KILDER & CO., NEW YORK, ix; S. KILDER & CO., NEW YORK, ix; A. L. FAUCHÈRE & CO., ii; FISHER & BIRD, ii; HUGH SIMON & SON, BALTIMORE, ii; MARQUET FLOORING (PARKS), C. BUTCHER, BOSTON, ii; MORTAR BLACK, HENRY D. DUPERE, BOSTON, iii; PAINTS, ASHLEY WHEELER, BOSTON, xi; C. M. WHEELER, AND J. M. ROSE, TOLEDO, O., ii; HARVARD FLOORING, NEW YORK, ii; H. W. JOHN MFG CO., NEW YORK, ii; PAPER HANGINGS, H. B. JONES & CO., BOSTON, ii; PATENTS, DOHVEY, CUTLER & CO., ii; PATENTS, F. A. LEBLANC, WASHINGTON, D. C., ii; A. D. ELBERS, NEW YORK, ii; PIPE (LAP WELDED), NATIONAL TUBE WORKS CO., ii; PLASTERERS, JOHN MACK, BOSTON, ii; PLUMBERS' SUPPLIES, HAWTHORNE & TUCKER, BOSTON, ii; JENNINGS' SANITARY DEPOT, NEW YORK, ii; ROLLING VENETIAN BLINDS, WILSON & JAMES, NEW YORK, ii; ROOFS, JOHN FARQUHAR'S SONS, ii; A. KNISLEY & CO., CHICAGO, ii; ROOFING FELT, N. E. FELT ROOFING CO., BOSTON, xi; ASPHALT and OTHER FELT, WARREN CHEMICAL and MANUFACTURING CO., BOSTON and NEW YORK, i; SASH LINES and CHAIRS, THOMAS S. MORTON, NEW YORK, iii; SCAGLIOLA and MAREZZO MARBLE, JAMES T. ALLEN & CO., PHILADELPHIA, ii; SWISS GAS TRAP, B. P. BOWER & CO., CLEVELAND, O., ii; S. BUHRER, CLEVELAND, O., x; BRANDLE & WICKERT, BROOKLYN, N. Y., ii; SHUTTERS (STEEL), CLARK & CO., NEW YORK, ii; WILSON & JAMES, NEW YORK, ii; SKYLIGHTS, ETC., SAMUEL WEST, BOSTON, ii; G. HAYES, NEW YORK, xi; E. VAN NOORDEN, BOSTON, ii; SLATE, CLEMENT, HIGBEE & CO., BOSTON, ii; STAINED AND ORNAMENTAL GLASS, KELLEY & HOLLAND, ii; W. J. McPHERSON, BOSTON, ii; SAMUEL WEST, BOSTON, ii; COOK, REDDING & CO., BOSTON, ii; J. H. GRANTAGAP, NEW YORK, ii; STEAM PUMPS, KNOWLES' PATENT, KNOWLES STEAM PUMP WORKS, ii; STONE (BUILDING), NICHOLL & MILLER, NEW YORK and AMHERST, O.; WILSON & HUGHES STONE CO., CLEVELAND, O.; TELEGRAPH, AUTOMATIC FIRE ALARM, BOSTON, iii; THEATRICAL SKELETRY, AMERICAN ENCAUSTIC TILING CO., NEW YORK, i; TILES, LAFFAYETTE W. SEAVEY, NEW YORK, ii; JOHN CHADWICK, ii; MILLER & CONTESS, NEW YORK, ii; AMERICAN ENCAUSTIC TILING CO., NEW YORK, i; T. ASPINWALL, NEW YORK, ii; WALDO BROTHERS, BOSTON, ii; C. A. WELLINGTON, BOSTON, ii; SHARPLESS & WATTS, PHILADELPHIA, ii; VENTILATION, WEATHER STRIPS, EUREKA VENTILATING CO., BOSTON, ii; PATENT METALLIC WEATHER STRIP CO., NEW YORK, ix; WINDOW LOCKS, F. J. HOYT, NEW YORK, ii; MORRIS SASH LOCK MANUF. CO., CINCINNATI, ii; WOOD CARPENTERS, NATIONAL WOOD MANUFACTURING CO., NEW YORK, ii

**ETNA IRON CO.**

Manufacturers of every description of Wrought and Cast

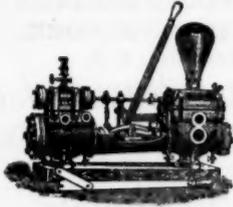
**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**

Patent



Steam

**PUMP**

**THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

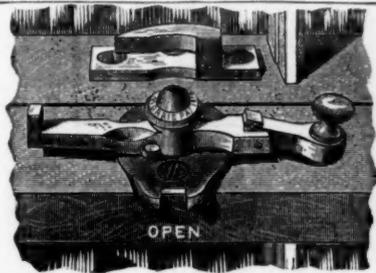
The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

**KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES, { 14 & 16 Federal St., Boston.  
113 & 115 Congress St., Boston.  
92 & 94 Liberty St., New York.

Send for Illustrated Catalogue.



THE

**MORRIS BURGLAR-PROOF SASH LOCK.**

Patented July 2, 1878. The Safest! The Simplest! The Most Reliable! THE BEST!

N. B.—No springs to get out of order. Sold by all hardware jobbers. Manufactured by the MORRIS SASH LOCK MANUFACT'G CO., Office 168 Walnut St., Cincinnati, O.

Price List and Samples furnished to the trade on application. A liberal discount to the trade.

*The College Book.*

Edited by CHARLES F. RICHARDSON and HENRY ALDEN CLARK. 4to. Full gilt, \$15.00.

A royal volume, comprising historical and descriptive accounts, principally by professors or graduates of twenty-four leading American Universities, Colleges, and the United States Military and Naval Academies, with 60 full-page heliotype illustrations of buildings connected with these institutions.

*Painters, Sculptors, Architects, Engravers, and their Works.*

A Handbook. By CLARA ERSKINE CLEMENT. A new, revised, and enlarged edition. 1 vol. Crown 8vo. \$3.25.

*British Poets. Riverside Edition.*

English and Scottish Ballads. Edited by Prof. F. J. CHILD. 4 vols. Crown 8vo. Gilt top, \$7.00

\*.\* For sale by all Booksellers. Sent, post-paid, on receipt of the price by the Publishers,

HOUGHTON, OSGOOD & CO., Boston.



Terra Cotta Chimney Tops, Akron Land Tile

D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

**NATIONAL**

**FINE ART FOUNDRY,**

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze.

**GAS**

**SPRINGFIELD GAS MACHINE.**

Springfield, Mass.; 45 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.



**NATIONAL TUBE WORKS CO.**

PATENT

Indestructible Enamelled Wrought Iron

**LAP-WELDED PIPE,**

From 1/4 inch to 15 inches diameter.

Now extensively used for

Water, Gas, Sewerage, and Mining.

It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at

National Tube Works Co.,

8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

**BURDITT & WILLIAMS,**

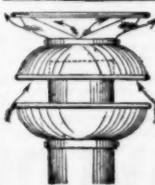
DEALERS IN

**FINE HARDWARE**

of every material. A specially complete stock of PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



**The Draft of the Chimney increased.**

Smoking Chimneys Prevented. Particularly adapted to Chimneys in exposed positions.

Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR, 70 Grand St., Brooklyn, N. Y.

**CATALOGUE OF**

**Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO., ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.

TO ARCHITECTS AND BUILDERS.

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

**BEEHIVE BRAND.**

**FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**UNPARALLELED DISCOVERY.**

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the *Paint Preserver* invented by ASAHIEL WHEELER, Boston. It will neither crack, blister, nor scale.



WALDO BROS., 57 KILBY ST., BOSTON.

Art Terra Cotta Work in Stock, and from Special Designs. Chimney Tops, Drain Pipe, Fire Brick. English Roman and Portland Cement.

**PEERLESS BRICKS.**

**THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,**

MANUFACTURES AND KEEPS IN STOCK

**ARCHITECTURAL SHAPES (80 kinds).**

ALSO

**RED Pressed Fronts.**

Extra fine in color and quality

**BROWN,** Colored throughout

More beautiful than Brown Stone DURABLE

**CHOCOLATE,**

Same as above; difference in color

**FLESH COLOR,**

A very popular color

**BUFF,** very fine.

Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F. ADAMS, JOSEPH WOOD, JR., PRESIDENT. TREASURER



**DOLIVET, CUTTER, & CO.**

ARTISTIC

**Papier Maché Decorations,**

108 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING Venetian Blinds.**  
Wilson's Patent.  
For first-class Dwellings and Public Buildings.  
These blinds can be fitted either inside or outside the sash, and are operated with ease without machinery or weights. They are made to coil above or below, as shown in cut. Can be furnished in any kind of wood. Unequaled for elegance, durability, and simplicity. Indorsed by many of the leading architects in the country, and in use in some of the handsomest buildings.  
We also manufacture  
**WILSON'S PATENT Rolling Steel Shutters**  
These blinds are operated on same principle as above (being self-coiling). They are used for closing store-fronts and all windowes and doorways that are required to be perfectly fire and burglar proof. Also, Rolling Wood Blinds for Store-Fronts, Book-Shelves, School Partitions, and other purposes.  
A list of public and private buildings fitted with our Blinds sent on application. Architects and owners are invited to send for working models, catalogues, and price-lists.  
**WILSON & JAMES,**  
68 Beekman St., New York.  
Two Prize Medals at Philadelphia.

**PRIZE MEDALLISTS.**  
1863; 1865; 1867; 1872; 1873; AND ONLY AWARD AND MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**  
ORIGINAL INVENTORS AND SOLE PATENTEES OF  
**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters  
OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Tiford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.  
OFFICE AND MANUFACTORY.  
162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**  
76 READE STREET, NEW YORK,  
WORKS, DARLINGTON, N. J.

*Lock and Hardware Manufacturers,*  
DESIGNERS, FOUNDERS, AND WORKERS

**BRONZE AND BRASS.**

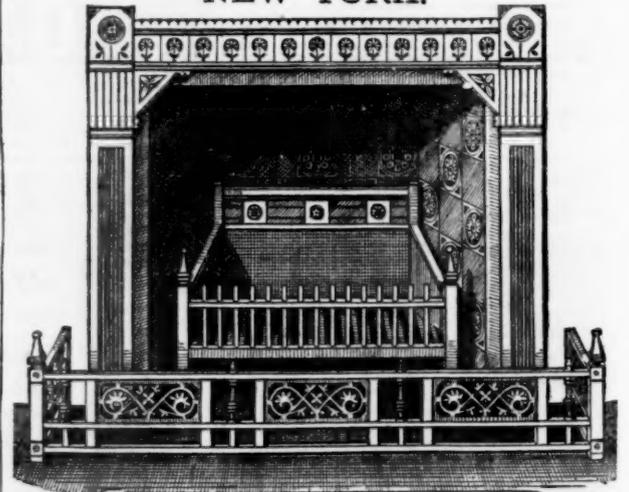
Architects' Designs faithfully executed.

Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side),  
NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tilo.

HAVE NO OTHER WAREROOMS.

**VALUABLE ART PUBLICATIONS.**

HUNT'S (WILLIAM M.) Talks on Art. 8vo. Paper, \$1.00.  
CLEMENT'S (CLARA ESSEKINE) A Handbook of Legendary and Mythological Art. Profusely Illustrated, and with a Complete Index. Crown 8vo. Cloth, red edges, \$3.25.  
Painters, Sculptors, Architects, Engravers, and their Works. A Handbook. With many Illustrations and Monograms. Cr. 8vo. Cloth, red edges, \$3.25.  
**HOUGHTON, OSGOOD & COMPANY, Boston.**

**IMPROVED PRISON LOCKS.**

All Architects should have our 36 page Illustrated Catalogue of Prison Locks.

ADDRESS

**YALE LOCK MFG. CO., STAMFORD, CONN.**  
New York Salesroom, No. 53 Chambers Street.

**JENNINGS' SANITARY DEPOT.**

A. G. MYERS, Manager,

**SPECIALTIES IN PLUMBING GOODS.**  
94 BEEKMAN STREET, NEW YORK.  
JENNINGS' NEW CLOSET, WITH New Valve  
Having for their special object Cleanliness, Durability, and the exclusion of Sewer Gas. With non-corrosive Valve Seating and Solid Plunger.

**STEWART'S SLATE, MARBLE AND HARD WOOD MANTELS.**  
MIRRORS, ART-TILES, HEARTHES & C.  
MANTELS, HEARTHES & C.  
Masonic Temple, 23rd St & 6th Ave. N.Y.

**WROUGHT IRON BEAMS & GIRDERS**

**THE UNION IRON MILLS, Pittsburgh, Pa.,** Manufacturers of Improved Wrought Iron Beams and Girders (patented).  
The great fall which has taken place in the prices of Iron, and especially in Beams used in the construction of FIRE-PROOF BUILDINGS, induces us to call the special attention of Engineers, Architects, and Builders to the undoubted advantages of now creating fire-proof structures; and by reference to pages 52 and 54 of our Book of Sections—which will be sent on application to those contemplating the erection of fire-proof buildings—THE COST CAN BE ACCURATELY CALCULATED, the cost of insurance avoided, and the serious losses and interruption to business caused by fire. These and like considerations fully justify any additional first cost. It is believed that, were owners fully aware of the small difference which now exists between the use of Wood and Iron, in many cases the latter would be adopted. We shall be pleased to furnish estimates for all the Beams complete, for any specie structure, so that the difference in cost may at once be ascertained. Address  
**CARNEGIE BROS. & CO., Pittsburgh, Pa.**

**LESTER** Scroll Saw, Circular Saw, Turning Lathe, Lathe Tools, Emery Wheel, and Drilling Attachment, all for \$8.00.  
A beautiful and perfect machine, warranted.  
**MILLERS FALLS CO.,**  
74 Chambers Street, New York.

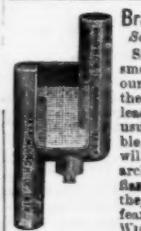
**G. BUTCHER,**  
107  
Devonshire St.  
BOSTON.

Send for Illustrated Catalogue.

**PATENT MARQUETRY FLOORING.**

Specimens at Lawrence, Wilde & Co.'s, 42 Cornhill, Boston.

**GAS FIXTURES OF EVERY DESCRIPTION.**  
SPECIAL RATES TO BUILDERS.  
R. HOLLINGS & CO 47 Washington St. BOSTON.



**Brandeis' Seamless Paragon Trap**  
Softest, Best, Cheapest, and Non-siphoning.  
Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily Sanded, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDIS & WICKERT 46 Fulton Street, Brooklyn N. Y.**

**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer Gas that has yet been invented.

**A POSITIVE SEAL**  
Against sewer-gas, absorbed gases, and back water. Seal is not broken by syphonage or evaporation. Self-siphoning, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers,  
**B. P. BOWER & CO.,**  
104 & 106 St. Clair St., Cleveland, O.

**THE EUREKA VENTILATION CO.**  
OFFICE AND MANUFACTORY,  
74 CHARLESTOWN STREET,  
BOSTON, MASS.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

Theatrical Fresco only. Prices moderate. References first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.  
**LAFAYETTE W. SEAVEY,**  
Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK.



**SAYLOR'S PORTLAND CEMENT.**

Approved, recommended, and used by Architects, Engineers, and Builders of the highest authority. New York and Brooklyn Bridge, Department of Docks, and Croton Aqueduct, New York; new Capitol at Albany; U. S. Government Works (forts, light-house foundations, canal locks, etc.); floors for breweries, sugar houses, ice-houses, cellars, and stables, and for heavy foundations, etc. For sale by all dealers in masons' materials.  
**JOHNSON & WILSON, Gen'l Agents, 93 Liberty St., New York.**

# THE AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 153.]

SATURDAY, NOVEMBER 30, 1878.

[PRICE 15 CENTS

### BUILDERS' SUPPLIES.

**BARTLETT, ROBBINS & CO.**

ARCHITECTURAL IRON WORK AND GAS MACHINES.

HEATING AND VENTILATING OF PUBLIC AND PRIVATE BUILDINGS A SPECIALTY.

24 LIGHT STREET, BALTIMORE.

**WALWORTH MANUFACTURING CO.,**

69 Kilby Street, Boston,  
ENGINEERS AND CONTRACTORS FOR

STEAM AND HOT WATER WARMING AND VENTILATION IN PUBLIC BUILDINGS, PRIVATE RESIDENCES, GREENHOUSES, ETC.

MANUFACTURERS OF SOLAR GAS MACHINES.

Correspondence solicited. Plans and estimates furnished on application.

**"HOTCHKISS" TOWER CLOCKS,**

MANUFACTURED BY

SETH THOMAS CLOCK CO., THOMASTON, CONN.

Prices \$100 to \$6,000.

WARRANTED ACCURATE, STRONG, DURABLE.  
OFFICE, 581 BROADWAY, NEW YORK.

Send for Illustrated Catalogue.

**"MINTON'S ART AND TILES."**

(China Works, Stoke-Up-on-Trent.) Also, The Campbell Brick and Tile Co.'s ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS, ETC.

For Churches, Banks, Halls, Vestibules, and Hearths; Outside Decorations, Flower Boxes, Etc.

THOS. ASPINWALL & SON,  
604 Broadway, NEW YORK.

The only representatives in the United States for the above firms.

**ASPHALT (FELT) ROOFING.**

WARREN'S NEW PATENT

FELT AND GRAVEL ROOFING.

Substitutes NATIVE ASPHALT for Coal-Tar materials for these roofs.

The very best and most durable material for flat roofs. Also, Native Asphalt and Asphaltic Cement for Concrete Walks and Pavements.

Roofers and pavers supplied with the above, and with Warren's original Coal-Tar Roofing and Paving Materials. Send for circulars and samples.

WARREN CHEMICAL AND MANUFACTURING CO.,  
20 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**TILES FROM ALL PARTS OF THE WORLD,**

FOR BANKS, PUBLIC BUILDINGS, and PRIVATE HOUSES. References given to Tile Work throughout the United States and British Provinces.

AGENT FOR THE AMERICAN ROOFING TILE

Contracts Solicited

O. A. WELLINGTON, HOUSEHOLD ART ROOMS,  
No. 171 TREMONT STREET, BOSTON.

**HUGH SISSON & SON,**

Importers, Dealers, and Manufacturers of

MARBLE.

INTERIOR MARBLE WORK AND MONUMENTAL WORK A SPECIALTY

Salesrooms, No. 140 W. Baltimore St.; Steam Marble Works, North and Monument Streets, BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,**

SPEAKING TUBES,

AND BURGLAR ALARMS,

For Public and Private Buildings.

THE BEST IN USE.

S. W. FULLER,

63 Devonshire Street, Boston.

**HAWTHORNE & TUCKER,**

PLUMBERS,

16 PROVINCE STREET, BOSTON.

Estimates for Plumbing made, and work done in any part of the United States or Provinces

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY**  
OF NEW YORK.

LEONARD F. BECKWITH, Pres't. E. GILLET, Vice-Pres't.

Hollow Blocks of any pattern, uniting strength and resistance to fire and water. The Hydraulic Lime of Tell (France), one of the strongest cements known, is largely used in this manufacture. The blocks do not conduct heat, cold, or sound, and weigh 60 per cent less than brick. Fire-proof Partitions, Floor Arches between iron or wooden beams, and ceilings under iron or wooden beams, erected in following buildings:

Western Union Telegraph, Coal and Iron Exchange, Equitable, Staats Zeitung, W'msb'gh Savings Bank, Windsor, & W'm'ster Hotels, Cluny, & Young's Hotel, Bos'n, Syracuse Savings Bank, West Point Military Hosp, Columbia College, Tribune, Coryell, & Vancortear Flats, Baltimore Safe Deposit Co. Peabody Inst., Baltimore, Peabody Museum, N. Haven, Westmoreland, & Elise Flats, Sidewalks laid at Lenox Library, Tribune, etc. Hollow Burnt Clay Bricks, for flat and curved arches, partitions, etc., and Skewbacks for brick arches.

Sole agents for the U. S. for HYDRAULIC LIME OF TELL, and LAFARGE PORTLAND CEMENT.

Sole agents for the U. S. for METLACH ENCAUSTIC TILES, laid in Tribune, Staats Zeitung, Mineral Spa, Central Park, Belvidere Hotel, etc.

Sole agents for the Atlantic States for WIGHT'S FIRE-PROOF COLUMNS.

Our Fire-proof work is the only one approved by the New York Board of Fire Underwriters and the Superintendent of Buildings, after severe public tests.

Office Room 54 COAL AND IRON EXCHANGE, 21 Courtlandt Street, New York. Represented in Boston by

BOOKMAN & Co., 5 Doane St.

**AMERICAN ENCAUSTIC TILE,**

Acknowledged by experts to be

THE BEST IN THE WORLD.

Manufactured by the

AMERICAN ENCAUSTIC TILING CO. (Limited.)

OFFICE, 325 AND 327 GREENWICH ST., NEW YORK

Designs and estimates for Public Buildings, Hall-Churches, Vestibules, and for External Decoration, furnished on application.

**E. HOWARD & CO.**

MANUFACTURERS OF CLOCKS AND WATCHES

CLOCKS FOR PUBLIC BUILDINGS

114 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**

PLAIN AND ENCAUSTIC

FOR PUBLIC BUILDINGS AND DWELLINGS,

As laid by us in

THE CAPITOL AT WASHINGTON, And in numerous Churches, Banks, and Dwellings in every part of the Country.

Glazed and Enamelled Tiles for Mantels, Hearths, Wainscoting, &c., and for Exterior Decoration.

MILLER & COATES,

270 PARK STREET, NEW YORK.

**THE NEW ENGLAND GRANITE WORKS**

HARTFORD, CONN., and 1521 BROADWAY, N.Y.

Quarries at Westbury, R.I.

MONUMENTAL AND BUILDING WORK

of every description, all the varieties of

AMERICAN AND FOREIGN GRANITE.

UNEQUALLED FACILITIES OFFERED TO THE TRADE.

J. G. BATTERSON, Pres't. H. E. BATTERSON, Sec'y.

J. G. BATTERSON, C. B. CANFIELD, H. A. BATTERSON

G. T. BATTERSON, DIRECTORS.

CARL CONRADS, Sculptor.

**WHITTIER MACHINE CO.**

Manufacturers of Steam and Hydraulic

ELEVATORS,

STEAM ENGINES, BOILERS, and MACHINERY.

No. 117 1/2 Tremont Street, Boston.

Office in the New England Mutual Life Insurance Co's Building, Post Office Square,

and 120 Broadway, New York

CHARLES WHITTIER, Pres't. A. C. WHITTIER, Treas.

**OTIS BROTHERS & CO.**

SAFETY STEAM AND HYDRAULIC

ELEVATORS.

A specialty for a quarter of a century.

BUILDERS OF THE HALE HYDRAULIC ELEVATOR.

No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**

OHIO BUILDING STONE.

GRIND AND SCYTH STONE.

From our FLORENCE and AMHERST QUARRIES.

Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS

111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**

Designers and Manufacturers of

GAS FIXTURES,

ORNAMENTAL METAL WORK, CLOCKS and BROWERS

ARCHITECTS' ORDERS SOLICITED.

Special designs submitted on application.

WAREHOUSES, 536 AND 538 BROADWAY, NEW YORK.

MANUFACTORY, 24th and 25th Sts., and 10th AVENUE, N. Y.

**FISHER & BIRD,**

Workers in all kinds of Foreign and Domestic

MARBLER,

97 TO 103 EAST HOUSTON ST., NEW YORK.

Established 1830.

Among our notable decorations are: The Illinois new State House; Palace Hotel, San Francisco; Baldwin's Hotel, San Francisco; Insurance Building, 10th and Chestnut Streets, Philadelphia; Mutual Life Insurance Building Boston; Orient Mutual Insurance Building, New York; Union College, Schenectady; and numerous Churches, Private Residences, etc., etc., throughout the country. We solicit the opportunity to estimate upon all classes of work, viz., Tiling, Wainscoting, Staircases, Mantels, etc. Come to our work and marble work of every description.

**WILSON & HUGHES STONE CO.**

Are ready to estimate on contracts of any size for furnishing their celebrated Amherst, Ohio, BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS OR CUT AND SET

Also, AMHERST AND INDEPENDENCE GRINDSTONES,

And OHIO MINERAL AND STONE PAINTS

Fire-Proof Stove Cement and Stove Putty ground in Oil

OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MOSAICS."**

Floor Tiles, beautiful in color and design, for Dwellings, Churches, and Public Buildings.

SPANISH WALL TILES. White, Glazed, Valencia, Tiles for Walls and for decorative painting.

PRINTED FIGURED TILES of Spanish designs, for Wainscoting, Mantels, Jardinières, etc.

Floors of "Nolla Mosaics" can be seen at the "Rockingham," corner of Broadway and 56th Street. Imported and for sale by JOHN CHADWICK, Sole Ag't for U. S.

49 Broadway, N. Y. C. E. PARKER, Agent, 14 Exchange Place, Boston.

**MINTON'S ENCAUSTIC TILES.**

SHARPLESS & WATTS,

1325 MARKET STREET, PHILADELPHIA,

Established 1850 as Agents for

MINTON'S TILES AND TESSELLATED PAVEMENTS.

Specialties in Glazed, Encaustic, Majolica, and Art-painted Tiles, for Furniture, Hearths, Fireplaces, etc.

New and original designs continually received.

**STEAM WARMING APPARATUS.**

HIGH AND LOW PRESSURE.

HOUSE WARMING A SPECIALTY.

Pamphlet with more than 1,000 references sent on application.

WYLLYS H. WARNER,

114 LEONARD STREET, NEW YORK,

and 33 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**

No. 6 COURTLAND ST., NEW YORK.

Works at Paterson, N.J.

PATENT SAFETY STEAM ELEVATORS for Public and Bank Buildings, Hotels, Private Dwellings, etc.

SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP GUARANTEED.

Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "HEALTH" AND "TUBULAR"  
Manufactured by the  
GOLD'S HEATER MANUFACTURING CO.  
114 LEONARD ST., NEW YORK.

Send for Pamphlet.  
F. GOLD, Frost WYLLIS H. WARREN, Tross

TO ARCHITECTS AND BUILDERS.

**MORTAR BLACK,**

Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar. For sale only by *Walpole Color and Chemical Works,*

HENRY D. DUPEE, Proprietor,  
79 KILBY STREET, BOSTON

J. H. BURT & CO., Carpenters and Builders,  
Blue Hill Avenue, Mattapan (Ward 24), Boston.

**MENEELY & KIMBERLY,**  
Bell Founders, Troy, N. Y.,

Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT-HOUSE BELLS. Illustrated Catalogue sent free.

JOHN MACK, Plain and Ornamental Plasterer.  
41 Cambridge Street, Boston.

**MANTELS AND GRATES.**

RANKIN'S PATENT makes the Cleanest, Cheapest, and Hottest Fire. Avoid infringements, and send for Circular to

C. S. RANKIN & CO.,  
ARCHITECTURAL IRON WORKS,  
Manufacturers of all kinds of Iron Work for BUILDINGS, JAILS, ETC.  
187 W. PEARL ST., CINCINNATI, O.

**BUILDING MARBLE.**

Branch yard of the RUTLAND MARBLE CO., 128 Cambridge Street, Boston. JOHN B. ALLAN, Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Italian and Continental Marble, furnished at low prices.

**PRESSED BRICK**

STOCK AND COMMON

MANUFACTURED BY  
FLETCHER & THOMAS,  
Indianapolis, Ind.  
All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY  
GILLIS & GEOGHEGAN,  
Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 50th St. and 5th Av.; Drexel Building, cor Wall and Broad; Bennett Building, Fulton and Nassau, etc.  
Architects and owners promptly furnished with specifications and estimates.

ROBERT LOGAN,  
Importer and Dealer in Foreign and Domestic Granite Monuments, Columns, etc.  
Also, GRANITE FOR BUILDING PURPOSES, And Encaustic and Marble Tiling.  
129 FULTON STREET . . . NEW YORK.

**ARCHITECTS.**

P. B. WIGHT,  
CONSULTING ARCHITECT,

73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.  
Consultations on matters pertaining to Fire-Proof Construction, Foundations, Drainage, Sanitary Work, Ventilation, Machinery, Valuations, Interior Decorations, and Furniture. Manager of the Meaker Hatchway Protectors.

RICHARD M. HUNT,  
ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

W. W. GOODRICH, C. E., ARCHITECT  
AND SANITARY ENGINEER  
KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes of Public or Private Buildings, Monumental Designs, etc.

CHARLES E. ILLSLEY, A.M., C.E.,  
ARCHITECT,  
Room 17, Life Insurance Building,  
ST. LOUIS, MO.  
Special attention to Churches, Schools, and other public buildings.

WALTER DICKSON, ARCHITECT, PERRY BUILDING,  
Albany, N. Y.

**SANITARY ENGINEERING.**

EDWARD S. PHILBRICK, C. E.

12 WEST ST., BOSTON, MASS.  
Offers advice and superintendence in CONSTRUCTION OF WORKS,  
AND PLUMBING, DRAINAGE, AND VENTILATION,  
And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

E. VAN NOORDEN,  
837 HARRISON AVENUE . . . BOSTON,  
SHEET METAL CORNICES, HAYES'S PATENT VENTILATING SKY-LIGHTS, WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

**EXCELSIOR ROOF PAINT.**

This paint has been thoroughly tested throughout the Eastern States, and has been found to be a perfect tin or metallic preserver. We warrant it neither to crack nor blister by HEAT or COLD, and to last

IN ANY CLIMATE TEN YEARS.

Those desiring to use this valuable preparation upon their buildings, can secure the same by addressing

C. M. WHEELER, J. M. ROOT,  
Toledo, Ohio.

IRON STABLE FITTINGS. BURIER & CO.  
23 Exchange St. BOSTON.

**PATENTS.**

F. A. LEHMANN, Solicitor of Patents, Washington, D. C.  
NO PATENT NO PAY. Send for Circular.

**FIRE ON THE HEARTH**

STOVES & HEATERS.

COMBINATION OF

FIRE-PLACE, CLOSE STOVE, AND FURNACE.

The attention of Architects and Builders is especially invited to our new

FIRE-PLACE HEATERS,  
Adapted for the use of any kind of fuel, and the only heater especially adapted for the use of SOFT COAL and WOOD. Send for description to

THE OPEN STOVE VENTILATING CO.,  
115 Fulton St., New York.

**DECORATORS.**

W. J. MCPHERSON,

(Established A.D. 1848.)

MURAL PAINTER,

DESIGNER,

Ecclesiastical Decorator,

AND

ART STAINED GLASS MANUFACTURER,

440 TREMONT STREET,

BOSTON, MASS.

Should you want Ornamental Glass, write for particulars to



**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the subscriber to produce Modern and Medieval styles of work equal to any European examples, for Churches, Private Residences, Halls, etc.

The value of the work is attained by a careful selection of colors in Cathedral and French Glass of his own importation.

Designs in accord with architects' plans furnished at short notice. Reference of work at office

SAMUEL WEST, 115 Eliot St., Boston

FRANK HILL SMITH,

171 1/2 TREMONT STREET,

BOSTON . . . . . MASS.

**COOK, REDDING & CO.**

149 CONGRESS ST., BOSTON,

Ornamental, Stained, and Cut Glass,

FOR

Churches, Public Buildings, and Private Residences.

**DECORATORS.**

JOHN LAFARGE,

MURAL DECORATION,

51 W. Tenth St., New York and Newport, R. I.

**Society of Decorative Art,**

34 East 19th Street,

NEW YORK.

The Society is prepared to undertake every kind of DECORATIVE NEEDLEWORK,

And special attention is paid to the RESTORATION of ANTIQUE EMBROIDERY.

Special terms are made and careful estimates given to ARTISTS, ARCHITECTS, AND DECORATORS Generally, who are assured that their designs will be carefully reproduced, and their directions carefully followed. Orders are earnestly solicited.

**Fresco Decoration.**

EMMART & QUARTLEY,

Designers, Decorators, and Painters,

32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate work on hand or made to order. No. 1210 Ridge Avenue. JOSEPH S. MILLER, successor to Wilson & Miller, Philadelphia, Pa. Send for Illustrated Price-List

Donald MacDonald,

GLASS STAINER AND DECORATOR

No. 6 Hayward Place,

BOSTON



INLAID WOOD FLOORS.  
ORNAMENTAL WOOD BORDERS  
Designs and Estimates free.  
National Wood Manuf'g Co.,  
950 Broadway, near 23d St., New York

PHILIP A. BUTLER,  
DECORATOR AND DESIGNER,  
No. 17 FERRISBURY SQUARE,  
BOSTON.

HENRY B. JONES & CO.  
IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS.  
612 WASHINGTON STREET, BOSTON.

(Established 1848.)  
L. HABERSTROH & SON,  
Fresco Painters,  
and INTERIOR DECORATORS,  
No. 12 SCHOOL STREET, BOSTON.

*Raphael and Michelangelo.*

A Critical and Biographical Essay. By CHARLES C. PERKINS. 8vo. Many Illustrations, including several Heliotypes. \$5.00.

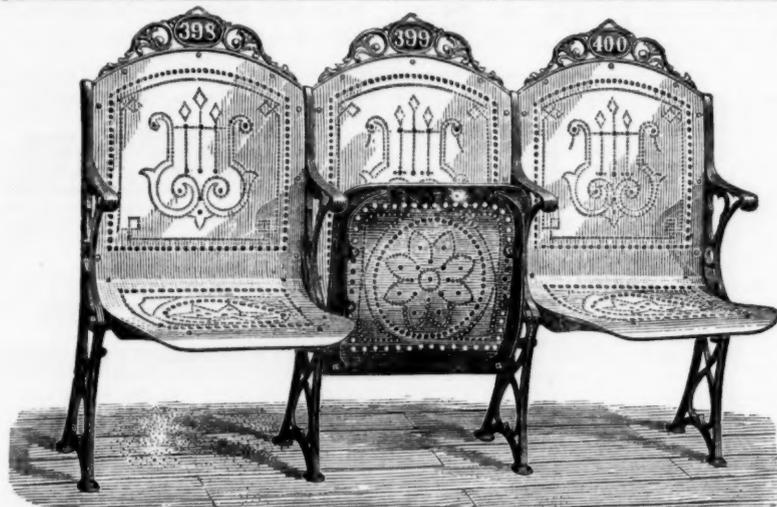
The long devotion of Mr Perkins to the study of art has borne noble fruit in this beautiful volume. The idea of combining in one work a series of interlinked sketches of the two great representative artists of the age of Julius II. and Leo X. was in every respect fortunate; for they respectively illustrate power and beauty, sportive and earnest labor, as no other contemporaries. . . . His style is that of a scholar and a man of taste—simple, lucid, graceful, and even throughout. It has much of the quality of that of Hermann Grimm, in his two similar biographies. The profuse illustrations—although some of them are rather coarsely printed—are a positive boon to the reader.—New York Tribune.

HOUGHTON, OSGOOD & CO., Boston.

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa (Can.)	Philadelphia.	San Francisco	St. Louis.
1 BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2 Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50		3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00		3.00
3 CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25		1.50 @ 2.00
4 Cabinet Maker	2.50 @ 3.25		1.75 @ 2.25		1.50 @ 2.00	1.50 @ 3.00	1.50 @ 2.00			1.50 @ 2.00
5 Finisher	2.00 @ 2.50		1.50 @ 2.00		2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50			2.25 @ 2.50
6 FOUNDRYMAN			1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.25 @ 2.00			1.50 @ 2.50
7 Blacksmith	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50	1.50 @ 2.00	2.00 @ 2.50	1.25 @ 1.75			2.25 @ 2.50
8 Whitesmith			1.50 @ 2.00	1.50 @ 2.50	1.50 @ 2.00	2.00 @ 2.50	1.25 @ 1.75			2.25 @ 2.50
9 Galvanized Iron Worker	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 2.50	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00			2.00 @ 3.00
10 GAS FITTER	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00			1.00 @ 2.00
11 LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50		2.00 @ 2.50
12 PAINTER	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13 Glazier		2.00 @ 2.50	1.75 @ 2.00			1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50		
14 Grainer	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00		2.00 @ 3.00	1.75 @ 2.50			3.50
15 Paper-Hanger	.75 @ 2.50		1.75 @ 2.00	2.00	15c. pr. roll.	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00
16 PLASTERER	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	2.00	1.50 @ 2.00	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00		2.25 @ 2.75
17 Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	1.50 @ 2.50		2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
18 PLUMBER	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.00	2.50 @ 3.50	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50			2.50 @ 3.50
19 QUARRYMAN		3.00 @ 3.50	1.10 @ 1.25		1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20 Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21 Carver	3.00	3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75	3.00	2.00 @ 2.50	3.50 @ 6.00	2.75 @ 3.25		2.00 @ 2.50
22 Pointers and Washers		2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75		1.50 @ 2.50	1.00 @ 1.25	2.25 @ 2.50		
23 Rubber	1.50 @ 2.00	1.75	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75		
24 Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50		2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.75		2.00 @ 2.50
25 Stone-Setter	3.00	2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00		2.00 @ 2.50	1.50 @ 2.00	2.25 @ 2.75		2.00 @ 2.50
26 ROOFER (Tin)	2.00 @ 2.35	2.00 @ 2.50	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25		2.00 @ 2.25
27 Slater		2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00		2.00 @ 2.00	1.25 @ 2.00	1.75 @ 2.25		3.00
28 STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25			1.50 @ 2.50
29 STEAM FITTER		2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00



ARCHITECTS AND BUILDERS

WILL ADD MUCH TO THE BEAUTY OF THEIR BUILDINGS BY USING

GARDNER'S PERFORATED THREE-PLY VENEER SEATING, Which is Ornamental, Durable, and Cleanly.

We refer to the following new and elegant buildings fitted up with our goods: —  
 Morris Plains, N. J., Insane Asylum.  
 New York Hospital.  
 American Museum of Natural History, New York.  
 Institution for Feeble-minded Children, Lincoln, Ill.  
 Insane Asylum, Oshkosh, Wis.

Opera Chairs in new Music Halls, Lewiston, Me., Providence, R. I., and Brooklyn, N. Y.  
 Seettes in Depots of the Pennsylvania Railroad, at Philadelphia, Pittsburgh, etc.

Messrs. GARDNER & CO.:  
 Gents, — The Perforated Opera Chairs put in my Brooklyn Music Hall have proved a great success. They not only furnish the hall in a very attractive style, but for comfort and convenience they are far superior to any upholstered seat I have ever seen. We have the best audiences that Brooklyn can produce, and as yet I have heard nothing but the highest commendation of our seat.  
 Yours very truly,  
 O. G. WALBRIDGE.

Please send for Illustrated Catalogue.

GARDNER & COMPANY, Patentees and Manufacturers,

376 PEARL STREET.....NEW YORK.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

CALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States.

Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO. | 72 & 74 West Monroe St. | Chicago, Ill.



"AUSTIN'S" PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT. MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS. Regular Sizes, 2, 3, 4, 5 & 6 Inch. SPECIAL SIZES MANUFACTURED TO ORDER. AUSTIN, OBDYKE & CO. SOLE MANUFACTURERS. 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA. WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH.

PRINCIPAL AGENTS.  
 M. Halliday, Boston, Mass.  
 Hicks & Badger, Buffalo, N. Y.  
 James Berry, Chicago, Ill.  
 George W. Pitkin & Co., Albany, N. Y.  
 Wasson & Martin, Troy, N. Y.  
 McLeod, Reardon & Co., Portland, Me.  
 W. H. Scott, Salem, O.  
 Kittredge Cornice Co., Worcester, Mass.  
 J. W. Jordan, Wilkesbarre, Penna.  
 B. G. Carpenter & Co., Alleghany City, Penna.  
 T. W. Irwin, Cincinnati, Ohio.  
 Sellen & Co.

W. & J. SLOANE,

IMPORTERS OF

FINE CARPETS AND RUGS

FROM

INDIA, PERSIA, RUSSIA, SMYRNA, and TURKEY.

649, 651, 655 BROADWAY, NEW YORK.

D. M. MEEKER & SON'S

Malleable Iron Hollow Munten Window Sash.

For Insane Hospitals, Fire Proof Buildings, &c.



The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

D. M. MEEKER & SON, Newark, N.J.

Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

THE COWLES HARDWARE CO.

UNIONVILLE, CONN., U. S. A.

MANUFACTURERS OF

(GRER'S)

Single & Double Acting SPRING BUTTS.

The Latest and Best.

Investigate before you purchase

Read the following points of superiority: —

These Spring Butts differ in principle from all others; having a Spiral Spring for power, and Toggles for Levers in combination, and when applied to the leaves of the Butts, Exert their greatest Power when the door is closed, and are the only Butts in existence that

will by actual test perform the labor claimed for them. They offer less resistance the wider the door is opened, until a point past the right angle is reached, where the power is reversed and the door held open.

They will not allow the door to sag. Send for Price List.



NONESUCH Self-Locking and Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.

Patented July 10th 1877

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the art-workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Heliotype Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. P'ANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER. 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist*, Boston.

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. Withal the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courant.*

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVES. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIÉNARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11¼ x 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOthic FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOLETTE-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal.*

The works of the learned and distinguished French Architect, EUGENE VIOLETTE-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser.*

## Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — *EUGENE BENSON, in The College Courant.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

**The New York Sketch-Book of Architecture.**

3 vols., 4to, \$6.50 each. We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

**The American Architect and Building News.**

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\*.\* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

(Reported for the American Architect and Building News.)

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for various building materials including Bricks, Fronts, Cement, and Fire Bricks.

DOORS.

Table listing prices for doors, including raised panels and moulded doors.

BLINDS.—Outside.

Table listing prices for blinds, including inside and outside blinds.

WINDOW FRAMES.

Table listing prices for window frames.

LATH.—Cargo rate.

Table listing prices for lath.

LIME.

Table listing prices for different types of lime.

LUMBER.

Table listing prices for various types of lumber.

PAINTS AND OILS.

Table listing prices for paints and oils.

AXLE PULLEYS.—Steel.

Table listing prices for axle pulleys.

SASH WEIGHTS.

Table listing prices for sash weights.

SASH LINE.

Table listing prices for sash lines.

DOOR BUTTS.

Table listing prices for door butts.

Table listing stone cargo rates delivered at New York.

Table listing slate delivered at New York.

Table listing tin plates delivered at New York.

Table listing zinc duty sheet.

Table listing lead.

BOSTON.

Prices to Contractors and Builders.

Table listing prices for fire bricks in Boston.

Table listing prices for building bricks in Boston.

Table listing prices for building stone in Boston.

Table listing prices for lumber in Boston.

Table listing prices for paints and oils in Boston.

Table listing prices for lime in Boston.

Table listing prices for lumber in Boston.

Table listing prices for paints and oils in Boston.

Table listing prices for lime in Boston.

Table listing prices for lumber in Boston.

Table listing prices for paints and oils in Boston.

Table listing prices for lime in Boston.

Table listing prices for lumber in Boston.

Table listing prices for paints and oils in Boston.

Table listing prices for lime in Boston.

Table listing prices for lumber in Boston.

Table listing prices for paints and oils in Boston.

Table listing prices for lime in Boston.

Table listing prices for lumber in Boston.

Table listing prices for paints and oils in Boston.

Table listing prices for lime in Boston.

Table listing prices for lumber in Boston.

Table listing prices for paints and oils in Boston.

Table listing mortise locks—brass face and half—easy spring.

Table listing sash fasts.

Table listing store door handles.

Table listing iron.

Table listing iron beams.

CHICAGO.

Prices to Contractors and Builders.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing prices for brick, lime, and cement in Chicago.

Table listing roofing materials including charcoal and zinc.

A Word to Manufacturing Firms.

Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms. They recommend, on their own account, and for the sake of the public, that such firms advertise in this paper.

Inventors and manufacturers of Steam Heating Apparatus, Hot Air Furnaces, etc., should not fail to advertise in the paper which prints a weekly list of all the new buildings projected in the country, and a record of important ones being built.

TO ADVERTISERS.

The following letter from an architect of Des Moines, Iowa, explains itself:— "The American Architect is especially invaluable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

**The Automatic Fire Alarm Telegraph.**

IS OPERATED BY THE HEAT OF THE FIRE.

The apparatus is placed on the ceiling of every room, of floor, and closet in the building, so that a fire can in no instance be more than fifteen or twenty feet from it.

It can be adapted to all temperatures.

The alarm is almost instantaneous.

It is given directly to the Fire and Protective companies and to the City Fire Alarm Office. It may also be given in the building protected. It may be given by hand.

It tells the Department the exact location of the fire before the companies leave their stations, thus preventing the delay and loss caused by breaking into rooms where there is no fire.

A break in the wire instantly signals itself; but, by a combination of the metallic and earth circuits, does not prevent an alarm of fire, even while the wire is broken.

An incendiary cannot, therefore, prevent an alarm by cutting the line.

**The Automatic Fire Alarm Telegraph**

Prevents the possibility of a large loss.

It saves the drenching a building with water.  
It saves the breaking up of business.  
It saves the loss of contracts and customers.  
It saves insurance. It saves a watchman.  
It saves the books, and the many other losses that insurance never covers.

The returns of the New York Patrol Committee show that the loss by fires originating in buildings equipped with the AUTOMATIC TELEGRAPH has been diminished over 76 per cent. by the use of this system.

Company's Office: 178 Devonshire St., Room 20,  
Where the apparatus can be seen.

C. E. QUINN, Pres. P. T. JACKSON, Treas.

CRANE, BREED & COMPANY CINCINNATI, O.

**SAFETY BOILERS**  
FOR  
**HEATING**  
STEAM AND HOT WATER.

MOST ECONOMICAL & RELIABLE METHOD WITH  
AUTOMATIC APPLIANCES, RA DIATORS, PIPE  
VALVES, REGISTERS, FITTINGS, STEAM-PUMPING

**TO ARCHITECTS.**

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the

**SCAGLIOLA AND MAREZZO MARBLE,**  
Which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall, and Altar Work.

JAS. T. ALLEN & CO.,  
25 North Market Street, Philadelphia

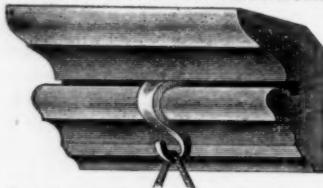
**MAKE** GAS GENERATORS,  
FOR LIGHTING  
Dwelling-Houses, Public  
Buildings, Churches,  
Factories, etc., etc.

Send for CIRCULAR **your own**

**WALWORTH MANUF. CO.** **GAS**  
No. 69 Kilby Street,  
BOSTON, MASS.

**BAKER'S**

Combined Cornice and Picture Rod Moulding.



(Patented in the United States and Dominion of Canada, 1877.)

For Hanging Pictures, etc.

FOR SALE BY F. P. BAKER.

The only Agent in the U. S. and Canada,  
84 BEVERLY STREET . . . BOSTON.

ESTABLISHED 1836.

**JOHN FARQUHAR'S SONS,  
SLATE, METAL, AND COMPOSITION ROOFERS,  
NOS. 20 AND 22 EAST STREET, BOSTON.**

Order Box, No. 83 Mechanics Exchange, No. 35 Hawley Street.

Agents for Warren's Patent Natural Asphalt Roofing. Special attention given to repairs of all kinds of Roofing.

**Inventors and Owners of the following Patents:** FIRST. Patent Fastener for securing Slates or other covering to Iron Purlines where the roof is wholly of Iron. SECOND. A Roof composed of Wooden Rafters encased in Asbestos, Sheet Metal, or other fire-proof material, to which Iron Purlines are fastened, and the slates or other covering secured by our Patent Fastener. The slates are then rendered underside with hair mortar or any other material. The object intended being a Light Fire-proof Roof, avoiding all condensation and preventing leakage.

**EASTERN ROOFING SLATES**

FROM MONSON AND BROWNVILLE, MAINE.

**CLEMENT, HIGBEE & CO.**

GENERAL AGENTS,

Piper's Wharf, 474 Atlantic Avenue,  
BOSTON, MASS.

These Maine Slates are the best and cheapest in the market They are also the strongest, smoothest, and most uniform, and the only perfectly un fading slate in the world.

THE AKRON PIPE

Is superior both in quality and finish to any manufactured in this country, and is recommended by architects, engineers, etc., familiar with its merits.

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY,  
72 WATER STREET, BOSTON.

**FIRE BRICK,**  
Enameled Brick,  
CHIMNEY TOPS,  
Flag Stones,  
Terra Cotta Goods,  
A full line of  
Fancy Building  
Materials.

**THE STANDARD AND ONLY RELIABLE PORTABLE ROOFING.**

With white Fire Proof Coating, for steep and flat roofs in all climates. In rolls ready for use. Easily applied by any one. No heat required. It weighs only 80 pounds per 100 square feet, and costs only half as much as tin.

**H. W. JOHNS M'F'G CO.,** 87 Maiden Lane, New York,

Manufacturers of Asbestos Liquid Paints, Coatings, Cements, Boiler Coverings, etc.

Send for Samples, Descriptive Price Lists, etc.

**The Art Interchange.**

A fortnightly household journal published under the auspices of the

**SOCIETY OF DECORATIVE ART.**

Suggestions of detailed instructions in silk, crewel, or mediæval embroidery; drawing and painting on wood, silks, linen, and porcelain; carving in wood and ivory; and modelling in clay. Art news from all large cities. Correspondence from abroad; besides special departments devoted to literary reviews, drama, music, and architecture.

ONE DOLLAR AND A QUARTER A YEAR

IN ADVANCE

Address 34 East 19th Street, New York.

**Bound Volumes of the American Architect.**

We are prepared to fill orders for binding the *American Architect and Building News* in styles similar to the volume for 1876, at the following rates:—

Price of cover without binding . . . . . \$1.00  
Cover and binding (for subscribers) . . . . . 2.00  
Numbers of 1876 or 1877 without cover or binding . . . . . 7.50  
Bound volumes of 1876 or 1877 . . . . . 9.00

In sending volumes to be bound it should be stated whether the illustrations are to be bound with their respective numbers, or whether all illustrations are to be placed together at the end of the volume.

The above will be sent, post-paid. Subscribers sending their numbers to be bound will prepay postage or express charges.

**HOUGHTON, OSGOOD & CO.,** PUBLISHERS,  
Winthrop Square, Boston.

**THE AMERICAN ARCHITECT AND BUILDING NEWS SENT FREE!**

We send Free the Nos. for November and December, 1878, to new subscribers paying before December 15, 1878.

**BUILDERS AND MECHANICS**

In search of a trade paper will do well to weigh the fact that in the first six months of this year we published fine illustrations of

24 Country Houses,	13 Churches,	10 Staircases,	4 Details,	2 Bridges,
9 City Houses,	5 Cathedrals,	9 Wall Decorations,	2 Tombs,	1 Police Station,
4 Hospital Buildings,	5 Church Interiors,	7 Bay-Windows,	2 Fountains,	1 Engine House,
4 School Buildings,	2 Hotels,	4 Furniture,	1 Shop Arcade,	1 Market House,
3 Library Buildings,	1 Court House,	1 City Hall,	1 Cemetery Gateway,	1 Stable,
2 Insurance Buildings,	1 Opera House,	1 State Prison,	1 Castle,	1 Studio.
4 Stores,	1 Music Hall,			

Besides perspective diagrams, foreign sketches, and numerous cuts illustrating building appliances. Terms \$6.00 per year. Send for specimen copy. Remittances to be made by check, draft, or money-order to the Publishers, **HOUGHTON, OSGOOD & CO.,** WINTHROP SQUARE, BOSTON.

**NON-POISONOUS****SILICATE PAINT**

Does not discolor, chalk, or crack off.  
It is superior to lead.

The only cure for damp walls of churches, dwellings, and public buildings, is the

**PETRIFYING LIQUID**

See article on "Dwellings of the Poor," *AM. ARCHITECT*, Sept. 21, 1878.

Send for Price List and Testimonials.

**HOWARD FLEMING,** Sole Agent in the United States,

10 PINE STREET, NEW YORK.

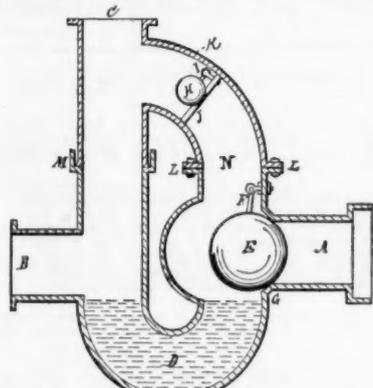
BUILDING INTELLIGENCE.

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

- ROCK-DRILLING ENGINE.—William H. Elliott, New York, N. Y.
SPRING HINGE.—David W. Housley, Grove City, Ill.
DAMS AND PIERS.—Roger S. Littlefield, Chicago, Ill.
WINDMILL.—Harvey L. May, Gatesburg, Ill.
TOOL HANDLE.—William Millsbaugh, Middletown, Conn.
MOULDS FOR FORMING BOXES FROM VEENEERS.—Nathaniel Waterbury, Baltimore, Md.
HYDRAULIC ELEVATOR.—George H. Bailey, Newark, N. J.
DOOR BELL.—Frederick W. Brookispiper, New Haven, Conn.
PUMP.—John T. Fanning, Manchester, N. H.
TONGUING AND GROOVING MACHINE.—W. S. Mayo, Ottawa, Can.
SCAFFOLD.—John A. Russell, Elizabeth, N. J.
HINGE FOR METALLIC BOX.—Daniel M. Somers, Brooklyn, N. Y.
AIR REGISTER.—Edward A. Tuttle, New York, N. Y.
PAVING STONE.—Charles Brenner, Quincy, Ill.
MACHINE FOR CALCIMINING.—Asa Brooks, Hawleyton, N. Y.
SEWER-TRAP.—William A. Pitt, New York, N. Y.
In this trap protection against sewer gas is afforded by the usual water-seal and by a ball-valve, E, which, suspended at F, closes tightly upon a ground valve seat in the mouth of the inlet pipe, A. Fastened to the trap by flanges at L and the socket M is a branch pipe, K, in the top of which is a hand-hole which is to be tightly closed. In this branch is a diaphragm of brass, J, pierced by a hole, which is usually tightly closed by the hinged ball-valve, H. In action this



trap is intended to work as follows: As the ball-valves E and H are lighter than the water which forms the water-seal, any action in the drain or out-let pipe B which would tend to siphon the trap will fail to so empty it, since the air rushing from A to fill the vacuum will find it easier to lift the valves E and H than to force over the contents of the trap. On the other hand, if the water in the trap evaporates, the inflow of sewer gas is checked by the valve E. The forcing of basin and water-closet traps opening into A, by the rush of a body of water through it, is prevented by the fact that air in A cannot be compressed, as it is free to force open the valves E and H and escape into the sewer.

- INSULATED CONNECTION FOR GAS-LIGHTING APPARATUS.—Charles D. P. Gibson, New York, N. Y.
CAP AND ANCHOR FOR METALLIC ROOFING.—William G. Hyndman, Cincinnati, O.
PUMP PLUNGER.—Amos A. Lamb, Boston, Mass.
SCROLL-SAWING MACHINE.—Benjamin Merritt, Newton, Mass.
BRICK MACHINE.—Isaac Morley, Pittsburgh, Penn.
CURTAIN ROLLER AND FIXTURE.—Walter B. Meyers, Boston, Mass.
WATER-CLOSET VALVE.—Robert Smith and Philip Connelly, Brooklyn, N. Y.
WOOD PAVEMENT.—William H. Stone, Chicago, Ill.
PIPE WRENCH AND CUTTER.—William L. Truland, Lansingburg, N. Y.
ROCK DRILL.—Edward S. Winchester, South Boston, Mass.
BORING MACHINE.—Edward S. Winchester, South Boston, Mass.
TINNERS' SPOCK.—Henry C. Woolson, Buffalo, N. Y.
LIGHTNING-ROD.—L. D. Vermilya, Dayton, O., W. S. Reynolds and E. A. W. Hunter, Philadelphia, Penn.
METAL-SHEARS.—William J. Collins, Cleveland, O.
EXCAVATING MACHINE.—James T. Douglas, San Francisco, Cal.
DOOR-KNOB ATTACHMENT.—Job F. Peacock, Reno, Neb.
FIRE-ESCAPE.—Valentine Wohlmann, Cincinnati, O.
DOUBLE-ACTING LIFT PUMP.—A. H. Dean and A. C. Pike, Philadelphia, Penn.
LAYCH.—Bradley W. Foster, Huntington, W. Va.
SHUTTER-WORKER.—William Jones, Oshawa, Ont.

COMPLETED BUILDINGS.

- BRIDGEPORT, CONN.—The new building of the Bridgeport Savings Bank is finished. It is a four-story brick and stone building at the corner of Main and State streets. It measures 48 by 60 feet. Messrs. Lambert & Bunell of this city are the architects.
CHESTERTOWN, MD.—The new church which the Catholics of this town and vicinity are about finishing will be dedicated on December 8.
DOVER, N. H.—The First Parish Congregational Church during the summer and fall has been undergoing thorough alteration of interior at a cost of \$15,000. The manner in which the fresco decoration is done is creditable to the artist, Mr. P. A. Butler. The windows were made by Messrs. Kelley & Holland, Kirby & Lewis, architects, of Boston. The ceremony of rededication was performed Thanksgiving Day.
JERSEY CITY, N. J.—The new Dominican convent was formally consecrated November 17. The edifice is built in the Gothic style, of pressed Philadelphia brick, finished with brown stone, and cost \$40,000.
LEXINGTON, ILL.—The new United Brethren church was dedicated November 17.

- LONDON, O.—The new Episcopal church here, just completed, was dedicated Saturday, November 16, by Bishop Jeggar.
MCGREGOR, IO.—The new public school building is just completed, at a cost of about \$13,000. F. D. Hyde, of Dubuque, is the architect.
MILWAUKEE, WIS.—The "Milwaukee City Hospital" is completed, and has been accepted by the city authorities.
PRIMA, ILL.—The new court-house was dedicated November 18. Mr. Decker, of Chicago, was the contractor.
STOCKBRIDGE, MASS.—The tower which David Dudley Field has erected at Stockbridge, to perpetuate the fame of the old mission church, is completed, and will soon receive the bells. The tower, eighty-five feet high, is constructed of the best masonry, and stands near the site of the old church.
WARREN, O.—The dedicatory services of the new First Presbyterian Church occurred November 19. The edifice was begun in 1873, and has been completed at a cost of \$52,000.

SUMMARY OF THE WEEK.

- Baltimore.
SEATING RINK FOR MR. S. T. CLARK.—Messrs. J. A. & W. T. Wilson, architects, Baltimore. The building measures 82 x 185 feet. A gallery 8 feet in width, for spectators, is carried around three sides, a space 12 feet wide being reserved in front for dressing rooms, lavatories, etc. The Pimpton roller skate, which is in use over Europe, and to some extent in the United States, is to be used. The surface, of asphalt or other pavement, covers over 10,000 square feet. The exterior or front is of half-timbered construction, plastered in the panels, resting on a low brick wall decorated with black brick. The sides of the gable are covered with Akron roofing tiles. The clerestory windows extend entirely around the building, and a porch over entrance is to have cathedral glass and bull's-eyes, set in lead. It is proposed to decorate the interior in gliding and poly chrome, with a flat paneled ceiling 18 feet from floor.
COURT HOUSE.—There seems to be a general feeling that a new court house should be built.
DWELLING.—A house on Charles Street, near corner Reed, is just commenced for Mr. E. N. Belt. Estimated cost, \$12,000; T. Buckler Ghequire, architect; Henry Smith & Son, builders. Of Baltimore brick, with finish of Salem, Ind., limestone.

- Boston.
BUILDING PERMITS.—The following permits have been granted since our last issue:
WOOD.—Rand St., near Blue Hill Ave., Ward 20, for D. F. Katon, by McNeil Bros, 1 dwell., 22' x 30'; two stories; pitch roof.—12 West Cottage St., Ward 20, for Mrs. A. H. Burke, by Chas. Stinson & Co., 1 dwell., 22' x 31'; two stories; pitch roof.—Adams St., Ward 24, for Wm. Gordon, 1 store, 17' x 22'; one stor.; pitch roof.—Buttonwood St., Ward 15, for Eneas McKehron, 6 dwells., 16' x 28'; two stories; mansard roof.—Wabon St., Ward 21, for Robert G. Molineux, by J. F. Haynes, 2 dwells., 20' x 36'; two stories; pitch roof.—92 Cambridge St., Ward 4, for D. H. Pettee, 1 stable, 30' x 14'; one story; flat roof.—Lawrence Ave., Ward 24, for Wm. Phipps, 1 stable, 36' x 29'; one story; mansard roof.—Adams St., Ward 24, for H. D. Pope, by H. P. Oakman, 1 dwell., 32' x 34'; two stories; pitch roof.—Monument St., Ward 3, for M. G. Field, 1 storage, 16' x 19'; one story; pitch roof. Division St., Ward 13, for A. L. Bailey, by John French, 1 storage, 35' x 75'; one story; flat roof.—Cawwell's Wharf, Ward 5, for J. C. Nichols, by Wm. H. Ryan, 1 storage, 55' x 180'; one story; flat roof.—Medford St., Ward 3, for Augustine Shurtleff, 1 storage, 20' x 40'; one story; pitch roof.—Savin Hill Ave., Ward 24, for Milbrey Green, by Alfred Ford, 1 dwell., 20' x 33'; two stories; flat roof.—M St., Ward 14, for Geo. H. Saw, by G. H. Wiggleworth, 1 stable, 32' x 32'; two stories; flat roof.

- REPAIRS, ADDITIONS, AND ALTERATIONS still continue active, 1,845; permits having been issued during the year ending November 23. The department is still busily engaged in the examination of buildings requiring fire escapes.
HALL.—The Catholic Hall in East Boston will be on Paris Street, and will shortly be built.
COURT HOUSE.—The City Surveyor is making a survey of the proposed site for a court house at the northerly end of Pemberton Square. The land included extends to Howard Street, and takes in the Howard Athenaeum and other buildings. The City Architect is preparing to make a design for the building. The probabilities are that the City Council will be recommended by the Committee on County Buildings to build there.

- Brooklyn.
BUILDING PERMITS.—Bergen St., No. 519, 1 two-story brick dwell., 20' x 26'; owner, John B. Carey, 517 Bergen St.; builders, J. Dighan and B. Carey.—Boerum Pl., cor. Schermerhorn St., 2 three-story brick flats, 20' x 60'; owner, A. J. Foren, on premises; builder, S. V. R. Ayles.—Clinton St., architect, E. L. Robert; builders, Thomas Gibbins and Geo. F. Chapman.—Fulton St., 1 one-story brick and iron car house, 50' x 100'; owner, Bushwick B. R. Co.—Hope St., 2 two and three-story brown stone dwells., 18' and 18' 6" x 45'; owner, P. Cancannon, Kemp St.—Madison St., 1 three-story brown stone dwell., 16' x 22'; owner, Ellen L. Hennessy; 399 Putnam Ave.; architect, J. D. Hennessy; builder, P. Sullivan.—Pierpont St., cor. Clinton St., 1 four-story brick and terra cotta library, 75' x 35'; owner, Long Island Historical Society; architect, George B. Post; builder, D. H. King, Jr.—Stagg St., 1 four-story brick tenement, 18' x 55'; owner, H. Reiners, Stagg St.; architect, John Platte.—Sunmer St., No. 3, 1 three-story brick store and dwell., 25' and 60' x 45'; owner, Henry (Chas. 3/8) Patches Ave.; builder, John Dhuy.—Fishing Ave., 1 one-story brick factory, 25' x 20'; architect, Charles H. Kraft; builders, Thos. B. Rutan and John Lee.—Fulton Ave., 7 four-story corner brown stone tenements, 20' x 65'; owner, Chas. E. Evans, 93 Monroe St.; architects, Parritt Bros.—Vanderbilt Ave., 5 three-story brown stone dwells., 15' x 45' owner, Chas. Pratt.

A CONTRACT AWARDED.—The contract for repairing and altering the Twenty-third Regiment Armory has been awarded to Matthew Ryan, whose bid of \$6,795 was the lowest one submitted to the Board.

- Chicago.
BUILDING PERMITS.—L. H. Boldenwick, three-story dwell. and store, cor. North Ave. and Wells St.; cost, \$6,000.—C. W. Partridge, 2 one-story dwells., Leavitt St.; cost, \$1,500.—Patrick Mooney, three-story stone front store and dwell., 739 South Halsted St.; cost, \$3,000.—John Johnston, two-story dwell. and barn, Dearborn Ave.; cost, \$6,500.—Martha E. Nixon, 6 two-story stone front dwells., cor. Cass and Illinois sts.; cost, \$15,000.—G. H. A. Thomas, 2 two-story stone front dwells., Sedgwick St.; cost, \$6,000.—Downer & Bemis Brewing Company, barn, Twenty-fourth St.; cost, \$10,000.—George Hildebrandt, 2 three-story dwells., Chicago Ave.; cost, \$6,000.—Thomas Macklin, 5 three-story stone front dwells., cost, \$17,500, and 2 two-story barns, cost, \$1,000, all situated on the corner of State and Indiana sts.

- Milwaukee.
ASYLUM FOR THE INSANE.—The contract to build the county asylum for the insane has been made with C. & W. Kratz for the sum of \$134,483. The work will be commenced immediately. The plans are by H. C. Koch & Co. There were in all fourteen bids, ranging from the above sum to \$173,000.

H. C. Koch & Co. have received an order to prepare plans for a court house for Jefferson County, Wis. It is to conform, in most respects, to the Wauegan court house, Ill., that has lately been completed, the plans of which were by the same architects.

They have also prepared plans for a church to be built at Schleicherville, Wis. Cost, about \$25,000.

NEWSPAPER OFFICE.—The work on the building for The Evening Wisconsin newspaper (E. T. Mix, architect) is being pushed with vigor. It is to be completed by the first of May next.

INDUSTRIAL SCHOOL.—The building for the Industrial School for girls will be ready for occupancy next month. Mr. E. T. Mix is the architect.

DWELLING HOUSES.—The contracts for finishing the dwelling house of Charles Ray have recently been made with the same contractors who had the contract for enclosing the house. This house is built of blue limestone, rock-faced, random-range work and relieved with Ohio sandstone. It will be one of the finest dwelling houses in the city when completed. Mr. Mix is the architect. He has also lately prepared plans for a dwelling for Mr. Davidson to be built on Grand Ave. Cost, \$6,500. Also plans for four cottages for S. Bryant that will cost about \$3,000 each.

The dwelling house for David Ferguson is about ready for occupancy. It is built of Milwaukee pressed brick and relieved with Ohio sandstone. It has one peculiarity for this section of the country; the wood used for the inside finish is chiefly gum-wood. Mr. James Douglas is the architect. There is very little new work at present in the architects' offices.

IN GENERAL.—There are about twenty-five or thirty small houses in course of construction in various parts of the city, that will cost from fifteen hundred to twenty-five hundred dollars each; but they are of the cheap order, with sanitary arrangements that would break the heart of Father Chadwick.

New York.

- BUILDING PERMITS.—Lexington Ave., cor. Sixty-fifth St., 1 four-story brown stone dwell., 20' 6" x 12'; owners, Wm. and A. M. Parsons, 803 Lexington Ave.; architect, A. B. Ogden.—Lexington Ave., 5 four-story brown stone dwells., 16' x 52'; cost, each, \$9,000; owners, W. and A. M. Parsons, 803 Lexington Ave.; architect, A. B. Ogden.—Sixty-second St., 2 four-story brown stone dwells., 12' 9" x 60'; cost, each, \$9,500; owner and builder, James McDonnell; architects, Thom & Wilson.—Twenty-sixth St., No. 126 W., 1 five-story brick and Ohio-stone store and tenements, 25' x 75'; cost, \$10,400; owner, Mrs. Parker, Buckingham Hotel; architects, Thom & Wilson; builders, Samuel Lowden, Grissler & Fausel.—Sixty-fifth St., Nos. 20 and 22 E., 2 four-story brown stone dwells., 20' x 55'; cost, each, \$13,000; owners, Bussell & Wray, 106 East Thirty-first St.; mason, Bernard Munday.—Seventieth St., 2 four-story brown stone dwells., 12' 6" x 55'; cost, each, \$8,500; owner, Lawrence Daly, 225 East One Hundred and Twenty-first St.; architect, James E. Ware.—Forty-ninth St., No. 451 W., 1 one-story brick factory, 18' x 30'; cost, \$170; owner and builder, Joseph Hoffstadt and Adams Sts., Nos. 101 and 103, 2 five-story brick tenements, 25' x 67' 3"; cost, each, \$9,500; owner, Charles Bornecamp, 127 First Ave.; architect, J. W. Klemt.—Fourth St., No. 54 E., one five-story brick store and dwell., 30' 6" x 90'; cost, \$10,750; owner, Hermann Bruns, 94 Second Ave.; architect, F. W. Klemt.—Fifty-sixth St., No. 152 W., 1 three-story brick stable, 25' x 95'; cost, \$6,000; owner, A. H. Barney, 38 Park Ave.; mason, L. N. Crow; builder, George Miller.

Philadelphia.

- BUILDING PERMITS.—Valentine Lent, 4 two-story dwells., 13' x 30', Hope St.—W. A. Levitte, two-story stable, 58' x 30', cor. Adams and Adams Sts.—W. A. Levitte, two-story parking-house, 140' x 30', cor. Adams and Aramingo sts.—W. A. Levitte, one-story warehouse, 280' x 40', Adams St.—W. A. Levitte, one-story warehouse, 288' x 35', Aramingo St.—Christ Dear, 2 two-story dwells., 14' x 30', Pearre, east of Roxborough St., Frankford.—J. Steel, four-story factory, 71' x 40', Huntingdon St.—S. Heim, three-story dwell., 16' x 30', cor. Ash & Salmon sts.—J. McBride, two-story dwell., 14' x 28', Amber St.—J. S. Culbertson, 12 three-story dwells., 15' 8" x 50', Wellington St.—J. Longstreet, one-story packer-house, 40' x 50', Forty-sixth and Haverford sts.—Joseph Bird, two-story factory, 40' x 81', Tenth St.—J. S. Culbertson, 20 two-story dwells., 14' x 20', Harrold St.
POLICE STATION HOUSE.—An ordinance appropriating \$20,000 for a new police station on Second Street is under consideration.

CHAPEL.—An ordinance authorizing the Belmont M. E. Church to build a frame chapel at Forty-third and Aspen streets has been reported favorably.

PUBLIC BUILDINGS.—The Public Building Commission has asked for an appropriation of \$1,265,000 for the ensuing year. The southern front has been completed to the architect's satisfaction. The marble work on the east and west fronts has been well advanced, and in some places to a height equal to that of the southern front. On the northern front but little has been done. The whole building is in such condition that it is expected it can, during the coming year, be completed in all the main structural features to the cornice of the second story, and at the same time steps taken for the erection of the roof over a large portion of the wings and curtains of the southern portion.

St. Louis.

BUILDING PERMITS.—Twenty permits have been issued for the week ending November 22, 1878, of which eight are for small frame structures of slight value. Of the rest, those worth \$2,500 and over are as follows:—

Table with 5 columns: Owners, Use, Stories, Rooms, Cost.
Row 1: S. E. Kennedy, Dwelling, 3, 8, \$4,000
Row 2: Mrs. Julia Chenie, Dwelling, 2, 20, 2,500
Row 3: W. Barnard, Dwelling, 2, 8, 5,000
Row 4: Henry G. Soulard, Dwelling, 2, 24, 3,500

CHURCH.—The new Second Baptist Church, Rev. W. W. Boyd, pastor, 1 plastered, and the interior wood-work is being pushed forward with a view to the completion of the church before January 1, 1879. The Messrs. Odell, of New York, have contracted to build a fine new organ for this church.

ART MUSEUM.—The Art School of Washington University has just received a gift of \$50,000 for the purpose of erecting a gallery and museum of fine arts. All branches of fine art will be represented. The building is to contain studios for advanced students, and also studios for rent.

Washington, D. C.

- BUILDING PERMITS.—C. W. Thorn, two-story stable on I St.; cost, \$500.—A. Richards, two-story dwell. on N St.; cost, \$500.

**CONTRACT AWARDED.**—Bids for furnishing the wrought and cast iron work in the second tier of beams for the new building for the Bureau of Printing and Engraving have been opened. The award was made to the lowest bidder, Charles A. Schneider & Sons, whose bid was \$4,475.94. The other bids were as follows in the order of the amounts: Samuel J. Crosswell, \$4,537.39; Bartlett, Robbins & Co., \$4,739.37; Phoenix Iron Co., \$4,818.95; Gray & Noyes, \$4,907.

#### General Notes.

**Bristol, R. I.**—The State Street Methodist Church is building a large parsonage on State Street. The house will be ready for occupancy by the commencement of the next conference year. On Thames Street Mr. Joyner is erecting a two-story building, to be used for stores underneath and the chambers for tenements. Mr. B. L. West is building a large store at the corner of High and Constitution streets.

**Camden, N. J.**—The Cox Brothers, of Camden, have just completed arrangements for building fourteen first class brick houses on Walnut Street, between Ninth and Tenth streets.

**Canton, Conn.**—Harlow A. Wheelock, of Collinsville, is putting up a new dwelling-house on his lot in Canton Village. He is a practical builder, and superintends the work himself.

**Cape May, N. J.**—Mr. R. J. Dobbins is thinking of rebuilding the Trans-Continental Hotel.

**Detroit, Mich.**—A Turner Hall is being built on the corner of Antoine and Calhoun streets.

**East Boston, Mass.**—A double house of wood is soon to be built for Mr. D. H. Blaney; cost, \$5,000. The building measures 42 by 35 feet. Mr. C. J. Bateman, of Boston, architect.

**Fall River, Mass.**—In the annual report of James G. Hill, Supervising Architect, we find the following: "The limited appropriation for the Fall River Custom House will also compel a suspension of the work during the winter."

**Hartford, Conn.**—Christ Church is to be improved by building a new chapel, vestry, and study rooms, and an addition to the west end of the church for a large chancel recess.

**Hartford, Ind.**—They are finishing a new Old Fellows' Hall at this pleasant village seven miles out on the raging laugher. This town is rather small of its age, as it was laid out by John Walker in 1817, and now contains only about one hundred inhabitants.

**Indianapolis, Ind.**—The contract for building the new elevator for Messrs. F. P. Bush & Co. has just been closed by the architect, Mr. L. H. Gibson. The bins and outside walls are to be laminated wood-work, the cost of which will be about \$19,000. The School Board Committee on Buildings and Grounds are to advise for ground suitable for a library building.

**Kensington, Conn.**—Work on the new Catholic church is progressing rapidly. The frame is covered and spire nearly completed. Peter Hackett has commenced the building of a house near the new church. He has the cellar and foundation completed and will soon have the frame up.

**La Crescent, Minn.**—A Catholic priest has recently settled here, and is soon to build a church, — the only sign of progress.

**Louisville, Ky.**—C. B. Shelton has obtained a permit to erect a brick cottage on Chestnut Street, at a cost of \$1,000.

**Marblehead, Mass.**—The members of the First Church Society are building a chapel on the land adjoining their meeting-house.

**Mechanicsburg, O.**—A number of public improvements are now in motion, and within a few months some new brick stores will be built.

**Medfield, Mass.**—The Catholics are to build a church, a site on Pleasant Street having been presented by Mr. Patrick Martin, and the completion of the work having been undertaken by the pastor, Rev. Father Brennan.

**Milltown, N. B.**—A Congregational church is now building of wood; cost, \$8,000. Messrs. J. Stevens & Son, of Boston, Mass., are the architects.

**Nashua, N. H.**—Mr. C. J. Bateman, of Boston, is the architect of a brick dwelling for Colonel D. W. King. Contracts let separately. It measures 34 by 44 feet, and will cost \$6,000.

**New Bedford, Mass.**—On the east side of Cedar Street, between Locust and Robeson, Walter R. Glass is building a cottage 23 by 30 feet in size. Charles A. Wilcox is doing the carpentry; Alexander R. Wilcox the masonry. On the west side of Cedar Street, between North and Hillman, Samuel T. Bennett is building a house 24 by 34 feet in size. Mr. Bennett does the carpentry himself. Martin L. Peirce does the masonry.

**Newcastle, Cal.**—The railroad company is building two wood-sheds at Newcastle, one 288 feet long, the other 224. The old shed was burned down in 1873.

**New Haven, Conn.**—A four-story brick building for stores and French flats is now building, corner Chapel and York streets, from designs by B. G. Russell, architect. It is of irregular shape, about 45 by 60 feet, street fronts faced with North Haven pressed brick, with granite and olive-colored Nova Scotia stone finish; cost, \$16,000. At present it is ready for roof, and is to be finished in April. Messrs. Brett and Brown are the contractors.

**Pateroson, N. J.**—The Franciscan Fathers have raised a fund for a new church building, the corner-stone of which was laid November 23 with the usual ceremonies of the Catholic Church. The new church will be dedicated to St. Bonaventura, one of the members of the Franciscan order, and is to be built in the Byzantine style of architecture, covering an area of 139 feet by 57 feet. In the centre there will be a large central tower, with corner and side buttresses. The church will have a groined and ribbed ceiling, rising 41 feet above the pews. The foundation walls are to be of brown stone, and the superstructure of brick. The basement of the new building will be used as a school-room.

**Rising Sun, Ind.**—Some improvements are going on in town. A new M. E. (colored) church, a new brick stable at the foot of Main Street, by Joo. Eshman, and a new steam saw-mill by Wm. Whitlock, are among the number.

**Roxbury, Mass.**—A brick dwelling is now building on Warren Street, for Mr. N. A. Apollonio; Kelley & McNamara, contractors; Mr. G. M. Harding, architect.

**Sidney, O.**—M. Wagner has contracted for the brick for a large block of buildings and business rooms, which he expects to put up on Popular Street next spring.

**St. John, N. B.**—The Baptist church on Lanister Street is to be finished December 25. It is of brick, and measures 90 by 130 feet. A. B. Edwards is the contractor; cost, \$35,000. Messrs. J. Stevens & Son, of Boston, Mass., are the architects.

**Stuebenville, O.**—St. Paul's Episcopal Church (stone) has just commenced by F. W. Hewitt, architect, of Philadelphia; length, 128 feet; width, 60 feet 9 inches; stone spire, 165 feet high. The church will have 650 sittings. The cost, omitting heating, pews, etc., will be about \$16,000.

**Wallingford, Conn.**—The new Catholic church has been commenced.

**Wethersfield, Conn.**—D. W. Bailey & Sons are building a new house on Rogers Avenue for Martin Hathaway. Messrs. Clarence Bailey and James G. Griswold are building new barns.

## INDEX OF CURRENT WORK,

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

### Baltimore, Md.

**Church.**—The Cummings Memorial Church. Mr. Cassell, architect.

**Church.**—The Pius IX. Memorial Church. G. A. Fredrick, architect. Cost \$100,000.

**Hospital.**—Johns Hopkins Hospital. J. R. Nicrusée, consulting architect.

### Boston.

**Bank Building.**—Tremont Bank Building. Carl Fehmer, architect.

**Hotel.**—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.

**The Museum of Fine Arts.**—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.

**School-House.**—High and Latin School. G. A. Clough, architect.

**Asylum.**—Asylum for Aged People, C. J. Bateman, architect. Cost \$50,000.

### Brooklyn, N. Y.

**Tenement.**—A. T. White, owner. William Field & Son, architects.

**Society Building.**—The Long Island Historical Society Building, Mr. G. B. Post, architect. Cost \$100,000.

**Church.**—St. Francis Xavier R. C. Church, West Fifth Street. Cost \$150,000. P. C. Keely, architect.

**Hospital.**—St. John's Hospital, N. L. Derby, New York, architect.

**Hospital.**—Hospital of St. Mary, Mr. P. C. Keely, architect. Cost \$200,000.

### Cincinnati, O.

**U. S. Custom House and Post Office.**—S. Hannaford, local superintendent.

**Children's Home.**—J. W. McLaughlin, architect. Cost \$50,000.

**Newspaper Office.**—The Gazette Building. E. Anderson, architect.

**Club-House.**—Allemania Club-House. J. W. McLaughlin, architect. Cost \$60,000.

**University Building.**—Cincinnati University Building. S. Hannaford, architect. Cost \$50,000.

### Cleveland, O.

**Convent.**—Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

### Hartford, Conn.

**Seminary.**—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.

**Cathedral.**—R. C. Cathedral of St. Joseph. P. C. Keely, Brooklyn, architect.

**Catholic School.**—Brown & Stilson, architects, New Haven. Cost about \$25,000.

### Jersey City, New York.

**The "Florence."**—Emile Gréwé, architect. Mrs. Matthews, owner. Cost \$50,000.

**Bank Office.**—Building by the United States Government. Cost \$146,000.

**The Boreel Building.**—S. D. Hatch, architect. Cost \$250,000.

**Church.**—St. Paul's (R. C.). Mr. J. O'Rourke, architect, Newark, N. J. Cost \$500,000.

**College.**—Addition to Columbia College. C. C. Haight, architect. Cost \$200,000.

**Office Building.**—Messrs. Silliman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.

**Apartment House.**—Mr. H. J. Hardenburgh, architect. Cost \$300,000.

**Private Residence.**—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.

**Armory for the Seventh Regiment.**—Cost \$300,000. C. W. Clinton, architect.

### Philadelphia.

**Hospital.**—Presbyterian Hospital. Wilson Bros., arch'ts.

**Office Building.**—Girard trust.

### Providence, R. I.

**Dormitory for Brown University.**—Messrs. Stone & Carpenter, architects.

### St. John, N. B.

**Post Office, Custom House, and Savings Bank.**—Mr. Scott, Chief Architect to the Dominion Government.

**Bank.**—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.

**Church.**—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.

**City Hall.**—Messrs. McKean & Fairweather, architects.

**Chapel.**—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.

**Churches.**—St. James's Church, Croft & Camp, architects, St. John, N. B.—St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$60,000.

### St. Louis.

**Church.**—Second Baptist Church. Edward Hilsley, contractor. Cost \$100,000.

**Court House for the new county of St. Louis.**—F. Renwick, architect. Cost \$28,000.

**College.**—College for the Christian Brothers. Mr. Jas. McGrath, architect. Cost \$200,000.

**Custom House and Post Office.**—Mr. Jas. G. Hill, Supervising Architect of the Treasury Department.

### General.

**Athens, O.**—Court House. Mr. H. E. Myers, architect. Cost \$90,000.

**Cambridge, Mass.**—Gymnasium for Harvard College. Messrs. Peabody & Stearns, architects, Boston.

**Concord, N. H.**—State Prison. Messrs. Dow & Wheeler, architects. Appropriation, \$200,000.

**Crown Point, Ind.**—Court-House. J. C. Cochran, architect, Chicago. Cost \$45,000.

**Elmira, N. Y.**—Masonic Hall. N. LeBrun, architect, New York. Cost \$60,000.

**Fairbault, Minn.**—Deaf, Dumb, and Blind Asylum. J. Babcock & Co., contractors. Cost \$53,730.

**Independence, Io.**—Hospital for the Insane. G. Josselyn, supervising architect. Cost \$350,000.

**Indianapolis, Ind.**—State House, Mr. E. May, architect. Cost \$2,000,000.

**Joliet, Ill.**—St. Mary's (Roman Catholic) Church. Mr. Keely, architect, Brooklyn.

**Kankakee, Ill.**—Insane Asylum. J. R. Willett, architect, Chicago, Ill.

**Lowell, Mass.**—Appleton Bank. O. A. Merrill, architect. Cost \$70,000.

**Newark, N. J.**—St. Michael's Church (R. C.). Mr. J. O'Rourke, architect. Cost \$25,000.

## Publishers' Department.

### The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY

HOUGHTON, OSGOOD & CO.,

WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year; \$6.00 in advance.

### CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,

WITH

Houghton, Osgood & Co.'s other Periodicals.

THE ARCHITECT and ATLANTIC MONTHLY...\$9.00

THE ARCHITECT and THE REPORTER...16.00

THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL...10.00

THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE...7.00

THE ARCHITECT and DWIGHT'S JOURNAL OF MUSIC...7.00

\* N. B.—The Atlantic portraits of Lowell, Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

Payments should be made directly to the Publishers, either by draft or by post office order.

HOUGHTON, OSGOOD & CO., Publishers,  
WINTHROP SQUARE, BOSTON.

## BUILDING SPECIALTIES, Etc.

—A correspondent thus writes concerning the "Paragon Trap," manufactured by Brandies & Wicket, 46 Fulton street, Brooklyn, N. Y.: "An ordinary trap is simply a piece of pipe, bent or cast into an S (U) shape for retaining a quantity of water to serve as a water-seal or cut-off against sewer-gas. When suction underneath it takes place this water is lifted (siphoned); the trap loses its protective power, as the sewer gas has a chance of egress, by means of the outlets suddenly opened to it. To avoid this occurrence the 'Paragon' trap has been devised. This trap contains a very large body of water; the siphoning is made impossible by a very simple but very effective arrangement in breaking the current; it is made in one solid casting, under pressure, to avoid leakage, to give a finished appearance, and to prevent adhesion of organic matter, and consequent accumulation. Its pleasing shape is purposely designed to facilitate branching of waste-pipes; it may be bent and worked or flanged without any danger of breaking a seam or leakage, and any intelligent observer can discern the points claimed by its inventor at first look. Traps are of too great importance in our domestic economy not to be discussed and examined thoroughly; all those containing impediments, seams, and rough spots should be considered as worse than useless, each rough place, each minute elevation, forming a nucleus for the formation of an obstruction of a dangerous nature; price should be no object where health and life are concerned; in this case, however, the best is the cheapest, and the price of the 'Paragon' is almost ridiculously low."

*St. Hall & Sons*  
Manufacturers of  
*Architectural Terra Cotta,*  
Buff and Colored Brick, Fire Brick  
Established 1876, South Amboy, N. J.

## ARCHITECTURAL IRON WORKS.

YOUNGLOVE & CO., Prop'r's.

CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CEILINGING, ETC.

Estimates promptly furnished.

(Established 1848.)

MARKET ST. ARCHITECTURAL FOUNDRY

AND

IRON WORKS.

SNEAD & CO..

LOUISVILLE, KY.

Makers of every description of Iron Work for Buildings

## PROPOSALS.

### WOOD MANTELS AND GLASS.

Proposals for Wood Mantels and Glass for the U. S. Custom House and Court House at Evansville, Ind.

OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., November 25, 1873.

Sealed proposals will be received at this office until 12 M. on the 11th day of December, 1873, for furnishing, delivering, and fitting in place complete, the Wood Mantels required for the U. S. Custom House and Court House at Evansville, Ind.; also, for furnishing and delivering, ready for putting in place, all the glass required for the building, in accordance with drawings, specifications, and schedules, copies of which and any additional information may be had on application at this office or the office of the Superintendent.

JAS. G. HILL,  
Supervising Architect.

154\*

PROPOSALS.

TIMBER.

UNITED STATES ENGINEER OFFICE, 82 WEST THIRD STREET, CINCINNATI, OHIO, November 7, 1878.

Sealed proposals, in duplicate, will be received at this office until noon on Wednesday, the 11th day of December, 1878, for furnishing 125,000 feet, B. M., more or less, of Oak Timber. This timber must be of the best quality and must be delivered without expense to the United States at the site of the movable dam at Davis Island.

Specifications and forms of proposals will be furnished on application to the undersigned, or to Lieutenant F. A. Mahan, Corps of Engineers, Box 70, Pittsburg, Pa.

WILLIAM E. MERRILL, Major of Engineers.

HEATING APPARATUS.

LOUISVILLE, KY.

The Building Committee of the Masonic Widows' and Orphans' Home and Infirmary, will receive proposals for the erection of the requisite apparatus for heating the Home by steam, according to a specification and plans made for same by Henry Whitestone, architect, which may be seen at the office of the undersigned, No. 159 Main Street, Louisville, Ky., and to whom sealed proposals are to be delivered on or before noon of the 12th day of December next. The Committee reserves the right to reject any or all bids.

GEO. W. WICKS, Chairman Building Committee.

COPPER.

NAVY PAY OFFICE, WASHINGTON, D. C. November 8, 1878.

Sealed proposals, in duplicate, to be indorsed "Proposals for Copper," will be received at this office until 12 o'clock M. on the third day of December, 1878, to furnish and deliver at the Washington Navy Yard,

BUREAU CONSTRUCTION AND REPAIR:

100,000 pounds of American Copper. This copper will be required as follows:— 50,000 pounds best quality American Copper, about 31 inches long, 4 inches wide, and 2 1/2 inches thick, to weigh not less than 110 pounds.

50,000 pounds best quality American Copper, 16 inches long, 12 inches wide, and 2 1/2 inches thick, to weigh about 150 pounds.

One half of each kind of copper to be delivered on or before the 31st day of January, 1879, and the second half on or before the 28th day of February, 1879, with the privilege of delivering the whole at as early a day as the successful bidder may desire.

The whole of this copper will be subject to the tests and inspections of the proper officers of the Washington Navy Yard, to whom bidders are referred.

No proposal will be considered unless from a manufacturer or regular dealer in copper.

The right is reserved to reject any or all offers should it be considered to the interest of the government to do so. Blank forms for bids to be had at this office.

W. W. WILLIAMS, Pay Inspector, U. S. Navy.

WROUGHT AND CAST-IRON WORK.

Proposals for Wrought and Cast-Iron Work for the U. S. Custom-House, etc., at Chicago, Ill.

OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., November 6, 1878.

Sealed proposals will be received at this office until 12 M., of the 3d day of December, 1878, for furnishing, delivering, fitting, and putting in place complete the wrought and cast-iron work, comprising window-frames, shutter-casings, sills, trimmings, door-frames, thresholds, skirting, etc., for the U. S. Custom-House, etc., at Chicago, Ill., in accordance with drawings, specification, and schedule, copies of which and any additional information may be had on application at this office or the office of the Superintendent.

JAMES G. HILL, Supervising Architect.

PROPOSALS.

GAS WORKS.

RIO DE JANEIRO, BRAZIL.

By order of the Brazilian Legation at Washington the undersigned makes public that the Imperial Government calls for proposals for the gas illumination of Rio de Janeiro, the present contract expiring in March next. The proposals, addressed to the Envoy Extraordinary and Minister Plenipotentiary of Brazil, must be sent until 3 o'clock in the afternoon of the 1st day of December next to the Brazilian Consulate General, 42 Broadway, New York, where copies of the general conditions and specifications referred to in the fourth clause can be obtained, as well as any information in relation to this matter.

SALVADOR DE MENDONCA, Brazilian Consul-General, NEW YORK, September 9, 1878.

MINISTRY OF AGRICULTURE, COMMERCE, AND PUBLIC WORKS - DIRECTORY OF PUBLIC WORKS.

By order of his Excellency the Minister of this Department, it is advertised that this Directory receives proposals for the service of the illumination by gas of the Capital of the Empire, in the terms and conditions below specified:—

First—The proposals will be presented in a closed letter, until 3 o'clock in the afternoon of the 1st day of December of the present year, in this city, in the Directory of Public Works of the Ministry of Agriculture, and in London, Paris, and Washington, at the respective Brazilian Legations.

Second—The proposers must present, outside of the envelope that shall contain the proposals, documents that will testify their fitness for the service that they propose to contract.

Third—No one can concur without having previously deposited in the National Treasury, in the depository of the same Treasury in London, or in either one of the Legations above indicated, a caution, in money or bonds, of the public debt or the Empire, \$50,000, or a corresponding amount in foreign money (£5,000, 125,000 francs, or \$25,000) gold.

Fourth—The object of the concurrence will be only the price of furnishing a cubic meter of gas, and the term of the privilege, that in no case shall exceed 35 years. All the other clauses of the contract, excepting whatever may be transitory, will be without any discrepancy or modification, those proposed by the Government in the general specifications and conditions, which will be distributed separately in the Directory of the Public Works and the above-mentioned Legations.

Fifth—All the proposals will be opened in this city, in the public session of the Directory of Public Works, on the 2d day of January, 1879; and the Government will declare on them within fifteen days of that date.

Sixth—When the choice of the proposal is made, the contract will be considered concluded; being necessary for the preferred proposer to sign only the mentioned general conditions, which will be entered in a competent book of the Department of Agriculture. For greater facility, each proposer who resides out of Rio de Janeiro must constitute in this city, and with a due antecedence, somebody with a power of attorney to sign the general conditions in case the preference fall on him.

Seventh—The proposer, who after having received communication of the acceptance of his proposal, refuses to sign the referred conditions, will forfeit the caution in the benefit of the National Treasury.

Eighth—The Government reserves the right to annul the competition within the period fixed by Clause 5, to decide upon the proposals that were presented.

M. BUARQUE DE MACEDO, Chief of the Directory.

DIRECTORY OF PUBLIC WORKS, Rio de Janeiro, July 22, 1878.

TIMBER.

U. S. ENGINEER'S OFFICE, 26 WASHINGTON AVENUE, DETROIT, MICH.

Sealed proposals, in duplicate, will be received at this office until 3 o'clock P. M., Wednesday, the 4th day of December, 1878, and opened immediately thereafter, for furnishing timber for crib work at Harbor of Refuge, Sand Beach, Mich. For information on this subject apply to this office.

G. WEITZEL, Major of Engineers.

PROPOSALS.

JAIL.

GALENA, ILL.

Sealed proposals will be received by the undersigned until 1 o'clock P. M. of the 11th day of December, prox., for the construction of a Jail and Jailor's Residence at Galena, Jo Daviess County, Ill., according to plans and specifications made for the same, and which may be seen at the county clerk's office, at the court-house in Galena, Jo Daviess County, Ill., or at the office of Randall & Miller, architects, 602 West Washington Street, Chicago, Ill. Bids are specially invited for the entire work complete, and also for any of the separate branches of it, the committee reserving the right to reject any or all of such bids at their discretion. Bids, sealed, to be left with W. F. Crummer, County Clerk. Dated at Galena, Jo Daviess County, Ill., November 16, 1878.

PHILIP PARKIN, CHARLES SPEER, JOHN A. GAFFNEY, WM. M. LOGAN, L. F. WOODWORTH, County Building Committee.

LEVEE.

WHITEWATER, O.

Sealed proposals will be received at this office until Wednesday, December 4, 1878, at 12 o'clock M., for the construction of a Levee and approach to the north end of the Elizabethtown Bridge, in Whitewater Township, said levee to be across the Miami Bottom, between the said bridge and the Indianapolis & Cincinnati Railroad. The Levee will be about 2,600 feet in length, and will contain about 75,000 cubic yards, more or less. Specifications, profile, and cross-sections of said work can be seen at this office.

All bids not in accordance with specifications will be rejected. The right to reject any or all bids is reserved. Persons desiring to remonstrate against said improvement will file their objections with the County Auditor, and said remonstrances will be considered on Wednesday, December 4, 1878, at 12 o'clock M.

By order of the Commissioners, W. S. CAPPELLER, County Auditor, and Clerk of Board County Commissioners.

LOCKS AND KEYS.

POST OFFICE DEPARTMENT, WASHINGTON, D. C., AUGUST 15, 1878.

Separate sealed proposals will be received at this Department until 12 o'clock noon on the 20th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as are to be used for the street letter-boxes of the United States.

As the public exposure and searching examination necessary to intelligent bidding on any prescribed model of a lock and key would tend to impair, if not entirely destroy, the further utility of all such locks and keys for the purposes of the mails, the Postmaster-General prescribes no models or samples for bidders, but relies for a selection on the mechanical ingenuity and skill which a fair competition among inventors, hereby invited, may develop in samples submitted by them.

Specifications of requirements as to proposals, samples, kinds and quantities of locks and keys, contracts, etc., will be furnished on application by letter to the Second Assistant Postmaster-General.

No proposal will be considered which is not submitted in accordance with such specifications and forms of proposal. The contracts which may be made are to be in conformity with the specifications and accepted proposals.

D. M. KEY, Postmaster-General.

"Wood thoroughly creosoted is practically imperishable." CREOSOTED WOOD.

PREPARED AT THE Hayford Patent Creosote Wood Preserving Works, ELIZABHTHPORT, N. J., and A St., So. BOSTON. Offices: 10 Warren St., New York, and 4 Post Office Sq., Boston.

EDWARD R. ANDREWS, Proprietor.

ARCHITECTS, ENGINEERS, and BUILDERS are reminded that wood prepared by the Hayford process is rendered PRACTICALLY IMPERISHABLE, being protected from decay, marine worms, etc. It should be used for Ties, Bridges, Piles, Piers, Wharves, Pavements, Stables and Cellar Floors, and wherever wood is exposed to alternate dryness and moisture.

Pamphlets, fully explaining the creosoting process, furnished on application.

Weather Strips.

BROWNE'S METALLIC AND RUBBER WEATHER-STRIPS—the oldest, the best, the cheapest in market. Stood the test 15 YEARS. They exclude the cold drafts around windows and doors in winter, keep out dust in summer, and stop rattling sashes. We employ experienced and responsible workmen, and guarantee entire satisfaction. We send, free of charge, men with samples and prices to measure and give cost. We warrant them good for 5 YEARS.

Patent Metallic Weather-Strip Co.

812 BROADWAY, N. Y.

THE PENRHYN SLATE CO.

MANTELS, And General Slate Manufacturers, (Quarries and Manufactory, Middle Granville, N. Y.) 80 UNION SQUARE, NEW YORK, Corner of Fourth Avenue and 17th Street. W. H. KIRTLAND, Secretary.

THE ATLANTIC MONTHLY FOR 1879.

DURING the coming year the Publishers of THE ATLANTIC will aim to maintain the high character of the magazine in all departments, and will especially seek to keep it in the leading place it has more recently taken by its articles on

POLITICAL, ECONOMIC, AND SOCIAL QUESTIONS.

The author of the notable paper on "Certain Dangerous Tendencies in American Life," and of the "Origin and Aims of the National Party," will furnish three articles on the Conservative Classes of the South, as a balance to the disorganizing elements in the North. His large and intimate personal acquaintance with workingmen, and his practical experience of their life, give peculiar value to his articles.

Hon. J. W. KEARNEY, of Kentucky, will continue his papers on the History of American Finance.

A. G. SEDGWICK, Esq., will write on legal points in politics; and men eminent in business and public life will write on matters connected with the interests they represent. THE ATLANTIC will endeavor to give, not merely names, but papers of real value on all the public questions it discusses.

During the session of Congress the magazine will contain each month a Washington Letter. The New York Letters will also be resumed, and will treat of the life of the commercial metropolis in its most characteristic phases.

FICTION.—THE ATLANTIC for 1879 will be uncommonly rich in the range and number of its Serial Stories, including Irene the Missionary, a story of Americans in Syria; and Stories by Mr. T. B. ALDRICH, Miss E. W. OLNEY, the author of One too Many, Mr. W. D. HOWELLS, and Mr. BJORNSTJERNE BJORNSEN, the famous Norwegian poet and novelist, who will write a Serial expressly for THE ATLANTIC.

Each month will be given a Short Story of the kind for which THE ATLANTIC is distinguished.

CRITICISM.—This department, in which THE ATLANTIC has long been chief, will receive particular attention. The brilliant articles on contemporary novels will appear regularly; the book notices will be full, varied, and carefully written; and Mr. T. S. PERRY will continue his characteristic reviews of French and German literature.

THE CONTRIBUTORS' CLUB, a favorite department with ATLANTIC readers, will be fully sustained as the expression of opinion and desultory criticism upon æsthetic and social topics.

TRAVELS.—Mr. W. W. STORY will furnish studies of Italian locality and travel; Mr. HENRY JAMES JR. will write transatlantic sketches; Mr. W. H. BISHOP will contribute papers on art and life abroad; Mr. C. E. NORTON'S studies of art and history in his essays on Italian cathedrals will be continued; and Col. G. E. WARING JR. will write of English country-life.

TERMS.—\$4.00 a year, in advance, postage free; 35 cents a number. With superb life-size portrait of Lowell, Whittier, Bryant, or Longfellow, \$5.00; with two portraits, \$6.00; with three portraits, \$7.00; with all four portraits, \$8.00.

Remittances should be made by money-order, draft, or registered letter to

HOUGHTON, OSGOOD & COMPANY, BOSTON.



**ATNA IRON CO.**

Manufacturers of every description of Wrought and Cast

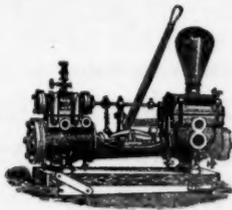
**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**

Patent



Steam

**PUMP**

**THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a speciality.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

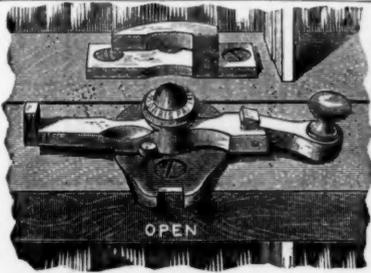
The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

**KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES, { 14 & 16 Federal St., Boston. 113 & 115 Congress St., Boston. 92 & 94 Liberty St., New York.

Send for Illustrated Catalogue.



THE

**MORRIS BURGLAR-PROOF SASH LOCK.**

Patented July 2, 1878. The Safest! The Simplest! The Most Reliable! THE BEST!

N. B. - No springs to get out of order. Sold by all hardware jobbers. Manufactured by the MORRIS SASH LOCK MANUFACT'G CO., Office 168 Walnut St., Cincinnati, O. Price List and Samples furnished to the trade on application. A liberal discount to the trade.

**\$500 COMPETITION**

FOR A

**MODEL TENEMENT.**

The attention of Architects is called to a competition for the best design for a

**Model Apartment House for Working People,**

Which has been instituted by the proprietors of THE PLUMBER and SANITARY ENGINEER, in company with several prominent citizens of New York. Four Prizes, amounting in all to Five Hundred Dollars, will be awarded. The Committee of Award is to consist of

- Mr. R. G. HATFIELD, Architect.
- Prof. CHAR. F. CHANDLER, Pres. Metropolitan Board of Health.
- Rev. JOHN HALL, D. D.
- Rev. HENRY C. POTTER, D. D.
- ROBERT HOE, Esq.

For further particulars see December issue of this journal. Address

**The Plumber and Sanitary Engineer, Box 3037 P. O. NEW YORK.**

TERMS: \$1.50 per year; Single Copies, 15 cents.



Terra Cotta Chimney Tops, Akron Lead Tile

D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

**NATIONAL**

**FINE ART FOUNDRY,**

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze.

**GAS**

**SPRINGFIELD GAS MACHINE.**

Springfield, Mass.: 45 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.



**NATIONAL TUBE WORKS CO.**

PATENT

Indestructible Enamelled Wrought Iron

**LAP-WELDED PIPE,**

From 1/4 inch to 15 inches diameter.

Now extensively used for

Water, Gas, Sewerage, and Mining.

It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage.

MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making Joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at offices of

National Tube Works Co.,

5 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

**BURDITT & WILLIAMS,**

DEALERS IN

**FINE HARDWARE**

of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



**The Draft of the Chimney increased.**

Smoking Chimneys Prevented

Particularly adapted to Chimneys in exposed positions.

Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR,

70 Grand St., Brooklyn, N. Y.

**CATALOGUE OF**

**Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO.,

ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.

TO ARCHITECTS AND BUILDERS.

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

**BEEHIVE BRAND.**

**FELT ROOFING.**

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

**UNPARALLELED DISCOVERY.**

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the Paint Preserver invented by ASAHEL WHEELER Boston. It will neither crack, blister, nor scale.



**PEERLESS BRICKS.**

**THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,**

MANUFACTURES AND KEEPS IN STOCK

**ARCHITECTURAL SHAPES (80 kinds).**

ALSO

**RED Pressed Fronts.**

Extra fine in color and quality

**BROWN,** Colored throughout

More beautiful than Brown Stone DURABLE

**CHOCOLATE,**

Same as above; difference in color

**FLESH COLOR,**

A very popular color

**BUFF,** very fine.

Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F. ADAMS,

JOSEPH WOOD, JR.,

PRESIDENT.

TREASURER



**DOLIVET, CUTTER, & CO.,**

ARTISTIC

**Papier Maché Decorations,**

108 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING Venetian Blinds.**  
*Wilson's Patent.*

For first-class Dwellings and Public Buildings. These blinds can be fitted either inside or outside the sash, and are operated with ease without machinery or weights. They are made to coil above or below, as shown in cut. Can be furnished in any kind of wood. Unsurpassed for elegance, durability, and simplicity. Indorsed by many of the leading architects in the country, and in use in some of the handsomest buildings.

We also manufacture **WILSON'S PATENT Rolling Steel Shutters** These blinds are operated on same principle as above (being self-coiling). They are used for closing store-fronts and all windows and doorways that are required to be perfectly fire and burglar proof. Also, Rolling Wood Blinds for Store-Fronts, Book-Shelves, School Partitions, and other purposes. A list of public and private buildings fitted with our Blinds sent on application. Architects and owners are invited to send for working models, catalogues, and price-lists.

**WILSON & JAMES,**  
68 Beekman St., New York.  
Two Prize Medals at Philadelphia.

**THREE ADMIRABLE NEW BOOKS.**

**The School-Boy.** By OLIVER WENDELL HOLMES. Poem read at the Centenary of Phillips Academy, Andover, Mass., June 10, 1878. Illustrated with many excellent Engravings on Wood, designed by J. Appleton Brown, Wand, Sheppard, Merrill, and Hitchcock. Uniform in size and general style with the choice and popular holiday books of previous years, "The Hanging of the Crane," "Mabel Martin," "The Skeleton in Armor," "Christmastide," etc. Handsomely bound in cloth, \$4.00; morocco or tree calf, \$8.00.

A beautiful poem, finely illustrated, tastefully bound: a choice holiday gift-book.

**An Account of the Life and Times of Lord Bacon.** Abridged from the "Life and Letters of Bacon," by JAMES SPEDDING. Uniform with Popular Edition of "Bacon's Works." With a Portrait. Two vols., crown 8vo, \$5.00; half calf, \$9.00.

This edition omits no essential part of Mr. Spedding's voluminous work, but presents a connected and complete narrative of Bacon's life and remarkable career, including enough of the political and literary history of England to make clear Bacon's position, circumstances, and influence. It is a very noteworthy addition to biographical literature.

**The College Book.** Edited by CHARLES F. RICHARDSON and HENRY A. CLARK. 1 volume, 4to, full gilt, \$15.00. A royal volume, containing historical and descriptive accounts, principally by professors or graduates, of twenty-four leading American Universities, Colleges, and the United States Military and Naval Academies, with 60 full-page Heliotype Illustrations of buildings connected with these institutions.

For Sale by all Booksellers.  
**HOUGHTON, OSGOOD & CO., Boston.**

**IMPROVED PRISON LOCKS.**

All Architects should have our 36 page Illustrated Catalogue of Prison Locks.

ADDRESS  
**YALE LOCK MFG. CO., STAMFORD, CONN.**  
New York Salesroom, No. 53 Chambers Street.

**STEWART'S**  
SLATE, MARBLE AND HARD WOOD  
**MANTELS**  
MIRRORS, ART-TILES,  
G. MANTELS, HEARTH'S & CO.  
Masonic Temple 23<sup>rd</sup> St & 6<sup>th</sup> Ave. N.Y.

**WROUGHT IRON BEAMS & GIRDERS**

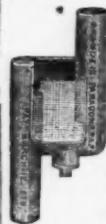
**THE UNION IRON MILLS,** Pittsburgh, Pa., Manufacturers of Improved Wrought Iron Beams and Girders (patented). The great fall which has taken place in the prices of Iron, and especially in Beams used in the construction of FIRE-PROOF BUILDINGS, induces us to call the special attention of Engineers, Architects, and Builders to the undoubted advantages of now erecting fire-proof structures; and by reference to pages 52 and 54 of our Book of Sections—which will be sent on application to those contemplating the erection of fire-proof buildings—THE COST CAN BE ACCURATELY CALCULATED, the cost of insurance avoided, and the serious losses and interruption to business caused by fire. These and like considerations fully justify any additional first cost. It is believed that were owners fully aware of the small difference which now exists between the use of Wood and Iron, in many cases the latter would be adopted. We shall be pleased to furnish estimates for all the Beams complete, for any special structure, so that the difference in cost may at once be ascertained. Address  
**CARNEGIE BROS. & CO., Pittsburgh, Pa.**

**LESTER** Scroll Saw, Circular Saw, Turning, Lathe, Lathe Tools, Emery Wheel, and Drilling Attachment, all for \$5.00. A beautiful and perfect machine, warranted.  
**MILLERS FALLS CO.,**  
74 Chambers Street, New York.

**C. BUTCHER,**  
107  
Devonshire St.  
BOSTON.

Send for Illustrated Catalogue.

**GAS FIXTURES** OF EVERY DESCRIPTION. SPECIAL RATES TO BUILDERS.  
**R. HOLLINGS & CO** 547 Washington St. BOSTON.



**Brandeis' Seamless Paragon Trap** Safest, Best, Cheapest, and Non-siphoning. Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDEIS & WICKETT** 46 Fulton Street, Brooklyn, N. Y.



**PATENT MARQUETRY FLOORING.**

Specimens at Lawrence, Wilde & Co's, 42 Cornhill, Boston.

**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer Gas that has yet been invented.

**A POSITIVE SEAL** Against sewer-gas, absorbed gases, and back water. Seal is not broken by siphonage or evaporation. Self-scouring, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers,  
**B. P. BOWER & CO.,**  
104 & 106 St. Clair St., Cleveland, O.

**THE EUREKA VENTILATION CO.**  
OFFICE AND MANUFACTORY,  
74 CHARLESTOWN STREET,  
BOSTON, MASS.

**THEATRICAL SCENERY AND STAGE SUPPLIES.** Theatrical Fresco only. Prices moderate. References first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.  
**LAFAYETTE W. SLAVY,**  
Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK

**SAYLOR'S PORTLAND CEMENT.**

Approved, recommended, and used by Architects, Engineers, and Builders of the highest authority. New York and Brooklyn Bridge, Department of Docks, and Croton Aqueduct, New York; new Capitol at Albany; U. S. Government Works (forts, light-house foundations, canal locks, etc.); floors for breweries, sugar houses, ice-houses, cellars, and stables, and for heavy foundations, etc. For sale by all dealers in masons' materials.  
**JOHNSON & WILSON, Gen'l Agents, 93 Liberty St., New York**

**PRIZE MEDALLISTS.**  
1862; 1865; 1867; 1873; AND ONLY AWARD AND MEDAL FOR SELF-COILING STEEL SHUTTERS AT CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**  
ORIGINAL INVENTORS AND SOLE PATENTEES OF  
**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Tilford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.  
OFFICE AND MANUFACTORY,  
**162 & 164 West 27th Street, New York.**

**HOPKINS & DICKINSON MANUF'G CO.**  
76 READE STREET, NEW YORK,  
WORKS, DARLINGTON, N. J.

**Lock and Hardware Manufacturers,**  
DESIGNERS, FOUNDERS, AND WORKERS

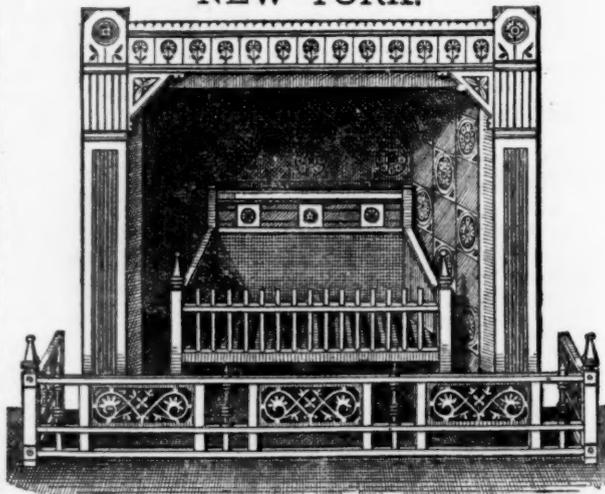
**BRONZE AND BRASS.**

Architects' Designs faithfully executed.

Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)  
Union Sq., 2d door from Broadway, (17th St. side,)  
**NEW YORK.**



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tin.  
HAVE NO OTHER WAREHOUSES.

# AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 154.]

SATURDAY, DECEMBER 7, 1878.

[PRICE 15 CENTS

### BUILDERS' SUPPLIES.

**BARTLETT, ROBBINS & CO.**

ARCHITECTURAL IRON WORK AND GAS MACHINES.

HEATING AND VENTILATING OF PUBLIC AND PRIVATE BUILDINGS A SPECIALTY.

24 LIGHT STREET, BALTIMORE.

**WALWORTH MANUFACTURING CO.,**

69 Kilby Street, Boston,

ENGINEERS AND CONTRACTORS FOR

STEAM AND HOT WATER WARMING AND VENTILATION IN PUBLIC BUILDINGS, PRIVATE RESIDENCES, GREENHOUSES, ETC.

MANUFACTURERS OF SOLAR GAS MACHINES.

Correspondence solicited. Plans and estimates furnished on application.

**"HOTCHKISS" TOWER CLOCKS,**

MANUFACTURED BY

ARTHUR THOMAS CLOCK CO., THOMASTON, CONN.

Prices \$100 to \$6,000.

WARRANTED ACCURATE, STRONG, DURABLE.

OFFICE, 581 BROADWAY, NEW YORK.

Send for Illustrated Catalogue.

**"MINTON'S ART AND TILES."**

ENAMELLED

(China Works, Stoke-Up-on-Trent.) Also, The Campbell Brick and Tile Co.'s ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS, ETC.

For Churches, Banks, Halls, Vestibules, and Hearths; Outside Decorations, Flower Boxes, Etc.

THOS. ASPINWALL & SON,

604 Broadway, New York.

The only representatives in the United States for the above firms.

**ASPHALT (FELT) ROOFING.**

WARREN'S NEW PATENT

FELT AND GRAVEL ROOFING,

Substitutes NATIVE ASPHALT for Coal-Tar materials for these roofs.

The very best and most durable material for flat roofs. Also, Native Asphalt and Asphaltic Cement for Concrete Walks and Pavements.

Roofers and pavers supplied with the above, and with Warren's original Coal Tar Roofing and Paving Materials. Send for circulars and samples.

WARREN CHEMICAL AND MANUFACTURING CO., 88 MAIDEN LANE, NEW YORK. 121 STATE STREET, BOSTON.

**TILES FROM ALL PARTS OF THE WORLD,**

FOR

BANKS, PUBLIC BUILDINGS, and PRIVATE HOUSES. References given to Tile Work throughout the United States and British Provinces

AGENT FOR THE AMERICAN ROOFING TILE

Contracts Solicited

G. A. WELLINGTON, HOUSEHOLD ART ROOMS,

No. 171 TREMONT STREET, BOSTON.

**HUGH SISSON & SON,**

Importers, Dealers, and Manufacturers of

MARBLE.

INTERIOR MARBLE WORK AND MONUMENTAL

WORK A SPECIALTY

Salesrooms, No. 140 W. Baltimore St.: Steam Marble Works, North and Monument Streets, BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,**

SPEAKING TUBES,

AND BURGLAR ALARMS,

For Public and Private Buildings.

THE BEST IN USE.

S. W. FULLER,

63 Devonshire Street, Boston.

**HAWTHORNE & TUCKER,**

PLUMBERS,

16 PROVINCE STREET, BOSTON.

Estimates for Plumbing made, and work done in any part of the United States or Provinces

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY OF NEW YORK.**

LEONARD F. BECKWITH, Pres't. E. GILLET, Vice-Pres't.

Hollow Blocks of any pattern, uniting strength and resistance to fire and water. The Hydraulic Lime of Tell (France), one of the strongest cements known, is largely used in this manufacture. The blocks do not conduct heat, cold, or sound, and weigh 60 per cent less than brick. Fire-proof Partitions, Floor Arches between iron or wooden beams, and ceilings under iron or wooden beams, erected in following buildings:

Western Union Telegraph, Coal and Iron Exchange, Equitable, Staats Zeitung, Windsor & Westminster Hotels, Cluny & Young's Hotel, Boston, Syracuse Savings Bank, West Point Military Hosp. Columbia College, Tribune, Coryell, & Vancorlear Flats, Baltimore Safe Deposit Co. Peabody Inst., Baltimore, Peabody Museum, N. Haven, Westmoreland, & Elise Flats, Sidewalks laid at Lenox Library, Tribune, etc.

Hollow Burnt Clay Bricks, for flat and curved arches, partitions, etc., and Skewbacks for brick arches.

Sole agents for the U. S. for HYDRAULIC LIME OF TELL, and LAFAVRE PORTLAND CEMENT.

Sole agents for the U. S. for METTLACH ENCAUSTIC TILES, laid in Tribune, Staats Zeitung, Mineral Spa, Central Park, Belvidere Hotel, etc.

Sole agents for the Atlantic States for WIGHT'S FIRE-PROOF COLUMNS.

Our Fire-proof work is the only one approved by the New York Board of Fire Underwriters and the Superintendent of Buildings, after severe public tests.

Office Room 64 COAL AND IRON EXCHANGE, 21 Courtland Street, New York. Represented in Boston by

BOORMAN & Co., 5 Doane St.

**AMERICAN ENCAUSTIC TILE.**

Acknowledged by experts to be

THE BEST IN THE WORLD.

Manufactured by the

AMERICAN ENCAUSTIC TILING CO. (Limited.)

OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.

Designs and estimates for Public Buildings, Halls, Churches, Vestibules, and for External Decoration, furnished on application.

**E. HOWARD & CO.**

MANUFACTURERS OF CLOCKS AND WATCHES

CLOCKS FOR PUBLIC BUILDINGS

14 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**

PLAIN AND ENCAUSTIC

FOR PUBLIC BUILDINGS AND DWELLINGS.

As laid by us in

THE CAPITOL AT WASHINGTON,

and in numerous Churches, Banks and Dwellings in every part of the Country.

Glazed and Enamelled Tiles for Mantels, Hearths, Wainscoting, &c., and for Exterior Decoration.

MILLER & COATES,

270 PEARL STREET, NEW YORK.

**THE NEW ENGLAND GRANITE WORKS**

HARTFORD, CONN., and 1321 BROADWAY, N.Y.

Quarries at Westbury, R.I.

MONUMENTAL AND BUILDING WORK

of every description, and the varieties of

AMERICAN AND FOREIGN GRANITE.

UNEQUALLED FACILITIES OFFERED TO THE TRADE.

J. G. BATTERSON, Pres't. H. R. BATTERSON, Sec'y.

J. G. BATTERSON, C. B. CANFIELD, H. A. BATTERSON

G. T. BATTERSON,

CARL CORNBAD, Sculptor.

**WHITTIER MACHINE CO.**

Manufacturers of Steam and Hydraulic

ELEVATORS,

STEAM ENGINES, BOILERS, AND MACHINERY.

No. 1176 Tremont Street, Boston.

Office in the New England Mutual Life Insurance Co's Building, Post Office Square,

and 129 Broadway, New York

CHARLES WHITTIER, Pres't. A. C. WHITTIER, Treas.

**OTIS BROTHERS & CO.**

SAFETY STEAM AND HYDRAULIC

ELEVATORS.

A specialty for a quarter of a century.

BUILDERS OF THE HALE HYDRAULIC ELEVATOR

No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**

OHIO BUILDING STONE.

GRIND AND SUTTER STONE,

From our FLORENCE and AMHERST QUARRIES.

Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS

111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**

Designers and Manufacturers of

GAS FIXTURES,

ORNAMENTAL METAL WORK, CLOCKS AND BROWNS

ARCHITECTS' ORDERS SOLICITED.

Special designs submitted on application.

WAREHOUSES, 536 AND 538 BROADWAY, NEW YORK

MANUFACTORY, 24th and 25th Sts., and 10th AVENUE, N. Y.

**FISHER & BIRD,**

Workers in all kinds of Foreign and Domestic

MARBLE,

97 TO 103 EAST HOUSTON ST., NEW YORK.

Established 1830.

Among our notable decorations are: The Illinois new State House; Palace Hotel, San Francisco; Baldwin's Hotel, San Francisco; Insurance Building, 10th and Chestnut Streets, Philadelphia; Mutual Life Insurance Building

Boston; Orient Mutual Insurance Building, New York; Union College, Schenectady; and numerous Churches, Private Residences, etc., throughout the country. We solicit the opportunity to estimate upon all classes of work, viz., Tiling, Wainscoting, Staircases, Mantels, etc. Come to our work and marble work of every description.

WILSON & HUGHES STONE CO.

Are ready to estimate on contracts of any size for furnishing their celebrated Amherst, Ohio,

BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS OR CUT AND SET

Also,

AMHERST AND INDEPENDENCE GRINDSTONES,

And OHIO MINERAL AND STONE PAINTS

Fire-Proof Stove Cement and Stove Putty ground in Oil

OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MOSAICS"**

Floor Tiles, beautiful in color and design, for Dwelling Churches, and Public Buildings.

SPANISH WALL TILES. White, Glazed, Valencia,

Tiles for Walls and for decorative painting.

PRINTED FIGURED TILES of Spanish designs, for Wainscoting, Mantels, Jardinières, etc.

Floors of "Nolla Mosaics" can be seen at the "Rockingham," corner of Broadway and 46th Street. Imported

and for sale by JOHN CHADWICK, Sole Ag't for U. S.,

49 Broadway, N. Y.

C. E. PARKER, Agent, 14 Exchange Place, Boston.

**MINTON'S ENCAUSTIC TILES.**

SHARPLESS & WATTS,

1325 MARKET STREET, PHILADELPHIA,

Established 1850 as Agents for

MINTON'S TILES AND TESSELLATED PAVEMENTS.

Specialties in Glazed, Encaustic, Majolica, and Art-painted Tiles, for Furniture, Hearths, Fireplaces, etc.

New and original designs continually received.

**STEAM WARMING APPARATUS.**

HIGH AND LOW PRESSURE.

HOUSE WARMING A SPECIALTY.

Pamphlet with more than 1,000 references sent on application.

WYLLYS H. WARNER,

114 LEONARD STREET, NEW YORK,

and 32 West Railroad Street, Syracuse.

**ELEVATORS.—COOKE & BEGGS.**

No. 6 COURTLAND ST., NEW YORK.

Works at Paterson, N.J.

PATENT SAFETY STEAM ELEVATORS

for Public and Bank Buildings, Hotels, Private Dwellings, etc.

SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP

GUARANTEED.

Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**  
THE "HEALTH" AND "TUBULAR"  
Manufactured by the  
**GOLD'S HEATER MANUFACTURING CO.**  
114 LEONARD ST., NEW YORK.  
Send for Pamphlet.  
E. GOLD, Pres't WYLLIS H. WALKER, Treas'r  
**TO ARCHITECTS AND BUILDERS.**

**MORTAR BLACK,**

Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar. For sale only by *Walpole Color and Chemical Works,*  
**HENRY D. DUPEE, Proprietor,**  
79 KILBY STREET, BOSTON

**J. H. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue, Mattapan (Ward 24), Boston.

**MENEELY & KIMBERLY,**  
Bell Founders, Troy, N. Y.,  
Manufacture a superior quality of Bells. Special attention given to **CHURCH, SCHOOL, and COURT-HOUSE BELLS.** Illustrated Catalogue sent free.

**JOHN MACK,** Plain and Ornamental Plasterer.  
41 Cambridge Street, Boston.

**MANTELS AND GRATES.**

**BANKIN'S PATENT** makes the Cleanest, Cheapest, and Hottest Fire. Avoid infringements, and send for Circular to

**C. S. RANKIN & CO.,**  
**ARCHITECTURAL IRON WORKS,**  
Manufacturers of all kinds of Iron Work for BUILDINGS, JAILS, ETC.  
187 W. PEARL ST., CINCINNATI, O.

**BUILDING MARBLE.**  
Branch yard of the **RUTLAND MARBLE CO.,** 198 Cambridge Street, Boston. **JOHN D. ALLAN,** Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Italian and Continental Marble, furnished at low prices.

**PRESSED BRICK.**  
STOCK AND COMMON

MANUFACTURED BY  
**FLETCHER & THOMAS,**  
Indianapolis, Ind  
All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY  
**GILLIS & GEOGHEGAN,**  
Nos. 116 & 118 Wooster St., New York.  
See our work at the Cathedral, 50th St. and 5th Av.; Drexel Building, cor Wall and Broad; Bennett Building, Fulton and Nassau, etc.  
Architects and owners promptly furnished with specifications and estimates.

**ROBERT LOGAN,**  
Importer and Dealer in Foreign and Domestic *Granite Monuments, Columns, etc.*  
Also, GRANITE FOR BUILDING PURPOSES, And Encaustic and Marble Tiling.  
129 FULTON STREET . . . NEW YORK.

**ARCHITECTS.**

**P. B. WIGHT,**  
CONSULTING ARCHITECT,  
78 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.  
Consultations on matters pertaining to Fire-Proof Construction, Foundations, Drainage, Sanitary Work, Ventilation, Machinery, Valuations, Interior Decorations, and Management of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,** ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY

**W. W. GOODRICH, C. E.,** ARCHITECT  
AND SANITARY ENGINEER  
KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes of Public or Private Buildings, Monumental Design, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,** ARCHITECT,  
Room 17, Life Insurance Building,  
ST. LOUIS, MO.  
Special attention to Churches, Schools, and other public buildings.

**WALTER DICKSON,** ARCHITECT. **PERRY BUILDING,**  
Albany, N. Y.

**SANITARY ENGINEERING.**  
**EDWARD S. PHILBRICK, C. E.,**  
13 West St., Boston, Mass.  
Offers advice and superintendence in CONSTRUCTION OF WORKS,  
PLUMBING, DRAINAGE, AND VENTILATION,  
And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
87 HARRISON AVENUE . . . BOSTON,  
**SHEET METAL CORNICES, HAYES'S PATENT VENTILATING SKY-LIGHTS, WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.**

**ARCHITECTURAL IRON AND JAIL WORKS.**  
**M. CLEMENTS,**  
MANUFACTURER OF  
Iron Railing, Bank Vaults, and Jail Cells,  
Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc  
BAYMILLER STREET, near Sixth and C. H. & D. R. R. Depot, CINCINNATI, OHIO.

**PATENT MINERAL WOOL.**  
ENTIRELY FIRE-PROOF AND UNDECAYING.  
**THE BEST INSULATOR OF HEAT, COLD, AND SOUND.**  
For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc.  
**ALEXANDER D. ELBERS,**  
P. O. Box 4461. 26 1/2 Broadway, New York.

**IRON STABLE FITTINGS.** **BUBIER & CO.,** 28 Exchange St. BOSTON.

**PATENTS.**  
**F. A. LEHMANN,** Solicitor of Patents, Washington, D. C.  
NO PATENT NO PAY. Send for Circular.

**FIRE ON THE HEARTH** STOVES & HEATERS.  
COMBINATION OF  
**FIRE-PLACE, CLOSE STOVE, AND FURNACE.**  
The attention of Architects and Builders is especially invited to our new  
**FIRE-PLACE HEATERS,**  
Adapted for the use of any kind of fuel, and the only heater especially adapted for the use of **SOFT COAL and WOOD.** Send for description to  
**THE OPEN STOVE VENTILATING CO.,**  
115 Fulton St., New York.

**DECORATORS.**

**W. J. MCPHERSON,**  
(Established A.D. 1848.)  
**MURAL PAINTER,**  
**DESIGNER,**  
**Ecclesiastical Decorator,**  
AND  
**ART STAINED GLASS MANUFACTURER,**  
440 TREMONT STREET,  
BOSTON, MASS.

Should you want Ornamental Glass, write for particulars to

**FRANK HILL SMITH,**  
117 1/2 TREMONT STREET,  
BOSTON . . . . . MASS.

**COOK, REDDING & CO.**  
149 CONGRESS ST., BOSTON,  
Ornamental, Stained, and Cut Glass,  
FOR  
Churches, Public Buildings, and Private Residences.

**STAINED GLASS.**  
Thirty years' experience in Stained Glass enables the subscriber to produce Modern and Medieval styles of work equal to any European examples, for Churches, Private Residences, Halls, etc.  
The value of the work is attained by a careful selection of colors in Cathedral and French Glass of his own importation.  
Designs in accord with architects' plans furnished at short notice. Reference of work at office  
**SAMUEL WEST, 115 Eliot St., Boston**

**FRANK HILL SMITH,**  
117 1/2 TREMONT STREET,  
BOSTON . . . . . MASS.

**COOK, REDDING & CO.**  
149 CONGRESS ST., BOSTON,  
Ornamental, Stained, and Cut Glass,  
FOR  
Churches, Public Buildings, and Private Residences.

**DECORATORS.**

**JOHN LAFARGE,**  
**MURAL DECORATION,**  
51 W. Tenth St., New York and Newport, R. I.

**Society of Decorative Art,**  
34 East 10th Street,  
NEW YORK.

The Society is prepared to undertake every kind of **DECORATIVE NEEDLEWORK,** And special attention is paid to the RESTORATION of **ANTIQUÉ EMBROIDERY.**

Special terms are made and careful estimates given to **ARTISTS, ARCHITECTS, and DECORATORS** Generally, who are assured that their designs will be carefully reproduced, and their directions carefully followed. Orders are earnestly solicited.

**Fresco Decoration.**

**EMMART & QUARTLEY,**  
Designers, Decorators, and Painters,  
32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate work on hand or made to order. No. 1210 Ridge Avenue **JOSEPH S. MILLER** successor to Wilson & Miller, Philadelphia, Pa. Send for Illustrated Price-List

**Donald MacDonald,**

**GLASS STAINER AND DECORATOR**

No. 6 Hayward Place,

BOSTON

THE  
**ARCHITECTURAL TERRA COTTA WORKS,**

Successors to CHICAGO TERRA COTTA WORKS.  
Established . . . Chicago, 1868—Boston, 1878.  
**S. E. LORING, Consulting Architect, Sup'r.**  
**OFFICES AND FACTORIES.**  
CHICAGO: Fifteenth and LaSalle Sts.  
BOSTON: Boston Fire Brick Works, 394 Federal Street.

**INLAID WOOD FLOORS.**  
**ORNAMENTAL WOOD BORDERS**  
Designs and Estimates free.  
**National Wood Manuf'g Co.,**  
950 Broadway, near 23d St., New York

**PHILIP A. BUTLER,**  
DECORATOR AND DESIGNER,  
No. 17 FRENCHTON SQUARE,  
BOSTON.

**HENRY B. JONES & CO.**  
IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS,  
613 WASHINGTON STREET, BOSTON.

(Established 1848.)  
**L. HABERSTROH & SON,**  
FRESCO PAINTERS,  
and INTERIOR DECORATORS,  
No. 12 SCHOOL STREET, BOSTON.

*Raphael and Michelangelo.*

A Critical and Biographical Essay. By **CHARLES C. PERKINS.** 8vo. Many illustrations, including several Heliotypes. \$5.00.

The long devotion of Mr Perkins to the study of art has borne noble fruit in this beautiful volume. The idea of combining in one work a series of interlinked sketches of the two great representative artists of the age of Julius II. and Leo X. was in every respect fortunate; for they respectively illustrate power and beauty, sportive and earnest labor, as no other contemporaries. . . . His style is that of a scholar and a man of taste—simple, lucid, graceful, and even throughout. It has much of the quality of that of Hermann Grimm, in his two similar biographies. The profuse illustrations—although some of them are rather coarsely printed—are a positive boon to the reader.—*New York Tribune.*

**HOUGHTON, OSGOOD & CO., Boston.**

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa. (Can.)	Philadelphia.	San Francisco	St. Louis.
1 BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50	.....	2.25 @ 2.50
2 Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50	.....	3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00	.....	3.00
3 CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25	.....	1.50 @ 2.00
4 Cabinet Maker	2.50 @ 3.25	.....	1.75 @ 2.25	.....	.....	1.50 @ 3.00	1.50 @ 2.00	.....	.....	.....
5 Finisher	2.00 @ 2.50	.....	1.50 @ 2.00	.....	.....	1.50 @ 3.00	1.25 @ 1.75	.....	.....	1.50 @ 2.00
6 FOUNDRYMAN	.....	.....	1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50	.....	.....	2.25 @ 2.50
7 Blacksmith	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50	.....	2.00 @ 2.50	1.25 @ 2.00	.....	.....	1.50 @ 2.50
8 Whitesmith	.....	.....	1.50 @ 2.00	1.50 @ 2.50	.....	2.00 @ 2.50	1.25 @ 1.75	.....	.....	.....
9 Galvanized Iron Worker	2.00 @ 2.35	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.70	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00	.....	.....	2.25 @ 2.50
10 GAS FITTER	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.60	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00	.....	.....	2.00 @ 3.00
11 LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.25	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50	.....	1.00 @ 2.00
12 PAINTER	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50	.....	2.00 @ 2.50
13 Glazier	.....	2.00 @ 2.50	1.75 @ 2.00	.....	.....	1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50	.....	.....
14 Grainer	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00	.....	2.00 @ 3.00	1.75 @ 2.50	.....	.....	3.50
15 Paper-Hanger	.75 @ 2.50	.....	per roll.	.....	15c. pr. roll.	2.00 @ 2.50	1.50 @ 2.00	.....	.....	2.00 @ 3.00
16 PLASTERER	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00	.....	1.50 @ 2.00	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00	.....	2.25 @ 2.75
17 Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	1.50 @ 2.50	.....	2.00 @ 2.50	1.50 @ 2.25	.....	.....	2.25 @ 2.75
18 PLUMBER	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.50	2.50 @ 3.50	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50	.....	.....	2.50 @ 3.50
19 QUARRYMAN	.....	3.00 @ 3.50	1.10 @ 1.25	.....	1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75	.....	1.50 @ 1.75
20 Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25	.....	2.00 @ 2.50
21 Carver	3.00	3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75	.....	3.00	2.00 @ 2.50	3.50 @ 6.00	2.75 @ 3.25	.....
22 Pointers and Washers	.....	2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75	.....	1.50 @ 2.50	1.00 @ 1.25	2.25 @ 2.50	.....	.....
23 Rubber	1.50 @ 2.00	1.75	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75	.....	.....
24 Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	.....	2.50	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	.....
25 Stone-Setter	3.00	2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	.....	2.75	2.00 @ 2.50	1.50 @ 2.00	2.25 @ 2.75	2.00 @ 2.50
26 ROOFER (Tin)	2.00 @ 2.35	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25	.....	2.00 @ 2.25
27 Slater	.....	2.50 @ 3.00	2.00 @ 2.25	3.50 @ 4.00	.....	2.00	2.00 @ 2.25	1.25 @ 2.00	1.75 @ 2.25	3.00
28 STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25	.....	.....	1.50 @ 2.50
29 STEAM FITTER	.....	2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	3.00 @ 2.50	1.50 @ 2.00	.....	.....	2.00 @ 3.00

THE ATLANTIC MONTHLY FOR 1879.

DURING the coming year the Publishers of THE ATLANTIC will aim to maintain the high character of the magazine in all departments, and will especially seek to keep it in the leading place it has more recently taken by its articles on

**POLITICAL, ECONOMIC, AND SOCIAL QUESTIONS.** The author of the notable paper on "Certain Dangerous Tendencies in American Life," and of the "Origin and Aims of the National Party," will furnish three articles on the Conservative Classes of the South, as a balance to the disorganizing elements in the North. His large and intimate personal acquaintance with workingmen, and his practical experience of their life, give peculiar value to his articles.

Hon. J. W. KEARNEY, of Kentucky, will continue his papers on the History of American Finance.

A. G. SEDGWICK, Esq., will write on legal points in politics; and men eminent in business and public life will write on matters connected with the interests they represent.

THE ATLANTIC will endeavor to give, not merely names, but papers of real value on all the public questions it discusses.

During the session of Congress the magazine will contain each month a Washington Letter. The New York Letters will also be resumed, and will treat of the life of the commercial metropolis in its most characteristic phases.

**FICTION.**—THE ATLANTIC for 1879 will be uncommonly rich in the range and number of its Serial Stories, including Irene the Missionary, a story of Americans in Syria; and Stories by Mr. T. B. ALDRICH, Miss E. W. OLNEY, the author of One too Many, Mr. W. D. HOWELLS, and Mr. BJORNSTJERNE BJORNSEN, the famous Norwegian poet and novelist, who will write a Serial expressly for THE ATLANTIC.

Each month will be given a Short Story of the kind for which THE ATLANTIC is distinguished.

**CRITICISM.**—This department, in which THE ATLANTIC has long been chief, will receive particular attention. The brilliant articles on contemporary novels will appear regularly; the book notices will be full, varied, and carefully written; and Mr. T. S. PERRY will continue his characteristic reviews of French and German literature.

**THE CONTRIBUTORS' CLUB,** a favorite department with ATLANTIC readers, will be fully sustained as the expression of opinion and desultory criticism upon aesthetic and social topics.

**TRAVELS.**—Mr. W. W. STORY will furnish studies of Italian locality and travel; Mr. HENRY JAMES JR. will write transatlantic sketches; Mr. W. H. BISHOP will contribute papers on art and life abroad; Mr. C. E. NORTON's studies of art and history in his essays on Italian cathedrals will be continued; and Col. G. E. WARING JR. will write of English country-life.

**CONTRIBUTORS.**—Among the old and favorite contributors of THE ATLANTIC the reader will welcome back Mrs. HARRIET BEECHER STOWE, who will write frequently. MESSRS. LONGFELLOW, WHITTIER, HOLMES, RICHARD GRANT WHITE, STEDMAN, STODDARD, SCUDDER, MARK TWAIN, CHARLES DUDLEY WARNER, and Miss PRESTON, Miss S. O. JEWETT, Miss C. F. WOOLSON, Mrs. ROSE TERRY COOKE, Mrs. PIATT, and H. H., with other well-known ATLANTIC authors, will continue as heretofore.

**TERMS:**—\$4.00 a year, in advance, postage free; 35 cents a number. With superb life size portrait of Lowell, Whittier, Bryant, or Longfellow, \$5.00; with two portraits, \$6.00; with three portraits, \$7.00; with all four portraits, \$8.00.

Remittances should be made by money-order, draft, or registered letter to

HOUGHTON, OSGOOD & COMPANY, BOSTON.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

GALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States.

Our twenty years' experience, and the numerous contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO., 72 & 74 West Monroe St. Chicago, Ill.



**"AUSTIN'S" PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT.**  
 MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS.  
 Regular Sizes, 2, 3, 4, 5 & 6 Inch. SPECIAL SIZES MANUF'D TO ORDER.  
**AUSTIN, OBDYKE & CO.**  
 SOLE MANUFACTURERS.  
 1705 & 1725 CHESTNUT STREET. PHILADELPHIA, PENNA.  
 WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS AND WILL BE TREATED AS SUCH.

- PRINCIPAL AGENTS.
- M. Halliday
  - Hicks & Badger
  - James Berry
  - George W. Pitkin & Co.
  - Wasson & Martin
  - McLeod, Beardon & Co.
  - W. H. Scott
  - Kittredge Cornice Co.
  - J. W. Jordan
  - B. G. Carpenter & Co.
  - T. W. Irwin
  - Sellew & Co.
  - New York City
  - Boston, Mass
  - Buffalo, N. Y
  - Chicago, Ill
  - Albany, N. Y
  - Troy, N. Y
  - Portland, Me
  - Salem, O
  - Worcester, Mass.
  - Wilkesbarre, Penn.
  - Alleghany City, Penn.
  - Cincinnati, Ohio

W. & J. SLOANE,

IMPORTERS OF

FINE CARPETS AND RUGS

FROM

INDIA, PERSIA, RUSSIA, SMYRNA, and TURKEY.

649, 651, 655 BROADWAY, NEW YORK.

Bound Volumes of the American Architect.

We are prepared to fill orders for binding the American Architect and Building News in styles similar to the volume for 1876, at the following rates:—

- Price of cover without binding.....\$1.00
- Cover and binding (for subscribers)..... 2.00
- Numbers of 1876 or 1877 without cover or binding 7.50
- Bound volumes of 1876 or 1877..... 9.00

In sending volumes to be bound it should be stated whether the illustrations are to be bound with their respective numbers, or whether all illustrations are to be placed together at the end of the volume.

N. B. — Volumes bound in both styles are kept in stock.

The above will be sent, post-paid. Subscribers sending their numbers to be bound will prepay postage or express charges.

HOUGHTON, OSGOOD & CO., PUBLISHERS, Winthrop Square, Boston.



TO ARCHITECTS.

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the SCAGLIOLA AND MAREZZO MARBLE, Which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall, and Altar Work. JAS. T. ALLEN & CO., 25 North Market Street, Philadelphia



NONESUCH Self-Locking AND Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

FRED. J. HOYT, 733 Broadway, N. Y.

Patented July 10th 1877

# VALUABLE WORKS ON ARCHITECTURE

PUBLISHED BY

HOUGHTON, OSGOOD AND COMPANY.

## Art Foliage.

**ART FOLIAGE, FOR SCULPTURE AND DECORATION.** With an Analysis of Geometric Form, and Studies from Nature, of Buds, Leaves, Flowers, and Fruit. By JAMES K. COLLING, F. R. I. B. A. 1 vol., large 4to, 72 plates, \$15.00.

Feeling the great importance of good foliated decoration in architecture and the subsidiary arts, I have endeavored to supply a want, which has long been felt, of some definite rules and exposition of principles, which should guide the art-workman in his studies. With this object, I have sought to take a wide and comprehensive view of foliage as conventionalized for art purposes from the earliest times. — *Author's Preface.*

## Medieval Foliage.

**EXAMPLES OF ENGLISH MEDIEVAL FOLIAGE AND COLORED DECORATION.** Taken from Buildings of the Twelfth to the Fifteenth Century. With descriptive letter-press. By JAMES KELLAWAY COLLING, F. R. I. B. A. 1 vol., large 4to, 76 plates and many wood-cuts, \$15.00.

This volume describes and illustrates the progress and development of English foliated ornament from the twelfth to the fifteenth century, and supplies a deficiency hitherto existing among our architectural works.

## American Interiors.

**THE BOOK OF AMERICAN INTERIORS.** By CHARLES WYLLYS ELLIOTT. Containing Helio-type Views of twenty-two striking Interiors now existing in this country, including the Libraries of Mr. Longfellow, Mr. Bryant, and Donald G. Mitchell; and noteworthy Halls and Dining-Rooms in Boston, Albany, Newport, San Francisco, etc. Comprising, also, thirty smaller illustrations. With descriptive letter-press and Essays on the Library and Dining-Room. 1 vol., large 4to, \$10.00.

## Examples of Modern Architecture.

**EXAMPLES OF MODERN ARCHITECTURE, ECCLESIASTICAL AND DOMESTIC.** Sixty-four Views of Churches and Chapels, Schools, Colleges, Mansions, Town-Halls, Railway-Stations, &c. Erected from the designs of G. G. SCOTT, R. A., G. E. STREET, J. P. LIDDON, E. G. PALEY, R. J. WITHERS, J. K. COLLING, E. L. BLACKBURN, G. F. BODLEY, E. B. LAMB, J. JOHNSON, E. PANSON, and other eminent architects. From the latest English edition. 1 vol., 4to, \$15.00.

## Home-Making Books.

**HOMES, AND HOW TO MAKE THEM.** By E. C. GARDNER 1 vol., square 12mo, illustrated by the author, \$1.50.

It is a treatise on house-building. So much good sense and good taste on this all-important subject are not often, to our thinking, embraced within an equal compass. Whether the reader is going to build or not, he will enjoy it vastly; and, if he is, he should give it his most diligent attention. — *The Congregationalist*, Boston.

**ILLUSTRATED HOMES.** Describing Real Houses, and Real People, including "The House the Judge Built," "Capt. George's Plan," "The Home of the Professor," "The Planter's Home," "The Poet's Abiding-place," "The Parsonage," and half a dozen other homes. Fully illustrated. By E. C. GARDNER. 1 vol., square 12mo, \$1.50.

**HOME INTERIORS.** By E. C. GARDNER. Illustrated, \$1.50.

A practical, useful, charmingly written book on finishing and adorning homes tastefully and inexpensively. It treats of walls, floors, paper hangings, doors, screens, window-seats and casings, stairways, tiles, fireplaces, and various modes and styles of decoration.

## Architecture for Students.

**ARCHITECTURE FOR GENERAL STUDENTS.** By CAROLINE W. HORTON. With descriptive illustrations. 1 vol., 16mo, \$1.50.

The subject is well treated in its leading and more general aspects. The history of architecture, the different styles, the parts of a building, are all given without repulsive methodicalness. With the volume is provided with a full index. In general the criticisms are just and in good taste. — *College Courier*.

## The Art Idea.

**THE ART IDEA.** Including an Account of American Architecture, Sculpture, and Painting; with Critical Notices of Artists, etc. By JAMES JACKSON JARVES. 18mo, red cloth, gilt top, \$1.75; half calf, \$3.50.

## Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIÉNARD. Reproduced in facsimile by the Helio-type Process. Folio, boards, (size of page 11½ X 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

## Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior — clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

## Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

## Gothic Forms.

**GOthic FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, book-cases, tables, chimney-pieces, &c.

## Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## Picturesque Swiss Architecture.

**THE PICTURESQUE ARCHITECTURE OF SWITZERLAND,** containing Designs of Country-Houses in several Swiss Cantons. Drawn and Engraved by A. and E. VARIN. 4to, boards, \$12.00.

This book is rich in suggestions to architects for making American country-houses picturesque as well as convenient.

**DISCOURSES ON ARCHITECTURE.** By VIOLETTÉ-LE-DUC. Translated, with an Introductory Essay, by HENRY VAN BRUNT, Fellow American Institute of Architects. Fully illustrated. 1 vol., royal 8vo, \$8.00.

The knowledge of the specialist, the culture of the scholar, and the skill of the *littérateur*, have seldom been more happily combined than in the architectural treatises and discourses of M. Viollet-le-Duc. — *Appletons' Journal*.

The works of the learned and distinguished French Architect, EUGÈNE VIOLETTÉ-LE-DUC, are certainly among the most entertaining and instructive books on Architecture that have been given to the public. — *Boston Advertiser*.

## Valuable Books for Architects.

**AMERICAN MECHANICAL DICTIONARY.** A Descriptive Word Book of Tools, Instruments, Machines, Chemical and Mechanical Processes; Civil, Mechanical, Railway, Hydraulic, and Military Engineering. A History of Inventions; General Technological Vocabulary; and Digest of Mechanical Appliances in Science and the Industrial and Fine Arts. By EDWARD H. KNIGHT, A. M., Civil and Mechanical Engineer. In three volumes, 8vo. Sold only by Subscription. Cloth, per set, \$24.00; sheep, \$27.00; half morocco, \$30.00.

To architects, inventors, mechanics, experts, etc., it will become as much a necessity as Webster's Dictionary is to students and scholars. — *M. D. Leggett, U. S. Commissioner of Patents.*

**A HANDBOOK OF LEGENDARY AND MYTHOLOGICAL ART.** By CLARA ERSKINE CLEMENT. Profusely illustrated. In one volume, crown 8vo, \$3.25.

All that we need to explain the stories illustrated or the persons represented in the pictures and statues of the churches and galleries of Europe may be found in Mrs. Clement's book, which ought to be known to a large public. — *EUGÈNE BENSON, in The College Courier.*

**PAINTERS, SCULPTORS, ARCHITECTS, ENGRAVERS, AND THEIR WORKS.** A Handbook. By CLARA ERSKINE CLEMENT. With illustrations and monograms. In one volume, crown 8vo, \$3.25.

This book is a *multum in parvo* affair. It will tell you all you want to know of hundreds of artists, and where to find all you want to know of their more important brethren, of whom no brief account will suffice you. It is a complete biographical dictionary of the heroes of brush and chisel and graver. It is copiously illustrated with representations of standard works of art, — the treasures of European galleries and churches, — and it contains the monograms of many of the painters and engravers. Its place in the library is unique, inasmuch as one would have to turn over scores of volumes to find all which this single handbook contains. — *New York Tribune.*

## The Architectural Sketch-Book.

3 vols., 4to, \$6.50 each. 1 vol., 4to, (6 mos.) \$3.25.

## The New York Sketch-Book of Architecture.

3 vols., 4to, \$6.50 each.

We have in stock partial sets of the SKETCH-BOOKS, IN MONTHLY PARTS. Paper covers. Each number complete in itself. Price 50 cents each.

## The American Architect and Building News.

An Illustrated Weekly Journal of Constructive and Decorative Art. Terms: single number 15 cents; yearly subscription \$7.50; if paid in advance, \$6.00. Specimen copies sent free. Volumes I. and II. for 1876 and 1877 bound, 4to, each \$9.00.

\* \* For sale at all Bookstores. Sent, post-paid, on receipt of price by the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Boston

BUILDING MATERIALS.

(Reported for the American Architect and Building News.)

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, PALE, JERSEY, LONG ISLAND, UP-RIVER, HAYSTACK BAR, and FRONTS.

Table listing prices for CEMENT, including Rosendale, Portland (Imported), Portland (Saylor's American), Roman, Keene's coarse, and Keene's fine.

Table listing prices for FIRE BRICK, including Red Welsh, Scotch, and American.

Table listing prices for DOORS, including Raised Panels, two Sides, and Moulded.

Table listing prices for BLINDS, including Outside and Inside.

Table listing prices for WINDOW FRAMES, including Cp to 3.4 x 7.2, put together.

Table listing prices for HAIR, including Duty free and bushel.

Table listing prices for LATH, including Cargo rate.

Table listing prices for LIME, including common, cargo rate, and finishing.

Table listing prices for LUMBER, including Pine, Spruce, Hemlock, and various other types.

Table listing prices for PAINTS AND OILS, including Paris white, Zinc white, and Ochre.

Table listing prices for AXLE PULLEYS, SASH WEIGHTS, SASH LINE, and DOOR BUTTS.

Table listing prices for STONE, including Amherst freestone, Berlin freestone, and various other types.

Table listing prices for SLATE, including Purple roofing slate, Green slate, and various other types.

Table listing prices for TIN PLATES, including C. charcoal, I. C. coke, and various other types.

Table listing prices for ZINC, including Sheet (gold) foreign and LEAD.

BOSTON.

Table listing prices for BOSTON, including Fiske & Coleman, No. 1, and various other items.

Table listing prices for BUILDING BRICKS, including Eastern and Bay State.

Table listing prices for BUILDING STONE, including Rutland Marble and LUMBER.

Table listing prices for PAINTS AND OILS, including Paris white, Zinc white, and Ochre.

Table listing prices for LIME, including Quoted at 85c per cask for Rockland and Rockport.

Table listing prices for CEMENT, including Rosendale, Portland (Imported), and various other types.

Table listing prices for NAILS, including 10d, 8d, and various other sizes.

Table listing prices for AXLE PULLEYS, SASH WEIGHTS, SASH LINE, and DOOR BUTTS.

Table listing prices for MORTISE LOCKS, DOOR KNOBS, SASH FASTS, and SCREWS.

Table listing prices for STORE DOOR HANDLES, IRON, and Wrought Iron Beams.

Table listing prices for Wrought Iron Beams, Wrought Angle Iron, and Wrought Girder Plates.

CHICAGO.

Table listing prices for CHICAGO, including BRICK, LIME, AND CEMENT, and Chicago building brick.

Table listing prices for PAINTS AND COLORS, including White Lead, Zinc, and various other types.

Table listing prices for LUMBER (MICHIGAN PINE), including 1st and 2d clear, 1 to 2-in., and various other types.

Table listing prices for PAINTS AND OILS, including Paris white, Zinc white, and Ochre.

Table listing prices for LIME, including Quoted at 85c per cask for Rockland and Rockport.

Table listing prices for CEMENT, including Rosendale, Portland (Imported), and various other types.

Table listing prices for NAILS, including 10d, 8d, and various other sizes.

Table listing prices for AXLE PULLEYS, SASH WEIGHTS, SASH LINE, and DOOR BUTTS.

Table listing prices for TINNERS' STOCK, including Tin plate, I. C. 10 x 14, charcoal, and various other types.

Table listing prices for I. C. roofing, I. X. roofing, and various other types.

Table listing prices for SHEET ZINC, SHEET IRON, and WIRE.

Table listing prices for PAINTS AND COLORS, including White Lead, Zinc, and various other types.

Table listing prices for OILS, including Lined, raw, 63c; boiled, 68c; Turpentine, 38c.

PHILADELPHIA.

Table listing prices for WHOLESALE PRICES, including IRON, SHEET, and various other types.

Table listing prices for PAINTS AND COLORS, including White Lead, Zinc, and various other types.

Table listing prices for LUMBER, including Mich. uppers, 45, 50, 45, 45, 35, 30, 25, 20, 15, 10, 5, 0.

Table listing prices for PAINTS AND OILS, including Paris white, Zinc white, and Ochre.

Table listing prices for LIME, including Quoted at 85c per cask for Rockland and Rockport.

Table listing prices for CEMENT, including Rosendale, Portland (Imported), and various other types.

Table listing prices for NAILS, including 10d, 8d, and various other sizes.

Table listing prices for AXLE PULLEYS, SASH WEIGHTS, SASH LINE, and DOOR BUTTS.

Table listing prices for TINNERS' STOCK, including Tin plate, I. C. 10 x 14, charcoal, and various other types.

A Word to Manufacturing Firms.

Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms. They recommend, on their own account, and for the sake of the public, that such firms advertise in this paper.

Inventors and manufacturers of Steam Heating Apparatus, Hot Air Furnaces, etc., should not fail to advertise in the paper which prints a weekly list of all the new buildings projected in the country, and a record of important ones being built.

The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

TO ADVERTISERS.

The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

**D. M. MEEKER & SON'S**  
Malleable Iron Hollow Munten Window Sash.  
For Insane Hospitals, Fire Proof Buildings, &c.



The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

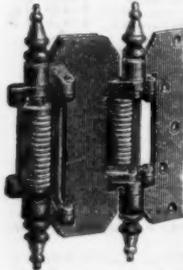
**D. M. MEEKER & SON,**  
Newark, N. J.

Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

**THE COWLES HARDWARE CO.**  
UNIONVILLE, CONN., U. S. A.

MANUFACTURERS OF

(GEER'S)



**Single & Double Acting SPRING BUTTS.**  
The Latest and Best.

Investigate before you purchase  
Read the following points of superiority:—

These Spring Butts differ in principle from all others; having a Spiral Spring for power, and Toggles for Levers in combination, and when applied to the leaves of the Butts, Exert their greatest Power when the door is closed, and are the only Butts in existence that will by actual test perform the labor claimed for them.

They offer less resistance the wider the door is opened, until a point past the right angle is reached, where the power is reversed and the door held open.

They will not allow the door to sag. Send for Price Lists.

**MAKE YOUR OWN GAS**

**GAS GENERATORS,**  
FOR LIGHTING  
Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.

Send for CIRCULAR.

**WALWORTH MANUF. CO.**  
No. 69 Kilby Street,  
BOSTON, MASE.

ESTABLISHED 1836.

**JOHN FARQUHAR'S SONS,**  
**SLATE, METAL, AND COMPOSITION ROOFERS,**  
NOS. 20 AND 22 EAST STREET, BOSTON.

Order Box, No. 83 Mechanics Exchange, No. 35 Hawley Street.

Agents for Warren's Patent Natural Asphalt Roofing. Special attention given to repairs of all kinds of Roofing.

**Inventors and Owners of the following Patents:** FIRST. Patent Fastener for securing Slates or other covering to Iron Purlines where the roof is wholly of Iron. SECOND. A Roof composed of Wooden Rafters encased in Asbestos, Sheet Metal, or other fire-proof material, to which Iron Purlines are fastened, and the slates or other covering secured by our Patent Fastener. The slates are then rendered underside with hair mortar or any other material. The object intended being a Light Fire-proof Roof, avoiding all condensation and preventing leakage.

**EASTERN ROOFING SLATES**

FROM MONSON AND BROWNVILLE, MAINE.

**CLEMENT, HIGBEE & CO.**

GENERAL AGENTS,

Piper's Wharf, 474 Atlantic Avenue,  
BOSTON, MASS.

These Maine Slates are the best and cheapest in the market. They are also the strongest, smoothest, and most uniform, and the only perfectly unsliding slate in the world.

THE AKRON PIPE

**FISKE & COLEMAN,**  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY,  
77 WATER STREET, BOSTON.

**FIRE BRICK,**  
Enamelled Brick,  
CHIMNEY TOPS,  
Flag Stones,  
Terra Cotta Goods,  
A full line of  
Fancy Building  
Materials.

25 PER CENT. OF CUSTOMARY OUTLAY CAN BE SAVED BY USE OF

**H. W. JOHNS' ASBESTOS LIQUID PAINTS**

Pure, Undiluted Paints, Full Body, and Full U. S. Standard Measure.

No other Paints for structural purposes equal these in quality, richness of color, covering capacity, and durability. Sample cards free by mail. **ROOF PAINTS** for Tin Roofs, Iron Work, etc. **FIREPROOF PAINTS** for Inside Woodwork.

**H. W. JOHNS M'F'G CO., 87 Maiden Lane, New York,**  
Manufacturers of Asbestos Roofing, Boiler Coverings, Sheathings, Cements, etc.

**B** Studies in Design, for Manufacturers, Architects, Builders, Designers, House Decorators, etc. By CHRISTOPHER DRESSER, Ph. D., F. L. S., F. E. B. S., consisting of Sixty Original Designs, elaborately produced in combined Colors, and in Gold and Colors; with Descriptive Letterpress, and 20 Chapters on Principles of Designing. In handsome cloth binding, folio, \$25.00.

The present work is submitted to those who desire to decorate houses in a manner that shall reveal their knowledge; but it will be most useful to that man who can use the ideas as aids to his own mind, give to the forms set forth new features and individuality of expression, throwing aside all that in his judgment is not true and right. "The plates which are lithographed in gold and colors by A. Goates, Nottingham, England, should be in the hands of all decorative artists."—*Glasgow Herald*.

**O** Principles of Ornamental Art. By F. EDWARD HULME, F. L. S., F. S. A., author of "Plants, their Natural Growth and Ornamental Treatment," "Freeland Ornament," etc. With 32 Plates, containing 431 Illustrations. Royal 4to, cloth, \$10.00.

**O** Principles of Decorative Design. By CHRISTOPHER DRESSER, Ph. D. Illustrated with two Colored Plates and numerous Designs and Diagrams. Extra crown 4to, cloth, gilt, \$3.50.

**S** Sketching from Nature in Water-Colors. By AARON PENLEY. With Illustrations in Chromo-Lithography, after original water color drawings. Super-royal 4to, cloth, gilt, \$7.50.

A very attractive as well as a very useful volume, indispensable to all learners, and of much service to advanced practitioners in the art.—*Art Journal*

**K** Sepia Painting, A Course of. With 24 Plates in Sepia, from Designs by R. P. LEITCH, and full instructions to the learner. Oblong 4to, cloth, \$2.50.

Those who wish to see sepia painting thoroughly well treated in respect to form, color, light, and shade, and the best method of producing effect with ease of manner, will do themselves a kindness by consulting these pages.—*Standard* (English).

**S** Water-Color Painting, A Course of. With 24 Colored Plates, by R. P. LEITCH, and full instructions to the learner. Oblong 4to, cloth, \$2.50.

The "Water-color" illustrations alone are worth treble the cost of the volume, and the printed instructions are concise and clear.—*Birmingham Post*

**S** Painting in Neutral Tint, A Course of. With 24 Plates in Neutral Tint, by R. P. LEITCH, and full instructions to the learner. Oblong 4to, cloth, \$2.50.

The directions to the students are ample, and the twenty-four plates are admirably varied for the purposes to which they are devoted.—*Daily News* (English).

If not for sale by your bookseller we will send, prepaid, on receipt of price.

CASSELL, PETER & GALPIN, 590 Broadway, New York.

**THE AMERICAN ARCHITECT AND BUILDING NEWS SENT FREE!**

We send Free the Nos. for November and December, 1878, to new subscribers paying before December 15, 1878.

**BUILDERS AND MECHANICS**

In search of a trade paper will do well to weigh the fact that in the first six months of this year we published fine illustrations of

24 Country Houses,	13 Churches,	10 Staircases,	4 Details,	2 Bridges,
9 City Houses,	5 Cathedrals,	9 Wall Decorations,	2 Tombs,	1 Police Station,
4 Hospital Buildings,	5 Church Interiors,	7 Bay-Windows,	2 Fountains,	1 Engine House,
4 School Buildings,	2 Hotels,	4 Furniture,	1 Shop Arcade,	1 Market House,
3 Library Buildings,	1 Court House,	1 City Hall,	1 Cemetery Gateway,	1 Stable,
2 Insurance Buildings,	1 Opera House,	1 State Prison,	1 Castle,	1 Studio.
4 Stores,	1 Music Hall,			

Besides perspective diagrams, foreign sketches, and numerous cuts illustrating building appliances. Terms \$6.00 per year. Send for specimen copy. Remittances to be made by check, draft, or money-order to the Publishers, HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON.

**NON-POISONOUS**

**SILICATE PAINT**

Does not discolor, chalk, or crack off. It is superior to lead.

See article on "Dwellings of the Poor," AM. ARCHITECT, Sept. 21, 1878.

The only cure for damp walls of churches, dwellings, and public buildings, is the

**PETRIFYING LIQUID**

Send for Price List and Testimonials.

HOWARD FLEMING, Sole Agent in the United States,

10 PINE STREET, NEW YORK.

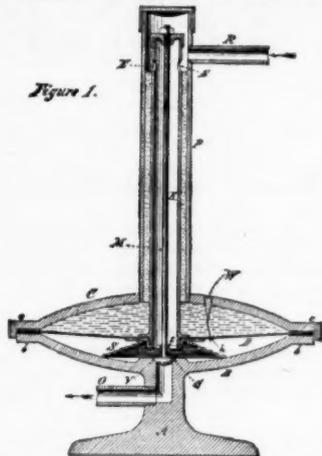
BUILDING INTELLIGENCE.

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

WATER-BIBB.—C. J. Elliott and H. B. McCool, Pottsville, Penn.
APPARATUS FOR STEAMING WOOD.—George Miles, Grantville, Mass.
LOCKING DEVICE FOR GAS AND WATER-PIPES.—John Miller, Cambridgeport, Mass.
SAW-SET.—Frank A. Buell, Brooklyn, N. Y.
METAL-FOUNDER'S LADLE.—G. F. Butterfield, Boston, Mass.
SMOKE-STACK.—Everett Clemens, Pekin, Ill.
MOULD FOR CASTING SASH-WEIGHTS.—E. P. Davis and W. J. Godfrey, Omaha, Neb.
FIRE EXTINGUISHING APPARATUS.—Richard K. Evans, Washington, D. C.
BENCH-PLANE.—Patrick Gallagher, Eureka, Nev.
FIREMEN'S LADDER.—Robert Glichrst, Louisville, Ky.
COUNTER-SINK.—William H. Gill, Meadville, Penn.
DOOR-SECURER.—William Hinchcliffe, Nashville, Tenn.
SLATE-GROUNDING MACHINE.—J. W. Hyatt, Newark, N. J.
APPARATUS FOR PROMOTING THE COMBUSTION OF FURNACES.—Isaac Kendrick, Philadelphia, Penn.
PAINT-BRUSH BRIDLE.—Mark W. Marsden, Connellsville, Penn.
WATER-CLOSET.—Charles Rogers, Pittsburgh, Penn.
ROOF-HATTENING.—John C. Wanda, Nashville, Tenn.
SAND-PAPER HOLDER.—Norman H. Fay, Abbot, Me.
LIGHTNING-ROD.—Henry W. Farley, Chicago, Ill.
DRAIN-TRAP FOR STEAM-HEATING APPARATUS.—James H. Blessing, Albany, N. Y.
This trap is for use on steam-heating apparatus, and is intended to be attached to the return pipe of the circulation just before it reaches the hot-water tank, and its office is to allow the water condensed in the coils and pipes to pass freely into the hot-water tank without allowing any steam to follow it. The apparatus consists of a standard A, from which passes the drain-pipe O to the hot-water tank. The standard A is shaped above into the saucer-like vessel B, between whose flanged edge b, and the corresponding flange c, of the vessel C, is tightly packed a diaphragm D, of Muntz metal. Passing through this diaphragm, and fastened to it by shoulders above and below it, is the pipe K, closed at the top by a cap through which passes, so that it may be secured on the upper side by a nut, the rod M, the lower end of which is fashioned as a valve V, which closes upon a ground valve-seat in the bottom of B. The pipe K is inclosed within a stand-pipe P, which is tapped into the top of C. This pipe is also closed



by a cap at the top, and receives, near its upper end, the return pipe R, of the circulation. Below the diaphragm, surrounding the stem M, and bearing at once against D and B, is a coiled spring S, of such strength that it more than counterbalances the weight of the diaphragm, the pipe K, and rod M, with their connections. In action, the water of condensation flows through R, and passing through the annular space between K and P, fills the chamber and the annular space between K and P, and finally passes through the holes E E, in the upper part of K, and fills the chamber below the diaphragm, and the pipe K. At this moment the diaphragm is in equilibrium, the apparatus being so adjusted that the water above it counterbalances the water below it, and this allows the spring S to force up the diaphragm with the pipe K and consequently the rod M, and thus raises the valve V, and allows the water of condensation in the lower part of the chamber to drain off through O, the flow continuing as long as water passes from R. As soon as the water stops flowing and steam attempts to escape, the water above the diaphragm, being no longer counterbalanced, will close the valve. In case air collected in the radiators finds its way below the diaphragm, and so stops the working, it is removed by the following device: The diaphragm is pierced by a small hole H, which is kept free from dirt by a flexible wire W, which plays through it at every motion of the diaphragm. Through this hole the water trickles until enough has escaped to allow the spring to open the valve. After which the operation of filling and emptying begins as before.

WINDLASS WATER ELEVATOR.—John Knipscheit, Weimar, Tex.
MACHINE FOR DRESSING AND ORNAMENTS MARBLE, SLATE, ETC.—William K. Lorber, Toledo, O.
LATHES FOR TURNING REGULAR FORMS.—Ellen A. Marsh, Battle Creek, Mich.
VENTILATOR.—Thomas Owens, Washington, D. C.
WINDOW.—Augustus K. Phillips, St. Louis, Mo.
PUMP.—Stephen Stucky, Lincoln, Neb.
VITREOUS LINING FOR PIPE CONNECTIONS.—Elijah H. Audeil, New York, N. Y.
MAINS AND PIPES.—Elijah H. Austin, New York, N. Y.
LOWERING ATTACHMENT TO HYDRAULIC ELEVATOR.—Charles Cookson, Wright's Grove, Ill.
CURTAIN-CORD FASTENER.—George B. Katen, New York, N. Y.
VULCANIZING RUBBER TUBES.—Morris Mattson, New York, N. Y.
FIRE AND WATER-PROOF ROOF.—Tobias New, New York, N. Y.

COMPLETED BUILDINGS.

BALTIMORE, Md.—The two pay-wards of the Johns Hopkins Hospital are now completed; also, the octagon ward, with the exception of the gables. Messrs. Cabot & Chandler, of Boston, and J. R. Niernsee, of Baltimore, architects.
BOSTON, Mass.—The building for the Howard National Bank, Messrs. Peabody & Stearns, architects, on Congress Street, is now completed. It is of Ohio stone, four stories high, with basement. The building measures 41 by 50 feet. In style it is a free rendering of Colonial Renaissance. Contracts were let separately; cost, \$35,000.
NEW YORK, N. Y.—The enlarged and reconstructed Roman Catholic Church of the Assumption, in West Forty-ninth Street, was dedicated November 24 by Cardinal McCloskey.—The new edifice of the Second Baptist Church in Ainslie Street, near Graham Avenue, was dedicated on Thursday evening, November 28.—The Roman Catholic Church of the Visitation, in Verona Street, which has been eight years in building, under the direction of Mr. P. C. Kely, architect, of Brooklyn, was dedicated December 1. It is built of granite in Gothic style.
TOLEDO, O.—A new Congregational church has lately been completed at a cost of \$65,000.
LEOMINSTER, Mass.—The new depot built for the Boston, Clinton, Fitchburg & New Bedford Railroad is finished.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Bernhard Berger, ice-house, Belvidere St., near Jones's Falls.—John Bandell, two-sty stable, 325 Pratt St.—Fredk. Glennmeyer, two-sty building, Chesnut Alley, in rear of 64 Ridgely St.—Wm. Reuter, two-sty building, 12 Ridgely St.—W. Betsworth, three-sty building, cor. Pratt & Madison sts.—O. W. Miller, three-sty building, Madison St., 20 feet from Pratt St.—Christian Wehr, two-sty stable, cor. Wolfe and Bank sts.—Martin Shueler, two-sty building, cor. Lexington and Fulton sts.—Henry Metzger, two-sty stable, cor. Druid Hill Ave. and St. Mary St.—Maryland Bible Society, two-sty building, rear of 7 Fayette St.

Boston.

BUILDING PERMITS.—The following permits have been granted since our last issue:—The 22 permits were built since our last issue:—Hallowell St., Ward 2, for Gottlieb F. Burkhardt, by Wm. F. Collins, 1 bottling-house, 64 x 120'; one story; flat roof.
Wood.—614 Dorchester Ave., Ward 15, for Wm. Horton, 1 office, 15' x 17'; one story; pitch roof; Millmont St., Ward 21, for Robert Duffy, by Samuel Knutson, 1 dwell., 22' x 30'; two stories; mansard roof.—Reaf Union Ave., Ward 23, for B. F. Sturtevant, 1 coal-shed, 12' x 38'; one story; pitch roof.—Sargent St., Ward 20, for P. W. Boothby, 1 stable, 25' x 30'; two stories; pitch roof.—Chelsea St., Ward 3, for J. J. O'Keefe, 1 stable, 20' x 25'; two stories; flat roof.—Rockland St., Ward 21, for J. V. N. Stultz, by A. Anderson, 2 dwells., 50' x 32'; one story; mansard roof.—Birch St., Ward 25, for F. Gerry, by A. C. Rogers, 1 dwell., 22' x 28'; two stories; pitch roof.—Ward St., Ward 22, for Estate of Isaac Cook, by M. Nolan, 1 cooper's shop, 30' x 20'; one story; pitch roof.

Brooklyn.

BUILDING PERMITS.—Clinton St., No. 6, 1 two-sty brick bakery, 17' 6" x 45'; owner, R. G. Anderson, on premises; builder, W. MacNaughton.—Floyd St., 1 three-sty frame store and tenement, 25' x 60'; owner, G. J. Volckman, 653 Lafayette Ave.—Grand St., 1 two-sty brick storage, 130' 6" x 31'; owners, J. N. and Wm. Brookfield, 115 Taylor St.—Halsey St., 2 two-and-a-half brown stone dwells., 20' x 40'; owner, Miller & Williamson, 657 Gates Ave.—Hewes St., 1 three-sty brown stone dwell., 19' 6" x 42'; owner, F. C. Vrooman, 444 Gates Ave.—Milton St., 2 three-sty brick dwells., 18' x 37', extension 16'; owner, Thomas C. Smith, 140 Milton St.; builders, G. J. Roberts and J. Fallon.—Wyckoff St., 23 three-sty brick tenements, 20' 4" x 62'; owner, T. H. Brush, 155 Lafayette Ave.—Franklin Ave., cor. Hancock St., 6 three-sty brown stone dwells., 17' x 40'; owner and builder, W. J. Rider, 128 Quincy St., architect, A. Hill.—Montrose Ave., cor. Humboldt St., 1 two-sty frame store and hall, 28' x 80'; owner, Conrad Goldbach, 200 Montrose Ave.; mason, U. Maurer, Jr.; carpenter, John Rueger.—Vanderbilt Ave., 1 three-sty brick store and tenement, 28' and 18' 8" x 38'; owner, John E. Cammeyer, 152 Nassau St.; architect, J. H. Van Winkle; builders, J. E. Buttrigham, and Hart & Boyd.

Chicago.

Table with columns: CLASSIFICATION OF BUILDINGS, Cost, and DETAILED STATEMENT OF NEW BUILDINGS FOR WHICH PERMITS HAVE BEEN ISSUED DURING THE MONTH OF NOVEMBER, 1878. The table lists various building types like Sheds, Basements, Churches, etc., and provides a breakdown of materials used (Stone, Brick) and street frontage.

REMARKS.—Cost of additions, basements, and improvements to buildings previously erected, for the month of Nov., 1878, \$30,500. For Nov., 1877, \$32,500. Total cost of new buildings and improvements for Nov., 1878, \$68,500. For Nov., 1877, \$35,500. Total cost of new buildings and improvements from Jan. 1 to Nov. 30, 1878, \$64,541,000. Same period in 1877, \$63,340,800.

BUILDING PERMITS.—John Gaynor, two-sty stone-front dwell., Sangamon St.; cost, \$2,500.—Rev. P. T. Butler, two-sty dwell., 479 North Franklin St.; cost, \$3,300.—M. Larcy, two-sty dwell., Emerald Ave.; cost, \$1,000.—F. Miller, two-sty dwell., Lake Ave.; cost, \$1,800.—C. Mear,

three-sty refrigerator building, Michigan St.; cost, \$18,500.—Porter & Welch, two-sty tannery, Elston Ave.; cost, \$2,000.—John Nras, two-sty dwell., West Seventeenth St.; cost, \$1,300.

New York.

BUILDING PERMITS.—Avenue A, near Seventy-fourth St., second-class store, 20' x 45'; cost, \$4,000; O. J. Froygans, owner; John Brandt, architect; Handwick & Wieber, builders.—One Hundred and Twenty seventh St., near Eighth Ave., 6 second-class dwells., 12' x 45'; Ohio stone fronts; cost, \$3,500; Ed. Just, owner; W. A. Miller, architect.—186 and 192 East Seventh St., school-house, 90' x 80'; four stories; cost, \$49,000.—Board of Education, owner; D. J. Stagg, architect; J. C. Tucker, builder.—224 and 230 East Twenty-eighth St., public school-house, 82' x 60'; four stories; cost, \$81,000; D. J. Stagg, architect; Jos. Ross, builder.—Madison Ave., near Eighty-third St., 2 first-class dwells., 17' x 60'; brown stone fronts; cost, \$11,000; Arnold & Constable, owners; Wm. Schickel, architect; J. Webb & Son, builders.—228 East One Hundred and Sixteenth St., 3 first-class dwells., 10' x 48'; cost, \$8,000; A. Fagan, owner and builder; W. T. Beer & Son, architects.—Robbins Ave., near One Hundred and Forty-ninth St., frame stable, 25' x 20'; cost, \$250; Frances McKenna, owner; Christopher Kennan, builder.—Fourth Ave., near Sixty-sixth St., 20' x 50', workshop; cost, \$150; Sylvester Murphy, owner and builder.—Second Ave., cor. Ninety-seventh St., 4 tenements, 25' x 60'; cost, \$8,000; A. H. Jones, owner; Chas. Baxter, architect; Jas. Frame, builder.—Ninety-seventh St., near Second Ave., tenement, 25' x 60'; four stories; cost, \$8,000; A. H. Jones, owner; C. Baxter, architect; Jas. Frame, builder.—543 East Sixth St., tenement, 20' x 68'; five stories; cost, \$9,000; G. P. Hermann, owner; Chas. Strutzkohn, architect; Peter Kreyer, builder.—Cor. Lafayette Ave. and Warren St., frame dwell., 20' x 30'; cost, \$1,500; C. C. Weeks, owner; A. Arclander, architect; P. Berrin, builder.—First Ave., near Sixty-first St., tenement, 20' x 52'; cost, \$6,000; A. Dowday, owner; F. Schenck, builder.—28 Oak St., stable, 28' x 17'; cost, \$3,000; W. A. McGrath, owner; Wm. McGrath, builder.—12 Goerck St., stable, 25' x 22'; cost, \$670; Wenzel Rimeck, owner; G. Pate, architect; H. Mills, builder.—Third Ave., between One Hundred and First and One Hundred and Second sts., 10 flats and stores, 20' x 65'; cost, \$10,000; brown stone fronts; Duffy & Bros., owners and builders; F. S. Barns, architect.—Eighty-fourth St., near First Ave., 3 first-class dwells., 16' x 48'; cost, \$7,000; P. Sheehy, owner; J. C. Burns, architect.

Philadelphia.

BUILDING PERMITS.—Jas. Meadowcroft, two-sty store and dwell., 14' x 61', cor. Huntingdon and Jasper sts.—J. M. Sharp, 3 two-sty dwells., 14' x 27', Darien St.—Wilt & McClellan, three-sty dwell., 18' x 50', cor. Nineteenth and Sharswood sts.—Wilt & McClellan, two-sty stable, 16' x 18', cor. Nineteenth and Sharswood sts.

SCHOOL-HOUSE.—The Edward Shippen School-House, on Cherry Street, above Nineteenth, which was partly destroyed by fire on last election day, is now being thoroughly rebuilt, the work having been commenced about a week ago. It is to be of the same form, etc., as before the fire, and it is hoped that it will be completed within sixty days.

SCHOOL-HOUSES.—The bids received for building the school-house on the corner of Broad and McFerran streets, in the Twenty-fifth Ward, were as follows:—

Table listing schoolhouse bids: Wm. McDaniels (\$20,987), James M. Stewart (22,220), George H. Brinkworth (20,198), Thomas W. Wright (21,600), E. H. Somerset (20,623), Ketcham & Steel (22,550), James A. Davis (22,940), C. Tweed (20,499), George Wamamaker (19,220).

It was agreed to award the lowest bidder the contract, provided he be proved competent.

For the erection of a school-house in the Twenty-sixth Ward, at the corner of Thirteenth and Federal streets, the following bids were received:—

Table listing schoolhouse bids: Wm. McDaniels (\$10,983), George H. Brinkworth (12,387), Jos. H. Stewart (12,379), Charles O'Neill, Jr. (10,947), E. H. Somerset (12,940), Albert G. McLaughlin (12,475), James A. Davis (12,870), John O'Donnell (11,700), Charles O'Neill, Jr. (being the lowest bidder, the contract was awarded to him under the same condition).

The bids for the school-house at Twenty-seventh and Passyunk Avenue were as follows:—

Table listing schoolhouse bids: John O'Donnell (\$7,500 00), Wm. H. McDaniels (6,980 00), James M. Stewart (7,980 85), Charles O'Neill, Jr. (6,945 00), E. H. Somerset (7,117 00). The contract for the erection of this building was also awarded to Mr. Charles O'Neill, Jr.

St. Louis.

BUILDING PERMITS.—Twenty-six permits have been issued for the week ending November 29, 1878, ten of which are for unimportant frame structures. Of the rest, those worth \$2,500 and over are as follows:—

Table with columns: Owners, Use, Stories, Rooms, Cost. Includes entries for J. B. Ghio (Store and Dwelling, 2 1/2 stories, 32 rooms, \$10,000), R. Anderson (Dwellings, 3 stories, 24 rooms, 14,000), Felix Dora (Dwellings, 2 stories, 8 rooms, 3,500).

STORE.—Messrs. Barnett & Taylor, architects, are reported to have in hand a project for a large store on Sixth Street, between Olive and Locust streets, to be occupied by the retail dry-goods house of Wm. Barr & Company, now on Fourth Street.

CHURCH.—It is also rumored that the first Unitarian congregation of this city is negotiating for the purchase of the Central Presbyterian Church, finished some two years ago at a cost somewhat exceeding \$125,000, and which has proved too heavy a burden for its owners to carry. Should this purchase not be made, the Unitarian congregation will probably build.

Washington, D. C.

BUILDING PERMITS.—William N. Roach et al., 4 three-sty dwells., Pierce St.; cost, \$12,000.—James Griffin, 2 two-sty dwells., Twenty-fourth St.; cost, \$1,600.—P. A. Balloch, 10 three-sty dwells., Sixteenth St.; cost, \$30,000.—M. G. Emery, two-sty brick addition, cor. Tenth St. and Maryland Ave.; cost, \$100.—Daniel Dougherty, two-sty dwell., Georgia Ave.; cost, \$500.

General Notes.

ALLSTON (ONT.), CANADA.—A three-story brick block for stores and offices is now finishing from designs furnished by Mr. Thomas Kennedy, of Barrie, Ont. The cost will be about \$10,000.

**AMHERST, MASS.**—The tower of the new Methodist church has been roofed over, but the spire will not be added until another season. The inside work is now being pushed with the intention of getting it ready for use as soon as possible.

**ATHENS, O.**—The work on the foundation of the new court-house, Mr. H. E. Myers, architect, is being pushed forward rapidly, so that by the opening of spring it will be ready for the superstructure.

**BRADFORD, PENN.**—Owners are already building upon the ruins of the late fire. A brick hotel will be built on the site of the old one, and other buildings are already started.

**CAMBRIDGE, MASS.**—Mr. T. M. Clark, of Boston, is the architect of a house for Professor Chas. H. Marsh. The building is of brick, and will measure 37 by 43 feet.

**CARO, MICH.**—Mr. Thomas, of Bay City, has decided to build a large brick hotel in Caro the coming season.

**DES MOINES, IO.**—The cost of the new capitol at Des Moines, when completed, will be not far from \$2,000,000. The appropriations to date foot up \$1,450,000. The cornerstone was laid seven years ago.

**GERMANTOWN, PENN.**—In the October hurricane Christ Church was demolished. The next night the congregation resolved to rebuild, and within a week every member had subscribed, so that enough is secured to erect a suitable edifice.

**GREENFIELD, MASS.**—Levi L. Kately is building a house on Chapman Street.

**IOWA CITY, IO.**—The Iowa City Elevator has been taken down and shipped to Kansas.

**LOUISVILLE, KY.**—Mrs. L. V. Dick, two-and-a-half-story brick dwelling, Chestnut Street, between Fifteenth and Sixteenth; cost, \$3,500.

**MILLVILLE, MASS.**—A new freight depot, 120 by 40 feet, is soon to be built on the Providence & Worcester Railroad.

**MONTREAL, CANADA.**—Sixty stone-cutters, employed on Section 3, Lachine Canal, struck for higher wages on November 23.

**MUKWANAGO, WIS.**—The new Universalist church is receiving the finishing touches.

**PROVIDENCE, R. I.**—On Thanksgiving Day the cornerstone of the new Catholic cathedral was laid. The extreme length of the cathedral, from the outside piers of the towers to the rear of the chancel buttresses, will be 195 feet, and the extreme breadth of the transepts, from the outside to outside of buttresses, will be 135 feet; extreme breadth in front, outside to outside of buttresses, 120 feet; extreme breadth of nave and aisles, 92 feet. There will be two front towers. It will be made of brown stone. The architect is Mr. P. C. Keely, of Brooklyn, N. Y. The stone work was contracted for by the Maginn Brothers, of Hartford. It will probably be two or three years before the church is finished. The edifice will very probably cost a quarter of a million dollars.

**RICHMOND, VA.**—There is a great deal of building going on at this time in all parts of the city. At the corner of First and Main streets, Mr. A. Harris is preparing to build three fine tenements with stock-brick fronts and granite finish. The excavation is being done by William F. Fletcher; brick work, Samuel B. Bagland; stone work, Hayes, Byron & Major; wood work, Duke & Hoge; iron work, William B. Cook; plumbing and gas-fitting, G. & A. Bergmann; plastering, A. Q. Billings; painting, D. H. Pyle. The architect, Mr. John Gibson, Sr., will superintend the work. Mr. A. Goodman is building a fine stock-brick front dwelling on the north side of Franklin Street, between Seventh and Eighth streets.

**RUSH CITY, MINN.**—Mr. F. H. Pratt will build a 25,000 bushel elevator.

**SHARPSBURG, MD.**—The cornerstone laying of the Church of God, a new edifice, took place on last Saturday.

**SOUTH PASS, MISS.**—The Lighthouse Board, in their annual report, ask an appropriation of \$50,000 to begin the erection of a sea-coast light at the South Pass, the principal entrance to the Mississippi River.

**TORONTO, CAN.**—The Presbyterians are busy in church building. The cornerstone of the Eskine Presbyterian Church was laid lately, and the same week the fine new church on St. James Square was opened for public worship.

**VANAR, MICH.**—A new flouring-mill, with four runs of stones, and costing \$10,000, is now building.

**WEST WARREN, MASS.**—The Methodists have voted to build a church at once. It is to be located on Central Street, and will cost about \$5,000. The building committee are now ready to receive proposals for doing the work.

## INDEX OF CURRENT WORK,

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

### Baltimore, Md.

**CHURCH.**—The Pius IX. Memorial Church. G. A. Frederick, architect. Cost \$100,000.  
**HOSPITAL.**—Johns Hopkins Hospital. J. R. Niernae, consulting architect.

### Boston.

**BANK BUILDING.**—Tremont Bank Building. Carl Fehmer, architect.  
**HOTEL.**—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.  
**THE MUSEUM OF FINE ARTS.**—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.  
**SCHOOL-HOUSE.**—High and Latin School. G. A. Clough, architect.  
**ASYLUM.**—Asylum for Aged People, C. J. Bateman, architect. Cost \$50,000.

### Brooklyn, N. Y.

**TENEMENT.**—A. T. White, owner. William Field & Son, architects.  
**SOCIETY BUILDING.**—The Long Island Historical Society Building, Mr. G. B. Post, architect. Cost \$100,000.  
**CHURCH.**—St. Francis Xavier B. C. Church, West Fifteenth Street. Cost \$150,000. P. C. Keely, architect.  
**HOSPITAL.**—St. John's Hospital, N. L. Derby, New York, architect.  
**HOSPITAL.**—Hospital of St. Mary, Mr. P. C. Keely, architect. Cost \$200,000.

### Cincinnati, O.

**U. S. CUSTOM HOUSE AND POST OFFICE.**—S. Hannaford, local superintendent.  
**CHILDREN'S HOME.**—J. W. McLaughlin, architect. Cost \$50,000.  
**NEWSPAPER OFFICE.**—The Gazette Building. E. Anderson, architect.  
**CLUB-HOUSE.**—Allemania Club-House. J. W. McLaughlin, architect. Cost \$80,000.  
**UNIVERSITY BUILDING.**—Cincinnati University Building. S. H. Hannaford, architect. Cost \$50,000.

### Cleveland, O.

**CONVENT.**— Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

### Hartford, Conn.

**SEMINARY.**—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.  
**CATHEDRAL.**—B. C. Cathedral of St. Joseph. P. C. Keely, Brooklyn, architect.  
**CATHOLIC SCHOOL.**—Brown & Stilson, architects, New Haven. Cost about \$25,000.

### Jersey City.

**CONVENT.**—Convent of the Sisters of St. Dominick. Cost \$40,000.

### New York.

**THE "FLORENCE."**—Emile Grewé, architect. Mrs. Matthews, owner. Cost \$500,000.  
**BARGE OFFICE.**—Building by the United States Government. Cost \$145,000.  
**THE BOREAL BUILDING.**—S. D. Hatch, architect. Cost \$250,000.  
**CHURCH.**—St. Paul's (R. C.). Mr. J. O'Rourke, architect, Newark, N. J. Cost \$500,000.  
**COLLEGE.**—Addition to Columbia College. C. C. Haight, architect. Cost \$200,000.  
**OFFICE BUILDING.**—Messrs. Silliman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.  
**APARTMENT HOUSE.**—Mr. H. J. Hardenburgh, architect. Cost \$300,000.  
**PRIVATE RESIDENCE.**—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.  
**ARMORY FOR THE SEVENTH REGIMENT.**—Cost \$300,000. C. W. Clinton, architect.

### Philadelphia.

**HOSPITAL.**—Presbyterian Hospital. Wilson Bros., arch'ts.  
**OFFICE BUILDING.**—Gillard trust.

### Providence, R. I.

**CATHEDRAL.**—Mr. P. C. Keely, architect, Brooklyn.  
**DORMITORY FOR BROWN UNIVERSITY.**—Messrs. Stone & Carpenter, architects.

### St. John, N. B.

**POST OFFICE, CUSTOM HOUSE, AND SAVINGS BANK.**—Mr. Scott, Chief Architect to the Dominion Government.  
**BANK.**—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.  
**CHURCH.**—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.  
**CITY HALL.**—Messrs. McKean & Fairweather, architects.  
**CHAPEL.**—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.  
**CHURCHES.**—St. James's Church, Croft & Camp, architects, St. John, N. B.—St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$60,000.

### St. Louis.

**CHURCH.**—Second Baptist Church. Edward Illsley, contractor. Cost \$10,000.  
**COURT HOUSE FOR THE NEW COUNTY OF ST. LOUIS.**—F. Renwick, architect. Cost \$28,000.  
**COLLEGE.**—College for the Christian Brothers. Mr. Jas. McGrath, architect. Cost \$200,000.  
**CUSTOM HOUSE AND POST OFFICE.**—Mr. Jas. G. Hill, Supervising Architect of the Treasury Department.

### General.

**ATHENS, O.**—Court House, Mr. H. E. Myers, architect. Cost \$90,000.  
**CAMBRIDGE, MASS.**—Gymnasium for Harvard College. Messrs. Peabody & Stearns, architects, Boston.  
**CONCORD, N. H.**—State Prison. Messrs. Dow & Wheeler, architects. Appropriation, \$200,000.  
**CROWN POINT, IND.**—Court-House. J. C. Cochrane, architect, Chicago. Cost \$45,000.  
**ELMIRA, N. Y.**—Masonic Hall. N. LeBrun, architect, New York. Cost \$60,000.  
**FARIBAULT, MINN.**—Deaf, Dumb, and Blind Asylum. J. Babcock & Co., contractors. Cost \$53,730.  
**INDEPENDENCE, IO.**—Hospital for the Insane. G. Joselyn, supervising architect. Cost \$50,000.  
**INDIANAPOLIS, IND.**—State House, Mr. M. May, architect. Cost \$2,000,000.

# The American Architect and Building News

PROSPECTUS FOR 1879.

THE AMERICAN ARCHITECT AND BUILDING NEWS is intended to be valuable to Architects, Designers, Engineers, and Builders, and to Manufacturers, Dealers, and Inventors, whose wares or processes are applicable to building uses. It furnishes a continuous record of current news concerning architecture, building, and all the arts which are connected therewith, with discussions of the most interesting topics which they and the time suggest, whether artistic, technical, mechanical, or relating to their commercial and legal bearings.

It is interesting also to amateurs of Architecture, Building, and the Decorative Arts; containing many papers, and much information of an untechnical character, in these and the other fine arts, while its variety of illustration gives it a value apart from its professional uses. These illustrations, printed by the Heliotype Process, include, with every week's issue, four plates, mostly of unpublished drawings of buildings, furniture, and decorative work executed in the United States, but with a selection of the most interesting works or buildings of note that are illustrated abroad.

The Publishers have added to its scope, as year by year has defined the functions and opportunities of their journal. The volumes for 1878 have contained, besides miscellaneous articles on the topics indicated above, a valuable series of papers on Perspective, making a very complete treatise on the subject; a series on Modern Plumbing, and one on the history and construction of Open Fire-places, all written especially for this journal, as well as many papers from the transactions of professional societies, and a large amount of matter selected from foreign journals, many of which are not easily accessible to American readers. Pains have been taken to secure the best contributors available. Among them have been and are expected to be, Professors H. L. Eustis, W. R. Ware, C. E. Norton, C. Babcock, and Messrs. George E. Waring, Jr., Henry Van Brunt, P. B. Wight, C. A. Cummings, Carl Pfeiffer, F. D. Millet, Edward T. Potter, T. M. Clark, and many others. It contains, in addition to its literary matter, a full weekly record of building news, which is meant to include the important buildings that are undertaken all over the country, with a special index of the most important; a list, corrected weekly, of prices current of building materials in the chief business centres of the United States, a weekly list of building patents issued by the Government, and comparative tables of the prices of labor in the various trades at different points.

During the year 1879 the competitions in interior decoration, which have proved useful and successful, will be continued. Sanitary subjects will be treated as heretofore by Colonel Waring, and illustrated articles on technical subjects, analogous to those on Plumbing and Open Fire-places, will be continued, and it is expected that the legal aspects of architectural practice will receive special attention. The cosmopolitan character of the paper will be maintained, and its correspondence from various American cities carried on by capable writers as heretofore, while its foreign correspondence will be increased, and in particular letters of interest may be expected from an architect of position in London, and from Paris by the eminent hand of M. César Daly.

In commencing its fourth year, then, the Publishers commend the *American Architect and Building News* to all those whose avocations or tastes interest them in Architecture, Decoration, Building, and kindred arts.

## SPECIAL OFFER.

New subscribers paying, before December 15, 1878, their subscriptions for 1879, will receive free of charge the numbers for November and December, 1878; thus receiving nine numbers in addition to the regular year's issue.

**TERMS:** Per year, \$7.50, or, if paid in advance, \$6.00. For six months, \$3.50. (The special offer above does not apply to subscribers for six months.)  
Single Copies fifteen cents each.

Remittances should be made by check, draft, or postal money-order to the Publishers

**HOUGHTON, OSGOOD AND COMPANY,**

WINTHROP SQUARE, BOSTON.

JOLIET, ILL.—St. Mary's (Roman Catholic) Church. Mr. Keely, architect, Brooklyn.

KANKAKEE, ILL.—Insane Asylum. J. R. Willett, architect, Chicago, Ill.

LOWELL, MASS.—Appleton Bank. O. A. Merrill, architect. Cost \$70,000.

NEWARK, N. J.—St. Michael's Church (R. C.). Mr. J. O'Rourke, architect. Cost \$25,000.

NORRISTOWN, PENN.—Insane Asylum. Wilson Bros. & Co., architects, Philadelphia.

OAKLAND, CAL.—First Congregational Church. Mr. L. B. Valk, New York, architect. Cost \$60,000.

OTTAWA, ILL.—Holy Trinity (R. C.) Church. H. C. Furness, architect. Cost \$150,000.

ARMORY. Cost \$35,000. Mr. H. C. Furness, architect.

PORTLAND, CONN.—Trinity Church, H. M. Congdon, architect, New York. Cost \$50,000.

SAN FRANCISCO, CAL.—College of the Jesuit Fathers. Cost \$500,000.

SPRINGFIELD, ILL.—Jail. G. H. Helmle, architect. Cost \$65,000.

TOPEKA, KAN.—Insane Asylum. Cost \$76,000. Mr. E. T. Carr, architect, Leavenworth, Kan.

WARASH, IND.—Court House. B. V. Enos & Son, architects. Cost \$100,000.

ZANESVILLE, O.—Hotel. H. E. Myers, architect. Black & Graham, owners. Cost \$75,000.

Publishers' Department.

**The American Architect and Building News.**  
 PUBLISHED EVERY SATURDAY BY  
**HOUGHTON, OSGOOD & CO.,**  
 WINTHROP SQUARE, BOSTON.  
 NEW YORK OFFICE, 21 ASTOR PLACE.  
*An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc.*  
 15 cents per copy; \$7.50 per year; \$6.00 in advance.

**CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,**  
 WITH  
*Houghton, Osgood & Co.'s other Periodicals.*  
 THE ARCHITECT and ATLANTIC MONTHLY...\$9.00  
 THE ARCHITECT and THE REPORTER...15.00  
 THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL...10.00  
 THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE...7.00  
 THE ARCHITECT and DWIGHT'S JOURNAL OF MUSIC...7.00  
 \* N. B.—The Atlantic portraits of Lowell, Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

Payments should be made directly to the Publishers, either by draft or by post-office order.  
**HOUGHTON, OSGOOD & CO., Publishers,**  
 WINTHROP SQUARE, BOSTON.

BUILDING SPECIALTIES, Etc.

Messrs. Wilson & James, 68 Beckman Street, New York, are manufacturing the rolling steel shutters for the following court-houses: Cook County, Chicago, Ill.; Hamilton County, Noblesville, Ind.; Lake County, Crown Point, Ind.; Worcester County, Worcester, Mass. They put their steel shutters into the Providence Court House, Providence, R. I., about eighteen months ago, and they have given great satisfaction.

The Walworth Manufacturing Company are at present engaged upon the following contracts: Heating and Ventilating Apparatus (finishing), new State Capitol, Lansing, Mich.; new Insane Asylum, Pontiac, Mich.; Hospital for Insane, Indianapolis; Porter's Block, Grand Rapids, Mich.; Shillito Building, Cincinnati, O.; McCune's Block, Columbus, O.; Court-house, Peoria, Ill.; (beginning) new State Capitol, Indianapolis (3,600,000 cubic feet space); Hospital for Insane (old building), Indianapolis. Steam (finishing), new Howard Bank, Boston; Medical Library, Boston; Court-house, Barnstable; Hotel, Augusta, Me.; Chapman School-house, East Boston; Mr. Collamore's and Mr. Moore's Apartment Houses, Columbus Ave.; Laundry, Memorial Hall, Harvard University; several private residences, hot water; (beginning) Harvard Gymnasium; Anawam Hall, West Roxbury; First Methodist Church, Lynn, Mass.; Odd Fellow's Hall, St. John, N. B.; St. Andrew's Church, St. John, N. B., and lately finished eighteen contracts, including Victoria School. Gas contracts under way: New Capitol, Albany, N. Y.; new City Hall, Providence, R. I.

*W. Hall & Sons*  
 Manufacturers of  
**Architectural Terra Cotta,**  
 Buff and Colored Brick, Fire Brick,  
 Established 1846, 215th Street, N. Y.

**ARCHITECTURAL IRON WORKS.**  
**YOUNGLOVE & CO., Propr's.**  
 CLEVELAND, O.  
 IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BRACKETS, STAIRS, DOORS AND SHUTTERS, TILES, LIGHT, CHESTING, ETC.  
 Estimates promptly furnished.

(Established 1848.)  
**MARKET ST. ARCHITECTURAL FOUNDRY**  
 AND  
**IRON WORKS.**  
**SNEAD & CO..**  
 LOUISVILLE, KY.  
 Makers of every description of Iron Work for Buildings

PROPOSALS.

HEATING APPARATUS.

LOUISVILLE, KY.  
 The Building Committee of the Masonic Widows' and Orphans' Home and Infirmary will receive proposals for the erection of the requisite apparatus for heating the Home by steam, according to a specification and plans made for same by Henry Whitestone, architect, which may be seen at the office of the undersigned, No. 139 Main Street, Louisville, Ky., and to whom sealed proposals are to be delivered on or before noon of the 12th day of December next. The Committee reserve the right to reject any or all bids.  
 GEO. W. WICKS,  
 Chairman Building Committee.

JAIL.

GALENA, ILL.  
 Sealed proposals will be received by the undersigned until 1 o'clock P. M. of the 11th day of December, prox., for the construction of a Jail and Jailor's Residence at Galena, Jo Daviess County, Ill., according to plans and specifications made for the same, and which may be seen at the county clerk's office, at the court-house in Galena, Jo Daviess County, Ill., or at the office of Randall & Miller, architects, 692 West Washington Street, Chicago, Ill. Bids are specially invited for the entire work complete, and also for any of the separate branches of it, the committee reserving the right to reject any or all of such bids at their discretion. Bids, sealed, to be left with W. F. Crummer, County Clerk. Dated at Galena, Jo Daviess County, Ill., November 16, 1878.

PHILIP PARKIN,  
 CHARLES SPEER,  
 JOHN A. GAFFNEY,  
 WM. M. LOGAN,  
 L. P. WOODWORTH,  
 County Building Committee.

LOCKS AND KEYS.

POST OFFICE DEPARTMENT,  
 WASHINGTON, D. C., August 15, 1878.  
 Separate sealed proposals will be received at this Department until 12 o'clock noon on the 20th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as are to be used for the street letter-boxes of the United States.

As the public exposure and searching examination necessary to intelligent bidding on any prescribed model of a lock and key would tend to impair, if not entirely destroy, the further utility of all such locks and keys for the purposes of the mails, the Postmaster-General prescribes no models or samples for bidders, but relies for a selection on the mechanical ingenuity and skill which a fair competition among inventors, hereby invited, may develop in samples submitted by them.

Specifications of requirements as to proposals, samples, kinds and quantities of locks and keys, contracts, etc., will be furnished on application by letter to the Second Assistant Postmaster-General.

No proposal will be considered which is not submitted in accordance with such specifications and forms of proposal. The contracts which may be made are to be in conformity with the specifications and accepted proposals.

D. M. KEY, Postmaster-General.

WOOD MANTELS AND GLASS.

Proposals for Wood Mantels and Glass for the U. S. Custom House and Court House at Evansville, Ind.  
 OFFICE OF THE SUPERVISING ARCHITECT,  
 TREASURY DEPARTMENT,  
 WASHINGTON, D. C., November 25, 1878.

Sealed proposals will be received at this office until 12 M. on the 11th day of December, 1878, for furnishing, delivering, and fitting in place complete, the Wood Mantels required for the U. S. Custom House and Court House at Evansville, Ind.; also, for furnishing and delivering, ready for putting in place, all the glass required for the building, in accordance with drawings, specifications, and schedules, copies of which and any additional information may be had on application at this office or the office of the Superintendent.

JAS. G. HILL,  
 Supervising Architect.

Weather Strips.

**BROWNE'S METALLIC AND RUBBER WEATHER-STRIPS**—the oldest, the best, the cheapest in market. Stood the test 15 YEARS. They exclude COLD DRAFTS around windows and doors in winter, keep out dust in summer, and stop rattling sashes. We employ experienced and responsible workmen, and guarantee entire satisfaction. We send, free of charge, men with samples and prices to measure and give cost. We warrant them good for 5 YEARS.  
**Patent Metallic Weather-Strip Co.**  
 812 BROADWAY, N. Y.

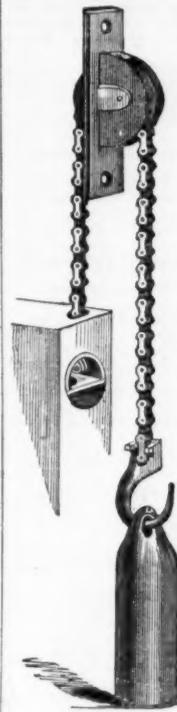
**THE PENRHYN SLATE CO.**  
 MANTELS,  
 And General Slate Manufacturers,  
 (Quarries and Manufactory, Middle Granville, N. Y.)  
 50 UNION SQUARE, . . . NEW YORK,  
 Corner of Fourth Avenue and 17th Street.  
 W. H. KIRTLAND, Secretary.

WANTS.

A SITUATION as Foreman of a Stone or Marble Yard by a man who has had 14 years' experience in the business, either as a foreman or in business for himself. Thoroughly understands Building and Monumental Work, and is a first-class practical workman. Has had considerable experience in quarrying stone. References given and required. Address  
 D. J. WHITNEY, Gouverneur, N. Y.

MORTON'S

Copper and Iron  
**SASH CHAIN,**  
 PATENTED  
 Aug. 15, 1871.



I would call the attention of Architects and Builders to my

**SASH CHAIN,**  
 Manufactured from the best  
**NORWAY IRON.**

This Chain is stronger and cheaper than the copper, and will last as long; all that is necessary is to paint the Chain the same color as the frame.

For terms and further information apply to

**THOS. S. MORTON,**  
 65 ELIZABETH ST.,  
 NEW YORK CITY.

**C. BUTCHER,**  
 107  
 Devonshire St.  
 BOSTON.

Send for  
 Illustrated  
 Catalogue.

**PATENT**  
**MARQUETRY**  
**FLOORING.**

Specimens at Lawrence, Wilde & Co.'s, 42 Cornhill, Boston



THE NEW RUBY FURNACE.

J. A. LAWSON, PATENTEE  
 For Hard or Soft Coal. With Non-Clinker Grate.

**RUBY & PEARL**  
 Surface-Burning Self-Feeding  
**FURNACES.**

**CLINTON** } Wrought Iron, with Brick Lined Fire-Pot.  
 Reversible Fine Furnace.  
**CRYSTAL** } Wrought Iron, with Cast Iron Fire-Pot.  
 Surface Burning Furnace.

MANUFACTURED BY  
**FULLER, WARREN & CO.,**  
 Troy, New York, Cleveland, Chicago.

The Automatic Fire Alarm Telegraph

IS OPERATED BY THE HEAT OF THE FIRE.

The apparatus is placed on the ceiling of every room, office, and closet in the building, so that a fire can in no instance be more than fifteen or twenty feet from it.

It can be adapted to all temperatures. The alarm is almost instantaneous. It is given directly to the Fire and Protective companies and to the City Fire Alarm Office. It may also be given in the building protected. It may be given by hand.

It tells the Department the exact location of the fire before the companies leave their stations, thus preventing the delay and loss caused by breaking into rooms where there is no fire.

A break in the wire instantly signals itself; but, by a combination of the metallic and earth circuits, does not prevent an alarm of fire, even while the wire is broken.

An incendiary cannot, therefore, prevent an alarm by cutting the line.

The Automatic Fire Alarm Telegraph

Prevents the possibility of a large loss.

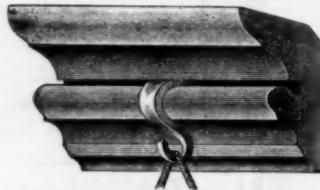
- It saves the drenching a building with water.
It saves the breaking up of business.
It saves the loss of contracts and customers.
It saves insurance. It saves a watchman.
It saves the books, and the many other losses that insurance never covers.

The returns of the New York Patrol Committee show that the loss by fires originating in buildings equipped with the AUTOMATIC TELEGRAPH has been diminished over 76 per cent. by the use of this system.

Company's Office: 178 Devonshire St., Room 20, Where the apparatus can be seen. C. E. GUILD, Pres. P. T. JACKSON, Treas.

BAKER'S

Combined Cornice and Picture Rod Moulding.



(Patented in the United States and Dominion of Canada, 1877.)

For Hanging Pictures, etc.

FOR SALE BY F. P. BAKER.

The only Agent in the U. S. and Canada,

84 BEVERLY STREET BOSTON.

"Wood thoroughly creosoted is practically imperishable."

CREOSOTED WOOD,

PREPARED AT THE

Hayford Patent Creosote Wood Preserving Works, ELIZABETHPORT, N. J., and A St., So. BOSTON.

Offices: 10 Warren St., New York, and 4 Post Office Sq., Boston.

ELWARD R. ANDREWS, Proprietor.

ARCHITECTS, ENGINEERS, and BUILDERS are reminded that wood prepared by the Hayford process is rendered PRACTICALLY IMPERISHABLE, being protected from decay, marine worms, etc. It should be used for Ties, Bridges, Piles, Piers, Wharves, Pavements, Stable and Cellar Floors, and wherever wood is exposed to alternate dryness and moisture.

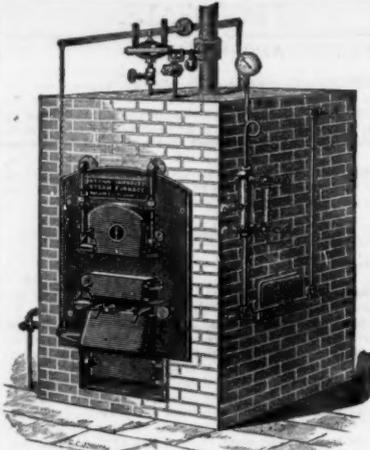
Pamphlets, fully explaining the creosoting process, for nished on application.

GAS FIXTURES

OF EVERY DESCRIPTION.

SPECIAL RATES TO BUILDERS.

R. HOLLINGS & CO 547 Washington St. BOSTON.



BROWN'S IMPROVED STEAM HEATERS.

The attention of Architects and Builders is directed to this NEW AND VALUABLE INVENTION FOR HEATING

PUBLIC AND PRIVATE BUILDINGS,

MANUFACTURED BY

RUFUS G. BROWN & CO.

WALTHAM, MASS.

Boston Office, 59 Bromfield St.

Send for Circular.

DORCHESTER UNION FREESTONE CO.

NEW BRUNSWICK YELLOW FREESTONE. The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order. 24 Pine Street, New York. G. P. SHERWOOD.



J. & R. LAMB, 59 CARMINE ST., N. Y.

CHURCH FURNISHERS. Practical Workers in Sterling Silver, Brass and Bronze, Carved Wood, Decorations, etc. Illustrated Catalogues. Furniture, 10c.; Metalwork 10c.; Decoration, 1c.

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free

HENRY McSHANE & CO., Baltimore, Md.

A. L. FAUCHERE & CO.

OFFICE AND WAREHOUSES

1319 and 1321 Broadway, New York,

Importers, Manufacturers, and Dealers in all kinds of foreign and domestic

MARBLE FOR INTERIOR WORK.

Estimates furnished on application.

STEAM and PIPE

THE "AIR SPACE" BOILER COVERINGS

Save 10 to 20 per cent in fuel.

See Am. Architect and Building News, Dec. 18, 1877.

THE CHALMERS-SPENCE COMPANY.

140 Congress Street, Boston. Foot 9th St., E. R., New York

Advertisement for THE HELIOTYPE PRINTING COMPANY, featuring a central illustration of a heliotype printing process and text: 'LUX-FECIT THE HELIOTYPE PRINTING COMPANY 220 DEVONSHIRE ST BOSTON COR FRANKLIN ST HELIOTYPE PHOTOGRAPHS in Printers Ink HELIOTYPE LITHOGRAPHS printed by Steam HELIOTYPE CUTS to print with Type HELIOTYPE FACSIMILE LETTERS, SHOW CARDS, etc.'

CLASSIFIED ADVERTISEMENTS.

Table listing various advertisements and their page numbers, including categories like ARCHITECTS, CREOSOTED WOOD, HELIOTYPES, BOOFS, and various engineering and construction services.

# ETNA IRON CO.

Manufacturers of every description of Wrought and Cast

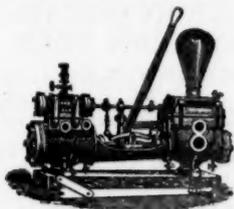
## ARCHITECTURAL IRON WORK FOR BUILDINGS.

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

### KNOWLES

Patent



Steam

### PUMP

### THE STANDARD.

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

KNOWLES STEAM PUMP WORKS, WARREN, MASS.

WAREHOUSES, { 11 & 16 Federal St., } Boston.  
{ 113 & 115 Congress St., }  
{ 82 & 94 Liberty St., } New York.

Send for Illustrated Catalogue.

### MARSHALL'S AMERICAN



### LEADED SHEETS.

Cheapest and most durable Metal for Cornice and Roofing

MARSHALL BROS. & CO.,

Front and Girard Ave., Phila

Represented in New England States by  
C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

### S. KLABER & CO.

### STEAM MARBLE WORKS,

217 to 223 W. 51st St., New York.

ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

### DEVER & SHORTLIDGE,

Ledger Building,

PHILADELPHIA, PA.

### Law and Collection Offices.

City Collections, Interest, Mercantile Bills, and Foreign Claims promptly made. Liens filed, Mortgages foreclosed, Ground Rents sued out, and all other Legal Business will receive careful attention. Reports made on Claims whenever desired, and cashed as soon as collected.

ROBERT DEVER,

Solicitor.

JOHN WALKER SHORTLIDGE,

Attorney and Counsellor at Law.

ROOMS 6 AND 7, FIRST FLOOR.



Terra Cotta Chimney Tops, Akron Lead Tile

"Akron, Ohio" DRAIN PIPE. ALL SIZES.

D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

### NATIONAL

### FINE ART FOUNDRY,

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze.

## GAS

### SPRINGFIELD GAS MACHINE.

Springfield, Mass.; 75 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 169 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.



### NATIONAL TUBE WORKS CO.

PATENT

Indestructible Enamelled Wrought Iron

### LAP-WELDED PIPE,

From 1/4 inch to 15 inches diameter.

Now extensively used for

Water, Gas, Sewerage, and Mining.

It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage.

MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at offices of

National Tube Works Co.,

8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

### BURDITT & WILLIAMS,

DEALERS IN

### FINE HARDWARE

of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.

### The Draft of the Chimney increased.

Smoking Chimneys Prevented Particularly adapted to Chimneys in exposed positions.

Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR,

70 Grand St., Brooklyn, N. Y.

### CATALOGUE OF Architectural Books

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO.,

ARCHITECTURAL BOOK PUBLISHERS, 77 WARREN STREET, NEW YORK.



TO ARCHITECTS AND BUILDERS.

### MAHOGANY,

(all thicknesses) for Doors and Interior Finish.

### FIGURED WALNUTS,

(1-4 inch thick), for Doors, etc.

### VENEERS,

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

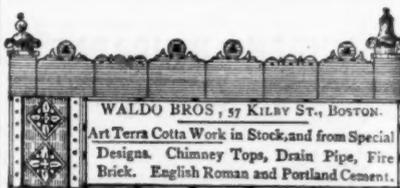
### BEEHIVE BRAND.

### FELT ROOFING.

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

### UNPARALLELED DISCOVERY.

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the Paint Preserver invented by ASAHEL WHEELER, Boston. It will neither crack, blister, nor scale.



WALDO BROS., 57 KILBY ST., BOSTON.

Art Terra Cotta Work in Stock, and from Special Designs. Chimney Tops, Drain Pipe, Fire Brick. English Roman and Portland Cement.

## PEERLESS BRICKS.

### THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK

### ARCHITECTURAL SHAPES (80 kinds).

ALSO

RED Pressed Fronts.

Extra fine in color and quality

BROWN, Colored throughout

More beautiful than Brown Stone DURABLE

CHOCOLATE,

Same as above; difference in color

FLESH COLOR,

A very popular color

BUFF, very fine.

Harmonizes beautifully with Brown or Black

GRAY, A pleasing shade.

BLACK, Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F. ADAMS,

JOSEPH WOOD, JR.,

PRESIDENT.

TREASURER



### DOLIVET, CUTTER, & CO.,

ARTISTIC

### Papier Maché Decorations,

108 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.



PERFORATED METALLIC BLINDS

SKYLIGHTS

G. HAYES

71 EIGHTH AVE.

PERFORATED SHEET METALS



**ROLLING Venetian Blinds.**  
*Wilson's Patent.*  
 For first-class Dwellings and Public Buildings.  
 These blinds can be fitted either inside or outside the ash, and are operated with ease without machinery or weight. They are made to coil above or below, as shown in cut. Can be furnished in any kind of wood. Unequaled for elegance, durability, and simplicity. Indorsed by many of the leading architects in the country, and in use in some of the handsomest buildings.  
 We also manufacture  
**WILSON'S PATENT Rolling Steel Shutters**  
 These blinds are operated on same principle as above (being self-coiling). They are used for closing store-fronts and all windows and doorways that are required to be perfectly fire and burglar proof.  
 Also, Rolling Wood Blinds for Store-Fronts, Book-Shelves, School Partitions, and other purposes.  
 A list of public and private buildings fitted with our Blinds sent on application. Architects and owners are invited to send for working models, catalogues, and price-lists.  
**WILSON & JAMES,**  
 58 Beekman St., New York.  
 Two Prize Medals at Philadelphia.

**THREE ADMIRABLE NEW BOOKS.**

**The School-Boy.** By OLIVER WENDELL HOLMES.  
 Poem read at the Centenary of Phillips Academy, Andover, Mass., June 10, 1878. Illustrated with many excellent Engravings on Wood, designed by J. Appleton Brown, Waud, Sheppard, Merrill, and Hitchcock. Uniform in size and general style with the choice and popular holiday books of previous years. "The Hanging of the Crane," "Mabel Martin," "The Skeleton in Armor," "Christmas-tide," etc. Handsomely bound in cloth, \$4.00; morocco or tree calf, \$8.00.  
 A beautiful poem, finely illustrated, tastefully bound: a choice holiday gift-book.  
**An Account of the Life and Times of Lord Bacon.**  
 Abridged from the "Life and Letters of Bacon," by JAMES SPEDDING. Uniform with Popular Edition of "Bacon's Works." With a Portrait. Two vols., crown 8vo., \$6.00; half calf, \$9.00.  
 This edition omits no essential part of Mr. Spedding's voluminous work, but presents a connected and complete narrative of Bacon's life and remarkable career, including enough of the political and literary history of England to make clear Bacon's position, circumstances, and influence. It is a very noteworthy addition to biographical literature.  
**The College Book.**  
 Edited by CHARLES F. RICHARDSON and HENRY A. CLARK. 1 volume, 4to, full gilt, \$15.00.  
 A royal volume, containing historical and descriptive accounts, principally by professors or graduates, of twenty-four leading American Universities, Colleges, and the United States Military and Naval Academies, with 60 full-page Heliotype Illustrations of buildings connected with these institutions.

HOUGHTON, OSGOOD & CO., Boston.

**IMPROVED PRISON LOCKS.**

All Architects should have our 36 page Illustrated Catalogue of Prison Locks.  
 ADDRESS  
**YALE LOCK MFG. CO., STAMFORD, CONN.**  
 New York Salesroom, No. 53 Chambers Street.

**T. B. STEWART & CO.**  
**SLATE, MARBLE, AND WOOD MANTELS,**  
 AND  
 Slate Goods of Every Description,  
 (QUARRIES AND MANUFACTORY, FAIR HAVEN, VT.)  
 75 & 77 West Twenty-Third Street, New York.

**WROUGHT IRON BEAMS & GIRDERS**

**THE UNION IRON MILLS,** Pittsburgh, Pa., Manufacturers of Improved Wrought Iron Beams and Girders (patented).  
 The great fall which has taken place in the prices of Iron, and especially in Beams used in the construction of FIRE-PROOF BUILDINGS, induces us to call the special attention of Engineers, Architects, and Builders to the undoubted advantages of now erecting fire-proof structures; and by reference to pages 52 and 54 of our Book of Sections — which will be sent on application to those contemplating the erection of fire-proof buildings — THE COST CAN BE ACCURATELY CALCULATED, the cost of insurance avoided, and the serious losses and interruption to business caused by fire. These and like considerations fully justify any additional first cost. It is believed that, were owners fully aware of the small difference which now exists between the use of Wood and Iron, in many cases the latter would be adopted. We shall be pleased to furnish estimates for all the Beams complete, for any specific structure, so that the difference in cost may at once be ascertained. Address  
**CARNEGIE BROS. & CO., Pittsburgh, Pa.**

**LESTER**  
 beautiful and perfect machine, warranted.  
**MILLERS FALLS CO., 74 Chambers St., New York**

**SPECIALTIES IN PLUMBING GOODS,**  
 Having for their special object  
**NEW CLOSET AND SEW VALVE.**  
 Cleanliness, Durability, and the exclusion of Sewer Gas.  
**Jennings' Sanitary Depot,**  
 A. G. MYERS, Manager,  
 94 Beekman Street, New York.

**Brandeis' Seamless Paragon Trap**  
*Safest, Best, Cheapest, and Non-siphoning.*  
 Simple in construction, cast in one piece, smooth as glass inside, and provided with our Patent Drain Screw, this Trap contains the largest water seal, and takes up the least possible space. Exempt from the usual defect of siphoning, strong and durable, its low price combined with its merits will commend itself to every intelligent architect and builder. The pipes are easily flanged, and, in the absence of all seams, they may be bent in any direction without fear of straining or leakage. **BRANDEIS & WICKERT** 46 Fulton Street, Brooklyn N. Y.



**SAYLOR'S PORTLAND CEMENT.**  
 Approved, recommended, and used by Architects, Engineers, and Builders of the highest authority. New York and Brooklyn Bridge, Department of Docks, and Croton Aqueduct, New York; new Capitol at Albany; U. S. Government Works (forts, light-house foundations, canal locks, etc.); floors for breweries, sugar houses, ice-houses, cellars, and stables, and for heavy foundations, etc. For sale by all dealers in masons' materials.  
**JOHNSON & WILSON, Gen'l Agents, 93 Liberty St., New York**

**PRIZE MEDALLISTS.**

1862; 1865; 1867; 1872; 1873; AND ONLY AWARD and MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**

ORIGINAL INVENTORS AND SOLE PATENTEES OF NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.

Fire and Burglar Proof. Also, improved Rolling Wood Shutters OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable & Co., and Park & Tiford's new Buildings, &c., &c., and are indorsed by the leading architects of the world. OFFICE AND MANUFACTORY. 162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**

76 READE STREET, NEW YORK, WORKS, DARLINGTON, N. J.

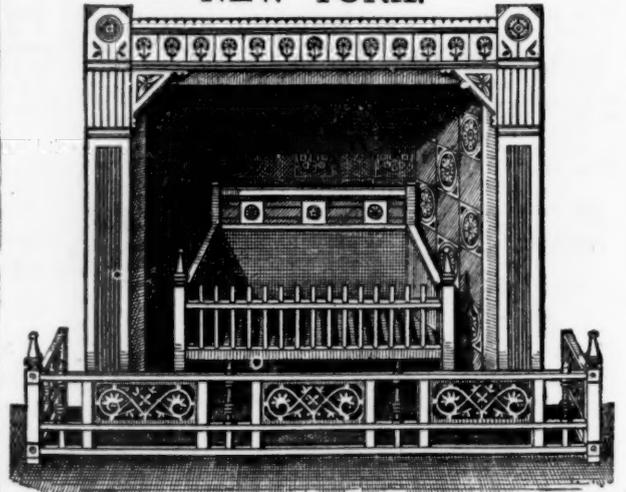
Lock and Hardware Manufacturers, DESIGNERS, FOUNDERS, AND WORKERS

**BRONZE AND BRASS.**

Architects' Designs faithfully executed. Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.) Union Sq., 2d door from Broadway, (17th St. side,) NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile. HAVE NO OTHER WAREHOUSES.

**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer Gas that has yet been invented.  
**A POSITIVE SEAL**  
 Against sewer-gas, absorbed gases, and back water. Seal is not broken by syphonage or evaporation. Self-scouring, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers,  
**B. P. BOWER & CO.,**  
 104 & 106 St. Clair St., Cleveland, O

**THE EUREKA VENTILATION CO.**  
 OFFICE AND MANUFACTORY,  
 74 CHARLESTOWN STREET,  
 BOSTON, MASS.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**  
 Theatrical Fresco only. Prices moderate. Refer ences first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.  
**LAFAYETTE W. SEAVEY,**  
 Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK.

# THE AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 155.]

SATURDAY, DECEMBER 14, 1878.

[PRICE 15 CENTS.

### BUILDERS' SUPPLIES.

**BARTLETT, ROBBINS & CO.**

ARCHITECTURAL IRON WORK AND  
GAS MACHINES.

HEATING AND VENTILATING OF PUBLIC AND PRIVATE BUILDINGS A SPECIALTY.

24 LIGHT STREET, BALTIMORE.

**WALWORTH MANUFACTURING CO.,**

69 Kilby Street, Boston,

ENGINEERS AND CONTRACTORS FOR

STEAM AND HOT WATER WARMING AND VENTILATION IN PUBLIC BUILDINGS, PRIVATE RESIDENCES, GREENHOUSES, ETC.

MANUFACTURERS OF SOLAR GAS MACHINES.

Correspondence solicited. Plans and estimates furnished on application.

**"HOTCHKISS" TOWER CLOCKS,**

MANUFACTURED BY

**SETH THOMAS CLOCK CO., THOMASTON, CONN.**

Prices \$100 to \$6,000.

WARRANTED ACCURATE, STRONG, DURABLE.

OFFICE, 581 BROADWAY, NEW YORK.

Send for Illustrated Catalogue.

**"MINTON'S ART AND ENAMELLED TILES,"**

(China Works, Stoke-Upon Trent.) Also, The Campbell Brick and Tile Co.'s

ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS, ETC.

For Churches, Banks, Halls, Vestibules, and Hearths; Outside Decorations, Flower Boxes, Etc.

THOS. ASPINWALL & SON,

604 Broadway, New York.

The only representatives in the United States for the above firms.

**ASPHALT (FELT) ROOFING.**

WARREN'S NEW PATENT

FELT AND GRAVEL ROOFING,

Substitutes NATIVE ASPHALT for Coal-Tar materials for these roofs.

The very best and most durable material for flat roofs.

Also, Native Asphalt and Asphaltic Cement for Concrete Walks and Pavements.

Roofers and pavers supplied with the above, and with Warren's original Coal Tar Roofing and Paving Materials.

Send for circulars and samples.

WARREN CHEMICAL AND MANUFACTURING CO.,

20 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

**TILES FROM ALL PARTS OF THE WORLD,**

FOR

BANKS, PUBLIC BUILDINGS, and PRIVATE HOUSES.

References given to Tile Work throughout the United States and British Provinces

AGENT FOR THE AMERICAN ROOFING TILE

Contracts Solicited

O. A. WELLINGTON, HOUSEHOLD ART ROOMS,

No. 171 TREMONT STREET, BOSTON.

**HUGH SISSON & SON,**

Importers, Dealers, and Manufacturers of

MARBLE.

INTERIOR MARBLE WORK AND MONUMENTAL WORK A SPECIALTY

Salesrooms, No. 140 W. Baltimore St.; Steam Marble Works, North and Monument Streets,

BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS,**

SPEAKING TUBES,

AND BURGLAR ALARMS,

For Public and Private Buildings.

THE BEST IN USE.

S. W. FULLER,

63 Devonshire Street, Boston.

**HAWTHORNE & TUCKER,**

PLUMBERS,

16 PROVINCE STREET, BOSTON.

Estimates for Plumbing made, and work done in any part of the United States or Provinces

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY**

OF NEW YORK.

LEONARD F. BECKWITH, Pres't. E. GILLET, Vice-Pres't.

Hollow Blocks of any pattern, uniting strength and resistance to fire and water. The Hydraulic Lime of Teil (France), one of the strongest cements known, is largely used in this manufacture. The blocks do not conduct heat, cold, or sound, and weigh 60 per cent less than brick. Fire-proof Partitions, Floor Arches between iron or wooden beams, and ceilings under iron or wooden beams, erected in following buildings:

Western Union Telegraph, Orient, and Queens' Ins. Coal and Iron Exchange, Museum of Natural Hist. Equitable, Staats Zeitung, Hudson R. R. Fr. Depot. Windsor, & Wm'ster Hotels, N. Y. Hospital, Drexel, Wm'sburgh Savings Bank, Cluny, & Young's Hotel, Bos'n, Syracuse Savings Bank, West Point Military Hosp. Columbia College, Tribune, Coryell, & Vancorrear Flats, Baltimore Safe Deposit Co. Peabody Inst., Baltimore, Peabody Museum, N. Haven, Westmoreland, & Elise Flats, Sidewalks laid at Lenox Library, Tribune, etc.

Hollow Burnt Clay Bricks, for flat and curved arches, partitions, etc., and Skewbacks for brick arches. Sole agents for the U. S. for HYDRAULIC LIME OF TEIL, and LAFARGE PORTLAND CEMENT.

Sole agents for the U. S. for METLACH ENCAUSTIC TILES, laid in Tribune, Staats Zeitung, Mineral Spa, Central Park, Belvidere Hotel, etc.

Sole agents for the Atlantic States for WIGHT'S FIRE-PROOF COLUMNS.

Our Fire-proof work is the only one approved by the New York Board of Fire Underwriters and the Superintendent of Buildings, after severe public tests.

Office Room 54 COAL AND IRON EXCHANGE, 21 Courtland Street, New York. Represented in Boston by

BOGEMAN & Co., 5 Doane St.

**AMERICAN ENCAUSTIC TILE,**

Acknowledged by experts to be

THE BEST IN THE WORLD.

Manufactured by the

AMERICAN ENCAUSTIC TILING CO. (Limited.)

OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.

Designs and estimates for Public Buildings, Halls, Churches, Vestibules, and for External Decoration, furnished on application.

**E. HOWARD & CO.**

MANUFACTURERS OF CLOCKS AND WATCHES

CLOCKS FOR PUBLIC BUILDINGS

114 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**

PLAIN AND ENCAUSTIC

FOR PUBLIC BUILDINGS AND DWELLINGS.

THE CAPITOL AT WASHINGTON, and in numerous Churches, Banks, and Dwellings in every part of the Country.

Glazed and Enamelled Tiles for Mantels, Hearths, Wainscoting, &c., and for Exterior Decoration.

MILLER & COATES,

278 PEARL STREET NEW YORK.

**THE NEW ENGLAND GRANITE WORKS**

HARTFORD, CONN., and 191 BROADWAY, N.Y.

Quarries at Westery, R.I.

MONUMENTAL AND BUILDING WORK

of every description, all the varieties of

AMERICAN AND FOREIGN GRANITE.

UNEQUALLED FACILITIES OFFERED TO THE TRADE.

J. G. BATTERSON, Pres't. H. R. BATTERSON, Sec'y.

J. G. BATTERSON, C. B. CANFIELD, H. A. BATTERSON

G. T. BATTERSON, DIRECTORS.

CARL CONEADS, Sculptor.

**WHITTIER MACHINE CO.**

Manufacturers of Steam and Hydraulic

ELEVATORS,

STEAM ENGINES, BOILERS, AND MACHINERY.

No. 1176 Tremont Street, Boston.

Office in the New England Mutual Life Insurance Co's

Building, Post Office Square,

and 120 Broadway, New York

CHARLES WHITTIER, Pres. A. C. WHITTIER, Treas.

**OTIS BROTHERS & CO.**

SAFETY STEAM AND HYDRAULIC

ELEVATORS.

A specialty for a quarter of a century.

BUILDERS OF THE HALE HYDRAULIC ELEVATOR.

No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**

OHIO BUILDING STONE.

GRIND AND SCOTCH STONE.

From our FLORENCE and AMHERST QUARRIES.

Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS

111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**

Designers and Manufacturers of

GAS FIXTURES,

ORNAMENTAL METAL WORK, CLOCKS AND BRASSES

ARCHITECTS' ORDERS SOLICITED.

Special designs submitted on application.

WAREHOUSES, 635 AND 638 BROADWAY, NEW YORK.

MANUFACTORY, 24th and 25th Sts., and 10th AVENUE, N. Y.

**FISHER & BIRD,**

Workers in all kinds of Foreign and Domestic

MARBLES,

97 to 103 EAST HOUSTON ST., NEW YORK.

Established 1830.

Among our notable decorations are: The Illinois new State House; Palace Hotel, San Francisco; Baldwin's Hotel, San Francisco; Insurance Building, 10th and Chestnut Streets, Philadelphia; Mutual Life Insurance Building, Boston; Orient Mutual Insurance Building, New York; Union College, Schenectady; and numerous Churches, Private Residences, etc., etc., throughout the country. We solicit the opportunity to estimate upon all classes of work, viz., Tiling, Wainscoting, Staircases, Mantels, etc. Cemetery work and marble work of every description.

**WILSON & HUGHES STONE CO.**

Are ready to estimate on contracts of any size for

furnishing their celebrated Amherst, Ohio,

BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS

OR CUT AND SET

Also,

AMHERST AND INDEPENDENCE GRINDSTONES,

AND OHIO MINERAL AND STONE PAINTS

Fire-Proof Stove Cement and Stove Putty ground in Oil

OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MOSAICS."**

Floor Tiles, beautiful in color and design, for

Dwellings, Churches, and Public Buildings.

SPANISH WALL TILES. White, Glazed, Valencia,

Tiles for Walls and for decorative painting.

PRINTED FIGURED TILES of Spanish designs, for

Wainscoting, Mantels, Jardinieres, etc.

Floors of "Nolla Mosaics" can be seen at the "Rock-

ingham," corner of Broadway and 56th Street. Imported

and for sale by JOHN CHADWICK, Sole Ag't for U. S.

49 Broadway, N. Y.

C. E. PARKER, Agent, 14 Exchange Place, Boston.

**MINTON'S ENCAUSTIC TILES.**

SHARPLESS & WATTS,

1825 MARKET STREET, PHILADELPHIA,

Established 1850 as Agents for

MINTON'S TILES AND TESSELLATED PAVEMENTS.

Specialties in Glazed, Encaustic, Majolica, and Art-

Painted Tiles, for Furniture, Hearths, Fireplaces, etc.

New and original designs continually received.

**STEAM WARMING APPARATUS.**

HIGH AND LOW PRESSURE.

HOUSE WARMING A SPECIALTY.

Pamphlet with more than 1,000 references sent on applica-

tion.

WYLLYS H. WARNER,

114 LEONARD STREET, NEW YORK,

and 33 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**

No. 6 COURTLAND ST., NEW YORK.

Works at Paterson, N.J.

PATENT SAFETY STEAM ELEVATORS

for Public and Bank Buildings, Hotels, Private Dwellings, etc.

SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP GUARANTEED.

Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "REALTY" AND "TUBULAR"  
Manufactured by the

**GOLD'S HEATER MANUFACTURING CO.**  
114 LEONARD ST., NEW YORK.

Send for Pamphlet.

F. GOLD, Pres't WYLLIS H. WANDER, Treas'r

**TO ARCHITECTS AND BUILDERS.**

**MORTAR BLACK,**

Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar. For sale only by *Walpole Color and Chemical Works,*

**HENRY D. DUPEE, Proprietor,**  
79 KILBY STREET, BOSTON

**J. H. BURT & CO.,** Carpenters and Builders,  
Blue Hill Avenue, Mattapan (Ward 24), Boston.

**MENEELY & KIMBERLY,**  
Bell Founders, Troy, N. Y.,

Manufacture a superior quality of Bells. Special attention given to **CHURCH, SCHOOL, and COURT-HOUSE BELLS.** Illustrated Catalogue sent free.

**JOHN MACK,** Plain and Ornamental Plasterer.  
41 Cambridge Street, Boston.

**MANTELS AND GRATES.**

**RANKIN'S PATENT** makes the Cleanest, Cheapest, and Hottest Fire. Avoid infringements, and send for Circular to

**C. S. RANKIN & CO.,**  
**ARCHITECTURAL IRON WORKS,**  
Manufacturers of all kinds of Iron Work for BUILDINGS, JAILS, ETC.

187 W. PEARL ST., CINCINNATI, O.  
**BUILDING MARBLE.**

Branch yard of the **RUTLAND MARBLE CO.,** 108 Cambridge Street, Boston. **JOHN D. ALLAN, Agent.** Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Italian and Continental Marble, furnished at low prices.

**PRESSED BRICK.**  
**STOCK AND COMMON**

MANUFACTURED BY  
**FLETCHER & THOMAS,**  
Indianapolis, Ind

All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY  
**GILLIS & GEOGHEGAN,**  
Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 50th St. and 6th Av.; Drexel Building, cor Wall and Broad; Bennett Building, Fulton and Nassau, etc.  
Architects and owners promptly furnished with specifications and estimates.

**ROBERT LOGAN,**  
Importer and Dealer in Foreign and Domestic **Granite Monuments, Columns, etc.**  
Also, GRANITE FOR BUILDING PURPOSES,  
**MARBLE AND ENCAUSTIC TILING,**  
129 FULTON STREET . . . NEW YORK.

**ARCHITECTS.**

**P. B. WIGHT,**  
CONSULTING ARCHITECT,

73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.  
Consultations on matters pertaining to Fire-Proof Construction, Foundations, Drainage, Sanitary Work, Ventilation, Machinery, Valuations, Interior Decorations, and Furniture. Manager of the Meaker Hatchway Protectors.

**RICHARD M. HUNT,**  
ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

**W. W. GOODRICH, C. E.,** ARCHITECT  
AND SANITARY ENGINEER  
KINGSTON, N. Y.  
Plans, Specifications, and Estimates furnished for all classes of Public or Private Buildings, Monumental Designs, etc.

**CHARLES E. ILLSLEY, A.M., C.E.,**  
ARCHITECT,  
Room 17, Life Insurance Building,  
ST. LOUIS, MO.  
Special attention to Churches, Schools, and other public buildings.

**WALTER ARCHITECT FERRY BUILDING.**  
DICKSON, Albany, N. Y.

**SANITARY ENGINEERING.**  
**EDWARD S. PHILBRICK, C. E.,**  
11 West St., Boston, Mass.,  
Offers advice and superintendence in CONSTRUCTION OF WORKS,  
PLUMBING, DRAINAGE, AND VENTILATION,  
And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

**E. VAN NOORDEN,**  
387 HARRISON AVENUE . . . BOSTON,  
**SHEET METAL CORNICES, HAYES'S PATENT VENTILATING SKY-LIGHTS, WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.**

**ARCHITECTURAL IRON AND JAIL WORKS.**

**M. CLEMENTS,**  
MANUFACTURER OF  
Iron Railing, Bank Vaults, and Jail Cells, Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc  
BAYMILLER STREET, near Sixth and C. H. & D. R. R. Depot, CINCINNATI, OHIO.

**PATENT MINERAL WOOL.**  
ENTIRELY FIRE-PROOF AND UNDECAYING.  
**THE BEST INSULATOR OF HEAT, COLD, AND SOUND.**  
For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc.

**ALEXANDER D. ELBERS,**  
P. O. Box 4461. 26½ Broadway, New York.

**IRON STABLE FITTINGS.** BUBIER & CO.  
23 Exchange St. BOSTON.

**PATENTS.**

**F. A. LEHMANN,** Solicitor of Patents, Washington, D. C.  
NO PATENT NO PAY. Send for Circular.

**FIRE ON THE HEARTH**  
STOVES & HEATERS.

COMBINATION OF  
FIRE-PLACE, CLOSE STOVE, AND FURNACE.  
The attention of Architects and Builders is especially invited to our new

**FIRE-PLACE HEATERS,**  
Adapted for the use of any kind of fuel, and the only heater especially adapted for the use of **SOFT COAL** and **WOOD.** Send for description to  
**THE OPEN STOVE VENTILATING CO.,**  
115 Fulton St., New York.

**DECORATORS.**

**W. J. MCPHERSON,**  
(Established A.D. 1845.)  
**MURAL PAINTER,**  
**DESIGNER,**

**Ecclesiastical Decorator,**  
AND  
**ART STAINED GLASS MANUFACTURER,**  
440 TREMONT STREET,  
**BOSTON, MASS.**

Should you want Ornamental Glass, write for particulars to



**STAINED GLASS.**  
Thirty years' experience in Stained Glass enables the subscriber to produce Modern and Medieval styles of work equal to any European examples, for Churches, Private Residences, Halls, etc.  
The value of the work is attained by a careful selection of colors in Cathedral and French Glass of his own importation.  
Designs in accord with architects' plans furnished at short notice. Reference of work at office  
**SAMUEL WEST, 115 Eliot St., Boston**

**FRANK HILL SMITH,**  
171 1/2 TREMONT STREET,  
BOSTON . . . . . MASS.

**COOK, REDDING & CO.**  
149 CONGRESS ST., BOSTON,  
**Ornamental, Stained, and Cut Glass,**  
FOR  
**Churches, Public Buildings, and Private Residences.**

**DECORATORS.**

**JOHN LAFARGE,**  
**MURAL DECORATION,**  
51 W. Tenth St., New York and Newport, R. I.

**Society of Decorative Art,**  
34 East 19th Street,  
**NEW YORK.**

The Society is prepared to undertake every kind of **DECORATIVE NEEDLEWORK,**  
And special attention is paid to the RESTORATION of **ANTIQU EMBROIDERY.**

Special terms are made and careful estimates given to **ARTISTS, ARCHITECTS, AND DECORATORS**  
Generally, who are assured that their designs will be carefully reproduced, and their directions carefully followed  
Orders are earnestly solicited.

**Fresco Decoration.**

**EMMART & QUARTLEY,**  
Designers, Decorators, and Painters,  
32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate work on hand or made to order. No. 1210 Ridge Avenue. **JOSEPH S. MILLES** successor to Wilson & Miller, Philadelphia, Pa. Send for Illustrated Price-List

**Donald MacDonald,**

**GLASS STAINER AND DECORATOR**  
No. 6 Hayward Place,  
**BOSTON**

THE  
**ARCHITECTURAL TERRA COTTA WORKS,**  
Successors to CHICAGO TERRA COTTA WORKS.  
Established . . . . . Chicago, 1858—Boston, 1878.  
**S. E. LORING, Consulting Architect, SUP'R.**  
**OFFICES AND FACTORIES.**  
CHICAGO: Fifteenth and Laflin Sts.  
BOSTON: Boston Fire Brick Works, 394 Federal Street.

**INLAID WOOD FLOORS.**  
**ORNAMENTAL WOOD BORDERS**  
Designs and Estimates free.  
**National Wood Manuf'g Co.,**  
950 Broadway, near 23d St., New York

**PHILIP A. BUTLER,**  
DECORATOR AND DESIGNER,  
No. 17 FERRISBTON SQUARE,  
**BOSTON.**

**HENRY B. JONES & CO.**  
IMPORTERS, JOBBERS, AND RETAILERS OF  
PAPER HANGINGS.  
612 WASHINGTON STREET, BOSTON.

(Established 1848.)  
**L. HABERSTROH & SON,**  
Fresco Painters,  
and INTERIOR DECORATORS,  
No. 17 SCHOOL STREET, BOSTON.

*Raphael and Michelangelo.*  
A Critical and Biographical Essay. By **CHARLES C. PERKINS.** 8vo. Many Illustrations, including several Heliotypes. \$5.00.

The long devotion of Mr Perkins to the study of art has borne noble fruit in this beautiful volume. The idea of combining in one work a series of interlinked sketches of the two great representative artists of the age of Julius II. and Leo X. was in every respect fortunate; for they respectively illustrate power and beauty, sportive and earnest labor, as no other contemporaries. . . . His style is that of a scholar and a man of taste—simple, lucid, graceful, and even throughout. It has much of the quality of that of Hermann Grimm, in his two similar biographies. The profuse illustrations—although some of them are rather coarsely printed—are a positive boon to the reader.—*New York Tribune.*  
**HOUGHTON, OSGOOD & CO., Boston.**

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa (Can.)	Philadelphia.	San Francisco	St. Louis.
1 BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.50 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2 Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	3.00 @ 3.50	3.50 @ 4.50	3.00 @ 3.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00		3.00
3 CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25		1.50 @ 2.00
4 Cabinet Maker	2.50 @ 3.25		1.75 @ 2.25			1.50 @ 3.00	1.50 @ 2.00			
5 Finisher	2.00 @ 2.50		1.50 @ 2.00		1.50 @ 2.00	1.50 @ 3.00	1.25 @ 1.75			1.50 @ 2.00
6 FOUNDRYMAN			1.25 @ 1.50	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50			2.25 @ 2.50
7 Blacksmith	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 2.00			1.50 @ 2.50
8 Whitesmith			1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.75			
9 Galvanized Iron Worker	2.00 @ 2.85	1.50 @ 2.75	2.00 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00			2.25 @ 2.50
10 GAS FITTER	2.00 @ 2.50	2.00 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00			2.00 @ 3.00
11 LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50		1.00 @ 2.00
12 PAINTER	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13 Glazier		2.00 @ 2.50	1.75 @ 2.00			1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50		
14 Grainer	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00		2.00 @ 3.00	1.75 @ 2.50			3.50
15 Paper-Hanger	.75 @ 2.50		per roll.		15c. pr. roll.	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00
16 PLASTERER	1.50 @ 2.00	2.00 @ 2.50	1.75 @ 2.00		2.00	1.50 @ 2.00	1.25 @ 1.75	1.75 @ 2.00		2.25 @ 2.75
17 Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50	2.00 @ 2.25	1.50 @ 2.50		2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
18 PLUMBER	2.25 @ 3.00	2.00 @ 3.00	2.50 @ 3.50	2.50 @ 3.50		2.50 @ 3.50	1.50 @ 2.50			2.50 @ 3.50
19 QUARRYMAN		3.00 @ 3.50	1.10 @ 1.25		1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20 Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.25 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21 Carver	3.00	3.50 @ 4.00	2.50 @ 3.00	1.25 @ 1.75		3.00	2.00 @ 2.50	3.50 @ 6.00		2.75 @ 3.25
22 Painters and Washers		2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75		1.50 @ 2.50	1.00 @ 1.25	2.25 @ 2.50		
23 Rubber	1.50 @ 2.00	1.75	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75		
24 Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	2.50	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.75		2.00 @ 2.50
25 Stone-Setter		2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00		2.75	2.00 @ 2.50	1.50 @ 2.00		2.00 @ 2.50
26 ROOFER (Tin)	2.00 @ 2.25	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25		2.00 @ 2.25
27 Slatier	2.50 @ 3.00	2.00 @ 2.25	2.25 @ 2.50	3.50 @ 4.00		2.00 @ 2.25	1.25 @ 2.00	1.75 @ 2.25		3.00
28 STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50	2.25 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25			1.50 @ 2.50
29 STEAM FITTER	2.50 @ 3.50	2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00



ARCHITECTS AND BUILDERS

WILL ADD MUCH TO THE BEAUTY OF THEIR BUILDINGS BY USING

GARDNER'S PERFORATED THREE-PLY VENEER SEATING, Which is Ornamental, Durable, and Cleanly.

We refer to the following new and elegant buildings fitted up with our goods:—

- Morris Plains, N. J., Insane Asylum.
- New York Hospital.
- American Museum of Natural History, New York.
- Institution for Feeble-minded Children, Lincoln, Ill.
- Insane Asylum, Oshkosh, Wis.

Messrs. GARDNER & CO.: Gents, — The Perforated Opera Chairs put in my Brooklyn Music Hall have proved a great success. They not only furnish the hall in a very attractive style, but for comfort and convenience they are far superior to any upholstered seat I have ever seen. We have the best audiences that Brooklyn can produce, and as yet I have heard nothing but the highest commendation of our seat.

(Signed) Yours very truly, O. G. WALBRIDGE.

Please send for Illustrated Catalogue.

GARDNER & COMPANY,

Patentees and Manufacturers,

376 PEARL STREET, NEW YORK.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

CALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States.

Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO. 72 & 74 West Monroe St. Chicago, Ill.



**AUSTIN'S PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT.**  
 MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS.  
 Regular Sizes, 2, 3, 4, 5 & 6 Inch.  
 SPECIAL SIZES MANUFACTURED TO ORDER.  
**AUSTIN, OBDYKE & CO.**  
 SOLE MANUFACTURERS.  
 1705 & 1725 CHESTNUT STREET, PHILADELPHIA, PENNA.  
 WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS, AND WILL BE TREATED AS SUCH.

- PRINCIPAL AGENTS.
- M. Halliday
  - Hicks & Badger
  - Sidney Shepard & Co.
  - George W. Pitkin & Co.
  - Wasson & Martin
  - McLeod, Beardon & Co.
  - W. H. Scott
  - Kirtledge Cornice Co.
  - I. W. Jordan
  - B. G. Carpenter & Co.
  - F. W. Irwin
  - Sellew & Co.
  - New York City
  - Boston, Mass
  - Buffalo, N. Y
  - Chicago, Ill
  - Albany, N. Y
  - Troy, N. Y
  - Portland, Me
  - Salem, O
  - Worcester, Mass
  - Wilkesbarre, Penna.
  - Alleghany City, Penna
  - Cincinnati, Ohio

W. & J. SLOANE,

IMPORTERS OF

FINE CARPETS AND RUGS

FROM

INDIA, PERSIA, RUSSIA, SMYRNA, and TURKEY.

649, 651, 655 BROADWAY, NEW YORK.

Bound Volumes of the American Architect.

We are prepared to fill orders for binding the American Architect and Building News in styles similar to the volume for 1876, at the following rates:—

- Price of cover without binding.....\$1.70
- Cover and binding (for subscribers)..... 2.00
- Numbers of 1876 or 1877 without cover or binding 7.50
- Bound volumes of 1876 or 1877..... 9.10

In sending volumes to be bound it should be stated whether the illustrations are to be bound with their respective numbers, or whether all illustrations are to be placed together at the end of the volume.

N. B. — Volumes bound in both styles are kept in stock.

The above will be sent, post-paid. Subscribers sending their numbers to be bound will prepay postage or express charges.

HOUGHTON, OSGOOD & CO., PUBLISHERS, Winthrop Square, Boston.

**CRANE, BREED & COMPANY CINCINNATI, O.**  
**SAFETY BOILERS**  
 FOR HEATING  
**STEAM AND HOT WATER.**  
 MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RADIATORS, PIPE COILS, REGISTERS, FITTINGS, STEAM-PUMPS.

TO ARCHITECTS.

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the SCAGLIOLA AND MAREZZO MARBLE, Which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wallscoting, Wall, and Altar Work.  
**JAS. T. ALLEN & CO.,**  
 25 North Market Street, Philadelphia



**NONESUCH Self-Locking and Burglar-Proof Window Locks.**

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.  
**FRED. J. HOYT,**  
 733 Broadway, N. Y.

Patented July 10th 1877



THE NEW RUBY FURNACE.

J. A. LAWSON, PATENTEE.

For Hard or Soft Coal. With Non-Clinker Grate.

RUBY & PEARL Surface-Burning Self-Feeding FURNACES.

CLINTON Wrought Iron, with Brick Lined Fire-Pot. Reversible Flue Furnace.

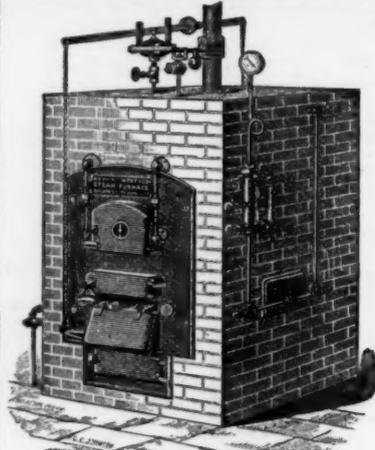
CRYSTAL Wrought Iron, with Cast Iron Fire-Pot. Surface Burning Furnace.

MANUFACTURED BY FULLER, WARREN & CO., Troy, New York, Cleveland, Chicago.

C. BUTCHER, 107 Devonshire St. BOSTON.

PATENT MARQUETRY FLOORING.

Send for Illustrated Catalogue. Specimens at Lawrence, Wilde & Co.'s, 42 Cornhill, Boston



BROWN'S IMPROVED STEAM HEATERS.

The attention of Architects and Builders is directed to this NEW AND VALUABLE INVENTION FOR HEATING

PUBLIC AND PRIVATE BUILDINGS,

MANUFACTURED BY

RUFUS G. BROWN & CO.

WALTHAM, MASS.

Boston Office, 59 Bromfield St.

Send for Circular.

DORCHESTER UNION FREESTONE CO. NEW BRUNSWICK YELLOW FREESTONE. The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order. 24 Pine Street, New York. G. P. SHERWOOD.

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free

HENRY McSHANE & CO., Baltimore, Md.



J. & R. LAMB, 59 CARMINE ST., N. Y. CHURCH FURNISHERS. Practical Workers in Sterling Silver, Brass and Bronze. Carved Wood, Decorations, etc. Illustrated Catalogues. Furniture, 10c.; Metalwork 10c.; Decoration, 1

A. L. FAUCHERE & CO.

OFFICE AND WAREHOUSES

1319 and 1321 Broadway, New York,

Importers, Manufacturers, and Dealers in all kinds of foreign and domestic

MARBLE FOR INTERIOR WORK. Estimates furnished on application.

STEAM and PIPE

THE "AIR SPACE" BOILER COVERINGS

Save 10 to 20 per cent in fuel.

See Am. Architect and Building News, Dec. 15, 1877.

THE CHALMERS-SPENCE COMPANY.

140 Congress Street, Boston. 75 South St., E. R., New York

Advertisement for THE HELIOTYPE PRINTING COMPANY. Features a central illustration of a person operating a heliotype printing press. Text includes: LUX-FECIT, THE HELIOTYPE PRINTING COMPANY, 220 DEVONSHIRE ST. BOSTON, COR FRANKLIN ST. HELIOTYPE PHOTOGRAPHS in Printers Ink, HELIOTYPE LITHOGRAPHS printed by Steam, HELIOTYPE CUTS to print with Type, HELIOTYPE FACSIMILE LETTERS, SHOW CARDS, etc.

CLASSIFIED ADVERTISEMENTS.

Table listing various categories and their corresponding page numbers: ARCHITECTS, ARCHITECTURAL BOOKS, ARCHITECTURAL IRON WORK, BELL FOUNDERS, BOILER COVERINGS, BRICK, BRONZE DECORATIONS, CARPENTERS, CARPETS, CEMENT, CLOCKERS, CONDUCTORS, DECORATED WOOD, etc.

Table listing various categories and their corresponding page numbers: DECORATORS, ENGINEER (SANITARY), FIRE-PROOF BUILDINGS, FREESTONE, GAS FIXTURES, GAS MACHINES, GRANITE, HEATING APPARATUS, HARDWARE, MARBLE WORKERS, PAINTS, PAPER HANGINGS, PATENTS, PLUMBERS, ROOFING, etc.

Table listing various categories and their corresponding page numbers: ROOFING (ADDITIONAL), ROOFING FELT, SASH CHAINS, SCAGLIOLA AND MARBEO MARBLE, SEATING (PERFORATED), SEWER GAS TRAP, SHUTTERS (STEEL), SLOTTING, STONE (BUILDING), TERRA COTTA, TELEGRAPH, TERRA COTTA, TILES, VENTILATION, WEATHER STRIPS, WINDOW LOCKS, WOOD CARPETING, etc.

Table listing various categories and their corresponding page numbers: ARCHITECTS, ARCHITECTURAL BOOKS, ARCHITECTURAL IRON WORK, BELL FOUNDERS, BOILER COVERINGS, BRICK, BRONZE DECORATIONS, CARPENTERS, CARPETS, CEMENT, CLOCKERS, CONDUCTORS, DECORATED WOOD, etc.

BUILDING MATERIALS.

(Reported for the American Architect and Building News.)

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table of building materials prices in New York, including sections for BRICK, CEMENT, FIRE BRICK, DOORS, LATH, LIME, LUMBER, PAINTS AND OILS, and TINNERS' STOCK.

Table of building materials prices in Boston, including sections for FIRE BRICK, BUILDING BRICKS, BUILDING STONE, LUMBER, PAINTS AND OILS, and CEMENT.

Table of building materials prices in Chicago, including sections for MORTISE LOCKS, DOOR KNOBS, SASH FASTS, SCREWS, STORE DOOR HANDLES, IRON, BRICK, LIME, AND CEMENT, and LUMBER.

Table of building materials prices in Philadelphia, including sections for WHOLESALE PRICES, IRON, PAINTS AND COLORS, and LUMBER.

Advertisement titled 'A Word to Manufacturing Firms' and 'TO ADVERTISERS', discussing the value of advertising in the building industry.

**D. M. MEEKER & SON'S**  
**Malleable Iron Hollow Mount Window Sash.**  
 For Insane Hospitals, Fire Proof Buildings, &c.



The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

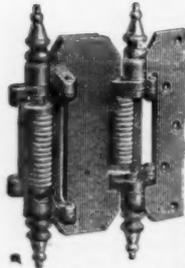
**D. M. MEEKER & SON,**  
 Newark, N.J.

Fine Castings of Malleable and Gray Iron, German Silver and Composition; also Patterns a specialty.

**THE COWLES HARDWARE CO.**  
 UNIONVILLE, CONN., U. S. A.

MANUFACTURERS OF

(GRER'S)



**Single & Double Acting**  
**SPRING BUTTS.**  
 The Latest and Best.

Investigate before you purchase. Read the following points of superiority:—

These Spring Butts differ in principle from all others: having a *Spiral Spring* for power, and *Toggles for Levers in combination*, and when applied to the leaves of the Butts, Exert their greatest Power when the door is closed, and are the only Butts in existence that will by actual test perform the labor claimed for them. They offer less resistance the wider the door is opened, until a point past the right angle is reached, where the power is reversed and the door held open. They will not allow the door to sag. Send for Price Lists.

**The Automatic Fire Alarm Telegraph**

IS OPERATED BY THE HEAT OF THE FIRE.

The apparatus is placed on the ceiling of every room, office, and closet in the building, so that a fire can in no instance be more than fifteen or twenty feet from it.

It can be adapted to all temperatures. The alarm is almost instantaneous. It is given directly to the Fire and Protective companies and to the City Fire Alarm Office. It may also be given in the building protected. It may be given by hand.

It tells the Department the exact location of the fire before the companies leave their stations, thus preventing the delay and loss caused by breaking into rooms where there is no fire.

A break in the wire instantly signals itself: but, by a combination of the metallic and earth circuits, does not prevent an alarm of fire, even while the wire is broken.

An incendiary cannot, therefore, prevent an alarm by cutting the line.

**The Automatic Fire Alarm Telegraph**

Prevents the possibility of a large loss.

It saves the drenching a building with water.  
 It saves the breaking up of business.  
 It saves the loss of contracts and customers.  
 It saves insurance. It saves a watchman.  
 It saves the books, and the many other losses that insurance never covers.

The returns of the New York Patrol Committee show that the loss by fires originating in buildings equipped with the AUTOMATIC TELEGRAPH has been diminished over 76 per cent. by the use of this system.

Company's Office: 178 Devonshire St., Room 20,  
 Where the apparatus can be seen.  
 C. E. GUILD, Pres. P. T. JACKSON, Treas.

ESTABLISHED 1836.  
**JOHN FARQUHAR'S SONS,**  
**SLATE, METAL, AND COMPOSITION ROOFERS,**  
 NOS. 20 AND 22 EAST STREET, BOSTON.

Order Box, No. 83 Mechanics Exchange, No. 35 Hawley Street.  
 Agents for Warren's Patent Natural Asphalt Roofing. Special attention given to repairs of all kinds of Roofing.

*Inventors and Owners of the following Patents:* FIRST. Patent Fastener for securing Slates or other covering to Iron Purlines where the roof is wholly of Iron. SECOND. A Roof composed of Wooden Rafters encased in Asbestos, Sheet Metal, or other fire-proof material, to which Iron Purlines are fastened, and the slates or other covering secured by our Patent Fastener. The slates are then rendered underside with hair mortar or any other material. The object intended being a Light Fire-proof Roof, avoiding all condensation and preventing leakage.

**EASTERN ROOFING SLATES**

FROM MONSON AND BROWNVILLE, MAINE.  
**CLEMENT, HIGBEE & CO.**

GENERAL AGENTS,  
 Piper's Wharf, 474 Atlantic Avenue,  
 BOSTON, MASS.

These Maine Slates are the best and cheapest in the market. They are also the strongest, smoothest, and most uniform, and the only perfectly unfauling slate in the world.

THE AKRON PIPE  
 is superior both in quality and finish to any manufactured in this country, and is recommended by architects, engineers, etc., familiar with its merits.

**FISKE & COLEMAN,**  
 New England Agents for  
**AKRON**  
 SEWER PIPE COMPANY,  
 72 WATER STREET, BOSTON.

FIRE BRICK, Enamelled Brick, CHIMNEY TOPS, Flag Stones, Terra Cotta Goods, A full line of Fancy Building Materials.

THE STANDARD AND ONLY RELIABLE PORTABLE ROOFING.

**ASBESTOS ROOFING**

With white Fire Proof Coating, for steep and flat roofs in all climates. In rolls ready for use. Easily applied by any one. No heat required. It weighs only 80 pounds per 100 square feet, and costs only half as much as tin.

**H. W. JOHNS M'FG CO.,** 87 Maiden Lane, New York,  
 Manufacturers of Asbestos Liquid Paints, Coatings, Cements, Boiler Coverings, etc.  
 Send for Samples, Descriptive Price Lists, etc.

**BAKER'S**  
 Combined Gornice and Picture Rod Moulding.

(Patented in the United States and Dominion of Canada, 1877.)  
 For Hanging Pictures, etc.  
 FOR SALE BY F. P. BAKER.  
 The only Agent in the U. S. and Canada,  
 84 BEVERLY STREET . . . BOSTON.

"Wood thoroughly creosoted is practically imperishable."  
**CREOSOTED WOOD,**  
 PREPARED AT THE  
 Hayford Patent Creosote Wood Preserving Works,  
 ELIZABETHTOWN, N. J., and A St., So. BOSTON.  
 Offices: 10 Warren St., New York, and 4 Post Office Sq., Boston.  
 EDWARD R. ANDREWS, Proprietor.  
 ARCHITECTS, ENGINEERS, and BUILDERS are reminded that wood prepared by the Hayford process is rendered PRACTICALLY IMPERISHABLE, being protected from decay, marine worms, etc. It should be used for *Ties, Bridges, Piles, Piers, Wharves, Pavements, Stable and Cellar Floors*, and wherever wood is exposed to alternate dryness and moisture.  
 Pamphlets, fully explaining the creosoting process, furnished on application.  
**GAS FIXTURES**  
 OF EVERY DESCRIPTION.  
 Special Rates to Builders.  
 B. HOLLINGS & CO., 647 Washington St., Boston.

THE AMERICAN ARCHITECT AND BUILDING NEWS SENT FREE!

We send Free the Nos. for November and December, 1878, to new subscribers paying before December 15, 1878.

BUILDERS AND MECHANICS

In search of a trade paper will do well to weigh the fact that in the first six months of this year we published fine illustrations of

24 Country Houses,	13 Churches,	10 Staircases,	4 Details,	2 Bridges,
9 City Houses,	5 Cathedrals,	9 Wall Decorations,	2 Tombs,	1 Police Station,
4 Hospital Buildings,	5 Church Interiors,	7 Bay-Windows,	2 Fountains,	1 Engine House,
4 School Buildings,	2 Hotels,	4 Furniture,	1 Shop Arcade,	1 Market House,
3 Library Buildings,	1 Court House,	1 City Hall,	1 Cemetery Gateway,	1 Stable,
2 Insurance Buildings,	1 Opera House,	1 State Prison,	1 Castle,	1 Studio.
4 Stores,	1 Music Hall,			

Besides perspective diagrams, foreign sketches, and numerous cuts illustrating building appliances. Terms \$6.00 per year. Send for specimen copy. Remittances to be made by check, draft, or money-order to the Publishers, HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON.

**NON-POISONOUS**

**SILICATE PAINT** { Does not discolor, chalk, or crack off. It is superior to lead. } **PETRIFYING LIQUID** { The only cure for damp walls of churches, dwellings, and public buildings, is the }  
 See article on "Dwellings of the Poor," AM. ARCHITECT, Sept. 21, 1878.  
 Send for Price List and Testimonials.

**HOWARD FLEMING,** Sole Agent in the United States,  
 10 PINE STREET, NEW YORK.

THE  
American Architect and Building News.

PROSPECTUS FOR 1879.

THE AMERICAN ARCHITECT AND BUILDING NEWS is intended to be valuable to Architects, Designers, Engineers, and Builders, and to Manufacturers, Dealers, and Inventors, whose wares or processes are applicable to building uses. It furnishes a continuous record of current news concerning architecture, building, and all the arts which are connected therewith, with discussions of the most interesting topics which they and the time suggest, whether artistic, technical, mechanical, or relating to their commercial and legal bearings.

It is interesting also to amateurs of Architecture, Building, and the Decorative Arts; containing many papers, and much information of an untechnical character, in these and the other fine arts, while its variety of illustration gives it a value apart from its professional uses. These illustrations, printed by the Heliotype Process, include, with every week's issue, four plates, mostly of unpublished drawings of buildings, furniture, and decorative work executed in the United States, but with a selection of the most interesting works or buildings of note that are illustrated abroad.

The Publishers have added to its scope, as year by year has defined the functions and opportunities of their journal. The volumes for 1878 have contained, besides miscellaneous articles on the topics indicated above, a valuable series of papers on Perspective, making a very complete treatise on the subject; a series on Modern Plumbing, and one on the history and construction of Open Fire-places, all written especially for this journal, as well as many papers from the transactions of professional societies, and a large amount of matter selected from foreign journals, many of which are not easily accessible to American readers. Pains have been taken to secure the best contributors available. Among them have been and are expected to be, Professors H. L. Eustis, W. R. Ware, C. E. Norton, C. Babcock, and Messrs. George E. Waring, Jr., Henry Van Brunt, P. B. Wight, C. A. Cummings, Carl Pfeiffer, F. D. Millett, Edward T. Potter, T. M. Clark, and many others. It contains, in addition to its literary matter, a full weekly record of building news, which is meant to include the important buildings that are undertaken all over the country, with a special index of the most important; a list, corrected weekly, of prices current of building materials in the chief business centres of the United States, a weekly list of building patents issued by the Government, and comparative tables of the prices of labor in the various trades at different points.

During the year 1879 the competitions in interior decoration, which have proved useful and successful, will be continued. Sanitary subjects will be treated as heretofore by Colonel Waring, and illustrated articles on technical subjects, analogous to those on Plumbing and Open Fire-places, will be continued, and it is expected that the legal aspects of architectural practice will receive special attention. The cosmopolitan character of the paper will be maintained, and its correspondence from various American cities carried on by capable writers as heretofore, while its foreign correspondence will be increased, and in particular letters of interest may be expected from an architect of position in London, and from Paris by the eminent hand of M. César Daly.

In commencing its fourth year, then, the Publishers commend the *American Architect and Building News* to all those whose avocations or tastes interest them in Architecture, Decoration, Building, and kindred arts.

SPECIAL OFFER.

New subscribers paying before December 25, 1878, their subscriptions for 1879 will receive free of charge the numbers for November and December, 1878; thus receiving nine numbers in addition to the regular year's issue.

**TERMS:** Per year, \$7.50, or, if paid in advance, \$6.00; for six months, \$3.50. (The special offer above does not apply to subscribers for six months.) Single copies 15 cents each.

Remittances should be made by check, draft, or postal money-order to the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Winthrop Square, Boston.

SUBSCRIPTION PREMIUMS.

Books, Drawing Instruments, Water Colors, Heliotypes.

The Publishers will send, post-paid, the following prizes to the draughtsman, student, or regular canvasser, who, complying with the conditions, shall secure new subscribers for, or remit the purchase money of, Bound Volumes of THE AMERICAN ARCHITECT AND BUILDING NEWS:—

- I. FOR TWO NEW SUBSCRIBERS, or Two Bound Volumes,**  
 "Story of a House," from the French of M. Viollet-le-Duc, illustrated, price... \$5.00  
 Or, "Annals of a Fortress," from the French of M. Viollet-le-Duc, illustrated, price 5.00  
 Or, a Winsor & Newton's Japanned Pocket Color-Box (12 half pans), containing the following moist colors:—  

Gamboge,	Crimson Lake,	Brown Pink,
Prussian Blue,	Yellow Ochre,	Vermilion,
Cobalt,	Hooker's Green,	Burnt Sienna,
Venetian Red,	Neutral Tint,	Brown Pink,

 price 3 50
- II. FOR THREE NEW SUBSCRIBERS, or Three Bound Volumes,**  
 A year's subscription to the AMERICAN ARCHITECT AND BUILDING NEWS..... 7.50  
 Or, "Hatfield's Transverse Strains" ..... 6.00
- III. FOR FOUR NEW SUBSCRIBERS, or Four Bound Volumes,**  
 "Examples of Ancient and Modern Furniture," etc., by B. J. Talbert, illustrated by twenty-one folio plates, price ..... 8.00  
 Or, "Discourses on Architecture," from the French of M. Viollet-le-Duc, illustrated, price ..... 8.00
- IV. FOR FIVE NEW SUBSCRIBERS, or Five Bound Volumes,**  
 A bound volume of the AMERICAN ARCHITECT AND BUILDING NEWS for 1876, 1877, or 1878 ..... 9.00  
 Or, Furniture for a Wooden Beam Compass, with spring Adjustment (Alteneder's make) ..... 8.75
- V. FOR SEVEN NEW SUBSCRIBERS, or Seven Bound Volumes,**  
 "Tredgold's Carpentry" ..... 12.00
- VI. FOR EIGHT NEW SUBSCRIBERS, or Eight Bound Volumes,**  
 "Gothic Forms applied to Furniture," etc., by B. J. Talbert, illustrated by twenty-one folio plates, price ..... 15.00  
 Or, "Art Foliage for Sculpture and Decoration," by J. K. Colling, royal quarto, illustrated by seventy-two plates, price ..... 15.00  
 Or, a Winsor & Newton's Japanned Color-Box (16 whole pans) ..... 15.00  
 This box will contain, besides three sable brushes, the following moist colors:—  

Antwerp Blue,	Prussian Blue,	Cobalt Blue,
French Blue,	Small,	Indigo,
Payne's Gray,	Vermilion,	Brown Pink,
Burnt Sienna,	Carmine,	Venetian Red,
Hooker's Green, No. 2,	Ivory Black,	Yellow Ochre,
Gamboge,	Cadmium Yellow,	Warm Sepia,
Bistre,	Chinese White,	India Ink.
- VII. FOR TEN NEW SUBSCRIBERS, or Ten Bound Volumes,**  
 Either two of the bound volumes of the AMERICAN ARCHITECT AND BUILDING NEWS for 1876-7-8 ..... 18.00
- VIII. FOR FIFTEEN NEW SUBSCRIBERS, or Fifteen Bound Volumes,**  
 The three bound volumes of the AMERICAN ARCHITECT AND BUILDING NEWS for 1876-7-8 ..... 27.00  
 Or, "Decoration and Ornamentation of the Nineteenth Century," by Liénard, illustrated by one hundred folio plates, price ..... 27.00  
 Or, "Gwilt's Encyclopaedia of Architecture," latest edition ..... 24.00  
 This book is the standard English work on Architecture and Construction. Its thirteen hundred octavo pages are illustrated by nearly fourteen hundred woodcuts.  
 Or, "Examples of Building Construction," prepared by Prof. W. R. Ware, illustrated by forty-eight quarto lithographs in color ..... 25.00
- IX. FOR TWENTY NEW SUBSCRIBERS, or Twenty Bound Volumes,**  
 One Pocket Case of Fine Drawing Instruments (Alteneder's make) ..... 37.50  
 This Case (morocco covered) will contain:—  
 1 Needle-point Dividers, six-inch, with Pen and Pencil Points, Jointed Legs, Lengthening Bar, all to shift; 1 Plain Dividers, 5 inches long; 1 three and one half inch Needle-point Dividers, with Shifting Pen, Pencil, and Needle-points; 1 steel Spacing Dividers, three inches long; 1 Drawing Pen, four and one half inches long; 1 Drawing Pen, five and one half inches long; 1 Protractor; 1 Metric Scale; 1 English Scale.

In lieu of these books the canvasser may obtain books of equal value selected from our trade list, or may obtain as equivalent the value of the prize in Heliotype Engravings, selected from our collection, which numbers over three hundred.

The conditions to be observed are:—

1. The subscribers must in all cases be new subscribers, and the subscription price must be forwarded with each order.
2. The subscribers' names may be sent to us as soon as secured, but canvassers are requested to state each time that the names are on account of a premium.
3. These prizes are not cumulative.

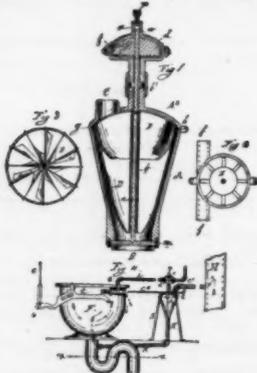
BUILDING INTELLIGENCE.

(Reported for the American Architect and Building News.)

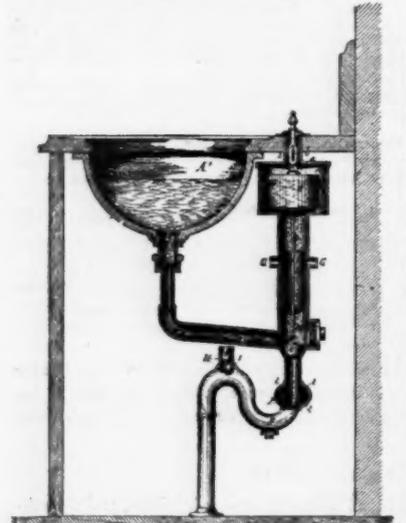
[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

BUILDING PATENTS.

PUMP-VALVE.—John J. Tonkin, Richmond, Va. WATER-POWER CLOSET-VENTILATOR.—William Selvey, Springfield, Mass. The object of this invention is to so utilize the motive power of running water as it passes through a house supply-pipe that foul air may be drawn away from any given space, the suction being effected by means of a water-wheel which the flowing water causes to revolve. In this instance, the water-wheel is inclosed in a brass chamber, shown at the top of Fig. 1, and in plan in Fig. 2, to which is connected the supply-pipe F. The water-wheel revolves horizontally, its axle being prolonged downward and having its lowest bearing in a cross-bar M, at the bottom of the cast-iron shell A. Attached to this spindle A, and revolving within the shell A is a fan D, shown in plan in Fig. 3, its vanes being so pitched as to secure the best upward current



of air. Thus, with this apparatus any water passing through F must cause the fan to revolve. The outlet of the fan-chamber C is connected, when the apparatus is applied to a water-closet as in Fig. 4, by a pipe, G, to a ventilating flue H. The inlet B, of the fan-chamber, is connected by the pipe K with the space between the water-seal and the pan of the water-closet, so that the action of the revolving fan sucks the foul air from this space and discharges it into the flue H. In this instance the apparatus is brought into action each time the closet is used, for the same movement of the handle C, which empties the pan, compresses the spring-valve E, by means of a projection on the top of the lever I. To prevent water and fecal matter being sucked into the pipe F, the inner orifice is protected by a wire grating, while the pipe itself is inclined upwards from the trap to the fan-chamber. Any leakage of water at the bearings of the water-wheel escapes through the fan-chamber to the trap by the pipe K. BASIN OVERFLOW AND TRAP.—Charles H. Moore, Yonkers, N. Y. The object of this invention is to provide an overflow for basins or tubs without a separate overflow pipe, also a tight plug-valve, and a means of replenishing the trap should it be siphoned. A float B, to which is attached by a spindle the plug-valve C, works in a chamber which is connected with the basin by pipes, as shown, so that when the water in the basin rises above a certain level the pressure in the valve-chamber is such that it forces up the float B, and consequently raises the plug-valve C. When it is desired to empty the basin the valve can be raised from its seat by that portion of the spindle which projects above the marble slab. Attached either to the spindle or to the tube in which it works, and midway between the float and the plug-valve, so that it is filled with water each time the basin is filled, is a



tubular chamber, open at the top, and with a perforated bottom, through which its contents can trickle and replenish the trap in case that it has been siphoned by a sudden discharge from the basin. A similar effect is produced by the chamber P, formed on the trap in the height of the water-seal. This chamber can be of any shape, and receives water through small holes in the wall of the trap, through which, in turn, it discharges its contents at such time as the trap may have been siphoned. In addition to all this a vacuum-valve of pure rubber is placed at the summit of the trap. G G are branches, to use if it should be desirable to fill the basin from the bottom. REFLECTOR.—Charles Cotterer, New York, N. Y. METALLIC SIDINGS FOR BUILDINGS.—Mason H. Crittenden, St. Paul, Minn. WINDMILL.—Loammi S. Dunlap, Galena, Ind.

MEANS FOR HEATING AND VENTILATING HOUSES.—Benjamin R. Hawley, Hyde Park, Ill. LIFTING-JACK.—Jacob O. Joyce, Dayton, O. WATER-CLOSET VALVE.—James P. Kenyon, Brooklyn, N. Y. WINDOW-CORNER.—Charles Lippe, New York, N. Y. APPARATUS FOR BORING AND DRILLING WELLS.—Orin Martin, Bloomfield, Io. TILE-MACHINE.—Isaac C. Nichols, West Liberty, Io. BAND-SAW GUIDE.—Joseph A. Wells, Oakland, Cal FAUCETS AND BUSHINGS.—Austin Connelly, Hoboken, N. J. FLOORING-JACK.—Daniel A. Ferris, Tioga Centre, N. Y. WALL-PAPER TRIMMER.—Russell S. Hill, Maquon, Ill. SAW-GAUGE.—Charles A. Huriburt, Ypsilanti, Mich. ELEVATOR.—David Jenkins, Evansville, Ind. SAW-FILING MACHINE.—Thomas N. Jordan, Mobile, Ala. PIPE-MOULDING MACHINE.—Frederick Shickle, St. Louis, Mo. SOLDERING-IRON.—James A. Bostwick, New York, N. Y. MACHINE FOR SAWING LATHS.—Deborah A. H. Starkweather, Greenville, Mich. BRICK-KILN.—Samuel J. Allen, Zanesville, O. FILTER.—Henry C. Bull, Brooklyn, N. Y. SYSTEM OF VENTILATION.—John Hurt, Detroit, Mich. SHINGLE-CUTTING MACHINE.—William Goldie, Fenton, Mich. VENTILATOR.—Thomas Owens, Washington, D. C. DOUBLE-ACTING FORCE-PUMP.—George H. Patch, Stevens Point, Wis. VENTILATING WATER-CLOSET.—Wilhelm Pickhardt, New York, N. Y. FIRE-ESCAPE.—E. H. Rotschka and O. F. Davis, Quincy, Ill. VISE.—William X. Stevens, East Brookfield, Mass. PULLEY.—George Taylor, New York, N. Y.

COMPLETED BUILDINGS.

CHICAGO, ILL.—The new Throop School, on Throop Street, near Blue Island Avenue, was formally opened December 2. It contains fifteen rooms, and has sitting accommodations for 1,000 pupils. Special attention has been given to the lighting, heating, and ventilating of the building by Inspector Dennis. The building was erected under the supervision of Messrs. Hotz, Dennis, and Keyne. The Building Committee of the Board of Education, according to the designs furnished by Architect Bauer, and the veteran building agent, Mr. James T. Ward. Mr. Hotz, being an architect himself, gave very valuable assistance to the city. HANOVER, IND.—The new Methodist church at Hanover was dedicated December 1. NORTH BROOKFIELD, MASS.—On December 2 the new High School building was dedicated. It is built of brick, with granite finish, in the Italian Renaissance style, with modern French details. In the basement are two school-rooms, two upon the first floor for grammar schools, and upon the second floor is the High-School room, with recitation rooms and laboratory, while in the attic there is a large room for a gymnasium. The contractors were William Fuliam & Sons, of North Brookfield; architects, Boyden & Son, Worcester.

OWATONNA, MINN.—The new Methodist church was dedicated December 1. WATLAND, MASS.—The Wayland Hall Building Committee have decided to dedicate the new \$16,000 town-hall and public library on Tuesday, December 24. WILTON, IO.—The new church was dedicated on the 17th ult. WORCESTER, MASS.—The services of dedication of the Church of Immaculate Conception were held December 8. The church has been in process of erection about four years. Work was commenced in the spring of 1874, and the cornerstone was laid in June of the same year. The basement was finished that season, and services have been held there since. The building is of wood, 175 by 75 feet, with a seating capacity of 1,300. The plans of the building were drawn by Mr. P. W. Ford, architect, of Boston. The entire cost of building and furniture was about \$40,000. ZANESVILLE, O.—The new church edifice just completed, at the corner of Sixth and South streets, by the St. John's Lutheran Congregation, was dedicated December 1.

SUMMARY OF THE WEEK.

Baltimore. BUILDING PERMITS.—Francis I. Smith, three-st'y building, Chew St., one door from Caroline St.—Estate of Samuel Brady, two-st'y building, 51 Hillen St.—Joseph Hampton, 9 three-st'y buildings, with two-st'y back buildings, Druid Hill Ave. and Preston St.—Hammit & Bullock, two-st'y building, corner President and Fawn sts.—Joseph H. & John F. Pfister, 5 two-st'y dwellings, and 1 two-st'y stable, Chapel St., 52 feet east of Eastern Ave. Boston. BUILDING PERMITS.—The following permits have been granted since our last issue:—WOOD.—Winship St., Ward 25, for Jas. Galligan, by D. Condon, 1 wagon-shed, 50' x 16'; one story; pitch roof.—Dudley St., Ward 20, for Fred. W. Webster, 1 carpenter-shop, 18' x 30'; one story; pitch roof.—Milmont St., Ward 21, for Robt. Duffy, by Samuel Rantlin, 1 dwell., 22' x 30'; two stories; mansard roof.—Cambridge St., Ward 25, for M. C. Washburn, by H. F. Ross, 1 storage of sand, 30' x 15'; one story; pitch roof.—Burn's Wharf, Ward 4, for David Richards, 1 storage of wagons, 30' x 15'; one story; flat roof.—South St., Ward 23, for J. J. Williams, by John Gately, 1 green-house, 19' x 41'; one story; pitch roof.—Ternace St., Ward 22, for Mrs. M. Crafley, by Samuel Rantlin, 1 blacksmith shop, 17' x 28'; one-story; pitch roof.—125 Emerson St., Ward 14, for Chas. E. Paige, by Wm. T. Eaton, 2 dwells., 15' x 35'; two stories; flat roof.—Nickerson's Wharf, Ward 1, for W. F. Green, 1 blacksmith shop, 10' x 22'; one story; pitch roof.—Shirley St., Ward 21, for Wm. Donaldson, 2 dwells., 20' x 28'; two stories; pitch roof.—Adams St., Ward 24, for J. F. Howland, by Jas. Pope, 1 dwell., 35' x 33'; two hip roof. BRICK.—Nos. 348, 350, 352 Marlborough St., for W. D. Pickman, R. S. Fay, Geo. Wheatland, Jr., and superintended by the latter, 3 dwells., 23' x 42'; two stories; mansard roof. Number of permits issued ending December 7, 1878, brick, 179; wood, 445; alterations, etc., 2,069. COURT-HOUSE.—The general plan of the new court-house on the proposed site has been presented to the Board of Aldermen by the City Architect, Mr. G. A. Clough. The building, as now proposed, will cover an area of 52,000 square feet, and will have fronts on Pemberton Square, Howard Street, and Somerset Street. The whole affair is yet very far from a settlement. Brooklyn. BUILDING PERMITS.—In Bergen St., 4 three-st'y brown stone flats, 20' x 60'; owner, Geo. W. Brown, Portland Ave.; architect, F. F. Thomas; builders, Levy Brown and J. W. Gray.—Broadway, No. 1268, 1 two-st'y frame dwell., 20' x 26'; owner, David R. Briggs, 77 Java St.; builders, Henry

Farrell and J. Darkhardt.—Deatur St., 2 two-st'y frame dwells., 20' x 24'; owner, Lewis Acor, 251 Monroe St.; builder, George Prior.—Elery St., 3 three-st'y brick tenements, 30' x 50'; owner, E. L. A. Miller, 72 8th Avenue St.—Henry St., 1 four-st'y brown stone flat, 20' x 52'; owner, James Scott; architect, M. J. Morrill.—Herkimer St., No. 654, 1 two-st'y frame stable, 25' x 50'; owner, Adolph Homberger, 656 Herkimer St.; builder, G. Schreiber.—Palisade St., 1 two-st'y frame dwell., 20' x 40'; owner, H. O. Pearce, 741 DeKalb Ave.; builder, Wm. Josiah.—Stockton St., No. 254, 1 three-st'y frame tenement, 20' 9/4' x 40'; owner and builder, Simon Schneider, 258 Stockton St.; architect, W. Measble.—Van Buren St., 4 two-and-one-half-st'y Conn. brown stone dwells., 20' x 45'; owner, Levi Fowler, 377 Fulton St.; architects, Parfitt Bros.—Central Ave., 1 two-st'y frame dwell., 18' 9/4' x 32'; owner, A. N. Spooner, 353 Central Ave.; builder, Jacob Phillips.—Lafayette Ave., 1 two-st'y brick store and dwell., 10' x 45'; owner, E. L. Donnellon, Jefferson Park; architect, R. Dixon; builder, W. E. Donnellon.—Park Ave., cor. Tomkins Ave., 1 two-st'y frame stable, 20' x 22'; owner, H. Vaughan, Tomkins and Park sts.; architect and builder, A. McKnight.—Stuyvesant Ave., 2 two-st'y brick dwells., 18' 6/8' x 32'; owner, Fred. Herr, 775 Broadway; architects, Cole & Richards; builder, G. Washington Adams, 3 three-st'y Conn. brown stone dwells., 17' 8/4' x 50'; owner, Wm. C. Bowers, 288 Lafayette Ave.; architects, Parfitt Bros.—Fifth Ave., cor. Fifth St., five-st'y and two-st'y brown stone stores and dwells., 20' x 55'; owner, E. C. Litchfield, Ninth Ave., cor. Third St.; architect, Robt. Dixon; builder, W. M. Hall. BIDS FOR THE ENGINE-HOUSE.—The following proposals were publicly opened and announced on December 3, 1878: For building a new brick Fire-Engine-House on the northerly side of Dean Street, John H. O'Rourke, for the sum of \$6,220; Arthur McQuade & Son, for the sum of \$6,975; H. D. Southard, for the sum of \$9,600; M. Nolan, for the sum of \$6,181; Jas. Richard, for the sum of \$6,331; Smith & Bisson, for the sum of \$6,541.

Chicago. BUILDING PERMITS.—J. W. Tomlin, 2 three-st'y stores and dwells., 530 and 532 West Madison St.; cost, \$12,000.—Arnold Bros., three-st'y ice-house and two-st'y barn, 145 and 147 West Randolph St.; cost, \$8,500.—Kribben, Sexton & Stodart, one-st'y foundry, Ontario St.; cost, \$2,200.—C. Mears, 3 three-st'y dwells., cor. of Rush and Indiana sts.; cost, \$9,000.—Notice was made a few weeks ago of the intention of parties to erect a large tenement house on Wabash Avenue, near Hubbard Court, on the site of the old Baptist church. The contract was let for the excavation, but it is now said that the scheme has fallen through entirely. CONTRACT AWARDED.—The following is a synopsis of bids for iron window and door frames, etc., for the U. S. Custom-House, etc., at Chicago, Ill:—

Table with 3 columns: Name, Price, and Notes. Includes Henry Beaudy, Phoenix Iron Co., Heuvelman & Co., Jos. Hall & Co., Bartlett, Robbins & Co., Sneed & Co., Union Foundry Works.

Louisville. BUILDING PERMITS.—Henry Deppan, tobacco-shed and store, Main St., between Tenth and Chapel; cost, \$750.—John Finzer & Bros., frame office, Jacob St., between Preston and Jackson; cost, \$1,000.

New York. BUILDING PERMITS.—49 Leonard St., iron store, 25' x 95', 6 stories; cost \$20,000; R. P. Messier, owner; T. M. Clark, architect, Boston.—Eighty-fifth St., near Third Ave., tenement, brown stone front, 30' x 65'; cost, \$8,010; Mary Higgins, owner; J. Beckell, architect; L. Zauger, builder.—847 Second Avenue, 2 tenements, 25' x 82'; brown stone fronts; cost, \$9,500; Rinaldo, owner; J. Beckell, architect.—Cor. Talmage St. and Lafayette Ave., frame dwelling, 20' x 24'; cost, \$600; F. Schultz, owner.—West Tenth St., near Washington St., stable, 53' x 75', one-st'y brick; Beadleston & Woery, owners; A. Pfund, architect; J. Weber, builder; Second Ave., cor. One Hundred and Twenty-eighth St., 8 tenements, 18' x 50'; cost, \$3,500 each; Mrs. E. Ingraham, owner.—Cor. Fifty-fifth St. and Madison Ave., 3 first-class dwellings, 18' x 60', brown stone fronts, 5 stories; cost, \$40,000; McCafferty & Buckley, owners, architects, and builders.

Philadelphia. BUILDING PERMITS.—C. Bachie, two-st'y stable, 16' x 35', No. 2435 Germantown Ave.—J. H. Brown, 4 two-st'y dwellings, 16' x 44', York St.—Allen Rock, two-st'y store-house, 25' x 70', Palethorp St.—Andrew Hetzel, two-st'y stable, 15' x 30', No. 936 Beach St.—Hughes & Patterson, one-st'y storehouse, 40' x 263', cor. Beach and Otis sts.—L. Conrad, two-st'y stable, 16' x 20', Percy St.—Wm. Bunch, Jr., 5 two-st'y dwells., 16' x 27' and 14' x 27', cor. Sloan and Filbert sts.—Samuel Wallace, three-st'y house and stable, 18' x 30', No. 2023 Bond St.—R. J. Dobbins, one-st'y building 95' x 162', Jones St.—P. Sherer, two-st'y store and dwell., 19' x 20', No. 1801 Passyunk Ave.—Jacob Mill, two-st'y stable, 18' x 32', McIlwain St.—Patrick Watson, 2 three-st'y dwells., 18' x 46' and 16' x 46', cor. Eighteenth and Dickinson sts.—J. P. Sheridan, two-st'y stable, 16' x 24', Dickinson St.—O. W. Pester, two-st'y stable, 18' x 25', cor. Grape and Cresson sts., Manayunk.—O. W. Pester, two-st'y store, 20' x 70', cor. Grape and Cresson sts., Manayunk. PERMITS ISSUED DURING THE MONTH OF NOVEMBER.—The whole number of permits issued during the month of November, 1878, by the Building Inspectors for the erection and improvement of new structures was 247, as follows: Dwelling-houses, two-story, 77; do., three-story, 32; do., four-story, 1; stores and dwellings, two-story, 3; do., three-story, 1; do., four-story, 1; stores, one-story, 1; do., two-story, 1; do., three-story, 1; do., four-story, 1; alterations and additions, 72; back-buildings, 16; stables, 11; offices, 2; ice-houses, 2; dye and dry houses, 3; factories, 3; coach and carriage houses, 2; boiler-houses, 3; packing-house, 1; warehouses, 2; shops, 2; church, 1; picker-house, 1; brewery, 1; carriage-shed, 1.

Table with 5 columns: Owners, Use, Stories, Rooms, Cost. Lists various building permits with details on owner names, building types, and costs.

Washington, D. C.

BUILDING PERMITS.—J. F. Donahue, stable, New Jersey Ave.; cost, \$300.—James Roach, brick dwell., Potomac St., Georgetown; cost, \$1,000.—Anna L. Shaw, stable, Sixteenth St.; cost, \$750.—Edward Medley, 3 two-story dwell., Pierce St.; cost, \$8,000.—William Humphrey, 9 two-story dwell. on the same street; cost, \$9,000.—Louis Schade, two-story back building, 515 Tenth St.; cost, \$250.

PROPOSALS AND AWARDS.—Bids for furnishing cut sandstone for the superstructure of the new building for the Bureau of Printing and Engraving have been opened in the office of the Supervising Architect of the Treasury. The bids are as follows: Richard Rothwell \$5,250; Wm. Bradley offered six varieties for varying amounts, including Mayfield rubbed, \$6,500; Potomac cut, \$7,475; Potomac rubbed, \$7,500; M. A. McGowan, three varieties, including Massena, \$6,565; Potomac, \$9,480; Acker & Co., Potomac, \$8,874; Evans & McLeod, Potomac, \$13,647.45. The stone will be examined, through specimens, before the award is made. Bids were also opened for furnishing labor for laying bricks, etc., for the superstructure. The following bids were opened: Bitting & Davidson, Philadelphia, \$13,575, for 142 days; Geo. O. Cook, \$17,778, for 120 days; A. L. Hutton & Co., \$20,740, until May 30. The award will be made to the lowest bidder.

General Notes.

BARRON, WIS.—The supervisors of the county have decided to build a jail.

BORDENTOWN, N. J.—Mr. Hewitt, of Philadelphia, is the architect of Christ Church, now being started here. It is to be built of Trenton sandstone, and will have an open-flashed roof. Size of main building, 97 by 40 feet, Sunday-school annex, 33 by 24 feet, and infant room, 16 by 20 feet; seating capacity of main building, 300; entire cost, \$13,000. James Wilson is the contractor.

BOUND BROOK, N. J.—T. D. Cook & Co are building a brick block. It will contain stores, offices, and public hall; George Stryker is the builder.—The Baritan Woolen Mills Co. are building a large woolen factory; Asa Dilts is the builder.

CAMBRIDGE, MASS.—Messrs. Norcross Bros., of Worcester, have the contract for building Sever Hall for Harvard College, which will cost about \$100,000. Messrs. Gambrell & Richardson, architects, New York.

CAMDEN, N. J.—Proposals were received December 9 for building a school-house at the corner of Seventh and Vine streets.

CLEVELAND, O.—A large force of men is at work on the new Homeopathic Hospital Building, on Huron Street, and it is being pushed rapidly to completion. The building is already inclosed.

COVINGTON, KY.—The hearing in the mayor's court, in the suit instituted by the city to condemn the property north of the court-house, on which the new jail is to be erected, took place on Saturday last.

HASTINGS, N. Y.—Persons have recently examined the old sugar refinery grounds with a view of buying them and building thereon a large cotton factory.

IONIA, MICH.—The people of Ionia County voted, a short time ago, on a proposition to build a new jail. The proposition was defeated, the vote being yeas, 1,015; nays, 1,768.

JUNEAU, WIS.—The cost of the Dodge County court-house and furnishing, complete, will aggregate \$29,915.89.

MECHANICSBURG, O.—The Roman Catholics of this vicinity are making an effort to build a church in town, and there are good promises of success.—The opera-house will hardly be completed by January 1, as promised.

NELSON, CAL.—Ten thousand dollars is to be expended on a new brick public school; J. Gash, architect; M. V. Roe, Chico, builder.

NEWPORT, O.—The following persons have taken out building permits: James T. Williamson, one-and-one-half-story brick addition, York Street.—Lewis Nagel, one-story frame, 24 by 14 feet, for shop, corner Putnam and Locust streets; Mrs. Rodgers, two-story brick, 20 by 24 feet, York Street; cost, \$800.

NEWPORT, R. I.—Mr. Philip S. Tsgart, of New York, has sold his cottage on Broadway, and is to build a more modern house upon the site at once.—A new villa is in process of erection for Mr. Philip Caswell, Jr., of New York.—New cottages are also being built for Dr. W. H. Smith, and for Mrs. Isaac Hartshorn, of Providence.—The plans have been prepared for a villa for Dr. S. C. Powell, of New Haven.

NEWTON, MASS.—The foundations are now being laid for a wooden dwelling for Mr. J. Howard Nichols. The building measures 45 x 46, with L, 25 x 30; Matthew Fossett & Co., of Boston, builders; cost, \$11,000; Messrs. Moffett & Tolman, of Boston, are the architects.

ROCKVILLE, IND.—Parke County will build a \$10,000 coal-house.

St. JOHN, N. B.—The new custom-house, the contract for which was awarded early in October, will be built at the expense of the Dominion Government. The building on plan somewhat resembles the letter E. The main building, 200 feet in length, fronts on Prince William Street, and the wings extend westwardly to Water Street, a distance of 90 feet. The style of architecture adopted is the Italian. The central portion of the front, 48 feet wide, and three stories high, will project slightly, and will be surmounted by a four-sided dome, the deck of which will be 86 feet above the sidewalk; a slight projection will also be given to the extreme ends of the front, and these will be covered by two-story roofs, 45 feet high. The faces of these projecting portions of the front will be relieved with pilasters and cornices at each story, and ornamental stone dormers will give variety to the roof. The portions of the facade connecting the pavilions with the centre will be lower and simpler in treatment. The level of Water Street is 24 feet below that of Prince William Street, consequently the three wings have been kept one story lower than the main body of the building. From the middle of the north and south fronts two towers will be carried up to the height of 122 feet above Water Street. They will be 16 feet square at the level of the main roof, and will have projecting balconies near the top. One of these towers is intended to carry the time-ball; the other will be used as a signal station. The foundation walls, up to the level of the several street grades, are of squared granite. The external walls above the surface of the ground will be of brick, faced with freestone, and the partition walls, throughout, will be entirely of brickwork. The principal framing of the roofs will be of wrought iron. The floors will be framed with wooden joists. Corrugated, galvanized iron ceilings will be hung under the several floors, and on these will be placed a layer of concrete of sufficient depth to bed the bottom edges of the joists. Where plastered ceilings are required the mortar will be laid on wire netting fastened to the corrugated iron. The building will be finished in hard woods, and the principal halls and corridors will be floored with English tiles and wainscoted. Sanitary appliances on the most improved system are liberally provided, and fire-plugs will be placed in the several halls; a number of most carefully constructed fire-proof vaults will be placed at convenient points. The building will be heated by steam. The contractors are Messrs. Williams, Anderson & Williams. The plans were prepared by Messrs. McKee & Fairweather, of this city, under the instructions of the Department of Public Works, at Ottawa.

TECUMSEH, MICH.—General Brown contributed the cornerstone to the new opera-house.

TORONTO, CAN.—Messrs. Smith & Gemmel, architects, are building a church on Gerard Street for the Pre-byterians. It is now nearly finished. The cost will be about \$40,000.—Another church is nearly finished, the one, namely, which Messrs. McCann & Lennox are building on Bond Street for the Congregational society.—Mr. William Irvin is the architect of the new structure now building for the Dominion Bank at the corner of George and Kingstreets. The cost will be about \$40,000.—Mr. D. B. Dick is the architect of the new building now in process of construction on King Street for the North of Scotland Canadian Mortgage Company. It is a stone front building, 53 by 63, and will cost about \$30,000.—A music hall is to be erected this winter, capable of seating 1,600 people, from plans prepared by Mr. Charles A. Walton, architect, Toronto. The building is to be of stone and red dressed bricks, ornamented with granite and tile and black pointing; estimated cost, \$35,000.

YANAKEN, N. J.—The Delaware & Round Brook R. R. Company are building a depot here; estimated cost, \$6,000; C. Graham, architect.

WAUPACA, WIS.—The inhabitants of Waupaca County think of investing \$15,000 in a new court-house.

WESTERLY, R. I.—Nelson Woodard is building a two-story machine-shop on Main Street.

WINSTED, CONN.—The Connecticut Western Railroad Company are building a new passenger depot near the East Winsted freight-house.

INDEX OF CURRENT WORK,

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

Baltimore, Md.

CHURCH.—The Pius IX. Memorial Church. G. A. Frederick, architect. Cost \$100,000.

HOSPITAL.—Johns Hopkins Hospital. J. R. Nieruse, consulting architect.

Boston.

BANK BUILDING.—Tremont Bank Building. Carl Fehmer, architect.

HOTEL.—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.

THE MUSEUM OF FINE ARTS.—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.

SCHOOL-HOUSE.—High and Latin School. G. A. Clough, architect.

ASYLUM.—Asylum for Aged People. C. J. Bateman, architect. Cost \$51,000.

Brooklyn, N. Y.

TENEMENT.—A. T. White, owner. William Field & Son, architects.

SOCIETY BUILDING.—The Long Island Historical Society Building. Mr. G. B. Post, architect. Cost \$100,000.

CHURCH.—St. Francis Xavier R. C. Church, West Fifth Street. Cost \$150,000. P. C. Keely, architect.

HOSPITAL.—St. John's Hospital. N. L. Derby, New York, architect.

HOSPITAL.—Hospital of St. Mary. Mr. P. C. Keely, architect. Cost \$200,000.

Cincinnati, O.

U. S. CUSTOM HOUSE AND POST OFFICE.—S. Hannaford, local superintendent.

CHILDREN'S HOME.—J. W. McLaughlin, architect. Cost \$50,000.

NEWSPAPER OFFICE.—The Gazette Building. E. Anderson, architect.

CLUB-HOUSE.—Allemania Club-House. J. W. McLaughlin, architect. Cost \$60,000.

UNIVERSITY BUILDING.—Cincinnati University Building. S. Hannaford, architect. Cost \$50,000.

Cleveland, O.

CONVENT.—Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

Hartford, Conn.

SEMINARY.—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.

CATHEDRAL.—R. C. Cathedral of St. Joseph. P. C. Keely, Brooklyn, architect.

CATHOLIC SCHOOL.—Brown & Stilson, architects, New Haven. Cost about \$25,000.

Jersey City.

CONVENT.—Convent of the Sisters of St. Dominick. Cost \$40,000.

New York.

THE "FLORENCE."—Emile Grew, architect. Mrs. Matthews, owner. Cost \$500,000.

BARGE OFFICE.—Building by the United States Government. Cost \$146,000.

THE BOREAL BUILDING.—S. D. Hatch, architect. Cost \$250,000.

CHURCH.—St. Paul's (R. C.). Mr. J. O'Rourke, architect, Newark, N. J. Cost \$50,000.

COLLEGE.—Addition to Columbia College. C. C. Haight, architect. Cost \$200,000.

OFFICE BUILDING.—Messrs. Stillman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.

APARTMENT HOUSE.—Mr. H. J. Hardenburgh, architect. Cost \$300,000.

PRIVATE RESIDENCE.—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.

ARMORY for the Seventh Regiment.—Cost \$300,000. C. W. Clinton, architect.

Philadelphia.

HOSPITAL.—Presbyterian Hospital. Wilson Bros., arch'ts.

OFFICE BUILDING.—Girard trust.

Providence, R. I.

CATHEDRAL.—Mr. P. C. Keely, architect, Brooklyn.

DORMITORY for Brown University.—Messrs. Stone & Carpenter, architects.

St. John, N. B.

POST OFFICE, Custom House, and Savings Bank.—Mr. Scott, Chief Architect to the Dominion Government.

BANK.—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.

CHURCH.—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.

CITY HALL.—Messrs. McKee & Fairweather, architects.

CHAPEL.—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.

CHURCHES.—St. James's Church, Croft & Camp, architects, St. John, N. B.—St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$60,000.

St. Louis.

CHURCH.—Second Baptist Church. Edward Hilsley, contractor. Cost \$100,000.

Publishers' Department.

The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year; \$6.00 in advance.

CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,

WITH

Houghton, Osgood & Co.'s other Periodicals. THE ARCHITECT and ATLANTIC MONTHLY...\$9.00 THE ARCHITECT and THE REPORTER...15.00 THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL...10.00 THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE...7.00 THE ARCHITECT and DWIGHT'S JOURNAL OF MUSIC...7.75 \* N. E.—The Atlantic portraits of Lowell, Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

Payments should be made directly to the Publishers, either by draft or by post-office order.

HOUGHTON, OSGOOD & CO., Publishers, WINTHROP SQUARE, BOSTON.

A. Hall & Sons Manufacturers of Architectural Terra Cotta, Buff and Colored Brick, Fire Brick, Established 1846, South Amboy, N. J.

ARCHITECTURAL IRON WORKS.

YOUNGLOVE & CO., Propr's. CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CHESTING, ETC.

Estimates promptly furnished.

(Established 1848.)

MARKET ST. ARCHITECTURAL FOUNDRY

AND

IRON WORKS.

SNEAD & CO..

LOUISVILLE, KY.

Makers of every description of Iron Work for Buildings

PROPOSALS.

LIGHT-HOUSE. AMERICAN SHOAL, FLA. OFFICE OF THE LIGHT-HOUSE BOARD, WASHINGTON, D. C., December 6, 1878. Sealed proposals will be received at this office until twelve (12) o'clock of Thursday, January 2, 1879, from iron manufacturers for furnishing the metal work of a Light-house for American Shoal, Florida. Plans, specifications, forms of proposal, and other information may be obtained from the undersigned on application by mail or in person.

PETER C. HAINS, Major of Engineers, U. S. A., Engineer Secretary Light-house Board.

POOR-HOUSE. MASON, MICH. To Architects.—Gentlemen—You are hereby requested to submit plans and specifications on first Monday in January next, in competition, for Ingham County Poor Building, the idea to be kept in view that ten thousand dollars must build and complete enough for the accommodation of the keeper and family, and fifty or sixty inmates. Buildings to be of brick. Any further information can be had by addressing S. A. PADDOCK, 167 Chairman of Building Committee, Mason, Mich.

BRIDGE. OTTUMWA, IO. As a Board of Supervisors, we have determined the location of the bridge to be at the foot of Market Street, Ottumwa, Io.; that we will erect a Howe Truss Iron Bridge; that its length will be about 650 feet long, and about 18 wide, with a sidewalk of four feet on each side; stone piers and abutments, and that the bridge should be completed by September, 1880. We now solicit bids for building the same, the bids to be accompanied with specifications corresponding with the above outlines. The Board meets again on the first Monday in January, 1879, at which time it will decide to let the contract. BOARD OF SUPERVISORS, Wapello County, Iowa. 167

PUMPING MACHINERY. LAKE, ILL. Bids will be received until 12 o'clock noon of Tuesday, the 17th of December, 1878, at the office of the Superintendent of Hyde Park and Lake Water Works, Town Hall, Town of Lake, for pumping machinery in condition for immediate use. All bids must guarantee a duty of 4,000,000 gallons of water per day, and 150 pounds fire pressure. LEVI MONTGOMERY, President of Trustees of Town of Lake. JOHN I. BENNETT, President of Trustees of Village of Hyde Park. December 6, 1878. 166\*

issued these of the Cost. \$2,800 5,000 4,500 15,000 4,800 2,500

PROPOSALS.

CULVERTS, ETC.

CINCINNATI, O.  
Sealed proposals will be received at the office of the Board of Public Works until 12 o'clock, noon, of Tuesday, December 31, A. D. 1878, for grading and constructing the necessary culverts, drains, or retaining walls, according to specifications on file in the office of the Board of Public Works, Thomas Street, or Lick Run Road, from the C., H. & D. R. R. to the Harrison Pike.  
The Board reserves the right of rejecting any or all the bids.  
Bidders will indorse their names upon the outside of the envelopes containing their bids.  
Each bid to be accompanied by two disinterested sureties. Bidders to use the printed forms, as no other will be received.  
By direction of the Board.  
JOHN E. BELL, President.  
JOHN D. BANKS, Clerk. 157

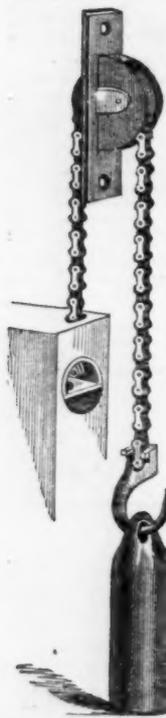
BRIDGE.

BROOKLYN, N. Y.  
DEPARTMENT OF CITY WORKS,  
MUNICIPAL DEPARTMENT BUILDING, BROOKLYN,  
December 7, 1878.  
Sealed proposals will be received at this office until Friday, the 20th day of December, 1878, at 11 A. M., for replanking, etc., the Washington Avenue Bridge (across Wallabout Canal).  
Plans and specifications may be seen, and forms of proposals can be procured on application at the Department of City Works.  
Proposals will not be considered unless accompanied by the deposit aforesaid, and also by an undertaking in writing, of two sureties, on each proposal (who shall qualify as to their responsibility in the sum of \$800), that if the contract be awarded to the party or parties proposing, they will become bound as his or their surety for its faithful performance; and in case he or they shall neglect or refuse to execute the contract if so awarded them, that they will pay to the city of Brooklyn the difference between the price so proposed and the price at which the contract may be made with any other person or persons. Proposals to be indorsed "To the Board of City Works" (specifying work). The said proposals will be publicly opened and announced at the next meeting of the said Board, which will be held on the 20th day of December, 1878, at the hour of 12 o'clock, M.; or in case there should be no quorum present on that day, then on the day of the next meeting of the Board.  
By order of the Common Council.  
Dated Brooklyn, November 15, 1878.  
F. S. MASSEY,  
JOHN W. FLAHERTY,  
GEO. C. BENNETT,  
Commissioners of City Works.  
Attest: D. L. NORTHUP, Secretary. 155

LOCKS AND KEYS.

POST OFFICE DEPARTMENT,  
WASHINGTON, D. C., August 15, 1878.  
Separate sealed proposals will be received at this Department until 12 o'clock noon on the 20th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as are to be used for the street letter-boxes of the United States.  
As the public exposure and searching examination necessary to intelligent bidding on any prescribed model of a lock and key would tend to impair, if not entirely destroy, the further utility of all such locks and keys for the purposes of the mails, the Postmaster-General prescribes no models or samples for bidders, but relies for a selection on the mechanical ingenuity and skill which a fair competition among inventors, hereby invited, may develop in samples submitted by them.  
Specifications of requirements as to proposals, samples, kinds and quantities of locks and keys, contracts, etc., will be furnished on application by letter to the Second Assistant Postmaster-General.  
No proposal will be considered which is not submitted in accordance with such specifications and forms of proposal.  
The contracts which may be made are to be in conformity with the specifications and accepted proposals.  
170 D. M. KEY, Postmaster-General.

MORTON'S



Copper and Iron  
SASH CHAIN,  
PATENTED

Aug. 15, 1871.

I would call the attention of Architects and Builders to my

SASH CHAIN,  
Manufactured from the best  
NORWAY IRON.

This Chain is stronger and cheaper than the copper, and will last as long; all that is necessary is to paint the Chain the same color as the frame.

For terms and further information apply to

THOS. S. MORTON,  
65 ELIZABETH ST.,  
NEW YORK CITY.

PROPOSALS.

DREDGING.

U. S. ENGINEER OFFICE,  
BALTIMORE, MD., November 25, 1878.  
Proposals for dredging near Snow Hill, in Potomac River, Maryland, will be received until noon of December 15, 1878, and opened immediately thereafter.  
Specifications, forms of proposals, and any desired information to be had on application at this office.  
155 WM. P. CRAIGHILL, Major of Engineers.

WANTS.

A SITUATION as Foreman of a Stone or Marble Yard by a man who has had 14 years' experience in the business, either as a foreman or in business for himself. Thoroughly understands Building and Monumental Work, and is a first-class practical workman. Has had considerable experience in quarrying stone. References given and required. Address  
D. J. WHITNEY, Gouverneur, N. Y.

ASSISTANT WANTED.

WANTED, an assistant of first-class ability and thorough training, who has been at a French school. Good position offered to right man. Address PHILLIPS, care of G. H. Petrie, 164 Broadway, New York.

THE PENRHYN SLATE CO.

MANTELS,  
And General Slate Manufacturers,  
(Quarries and Manufactory, Middle Granville, N. Y.)  
50 UNION SQUARE . . . NEW YORK,  
Corner of Fourth Avenue and 17th Street.  
W. H. KIRTLAND, Secretary.

BOUND VOLUMES AND BACK NUMBERS

THE AMERICAN ARCHITECT AND BUILDING NEWS

For 1876, 1877, and 1878.

The publishers can supply back numbers of this journal, and also a limited number of volumes for 1876, 1877, and 1878, neatly bound in cloth, either one of which will be sent, express paid, on receipt of nine dollars.

The value of these volumes may be judged by the facts that besides the Summary of each number, which forms a running and reliable record and commentary on current events in the architectural and artistic world:

The volume for 1876 contains, amongst other valuable papers, the interesting essays, "Architectural Students;" the controversial papers on the style of the New York State House; the remarkably able and technical papers "Ceramics at Philadelphia;" the instructive series of articles "The Sanitary Condition of Country Houses," the discussions on the planning of theatres and the fire-proofing of buildings occasioned by the burning of the Brooklyn Theatre, etc.

The Volume for 1877 contains the series of sanitary papers "The Drainage of Country Houses" and "The Sanitary Condition of City Houses," papers complementary to the series published in the preceding volume; the essays on the "Qualification of Architects" and kindred subjects; the illustrated "Studies in Interior Decoration;" the discussions caused by the fall of the Rockford Court House, etc.

The Volume for 1878 contains the illustrated series of "Papers on Prospective" which present a complete exposition of the science; the comprehensive illustrated papers, "Modern Plumbing;" the essays on the "Responsibility of Architects," the Labor Troubles and kindred topics; the papers, "Urban Housing;" the profusely illustrated article, "The Open Fireplace;" the "Competitions in Interior Decoration," etc.

THE ILLUSTRATIONS.

The illustrations in these volumes cover the ground of architectural designs by reproducing

	1876.	1877.	1878.		1876.	1877.	1878.
Bay Windows.....	1		10	Monuments.....		10	3
Churches, etc.....	26	24	22	Museums.....	1	1	
City Houses.....	11	8	16	Music Halls.....	3	1	1
College Buildings.....	4	5		Perspective Diagrams.....			13
Country Houses.....	34	44	44	School Houses.....	2	5	2
Court Houses.....	5	3	1	Stables.....	2	2	2
Details.....	9	16	5	Staircases.....		3	13
Engine Houses.....	2	2	1	Stores, etc.....	11	16	6
Fire Places.....	1	10	15	Temples.....	2	7	1
Furniture.....	2	9	5	Tombs.....	2	2	2
Hospitals.....	6	2	5	Town Halls.....	3	1	5
Hotels.....	4	3	4	Theatres.....	2		1
Interiors.....	16	15	8	Vestibules.....			6
Libraries.....	8	6	4	Wall Decorations.....			10

Besides those included in the above list, illustrations have been published of 3 Banks, 1 Insurance Office, 3 Custom Houses, 1 Post Office, 2 State Houses; 3 Fountains, 1 Heredos, 1 Club House, 4 Châteaux, 1 Bishop's Throne, 2 Museums, 2 Police Stations, 2 School of Fine Arts, 2 Domes, 4 Towers, 1 Grain Elevator, 2 Triumphal Arches, 1 Rostrum, 1 Organ, 3 Cemetery Lodges, 1 Synagogue, 1 Factory, 1 Newspaper Office, 2 Market Houses, 1 Prison, 1 Patent Office, 1 Cotton Exchange, 2 Bridges, 2 Exhibition Buildings, etc.

Those who desire to complete their sets can do so at the following rates:—

Single Numbers, 15 cents each; Unbound Volumes, \$7.50; Bound Volumes, \$0.00.

SPECIAL OFFER!

For twenty-seven dollars, a subscriber can obtain the numbers for the year 1879, and all three bound volumes for 1876, 1877, and 1878.

Remittances should be made by check, draft, or postal money-order, to the Publishers,

HUGHTON, OSGOOD, AND COMPANY, BOSTON.

# ETNA IRON CO.

Manufacturers of every description of Wrought and Cast

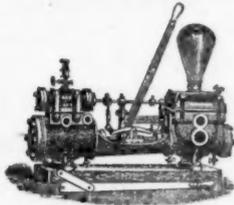
## ARCHITECTURAL IRON WORK FOR BUILDINGS.

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

### KNOWLES

Patent



Steam

### PUMP

### THE STANDARD.

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a speciality.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

KNOWLES STEAM PUMP WORKS, WARREN, MASS.

WAREHOUSES, { 14 & 16 Federal St., } Boston.  
{ 113 & 115 Congress St., }  
{ 92 & 94 Liberty St., New York.

Send for Illustrated Catalogue.

### MARSHALL'S AMERICAN



### LEADED SHEETS.

Cheapest and most durable Metal for Cornice and Roofing

MARSHALL BROS. & CO.,

Front and Girard Ave., Phila

Represented in New England States by

C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

### S. KLABER & CO.

### STEAM MARBLE WORKS,

217 to 223 W. 51st St., New York.

ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

### DEVER & SHORTLIDGE,

Ledger Building,

PHILADELPHIA, PA.

### Law and Collection Offices.

City Collections, Interest, Mercantile Bills, and Foreign Claims promptly made. Liens filed, Mortgages foreclosed, Ground Rents sued out, and all other Legal Business will receive careful attention. Reports made on Claims whenever desired, and cashed as soon as collected.

ROBERT DEVER, Solicitor.

JOHN WALKER SHORTLIDGE, Attorney and Counsellor at Law.

ROOMS 6 AND 7, FIRST FLOOR.



Terra Cotta Chimney Tops, Akron Land Tile

D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

### NATIONAL

### FINE ART FOUNDRY,

318 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze.

## GAS

### SPRINGFIELD GAS MACHINE.

Springfield, Mass.: 75 Maiden Lane, New York: 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.



### NATIONAL TUBE WORKS CO.

PATENT

Indestructible Enamelled Wrought Iron

### LAP-WELDED PIPE,

From 1/4 inch to 15 inches diameter.

Now extensively used for

Water, Gas, Sewerage, and Mining.

It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage. MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making Joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at offices of

National Tube Works Co.,

8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

### BURDITT & WILLIAMS,

DEALERS IN

### FINE HARDWARE

of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.

### The Draft of the Chimney increased.

Smoking Chimneys Preferred Particularly adapted to Chimneys in exposed positions.

Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR, 70 Grand St., Brooklyn, N. Y.

### CATALOGUE OF Architectural Books

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO.,

ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.



TO ARCHITECTS AND BUILDERS.

### MAHOGANY,

(all thicknesses) for Doors and Interior Finish.

### FIGURED WALNUTS,

(1-4 inch thick), for Doors, etc.

### VENEERS,

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

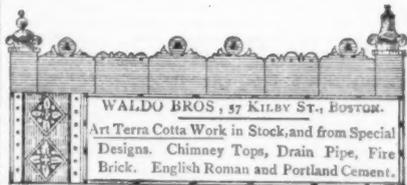
### BEEHIVE BRAND.

### FELT ROOFING.

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

### UNPARALLELED DISCOVERY.

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the Paint Preserver invented by ASAHEL WHEELER, Boston. It will neither crack, blister, nor scale.



WALDO BROS., 57 KILBY ST., BOSTON.

Art Terra Cotta Work in Stock, and from Special Designs. Chimney Tops, Drain Pipe, Fire Brick. English Roman and Portland Cement.

## PEERLESS BRICKS.

### THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK

### ARCHITECTURAL SHAPES (80 kinds).

ALSO

### RED Pressed Fronts.

Extra fine in color and quality

### BROWN, Colored throughout

More beautiful than Brown Stone DURABLE

### CHOCOLATE,

Same as above; difference in color

### FLESH COLOR,

A very popular color

### BUFF, very fine.

Harmonizes beautifully with Brown or Black

### GRAY, A pleasing shade.

### BLACK, Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F. ADAMS,

JOSEPH WOOD, JR.,

PRESIDENT.

TREASURER



### DOLIVET, CUTTER, & CO.,

ARTISTIC

### Papier Mache Decorations,

108 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





ROLLING Venetian Blinds.

Wilson's Patent. For first-class Dwellings and Public Buildings.

These blinds can be fitted either inside or outside the sash, and are operated with ease without machinery or weights. They are made to coil above or below, as shown in cut. Can be furnished in any kind of wood. Unequaled for elegance, durability, and simplicity. Indorsed by many of the leading architects in the country, and in use in some of the handsomest buildings.

We also manufacture WILSON'S PATENT Rolling Steel Shutters

These blinds are operated on same principle as above (being self-coiling). They are used for closing store-fronts and all windows and doorways that are required to be perfectly fire and burglar proof. Also, Rolling Wood Blinds for Store-Fronts, Book-Shelves, School Partitions, and other purposes.

A list of public and private buildings fitted with our Blinds sent on application. Architects and owners are invited to send for working models, catalogues, and price-lists.

WILSON & JAMES, 68 Beekman St., New York. Two Prize Medals at Philadelphia.

THREE ADMIRABLE NEW BOOKS.

The School-Boy. By OLIVER WENDELL HOLMES. Poem read at the Centenary of Phillips Academy, Andover, Mass., June 10, 1878. Illustrated with many excellent Engravings on Wood, designed by J. Appleton Brown, Wand, Sheppard, Merrill, and Hitchcock. Uniform in size and general style with the choice and popular holiday books of previous years. "The Hanging of the Crane," "Mabel Martin," "The Skeleton in Armor," "Christmas tide," etc. Handsomely bound in cloth, \$4.00; morocco or tree calf, \$8.00.

An Account of the Life and Times of Lord Bacon. Abridged from the "Life and Letters of Bacon," by JAMES SPEDDING. Uniform with Popular Edition of "Bacon's Works." With a Portrait. Two vols., crown 8vo, \$5.00; half calf, \$9.00.

This edition omits no essential part of Mr. Spedding's voluminous work, but presents a connected and complete narrative of Bacon's life and remarkable career, including enough of the political and literary history of England to make clear Bacon's position, circumstances, and influence. It is a very noteworthy addition to biographical literature.

The College Book. Edited by CHARLES F. RICHARDSON and HENRY A. CLARK. 1 volume, 4to, full gilt, \$15.00.

A royal volume, containing historical and descriptive accounts, principally by professors or graduates, of twenty-four leading American Universities, Colleges, and the United States Military and Naval Academies, with 60 full-page Heliotype Illustrations of buildings connected with these institutions.

For Sale by all Booksellers.

HOUGHTON, OSGOOD & CO., Boston.

IMPROVED PRISON LOCKS.

All Architects should have our 36 page Illustrated Catalogue of Prison Locks.

ADDRESS

YALE LOCK MFG. CO., STAMFORD, CONN.

New York Salesroom, No. 53 Chambers Street.

T. B. STEWART & CO. SLATE, MARBLE, AND WOOD MANTELS,

Slate Goods of Every Description, (QUARRIES AND MANUFACTORY, FAIR HAVEN, VT.)

75 & 77 West Twenty-Third Street, New York.

WROUGHT IRON BEAMS & GIRDERS

THE UNION IRON MILLS, Pittsburgh, Pa., Manufacturers of Improved Wrought Iron Beams and Girders (patented).

The great fall which has taken place in the prices of Iron, and especially in Beams used in the construction of FIRE-PROOF BUILDINGS, induces us to call the special attention of Engineers, Architects, and Builders to the undoubted advantages of now erecting fire-proof structures; and by reference to pages 52 and 54 of our Book of Sections—which will be sent on application to those contemplating the erection of fire-proof buildings—THE COST CAN BE ACCURATELY CALCULATED, the cost of insurance avoided, and the serious losses and interruption to business caused by fire. These and like considerations fully justify any additional first cost. It is believed that, were owners fully aware of the small difference which now exists between the use of Wood and Iron, in many cases the latter would be adopted. We shall be pleased to furnish estimates for all the Beams complete, for any specific structure, so that the difference in cost may at once be ascertained. Address CARNEGIE BROS. & CO., Pittsburgh, Pa.

LESTER Scroll Saw, Circular Saw, Turning Lathe, Lathe Tools, Emery Wheel, and Drilling Attachment. All for \$5.00. A beautiful and perfect machine, warranted. MILLERS FALLS CO., 74 Chambers St., New York.

Advertisement for plumbing goods including a 'Sewer Gas Trap' and 'Jennings' Sanitary Depot' with illustrations of various fixtures.

Advertisement for 'Brandeis' Seamless Paragon Trap' with an illustration of the trap and descriptive text.

Advertisement for 'Saylor's Portland Cement' featuring a circular logo with 'Saylor's Portland Cement' and 'Johnson & Wilson Agents New York'.

PRIZE MEDALLISTS. 1862; 1865; 1867; 1872; 1873; AND ONLY AWARD and MEDAL FOR SELF COILING STEEL SHUTTERS at CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

CLARK & COMPANY. ORIGINAL INVENTORS AND SOLE PATENTEES OF NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.

Fire and Burglar Proof. Also, improved Rolling Wood Shutters OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable & Co., and Park & Tilford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.

OFFICE AND MANUFACTORY. 162 & 164 West 27th Street, New York.

HOPKINS & DICKINSON MANUF'G CO. 76 READE STREET, NEW YORK, WORKS, DARLINGTON, N. J.

Lock and Hardware Manufacturers, DESIGNERS, FOUNDERS, AND WORKERS

BRONZE AND BRASS.

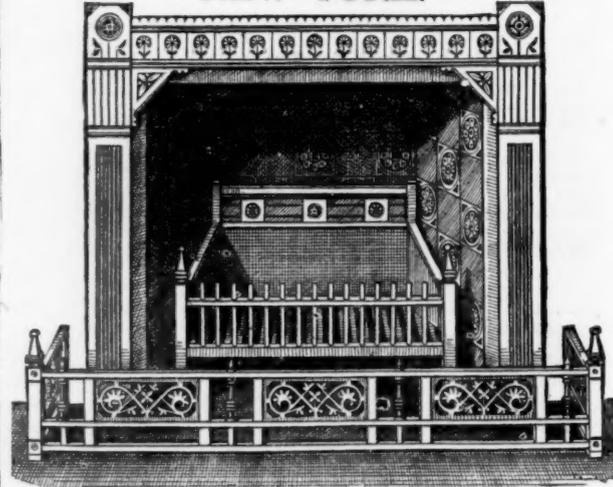
Architects' Designs faithfully executed.

Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

WM. H. JACKSON & CO.

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side,) NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile. HAVE NO OTHER WAREHOUSES.

BOWER'S PATENT SEWER-GAS TRAP.

The most perfect barrier against Sewer gas that has yet been invented.

A POSITIVE SEAL Against sewer-gas, absorbed gases, and back water. Seal is not broken by syphonage or evaporation. Self-scouring, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers, B. P. BOWER & CO., 104 & 105 St. Clair St., Cleveland, O

THE EUREKA VENTILATION CO. OFFICE AND MANUFACTORY, 74 CHARLESTOWN STREET, BOSTON, MASS.

THEATRICAL SCENERY AND STAGE SUPPLIES. Theatrical Fresco only. Prices moderate. References first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited. LAFAYETTE W. SEAVEY. Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK.

SAYLOR'S PORTLAND CEMENT.

Approved, recommended, and used by Architects, Engineers, and Builders of the highest authority. New York and Brooklyn Bridge, Department of Docks, and Croton Aqueduct, New York; new Capitol at Albany; U. S. Government Works (forts, light-house foundations, canal locks, etc.); floors for breweries, sugar-houses, ice-houses, cellars, and stables, and for heavy foundations, etc. For sale by all dealers in masons' materials. JOHNSON & WILSON, Gen'l Agents, 93 Liberty St., New York

# AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 156.]

SATURDAY, DECEMBER 21, 1878.

[PRICE 15 CENTS

### BUILDERS' SUPPLIES.

**BARTLETT, ROBBINS & CO.**

ARCHITECTURAL IRON WORK AND GAS MACHINES.

HEATING AND VENTILATING OF PUBLIC AND PRIVATE BUILDINGS A SPECIALTY.

24 LIGHT STREET, BALTIMORE.

**WALWORTH MANUFACTURING CO.,**

69 Kilby Street, Boston,

ENGINEERS AND CONTRACTORS FOR

STEAM AND HOT WATER WARMING AND VENTILATION IN PUBLIC BUILDINGS, PRIVATE RESIDENCES, GREENHOUSES, ETC.

MANUFACTURERS OF SOLAR GAS MACHINES.

Correspondence solicited. Plans and estimates furnished on application.

**"HOTCHKISS" TOWER CLOCKS,**

MANUFACTURED BY

W. THOMAS CLOCK CO., THOMASTON, CONN.

Prices \$100 to \$6,000.

WARRANTED ACCURATE, STRONG, DURABLE.

OFFICE, 581 BROADWAY, NEW YORK.

Send for Illustrated Catalogue.

**"MINTON'S ART AND ENAMELLED TILES."**

(China Works, Stoke-Up-on-Trent.) Also, The Campbell Brick and Tile Co.'s ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS, ETC.

For Churches, Banks, Halls, Vestibules, and Hearths; Outside Decorations, Flower Boxes, Etc.

THOS. ASPIN WALL & SON,

604 Broadway, NEW YORK.

The only representatives in the United States for the above firms.

**ASPHALT (FELT) ROOFING.**

WARREN'S NEW PATENT

FELT AND GRAVEL ROOFING.

Substitutes NATIVE ASPHALT for Coal-Tar materials for these roofs.

The very best and most durable material for flat roofs. Also, Native Asphalt and Asphaltic Cement for Concrete Walks and Pavements.

Roofers and pavers supplied with the above, and with Warren's original Coal Tar Roofing and Paving Materials. Send for circulars and samples.

WARREN CHEMICAL AND MANUFACTURING CO.,

30 MAIDEN LANE, NEW YORK. 121 STATE STREET, BOSTON.

**TILES FROM ALL PARTS OF THE WORLD,**

FOR

BANKS, PUBLIC BUILDINGS, and PRIVATE HOUSES. References given to Tile Work throughout the United States and British Provinces

AGENTS FOR THE AMERICAN ROOFING TILE

Contracts Solicited

O. A. WELLINGTON, HOUSEHOLD ART ROOMS,

No. 171 TREMONT STREET, BOSTON.

**HUGH SISSON & SON,**

Importers, Dealers, and Manufacturers of

MARBLE.

INTERIOR MARBLE WORK AND MONUMENTAL WORK A SPECIALTY

Salesrooms, No. 140 W. Baltimore St.; Steam Marble Works, North and Monument Streets, BALTIMORE, MD.

**ELECTRIC BELL, AND ANNUNCIATORS, SPEAKING TUBES,**

AND BURGLAR ALARMS,

For Public and Private Buildings.

THE BEST IN USE.

S. W. FULLER,

63 Devonshire Street, Boston.

**HAWTHORNE & TUCKER,**

PLUMBERS,

16 PROVINCE STREET, BOSTON

Estimates for Plumbing made, and work done in any part of the United States or Provinces

### BUILDERS' SUPPLIES.

**THE FIRE-PROOF BUILDING COMPANY OF NEW YORK.**

LEONARD F. BECKWITH, Pres't. E. GILLET, Vice-Pres't.

Hollow Blocks of any pattern, uniting strength and resistance to fire and water. The Hydraulic Lime of Teil (France), one of the strongest cements known, is largely used in this manufacture. The blocks do not conduct heat, cold, or sound, and weigh 60 per cent less than brick. Fire-proof Partitions, Floor Arches between iron or wooden beams, and ceilings under iron or wooden beams, erected in following buildings:

Western Union Telegraph, Orient, and Queens' Ins. Coal and Iron Exchange, Museum of Natural Hist. Equitable, Staats Zeitung, Hudson B. R. Fr. Depot. W. Ingham Savings Bank, N. Y. Hospital, Drexel, Windsor, & W. T. Hotels, Cluny, & Young's Hotel, Bos'n, Syracuse Savings Bank, West Point Military Hosp. Columbia College, Tribune, Coryell, & Vauclair Flats, Baltimore Safe Deposit Co. Peabody Inst., Baltimore, Peabody Museum, N. Haven, Westmoreland, & Elise Flats, Sidewalks laid at Lenox Library, Tribune, etc. Hollow Burnt Clay Bricks, for flat and curved arches, partitions, etc., and Skewbacks for brick arches.

Sole agents for the U. S. for HYDRAULIC LIME OF TEIL, and LAFARGE PORTLAND CEMENT.

Sole agents for the U. S. for METTLACH ENCAUSTIC TILES, laid in Tribune, Staats Zeitung, Mineral Spa, Central Park, Belvidere Hotel, etc.

Sole agents for the Atlantic States for WIGHT'S FIRE-PROOF COLUMNS.

Our Fire-proof work is the only one approved by the New York Board of Fire Underwriters and the Superintendent of Buildings, after severe public tests.

Office Room 64 COAL AND IRON EXCHANGE, 21 Courtland Street, New York. Represented in Boston by

BOORMAN & CO., 5 DOANE ST.

**AMERICAN ENCAUSTIC TILE,**

Acknowledged by experts to be

THE BEST IN THE WORLD.

Manufactured by the

AMERICAN ENCAUSTIC TILING CO. (Limited.)

OFFICE, 325 AND 327 GREENWICH ST., NEW YORK

Designs and estimates for Public Buildings, Halls, Churches, Vestibules, and for External Decoration, furnished on application.

**E. HOWARD & CO.**

MANUFACTURERS OF CLOCKS AND WATCHES

CLOCKS FOR PUBLIC BUILDINGS

114 Tremont Street, Boston, and 692 Broadway, New York

**MINTON'S TILES.**

PLAIN AND ENCAUSTIC

FOR PUBLIC BUILDINGS AND DWELLINGS,

As laid by us in

THE CAPITOL AT WASHINGTON, and in numerous Churches, Banks, and Dwellings in every part of the Country.

Glazed and Enamelled Tiles for Mantels, Hearths, Wainscoting, &c., and for Exterior Decoration.

MILLER & COATES,

270 PEARL STREET, NEW YORK.

**THE NEW ENGLAND GRANITE WORKS**

HARTFORD, CONN., and 1521 BROADWAY, N. Y.

Quarries at Westley, H. I.

MONUMENTAL AND BUILDING WORK

of every description, all the varieties of

AMERICAN AND FOREIGN GRANITE.

UNEQUALLED FACILITIES OFFERED TO THE TRADE.

J. G. BATTERSON, Pres't. H. R. BATTERSON, Sec'y.

DIRECTORS. J. G. BATTERSON, C. B. CANFIELD, H. A. BATTERSON

G. T. BATTERSON. CARL CONRADS, Sculptor.

**WHITTIER MACHINE CO.**

Manufacturers of Steam and Hydraulic

ELEVATORS,

STEAM ENGINES, BOILERS, AND MACHINERY.

No. 1176 Tremont Street, Boston.

Office in the New England Mutual Life Insurance Co's

Building, Post Office Square, and 120 Broadway, New York

CHARLES WHITTIER, Pres't. A. C. WHITTIER, Treas.

**OTIS BROTHERS & CO.**

SAFETY STEAM AND HYDRAULIC

ELEVATORS.

A specialty for a quarter of a century.

BUILDERS OF THE HALE HYDRAULIC ELEVATOR.

No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

**NICHOLL & MILLER,**

OHIO BUILDING STONE.

GRIND AND SCUTTER STONE,

From our FLORENCE and AMHERST QUARRIES.

Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS

111 Broadway, NEW YORK, and AMHERST, O.

**MITCHELL, VANCE, & CO.,**

Designers and Manufacturers of

GAS FIXTURES,

ORNAMENTAL METAL WORK, CLOCKS AND BROWNS

ARCHITECTS' ORDERS SOLICITED.

Special designs submitted on application.

WAREHOUSES, 836 AND 838 BROADWAY, NEW YORK

MANUFACTORY, 24th AND 25th Sts., AND 10th AVENUE, N. Y.

**FISHER & BIRD,**

Workers in all kinds of Foreign and Domestic

MARBLES,

97 TO 103 EAST HOUSTON ST., NEW YORK.

Established 1830.

Among our notable decorations are: The Illinois New State House; Palace Hotel, San Francisco; Baldwin's Hotel, San Francisco; Insurance Building, 10th and Chestnut Streets, Philadelphia; Mutual Life Insurance Building

Boston; Orient Mutual Insurance Building, New York; Union College, Schenectady; and numerous Churches, Private Residences, etc., etc., throughout the country. We solicit the opportunity to estimate upon all classes of work, viz., Tiling, Wainscoting, Staircases, Mantels, etc. Cemetery work and marble work of every description.

**WILSON & HUGHES STONE CO.**

Are ready to estimate on contracts of any size for furnishing their celebrated Amherst, Ohio,

BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS OR CUT AND SET

Also,

AMHERST AND INDEPENDENCE GRINDSTONES, AND OHIO MINERAL AND STONE PAINTS

Fire-Proof Stove Cement and Stove Putty ground in Oil

OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

**SPANISH FLOOR TILES. "NOLLA MOSAICA"** Floor Tiles, beautiful in color and design, for

Dwellings, Churches, and Public Buildings. SPANISH WALL TILES. White, Glazed, Valencia, Tiles for Walls and for decorative painting.

PRINTED FIGURED TILES of Spanish designs, for Wainscoting, Mantels, Jardinières, etc.

Floors of "Solla Mosaica" can be seen at the "Rockingham," corner of Broadway and 56th Street. Imported and for sale by JOHN CHADWICK, Sole Ag't for U. S., 49 Broadway, N. Y.

C. E. PARKER, Agent, 14 Exchange Place, Boston.

**MINTON'S ENCAUSTIC TILES.**

SHARPLESS & WATTS,

1325 MARKET STREET, PHILADELPHIA,

Established 1850 as Agents for

MINTON'S TILES AND TESSELLATED PAVEMENTS.

Specialties in Glazed, Encaustic, Majolica, and Art-painted Tiles, for Furniture, Hearths, Fireplaces, etc.

New and original designs continually received.

**STEAM WARMING APPARATUS.**

HIGH AND LOW PRESSURE.

HOUSE WARMING A SPECIALTY.

Pamphlet with more than 1,000 references sent on application.

WYLLYS H. WARNER,

114 LEONARD STREET, NEW YORK,

and 33 West Railroad Street, Syracuse.

**ELEVATORS. — COOKE & BEGGS.**

No. 6 COURTLAND ST., NEW YORK.

Works at Paterson, N. J.

PATENT SAFETY STEAM ELEVATORS for Public and Bank Buildings, Hotels, Private Dwellings, etc.

SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP GUARANTEED.

Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "HEALTH" AND "TUBULAR"  
Manufactured by the

GOLD'S HEATER MANUFACTURING CO.  
114 LEONARD ST., NEW YORK.

Send for Pamphlet.

E. GOLD, Pres't WYLLIS H. WARNER, Treas'r

TO ARCHITECTS AND BUILDERS.

**MORTAR BLACK,**

Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar. For sale only by *Walpole Color and Chemical Works,*

HENRY D. DUPEE, Proprietor,  
79 KILBY STREET, BOSTON

J. H. BURT & CO., Carpenters and Builders,  
Blue Hill Avenue, Mattapan (Ward 24), Boston.

**MENEELY & KIMBERLY,**  
Bell Founders, Troy, N. Y.,

Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT-HOUSE BELLS. Illustrated Catalogue sent free.

JOHN MACK, Plain and Ornamental Plasterer.  
41 Cambridge Street, Boston.

**MANTELS AND GRATES.**

RANKIN'S PATENT makes the Cleanest, Cheap est, and Hottest Fire. Avoid infringements, and send for Circular to

C. S. RANKIN & CO.,  
ARCHITECTURAL IRON WORKS,

Manufacturers of all kinds of Iron Work for BUILDINGS, JAILS, ETC.

187 W. PEARL ST., CINCINNATI, O.  
BUILDING MARBLE.

Branch yard of the RUTLAND MARBLE CO., 198 Causeway Street, Boston. JOHN D. ALLAN, Agent.

Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Rio and Continental Marble, furnished at low prices.

**PRESSED BRICK.**

STOCK AND COMMON

MANUFACTURED BY

FLETCHER & THOMAS,  
Indianapolis, Ind

All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY  
**GILLIS & GEOGHEGAN,**

Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 50th St. and 5th Av.; Drexel Building, cor Wall and Broad; Bennett Building, Fulton and Nassau, etc. Architects and owners promptly furnished with specifications and estimates.

ROBERT LOGAN,

Importer and Dealer in Foreign and Domestic Granite Monuments, Columns, etc.

Also, GRANITE FOR BUILDING PURPOSES, MARBLE AND ENCAUSTIC TILING,

129 FULTON STREET . . . NEW YORK.

**ARCHITECTS.**

P. B. WIGHT,

CONSULTING ARCHITECT,

73 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.

Consultations on matters pertaining to Fire-Proof Construction, Foundations, Drainage, Sanitary Work, Ventilation, Machinery, Valuations, Interior Decorations, and Furniture. Manager of the Meaker Hatchway Protectors.

RICHARD M. HUNT,

ARCHITECT,  
COAL AND IRON EXCHANGE,  
NEW YORK CITY.

W. W. GOODRICH, C. E., ARCHITECT  
AND SANITARY ENGINEER  
KINGSTON, N. Y.

Plans, Specifications, and Estimates furnished for all classes of Public or Private Buildings, Monumental Design, etc.

CHARLES E. ILLSLEY, A.M., C.E.,

ARCHITECT,

Room 17, Life Insurance Building,  
ST. LOUIS, MO.

Special attention to Churches, Schools, and other public buildings.

WALTER ARCHITECT. PERRY  
DICKSON. ALBANY, N. Y. BUILDING.

**SANITARY ENGINEERING.**

EDWARD S. PHILBRICK, C. E.,

12 WEST ST., BOSTON, MASS.

Offers advice and superintendence in

CONSTRUCTION OF WORKS,

PLUMBING, DRAINAGE, AND VENTILATION,

And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

E. VAN NOORDEN,  
887 HARRISON AVENUE . . . BOSTON,  
SHEET METAL CORNICES, HAYES'S PATENT VENTILATING SKY-LIGHTS, WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

**ARCHITECTURAL IRON AND JAIL WORKS.**

M. CLEMENTS,

MANUFACTURER OF

Iron Railing, Bank Vaults, and Jail Cells, Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc.

BAYMILLER STREET, near Sixth and C. H. & D. R. R. Depot, CINCINNATI, OHIO.

**PATENT MINERAL WOOL.**

ENTIRELY FIRE-PROOF AND UNDECAIFYING. THE BEST INSULATOR OF HEAT, GOLD, AND SOUND.

For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc.

ALEXANDER D. ELBERS,

P. O. Box 4461. 26 1/2 Broadway, New York.

**IRON STABLE FITTINGS.**

BUBIER & CO.,  
23 Exchange St.  
BOSTON.

**PATENTS.**

F. A. LEHMANN, Solicitor of Patents, Washington, D. C.  
NO PATENT NO PAY. Send for Circular.

**FIRE ON THE HEARTH**  
STOVES & HEATERS.

COMBINATION OF

FIRE-PLACE, CLOSE STOVE, AND FURNACE.

The attention of Architects and Builders is especially invited to our new

**FIRE-PLACE HEATERS,**

Adapted for the use of any kind of fuel, and the only heater especially adapted for the use of SOFT COAL and WOOD. Send for description to

THE OPEN STOVE VENTILATING CO.,  
115 Fulton St., New York.

**DECORATORS.**

W. J. MCPHERSON,

(Established A.D. 1845.)

MURAL PAINTER,

DESIGNER,

Ecclesiastical Decorator,

AND

ART STAINED GLASS MANUFACTURER,

440 TREMONT STREET,

BOSTON, MASS.

Should you want Ornamental Glass, write for particulars to



**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the subscriber to produce Modern and Mediaeval styles of work equal to any European examples, for Churches, Private Residences, Halls, etc.

The value of the work is attained by a careful selection of colors in Cathedral and French Glass of his own importation.

Designs in accord with architects' plans furnished at short notice. Reference of work at office

SAMUEL WEST, 115 Eliot St., Boston

FRANK HILL SMITH,

117 1/2 TREMONT STREET,

BOSTON . . . . . MASS.

COOK, REDDING & CO.

149 CONGRESS ST., BOSTON,

Ornamental, Stained, and Cut Glass,

FOR

Churches, Public Buildings, and Private Residences.

**DECORATORS.**

JOHN LAFARGE,

MURAL DECORATION,

51 W. Tenth St., New York and Newport, R. I.

**Society of Decorative Art,**

34 East 19th Street,

NEW YORK.

The Society is prepared to undertake every kind of

DECORATIVE NEEDLEWORK,

And special attention is paid to the RESTORATION of

ANTIQUÉ EMBROIDERY.

Special terms are made and careful estimates given to

ARTISTS, ARCHITECTS, AND DECORATORS

Generally, who are assured that their designs will be carefully reproduced, and their directions carefully followed

Orders are earnestly solicited.

**Fresco Decoration.**

EMMART & QUARTLEY,

Designers, Decorators, and Painters,

82 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate work on hand or made to order. No. 1210 Ridge Avenue. JOSEPH S. MILLER, successor to Wilson, & Miller, Philadelphia, Pa. Send for Illustrated Price-List

Donald MacDonald,

GLASS STAINER AND DECORATOR

No. 6 Hayward Place,

BOSTON

THE

ARCHITECTURAL TERRA COTTA WORKS

Successors to CHICAGO TERRA COTTA WORKS.

Established . . . . . Chicago, 1868 — Boston, 1878.

S. E. LORING, Consulting Architect, Sup't.

OFFICES AND FACTORIES.

CHICAGO: Fifteenth and LaSalle Sts.  
BOSTON: Boston Fire Brick Works, 394 Federal Street.



INLAID WOOD FLOORS.

ORNAMENTAL WOOD BORDERS

Designs and Estimates free.

National Wood Manuf'g Co.,

950 Broadway, near 23d St., New York

PHILIP A. BUTLER,

DECORATOR AND DESIGNER,

No. 17 FARMINGTON SQUARE,

BOSTON.

HENRY B. JONES & CO.

IMPORTERS, JOBBERS, AND RETAILERS OF

PAPER HANGINGS.

413 WASHINGTON STREET, BOSTON.

(Established 1845.)

L. HABERSTROH & SON,

FRESCO PAINTERS,

and INTERIOR DECORATORS,

No. 12 SCHOOL STREET, BOSTON.

*Raphael and Michelangelo.*

A Critical and Biographical Essay. BY CHARLES C. PERKINS. 8vo. Many Illustrations, including several Heliotypes. \$5.00.

The long devotion of Mr Perkins to the study of art has borne noble fruit in this beautiful volume. The idea of combining in one work a series of interlinked sketches of the two great representative artists of the age of Julius II. and Leo X. was in every respect fortunate; for they respectively illustrate power and beauty, sportive and earnest labor, as no other contemporaries. . . . His style is that of a scholar and a man of taste—simple, lucid, graceful, and even throughout. It has much of the quality of that of Hermann Grimm, in his two similar biographies. The profuse illustrations—although some of them are rather coarsely printed—are a positive boon to the reader.—*New York Tribune*

HOUGHTON, OSGOOD & CO., Boston.

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa (Can.)	Philadelphia.	San Francisco	St. Louis.
1 BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.25 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2 Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	2.50 @ 3.25	2.50 @ 3.25	3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00		3.00
3 CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25		1.50 @ 2.00
4 Cabinet Maker	2.50 @ 3.25		1.75 @ 2.25			1.50 @ 3.00	1.50 @ 2.00			
5 Finisher	2.00 @ 2.50		1.50 @ 2.00			1.50 @ 3.00	1.25 @ 1.75			
6 FOUNDRYMAN	1.50 @ 2.00	1.50 @ 2.75	1.25 @ 1.75	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50	1.25 @ 2.00		1.50 @ 2.00
7 Blacksmith			1.75 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.75			1.25 @ 2.50
8 Whitesmith			1.75 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.75			1.50 @ 2.50
9 Galvanized Iron Worker	2.00 @ 2.25	1.50 @ 2.75	1.75 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00			2.25 @ 2.50
10 GAS FITTER	2.00 @ 2.50	2.00 @ 3.00	1.75 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00			2.00 @ 3.00
11 LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50		1.00 @ 2.00
12 PAINTER	1.50 @ 2.50	2.25 @ 3.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13 Glazier		2.00 @ 2.50	1.50 @ 2.00			1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50		
14 Grainer	2.50 @ 3.00	3.00 @ 4.00	2.50 @ 3.00	3.50 @ 4.00		2.00 @ 3.00	1.75 @ 2.50			3.50
15 Paper-Hanger	.75 @ 2.50		per roll.			15c. pr. roll.	2.00 @ 2.50	1.50 @ 2.00		2.00 @ 3.00
16 PLASTERER	1.50 @ 2.00	2.00 @ 2.50	1.50 @ 2.00	2.00	1.50 @ 2.00	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00		2.25 @ 2.75
17 Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50	1.75 @ 2.25	1.50 @ 2.50	2.00 @ 2.50	2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
18 PLUMBER	2.25 @ 3.00	2.00 @ 3.00	2.25 @ 3.00	2.50 @ 3.50	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50			2.50 @ 3.50
19 QUARTERMAN		3.00 @ 3.50	quarries old		1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20 Stone Mason	1.50 @ 2.50	2.00 @ 2.50	1.00 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21 Carver		3.50 @ 4.00	2.00 @ 3.00	1.25 @ 1.75		3.00	2.00 @ 2.50	3.50 @ 6.00		2.75 @ 3.25
22 Pointers and Washers		2.50 @ 3.00	1.50 @ 1.75	1.50 @ 1.75			1.50 @ 2.50	1.00 @ 1.25		2.25 @ 2.50
23 Rubber	1.50 @ 2.00	1.75	1.10 @ 1.25	1.25	1.00 @ 1.25	1.50 @ 2.00	.80 @ 1.00	1.50 @ 1.75		2.00 @ 2.50
24 Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	2.50	2.00 @ 3.00	2.00 @ 2.50	2.25 @ 2.75		2.25 @ 2.75
25 Stone-Setter	3.00	2.50 @ 3.00	2.00 @ 2.50	2.50 @ 3.00	2.75	2.00 @ 2.50	1.50 @ 2.00	2.25 @ 2.75		2.00 @ 2.50
26 ROOFER (Tin)	2.00 @ 2.25	2.50 @ 3.00	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25		2.00 @ 2.25
27 Slater		2.50 @ 3.00	1.75 @ 2.00	3.50 @ 4.00		2.00	2.00 @ 2.25	1.25 @ 2.00		1.75 @ 2.25
28 STAIR BUILDER	2.25 @ 3.00	2.00 @ 2.50	2.00 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25			3.00
29 STEAM FITTER		2.50 @ 3.50	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00

THE ATLANTIC MONTHLY FOR 1879.

DURING the coming year the Publishers of THE ATLANTIC will aim to maintain the high character of the magazine in all departments, and will especially seek to keep it in the leading place it has more recently taken by its articles on

**POLITICAL, ECONOMIC, AND SOCIAL QUESTIONS.** The author of the notable paper on "Certain Dangerous Tendencies in American Life," and of the "Origin and Aims of the National Party," will furnish three articles on the Conservative Classes of the South, as a balance to the disorganizing elements in the North. His large and intimate personal acquaintance with workingmen, and his practical experience of their life, give peculiar value to his articles.

Hon. J. W. KEARNEY, of Kentucky, will continue his papers on the History of American Finance.

A. G. SEDGWICK, Esq., will write on legal points in politics; and men eminent in business and public life will write on matters connected with the interests they represent.

THE ATLANTIC will endeavor to give, not merely names, but papers of real value on all the public questions it discusses.

During the session of Congress the magazine will contain each month a Washington Letter. The New York Letters will also be resumed, and will treat of the life of the commercial metropolis in its most characteristic phases.

**FICTION.**—THE ATLANTIC for 1879 will be uncommonly rich in the range and number of its Serial Stories, including Irene the Missionary, a story of Americans in Syria; and Stories by Mr. T. B. ALDRICH, Miss E. W. OLNEY, the author of One too Many, Mr. W. D. HOWELLS, and Mr. BJORNSTJERNE BJORNSEN, the famous Norwegian poet and novelist, who will write a Serial expressly for THE ATLANTIC.

Each month will be given a Short Story of the kind for which THE ATLANTIC is distinguished.

**CRITICISM.**—This department, in which THE ATLANTIC has long been chief, will receive particular attention. The brilliant articles on contemporary novels will appear regularly; the book notices will be full, varied, and carefully written; and Mr. T. S. PERRY will continue his characteristic reviews of French and German literature.

**THE CONTRIBUTORS' CLUB,** a favorite department with ATLANTIC readers, will be fully sustained as the expression of opinion and desultory criticism upon aesthetic and social topics.

**TRAVELS.**—Mr. W. W. STORY will furnish studies of Italian locality and travel; Mr. HENRY JAMES JR. will write transatlantic sketches; Mr. W. H. BISHOP will contribute papers on art and life abroad; Mr. C. E. NORTON'S studies of art and history in his essays on Italian cathedrals will be continued; and Col. G. E. WARING JR. will write of English country-life.

**CONTRIBUTORS.**—Among the old and favorite contributors of THE ATLANTIC the reader will welcome back Mrs. HARRIET BRECHER STOWE, who will write frequently. Messrs. LONGFELLOW, WHITTIER, HOLMES, RICHARD GRANT WHITE, STEDMAN, STODDARD, SCUDDER, MARK TWAIN, CHARLES DUDLEY WARNER, and Miss PRESTON, Miss S. O. JEWETT, Miss C. F. WOOLSON, Mrs. ROSE TERRY COOKE, Mrs. PIATT, and H. H., with other well-known ATLANTIC authors, will continue as heretofore.

**TERMS:**—\$4.00 a year, in advance, postage free; 35 cents a number. With superb life-size portrait of Lowell, Whittier, Bryant, or Longfellow, \$5.00; with two portraits, \$6.00; with three portraits, \$7.00; with all four portraits, \$8.00.

Remittances should be made by money-order, draft, or registered letter to

HOUGHTON, OSGOOD & COMPANY, BOSTON.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

GALVANIZED IRON CORNICES.

Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS.

All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States. Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO., 72 & 74 West Monroe St. Chicago, Ill.



**"AUSTIN'S" PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT,**  
 MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS.  
 Regular Sizes, 2, 3, 4, 5 & 6 Inch.  
 SPECIAL SIZES MANUFACTURED TO ORDER.  
**AUSTIN, OBDYKE & CO.**  
 SOLE MANUFACTURERS.  
 1705 & 1725 CHESTNUT STREET.  
 PHILADELPHIA, PENNA.  
 WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS, AND WILL BE TREATED AS SUCH.

PRINCIPAL AGENTS.  
 M. Halliday, New York City  
 Hicks & Badger, Boston, Mass.  
 Sidney Shepard & Co., Buffalo, N. Y.  
 George W. Picken & Co., Chicago, Ill.  
 Wasson & Martin, Albany, N. Y.  
 McLeod, Reardon & Co., Troy, N. Y.  
 W. H. Scott, Portland, Me.  
 Kirtledge Corlice Co., Salem, O.  
 J. W. Jordan, Worcester, Mass.  
 B. G. Carpenter & Co., Wilkesbarre, Penna.  
 T. W. Irwin, Allegheny City, Penna.  
 Sellev & Co., Cincinnati, Ohio.

W. & J. SLOANE,

IMPORTERS OF

FINE CARPETS AND RUGS

FROM

INDIA,  
 PERSIA,  
 RUSSIA,  
 SMYRNA,  
 and TURKEY.

649, 651, 655 BROADWAY, NEW YORK.

Bound Volumes of the American Architect

We are prepared to fill orders for binding the American Architect and Building News in styles similar to the volume for 1876, at the following rates:—

- Price of cover without binding.....\$1.00
- Cover and binding (for subscribers)..... 2.00
- Numbers of 1876 or 1877 without cover or binding 7.50
- Bound volumes of 1876 or 1877..... 9.00

In sending volumes to be bound it should be stated whether the illustrations are to be bound with their respective numbers, or whether all illustrations are to be placed together at the end of the volume.

N. B. — Volumes bound in both styles are kept in stock.

The above will be sent, post-paid. Subscribers sending their numbers to be bound will prepay postage or express charges.

HOUGHTON, OSGOOD & CO., PUBLISHERS,  
 Winthrop Square, Boston.



TO ARCHITECTS.

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the SCAGLIOLA AND MAREZZO MARBLE, which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall, and Altar Work.  
**JAS. T. ALLEN & CO.,**  
 25 North Market Street, Philadelphia



**NONESUCH Self-Locking AND Burglar-Proof Window Locks.**

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted.

**FRED. J. HOYT,**  
 733 Broadway, N. Y.

Patented July 19th 1877



BUILDING MATERIALS.

[Reported for the American Architect and Building News.]

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for BRICK, FRONTS, CEMENT, and FIRE BRICK. Includes items like 'Fale', 'Jersey', 'Long Island', 'Up-River', 'Haverstraw Bay choice', 'Haverstraw Bay', 'Croton - Brown', 'Croton - Dark', 'Croton - Red', 'Philadelphia', 'Trenton', 'Baltimore', 'Rosendale', 'Portland (imported)', 'Portland (Saylor's American)', 'Roman', 'Keene's coarse', 'Keene's fine', 'Red Welsh', 'Scotch', 'American', and 'DOORS'.

Table listing 'RAISED PANELS, TWO SIDES' with dimensions like '1.0 x 6.0', '1.4 x 6.0', '1.8 x 6.0' and prices.

Table listing 'MOULDED' panels with dimensions like '1.0 x 6.0', '1.4 x 6.0', '1.8 x 6.0' and prices.

Table listing 'BLINDS - Outside' and 'Inside' with dimensions like 'Per lineal, up to 2.10 wide', 'Per lineal, up to 3.1 wide', 'Per lineal, up to 3.4 wide' and prices.

Table listing 'WINDOW FRAMES' with dimensions like 'Up to 3.4 x 7.2, put together' and price.

Table listing 'HAIR' and 'LATH' with prices for 'Cattle', 'Goat', and 'LATH - Cargo rates'.

Table listing 'LIME' with prices for 'State, common, cargo rate', 'State, finishing', 'Rockland, common', 'Rockland, finishing', and 'Irond'.

Table listing 'LUMBER' with prices for 'Pine, choice, extra', 'Pine, good', 'Pine, plank, 1 1/2 in. x 8 in.', 'Spruce boards, dressed', 'Spruce plank, 1 1/2 in., dressed', 'Spruce plank, 2 in.', 'Spruce timber', 'Hemlock boards, dry (gold)', 'Ash, good', 'Oak', 'Chestnut', 'Walnut, bl'k., good to choice', 'Walnut, bl'k., 1 1/2 in. x 8 in.', 'Walnut, bl'k., choice seasoned', 'Cherry, good', 'Whitewood, chair plank', 'Shingles extra', 'Shingles, 1 1/2 in.', 'Yellow pine dressed flooring'.

Table listing 'PAINTS AND OILS' with prices for 'Whiting', 'Paris white, English (gold)', 'Zinc, white, Am., dry', 'Zinc, white, Am., in oil, pure', 'Lead, white, Am., in oil, pure', 'Lead, red, Am.', 'Litharge, Am.', 'Ochre, French, dry (gold)', 'Ochre, in oil (currency)', 'Ven. red, Eng. (gold)', 'Vermilion, Am., Quicksilver (gold)', 'Vermilion, Trieste (gold)', 'Chrome yellow, genuine, dry', 'Chrome yellow, in oil', 'Paris green, pure, dry', 'Putty, pure, (American)', 'Sienna, raw (American)', 'Sienna, burnt (American)', 'Sienna, burnt, in oil', 'Umber, raw, in oil', 'Black, Lamp, ordinary', 'Black, Lamp, in oil, kegs', 'Black Paint, in assorted cans'.

Table listing 'NAILS' and 'AXLE PULLEYS - Steel' with prices for '10d', '8d', '6d', '4d', '3d', '2-in., Pennsylvania make', '2-in., Boston make', 'SASH WEIGHTS', 'SASH LINE', 'Best helup', 'Best linen', 'DOOR BUTTS'.

Table listing 'STONE Cargo rates, delivered at New York' with prices for 'Amherst freestone, in rough', 'Berlin freestone, in rough', 'Berea freestone, in rough', 'Brown stone, Portland, Ct.', 'Brown stone, Belleville, N. J.', 'Granite Rough', 'Canaan Marble', 'Dorchester, N. B., stone, rough', '(Currency) foot'.

Table listing 'SLATE Delivered in New York' with prices for 'Purple roofing slate, square', 'Green slate', 'Red slate', 'Bl'k slate, Penn. (Jersey City)', 'Granite Rough', 'Ties, 1 1/2 in., rubbed, sq. ft.', 'Ties, 1 1/2 in., rubbed, sq. ft.'.

Table listing 'TIN PLATES - Duty, 1-1-10c' with prices for 'C. charcoal, 10 x 14 box', 'I. C. coke, 10 x 14', 'I. X. charcoal, 10 x 14', 'I. C. charcoal, 14 x 20', 'I. X. charcoal, 14 x 20', 'I. C. coke, 14 x 20', 'I. C. coke, tarred, 14 x 20', 'I. C. charcoal, tarred, 14 x 20'.

Table listing 'ZINC - Duty, sheet' and 'LEAD' with prices for 'Sheet (gold) foreign', 'Bar', 'Sheet', 'Pipe', and 'Discount 10 per cent to trade'.

BOSTON.

Prices to Contractors and Builders.

Table listing 'FIRE BRICK' with prices for 'Waldo Bros Extra', 'Waldo Bros. No. 1', 'Waldo Bros. No. 2', 'Fiske & Coleman, No. 1', 'Fiske & Coleman, No. 1X'.

Table listing 'BUILDING BRICKS' with prices for 'Eastern', 'Hay State'.

Table listing 'BUILDING STONE' with prices for 'Rutland Marble, sawed'.

Table listing 'LUMBER' with prices for 'Michigan pine - Nos. 1 and 2', 'No. 3', 'Sap', 'Black Walnut - Nos. 1 and 2', 'Culls', 'Ash - Nos. 1 and 2', 'Culls', 'Cherry - Nos. 1 and 2', 'Whitewood - Nos. 1 and 2', 'N-inch', 'Oak', 'Butternut - Nos. 1 and 2', 'Eastern pine - Nos. 1, 2, and 3', 'No. 4', 'No. 5', 'Spruce - ranging cargo and cantling and plank', 'Boards', 'Hemlock Boards', 'Laths - Spruce', 'Pine', 'Shingles - Spruce', 'Pine shaved', 'Sawed extras, 16 and 18 in.'.

Table listing 'PAINTS AND OILS' with prices for 'Whiting', 'Paris white, English', 'Zinc, white, in oil', 'Lead, white, Am., in oil, pure', 'Ochre, French, dry', 'Ochre, in oil', 'Venetian red, English', 'Chrome yellow, in oil', 'Paris green, pure', 'Putty', 'Sienna, in oil', 'Umber, burnt, in oil', 'Umber, raw', 'Umber, raw, in oil', 'Black, Lamp', 'White Paint, in assorted cans', 'W. Bros. & H's Bay State Colors in kegs or pails'.

Table listing 'LIME' with prices for 'Quoted at 85c. per cask for Rockland and Rockport'.

Table listing 'CEMENT' with prices for 'Rosendale', 'Portland (Imported)', 'Portland (Saylor's American)', 'Roman', 'Keene's coarse', 'Keene's fine'.

Table listing 'NAILS' with prices for '10d', '8d', '6d', '4d', '3d', '2-in., Pennsylvania make', '2-in., Boston make', 'SASH WEIGHTS', 'SASH LINE', 'Best helup', 'Best linen', 'DOOR BUTTS'.

Table listing 'AXLE PULLEYS - Steel' with prices for '2-in., Pennsylvania make', '2-in., Boston make', 'SASH WEIGHTS', 'SASH LINE', 'Best helup', 'Best linen', 'DOOR BUTTS'.

Table listing 'SASH WEIGHTS' and 'SASH LINE' with prices for 'Best helup', 'Best linen', 'DOOR BUTTS'.

Table listing 'DOOR BUTTS' with prices for 'Japanned Acorn', 'Plain Bronzed Iron', 'Ornamental Bronzed Iron', 'Ornamental Bronzed Metal'.

Table listing 'MORTISE LOCKS - Brass face and bolt - easy spring' with prices for '1 1/2 to 4 1/2 in.', 'Do., for front doors', 'Factory make, plain front', 'Factory make, bronze front', 'Boston make, plain front'.

Table listing 'DOOR KNOBS' with prices for 'Solid glass', 'Silvered glass', 'Cut glass', 'Nickel plated', 'Bronze metal'.

Table listing 'SASH FASTENERS' with prices for 'Plain brass, self-locking', 'Nickel plated, self-locking', 'Bronze metal, self-locking'.

Table listing 'SCREWS' with prices for 'Round head, nickel plated', 'For window blinds'.

Table listing 'STORE DOOR HANDLES' with prices for 'Lacquered brass', 'Bronze metal'.

Table listing 'IRON' with prices for 'Wrought Iron Beams (J. H. Reed & Co.)', 'Wrought Iron Beams', 'Wrought Iron Beams', 'Wrought Iron Chan'l Beams', 'Wrought Angle Iron', 'Wrought T Iron', 'Wrought Grid Plates', 'Wrought Girder Rivets'.

CHICAGO.

Prices to Contractors and Builders.

Table listing 'BRICK, LIME, AND CEMENT' with prices for 'Lime, in bulk', 'Chicago building brick', 'Sewer brick', 'Indiana pressed brick', 'Fire brick', 'Cement, Akron, 94 bbl.', 'Eagle, Portland', 'Portland (English)', 'Portland (American)', 'White sand', 'Plaster paris, Mich.', 'Plaster paris, N. Y.', 'Plaster paris, Ill.', 'Plastering hair'.

Table listing 'LUMBER (MICHIGAN PINE)' with prices for '1st and 2d clear, 1 to 2-in.', '3d clear, 1-in.', '3d clear, 1 1/2 to 2 in.', 'Select, 1-in. A', 'Select, 1-in. B', 'Select, 1 1/2 in. A', 'Select, 1 1/2 in. B', 'Wagon box boards, 13-in. and upward A', 'Wagon box boards, 13-in. and upward B', 'A stock boards, 10 to 12-in.', 'B stock boards, 10 to 12-in.', 'C stock boards, 10 to 12-in.', 'Common stock boards, 12-in.', 'Joist and scantling, 22 to 24 ft.', 'Fencing, 12 to 16 ft.', 'Round cedar posts', 'Joist and scantling, 12 to 18 ft.', 'Joist and scantling, 20 ft.', 'Fencing, 12 to 16 ft.', 'Round cedar posts', 'Joist and scantling, 12 to 18 ft.', 'Joist and scantling, 20 ft.', 'Fencing, 12 to 16 ft.', 'Round cedar posts'.

Table listing 'HARDWOOD LUMBER' with prices for 'Whitewood, clear', 'Whitewood box boards, B', 'Whitewood select', 'Whitewood, common', 'Whitewood cull', 'Dry', 'Walnut, bl'k clear flooring, 3 and 4-in. dressed and matched', 'Ash, clear flooring, 3 and 4-in., dressed and matched', 'Ash, clear flooring, 6-in. dressed and matched', 'Oak, common', 'Hickory', 'Walnut, bl'k counter-tops', 'Walnut, bl'k counter-tops', 'Walnut, bl'k lvs and 2 1/2 in.', 'Walnut, bl'k common', 'Walnut, bl'k culls', 'Walnut, bl'k clear flooring, 3 and 4-in. dressed and matched', 'Cherry, first and second', 'Butternut, first and second', 'Maple', 'Maple, clear flooring, 4 and 6-in., dressed and matched', 'Florida red cedar, 3/4 foot', 'Mahogany, 3/4 foot', 'White holly, 3/4 foot'.

Table listing 'TINNERS' STOCK' with prices for 'Tin plate, 1 C 10 x 14, charcoal', 'Tin plate, 1 X, 10 x 14, charcoal', 'Tin plate, 1 C, 12 x 12, cha coal', 'Tin plates, 1 X, 12 x 12, charcoal', 'Tin plate, 1 C, 14 x 20, charcoal', 'Tin plate, 1 X, 14 x 20, charcoal'.

Table listing 'C ROOFING' with prices for '1 1/2 x 20, charcoal', '1 X roofing, 14 x 20, charcoal', '1 X roofing, 20 x 28, charcoal', '1 X roofing, 20 x 28, charcoal', '1 C roofing, 14 x 20, gutters', '10 x 20 coke (for gutters), 250 sheets', 'Fig tin, large (60 lbs.)', 'Fig tin, small (30 lbs.)', 'Fig bar tin'.

Table listing 'SOLDER' with prices for 'No. 1, 1/4c.; extra, 16c.', 'LEAD', 'Fig. 6c.; bar, 7c.; lead pipe, 6c.', 'COPPER', 'Bottoms, 28c.; sheathing copper, 26c.', 'SHEET ZINC', 'Full caulk, 7c.; slabs, 8 1/2c.', 'SHEET IRON', 'Nos. 24, 3 c. rates; Russia iron, Nos. 9 to 12, 12c.; do. No. 1, staled, 12c.; American, 12c.; B. 9c.; galvanized iron, No. 26, 14c., with discount of 40 per cent'.

Table listing 'WIRE' with prices for 'Nos. 1 to 4, 9c.; 5 to 9, 10c.; 10 to 11, 11c.; 12, 11c.; 13 and 14, 12c.; 15 and 16, 14c.; 17, 15c.; 18, 16c.; 19, 18c.; 20, 20c. Discount of 30 per cent'.

Table listing 'NAILS' and 'PAINTS AND COLORS' with prices for 'White Lead, strictly pure, 83.50; fancy brands, 87.00', 'Zinc, French, 12.50 @ 13.50; Am. 11.50', 'Chrome yellow, in oil, 15.50 @ 20.00', 'Timbers and Stencils, 9.00 @ 20.00', 'Chrome green, 20.00 @ 25.00', 'Coach black, 20.00 @ 25.00', 'Graining colors, 12.00 @ 20.00', 'Mineral paints, 2.00 @ 3.00', 'Ven. red, dry, 2.50 @ 3.00', 'Yellow ochre, dry, 2.50 @ 3.00'.

Table listing 'OILS' with prices for 'Lined, raw, 6c.; boiled, 6c.', 'Turpentine, 38c.'.

PHILADELPHIA.

WHOLESALE PRICES.

Table listing 'IRON - Duty: Bar 1 to 1/2 c.; Rail, road 10c.; 100 lbs; Boiler and Plate 1 1/2 c.; Sheet, Band, Hoop and Screw 1 1/2 to 1 3/4 c.; Pig 7 1/2 c. ton; Polish Sheet 3c. 1/2 lb; Galvanized 2 1/2 c.; all less 10 per cent ad val. No Bar Iron to pay less duty than 35 per cent ad valorem'.

Table listing 'NAILS' and 'PAINTS AND COLORS' with prices for 'Anthracite No. 1 Pig, 18.50 @ 19.00', 'Anthracite No. 2, 17.00 @ 18.00', 'Gray Forge, 15.00 @ 17.00', 'Scrap No. 1, wrought, 23.00 @ 17.00', 'No. 1 cast, 15.00 @ 17.00', 'NAILS - Duty: Cut 1 1/2 c.; Wrought 2 1/2 c.; Horse Shoe 3c. 1/2 lb', 'Standard price, 2 1/2 @ 2.20', 'All Cut Spikes, 25c. above 10d', 'Fencing and Brads', '6d. and 8d., 25c. above 10d', '6d. and 7d., 50c. above 10d', '4d. and 5d., 75c. above 10d', '3d. nails and car nails, 1.50 above 10d', 'Fine Nails, 3d. and 5d., 25.00 above 10d', 'LEAD - Duty: Pig 7 1/2 c. 100 lbs; all less 10 per cent', 'Fig. Galena, 4.75 @ 5.00', 'Sheet, 2.00 @ 2.25'.

Table listing 'LUMBER' with prices for 'Mich. upper, 45 @ 50, 40 @ 45 @ 35 @ 30', 'Susquehanna Boards, run of log 21 @ 23 @ 24', 'Box out, 23 @ 25 @ 26 @ 28', 'Selects and Better, 27 @ 30 @ 40 @ 60', 'Plank, Run of log, 22 @ 25 @ 26 @ 28', 'Selected log, dressed, 27 @ 30 @ 32 @ 36', '7-8 box, 14 @ 16 @ 18 @ 20', 'Siding 1/2, good, 22 @ 25 @ 26 @ 28', 'Siding 3/4, common, 18 @ 20 @ 24', 'Hemlock Board, 11 @ 12 @ 12 @ 14', 'Hemlock 6-in. fencing, 14 @ 15 @ 15 @ 16', 'Yellow Pine Flooring Boards undressed, heart, 20 @ 20 @ 22 @ 24', 'Flooring Boards, undressed, siding, 16 @ 17 @ 17 @ 18', 'Scantling, 25 @ 26 @ 26 @ 28', 'Sap Pine Boards, V, 14 @ 16 @ 16 @ 18', 'Walnut 3/4 Boards, 60 @ 60 @ 65 @ 68', 'Walnut Bds. and Plks. No. 1, 77 @ 80 @ 82 @ 84', 'Walnut Bds. and Plks. Culls, 32 @ 35 @ 35 @ 36', 'Ash Boards and Planks, 40 @ 42 @ 42 @ 44', 'Pennsylvania Ash, 25 @ 30 @ 30 @ 30', 'Western Ash, 27 @ 30 @ 40 @ 40', 'Poplar 4 Boards, 25 @ 30 @ 30 @ 30', 'Poplar 4 Boards, 23 @ 30 @ 36 @ 36', 'Poplar 4 Boards, 40 @ 40 @ 40 @ 40', 'Shingles - 30 in. cedar, dressed, 35 @ 40 @ 40 @ 40', '24 in. cedar, dressed, 18 @ 20 @ 25 @ 26', '30 in. cypress, dressed, 26 @ 30 @ 30 @ 36', '24 in. cypress, dressed, 12 @ 16 @ 16 @ 16', '20 in. cypress, dressed, 14 @ 16 @ 16 @ 16', 'Laths - English and Bangor, 1.80 @ 2.00', 'Calais, 1.65 @ 1.75'.

Table listing 'PLASTER' with prices for 'Lump free, Calcined 20c. per cent ad valorem', 'Soft lime, 2 1/2 @ 3.00'.

Table listing 'PAINTS AND OILS' with prices for 'White Lead in oil, 71 @ 71', 'Red Lead, 5 @ 5', 'Litharge, 5 @ 5', 'Lined oil, American, 53 @ 55'.

Table listing 'TIN - Duty: Pig Bars and Blocks free; Tin Plates and Sheets and Terne Plates 1 1/2 to 1 3/4 c. 1/2 lb'.

Table listing 'ZINC - Duty: Pig or Block, 1.50 @ 1.00; Sheet 2 1/2 c.; all less 10 per cent ad val'.

Table listing 'SHEET' with prices for 'Banca, 1 1/2 lb gold, 160 @ 160', 'Strait, gold, 15 @ 15', 'English, L. & F., gold, 160 @ 160', 'Plates, 1 C. coke, 4.87 @ 5.15'.

Table listing 'ZINC - Duty: Pig or Block, 1.50 @ 1.00; Sheet 2 1/2 c.; all less 10 per cent ad val'.

Table listing 'SHEET' with prices for 'Banca, 1 1/2 lb gold, 160 @ 160', 'Strait, gold, 15 @ 15', 'English, L. & F., gold, 160 @ 160', 'Plates, 1 C. coke, 4.87 @ 5.15'.

Table listing 'ZINC - Duty: Pig or Block, 1.50 @ 1.00; Sheet 2 1/2 c.; all less 10 per cent ad val'.

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms. They recommend, on their own account, and for the sake of the public, that such firms advertise in this paper.

Inventors and manufacturers of Steam Heating Apparatus, Hot Air Furnaces, etc., should not fail to advertise in the paper which prints a weekly list of all the new buildings projected in the country, and a record of important ones being built.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: "The American Architect is especially invaluable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper."

**D. M. MEEKER & SON'S**  
**Malleable Iron Hollow Munten Window Sash.**  
 For Insane Hospitals, Fire Proof Buildings, &c.



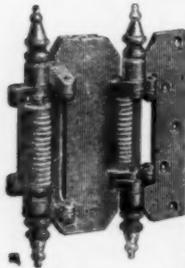
The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

**D. M. MEEKER & SON,**  
 Newark, N.J.

Fine Castings of Malleable and Gray Iron, German Silver and Composition: also Patterns a speciality.

**THE COWLES HARDWARE CO.**  
 UNIONVILLE, CONN., U. S. A.

MANUFACTURERS OF  
 (GEER'S)



**Single & Double Acting SPRING BUTTS.**  
 The Latest and Best.

Investigate before you purchase. Read the following points of superiority:—

These Spring Butts differ in principle from all others; having a *Spiral Spring* for power, and *Toggles for Levers* in combination, and when applied to the leaves of the Butts, exert their greatest Power when the door is closed, and are the only Butts in existence that will by actual test perform the labor claimed for them. They offer less resistance the wider the door is opened, until a point past the right angle is reached, where the power is reversed and the door held open. They will not allow the door to sag. Send for Price Lists.

**The Automatic Fire Alarm Telegraph**

IS OPERATED BY THE HEAT OF THE FIRE.

The apparatus is placed on the ceiling of every room, office, and closet in the building, so that a fire can in no instance be more than fifteen or twenty feet from it.

It can be adapted to all temperatures. The alarm is almost instantaneous. It is given directly to the Fire and Protective companies and to the City Fire Alarm Office. It may also be given in the building protected. It may be given by hand.

It tells the Department the exact location of the fire before the companies leave their stations, thus preventing the delay and loss caused by breaking into rooms where there is no fire.

A break in the wire instantly signals itself; but, by a combination of the metallic and earth circuits, does not prevent an alarm of fire, even while the wire is broken. An incendiary cannot, therefore, prevent an alarm by cutting the line.

**The Automatic Fire Alarm Telegraph**

Prevents the possibility of a large loss.

It saves the drowning a building with water. It saves the breaking up of business. It saves the loss of contracts and customers. It saves insurance. It saves a watchman. It saves the books, and the many other losses that insurance never covers.

The returns of the New York Patrol Committee show that the loss by fire originating in buildings equipped with the AUTOMATIC TELEGRAPH has been diminished over 76 per cent. by the use of this system.

Company's Office: 178 Devonshire St., Room 20, Where the apparatus can be seen.  
 C. E. GUILD, Pres. P. T. JACKSON, Treas.

ESTABLISHED 1836.  
**JOHN FARQUHAR'S SONS,**  
**SLATE, METAL, AND COMPOSITION ROOFERS,**  
 NOS. 20 AND 22 EAST STREET, BOSTON.  
 Order Box, No. 83 Mechanics Exchange, No. 85 Hawley Street.

Agents for Warren's Patent Natural Asphalt Roofing. Special attention given to repairs of all kinds of Roofing.  
 Inventors and Owners of the following Patents: FIRST. Patent Fastener for securing Slates or other covering to Iron Purlines where the roof is wholly of Iron. SECOND. A Roof composed of Wooden Rafters encased in Asbestos, Sheet Metal, or other fire-proof material, to which Iron Purlines are fastened, and the slates or other covering secured by our Patent Fastener. The slates are then rendered underside with hair mortar or any other material. The object intended being a Light Fire-proof Roof, avoiding all conensation and preventing leakage.

**EASTERN ROOFING SLATES**

FROM MONSON AND BROWNVILLE, MAINE.  
**CLEMENT, HIGBEE & CO.**

GENERAL AGENTS,  
 Piper's Wharf, 474 Atlantic Avenue,  
 BOSTON, MASS.

These Maine Slates are the best and cheapest in the market. They are also the strongest, smoothest, and most uniform, and the only perfectly unfading slate in the world.

THE AKRON PIPE FISKE & COLEMAN, FIRE BRICK, Enameled Brick, CHIMNEY TOPS, Flag Stones, Terra Cotta Goods, A full line of Fancy Building Materials.

New England Agents for

**AKRON**

SEWER PIPE COMPANY,  
 72 WATER STREET, BOSTON.

THE STANDARD AND ONLY RELIABLE PORTABLE ROOFING.

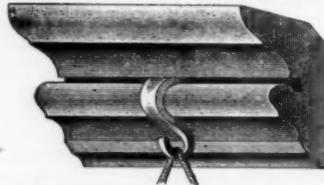


With white Fire Proof Coating, for steep and flat roofs in all climates. In rolls ready for use. Easily applied by any one. No heat required. It weighs only 80 pounds per 100 square feet, and costs only half as much as tin.

H. W. JOHNS M'FG CO., 87 Maiden Lane, New York,

Manufacturers of Asbestos Liquid Paints, Coatings, Cements, Boiler Coverings, etc.  
 Send for Samples, Descriptive Price Lists, etc.

BAKER'S  
 Combined Cornice and Picture Rod Moulding,



Patented in the United States and Dominion of Canada, 1877.  
 For Hanging Pictures, etc.  
 FOR SALE BY F. P. BAKER.  
 The only Agent in the U. S. and Canada,  
 84 BEVERLY STREET . . . BOSTON.

"Wood thoroughly creosoted is practically imperishable."  
**CREOSOTED WOOD,**

PREPARED AT THE  
 Hayford Patent Creosote Wood Preserving Works,  
 ELIZABETHPORT, N. J., and A St., So. BOSTON.  
 Offices: 10 Warren St., New York, and 4 Post Office Sq., Boston.

EDWARD R. ANDREWS, Proprietor.  
 ARCHITECTS, ENGINEERS, and BUILDERS are reminded that wood prepared by the Hayford process is rendered PRACTICALLY IMPERISHABLE, being protected from decay, marine worms, etc. It should be used for *Ties, Bridges, Piles, Piers, Wharves, Pavements, Stable and Cellar Floors*, and wherever wood is exposed to alternate dryness and moisture.  
 Pamphlets, fully explaining the creosoting process, furnished on application.

**GAS FIXTURES**  
 OF EVERY DESCRIPTION.  
 Special Rates to Builders.  
 R. HOLLINGS & CO., 547 Washington St., Boston.

THE AMERICAN ARCHITECT AND BUILDING NEWS SENT FREE!

We send Free the Nos. for November and December, 1878, to new subscribers paying before December 15, 1878.

BUILDERS AND MECHANICS

In search of a trade paper will do well to weigh the fact that in the first six months of this year we published fine illustrations of

- |                        |                     |                     |                     |                   |
|------------------------|---------------------|---------------------|---------------------|-------------------|
| 24 Country Houses,     | 13 Churches,        | 10 Staircases,      | 4 Details,          | 2 Bridges,        |
| 9 City Houses,         | 5 Cathedrals,       | 9 Wall Decorations, | 2 Tombs,            | 1 Police Station, |
| 4 Hospital Buildings,  | 5 Church Interiors, | 7 Bay-Windows,      | 2 Fountains,        | 1 Engine House,   |
| 4 School Buildings,    | 2 Hotels,           | 4 Furniture,        | 1 Shop Arcade,      | 1 Market House,   |
| 3 Library Buildings,   | 1 Court House,      | 1 City Hall,        | 1 Cemetery Gateway, | 1 Stable,         |
| 2 Insurance Buildings, | 1 Opera House,      | 1 State Prison,     | 1 Castle,           | 1 Studio.         |
| 4 Stores,              | 1 Music Hall,       |                     |                     |                   |

Besides perspective diagrams, foreign sketches, and numerous cuts illustrating building appliances. Terms \$6.00 per year. Send for specimen copy. Remittances to be made by check, draft, or money-order to the Publishers, HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON.

**NON-POISONOUS**

**SILICATE PAINT**

Does not discolor, chalk, or crack off. It is superior to lead.

The only cure for damp walls of churches, dwellings, and public buildings, is the

**PETRIFYING LIQUID**

See article on "Dwellings of the Poor," AM. ARCHITECT, Sept. 21, 1878.

Send for Price List and Testimonials.

HOWARD FLEMING, Sole Agent in the United States,

10 PINE STREET, NEW YORK.

THE

# American Architect and Building News.

## PROSPECTUS FOR 1879.

THE AMERICAN ARCHITECT AND BUILDING NEWS is intended to be valuable to Architects, Designers, Engineers, and Builders, and to Manufacturers, Dealers, and Inventors, whose wares or processes are applicable to building uses. It furnishes a continuous record of current news concerning architecture, building, and all the arts which are connected therewith, with discussions of the most interesting topics which they and the time suggest, whether artistic, technical, mechanical, or relating to their commercial and legal bearings.

It is interesting also to amateurs of Architecture, Building, and the Decorative Arts; containing many papers, and much information of an untechnical character, in these and the other fine arts, while its variety of illustration gives it a value apart from its professional uses. These illustrations, printed by the Heliotype Process, include, with every week's issue, four plates, mostly of unpublished drawings of buildings, furniture, and decorative work executed in the United States, but with a selection of the most interesting works or buildings of note that are illustrated abroad.

The Publishers have added to its scope, as year by year has defined the functions and opportunities of their journal. The volumes for 1878 have contained, besides miscellaneous articles on the topics indicated above, a valuable series of papers on Perspective, making a very complete treatise on the subject; a series on Modern Plumbing, and one on the history and construction of Open Fire-places, all written especially for this journal, as well as many papers from the transactions of professional societies, and a large amount of matter selected from foreign journals, many of which are not easily accessible to American readers. Pains have been taken to secure the best contributors available. Among them have been and are expected to be, Professors H. L. Eustis, W. R. Ware, C. E. Norton, C. Babcock, and Messrs. George E. Waring, Jr., Henry Van Brunt, P. B. Wight, C. A. Cummings, Carl Pfeiffer, F. D. Millett, Edward T. Potter, T. M. Clark, and many others. It contains, in addition to its literary matter, a full weekly record of building news, which is meant to include the important buildings that are undertaken all over the country, with a special index of the most important; a list, corrected weekly, of prices current of building materials in the chief business centres of the United States, a weekly list of building patents issued by the Government, and comparative tables of the prices of labor in the various trades at different points.

During the year 1879 the competitions in interior decoration, which have proved useful and successful, will be continued. Sanitary subjects will be treated as heretofore by Colonel Waring, and illustrated articles on technical subjects, analogous to those on Plumbing and Open Fire-places, will be continued, and it is expected that the legal aspects of architectural practice will receive special attention. The cosmopolitan character of the paper will be maintained, and its correspondence from various American cities carried on by capable writers as heretofore, while its foreign correspondence will be increased, and in particular letters of interest may be expected from an architect of position in London, and from Paris by the eminent hand of M. César Daly.

In commencing its fourth year, then, the Publishers commend the *American Architect and Building News* to all those whose avocations or tastes interest them in Architecture, Decoration, Building, and kindred arts.

### SPECIAL OFFER.

New subscribers paying before December 25, 1878, their subscriptions for 1879 will receive free of charge the numbers for November and December, 1878; thus receiving nine numbers in addition to the regular year's issue.

**TERMS:** Per year, \$7.50, or, if paid in advance, \$6.00; for six months, \$3.50. (The special offer above does not apply to subscribers for six months.) Single copies 15 cents each.

Remittances should be made by check, draft, or postal money-order to the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Winthrop Square, Boston.

## SUBSCRIPTION PREMIUMS.

### Books, Drawing Instruments, Water Colors, Heliotypes.

The Publishers will send, post-paid, the following prizes to the draughtsman, student, or regular canvasser, who, complying with the conditions, shall secure new subscribers for, or remit the purchase money of, Bound Volumes of THE AMERICAN ARCHITECT AND BUILDING NEWS:—

**I. FOR TWO NEW SUBSCRIBERS, or Two Bound Volumes,**  
 "Story of a House," from the French of M. Viollet-le-Duc, illustrated, price... \$5.00  
 Or, "Annals of a Fortress," from the French of M. Viollet-le-Duc, illustrated, price 5.00  
 Or, a Winsor & Newton's Japanned Pocket Color-Box (12 half pans), containing the following moist colors:—

Gamboge,	Crimson Lake,	Brown Pink,
Prussian Blue,	Yellow Ochre,	Vermilion,
Cobalt,	Hooker's Green,	Burnt Sienna,
Venetian Red,	Neutral Tint,	Brown Pink,
		price 3 50

**II. FOR THREE NEW SUBSCRIBERS, or Three Bound Volumes,**  
 A year's subscription to the AMERICAN ARCHITECT AND BUILDING NEWS..... 7.50  
 Or, "Hatfield's Transverse Strains" ..... 6.00

**III. FOR FOUR NEW SUBSCRIBERS, or Four Bound Volumes,**  
 "Examples of Ancient and Modern Furniture," etc., by B. J. Talbert, illustrated by twenty-one folio plates, price ..... 8.00  
 Or, "Discourses on Architecture," from the French of M. Viollet-le-Duc, illustrated, price..... 8.00

**IV. FOR FIVE NEW SUBSCRIBERS, or Five Bound Volumes,**  
 A bound volume of the AMERICAN ARCHITECT AND BUILDING NEWS for 1876, 1877, or 1878 ..... 9.00  
 Or, Furniture for a Wooden Beam Compass, with spring Adjustment (Alteneder's make) ..... 8.75

**V. FOR SEVEN NEW SUBSCRIBERS, or Seven Bound Volumes,**  
 "Treigold's Carpentry" ..... 12.00

**VI. FOR EIGHT NEW SUBSCRIBERS, or Eight Bound Volumes,**  
 "Gothic Forms applied to Furniture," etc., by B. J. Talbert, illustrated by twenty-one folio plates, price ..... 15.00  
 Or, "Art Foliage for Sculpture and Decoration," by J. K. Colling, royal quarto, illustrated by seventy-two plates, price..... 15.00

Or, a Winsor & Newton's Japanned Color-Box (16 whole pans)..... 15.00  
 This box will contain, besides three sable brushes, the following moist colors:—

Antwerp Blue,	Prussian Blue,	Cobalt Blue,
French Blue,	Smalt,	Indigo,
Payne's Gray,	Vermilion,	Brown Pink,
Burnt Sienna,	Carmine,	Venetian Red,
Hooker's Green, No. 2,	Ivory Black,	Yellow Ochre,
Gamboge,	Cadmium Yellow,	Warm Sepia,
Bistre,	Chinese White,	India Ink.

**VII. FOR TEN NEW SUBSCRIBERS, or Ten Bound Volumes,**  
 Either two of the bound volumes of the AMERICAN ARCHITECT AND BUILDING NEWS for 1876-7-8..... 18.00

**VIII. FOR FIFTEEN NEW SUBSCRIBERS, or Fifteen Bound Volumes,**  
 The three bound volumes of the AMERICAN ARCHITECT AND BUILDING NEWS for 1876-7-8..... 27.00  
 Or, "Decoration and Ornamentation of the Nineteenth Century," by Liénard, illustrated by one hundred folio plates, price..... 27.00  
 Or, "Gwilt's Encyclopedia of Architecture," latest edition ..... 24.00  
 This book is the standard English work on Architecture and Construction. In thirteen hundred octavo pages are illustrated by nearly fourteen hundred woodcuts.

Or, "Examples of Building Construction," prepared by Prof. W. R. Ware, illustrated by forty-eight quarto lithographs in color..... 25.00

**IX. FOR TWENTY NEW SUBSCRIBERS, or Twenty Bound Volumes,**  
 One Pocket Case of Fine Drawing Instruments (Alteneder's make)..... 37.50  
 This Case (morocco covered) will contain:—  
 1 Needle-point Dividers, six-inch, with Pen and Pencil Points, Jointed Legs, Lengthening Bar, all to shift; 1 Plain Dividers, 5 inches long; 1 three and one half inch Needle-point Dividers, with Shifting Pen, Pencil, and Needle-points; 1 steel Spacing Dividers, three inches long; 1 Drawing Pen, four and one half inches long; 1 Drawing Pen, five and one half inches long; 1 Protractor; 1 Metric Scale; 1 English Scale.

In lieu of these books the canvasser may obtain books of equal value selected from our trade list, or may obtain as equivalent the value of the prize in Heliotype Engravings, selected from our collection, which numbers over three hundred.

- The conditions to be observed are:—
1. The subscribers must in all cases be new subscribers, and the subscription price must be forwarded with each order.
  2. The subscribers' names may be sent to us as soon as secured, but canvassers are requested to state each time that the names are on account of a premium.
  3. These prizes are not cumulative.



the same architect, for Mr. H. W. Bickley; sizes, 60 by 80 and 15 by 40 feet.

LEESBURG, VA.—A new front building to the residence of E. G. Cauffman, 20 by 42 feet, two stories high, built of brick, and will cost \$2,500; John Norris & Sons, builders.

NEW BEDFORD, MASS.—At the northwest corner of Mill and Chestnut streets, William A. Bassett is building a house two and a half stories in height, 31 by 37 feet in size, with 24 feet posts, and with a double bay-window on the south side.

NEWTON, MASS.—Mr. H. Graves, of Boston, is the architect of a wooden dwelling now building here.

SAN FRANCISCO, CAL.—The corner-stone of the Congregation Beth Israel's new synagogue, on Turk Street, between Jones and Taylor, was laid with the usual Hebrew rites, November 22.

SAN RAFAEL, CAL.—Ground has been broken for a new warehouse, at the corner of Fourth Street and Tamalpais Avenue, by the Sonoma & Marin Railroad. It will be 50 by 100 feet, and two stories high.

THOMPSONVILLE, CONN.—The carpet company is building a new factory 187 by 30 feet, to be one story high.

VIOLA, MINN.—The congregation of the United Brethren is to build a church here next season.

WARWICK NECK, N. Y.—Cellars and foundations are completed for new houses for Mr. James Baxter on the Bayville Plat, and for Right Rev. Bishop Clark, not far from the Warwick Neck House.

WEST OAKLAND, CAL.—A Roman Catholic church is to be built, the priest of the parish having succeeded in collecting the necessary funds and letting the contract.

WOOSTER, O.—The entrances to the new court-house are to be decorated on either side by colossal statues of Atlas. The one now being chiseled out is rapidly assuming an expression of personified strength and patience.

INDEX OF CURRENT WORK,

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

Baltimore, Md.

CHURCH.—The Pius IX. Memorial Church. G. A. Frederick, architect. Cost \$100,000.

HOSPITAL.—Johns Hopkins Hospital. J. R. Niernsee, consulting architect.

Boston.

BANK BUILDING.—Tremont Bank Building. Carl Fehmer, architect.

HOTEL.—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.

THE MUSEUM OF FINE ARTS.—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.

SCHOOL-HOUSE.—High and Latin School. G. A. Clough, architect.

ASYLUM.—Asylum for Aged People. C. J. Bateman, architect. Cost \$50,000.

Brooklyn, N. Y.

TENEMENT.—A. T. White, owner. William Field & Son, architects.

SOCIETY BUILDING.—The Long Island Historical Society Building. Mr. G. B. Post, architect. Cost \$100,000.

HOSPITAL.—St. John's Hospital. N. L. Derby, New York, architect.

HOSPITAL.—Hospital of St. Mary. Mr. P. C. Keely, architect. Cost \$200,000.

Cincinnati, O.

U. S. CUSTOM HOUSE AND POST OFFICE.—S. Hannaford, local superintendent.

CHILDREN'S HOME.—J. W. McLaughlin, architect. Cost \$50,000.

NEWSPAPER OFFICE.—The Gazette Building. E. Anderson, architect.

CLUB-HOUSE.—Allemania Club-House. J. W. McLaughlin, architect. Cost \$60,000.

UNIVERSITY BUILDING.—Cincinnati University Building. S. Hannaford, architect. Cost \$50,000.

Cleveland, O.

CONVENT.—Ursuline Academy. L. A. Hearl, architect. Cost \$120,000.

Hartford, Conn.

SEMINARY.—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.

CATHEDRAL.—R. C. Cathedral of St. Joseph. P. C. Keely, Brooklyn, architect.

CATHOLIC SCHOOL.—Brown & Stilson, architects, New Haven. Cost about \$25,000.

HOSPITAL.—Homoeopathic Hospital. Coburn & Barnum, architects. Cost \$20,000.

SCHOOL.—Twelfth Ward Schoolhouse. L. T. Scofield, architect. Cost \$30,000.

Jersey City.

CONVENT.—Convent of the Sisters of St. Dominick. Cost \$40,000.

New York.

THE "FLORENCE."—Emile Grewé, architect. Mrs. Matthews, owner. Cost \$500,000.

BARGE OFFICE.—Building by the United States Government. Cost \$146,000.

THE BOREEL BUILDING.—S. D. Hatch, architect. Cost \$250,000.

CHURCH.—St. Francis Xavier R. C. Church, West Sixteenth Street. Cost \$150,000. P. C. Keely, architect.

CHURCH.—St. Paul's (R. C.). Mr. J. O'Rourke, architect, Newark, N. J. Cost \$500,000.

COLLEGE.—Addition to Columbia College. C. C. Haight, architect. Cost \$200,000.

OFFICE BUILDING.—Messrs. Silliman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.

APARTMENT HOUSE.—Mr. H. J. Hardenburgh, architect. Cost \$300,000.

PRIVATE RESIDENCE.—Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.

ARMORY for the Seventh Regiment.—Cost \$300,000. C. W. Clinton, architect.

Philadelphia.

HOSPITAL.—Presbyterian Hospital. Wilson Bros., architects. Office Building.—Girard trust.

Providence, R. I.

CATHEDRAL.—Mr. P. C. Keely, architect, Brooklyn.

DORMITORY for Brown University.—Messrs. Stone & Carpenter, architects.

St. John, N. B.

POST OFFICE, Custom House, and Savings Bank.—Mr. Scott, Chief Architect to the Dominion Government.

BANK.—Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.

CHURCH.—Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.

CITY HALL.—Messrs. McKean & Fairweather, architects.

CHAPEL.—The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.

CHURCH.—St. James's Church. Croft & Camp, architects, St. John, N. B.—St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$60,000.

St. Louis.

CHURCH.—Second Baptist Church. Edward Ilsey, contractor. Cost \$100,000.

COURT HOUSE for the new county of St. Louis.—F. Renwick, architect. Cost \$28,000.

COLLEGE.—College for the Christian Brothers. Mr. Jas. McGrath, architect. Cost \$200,000.

CUSTOM HOUSE AND POST OFFICE.—Mr. Jas. G. Hill, Supervising Architect of the Treasury Department.

General.

ATHENS, O.—Court House, Mr. H. E. Myers, architect. Cost \$90,000.

CAMBRIDGE, MASS.—Gymnasium for Harvard College. Messrs. Peabody & Stearns, architects, Boston.

CONCORD, N. H.—State Prison. Messrs. Dow & Wheeler, architects. Appropriation \$200,000.

CROWN POINT, IND.—Court-House. J. C. Cochrane, architect, Chicago. Cost \$45,000.

ELMIRA, N. Y.—Masonic Hall. N. LeBrun, architect, New York. Cost \$60,000.

FARIBAULT, MINN.—Deaf, Dumb, and Blind Asylum. J. Babcock & Co., contractors. Cost \$53,730.

INDEPENDENCE, IO.—Hospital for the Insane. G. Josephly, supervising architect. Cost \$850,000.

INDIANAPOLIS, IND.—State House, Mr. E. May, architect. Cost \$2,000,000.

JOLIET, ILL.—St. Mary's (Roman Catholic) Church. Mr. Keely, architect, Brooklyn.

KANKAKEE, ILL.—Insane Asylum. J. R. Willett, architect, Chicago, Ill.

LOWELL, MASS.—Appleton Bank. O. A. Merrill, architect. Cost \$70,000.

NEWARK, N. J.—St. Michael's Church (R. C.). Mr. J. O'Rourke, architect. Cost \$25,000.

NORRISTOWN, PENN.—Insane Asylum. Wilson Bros. & Co., architects, Philadelphia.

OAKLAND, CAL.—First Congregational Church. Mr. L. B. Valk, New York, architect. Cost \$60,000.

OTTAWA, ILL.—Holy Trinity (R. C.) Church. H. C. Furness, architect. Cost \$150,000.

ARMORY. Cost \$35,000. Mr. H. C. Furness, architect.

PORTLAND, CONN.—Trinity Church, H. M. Congdon, architect, New York. Cost \$50,000.

SAN FRANCISCO, CAL.—College of the Jesuit Fathers. Cost \$500,000.

SPRINGFIELD, ILL.—Jail. G. H. Helmie, architect. Cost \$65,000.

TOPEKA, KAN.—Insane Asylum. Cost \$75,000. Mr. E. T. Carr, architect, Leavenworth, Kan.

WABASH, IND.—Court House. B. V. Enos & Son, architects. Cost \$100,000.

ZANESVILLE, O.—Hotel. H. E. Myers, architect. Black & Graham, owners. Cost \$75,000.

Publishers' Department.

The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY

HOUGHTON, OSGOOD & CO.,

WINTHROP SQUARE, BOSTON.

NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year; \$6.00 in advance.

CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS,

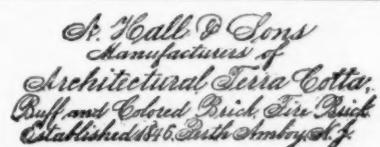
WITH

Houghton, Osgood & Co.'s other Periodicals. THE ARCHITECT AND ATLANTIC MONTHLY...\$9.00 THE ARCHITECT AND THE REPORTER...15.00 THE ARCHITECT AND BOSTON MEDICAL AND SURGICAL JOURNAL...10.00 THE ARCHITECT AND UNITED STATES OFFICIAL POSTAL GUIDE...7.00 THE ARCHITECT AND DWIGHT'S JOURNAL OF MUSIC...7.75 \* N. B.—The Atlantic portraits of Lowell, Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

Payments should be made directly to the Publishers, either by draft or by post-office order.

HOUGHTON, OSGOOD & CO., Publishers,

WINTHROP SQUARE, BOSTON.



ARCHITECTURAL IRON WORKS.

YOUNGLOVE & CO., Prop'r's.

CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CRISTING, ETC.

Estimates promptly furnished.

PROPOSALS.

CULVERTS, ETC. CINCINNATI, O.

Sealed proposals will be received at the office of the Board of Public Works until 12 o'clock, noon, of Tuesday, December 31, A. D. 1878, for grading and constructing the necessary culverts, drains, or retaining walls, according to specifications on file in the office of the Board of Public Works, Thomas Street, or Lick Run Road, from the C. H. & D. R. R. to the Harrison Pike.

The Board reserves the right of rejecting any or all the bids.

Bidders will indorse their names upon the outside of the envelopes containing their bids.

Each bid to be accompanied by two disinterested sureties. Bidders to use the printed forms, as no other will be received.

By direction of the Board. JOHN D. BANES, Clerk. JOHN E. BELL, President. 157

GATEWAYS. OFFICE OF NATIONAL CEMETERIES, WASHINGTON, December 3, 1878.

Sealed proposals, in triplicate, with a copy of this advertisement attached to each, will be received at this office until Monday, January 6, 1879, for the construction of Arched Gateways at the National Cemeteries at Vicksburg, Miss., and Chattanooga, Tenn.

Copies of plans and specifications may be seen, and blank forms of proposals procured, at this office, and at the Quartermaster's Offices in Chattanooga, Tenn.; New Orleans, La.; Atlanta, Ga.; Louisville and Newport Barracks, Ky.; and St. Louis, Mo.; also, at the Vicksburg and Memphis National Cemeteries.

Proposals should be indorsed "Proposals for Gateways," and addressed to the undersigned. They will be opened at noon on the date specified, when bidders are invited to be present. A. F. ROCKWELL, 155 Capt. and A. Q. M., U. S. A.

LIGHT-HOUSE. AMERICAN SHOAL, FLA.

OFFICE OF THE LIGHT-HOUSE BOARD, WASHINGTON, D. C., December 6, 1878. Sealed proposals will be received at this office until twelve (12) o'clock of Thursday, January 2, 1879, from iron manufacturers for furnishing the metal work of a Light-house for American Shoal, Florida.

Plans, specifications, forms of proposal, and other information may be obtained from the undersigned on application by mail or in person.

PETER C. HAINS, Major of Engineers, U. S. A., 157 Engineer Secretary Light-house Board.

POOR-HOUSE. MASON, MICH.

To Architects.—Gentlemen—You are hereby requested to submit plans and specifications on first Monday in January next, in competition, for Ingham County Poor Building, the idea to be kept in view that ten thousand dollars must build and complete enough for the accommodation of the keeper and family, and fifty or sixty inmates. Buildings to be of brick. Any further information can be had by addressing S. A. PAIDOCK, 157 Chairman of Building Committee, Mason, Mich.

(Established 1848.) MARKET ST. ARCHITECTURAL FOUNDRY

AND IRON WORKS. SNEAD & CO.

LOUISVILLE, KY. Makers of every description of Iron Work for Buildings

WANTS.

A SITUATION as Foreman of a Stone or Marble Yard by a man who has had 14 years' experience in the business, either as a foreman or in business for himself. Thoroughly understands Building and Monumental Work, and is a first-class practical workman. Has had considerable experience in quarrying stone. References given and required. Address D. J. WHITNEY, Gouverneur, N. Y.

PROPOSALS.

DAM.

U. S. ENGINEER OFFICE, }  
ROCK ISLAND, ILL., December 5, 1878. }  
Duplicate sealed proposals will be received by the undersigned until 3 o'clock P. M., January 4, 1879, for furnishing brush and stone, and constructing dam of the same, in the vicinity of Gilbert's Island, which is situated about ten miles below Hannibal, on the Mississippi River. For all information address  
157 F. U. FARQUHAR, Major of Engineers.

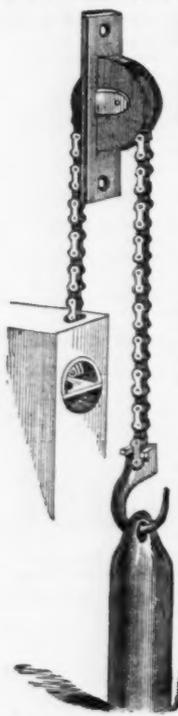
ROSTRA.

OFFICE OF NATIONAL CEMETERIES, }  
WASHINGTON, D. C., December 13, 1878. }  
Sealed proposals, in triplicate, with a copy of this advertisement attached to each, will be received at this office until Monday, January 20, 1879, for the construction of Rostrums at National Cemeteries, as follows:—  
Vicksburg, Miss.; Chattanooga, Tenn.; Chalmette, near New Orleans, La.; Jefferson Barracks, near St. Louis, Mo.; Knoxville, Tenn.; Gettysburg, Pa.; Antietam, Md.  
Copies of plans may be seen and blank forms of proposals procured at this office, and at the Quartermaster's offices in New Orleans, La.; Chattanooga, Tenn.; St. Louis, Mo.; Jeffersonville, Ind.; Newport Barracks, Ky.; Baltimore, Md.; also, at the Cemeteries above named.  
Proposals should be indorsed, "Proposals for Rostrums," and addressed to the undersigned. They will be opened at this office at noon on the date specified, when bidders are invited to be present.  
A. F. ROCKWELL,  
159 Capt. and A. Q. M., U. S. A.

LOCKS AND KEYS.

POST OFFICE DEPARTMENT, }  
WASHINGTON, D. C., August 15, 1878. }  
Separate sealed proposals will be received at this Department until 12 o'clock noon on the 20th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as are to be used for the street letter-boxes of the United States.  
As the public exposure and searching examination necessary to intelligent bidding on any prescribed model of a lock and key would tend to impair, if not entirely destroy, the further utility of all such locks and keys for the purposes of the mails, the Postmaster-General prescribes no models or samples for bidders, but relies for a selection on the mechanical ingenuity and skill which a fair competition among inventors, hereby invited, may develop in samples submitted by them.  
Specifications of requirements as to proposals, samples, kinds and quantities of locks and keys, contracts, etc., will be furnished on application by letter to the Second Assistant Postmaster-General.  
No proposal will be considered which is not submitted in accordance with such specifications and forms of proposal.  
The contracts which may be made are to be in conformity with the specifications and accepted proposals.  
170 D. M. KEY, Postmaster-General.

MORTON'S



Copper and Iron  
**SASH CHAIN,**  
PATENTED  
Aug. 15, 1871.

I would call the attention of Architects and Builders to my  
**SASH CHAIN,**  
Manufactured from the best  
**NORWAY IRON.**  
This Chain is stronger and cheaper than the copper, and will last as long; all that is necessary is to paint the Chain the same color as the frame.  
For terms and further information apply to  
**THOS. S. MORTON,**  
65 ELIZABETH ST.,  
NEW YORK CITY.

JUST PUBLISHED.

JOHN LOTHROP MOTLEY.

A Memoir, by OLIVER WENDELL HOLMES. With a fine Steel Portrait. Memorial Edition, 4to, \$3. Popular Edition, 16mo, \$1.50.

POEMS OF PLACES.

Vols. XXV., XXVI. New England. Edited by H. W. LONGFELLOW. \$2.

BRITISH POETS. Riverside Edition. HOOD. 2 vols., cr. 8vo, gilt top, \$3.50.

CAMPBELL, with FALCONER. 1 vol., \$1.75

\*.\* Sold by all Booksellers, and by the Publishers, HOUGHTON, OSGOOD & CO., Boston.

PROPOSALS.

BRIDGE.

OTTUMWA, IO.  
As a Board of Supervisors, we have determined the location of the bridge to be at the foot of Market Street, Ottumwa, Io.; that we will erect a Howe Truss Iron Bridge; that its length will be about 650 feet long, and about 18 wide, with a sidewalk of four feet on each side; stone piers and abutments, and that the bridge should be completed by September, 1880. We now solicit bids for building the same, the bids to be accompanied with specifications corresponding with the above outlines. The Board meets again on the first Monday in January, 1879, at which time it will decide to let the contract. BOARD OF SUPERVISORS, Wapello County, Iowa. 157

SCHOOL-HOUSE.

PHILADELPHIA, PENN.  
Sealed proposals, indorsed "Proposals for building a Public School-House in the Nineteenth Section," will be received by the Committee on Property of the Board of Public Education, at the Chamber of Select Council, Chestnut Street, on Thursday, December 26, 1878, at 2 o'clock P. M., for building a Public School-House on a lot of ground situated at Fourth Street and Lehigh Avenue, Nineteenth Ward at which time said proposals will be opened by the Committee on Property.  
Said school-house to be built in accordance with the plans and specifications of L. H. Esler, Architect and Superintendent of School Buildings, to be seen at the office of the Board of Public Education.  
No bids will be considered unless accompanied by a certificate from the City Solicitor that the provisions of an ordinance approved May 25, 1870, have been complied with.  
The contract will be awarded only to known master builders.  
By order of the Committee on Property.  
156 H. W. HALLIWELL, Secretary.

THE PENRHYN SLATE CO.

MANTELS,

And General Slate Manufacturers,

(Quarries and Manufactory, Middle Granville, N. Y.)

50 UNION SQUARE . . . NEW YORK,

Corner of Fourth Avenue and 17th Street.

W. H. KIRTYLAND, Secretary.

Weather Strips.

BROWNE'S METALLIC AND RUBBER WEATHER-STRIPS—the oldest, the best, the cheapest in market. Stood the test 15 YEARS. They exclude COLD DRAFTS around windows and doors in winter, keep out dust in summer, and stop rattling sashes. We employ experienced and responsible workmen, and guarantee entire satisfaction. We send, free of charge, men with samples and prices to measure and give cost. We warrant them good for 5 YEARS.

Patent Metallic Weather-Strip Co.

812 BROADWAY, N. Y.

BOUND VOLUMES AND BACK NUMBERS

OF THE AMERICAN ARCHITECT AND BUILDING NEWS

For 1876, 1877, and 1878.

The publishers can supply back numbers of this journal, and also a limited number of volumes for 1876, 1877, and 1878, neatly bound in cloth, either one of which will be sent, express paid, on receipt of nine dollars.

The value of these volumes may be judged by the facts that besides the Summary of each number, which forms a running and reliable record and commentary on current events in the architectural and artistic world:

The volume for 1876 contains, amongst other valuable papers, the interesting essays, "Architectural Students;" the controversial papers on the style of the New York State House; the remarkably able and technical papers "Ceramics at Philadelphia;" the instructive series of articles "The Sanitary Condition of Country Houses," the discussions on the planning of theatres and the fire-proofing of buildings occasioned by the burning of the Brooklyn Theatre, etc.

The Volume for 1877 contains the series of sanitary papers "The Drainage of Country Houses" and "The Sanitary Condition of City Houses," papers complementary to the series published in the preceding volume; the essays on the "Qualification of Architects" and kindred subjects; the illustrated "Studies in Interior Decoration;" the discussions caused by the fall of the Rockford Court House, etc.

The Volume for 1878 contains the illustrated series of "Papers on Prospective" which present a complete exposition of the science; the comprehensive illustrated papers, "Modern Plumbing;" the essays on the "Responsibility of Architects," the Labor Troubles and kindred topics; the papers, "Urban Housing;" the profusely illustrated article, "The Open Fireplace;" the "Competitions in Interior Decoration," etc.

THE ILLUSTRATIONS.

The illustrations in these volumes cover the ground of architectural designs by reproducing

	1876.	1877.	1878.		1876.	1877.	1878.
Bay Windows.....	1		10	Monuments.....		10	3
Churches, etc.....	26	24	22	Museums.....	1	1	
City Houses.....	11	8	16	Music Halls.....	3	1	1
College Buildings.....	4	3		Perspective Diagrams.....			13
Country Houses.....	34	44	44	School Houses.....	2	5	2
Court Houses.....	5	3	1	Stables.....	2	2	2
Details.....	9	16	5	Staircases.....		3	13
Engine Houses.....	2	2	1	Stores, etc.....	11	16	6
Fire Places.....	1	10	15	Temples.....	2	7	1
Furniture.....	2	9	5	Tombs.....	2	2	2
Hospitals.....	6	2	5	Town Halls.....	3	1	5
Hotels.....	4	3	4	Theatres.....	2		1
Interiors.....	16	18	8	Vestibules.....			6
Libraries.....	8	6	4	Wall Decorations.....			10

Besides those included in the above list, illustrations have been published of 3 Banks, 4 Insurance Offices, 3 Custom Houses, 1 Post Office, 2 State Houses; 3 Fountains, 1 Reredos, 1 Club House, 4 Châteaux, 1 Bishop's Throne, 2 Museums, 2 Police Stations, 2 School of Fine Arts, 2 Domes, 4 Towers, 1 Grain Elevator, 2 Triumphal Arches, 1 Rostrum, 1 Organ, 3 Cemetary Lodges, 1 Synagogue, 1 Factory, 1 Newspaper Office, 2 Market Houses, 1 Prison, 1 Patent Office, 1 Cotton Exchange, 2 Bridges, 2 Exhibition Buildings, etc.

Those who desire to complete their sets can do so at the following rates:—

Single Numbers, 15 cents each; Unbound Volumes, \$7.50; Bound Volumes, \$9.00.

SPECIAL OFFER!

For twenty-seven dollars, a subscriber can obtain the numbers for the year 1879, and all three bound volumes for 1876, 1877, and 1878.

Remittances should be made by check, draft, or postal money-order, to the Publishers,

HOUGHTON, OSGOOD, AND COMPANY, BOSTON

**ETNA IRON CO.**

Manufacturers of every description of Wrought and Cast

**ARCHITECTURAL IRON WORK FOR BUILDINGS.**

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

**KNOWLES**

Patent



Steam

**PUMP THE STANDARD.**

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a specialty.

Noiseless Pumps for Water Elevators.

ALSO, Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE **KNOWLES STEAM PUMP WORKS, WARREN, MASS.**

WAREHOUSES: { 14 & 16 Federal St., } Boston.  
{ 113 & 115 Congress St., }  
{ 82 & 84 Liberty St., } New York.

Send for Illustrated Catalogue.

**MARSHALL'S AMERICAN**



**LEADED SHEETS.** Cheapest and most durable Metal for Cornice and Roofing

**MARSHALL BROS. & CO.,**

Front and Girard Ave., Phila

Represented in New England States by **C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.**

**S. KLABER & CO.**

**STEAM MARBLE WORKS,**

217 to 223 W. 51st St., New York.

ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

**DEVER & SHORTLIDGE,**

Ledger Building,

PHILADELPHIA, PA.

**Law and Collection Offices.**

City Collections, Interest, Mercantile Bills, and Foreign Claims promptly made. Liens filed, Mortgages foreclosed, Ground Rents sued out, and all other Legal Business will receive careful attention. Reports made on Claims whenever desired, and cashed as soon as collected.

**ROBERT DEVER,** Solicitor.

**JOHN WALKER SHORTLIDGE,** Attorney and Counsellor at Law.

ROOMS 6 AND 7, FIRST FLOOR.



Terra Cotta Chimney Tops, Akron Lead Tile

**D. W. LEWIS, 80 Water Street, Boston,** Manufacturers' Agent.

**NATIONAL**

**FINE ART FOUNDRY,**

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze.

**GAS**

**SPRINGFIELD GAS MACHINE.**

Springfield, Mass.; 75 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.



**NATIONAL TUBE WORKS CO.**

PATENT

Indestructible Enamelled Wrought Iron

**LAP-WELDED PIPE,**

From 1/4 inch to 15 inches diameter.

Now extensively used for

Water, Gas, Sewerage, and Mining.

It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our **PATENT SLEEVE COUPLINGS** preventing all leakage.

**MALLEABLE IRON FITTINGS** (enamelled), and **COMPOSITE ENAMEL** for making joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at offices of

**National Tube Works Co.,**

8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburg, Penn.; and McKeesport, Penn.

**BURDITT & WILLIAMS,**

DEALERS IN

**FINE HARDWARE**

of every material. A specially complete stock of **PLAIN AND ORNAMENTAL BRONZE HARDWARE** of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



**The Draft of the Chimney increased.**

Smoking Chimneys Prevented. Particularly adapted to Chimneys in exposed positions.

Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

**JOS. W. TAYLOR,** 70 Grand St., Brooklyn, N. Y.

**CATALOGUE OF Architectural Books**

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices. **A. J. BICKNELL & CO., ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.**



TO ARCHITECTS AND BUILDERS.

**MAHOGANY,**

(all thicknesses) for Doors and Interior Finish.

**FIGURED WALNUTS,**

(1-4 inch thick), for Doors, etc.

**VENEERS,**

from all varieties of Domestic and Foreign Woods.

**PALMER, PARKER, & CO.,**

10 TRAVERS STREET, BOSTON.

**BEEHIVE BRAND.**

**FELT ROOFING.**

Only Manufacturers, **NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.**

**UNPARALLELED DISCOVERY.**

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the **Paint Preserver** invented by **ASAHEL WHEELER** Boston. It will neither crack, blister, nor scale.



**WALDO BROS, 57 KILBY ST., BOSTON.**

Art Terra Cotta Work in Stock, and from Special Designs. Chimney Tops, Drain Pipe, Fire Brick. English Roman and Portland Cement.

**PEERLESS BRICKS.**

**THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,**

MANUFACTURES AND KEEPS IN STOCK

**ARCHITECTURAL SHAPES (80 kinds).**

ALSO

**RED Pressed Fronts.**

Extra fine in color and quality

**BROWN,** Colored throughout

More beautiful than Brown Stone **DURABLE**

**CHOCOLATE,**

Same as above; difference in color

**FLESH COLOR.**

A very popular color

**BUFF,** very fine.

Harmonizes beautifully with Brown or Black

**GRAY,** A pleasing shade.

**BLACK,** Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

**NORTHEAST COR. FIFTH & CHESTNUT STS.**

**THOMAS F ADAMS, JOSEPH WOOD, JR.,**

PRESIDENT.

TREASURER



**DOLIVET, CUTTER, & CO.,**

ARTISTIC

**Papier Maché Decorations,**

106 West 25th St., New York.

House, Theatre, and Church Work. Architects' drawing strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING Venetian Blinds.**

Wilson's Patent. For first-class Dwellings and Public Buildings.

These blinds can be fitted either inside or outside the sash, and are operated with ease without machinery or weights. They are made to coil above or below, as shown in cut. Can be furnished in any kind of wood. Unequaled for elegance, durability, and simplicity. Indorsed by many of the leading architects in the country, and in use in some of the handsomest buildings.

We also manufacture **WILSON'S PATENT Rolling Steel Shutters**

These blinds are operated on same principle as above (being self-coiling). They are used for closing store-fronts and all window and doorways that are required to be perfectly fire and burglar proof. Also, Rolling Wood Blinds for Store-Fronts, Book-Shelves, School Partitions, and other purposes.

A list of public and private buildings fitted with our Blinds sent on application. Architects and owners are invited to send for working models, catalogues, and price-lists.

**WILSON & JAMES,** 68 Beekman St., New York. Two Prize Medals at Philadelphia.

**THREE ADMIRABLE NEW BOOKS.**

**The School-Boy.** By OLIVER WENDELL HOLMES. Poem read at the Centenary of Phillips Academy, Andover, Mass., June 10, 1873. Illustrated with many excellent Engravings on Wood, designed by J. Appleton Brown, Waud, Sheppard, Merrill, and Hitchcock. Uniform in size and general style with the choice and popular holiday books of previous years. "The Hanging of the Crane," "Mabel Martin," "The Skeleton in Armor," "Christmastide," etc. Handsomely bound in cloth, \$4.00; morocco or tree calf, \$5.00.

A beautiful poem, finely illustrated, tastefully bound: a choice holiday gift-book.

**An Account of the Life and Times of Lord Bacon.** Abridged from the "Life and Letters of Bacon," by JAMES SPEDDING. Uniform with Popular Edition of "Bacon's Works." With a Portrait. Two vols., crown 8vo, \$5.00; half calf, \$9.00.

This edition omits no essential part of Mr. Spedding's voluminous work, but presents a connected and complete narrative of Bacon's life and remarkable career, including enough of the political and literary history of England to make clear Bacon's position, circumstances, and influence. It is a very noteworthy addition to biographical literature.

**The College Book.** Edited by CHARLES F. RICHARDSON and HENRY A. CLARK. 1 volume, 4to, full gilt, \$15.00.

A royal volume, containing historical and descriptive accounts, principally by professors or graduates, of twenty-four leading American Universities, Colleges, and the United States Military and Naval Academies, with 60 full-page Heliotype Illustrations of buildings connected with these institutions.

\* For Sale by all Booksellers.

HOUGHTON, OSGOOD & CO., Boston.

**IMPROVED PRISON LOCKS.**

All Architects should have our 36 page Illustrated Catalogue of Prison Locks.

ADDRESS

YALE LOCK MFG. CO., STAMFORD, CONN.  
New York Salesroom, No. 53 Chambers Street.

**T. B. STEWART & CO.**  
SLATE, MARBLE, AND WOOD MANTELS,

AND  
Slate Goods of Every Description,

(QUARRIES AND MANUFACTORY, FAIR HAVEN, VT.)

75 & 77 West Twenty-Third Street, New York.

**WROUGHT IRON BEAMS & GIRDERS**

THE UNION IRON MILLS, Pittsburgh, Pa., Manufacturers of Improved Wrought Iron Beams and Girders (patented).

The great fall which has taken place in the prices of Iron, and especially in Beams used in the construction of FIRE-PROOF BUILDINGS, induces us to call the special attention of Engineers, Architects, and Builders to the undoubted advantages of now erecting fire-proof structures; and by reference to pages 52 and 64 of our Book of Sections—which will be sent on application to those contemplating the erection of fire-proof buildings—THE COST CAN BE ACCURATELY CALCULATED, the cost of insurance avoided, and the serious losses and interruption to business caused by fire. These and like considerations fully justify any additional first cost. It is believed that, were owners fully aware of the small difference which now exists between the use of Wood and Iron, in many cases the latter would be adopted. We shall be pleased to furnish estimates for all the Beams complete, for any specific structure, so that the difference in cost may at once be ascertained. Address

CARNEGIE BROS. & CO., Pittsburgh, Pa.

**LESTER**

beautiful and perfect machine, warranted.  
MILLERS FALLS CO., 74 Chambers St., New York

Scroll Saw, Circular Saw, Turning Lathe, Lathe Tools, Emery Wheel, and Drilling Attachment. All for \$5.00.

**SPECIALTIES IN PLUMBING GOODS,**

Having for their special object **Cleanliness, Durability,** and the exclusion of Sewer Gas. Jennings' Sanitary Depot, A. G. MYERS, Manager, 94 Beekman Street, New York.

**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer Gas that has yet been invented.

**A POSITIVE SEAL** Against sewer-gas, absorbed gases, and back water. Seal is not broken by syphoning or evaporation. Self-scouring, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers,

B. P. BOWER & CO., 104 & 106 St. Clair St., Cleveland, O.

**MAKE YOUR OWN GAS**

GAS GENERATORS, FOR LIGHTING Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.

Send for CIRCULAR.

WALWORTH MANUF. CO. No. 69 Kilby Street, BOSTON, MASS.

**THE EUREKA VENTILATION CO.**

OFFICE AND MANUFACTORY, 74 CHARLESTOWN STREET, BOSTON, MASS.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

Theatrical Fresco only. Prices moderate. Refer to our first-class Scenery and Supplies delivered at any point, however distant. Correspondence solicited.

LAFAYETTE W. SEAVEY, Established 1865. No. 8 LAFAYETTE PLACE, NEW YORK



**SAYLOR'S PORTLAND CEMENT.**

Approved, recommended, and used by Architects, Engineers, and Builders of the highest authority. New York and Brooklyn Bridge, Department of Docks, and Croton Aqueduct, New York; new Capitol at Albany; U. S. Government Works (forts, light-house foundations, canal locks, etc.); floors for breweries, sugar houses, ice-houses, cellars, and stables, and for heavy foundations, etc. For sale by all dealers in masons' materials.

JOHNSON & WILSON, Gen'l Agents, 93 Liberty St., New York

**PRIZE MEDALLISTS.**  
1862; 1865; 1867; 1872; 1873; AND ONLY AWARD AND MEDAL FOR SELF-COILING STEEL SHUTTERS AT CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**  
ORIGINAL INVENTORS AND SOLE PATENTEES OF  
**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, improved Rolling Wood Shutters

OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Tilford a new Buildings, &c., &c., and are indorsed by the leading architects of the world.

OFFICE AND MANUFACTORY,  
162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**  
76 READE STREET, NEW YORK,  
WORKS, DARLINGTON, N. J.

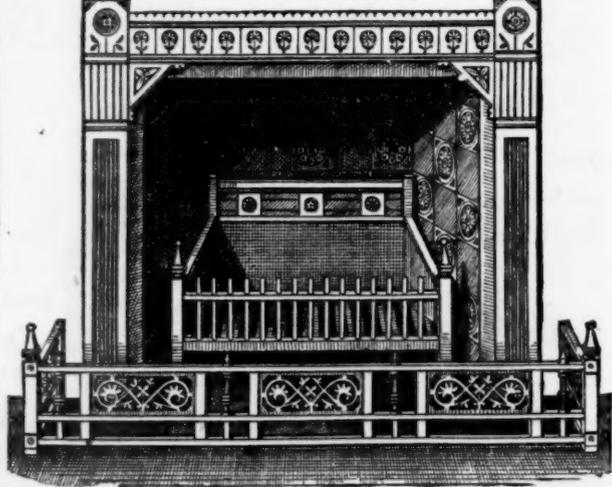
Lock and Hardware Manufacturers,  
DESIGNERS, FOUNDERS, AND WORKERS

**BRONZE AND BRASS.**  
Architects' Designs faithfully executed.

Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)  
Union Sq., 2d door from Broadway, (17th St. side),  
NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile.  
HAVE NO OTHER WAREHOUSES.

# AMERICAN ARCHITECT

## AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART.

VOL. IV. No. 157.]

SATURDAY, DECEMBER 28, 1878.

[PRICE 15 CENTS

### BUILDERS' SUPPLIES.

#### BARTLETT, ROBBINS & CO.

ARCHITECTURAL IRON WORK AND GAS MACHINES.

HEATING AND VENTILATING OF PUBLIC AND PRIVATE BUILDINGS A SPECIALTY.

24 LIGHT STREET, BALTIMORE.

#### WALWORTH MANUFACTURING CO.,

69 Kilby Street, Boston,

ENGINEERS AND CONTRACTORS FOR

STEAM AND HOT WATER WARMING AND VENTILATION IN PUBLIC BUILDINGS, PRIVATE RESIDENCES, GREENHOUSES, ETC.

MANUFACTURERS OF SOLAR GAS MACHINES.

Correspondence solicited. Plans and estimates furnished on application.

#### "HOTCHKISS" TOWER CLOCKS,

MANUFACTURED BY

SETH THOMAS CLOCK CO., THOMASTON, CONN.

Prices \$100 to \$6,000.

WARRANTED ACCURATE, STRONG, DURABLE. OFFICE, 581 BROADWAY, NEW YORK.

Send for Illustrated Catalogue.

#### "MINTON'S ART AND TILES."

ENAMELLED

(China Works, Stoke-Upon Trent.) Also, The Campbell Brick and Tile Co.'s ENCAUSTIC AND GEOMETRICAL TILES, MOSAICS, ETC.

For Churches, Banks, Halls, Vestibules, and Hearths; Outside Decorations, Flower Boxes, Etc. THOS. ASPINWALL & SON, 604 Broadway, NEW YORK.

The only representatives in the United States for the above firms.

#### ASPHALT (FELT) ROOFING.

WARREN'S NEW PATENT

FELT AND GRAVEL ROOFING,

Substitutes NATIVE ASPHALT for Coal-Tar materials for these roofs.

The very best and most durable material for flat roofs. Also, Native Asphalt and Asphaltic Cement for Concrete Walks and Pavements.

Roofers and pavers supplied with the above, and with Warren's original Coal Tar Roofing and Paving Materials. Send for circulars and samples.

WARREN CHEMICAL AND MANUF'G CO., 25 MAIDEN LANE, NEW YORK. 127 STATE STREET, BOSTON.

#### TILES FROM ALL PARTS OF THE

WORLD, FOR

BANKS, PUBLIC BUILDINGS, and PRIVATE HOUSES. References given to the Tile Work throughout the United States and British Provinces

AGENT FOR THE AMERICAN ROOFING TILE

Contracts Solicited

O. A. WELLINGTON, HOUSEHOLD ART ROOMS, No. 171 TREMONT STREET, BOSTON.

#### HUGH SISSON & SON,

Importers, Dealers, and Manufacturers of

MARBLE.

INTERIOR MARBLE WORK AND MONUMENTAL WORK A SPECIALTY

Salesrooms, No. 140 W. Baltimore St.; Steam Marble Works, North and Monument Streets, BALTIMORE, MD.

#### ELECTRIC BELL, AND ANNUNCIATORS,

SPEAKING TUBES,

AND BURGALAR ALARMS,

For Public and Private Buildings.

THE BEST IN USE.

S. W. FULLER,

63 Devonshire Street, Boston.

#### HAWTHORNE & TUCKER,

PLUMBERS,

16 PROVINCE STREET, BOSTON

Estimates for Plumbing made, and work done in any part of the United States or Provinces

### BUILDERS' SUPPLIES.

#### THE FIRE-PROOF BUILDING COMPANY

OF NEW YORK.

LEONARD F. BECKWITH, Pres't. E. GILLET, Vice-Pres't.

Hollow Blocks of any pattern, uniting strength and resistance to fire and water. The Hydraulic Lime of Teil (France), one of the strongest cements known, is largely used in this manufacture. The blocks do not conduct heat, cold, or sound, and weigh 60 per cent less than brick. Fire-proof Partitions, Floor Arches between iron or wooden beams, and ceilings under iron or wooden beams, erected in following buildings:

Western Union Telegraph, Orient, and Queens' Ins. Coal and Iron Exchange, Museum of Natural Hist. Equitable, Staats Zeitung, Hudson R. R. Fr. Depot. Wm.burgh Savings Bank, N. Y. Hospital, Drexel, Windsor, & Wm. Water Hotels, Cluny, & Young's Hotel, Bos'n, Syracuse Savings Bank, West Point Military Hosp., Columbia College, Tribune, Coryell, & Vanoclear Flats, Baltimore Safe Deposit Co. Peabody Inst., Baltimore, Peabody Museum, N. Haven, Westmoreland, & Ellee Flats, Sidewalks laid at Lenox Library, Tribune, etc.

Hollow Burnt Clay Bricks, for flat and curved arches, partitions, etc., and Skewbacks for brick arches.

Sole agents for the U. S. for HYDRAULIC LIME OF TEIL, and LAFARGE PORTLAND CEMENT.

Sole agents for the U. S. for METTLACH ENCAUSTIC TILES, laid in Tribune, Staats Zeitung, Mineral Spa, Central Park, Belvidere Hotel, etc.

Sole agents for the Atlantic States for WIGHT'S FIRE-PROOF COLUMNS.

Our Fire-proof work is the only one approved by the New York Board of Fire Underwriters and the Superintendent of Buildings, after severe public tests.

Office Room 64 COAL AND IRON EXCHANGE, 21 Courtland Street, New York. Represented in Boston by BOORMAN & Co., 5 Doane St.

#### AMERICAN ENCAUSTIC TILE,

Acknowledged by experts to be

THE BEST IN THE WORLD.

Manufactured by the

AMERICAN ENCAUSTIC TILING CO. (Limited.)

OFFICE, 325 AND 327 GREENWICH ST., NEW YORK.

Designs and estimates for Public Buildings, Halls, Churches, Vestibules, and for External Decoration, furnished on application.

#### E. HOWARD & CO.

MANUFACTURERS OF CLOCKS AND WATCHES

CLOCKS FOR PUBLIC BUILDINGS

114 Tremont Street, Boston, and 692 Broadway, New York

#### MINTON'S TILES.

PLAIN AND ENCAUSTIC

FOR PUBLIC BUILDINGS AND DWELLINGS.

As laid by us in

THE CAPITOL AT WASHINGTON.

And in numerous Churches, Banks, and Dwellings in every part of the Country,

Glazed and Enamelled Tiles for Mantels, Hearths, Wainscoting, &c., and for Exterior Decoration.

MILLER & COATES,

270 N. PARK STREET NEW YORK.

#### THE NEW ENGLAND GRANITE WORKS

HARTFORD, CONN., and 121 BROADWAY, N. Y.

Quarries at Westley, E. I.

MONUMENTAL AND BUILDING WORK

of every description, all the varieties of

AMERICAN AND FOREIGN GRANITE.

UNEQUALLED FACILITIES OFFERED TO THE TRADE.

J. G. BATTERSON, Pres't. H. B. BATTERSON, Sec'y.

DIRECTORS.

J. G. BATTERSON, C. B. CAMPFIELD, H. A. BATTERSON

G. T. BATTERSON.

CARL CORNBAD, Sculptor.

#### WHITTIER MACHINE CO.

Manufacturers of Steam and Hydraulic

ELEVATORS,

STEAM ENGINES, BOILERS, AND MACHINERY.

No. 117 1/2 Tremont Street, Boston.

Office in the New England Mutual Life Insurance Co's

Building, Post Office Square,

and 126 Broadway, New York

CHARLES WHITTIER, Pres't. A. C. WHITTIER, Treas.

#### OTIS BROTHERS & CO.

SAFETY STEAM AND HYDRAULIC

ELEVATORS.

A specialty for a quarter of a century.

BUILDERS OF THE HALE HYDRAULIC ELEVATOR.

No. 348 Broadway, New York.

### BUILDERS' SUPPLIES.

#### NICHOLL & MILLER,

OHIO BUILDING STONE.

GRIND AND SCYTHE STONE,

From our FLORENCE and AMHERST QUARRIES.

Also, from NEW YORK, NEW JERSEY, and MASSACHUSETTS

111 Broadway, NEW YORK, and AMHERST, O.

#### MITCHELL, VANCE, & CO.,

Designers and Manufacturers of

GAS FIXTURES,

ORNAMENTAL METAL WORK, CLOCKS AND BRONZE

ARCHITECTS' ORDERS SOLICITED.

Special designs submitted on application.

WAREHOUSES, 536 AND 538 BROADWAY, NEW YORK.

MANUFACTORY, 24th AND 25th Sts., AND 10th AVENUE, N. Y.

#### FISHER & BIRD,

Workers in all kinds of Foreign and Domestic

MARBLE,

97 TO 103 EAST HOUSTON ST., NEW YORK.

Established 1830.

Among our notable decorations are: The Illinois New State House; Palace Hotel, San Francisco; Baldwin's Hotel, San Francisco; Insurance Building, 10th and Chestnut Streets, Philadelphia; Mutual Life Insurance Building, Boston; Orient Mutual Insurance Building, New York; Union College, Schenectady; and numerous Churches, Private Residences, etc., etc., throughout the country. We solicit the opportunity to estimate upon all classes of work, viz., Tiling, Wainscoting, Staircases, Mantels, etc. Come for work and marble work of every description.

#### WILSON & HUGHES STONE CO.

Are ready to estimate on contracts of any size for

furnishing their celebrated Amherst, Ohio,

BUFF AND LIGHT DRAB SANDSTONE, IN BLOCKS,

OR CUT AND SET

Also,

AMHERST AND INDEPENDENCE GRINDSTONES,

And OHIO MINERAL AND STONE PAINTS

Fire-Proof Stove Cement and Stove Putty ground in Oil

OFFICE 170 SUPERIOR STREET, CLEVELAND, OHIO.

#### SPANISH FLOOR TILES. "NOLLA MO-

SAICS." Floor Tiles, beautiful in color and design, for

Dwellings, Churches, and Public Buildings.

SPANISH WALL TILES. White, Glazed, Valencia,

Tiles for Walls and for decorative painting.

PRINTED FIGURED TILES of Spanish designs, for

Wainscoting, Mantels, Jardinieres, etc.

Floors of "Nolla Mosaisca" can be seen at the "Rock-

ingham," corner of Broadway and 56th Street. Imported

and for sale by JOHN CHADWICK, Sole Ag't for U. S.

49 Broadway, N. Y.

C. E. PARKER, Agent, 14 Exchange Place, Boston.

#### MINTON'S ENCAUSTIC TILES.

SHARPLESS & WATTS,

1825 MARKET STREET, PHILADELPHIA,

Established 1850 as Agents for

MINTON'S TILES AND TESSELATED PAVEMENTS.

Specialties in Glazed, Encaustic, Majolica, and Art-

Painted Tiles, for Furniture, Hearths, Fireplaces, etc.

New and original designs continually received.

#### STEAM WARMING APPARATUS.

HIGH AND LOW PRESSURE.

HOUSE WARMING A SPECIALTY.

Pamphlet with more than 1,000 references sent on applica-

tion.

WYLLYS H. WARNER,

114 LEONARD STREET, NEW YORK,

and 32 West Railroad Street, Syracuse.

#### ELEVATORS. — COOKE & BEGGS.

No. 6 COURTLAND ST., NEW YORK.

Works at Paterson, N. J.

PATENT SAFETY STEAM ELEVATORS

for Public and Bank Buildings, Hotels, Private Dwell-

ings, etc.

SAFETY, SMOOTHNESS, AND THOROUGH WORKMANSHIP

GUARANTEED.

Send for Circular.

**BUILDERS' SUPPLIES.**

**GOLD'S WROUGHT IRON HEATERS.**

THE "HEALTH" AND "TUBULAR"

Manufactured by the

GOLD'S HEATER MANUFACTURING CO.  
114 LEONARD ST., NEW YORK.

Send for Pamphlet.

F. GOLD, Pres't. WILLYS H. WARNER, Treas'r.

TO ARCHITECTS AND BUILDERS.

**MORTAR BLACK,**

Now being used largely as a substitute for Lamp Black mixes readily and does not rot the mortar. For sale only by *Walpole Color and Chemical Works,*

HENRY D. DUPEE, Proprietor,  
79 KILBY STREET, BOSTON

J. H. BURT & CO., Carpenters and Builders,  
Blue Hill Avenue, Mattapan (Ward 24), Boston.

**MENEELY & KIMBERLY,**

Bell Founders, Troy, N. Y.,

Manufacture a superior quality of Bells. Special attention given to CHURCH, SCHOOL, and COURT-HOUSE BELLS. Illustrated Catalogue sent free.

JOHN MACK, Plain and Ornamental Plasterer,  
41 Cambridge Street, Boston.

**MANTELS AND GRATES.**

RANKIN'S PATENT makes the Cleanest, Cheap est, and Hottest Fire. Avoid infringements, and send for Circular to

C. S. RANKIN & CO.,

ARCHITECTURAL IRON WORKS,  
Manufacturers of all kinds of Iron Work for BUILDINGS, JAILS, ETC.

187 W. PEARL ST., CINCINNATI, O.

**BUILDING MARBLE.**

Branch yard of the RUTLAND MARBLE CO., 198 Cambridge Street, Boston. JOHN D. ALLAN, Agent.  
Wall Capping, Sills, Lintels, Steps, Tiles, etc., in Roman and Continental Marble, furnished at low prices.

**PRESSED BRICK.**

STOCK AND COMMON

MANUFACTURED BY

FLETCHER & THOMAS,

Indianapolis, Ind

All brick warranted. Send for price list and samples.

**STEAM HEATING**

BY

**GILLIS & GEOGHEGAN,**

Nos. 116 & 118 Wooster St., New York.

See our work at the Cathedral, 60th St. and 5th Av.; Drexel Building, cor Wall and Broad; Bennett Building, Fulton and Nassau, etc.

Architects and owners promptly furnished with specifications and estimates.

**ROBERT LOGAN,**

Importer and Dealer in Foreign and Domestic *Granite Monuments, Columns, etc.*

Also, GRANITE FOR BUILDING PURPOSES,

MARBLE AND ENCAUSTIC TILING,

129 FULTON STREET . . . NEW YORK.

**ARCHITECTS.**

P. B. WIGHT,

CONSULTING ARCHITECT,

78 DEARBORN STREET, CHICAGO; ASTOR HOUSE, N. Y.

Consultations on matters pertaining to Fire-Proof Construction, Foundations, Drainage, Sanitary Work, Ventilation, Machinery, Valuations, Interior Decorations, and Furniture. Manager of the Meaker Hatchway Protectors.

RICHARD M. HUNT,

ARCHITECT,

COAL AND IRON EXCHANGE,  
NEW YORK CITY.

W. W. GOODRICH, C. E., ARCHITECT  
AND SANITARY ENGINEER  
KINGSTON, N. Y.

Plans, Specifications, and Estimates furnished for all classes of Public or Private Buildings, Monumental Designs, etc.

CHARLES E. ILLSLEY, A.M., C.E.,  
ARCHITECT,  
Room 17, Life Insurance Building,  
ST. LOUIS, MO.

Special attention to Churches, Schools, and other public buildings.

WALTER DICKSON, ARCHITECT, PERRY BUILDING,  
Albany, N. Y.

**SANITARY ENGINEERING.**

EDWARD S. PHILBRICK, C. E.,

12 WEST ST., BOSTON, MASS.,

Offers advice and superintendence in

CONSTRUCTION OF WORKS,

PLUMBING, DRAINAGE, AND VENTILATION,

And has no interest in any patent right.

**BUILDERS' SUPPLIES.**

E. VAN NOORDEN,

327 HARRISON AVENUE . . . BOSTON,  
SHEET METAL CORNICES, HAYES'S PATENT VENTILATING SKY-LIGHTS, WINDOW CAPS, ROOFING GUTTERS, ETC., ETC.

**ARCHITECTURAL IRON AND JAIL WORKS.**

M. CLEMENTS,

MANUFACTURER OF

Iron Railing, Bank Vaults, and Jail Cells, Iron Stairs, Fire-proof Buildings, Wrought Iron Columns and Girders; Iron Arches, Plain and Corrugated; Fire-proof Shutters, Doors, etc

BAYMILLER STREET, near Sixth and C. H. & D. R. R. Depot, CINCINNATI, OHIO.

**PATENT MINERAL WOOL.**

ENTIRELY FIRE-PROOF AND UNDECAYING. THE BEST INSULATOR OF HEAT, COLD, AND SOUND.

For lining Roofs, Walls, Ice-Houses, Refrigerators, Furnaces, Heater-Pipes, Boilers, etc.

ALEXANDER D. ELBERS,

P. O. Box 4461. 26 1/2 Broadway, New York.

IRON STABLE FITTINGS. BUBIER & CO.,  
29 Exchange St. BOSTON.

**PATENTS.**

F. A. LEHMANN, Solicitor of Patents, Washington, D. C.  
NO PATENT NO PAY. Send for Circular.

**FIRE ON THE HEARTH**

STOVES & HEATERS.

COMBINATION OF

FIRE-PLACE, CLOSE STOVE, AND FURNACE.

The attention of Architects and Builders is especially invited to our new

**FIRE-PLACE HEATERS,**  
Adapted for the use of any kind of fuel, and the only heater especially adapted for the use of SOFT COAL and WOOD. Send for description to

THE OPEN STOVE VENTILATING CO.,  
115 Fulton St., New York.

**DECORATORS.**

**W. J. MCPHERSON,**

(Established A.D. 1848.)

MURAL PAINTER,  
DESIGNER,

*Ecclesiastical Decorator,*

AND

ART STAINED GLASS MANUFACTURER,

440 TREMONT STREET,

BOSTON, MASS.

Should you want Ornamental Glass, write for particulars to



**STAINED GLASS.**

Thirty years' experience in Stained Glass enables the subscriber to produce Modern and Medieval styles of work equal to any European examples, for Churches, Private Residences, Halls, etc.

The value of the work is attained by a careful selection of colors in Cathedral and French Glass of his own importation.

Designs in accord with architects' plans furnished at short notice. Reference of work at office

SAMUEL WEST, 115 Eliot St., Boston

FRANK HILL SMITH,

171 1/2 TREMONT STREET.

BOSTON . . . . . MASS.

**COOK, REDDING & CO.**

149 CONGRESS ST., BOSTON,

Ornamental, Stained, and Cut Glass,

FOR

Churches, Public Buildings, and Private Residences.

**DECORATORS.**

JOHN LAFARGE,

MURAL DECORATION,

51 W. Tenth St., New York and Newport, R. I.

**Society of Decorative Art,**

34 East 19th Street,

NEW YORK.

The Society is prepared to undertake every kind of DECORATIVE NEEDLEWORK,

And special attention is paid to the RESTORATION of ANTIQUE EMBROIDERY.

Special terms are made and careful estimates given to

ARTISTS, ARCHITECTS, AND DECORATORS

Generally, who are assured that their designs will be carefully reproduced, and their directions carefully followed. Orders are earnestly solicited.

**Fresco Decoration.**

**EMMART & QUARTLEY,**

Designers, Decorators, and Painters,

32 PARK AVENUE, BALTIMORE, MD.

Designs for Halls, Churches, Theatres, and Private Mansions made and executed in harmony with the plans of Architects.

**SLATE MANTELS**

Of the latest and most beautiful designs, and all other Slate work on hand or made to order. No. 1210 Ridge Avenue. JOSEPH S. MILLER successor to Wilson & Miller, Philadelphia, Pa. Send for Illustrated Price-List

**Donald MacDonald,**

**GLASS STAINER AND DECORATOR**

No. 6 Hayward Place,

BOSTON

THE

**ARCHITECTURAL TERRA COTTA WORKS**

Successors to CHICAGO TERRA COTTA WORKS.

Established . . . Chicago, 1868 — Boston, 1878.

S. E. LORING, Consulting Architect, Sup'r.

OFFICES AND FACTORIES.

CHICAGO: Fifteenth and Laflin Sts.  
BOSTON: Boston Fire Brick Works, 394 Federal Street.



**INLAID WOOD FLOORS.**

ORNAMENTAL WOOD BORDERS

Designs and Estimates free.

National Wood Manuf'g Co.,

950 Broadway, near 23d St., New York

PHILIP A. BUTLER,

DECORATOR AND DESIGNER,

No. 17 FENNER STREET, BOSTON.

HENRY B. JONES & CO.

IMPORTERS, JOBBERS, AND RETAILERS OF

PAPER HANGINGS.

611 WASHINGTON STREET, BOSTON.

(Established 1842.)

L. HABERSTROH & SON,

FRESCO PAINTERS,  
AND INTERIOR DECORATORS,

No. 17 SCHOOL STREET, BOSTON.

*Raphael and Michelangelo.*

A Critical and Biographical Essay. By CHARLES C. PERKINS. 8vo. Many Illustrations, including several Heliotypes. \$5.00.

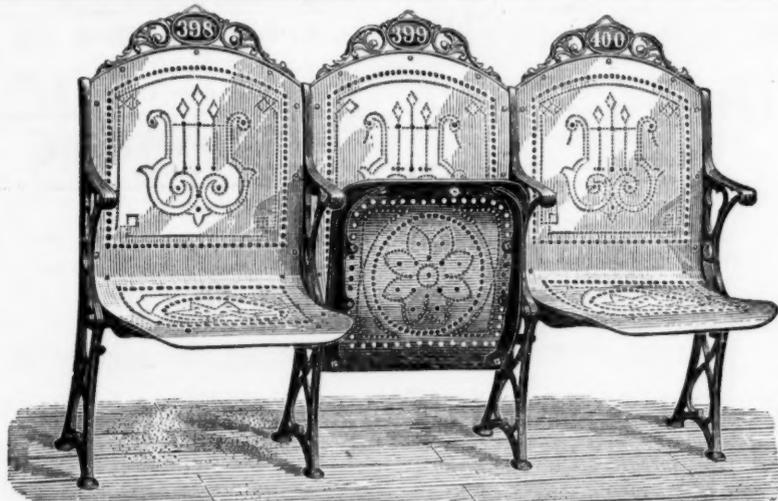
The long devotion of Mr Perkins to the study of art has borne noble fruit in this beautiful volume. The idea of combining in one work a series of interlinked sketches of the two great representative artists of the age of Julius II. and Leo X. was in every respect fortunate; for they respectively illustrate power and beauty, sportive and earnest labor, as no other contemporaries. . . . His style is that of a scholar and a man of taste—simple, lucid, graceful, and even throughout. It has much of the quality of that of Hermann Grimm, in his two similar biographies. The profuse illustrations—although some of them are rather coarsely printed—are a positive boon to the reader.—*New York Tribune*

HOUGHTON, OSGOOD & CO., Boston.

LABOR MARKET.

[REPORTED ESPECIALLY FOR THE AMERICAN ARCHITECT AND BUILDING NEWS, AND REGULARLY REVISED.]

TRADES.	Baltimore.	Boston.	Chicago.	Cincinnati.	Indianapolis.	New York.	Ottawa (Can.)	Philadelphia.	San Francisco	St. Louis.
1 BRICKLAYER	1.75 @ 2.75	2.00 @ 2.50	1.25 @ 1.75	1.50 @ 1.75	2.00 @ 3.00	2.50 @ 2.75	1.50 @ 2.00	2.00 @ 2.50		2.25 @ 2.50
2 Brick Mason (Fronts)	3.00 @ 4.00	2.00 @ 3.00	2.50 @ 3.25		3.50 @ 4.50	3.00 @ 3.50	1.75 @ 2.25	2.50 @ 3.00		3.00
3 CARPENTER	1.50 @ 2.25	1.50 @ 2.25	1.25 @ 1.75	1.75 @ 2.25	1.25 @ 1.75	2.50 @ 2.75	1.25 @ 2.00	1.50 @ 2.25		1.50 @ 2.00
4 Cabinet Maker	2.50 @ 3.25		1.75 @ 2.25			1.50 @ 3.00	1.50 @ 2.00			
5 Finisher	2.00 @ 2.50		1.50 @ 2.00		1.50 @ 2.00	1.50 @ 3.00	1.25 @ 1.75			1.50 @ 2.00
6 FOUNDRYMAN			1.25 @ 1.75	1.50 @ 2.50	2.00 @ 2.75	2.00 @ 2.50	1.00 @ 1.50			2.25 @ 2.50
7 Blacksmith	1.50 @ 3.00	1.50 @ 2.75	1.50 @ 2.00	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 2.00			1.50 @ 2.50
8 Whitesmith			1.75 @ 2.25	1.50 @ 2.50		2.00 @ 2.50	1.25 @ 1.75			
9 Galvanized Iron Worker	2.00 @ 2.35	1.50 @ 2.75	1.75 @ 2.25	2.00 @ 3.50	1.50 @ 2.00	1.75 @ 2.00	1.50 @ 2.00			2.25 @ 2.50
10 GAS FITTER	2.00 @ 2.50	2.00 @ 3.00	1.75 @ 2.50	2.50 @ 3.00	1.75 @ 2.25	2.00 @ 3.00	1.75 @ 2.00			2.00 @ 3.00
11 LABORER	1.00 @ 1.50	1.00 @ 1.50	1.00 @ 1.25	1.00 @ 1.50	1.00 @ 1.25	1.50 @ 2.75	.80 @ 1.00	1.20 @ 1.50		1.00 @ 2.00
12 PAINTER	1.50 @ 2.50	2.00	1.75 @ 2.25	1.75 @ 2.00	1.75 @ 2.25	1.50 @ 2.00	1.00 @ 1.75	2.00 @ 2.50		2.00 @ 2.50
13 Glazier	2.50 @ 3.00	2.00	2.50 @ 3.00	3.50 @ 4.00		1.50 @ 2.00	1.50 @ 1.75	2.00 @ 2.50		
14 Grainer	2.50 @ 3.00	2.00	2.50 @ 3.00	3.50 @ 4.00		2.00 @ 3.00	1.75 @ 2.50			3.50
15 Paper-Hanger	.75 @ 2.50		per roll.		15c. pr. roll.	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00
16 PLASTERER	1.50 @ 2.00	2.00	1.50 @ 2.00	2.00	1.50 @ 2.00	2.00 @ 2.50	1.25 @ 1.75	1.75 @ 2.00		2.25 @ 2.75
17 Stucco-Worker	2.00 @ 2.50	2.00 @ 2.50	1.75 @ 2.25	1.50 @ 2.50		2.00 @ 2.50	1.50 @ 2.25			2.25 @ 2.75
18 PLUMBER	2.25 @ 3.00	2.00 @ 3.00	2.25 @ 3.00	2.50 @ 3.50	2.00 @ 2.50	2.50 @ 3.50	1.50 @ 2.50			2.50 @ 3.50
19 QUARRYMAN		3.00 @ 3.50	quarried		1.25 @ 1.50	1.25 @ 1.50	1.00 @ 1.50	1.50 @ 1.75		1.50 @ 1.75
20 Stone Mason	1.50 @ 2.50	1.00 @ 1.50	1.00 @ 1.50	2.00 @ 2.50	1.75 @ 2.00	2.25 @ 2.50	1.50 @ 2.00	1.75 @ 2.25		2.00 @ 2.50
21 Carver	3.00	3.00 @ 3.50	2.00 @ 3.00	1.25 @ 1.75	3.00	2.00 @ 2.50	3.50 @ 6.00	2.75 @ 3.25		
22 Pointers and Washers	2.50 @ 3.00	2.50 @ 3.00	1.50 @ 1.50	1.50 @ 1.75		1.50 @ 2.00	1.00 @ 1.25	2.25 @ 2.50		
23 Rubber	1.50 @ 2.00	1.25	1.10 @ 1.25	2.00 @ 2.50	1.00 @ 1.25	2.50 @ 3.00	2.00 @ 2.50	2.25 @ 2.75		
24 Stone-Cutter	2.25 @ 3.00	2.50 @ 3.00	1.50 @ 1.75	2.50 @ 3.00	2.75	2.00 @ 2.50	1.50 @ 2.00	2.25 @ 2.75		2.00 @ 2.50
25 Stone-Setter	2.00 @ 2.25	2.50	1.50 @ 1.75	2.00 @ 2.50	1.50 @ 2.00	2.00 @ 2.25	1.50 @ 1.75	1.75 @ 2.25		2.00 @ 2.25
26 ROOFER (Tin)	2.50	2.50	1.75 @ 2.00	3.50 @ 4.00	2.00	2.00 @ 2.25	1.25 @ 2.00	1.75 @ 2.25		3.00
27 Slat	2.25 @ 3.00	2.00	2.00 @ 2.75	1.75 @ 2.25	1.50 @ 2.00	2.25 @ 2.75	1.75 @ 2.25			1.50 @ 2.50
28 STAIR BUILDER	2.50 @ 3.00	2.50 @ 3.00	2.00 @ 2.50	2.00 @ 2.50	2.50 @ 3.00	2.00 @ 2.50	1.50 @ 2.00			2.00 @ 3.00



ARCHITECTS AND BUILDERS

WILL ADD MUCH TO THE BEAUTY OF THEIR BUILDINGS BY USING

GARDNER'S PERFORATED THREE-PLY VENEER SEATING, Which is Ornamental, Durable, and Cleanly.

We refer to the following new and elegant buildings fitted up with our goods:—

- Morris Plains, N. J., Insane Asylum.
- New York Hospital.
- American Museum of Natural History, New York.
- Institution for Feeble-minded Children, Lincoln, Ill.
- Insane Asylum, Oshkosh, Wis.
- Opera Chairs in new Music Hall, Lewiston, Me., Providence, R. I., and Brooklyn, N. Y.
- Seats in Depots of the Pennsylvania Railroad, at Philadelphia, Pittsburgh, etc.

Messrs. GARDNER & CO.: New York, November 1, 1878.  
 Gents, — The Perforated Opera Chairs put in my Brooklyn Music Hall have proved a great success. They not only furnish the hall in a very attractive style, but for comfort and convenience they are far superior to any upholstered seat I have ever seen. We have the best audiences that Brooklyn can produce, and as yet I have heard nothing but the highest commendation of our seat.  
 Yours very truly, O. G. WALBRIDGE.

(Signed) Please send for Illustrated Catalogue.  
**GARDNER & COMPANY,**  
 Patentees and Manufacturers,  
 376 PEARL STREET, NEW YORK.

SLATE, TIN, AND CORRUGATED IRON ROOFERS.

Correspondence solicited.

CALVANIZED IRON CORNICES. Send for Illustrated Catalogues. Estimates furnished on application.

HAYES'S PATENT SKY-LIGHTS. All work warranted.

CORRUGATED IRON CEILINGS.

Contracts taken in any part of the United States. Our twenty years' experience, and the numberless contracts executed by us, are our guarantee that all orders will be promptly and faithfully filled.

A. KNISELY & CO., 72 & 74 West Monroe St. Chicago, Ill.



**"AUSTIN'S" PATENT EXPANDING CORRUGATED CONDUCTOR OR RAIN-SPOUT.**  
 MANUFACTURED OF GALVANIZED IRON & ALL SHEET METALS.  
 Regular Sizes, 2, 3, 4, 5 & 6 Inch. SPECIAL SIZES MANUFACTURED TO ORDER.  
**AUSTIN, OBDYKE & CO.**  
 SOLE MANUFACTURERS.  
 1705 & 1725 CHESTNUT STREET, PHILADELPHIA, PENNA.  
 WE CLAIM THAT ALL OTHER CONDUCTORS WHICH ADMIT OF EXPANSION ARE INFRINGEMENTS, AND WILL BE TREATED AS SUCH.

- PRINCIPAL AGENTS.
- M. Halliday
  - Hicks & Badger
  - Sidney Shepard & Co.
  - George W. Pitkin & Co.
  - Wasson & Martin
  - McLeod, Beardon & Co.
  - W. H. Scott
  - Kittredge Corlice Co.
  - I. W. Jordan
  - B. G. Carpenter & Co.
  - T. W. Irwin
  - Sellow & Co.
  - New York City
  - Boston, Mass
  - Buffalo, N. Y
  - Chicago, Ill
  - Albany, N. Y
  - Troy, N. Y
  - Portland, Me
  - Salem, O
  - Worcester, Mass
  - Wilkesbarre, Penna
  - Alleghany City, Penna
  - Cincinnati, Ohio

W. & J. SLOANE,

IMPORTERS OF

FINE CARPETS AND RUGS

FROM

INDIA, PERSIA, RUSSIA, SMYRNA, and TURKEY.

649, 651, 655 BROADWAY, NEW YORK.

MORTON'S

Copper and Iron SASH CHAIN,

PATENTED

Aug. 15, 1871.

I would call the attention of Architects and Builders to my

SASH CHAIN,

Manufactured from the best

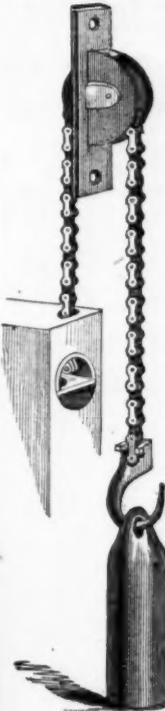
NORWAY IRON.

This Chain is stronger and cheaper than the copper, and will last as long; all that is necessary is to paint the Chain the same color as the frame.

For terms and further information apply to

THOS. S. MORTON,

65 ELIZABETH ST., NEW YORK CITY.



CRANE-BREED & COMPANY CINCINNATI, O.  
**SAFETY BOILERS FOR HEATING**  
 STEAM AND HOT WATER.  
 MOST ECONOMICAL & RELIABLE METHOD WITH AUTOMATIC APPLIANCES, RADIATORS, PIPE COILS, REGISTERS, FITTINGS, STEAM-PUMPS.

TO ARCHITECTS.

The cheapest as well as the most beautiful article yet manufactured for interior ornamental purposes is the SCAGLIOLA AND MAREZZO MARBLE, which closely imitates the rarest and most costly Marbles, Columns, Pilasters, Pedestals, Wainscoting, Wall, and Altar Work.  
**JAS. T. ALLEN & CO.,**  
 25 North Market Street, Philadelphia



THE NEW RUBY FURNACE.

J. A. LAWSON, PATENTEE.

For Hard or Soft Coal. With Non-Clinker Grate.



FURNACES.

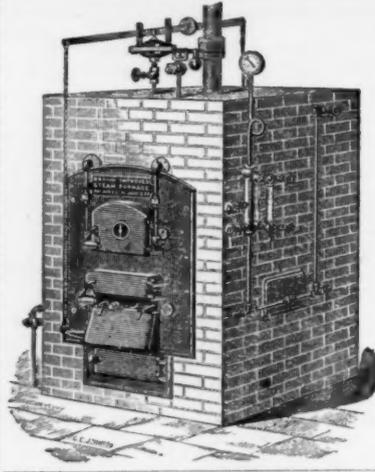
CLINTON Reversible Flue Furnace.

CRYSTAL Surface Burning Furnace.

Wrought Iron, with Brick Lined Fire-Pot. Wrought Iron, with Cast Iron Fire-Pot.

MANUFACTURED BY FULLER, WARREN & CO.,

Troy, New York. Cleveland. Chicago.



BROWN'S IMPROVED STEAM HEATERS.

The attention of Architects and Builders is directed to this NEW AND VALUABLE INVENTION FOR HEATING

PUBLIC AND PRIVATE BUILDINGS,

MANUFACTURED BY

RUFUS G. BROWN & CO.

WALTHAM, MASS.

Boston Office, 59 Bromfield St.

Send for Circular.

DORCHESTER UNION FREESTONE CO. NEW BRUNSWICK YELLOW FREESTONE. The strongest, most durable, and cheapest light colored Building Stone. Blocks of any size furnished to order. 54 Pine Street, New York. G. P. SHERWOOD.



J. & R. LAMB, 59 CARMINE ST., N. Y. CHURCH FURNISHERS. Practical Workers in Sterling Silver, Brass and Bronze, Carved Wood, Decorations, etc. Illustrated Catalogues. Furniture, 10c.; Metalwork 10c.; Decoration 1

McSHANE BELL FOUNDRY

Manufacture those celebrated Bells for Churches, Academies, etc. Price-List and Circulars sent free

HENRY McSHANE & CO., Baltimore, Md.

A. L. FAUCHÈRE & CO.

OFFICE AND WAREHOUSES

1319 and 1321 Broadway, New York,

Importers, Manufacturers, and Dealers in all kinds of foreign and domestic

MARBLE FOR INTERIOR WORK.

Estimates furnished on application.

STEAM PIPE and

THE "AIR SPACE" BOILER COVERINGS

Save 10 to 20 per cent in fuel.

See Am. Architect and Building News, Dec. 15, 1877.

THE CHALMERS-SPENCE COMPANY.

140 Congress Street, Boston, and 9th St., P. R., New York

C. BUTCHER, 107 Devonshire St. BOSTON.

PATENT MARQUETRY FLOORING.

Specimens at Lawrence, Wilds & Co.'s, 42 Cornhill, Boston

Advertisement for The Helio Type Printing Company, featuring a central illustration of a person operating a printing press and text describing their services: 'LUX-FECIT THE HELIOTYPE PRINTING COMPANY 220 DEVONSHIRE ST. BOSTON HELIOTYPE PHOTOGRAPHS in Printers Ink HELIOTYPE PHOTOGRAPHS printed by Steam HELIOTYPE CUTS to print with Type HELIOTYPE FACSIMILE LETTERS, SHOW CARDS &c'

CLASSIFIED ADVERTISEMENTS.

Table listing various categories and sub-categories such as ARCHITECTS, BRICK, GAS FIXTURES, HEATING APPARATUS, etc., with corresponding page numbers.

Table listing various categories and sub-categories such as INTERIOR FINISHING WOOD, PAINTS, PAPER HANGINGS, etc., with corresponding page numbers.

Table listing various categories and sub-categories such as ROOFING FELT, STAINED AND ORNAMENTAL GLASS, etc., with corresponding page numbers.

Table listing various categories and sub-categories such as TILES, WEATHER STRIPS, etc., with corresponding page numbers.

BUILDING MATERIALS.

(Reported for the American Architect and Building News.)

THE NEW YORK MARKET.

WHOLESALE PRICES.

Table listing prices for various building materials including brick, fire brick, doors, and cement.

STONE. Carpo rates, delivered at New York. Table listing prices for various types of stone like Amherst freestone, Berlin freestone, etc.

SLATE. Delivered in New York. Table listing prices for different grades of slate.

TIN PLATES - Duty, 1-10c. Table listing prices for various sizes of tin plates.

ZINC - Duty, sheet, 7c. Table listing prices for zinc sheet and other products.

BOSTON. Prices to Contractors and Builders.

Table listing prices for fire brick, building bricks, and building stone in Boston.

LUMBER. Table listing prices for Michigan pine and other lumber types.

PAINTS AND OILS. Table listing prices for various paint and oil products.

CEMENT. Table listing prices for different brands of cement.

PAINTS AND OILS. Table listing prices for various paint and oil products.

CEMENT. Table listing prices for different brands of cement.

PAINTS AND OILS. Table listing prices for various paint and oil products.

CEMENT. Table listing prices for different brands of cement.

PAINTS AND OILS. Table listing prices for various paint and oil products.

MORTISE LOCKS - Brass face and bolt - easy spring. Table listing prices for different lock models.

DOOR KNOBS. Table listing prices for various door knob styles.

SASH FASTS. Table listing prices for different sash fast models.

SCREWS. Table listing prices for various sizes and types of screws.

STORE DOOR HANDLES - With mortise latch. Table listing prices for door handles.

IRON. Table listing prices for various iron products like beams, plates, etc.

CHICAGO. Prices to Contractors and Builders.

BRICK, LIME, AND CEMENT. Table listing prices for brick, lime, and cement in Chicago.

LUMBER (MICHIGAN PINE). Table listing prices for Michigan pine lumber.

PAINTS AND OILS. Table listing prices for various paint and oil products.

CEMENT. Table listing prices for different brands of cement.

PAINTS AND OILS. Table listing prices for various paint and oil products.

CEMENT. Table listing prices for different brands of cement.

PAINTS AND OILS. Table listing prices for various paint and oil products.

CEMENT. Table listing prices for different brands of cement.

PAINTS AND OILS. Table listing prices for various paint and oil products.

Table listing prices for roofing materials like charcoal, lead, and copper.

Table listing prices for various types of lead and copper.

Table listing prices for different grades of zinc.

Table listing prices for various types of iron.

Table listing prices for different types of wire.

Table listing prices for various types of nails.

Table listing prices for different types of paint and color.

PHILADELPHIA. WHOLESALE PRICES.

Table listing prices for iron, steel, and other materials in Philadelphia.

Table listing prices for various types of nails.

Table listing prices for different types of lumber.

Table listing prices for various types of paint and oil.

Table listing prices for different types of cement.

Table listing prices for various types of paint and oil.

Table listing prices for different types of cement.

Table listing prices for various types of paint and oil.

Table listing prices for different types of cement.

A Word to Manufacturing Firms. Architects are constantly met with requests to furnish to their clients the address of prominent manufacturing firms.

Inventors and manufacturers of Steam Heating Apparatus, Hot Air Furnaces, etc., should not fail to advertise in the paper which prints a weekly list of all the new buildings projected in the country, and a record of important ones being built.

TO ADVERTISERS. The following letter from an architect of Des Moines, Iowa, explains itself: 'The American Architect is especially valuable to us members of the profession who are far removed from the more prominent building centres, and where our opportunities for observation and study of current work are so limited; and its advertising columns, as a ready reference where to obtain building materials not readily found in this section, are worth to me many times the cost of the paper.'

**D. M. MEEKER & SON'S**  
Malleable Iron Hollow Munten Window Sash.  
For Insane Hospitals, Fire Proof Buildings, &c.



The use of these Sashes gives perfect security without the usual gratings that have a prison-like appearance. Wherever introduced both architects and medical superintendents testify to their worth. Manufactured by

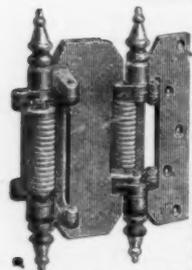
**D. M. MEEKER & SON,**  
Newark, N.J.

Fine Castings of Malleable and Gray Iron, German Silver and Composition: also Patterns a specialty.

**THE COWLES HARDWARE CO.**  
UNIONVILLE, CONN., U. S. A.

MANUFACTURERS OF

(GEER'S)



**Single & Double Acting SPRING BUTTS.**

The Latest and Best.

Investigate before you purchase. Read the following points of superiority:—

These Spring Butts differ in principle from all others: having a Spiral Spring for power, and Toggles for Levers in combination, and when applied to the leaves of the Butts, Exert their greatest Power when the door is closed, and are the only Butts in existence that will by actual test perform the labor claimed for them. They offer less resistance the wider the door is opened, until a point past the right angle is reached, where the power is reversed and the door held open. They will not allow the door to sag. Send for Price List.

**The Automatic Fire Alarm Telegraph.**

IS OPERATED BY THE HEAT OF THE FIRE.

The apparatus is placed on the ceiling of every room, office, and closet in the building, so that a fire can in no instance be more than fifteen or twenty feet from it. It can be adapted to all temperatures.

The alarm is almost instantaneous. It is given directly to the Fire and Protective companies and to the City Fire Alarm Office. It may also be given in the building protected. It may be given by hand.

It tells the Department the exact location of the fire before the companies leave their stations, thus preventing the delay and loss caused by breaking into rooms where there is no fire.

A break in the wire instantly signals itself; but, by a combination of the metallic and earth circuits, does not prevent an alarm of fire, even while the wire is broken.

An incendiary cannot, therefore, prevent an alarm by cutting the line.

**The Automatic Fire Alarm Telegraph**

Prevents the possibility of a large loss.

It saves the drenching a building with water. It saves the breaking up of business. It saves the loss of contracts and customers. It saves insurance. It saves a watchman. It saves the books, and the many other losses that insurance never covers.

The returns of the New York Patrol Committee show that the loss by fires originating in buildings equipped with the AUTOMATIC TELEGRAPH has been diminished over 76 per cent. by the use of this system.

Company's Office: 178 Devonshire St., Room 20, Where the apparatus can be seen.

C. E. GUILD, Pres. P. T. JACKSON, Treas.

ESTABLISHED 1836.  
**JOHN FARQUHAR'S SONS,**  
**SLATE, METAL, AND COMPOSITION ROOFERS,**  
NOS. 20 AND 22 EAST STREET, BOSTON.

Order Box, No. 83 Mechanics Exchange, No. 35 Hawley Street.  
Agents for Warren's Patent Natural Asphalt Roofing. Special attention given to repairs of all kinds of Roofing.

Inventors and Owners of the following Patents: First Patent Fastener for securing Slates or other covering to Iron Purloons where the roof is wholly of Iron. SECOND. A Roof composed of Wooden Rafters encased in Asbestos, Sheet Metal, or other fire-proof material, to which Iron Parlines are fastened, and the slates or other covering secured by our Patent Fastener. The slates are then rendered underside with hair mortar or any other material. The object intended being a Light Fire-proof Roof, avoiding all condensation and preventing leakage.

**EASTERN ROOFING SLATES**

FROM MONSON AND BROWNVILLE, MAINE.  
**CLEMENT, HIGBEE & CO.**

GENERAL AGENTS,  
Piper's Wharf, 474 Atlantic Avenue,  
BOSTON, MASS.

These Maine Slates are the best and cheapest in the market. They are also the strongest, smoothest, and most uniform, and the only perfectly unfading slate in the world.

THE AKRON PIPE  
FISKE & COLEMAN,  
New England Agents for  
**AKRON**  
SEWER PIPE COMPANY,  
72 WATER STREET, BOSTON.

FIRE BRICK, Enameled Brick, CHIMNEY TOPS, Flag Stones, Terra Cotta Goods, A full line of Fancy Building Materials.

25 PER CENT. OF CUSTOMARY OUTLAY CAN BE SAVED BY USE OF  
**H.W. JOHNS' ASBESTOS LIQUID PAINTS**

Pure, Undiluted Paints, Full Body, and Full U. S. Standard Measure.

No other Paints for structural purposes equal these in quality, richness of color, covering capacity, and durability. Sample cards free by mail. ROOF PAINTS for Tin Roofs, Iron Work, etc. FIREPROOF PAINTS for Inside Woodwork.

**H. W. JOHNS M'FG CO., 87 Maiden Lane, New York,**  
Manufacturers of Asbestos Roofing, Boiler Coverings, Sheathings, Cements, etc.

JUST ISSUED:  
PLANS OF  
**TWENTY-SEVEN DORIC TEMPLES,**  
Drawn on a uniform scale  
By CHARLES H. BURR.  
Price \$3.00.  
Address W. L. TITUS,  
8 Stoughton Hall, Cambridge, Mass.

**THE PENRHYN SLATE CO.**  
MANTELS,  
And General Slate Manufacturers,  
(Quarries and Manufactory, Middle Granville, N. Y.)  
50 UNION SQUARE . . . NEW YORK,  
Corner of Fourth Avenue and 17th Street.  
W. H. KIRTLAND, Secretary.

"Wood thoroughly creosoted is practically imperishable."  
**CREOSOTED WOOD,**  
PREPARED AT THE  
Hayford Patent Creosote Wood Preserving Works,  
ELIZABETHPORT, N. J., and A St., So. BOSTON.  
Offices: 10 Warren St., New York, and 4 Post Office Sq., Boston.  
EDWARD R. ANDREWS, Proprietor.  
ARCHITECTS, ENGINEERS, and BUILDERS are reminded that wood prepared by the Hayford process is rendered PRACTICALLY IMPERISHABLE, being protected from decay, marine worms, etc. It should be used for Piers, Bridges, Piles, Fiers, Wharves, Pavements, Stable and Cellar Floors, and wherever wood is exposed to alternate dryness and moisture.  
Pamphlets, fully explaining the creosoting process, furnished on application.  
**GAS FIXTURES**  
OF EVERY DESCRIPTION.  
Special Rates to Builders.  
R. HOLLINGS & CO., 647 Washington St., Boston

**BOUND VOLUMES OF THE AMERICAN ARCHITECT.**

We are prepared to fill orders for binding *The American Architect and Building News* in styles similar to the volume for 1876, at the following rates:—

Price of cover without binding . . . . .	\$1.00	Numbers of 1876 or 1877 without cover or binding, \$7.50
Cover and binding (for subscribers) . . . . .	2.00	Bound volumes of 1876 or 1877 . . . . .
		9.00

In sending volumes to be bound it should be stated whether the illustrations are to be bound with their respective numbers, or whether all illustrations are to be placed together at the end of the volume.

**N. B.—VOLUMES BOUND IN BOTH STYLES ARE KEPT IN STOCK.**

The above will be sent, post-paid. Subscribers sending their numbers to be bound will prepay postage or express charges.

**HOUGHTON, OSGOOD & CO., Publishers, Winthrop Square, Boston.**

**NON-POISONOUS**

**SILICATE PAINT**

Does not discolor, chalk, or crack off. It is superior to lead.

The only cure for damp walls of churches, dwellings, and public buildings, is the

**PETRIFYING LIQUID**

See article on "Dwellings of the Poor," AM. ARCHITECT, Sept. 21, 1878.

Send for Price List and Testimonials.

**HOWARD FLEMING, Sole Agent in the United States,**

**10 PINE STREET, NEW YORK.**

THE  
American Architect and Building News.

PROSPECTUS FOR 1879.

THE AMERICAN ARCHITECT AND BUILDING NEWS is intended to be valuable to Architects, Designers, Engineers, and Builders, and to Manufacturers, Dealers, and Inventors, whose wares or processes are applicable to building uses. It furnishes a continuous record of current news concerning architecture, building, and all the arts which are connected therewith, with discussions of the most interesting topics which they and the time suggest, whether artistic, technical, mechanical, or relating to their commercial and legal bearings.

It is interesting also to amateurs of Architecture, Building, and the Decorative Arts; containing many papers, and much information of an untechnical character, in these and the other fine arts, while its variety of illustration gives it a value apart from its professional uses. These illustrations, printed by the Heliotype Process, include, with every week's issue, four plates, mostly of unpublished drawings of buildings, furniture, and decorative work executed in the United States, but with a selection of the most interesting works or buildings of note that are illustrated abroad.

The Publishers have added to its scope, as year by year has defined the functions and opportunities of their journal. The volumes for 1878 have contained, besides miscellaneous articles on the topics indicated above, a valuable series of papers on Perspective, making a very complete treatise on the subject; a series on Modern Plumbing, and one on the history and construction of Open Fire-places, all written especially for this journal, as well as many papers from the transactions of professional societies, and a large amount of matter selected from foreign journals, many of which are not easily accessible to American readers. Pains have been taken to secure the best contributors available. Among them have been and are expected to be, Professors H. L. Eustis, W. R. Ware, C. E. Norton, C. Babcock, and Messrs. George E. Waring, Jr., Henry Van Brunt, P. B. Wight, C. A. Cummings, Carl Pfeiffer, F. D. Millett, Edward T. Potter, T. M. Clark, and many others. It contains, in addition to its literary matter, a full weekly record of building news, which is meant to include the important buildings that are undertaken all over the country, with a special index of the most important; a list, corrected weekly, of prices current of building materials in the chief business centres of the United States, a weekly list of building patents issued by the Government, and comparative tables of the prices of labor in the various trades at different points.

During the year 1879 the competitions in interior decoration, which have proved useful and successful, will be continued. Sanitary subjects will be treated as heretofore by Colonel Waring, and illustrated articles on technical subjects, analogous to those on Plumbing and Open Fire-places, will be continued, and it is expected that the legal aspects of architectural practice will receive special attention. The cosmopolitan character of the paper will be maintained, and its correspondence from various American cities carried on by capable writers as heretofore, while its foreign correspondence will be increased, and in particular letters of interest may be expected from an architect of position in London, and from Paris by the eminent hand of M. César Daly.

In commencing its fourth year, then, the Publishers commend the *American Architect and Building News* to all those whose avocations or tastes interest them in Architecture, Decoration, Building, and kindred arts.

SPECIAL OFFER.

New subscribers paying before December 25, 1878, their subscriptions for 1879 will receive free of charge the numbers for November and December, 1878: thus receiving nine numbers in addition to the regular year's issue.

TERMS: Per year, \$7.50, or, if paid in advance, \$6.00; for six months, \$3.50. (The special offer above does not apply to subscribers for six months.) Single copies 15 cents each.

Remittances should be made by check, draft, or postal money-order to the Publishers,

HOUGHTON, OSGOOD AND COMPANY, Winthrop Square, Boston.

SUBSCRIPTION PREMIUMS.

Books, Drawing Instruments, Water Colors, Heliotypes.

The Publishers will send, post-paid, the following prizes to the draughtsman, student, or regular canvasser, who, complying with the conditions, shall secure new subscribers for, or remit the purchase money of, Bound Volumes of THE AMERICAN ARCHITECT AND BUILDING NEWS:—

I. FOR TWO NEW SUBSCRIBERS, or Two Bound Volumes,  
"Story of a House," from the French of M. Viollet-le-Duc, illustrated, price...\$5.00  
Or, "Annals of a Fortress," from the French of M. Viollet-le-Duc, illustrated, price 5.00  
Or, a Winsor & Newton's Japanned Pocket Color-Box (12 half pans), containing the following moist colors:—

Gamboge,	Crimson Lake,	Brown Pink,
Prussian Blue,	Yellow Ochre,	Vermilion,
Cobalt,	Hooker's Green,	Burnt Sienna,
Venetian Red,	Neutral Tint,	Brown Pink,

price 3 50

II. FOR THREE NEW SUBSCRIBERS, or Three Bound Volumes,  
A year's subscription to the AMERICAN ARCHITECT AND BUILDING NEWS..... 7.50  
Or, "Hatfield's Transverse Strains" ..... 6.00

III. FOR FOUR NEW SUBSCRIBERS, or Four Bound Volumes,  
"Examples of Ancient and Modern Furniture," etc., by B. J. Talbert, illustrated by twenty-one folio plates, price ..... 8.00  
Or, "Discourses on Architecture," from the French of M. Viollet-le-Duc, illustrated, price ..... 8.00

IV. FOR FIVE NEW SUBSCRIBERS, or Five Bound Volumes,  
A bound volume of the AMERICAN ARCHITECT AND BUILDING NEWS for 1876, 1877, or 1878 ..... 9.00  
Or, Furniture for a Wooden Beam Compass, with spring Adjustment (Alteneder's make) ..... 8.75

V. FOR SEVEN NEW SUBSCRIBERS, or Seven Bound Volumes,  
"Tredgold's Carpentry" ..... 12.00

VI. FOR EIGHT NEW SUBSCRIBERS, or Eight Bound Volumes,  
"Gothic Forms applied to Furniture," etc., by B. J. Talbert, illustrated by twenty-one folio plates, price ..... 15.00  
Or, "Art Foliage for Sculpture and Decoration," by J. K. Colling, royal quarto, illustrated by seventy-two plates, price ..... 15.00  
Or, a Winsor & Newton's Japanned Color-Box (16 whole pans) ..... 15.00

This box will contain, besides three sable brushes, the following moist colors:—

Antwerp Blue,	Prussian Blue,	Cobalt Blue,
French Blue,	Smalt,	Indigo,
Payne's Gray,	Vermilion,	Brown Pink,
Burnt Sienna,	Carmine,	Venetian Red,
Hooker's Green, No. 2,	Ivory Black,	Yellow Ochre,
Gamboge,	Cadmium Yellow,	Warm Sepia,
Bistre,	Chinese White,	India Ink.

VII. FOR TEN NEW SUBSCRIBERS, or Ten Bound Volumes,  
Either two of the bound volumes of the AMERICAN ARCHITECT AND BUILDING NEWS for 1876-7-8 ..... 18.00

VIII. FOR FIFTEEN NEW SUBSCRIBERS, or Fifteen Bound Volumes,  
The three bound volumes of the AMERICAN ARCHITECT AND BUILDING NEWS for 1876-7-8 ..... 27.00  
Or, "Decoration and Ornamentation of the Nineteenth Century," by Lidard, illustrated by one hundred folio plates, price ..... 27.00  
Or, "Gwilt's Encyclopedia of Architecture," latest edition ..... 24.00  
This book is the standard English work on Architecture and Construction. Its thirteen hundred octavo pages are illustrated by nearly fourteen hundred woodcuts.  
Or, "Examples of Building Construction," prepared by Prof. W. R. Ware, illustrated by forty-eight quarto lithographs in color ..... 25.00

IX. FOR TWENTY NEW SUBSCRIBERS, or Twenty Bound Volumes,  
One Pocket Case of Fine Drawing Instruments (Alteneder's make) ..... 37.50  
This case (morocco covered) will contain:—  
1 Needle-point Dividers, six-inch, with Pen and Pencil Points, Jointed Legs, Lengthening Bar, all to shift; 1 Plain Dividers, 5 inches long; 1 three and one half inch Needle-point Dividers, with Shifting Pen, Pencil, and Needle-points; 1 steel Spacing Dividers, three inches long; 1 Drawing Pen, four and one half inches long; 1 Drawing Pen, five and one half inches long; 1 Protractor; 1 Metric Scale; 1 English Scale.

In lieu of these books the canvasser may obtain books of equal value selected from our trade list, or may obtain as equivalent the value of the prize in Heliotype Engravings, selected from our collection, which numbers over three hundred.

The conditions to be observed are:—

1. The subscribers must in all cases be new subscribers, and the subscription price must be forwarded with each order.
2. The subscribers' names may be sent to us as soon as secured, but canvassers are requested to state each time that the names are on account of a premium.
3. These prizes are not cumulative.

## BUILDING INTELLIGENCE.

[Reported for the American Architect and Building News.]

[Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.]

## COMPLETED BUILDINGS.

**BROOKLYN, N. Y.**—The Pilgrim Chapel, corner of Degraw and Henry streets, has been dedicated.

**BUFFALO, N. Y.**—The new police station-house in the Third Precinct is now occupied. It cost complete about \$15,000, and the lot, on the east side of Pearl Street, above Chippewa Street, was purchased for \$5,000.

**BURLETON, N. J.**—The Providence (Presbyterian) Church, at Burlington, near Burlington, has been dedicated.

**CUTCHOGUE, L. I.**—The new Catholic Church of St. Joseph has been dedicated.

**CHESTERTOWN, Md.**—The new Catholic church was dedicated on Sunday, 22d instant.

**COVENTRY, Vt.**—A new Methodist church has recently been dedicated at Coventry.

**FALL RIVER, MASS.**—The Committee on Public Institutions, the Mayor, and the architect and contractor of the new school-houses have visited the buildings preparatory to their acceptance by the committee.

**NEWPORT, R. I.**—The new Odd Fellows' Hall, on Washington Square, erected during the past season, has been dedicated.

## SUMMARY OF THE WEEK.

## Boston.

**BUILDING PERMITS.**—The following permits have been granted since our last issue:—

**BRICK.**—Commonwealth Ave., near Hereford St., for Benj. E. Fitch, by H. J. Bartlett, 1 dwell., 24' x 60'; two stories; mansard roof.

**WOOD.**—5 Cedar St., Ward 21, for A. Johnson, 1 dwell., 22' x 34'; two stories; mansard roof.—Commonwealth Flats, Ward 13, for N. Y. & N. E. R. K. Co., by Geo. W. Cole, 3 freight and coal-houses, 40' x 63', 40' x 44', and 50' x 200'; one story; pitch roof.—Mt. Vernon St., Ward 23, for G. K. Guild, by C. F. Barton, 1 carriage house, 29' x 33'; one story; pitch roof.—425 Medford St., Ward 4, for A. Waterman, 1 stable, 20' x 24'; one story; flat roof.—Poplar St., Ward 23, for J. B. Withington, by W. Allen, 1 tool house, 12' x 10'; one story; pitch roof.—Commonwealth Flats, Ward 13, for Dixon & Hall, by Jas. McIntyre, 1 engine-house, 22' x 33'; one story; pitch roof.

**STONES AND TEMENTS.**—Workmen are now engaged in driving piles for the erection of two tenement buildings opposite the foot of Indiana Place, near Ferdinand Street. The land belongs to John F. Bassett. The buildings are to be of brick, with freestone trimmings, each four stories high, twenty feet front and sixty feet deep. They will have a ones underneath and three tenement floors above. The roof is to be flat, in the New York style, a fashion that is growing into greater use in this city, not only on account of its using the room to better advantage, but of being safer from adjacent fires than the mansard.

**FREIGHT-HOUSES.**—The improvements begun on the New England Railroad land at South Boston consist of a two-story freight-house, 630 feet long by 25 and 40 feet in width, a freight shed 450 feet long, and a coal shed 200 feet by 50.

[In our next issue we shall publish a list of the more important buildings within the building limits of the city of Boston completed during the year 1873, giving location, cost, owner, builder, and architect.]

## Brooklyn.

**BUILDING PERMITS.**—Bergen St., 2 two-story brown stone dwells., 15' x 45'; owner, John B. McCord, 48 Macomb St.; architect, Goodwin; builders, Bennett & Gruna.—Bond St., 1 three-story brick dwell., 20' x 22' 2"; owner, James Sullivan, 385 Carroll St.; architect, W. J. Conway; builder, R. J. Bennett.—Calyer St., 1 two-story frame dwell., 25' x 30'; owner, Mary A. Doyle, No. 591 Manhattan Ave.; architect, Jas. Dennen; builders, J. & J. Van Riper and S. Bergerstrasser.—Hall St., 1 three-story frame store and factory, 25' x 45'; owner, C. M. Evars, 85 Clinton Ave.; architect and carpenter, F. Hanlon; mason, Mr. Degran.—Monroe St., 1 one-story frame shed, 12' x 13'; owners, Fier Bros., Stuyvesant Ave., cor. Moun. St.; builder, George Prior.—Sackett St., 2 three-story brown stone dwells., 14' x 55'; owner, E. M. Van Tassel, 376 Clinton St.; architects, Perkins & Green; builders, R. Bold and Tostevin.—Skillman St., 1 two-story brick boiler-house, etc., 42' x 38'; owner, Gutta Percha, etc., Co., Franklin Ave., near Flushing Ave.; architect, Jno. Murphy; builders, P. Kernan and E. Van Voorhis.—Sixth St., 1 two-story brick stable, 12' x 29'; owner, John Tietlen, on premises; builders, Thatcher & Wiles.—Twenty-third St., 5 three-story brick tenements, 20' x 52'; owner, John Schajgel, 132 to 135 Twenty-second St.; architect, Julius Becker.—Carlton Ave., 1 two-story brick shop, 15' x 34'; owner, architect, and builder, W. J. Altshier, 21 Carlton Ave.—Flushing Ave., 1 one-story frame shed, 33' x 55'; owner, Iron Clad Manufacturing Co., 111 Kent St.; builder, Thomas Davies, Jr.—Flushing Ave., 1 two-story frame dwell., 25' x 54'; owner, architect, and builder, George Loeffler, 197 Floyd St.—Graham Ave., 1 three-story frame store and tenement, 25' x 60'; owner, Samuel Self, Newell St.; architect, F. Weber; builders, J. Read and Wabing & Co.—Lee Ave., 1 two-story frame stable, 12' x 15'; owner, Fred. Lankey, on premises; builder, J. Wilson.—Yassau Ave., 1 one-story frame dwell., 20' x 24'; owner, Peter McNally, 402 South Fifth St.; builder, John Gelling.—Newtown Creek, one and two-story frame building for refinery, 100' x 50'; owner, etc., Ellipse Lubricator Co., 170 Calyer St.

**A LARGE CLOCK FACTORY.**—A large tract of land on Seventh Avenue, extending from Twelfth to Thirteenth Street, and running back several hundred feet, was recently purchased by the Ansonia Clock Company, which has begun the erection of a large factory. Besides the factory at Ansonia, Conn., the company has one in Tenth Street, New York, and two smaller ones in this city. These last three factories will be consolidated in the new one now being constructed. It will be built of brick, and will be 250 feet square and five stories in height. It will contain a 250-horse-power engine and new automatic machinery for the construction of fine clocks of every description. Many new principles in clock-making machinery, it is said, will be applied. Between seven and eight hundred workmen will be employed. This factory is expected to be in operation by May, 1873. The situation of the new factory is considered a most eligible one, as it is in a growing part of the city, where rents, nevertheless, are moderate. It is within two blocks of Prospect Park, and commands a fine view of New York Bay. The land on which the factory is situated cost about \$38,000.

**Chicago.**  
**BUILDING PERMITS.**—Fourteen permits were issued during the week for the erection of new buildings. The only ones of importance were to Belle Stevens for a two-story dwelling on Third Avenue, near Harrison, to cost \$2,000, and to Charles Hagenow & Son, for two stores and dwellings at 338 and 340 Clark Street, to cost \$5,000.—State St., No. 336, three-story brick (stone front) store and dwell., cost, \$5,000; A. P. Harris.—Twenty-sixth near Butterfield St., two-story brick addition; cost, \$1,000; Mark S. Thompson.

## Cincinnati.

**EXTENSIVE IMPROVEMENT.**—Mr. James W. McLaughlin is preparing a design for a new office building, to be erected by the heirs of the late Samuel Wiggins, on the south-east corner of Fifth and Vine streets (Fountain Square), in the coming spring. It will be a stone front, seventy-five feet on Vine by ninety feet on Fifth Street, six stories, and same height as the Johnston buildings, on the Walnut Street corner of same square. This will be about as radical an improvement, remarks the *Gazette*, in the removal of old, worn-out, unsavory, and unsightly market stores and unsavory fish-stands, as was the case when the Johnston buildings were erected, at the other end of the same square, some years ago. The Johnston buildings have a frontage on Fifth Street of 190 feet, from Walnut Street to Stone Alley. The Wiggins building will have a frontage of but ninety feet, which leaves only 100 feet more to Stone Alley to make Fountain Square the most beautiful continuous front of that length in Cincinnati.

**BUILDING PERMITS.**—Mill St., at Ohio River, two-story frame coal elevator, and one-and-one-half-story stable; cost, \$15,000; Daniel Stone & Co.—Water St., No. 14, to repair four-story brick building, cost, \$1,200; B. Barr.

## Philadelphia.

**BUILDING PERMITS.**—Thos. McCarty, 3 two-story dwells., Almond St.—James O'Hara, one-story shop, Bevan St.—W. J. McLean, two-story table, 1711 Carpenter St.—Thomas Campbell & Son, two-story store, cor. Fifth and Lehigh Ave.—W. Wolfe, altering factory to dwell., Nos. 1240 and 1242 Hope St.—H. C. Shurtliff, two-story back building, No. 3722 Market St.—Andrew Brothoff, two-story dwell., Mehan St., Germantown.—W. Wirup, two-story stable, No. 1844 North Front St.—Timothy Huan, 8 two-story dwells., Sanson St.—J. C. D. Smith, two-story stable, Federal St.—James F. Boyle, two-story dwell., Twelfth St.

**NEW ELEVATOR.**—The Philadelphia Grain Elevator Company proposes to erect an immense elevator at Port Richmond for the reception and delivery of grain for export trade only. Heretofore the only storehouses for export grain were the elevators at Washington Street Wharf and Girard Point, which are confined to receipts of western grain only, by way of the Pennsylvania Railroad. When the new elevator shall be completed the lines and branches of the Erie and the New York Central will be brought into direct competition for the trade. A new dock is to be constructed and dredged to a depth sufficient to receive the largest vessels, and a new wharf, four hundred feet in length, will be built adjacent to the works, to facilitate the shipping.

## St. Louis.

**BUILDING PERMITS.**—But five permits have been issued for the week ending December 20, 1873. Four of these are for brick buildings, only two being worth over \$2,700, viz:—

Owners.	Use.	Stories.	Rooms.	Cost.
Allan Trail.	Dwelling.	2	6	\$5,500
C. L. Hunt.	Hotel.	4	97	25,375

**NEW HOTEL.**—The new hotel being built by Charles L. Hunt, at the northeast corner of Ninth and Chestnut streets, will be brick with stone facings. It will have a frontage of 85 feet on Chestnut Street, and 81 feet on Ninth Street. The main entrance will be on Chestnut Street. It will contain one hundred rooms, and is intended to be a first-class hotel for gentlemen only, to be run on the European plan.

## Washington, D. C.

**BUILDING PERMITS.**—O. A. Daley, private stable on M St., between Ninth and Tenth sts.—D. B. Groff, 2 two-story and basement dwells., on Vermont Ave., near S St.—G. C. Nichols, colonnade, 45 Pennsylvania Ave.—The Western Presbyterian Church, brick school-room on H St., near Nineteenth.—Mrs. Sullivan, two-story dwell. on High St., near Stoddard, Georgetown.

**CENTRAL GUARD-HOUSE.**—Building Inspector Entwisle reports that it cost \$2,000 to put the old Central Guard-house, on Louisiana Avenue, in order for a station-house, and that it cannot be used as a headquarters. He recommends another building being erected on the lot at a cost of \$17,500. Taking the total cost of this change at \$49,358, the interest at six per cent, \$2,961.48, would make a saving of \$861.48 over the \$2,100 now paid in rent.

**NEW DEPOT.**—The locality selected by the Chief Engineer of the Baltimore and Ohio Railroad for a new depot, and for which the indorsement of the District Commissioners is sought, is Square No. 681, situated between D and E and North Capitol streets and Delaware Avenue northeast, and owned by the company. To this the objection made by the Commissioners in their report, of being south of Massachusetts Avenue, applies, and it will probably have to be abandoned.

## General Notes.

**ALEXANDRIA, VA.**—The warehouse at the foot of King Street, formerly occupied by Boush & Co., is being remodelled and fitted up for a first-class restaurant by Capt. Eli Pettit.

**ATTLEBORO, MASS.**—Rev. J. W. Willett has bought a lot on Dean Street, and contracted to have a house built on it this winter. It will be occupied by his successors in the pastorate of the Methodist church.

**BALSTON, N. Y.**—Hon. Geo. West has commenced clearing away the debris of the late fire preparatory to rebuilding the old mill and erecting another mill and a boiler house. The new mill is to be four stories high, with mansard roof and tower. The second building will be 100 by 40 feet and three stories high. A boiler house, with a chimney stack 100 feet in height, is also to be erected.

**BLOCK ISLAND, R. I.**—Mr. Ball's addition to his hotel is again under way, partially framed.—Mr. A. D. Mitchell soon commences work on a two and one half story building, 25 by 50 feet, in connection with the Ocean View Hotel property, to be used as a steam laundry, etc.

**BRISTOL, R. I.**—The new parsonage being erected by the State Street M. E. Church on State Street is nearly raised.

**COLUMBUS, O.**—The new school building ordered by the Board of Education will be erected on the corner of Mound and Third streets.

**IOWA CITY, IOWA.**—The alcohol works, under the ownership of Messrs. Schofield & Hull, have been rebuilt and improved, and are now turning out a car-load per day of alcohol and high wines.

**KNOXVILLE, TENN.**—Mr. E. S. Sheppard is erecting a ten-room cottage on Holston Heights; McLemore, Kelly & Co. have the contract.—Mrs. Wilkins is erecting a cottage on the site of the one destroyed by fire a few weeks since. Both of the above buildings are from plans furnished by J. F. Baumann, architect, who is also preparing plans for the follow-

ing buildings, which will be erected early in the spring; an elegant summer residence for Major D. A. Carpenter, which will be erected on his fine farm, situated about a mile and a half west of this city; a cottage for Mr. J. E. Chapman, which will be erected on Fifth Avenue; a cottage for Mr. C. Aebli, to be erected on Hill Street.

**LOUISVILLE, KY.**—Building operations are very quiet just at present.

**MANCHESTER, N. H.**—The Haver Street Congregational Society of this city, of which Rev. Mr. Selden is pastor, have inaugurated measures to build a new church. Among the sites which are named for the new building is the lot on the corner of Union and Hanover streets.—The Franklin Street Society, also Congregational, have expended the sum of \$21,000 in remodeling and improving their church edifice, in addition to the cost of the chime of bells, which was the gift of ex-Governor Smyth.

**MARSHFIELD, VINEYARD, MASS.**—Mr. George W. Farnham, of New Bedford, is building a nice cottage on Washington Park. Mr. John F. Alden, of Fairhaven, is doing the work.

**MARYSVILLE, OHIO.**—The German Lutherans are building an addition to their church edifice.

**NASHVILLE, TENN.**—A local paper reports that a sudden demand for buildings of all descriptions has sprung up, and there is even an impatience felt at the necessarily slow progress of completing new buildings. Small manufactories are rapidly coming into existence.

**NEW BEDFORD, MASS.**—The committee on location and plans for the proposed new opera house are conferring. They have under consideration three lots with reference to the erect on of such a building as was desired, and the question will probably soon be decided.—Merrill J. Brown, of Fall River, architect, has prepared plans for a man-ion, the erection of which is contemplated by Charles D. Milliken, upon the lot at the southeast corner of Orchard and Arnold streets. It is to be 44 by 68 feet in size, two stories in height, with 22 feet p stairs, and is estimated to cost about \$87,000.

**NEWPORT, R. I.**—There is a prospect for considerable work this winter. Until recently, but little was known regarding the building of houses, but within the past two or three weeks there has sprung up considerable of a mania for the erection of cottages. At present there are some eight or ten in course of construction, and it is fully expected that this number will be largely increased before the arrival of spring.

**OSWEGO, N. Y.**—A penitentiary is to be built at this place.

**PLYMOUTH, MASS.**—Work has begun on the extension of the woolen mill.

**RENO, CAL.**—A very peculiar convent building is being erected at Reno, Cal., with queer-shaped rooms, isolated corridors, double walls, and odd architecture generally.

**RICHMOND, VA.**—There is a movement on foot to build a public hall on Church Hill.

**SOMERVILLE, MASS.**—Messrs. Ober & Rand, of Boston, are the architects of four houses on Highland Avenue for Mr. A. P. Potter. The houses are of wood, and are each built after a different plan. French Bros. are the carpenters. Cost, \$16,000 for the whole.

**WILLIAMSTOWN, MASS.**—For a number of years the chapel at Williams College has been cramped for the accommodation of the students, and now it is proposed to enlarge it by taking into it the space occupied by the senior and junior recitation rooms and Alumni Hall. The seats will be reversed, the pulpit placed between the entrance doors, and a gallery built in the rear for the organ and choir. The work will not probably be begun until the summer vacation.

**WORCESTER, MASS.**—The Main Street Baptist Church, which has recently been in the hands of painters, carpenters, and other workmen has been reopened, looking brighter and more inviting than ever before. The heavy dark coloring which formerly prevailed has given way to some very tastefully freecing in medium colors.—The new engine-house of the Norwich & Worcester Railroad, near the Junction, is nearly completed. It is semicircular, with 115 for eight engines, and is a great improvement over the old building near Park Street, which has been in use about twenty years.

## INDEX OF CURRENT WORK,

Giving information concerning important buildings now unfinished.

[Architects and Builders are requested to aid the editors in making the information in this department full and exact. Notice of the completion of a building is particularly desired.]

## Baltimore, Md.

**CHURCH.**—The Pius IX. Memorial Church. G. A. Fredrick, architect. Cost \$100,000.

**HOSPITAL.**—Johns Hopkins Hospital. J. R. Niernase, consulting architect.

## Boston.

**BANK BUILDING.**—Tremont Bank Building. Carl Fehmer, architect.

**HOTEL.**—Family hotel. Cost \$150,000. Mr. S. D. Kelley, architect.

**THE MUSEUM OF FINE ARTS.**—Messrs. Sturgis & Brigham, architects. Present appropriation \$100,000.

**SCHOOL-HOUSES.**—High and Latin School. G. A. Clough, architect.

**ASYLUM.**—Asylum for Aged People. C. J. Bateman, architect. Cost \$50,000.

## Brooklyn, N. Y.

**TESEMENT.**—A. T. White, owner. William Field & Son, architects.

**SOCIETY BUILDING.**—The Long Island Historical Society Building. Mr. G. B. Post, architect. Cost \$10,000.

**HOSPITAL.**—St. John's Hospital. N. L. Derby, New York, architect.

**HOSPITAL.**—Hospital of St. Mary. Mr. P. C. Keely, architect. Cost \$200,000.

## Cincinnati, O.

**U. S. CUSTOM HOUSE AND POST OFFICE.**—S. Hannaford, local superintendent.

**CHILDREN'S HOME.**—J. W. McLaughlin, architect. Cost \$50,000.

**NEWSPAPER OFFICE.**—The *Gazette* Building. E. Anderson, architect.

**CLUB-HOUSE.**—Allemania Club-House. J. W. McLaughlin, architect. Cost \$60,000.

**UNIVERSITY BUILDING.**—Cincinnati University Building. S. Hannaford, architect. Cost \$50,000.

## Cleveland, O.

**CONVENT.**—Ursuline Academy. L. A. Heard, architect. Cost \$120,000.

## Hartford, Conn.

**SEMINARY.**—Theological Seminary. F. H. Kimball, architect. Cost \$75,000.

**CATHEDRAL.**—R. C. Cathedral of St. Joseph. P. C. Keely, Brooklyn, architect.

**CATHOLIC SCHOOL.**—Brown & Stilson, architects, New Haven. Cost about \$25,000.

HOSPITAL. — Homoeopathic Hospital. Coburn & Barnum, architects. Cost \$20,000.

SCHOOL. — Twelfth Ward Schoolhouse. L. T. Scofield, architect. Cost \$30,000.

Jersey City.

CONVENT. — Convent of the Sisters of St. Dominick. Cost \$40,000.

New York.

THE "FLORENCE." — Emile Grevé, architect. Mrs. Matthews, owner. Cost \$500,000.

BARGE OFFICE. — Building by the United States Government. Cost \$146,000.

THE BOREAL BUILDING. — S. D. Hatch, architect. Cost \$250,000.

CHURCH. — St. Francis Xavier R. C. Church, West Sixteenth Street. Cost \$150,000. P. C. Keely, architect.

CHURCH. — St. Paul's (R. C.). Mr. J. O'Rourke, architect, Newark, N. J. Cost \$500,000.

COLLEGE. — Addition to Columbia College. C. C. Haight, architect. Cost \$200,000.

OFFICE BUILDING. — Messrs. Silliman & Farnsworth, architects. G. L. and S. E. Morse, owners. Cost \$200,000.

APARTMENT HOUSE. — Mr. H. J. Hardenburgh, architect. Cost \$300,000.

PRIVATE RESIDENCE. — Dwelling for Mr. Arnold. Griffith Thomas, architect. Cost about \$125,000.

ARMORY for the Seventh Regiment. — Cost \$300,000. C. W. Clinton, architect.

Philadelphia.

HOSPITAL. — Presbyterian Hospital. Wilson Bros., arch'ts.

OFFICE BUILDING. — Girard trust.

Providence, R. I.

CATHEDRAL. — Mr. P. C. Keely, architect, Brooklyn.

DORMITORY for Brown University. — Messrs. Stone & Carpenter, architects.

St. John, N. B.

POST OFFICE, Custom House, and Savings Bank. — Mr. Scott, Chief Architect to the Dominion Government.

BANK. — Maritime Bank Building. Messrs. Hopkins & Wiley, architects, Montreal.

CHURCH. — Trinity Church. Messrs. Potter & Robertson, architects, New York, N. Y.

CITY HALL. — Messrs. McKean & Fairweather, architects.

CHAPEL. — The Methodist Centenary Chapel. Mr. J. Welch, architect, New York. Cost \$100,000.

CHURCHES. — St. James's Church, Croft & Camp, architects, St. John, N. B. — St. Andrew's Kirk, Langley, Langley & Burke, architects, Toronto, \$60,000.

St. Louis.

CHURCH. — Second Baptist Church. Edward Hilsley, contractor. Cost \$10,000.

COURT HOUSE for the new county of St. Louis. — F. Reunick, architect. Cost \$2,000,000.

COLLEGE. — College for the Christian Brothers. Mr. Jas. McGrath, architect. Cost \$20,000.

CUSTOM HOUSE and Post Office. — Mr. Jas. G. Hill, Supervising Architect of the Treasury Department.

General.

ATHENS, O. — Court House, Mr. H. E. Myers, architect. Cost \$90,000.

CAMBRIDGE, MASS. — Gymnasium for Harvard College. Messrs. Peabody & Stearns, architects, Boston.

CONCORD, N. H. — State Prison. Messrs. Dow & Wheeler, architects. Appropriation, \$200,000.

CROWN POINT, IND. — Court House. J. C. Cochrane, architect, Chicago. Cost \$45,000.

ELMIRA, N. Y. — Masonic Hall. N. LeBrun, architect, New York. Cost \$90,000.

FAIRBANKS, MINN. — Deaf, Dumb, and Blind Asylum. J. Babcock & Co., contractors. Cost \$53,730.

INDEPENDENCE, IO. — Hospital for the Insane. G. Johnson, supervising architect. Cost \$550,000.

INDIANAPOLIS, IND. — State House, Mr. E. May, architect. Cost \$2,000,000.

JOLIET, ILL. — St. Mary's (Roman Catholic) Church. Mr. Keely, architect, Brooklyn.

KANKAKEE, ILL. — Insane Asylum. J. R. Willett, architect, Chicago, Ill.

LOWELL, MASS. — Appleton Bank. O. A. Merrill, architect. Cost \$70,000.

NEWARK, N. J. — St. Michael's Church (R. C.). Mr. J. O'Rourke, architect. Cost \$25,000.

NORRISTOWN, PENN. — Insane Asylum. Wilson Bros. & Co., architects, Philadelphia.

OAKLAND, CAL. — First Congregational Church. Mr. L. B. Valk, New York, architect. Cost \$60,000.

OTTAWA, ILL. — Holy Trinity (R. C.) Church. H. C. Furness, architect. Cost \$150,000.

ARMORY. Cost \$35,000. Mr. H. C. Furness, architect.

PORTLAND, CONN. — Trinity Church, H. M. Congdon, architect, New York. Cost \$50,000.

SAN FRANCISCO, CAL. — College of the Jesuit Fathers. Cost \$500,000.

SPRINGFIELD, ILL. — Jail. G. H. Heinle, architect. Cost \$65,000.

TOPKA, KAN. — Insane Asylum. Cost \$70,000. Mr. E. T. Carr, architect, Leavenworth, Kan.

WABASH, IND. — Court House. B. V. Enos & Son, architects. Cost \$100,000.

ZANESVILLE, O. — Hotel. H. E. Myers, architect. Black & Graham, owners. Cost \$75,000.

Publishers' Department.

The American Architect and Building News.

PUBLISHED EVERY SATURDAY BY HOUGHTON, OSGOOD & CO., WINTHROP SQUARE, BOSTON. NEW YORK OFFICE, 21 ASTOR PLACE.

An Illustrated Journal of Constructive and Decorative Art, devoted to the Interests of Architects, Builders, Decorators, etc.

15 cents per copy; \$7.50 per year; \$6.00 in advance.

CLUB RATES OF THE AMERICAN ARCHITECT AND BUILDING NEWS.

WITH Houghton, Osgood & Co.'s other Periodicals.

THE ARCHITECT and ATLANTIC MONTHLY... \$9.00 THE ARCHITECT and THE REPORTER... 15.00 THE ARCHITECT and BOSTON MEDICAL AND SURGICAL JOURNAL... 10.00

THE ARCHITECT and UNITED STATES OFFICIAL POSTAL GUIDE... 7.00 THE ARCHITECT and DWIGHT'S JOURNAL OF MUSIC... 7.75

\* N. B. — The Atlantic portraits of Lovell, Whittier, Bryant, and Longfellow will be sent for \$1.00 each in addition to the above rate.

Payments should be made directly to the Publishers, either by draft or by post-office order.

HOUGHTON, OSGOOD & CO., Publishers, WINTHROP SQUARE, BOSTON

PROPOSALS.

GATEWAYS.

Sealed proposals, in triplicate, with a copy of this advertisement attached to each, will be received at this office until Monday, January 6, 1879, for the construction of Arched Gateways at the National Cemeteries at Vicksburg, Miss., and Chattanooga, Tenn.

Copies of plans and specifications may be seen, and blank forms of proposals procured, at this office, and at the Quartermaster's Offices in Chattanooga, Tenn.; New Orleans, La.; Atlanta, Ga.; Louisville and Newport Barracks, Ky.; and St. Louis, Mo.; also, at the Vicksburg and Memphis National Cemeteries.

Proposals should be indorsed "Proposals for Gateways," and addressed to the undersigned. They will be opened at noon on the date specified, when bidders are invited to be present.

A. F. ROCKWELL, Capt. and A. Q. M., U. S. A.

LIGHT-HOUSE.

Sealed proposals will be received at this office until twelve (12) o'clock of Thursday, January 2, 1879, from iron manufacturers for furnishing the metal work of a Light-house for American Shoal, Florida.

Plans, specifications forms of proposal, and other information may be obtained from the undersigned on application by mail or in person.

PETER C. HAINS, Major of Engineers, U. S. A. Engineer Secretary Light-house Board

POOR-HOUSE.

To Architects. — Gentlemen — You are hereby requested to submit plans and specifications on first Monday in January next, in competition, for Ingham County Poor Building, the idea to be kept in view that ten thousand dollars must build and complete enough for the accommodation of the keeper and family, and fifty or sixty inmates. Buildings to be of brick. Any further information can be had by addressing S. A. PADDOCK, Chairman of Building Committee, Mason, Mich.

DAM.

Duplicate sealed proposals will be received by the undersigned until 3 o'clock P. M., January 4, 1879, for furnishing brush and stone, and constructing dam of the same, in the vicinity of Gilbert's Island, which is situated about ten miles below Hannibal, on the Mississippi River. For all information address F. U. FARQUHAR, Major of Engineers.

WANTS.

A SITUATION as Foreman of a Stone or Marble Yard by a man who has had 14 years' experience in the business, either as a foreman or in business for himself. Thoroughly understands Building and Monumental Work, and is a first-class practical workman. Has had considerable experience in quarrying stone. References given and required. Address D. J. WHITNEY, Gouverneur, N. Y.

PROPOSALS.

CULVERTS, ETC.

Sealed proposals will be received at the office of the Board of Public Works until 12 o'clock, noon, of Tuesday, December 31, A. D. 1878, for grading and constructing the necessary culverts, drains, or retaining walls, according to specifications on file in the office of the Board of Public Works, Thomas Street, or Lick Run Road, from the C., H. & D. R. R. to the Harrison Pike.

Bidders will indorse their names upon the outside of the envelopes containing their bids.

Each bid to be accompanied by two disinterested sureties. Bidders to use the printed forms, as no other will be received.

By direction of the Board. JOHN D. BANES, Clerk. JOHN E. BELL, President. 157

ROSTRA.

OFFICE OF NATIONAL CEMETERIES, WASHINGTON, D. C., December 13, 1878.

Sealed proposals, in triplicate, with a copy of this advertisement attached to each, will be received at this office until Monday, January 20, 1879, for the construction of Rostrums at National Cemeteries, as follows: —

Vicksburg, Miss.; Chattanooga, Tenn.; Chalmette, near New Orleans, La.; Jefferson Barracks, near St. Louis, Mo.; Knoxville, Tenn.; Gettysburg, Pa.; Antietam, Md.

Copies of plans may be seen and blank forms of proposals procured at this office, and at the Quartermaster's offices in New Orleans, La.; Chattanooga, Tenn.; St. Louis, Mo.; Jeffersonville, Ind.; Newport Barracks, Ky.; Baltimore, Md.; also, at the Cemeteries above named.

Proposals should be indorsed, "Proposals for Rostrums," and addressed to the undersigned. They will be opened at this office at noon on the date specified, when bidders are invited to be present.

A. F. ROCKWELL, Capt. and A. Q. M., U. S. A.

LOCKS AND KEYS.

POST OFFICE DEPARTMENT, WASHINGTON, D. C., August 15, 1878.

Separate sealed proposals will be received at this Department until 12 o'clock noon on the 20th day of March, 1879, for furnishing four new and different kinds of Locks and Keys for the sole and exclusive use of the United States mails, including besides those to be used for mail bags such as are to be used for the street letter-boxes of the United States.

As the public exposure and searching examination necessary to intelligent bidding on any prescribed model of a lock and key would tend to impair, if not entirely destroy, the further utility of all such locks and keys for the purposes of the mails, the Postmaster-General prescribes, no models or samples for bidders, but relies for a selection on the mechanical ingenuity and skill which a fair competition among inventors, hereby invited, may develop in samples submitted by them.

Specifications of requirements as to proposals, samples, kinds and quantities of locks and keys, contracts, etc., will be furnished on application by letter to the Second Assistant Postmaster-General.

No proposal will be considered which is not submitted in accordance with such specifications and forms of proposal. The contracts which may be made are to be in conformity with the specifications and accepted proposals.

D. M. KEY, Postmaster-General. 170

BRIDGE.

As a Board of Supervisors, we have determined the location of the bridge to be at the foot of Market Street, Ottumwa, Io.; that we will erect a Howe Truss Iron Bridge; that its length will be about 650 feet long, and about 13 wide, with a sidewalk of four feet on each side; stone piers and abutments, and that the bridge should be completed by September, 1880. We now solicit bids for building the same, the bids to be accompanied with specifications corresponding with the above outlines. The Board meets again on the first Monday in January, 1879, at which time it will decide to let the contract. BOARD OF SUPERVISORS, Wapello County, Iowa. 157

WROUGHT AND CAST-IRON WORK.

Proposals for Wrought and Cast-Iron Work for the U. S. Court-House and Post Office, at Austin, Tex.

OFFICE OF THE SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., December 23, 1878.

Sealed proposals will be received at this office until 12 M., of the 10th day of January, 1879, for furnishing, delivering, fitting, and putting in place complete the wrought and cast-iron work, comprising cast-iron columns, pilasters, etc., in first story, and rolled iron beams, etc., in second story floor, for the U. S. Court House and Post Office at Austin, Tex., in accordance with drawings, specification, and schedule, copies of which and any additional information may be had on application at this office or the office of the Superintendent.

JOHN RASER, Acting Supervising Architect. 158\*



NONESUCH Self-Locking AND Burglar-Proof Window Locks.

Cheapest and best in the market. Send 25c. for sample, price list, etc. Agents wanted. FRED. J. HOYT, 733 Broadway, N. Y.

DESCRIPTIVE CATALOGUE

OF ALL THE PUBLICATIONS OF HOUGHTON, OSGOOD & CO.

A new and elegantly printed Catalogue (forming a book of 235 pages), with illuminated cover, carefully indexed and classified, and with critical opinions of the most competent judges; embracing Novels, Stories, Travel Sketches, Essays, Poetry, Biography, History, Philosophy, Religion, and Art; and Medical and Legal Works. Sent to any address on receipt of 10 cents. 220 Devonshire Street, Boston.

St. Hall & Sons Manufacturers of Architectural Terra Cotta, Buff and Colored Brick, Fire Brick, Established 1846, South Amboy, N. J.

ARCHITECTURAL IRON WORKS. YOUNGLOVE & CO., Propr's. CLEVELAND, O.

IRON BUILDINGS, FRONTS, COLUMNS, LINTELS, WINDOW CAPS, BEAMS, GIRDERS, STAIRS, DOORS AND SHUTTERS, TILE LIGHT, CRESTING, ETC. Estimates promptly furnished.

(Established 1848.)

MARKET ST. ARCHITECTURAL FOUNDRY AND IRON WORKS.

SNEAD & CO., LOUISVILLE, KY. Makers of every description of Iron Work for Buildings

Weather Strips. BROWNE'S METALLIC AND RUBBER WEATHER-STRIPS—the oldest, the best, the cheapest in market. Stood the test 15 YEARS. They exclude COLD DRAFTS around windows and doors in winter, keep out dust in summer, and stop rattling sashes. We employ experienced and responsible workmen, and guarantee entire satisfaction. We send, free of charge, men with samples and prices to measure and give cost. We warrant them good for 5 YEARS. Patent Metallic Weather-Strip Co. 812 BROADWAY, N. Y.

## THE SCIENTIFIC MAN,

A Weekly Illustrated Journal of Science.

(Late "Scientific Supplement" to MAN.)

BY FAR THE

CHEAPEST PUBLICATION OF SCIENCE IN THE WORLD,

And the best for all youth and the general public. Each number contains a popular science lecture by an eminent scientist, such as ROSCOE, TYNDALL, HUXLEY, CARPENTER, GEIKIE, LOCKYER, JEVONS, and LUBBOCK. Most numbers contain also current notes and news of science. Terms of subscription, \$1.00 per year in advance.

Clubs of four, 75 cents each, and on each additional club of four, a 50 or 75 cent book to sender of club. To clubs of ten, 60 cents each. Each additional club of ten, choice of 100 books, ranging from \$1.00 to \$2.00, to get up of club. To clubs of fifty, at 50 cents each, with \$5.00 in books for each additional club of fifty. All in a club must be at one P. O. address, but may be to each different name, if desired.

N. B.—As we publish this paper at the lowest cost price, we can afford no "dead heads." We shall stop each paper on expiration of time paid for, and sample copies will not be sent in reply to postal cards. Inclose two stamps for sample copy.

### NOTABLE OPINIONS.

It will be to me most valuable. — PROF. WILLIAM DENTON.  
Such a laudable effort to benefit mankind should be encouraged. Please find the money inclosed — B. FRANKLIN CLARK, M. D.

That very noble feature of your enterprise, the republication of the Manchester Lectures, etc., is a feature so worthy of all praise that it ought alone to insure the success of your undertaking, and stamp you as a public benefactor. — C. N. BOYER.

It will be valuable in all families where there are children in their educational years. It will call the attention of many to the examination of the various scientific subjects treated of, who might otherwise overlook such things for years. That will be the case with those whose educational advantages are limited. For such it will be invaluable. If the children can be drawn to the study of facts in the great volume of Nature, the next generation will be wiser than the present. — HENRY SEVERANCE, M. D.

A good idea, and it is to be hoped that its circulation may be commensurate with its importance and worth. The masses need popular, understandable scientific information, and the lectures you propose publishing are among the best of the kind. — Wm. EMMETTE COLEMAN.

To many readers the Supplement will be worth much more than the subscription price. — Am. Socialist.

The Scientific Supplement, now THE SCIENTIFIC MAN, consists of lectures by the ablest scientists in England, and will, when bound, form a valuable scientific cyclopaedia. The current number, containing a lecture on Elementary Chemistry, by Prof. Roscoe, F. R. S., is alone worth the price of subscription. — Vermont Tribune.

By publishing your cheap SCIENTIFIC MAN, you will do much to popularize science, which will do more than anything else to liberalize and elevate humanity generally. — H. L. GREEN.

Address

ASA K. BUTTS, Publisher,  
19 Dey Street,  
NEW YORK.

STORY & WILBUR,  
FORMERLY A. WILBUR & Co. (ESTABLISHED 1821),

NEW ENGLAND EMPORIUM FOR

## ROOFING SLATES.

Merrill's Celebrated Unfading Brownville Maine Slate. Purple and Black Welch, Monson, Bangor, and Star Penna., Black Diamond, Purple, Green, and Red Slates. By cargo or square. Special rates by carloads from quarries.

Slate Dressing and Punching Machine. Roofing Tin, Zinc, Solder, Slating Tools, and Nails, Elastic Cement, Roan Sixed Tarred and Dry Felts.

We are the Agents of the Fire-proof Building Co. of New York for the sale of their goods (see their advertisement on first page), namely: French Teal Hydraulic Lime, and Lafarge Portland Cement, unsurpassed for Cements and Concrete. Also their Fire and Water Proof Hollow Blocks for Floors, Partitions, Ceilings, Furring Arches, etc., and for an Absolutely Fire-proof Roof to which slate can be nailed in the ordinary way; for all of which contracts will be taken for materials and labor.

Slate Wharves, 529 Commercial Street,  
(Near Old Charlestown Bridge),

JOSEPH STORY. BOSTON. S. A. WILBUR.

Messrs. S. & W. have the entire product of my quarries, for 25 years known as "Brownville" or "Bangor Maine Slate," the standard slate of New England; awarded a Silver Medal by the Mass. Char. Mech. Ass'n; and the "Centennial" Medal, the highest awards in Roofing Slates. As my quarries are the only ones making this peculiar quality, architects, builders, and others, by specifying "Merrill's No. 1 Brownville Me. Slate" may protect themselves against inferior kinds. ADAMS H. MERRILL, Brownville, Me.

## VALUABLE WORKS ON ARCHITECTURE.

### Decoration and Ornamentation.

**SPECIMENS OF THE DECORATION AND ORNAMENTATION OF THE NINETEENTH CENTURY.** By M. LIENARD. Reproduced in facsimile by the Heliotype Process. Folio, boards, (size of page 11½ x 15½ inches), \$27.00; half morocco, cloth sides, \$30.00. Also, if desired, can be furnished singly or collectively, in twelve parts, paper covers, each, \$2.00.

This work comprises upwards of one hundred and twenty designs illustrating the varied forms of modern artistic invention applied to architectural ornamentation and to industrial products. It is full of hints for architects, and appeals to all who are interested in the art movement now in progress in this country.

### Newport Cottages.

**NEWPORT AND ITS COTTAGES.** By GEORGE C. MASON, Architect. Containing views of forty-five of the most noteworthy Cottages of Newport. The letter-press describing each Cottage has for head or tail piece a sketch of some picturesque feature, usually of the interior—clock, mantel, staircase, &c. Only 100 copies printed. Morocco, \$30.00.

Published by HOUGHTON, OSGOOD & CO., Boston.

### Sketches of European Architecture.

**NOTE-BOOK SKETCHES.** By ROBERT SWAIN PEABODY, Architect. 1 vol., oblong folio, boards, \$6.00.

A collection of Sketches of European churches, houses, furniture, and miscellaneous architectural details.

### Gothic Forms.

**GOTHIC FORMS (First Series),** applied to Furniture, Metal Work, and Decoration for Domestic Purposes. By B. J. TALBERT, Architect. 1 vol., folio, 31 plates, \$15.00.

This volume contains designs for Gothic cabinets, bedroom and dining-room furniture, bookcases, tables, chimney-pieces, &c.

### Gothic Forms. (Second Series.)

**EXAMPLES OF ANCIENT AND MODERN FURNITURE (Second Series),** Metal Work, Tapestries, Decoration, Designs for Staircases, Fireplaces, Side-boards, Cabinets, Curtain Fabrics, Wall Papers, &c. By B. J. TALBERT, Architect. London. 1 vol., folio, 21 plates, \$8.00.

## BOUND VOLUMES AND BACK NUMBERS

# OF THE AMERICAN ARCHITECT AND BUILDING NEWS

For 1876, 1877, and 1878.

The publishers can supply back numbers of this journal, and also a limited number of volumes for 1876, 1877, and 1878, neatly bound in cloth, either one of which will be sent, express paid, on receipt of nine dollars.

The value of these volumes may be judged by the facts that besides the Summary of each number, which forms a running and reliable record and commentary on current events in the architectural and artistic world:

The volume for 1876 contains, amongst other valuable papers, the interesting essays, "Architectural Students;" the controversial papers on the style of the New York State House; the remarkably able and technical papers "Ceramics at Philadelphia;" the instructive series of articles "The Sanitary Condition of Country Houses," the discussions on the planning of theatres and the fire-proofing of buildings occasioned by the burning of the Brooklyn Theatre, etc.

The Volume for 1877 contains the series of sanitary papers "The Drainage of Country Houses" and "The Sanitary Condition of City Houses," papers complementary to the series published in the preceding volume; the essays on the "Qualification of Architects" and kindred subjects; the illustrated "Studies in Interior Decoration;" the discussions caused by the fall of the Rockford Court House, etc.

The Volume for 1878 contains the illustrated series of "Papers on Prospective" which present a complete exposition of the science; the comprehensive illustrated papers, "Modern Plumbing;" the essays on the "Responsibility of Architects," the Labor Troubles and kindred topics; the papers, "Urban Housing;" the profusely illustrated article, "The Open Fireplace;" the "Competitions in Interior Decoration," etc.

### THE ILLUSTRATIONS.

The illustrations in these volumes cover the ground of architectural designs by reproducing

	1876.	1877.	1878.		1876.	1877.	1878.
Bay Windows.....	1		10	Monuments.....		10	8
Churches, etc.....	26	24	22	Museums.....	1	1	
City Houses.....	11	8	16	Music Halls.....	3	1	1
College Buildings.....	4	3		Perspective Diagrams.....			13
Country Houses.....	34	44	44	School Houses.....	2	6	2
Court Houses.....	5	3	1	Stables.....	2	2	2
Details.....	9	13	5	Staircases.....		3	13
Engine Houses.....	2	2	1	Stores, etc.....	11	16	6
Fire Places.....	1	10	15	Temples.....	2	7	1
Furniture.....	2	9	5	Tombs.....	2	2	2
Hospitals.....	6	2	5	Town Halls.....	8	1	5
Hotels.....	4	3	4	Theatres.....	2		1
Interiors.....	16	18	8	Vestibules.....			6
Libraries.....	8	6	4	Wall Decorations.....			10

Besides those included in the above list, illustrations have been published of 3 Banks, 4 Insurance Offices, 3 Custom Houses, 1 Post Office, 2 State Houses; 3 Fountains, 1 Reredos, 1 Club House, 4 Châteaux, 1 Bishop's Throne, 2 Museums, 2 Police Stations, 2 School of Fine Arts, 2 Domes, 4 Towers, 1 Grain Elevator, 2 Triumphal Arches, 1 Rostrum, 1 Organ, 3 Cemetery Lodges, 1 Synagogue, 1 Factory, 1 Newspaper Office, 2 Market Houses, 1 Prison, 1 Patent Office, 1 Cotton Exchange, 2 Bridges, 2 Exhibition Buildings, etc.

Those who desire to complete their sets can do so at the following rates:—

Single Numbers, 15 cents each; Unbound Volumes, \$7.50; Bound Volumes, \$9.00.

### SPECIAL OFFER!

For twenty-seven dollars, a subscriber can obtain the numbers for the year 1873, and all three bound volumes for 1876, 1877, and 1878.

Remittances should be made by check, draft, or postal money-order, to the Publishers,

HOUGHTON, OSGOOD, AND COMPANY, BOSTON

# ETNA IRON CO.

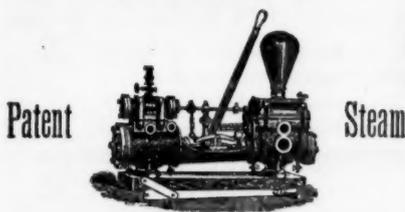
Manufacturers of every description of Wrought and Cast

## ARCHITECTURAL IRON WORK FOR BUILDINGS.

WM. J. FRYER, JR., MANAGER.

Office, 104 Goerck Street, New York.

### KNOWLES



## PUMP THE STANDARD.

Fire Pumps for Manufactories, Hotels, Mercantile Houses, and Public Buildings of every description, a speciality.

Noiseless Pumps for Water Elevators.

ALSO,

Pumps for Water-Works, Mines, and all classes of work executed by civil engineers.

The Knowles Independent Stationary "Quick Steaming" Fire Apparatus, for Cities, Villages, and Towns, affords the best possible fire protection, and is most economical.

MANUFACTURED BY THE

KNOWLES STEAM PUMP WORKS, WARREN, MASS.

WAREHOUSES, { 14 & 16 Federal St., } Boston.  
{ 113 & 115 Congress St., }  
{ 82 & 94 Liberty St., } New York.

Send for Illustrated Catalogue.

### MARSHALL'S AMERICAN



#### LEADED SHEETS.

Cheapest and most durable Metal for Cornice and Roofing

MARSHALL BROS. & CO.,

Front and Girard Ave., Phila

Represented in New England States by

C. T. HOLBROOK, No. 60 UNION STREET, BOSTON.

### S. KLABER & CO.

## STEAM MARBLE WORKS,

217 to 223 W. 51st St., New York.

ESTIMATES MADE ON ALL KINDS OF MARBLE WORK.

## DEVER & SHORTLIDGE,

Ledger Building,

PHILADELPHIA, PA.

## Law and Collection Offices.

City Collections, Interest, Mercantile Bills, and Foreign Claims promptly made. Liens filed, Mortgages foreclosed, Ground Rents sued out, and all other Legal Business will receive careful attention. Reports made on Claims whenever desired, and cashed as soon as collected.

ROBERT DEVER, Solicitor.

JOHN WALKER SHORTLIDGE,

Attorney and Counsellor at Law.

ROOMS 6 AND 7, FIRST FLOOR.



Terra Cotta Chimney Tops, Akron Land Tile

D. W. LEWIS, 80 Water Street, Boston, Manufacturers' Agent.

### NATIONAL

## FINE ART FOUNDRY,

218 East 25th Street, New York.

Artistic Bronze Decoration for Buildings, Monuments, and Altars.

Architects' Designs executed, and designs furnished for special subjects.

Artistic Monuments in Granite and Bronze.

## GAS

### SPRINGFIELD GAS MACHINE.

Springfield, Mass.; 75 Maiden Lane, New York; 117 and 119 Court St., Boston; and No. 12 North 7th St., Philadelphia. Agencies, 159 West 4th St., Cincinnati, and 315 Pine St., San Francisco. Send for Circular.



### NATIONAL TUBE WORKS CO.

PATENT

Indestructible Enamelled Wrought Iron

### LAP-WELDED PIPE,

From 1/2 inch to 15 inches diameter.

Now extensively used for

Water, Gas, Sewerage, and Mining.

It is not affected by heat or cold, acids, caustic or potash in solution, boiling water, salt or fresh. Joints connected by our PATENT SLEEVE COUPLINGS preventing all leakage.

MALLEABLE IRON FITTINGS (enamelled), and COMPOSITE ENAMEL for making Joints, supplied to Plumbers, Steam and Gas Fitters, etc. Specimens can be seen and obtained at offices of

National Tube Works Co.,

8 Pemberton Square, Boston; 116 Lake Street, Chicago; 106 John Street, New York; 113 Water Street, Pittsburgh, Penn.; and McKeesport, Penn.

## BURDITT & WILLIAMS,

DEALERS IN

## FINE HARDWARE

of every material. A specially complete stock of

PLAIN AND ORNAMENTAL BRONZE HARDWARE of the latest patterns.

A full assortment of all Hardware required in the construction of Public Buildings, Stores, Dwellings, etc. Estimates furnished to Architects and Contractors. Samples sent to any address.

20 DOCK SQUARE, BOSTON.



### The Draft of the Chimney increased.

Smoking Chimneys Prevented Particularly adapted to Chimneys in exposed positions.

Explanatory Circulars sent to Architects, Builders, Sanitary Engineers, etc., on application.

JOS. W. TAYLOR, 70 Grand St., Brooklyn, N. Y.

## CATALOGUE OF Architectural Books

Mailed free to any address.

All architectural and Scientific Books supplied at publishers' prices.

A. J. BICKNELL & CO.,

ARCHITECTURAL BOOK PUBLISHERS, 27 WARREN STREET, NEW YORK.

TO ARCHITECTS AND BUILDERS.

## MAHOGANY,

(all thicknesses) for Doors and Interior Finish.

## FIGURED WALNUTS,

(1-4 inch thick), for Doors, etc.

## VENEERS,

from all varieties of Domestic and Foreign Woods.

PALMER, PARKER, & CO.,

10 TRAVERS STREET, BOSTON.

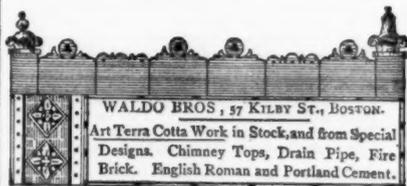
BEEHIVE BRAND.

## FELT ROOFING.

Only Manufacturers, NEW ENGLAND FELT ROOFING COMPANY, 22 Milk Street, Boston.

## UNPARALLELED DISCOVERY.

Paint upon exterior surfaces, in the most exposed situations, will wear twenty years or longer if admixed with the Paint Preserver invented by ASAHEL WHEELER, Boston. It will neither crack, blister, nor scale.



## PEERLESS BRICKS.

## THE PEERLESS BRICK COMPANY, OF PHILADELPHIA,

MANUFACTURES AND KEEPS IN STOCK

ARCHITECTURAL SHAPES (80 kinds).

ALSO

RED Pressed Fronts.

Extra fine in color and quality

BROWN, Colored throughout

More beautiful than Brown Stone DURABLE

CHOCOLATE,

Same as above; difference in color

FLESH COLOR,

A very popular color

BUFF, very fine.

Harmonizes beautifully with Brown or Black

GRAY, A pleasing shade.

BLACK, Velvety jet face.

The only black brick fit for a fine building, producing a beautiful effect, and free from the glossy and greasy look of other black or dipped bricks

OFFICE:

NORTHEAST COR. FIFTH & CHESTNUT STS.

THOMAS F. ADAMS,

JOSEPH WOOD, JR.,

PRESIDENT.

TREASURER



## DOLIVET, CUTTER, & CO.,

ARTISTIC

## Papier Maché Decorations,

106 West 28th St., New York.

House, Theatre, and Church Work. Architects' drawings strictly followed. Special designs and details furnished on application. Work shipped to any distance.





**ROLLING Venetian Blinds.**

Wilson's Patent. For first-class Dwellings and Public Buildings.

These blinds can be fitted either inside or outside the sash, and are operated with ease without machinery or weights. They are made to coil above or below, as shown in cut. Can be furnished in any kind of wood. Unequaled for elegance, durability, and simplicity. Indorsed by many of the leading architects in the country, and in use in some of the handsomest buildings.

We also manufacture

**WILSON'S PATENT Rolling Steel Shutters**

These blinds are operated on same principle as above (being self-coiling). They are used for closing store-fronts and all windows and doorways that are required to be perfectly fire and burglar proof.

Also, Rolling Wood Blinds for Store-Fronts, Book-Shelves, School Partitions, and other purposes.

A list of public and private buildings fitted with our Blinds sent on application. Architects and owners are invited to send for working models, catalogues, and price-lists.

**WILSON & JAMES, 68 Beckman St., New York.** Two Prize Medals at Philadelphia.

**THREE ADMIRABLE NEW BOOKS.**

**The School-Boy.** By OLIVER WENDELL HOLMES. Poem read at the Centenary of Phillips Academy, Andover, Mass., June 10, 1878. Illustrated with many excellent Engravings on Wood, designed by J. Appleton Brown, Waud, Sheppard, Merrill, and Hitchcock. Uniform in size and general style with the choice and popular holiday books of previous years, "The Hanging of the Crane," "Mabel Martin," "The Skeleton in Armor," "Christmastide," etc. Handsomely bound in cloth, \$4.00; morocco or tree calf, \$8.00.

A beautiful poem, finely illustrated, tastefully bound: a choice holiday gift-book.

**An Account of the Life and Times of Lord Bacon.** Abridged from the "Life and Letters of Bacon," by JAMES SPEDDING. Uniform with Popular Edition of "Bacon's Works." With a Portrait. Two vols., crown 8vo., \$5.00; half calf, \$9.00.

This edition omits no essential part of Mr. Spedding's voluminous work, but presents a connected and complete narrative of Bacon's life and remarkable career, including enough of the political and literary history of England to make clear Bacon's position, circumstances, and influence. It is a very noteworthy addition to biographical literature.

**The College Book.** Edited by CHARLES F. RICHARDSON and HENRY A. CLARK. 1 volume, 4to, full gilt, \$15.00.

A royal volume, containing historical and descriptive accounts, principally by professors or graduates, of twenty-four leading American Universities, Colleges, and the United States Military and Naval Academies, with 60 full-page Heliotype Illustrations of buildings connected with these institutions.

\*• For Sale by all Booksellers.

HOUGHTON, OSGOOD & CO., Boston.

**IMPROVED PRISON LOCKS.**

All Architects should have our 36 page Illustrated Catalogue of Prison Locks.

ADDRESS

YALE LOCK MFG. CO., STAMFORD, CONN.

New York Salesroom, No. 53 Chambers Street.

**T. B. STEWART & CO. SLATE, MARBLE, AND WOOD MANTELS,**

AND Slate Goods of Every Description, (QUARRIES AND MANUFACTORY, FAIR HAVEN, VT.)

75 & 77 West Twenty-Third Street, New York.

**WROUGHT IRON BEAMS & GIRDERS**

THE UNION IRON MILLS, Pittsburgh, Pa., Manufacturers of Improved Wrought Iron Beams and Girders (patented).

The great fall which has taken place in the prices of Iron, and especially in Beams used in the construction of FIRE-PROOF BUILDINGS, induces us to call the special attention of Engineers, Architects, and Builders to the undoubted advantages of now erecting fire-proof structures; and by reference to pages 52 and 54 of our Book of Sections — which will be sent on application to those contemplating the erection of fire-proof buildings — THE COST CAN BE ACCURATELY CALCULATED, the cost of insurance avoided, and the serious losses and interruption to business caused by fire. These and like considerations fully justify any additional first cost. It is believed that, were owners fully aware of the small difference which now exists between the use of Wood and Iron, in many cases the latter would be adopted. We shall be pleased to furnish estimates for all the Beams complete, for any specific structure, so that the difference in cost may at once be ascertained. Address

CARNEGIE BROS. & CO., Pittsburgh, Pa.

**LESTER** Scroll Saw, Circular Saw, Turning Lathe, Lathes, Tools, Emery Wheel, and Drilling Attachment. All for \$5.00. A beautiful and perfect machine, warranted.

MILLERS FALLS CO., 74 Chambers St., New York

**SPECIALTIES IN PLUMBING GOODS,**

Having for their special object

**NEW CLOSET AND NEW VALVE.**

Cleanliness, Durability, And the exclusion of Sewer Gas.

Jennings' Sanitary Depot, A. G. MYERS, Manager, 94 Beekman Street, New York.

**MAKE your own GAS**

GAS GENERATORS, FOR LIGHTING Dwelling-Houses, Public Buildings, Churches, Factories, etc., etc.

WALWORTH MANUF. CO. No. 69 Kilby Street, BOSTON, MASE.



**SAYLOR'S PORTLAND CEMENT.**

Approved, recommended, and used by Architects, Engineers, and Builders of the highest authority. New York and Brooklyn Bridge, Department of Docks, and Croton Aqueduct, New York; new Capitol at Albany; U. S. Government Works (forts, light-house foundations, canal locks, etc.); floors for breweries, sugar-houses, ice-houses, cellars, and stables, and for heavy foundations, etc. For sale by all dealers in masons' materials.

JOHNSON & WILSON, Gen'l Agents, 93 Liberty St., New York

**PRIZE MEDALLISTS.**

1863; 1865; 1872; 1873; AND ONLY AWARD AND MEDAL FOR SELF COILING STEEL SHUTTERS AT CENTENNIAL EXHIBITION, PHILADELPHIA, 1876.

**CLARK & COMPANY,**

ORIGINAL INVENTORS AND SOLE PATENTEES OF

**NOISELESS, SELF-COILING, REVOLVING STEEL SHUTTERS.**

Fire and Burglar Proof. Also, Improved Rolling Wood Shutters

OF VARIOUS KINDS. CLARK'S SHUTTERS are fitted to the new Tribune Building, Lenox Library, Delaware and Hudson Canal Company's Building, Trans-Atlantic Steamship Company's new Dock, American News Office, Arnold, Constable, & Co., and Park & Telford's new Buildings, &c., &c., and are indorsed by the leading architects of the world.

OFFICE AND MANUFACTORY.

162 & 164 West 27th Street, New York.

**HOPKINS & DICKINSON MANUF'G CO.**

76 READE STREET, NEW YORK,

WORKS, DARLINGTON, N. J.

Lock and Hardware Manufacturers,

DESIGNERS, FOUNDERS, AND WORKERS

**BRONZE AND BRASS.**

Architects' Designs faithfully executed.

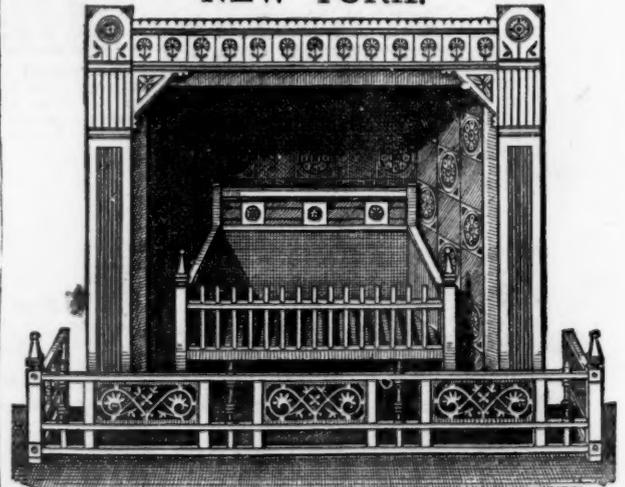
Our name upon any article can always be relied upon as expressing an unvarying standard of high quality, both in metal and workmanship.

**WM. H. JACKSON & CO.**

(NO CONNECTION WITH ANY OTHER ESTABLISHMENT.)

Union Sq., 2d door from Broadway, (17th St. side),

NEW YORK.



Manufacturers of Artistic Grates and Fenders in Brass, Real Bronze, Steel and Tile. HAVE NO OTHER WAREHOUSES.

**BOWER'S PATENT SEWER-GAS TRAP.**

The most perfect barrier against Sewer Gas that has yet been invented.

**A POSITIVE SEAL**

Against sewer-gas, absorbed gases, and back water. Seal is not broken by syphonage or evaporation. Self-cleaning, not injured by freezing, it has many other good points that no other trap possesses. Simple, cheap, durable, and effective. Send for full descriptive Circulars to the Manufacturers,

B. P. BOWER & CO., 104 & 106 St. Clair St., Cleveland, O

**THE EUREKA VENTILATION CO.**

OFFICE AND MANUFACTORY,

74 CHARLESTOWN STREET,

BOSTON, MASS.

**THEATRICAL SCENERY AND STAGE SUPPLIES.**

Theatrical Fresco only. Prices moderate. Refer to first-class. Scenery and Supplies delivered at any point, however distant. Correspondence solicited.

LAFAYETTE W. SEAVEY, Established 1855. No. 8 LAFAYETTE PLACE, NEW YORK

DAL

RS.

enox  
nship  
& Til  
id.

CO.

rs,

rying

de,)



nd Tile

P.

aint

L, and  
by sy-  
ring,  
many  
trap  
le, and  
re Cir

nd, O

CO.

LIES.

Refer  
at any

YORK

ID

high-  
Aque-  
-house  
rs, and  
York