

WESTERN ARCHITECT. THE





THE WESTERN ARCHITECT.





ASPHALT, PITCH, GRAVEL ROOFING IRON, TIN AND SLATE.

41 South Eleventh Street,

Minneapolis, Minn.

PUBLISHER'S DEPARTMENT.

THE WESTERN ARCHITECT IS FUBLISHED THE 15th OF EACH MONTH BY

THE WESTERN ARCHITECT PUBLISHING COMPANY.

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Insurance Exchange Building, MINNEAPOLIS, MINN. ST. PAUL, Commercial Building.

A WELL TESTED FIRE PROOFING SYSTEM.

Fitzpatrick may not be so far out of the way in his claim that American architecture is receding from the high mark it made in the early nineties. His notion that the scenic results of the Chicago Expo were better than we could now produce may be true.

At all events there were good ideas of building, then fresh and in full vigor, which have been since abandoned in part much to the detriment of our structures.

That was the time when the steel frame had displaced the old walls for the outside of buildings as well as the floors and partitions, and this fuller development of the steel frame, leading as it did at once to greatly increased height, turned the most intelligent minds to the study of clay as a logical material for the protection of the steel frame. Clay immediately took its place in the newer and lighter construction, so consistently and skilfully that today, after twelve or fifteen years of trial of this and that, we turn to the practice of the early nineties for undoubted safe methods of fireproofing.

At that time the best men of that brilliant period were striving to produce the best systems of fireproofing from clay, and in the struggles between systems some curious facts were developed.

Then it was that Bob Andrews and Jacques instituted those comparative tests in Denver which have become historic and so surprised the building world. The genius who first got the notion of mixing sawdust with clays for the kiln probably had little idea that floor arch tiles so made would stand those Denver tests as well as they did, defeating the hard tiles at every point. In fact it would puzzle a large part of the building world today to tell why a floor arch of porous terra cotta tiles is so much stronger than one of the harder tiles of the same weight and general design. The secret is doubtless to be found in the mortar joints, which can be made so much broader and more perfect in the lighter, thicker tiles.

One would naturally expect to find the porous material superior in insulating and deafening qualities, and it is de servedly popular for backing up outer walls and for partitions.

The valuable qualities of this material appealed so strongly to Mr. C. J. Swanson, who was at the time operating a wellequipped brick making plant near Minneapolis, that in the slack times of '93 he turned his energies towards building a plant for the production of thece porous goods for the construction of floor arches, partitions and wall linings. His clays have shown themselves exceptionally adapted for making these goods and he has a plant which is not only well adapted for handling, drying and burning the goods so as to make a uniform output of high grade, but all dies and much of the accessory mechanism are made in his own shop.

The sections used by Mr. Swanson in his floor arches are exceptionally well studied and invite comparison.

The past few years have witnessed a good deal of experimenting in floor construction and many new devices have appeared of very doubtful merit, so doubtful, in fact, that the net result of all this experimenting is the conviction that for something safe and economical, we must fall back on the practice of the days before every other man you meet had a new system of fireproofing. A multitude of failures of these new and strange schemes are convincing the wary that we have had nothing later than the I-beam and good porous terracotta tile arch that we really want to trust.

The evidently splendid insulating possibilities of this porous terra cotta are leading to its increased use in outer walls of light buildings. Some of the forms of tiles used in floors and partitions are used for the body of the wall, the facing being of bricks or other material.

Very effective work is being done with this material as a wall material to be finished on the outside with a plaster of material impervious to water.

The existence in a community of a large plant like the above, capable of turning out all the desirable forms of porous terra goods at short notice is cause for congratulation, and the merits of these goods needs only to be more fully known to lead to a greatly increased use of them.



VIEW OF NORTHWESTERN FIRE PROOFING WORKS, MINNEAPOLIS. C. J. Swanson- Proprietor.

TO BEAUTIFY AND PRESERVE YOUR HOMES.

We have recently received a copy of a handsomely illustrated booklet, issued by the well-known house of Samuel Cabot, of Boston, Mass., relating to the use of their stains on shingle roofs and sidings of frame buildings.

The booklet might properly be called a "Book of 100 Stained Houses" as about that number of buildings are illustrated in half-tone plates through its pages, made not only interesting from the high character of the buildings so illustrated, but also by the unsolicited and eulogistic testimonials of leading architects from nearly every state in the Union whose work grace the pages of this beautifully printed "booklet."

It seems to be the universal opinion among educated architects, that no other shingle stains than Cabot's give as great a degree of satisfaction both to owner and architect, for, besides beautifying the home, its application will without question increase the life of the roof or sidings more than fifty per cent. While there are other stains on the market called "just the same" or "equally as good," none of the stains with which we are familiar has the unanimous indorsement of both the architect, owner and builder as does "Samuel Cabot's Cresote Shingle Stains," and no one intending to build should fail to give these facts their proper consideration. When they have done this, they will not only use it themselves, but will recommend it to others.

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NORTHFIELD, MINN., Dec. 26, 1902.

Pembina Porltand Cement Co.,

Grand Forks, North Dakota,

Gentlemen-I have used your "Northern Hydraulic" cement in various work for the past three years, and am convinced that it is a superior article. It carries as much sand as a portland cement and when properly mixed, attains a strength equal to best portland.

It is uniform and satisfactory in every respect. I shall use it in preference to any other hereafter and congratulate you on the success you have attained. Yours truly,

D. H. LORD.

PEMBINA PORTLAND CEMENT CO. MILTON, N. D., Feb. 3, 1902.

Pembina Portland Cement Co., Grand Forks, North Dakota,

Gentlemen-In stone work recently I used your "Northern Hydraulic" cement. I began mixing it two parts sand to one of cement, and finished mixing four parts sand to one of cement. The four to one mortar worked beautifully and became

hard as a rock. It works like Portland, only that it is richer. I consider it as cheap as lime for stone work on account of the extra sand it will carry, and as to durability there is no comparison. A. EBERTII.

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THE SAMSON SPOT CORD.

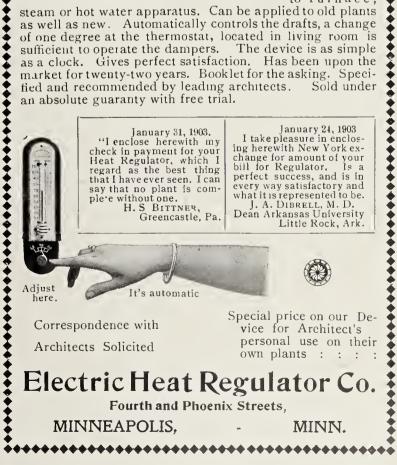
Most of the architects in the United States are familiar with the "Samson Spot Cord," from its general use in buildings all over the country, and many of them have always specified it in their work.



There are some architects who specify simply "braided cord," not having given the subject the consideration which is its due, and not realizing that there is any difference in the us its due, and not realizing that there is any difference in the quality or wearing attributes of different braided cords. Owing to this want of knowledge on the part of architects and builders, the Western Architect desires to state that the manufacturers make three grades, viz: the "Phoenix," which meets the demand of the man who considers only first cost in his purchases; the "Massachusetts," a consider-ably better grade, and the "Samson Spot Cord," the very best grade. The nurghase of such and make a difference of grade. The purchase of sash cord may make a difference of three or four dollars in the cost of a dwelling house, but it will save many times this amount in expense of repair, to say nothing of the bother in the first few years of occupancy. The same principle applies in the large public or office buildings. If the proper size of cord and pulley are used, as specified in the Samson Cordage Work's catalogue, they will outwear any other device for hanging windows. These facts are becoming known more and more to those interested in building, but the Sash Cord item is such a small one, that it is often overlooked by many. We believe there is no one item, however, that causes so much annoyance as poor Sash Cords, and as the Western Architect is always glad to aid those in search of information on any subject pertaining to building, we cheerfully give the above information to our many readers.

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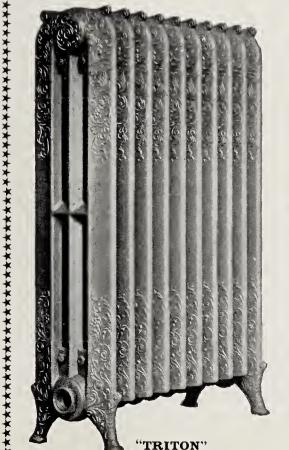
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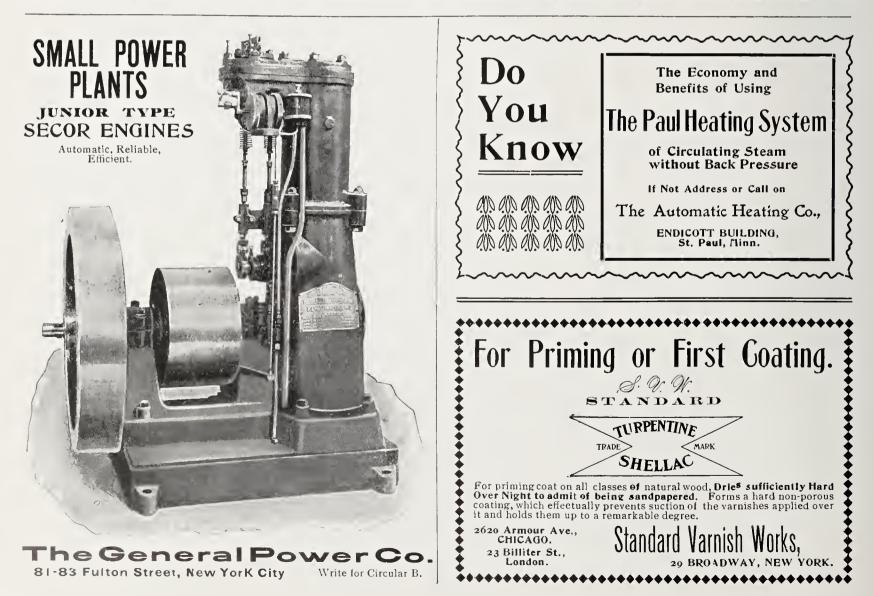
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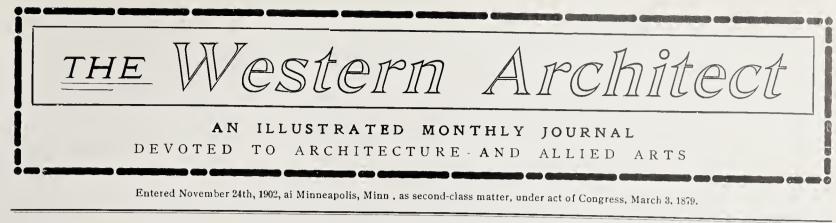
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Vol. 2.

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Remittance for Subscription and Advertising may be made by check, bank draft, express or post office order, always payable to The Western Architect Publishing Co., Insurance Exchange Building, Minneapolis, Minnesota. As THE season advances, the business situation in the Northwest becomes comparatively even more encouraging. Without floods or drought but with weather conditions making for exceptionably large crop returns and with no considerable labor disturbances, building improvements must needs be in active demand.

Again, while this section has for a few years been greatly favored by immigration it seems to have escaped any wild "booms" or great speculative fevers. A year ago it seemed that some of the new farm lands might be bringing too high prices for safety, but any craze of that nature has subsided and one or two good crops will do much to place new settlers on a safe basis. Meanwhile prices of city real estate have hardly risen to a decent mean after the reaction in the early nineties. Another field to demand much in the way of improvements in the near future is that of railway building, both steam and trolley; for the region covered by the big "merger" has been notoriously inactive in new railway building of later years, and a change of policy would seem to be due.

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RARELY does a publication better merit its name than that modest monthly, the "Architectural Record." Tf tempted to twit it with want of margins and general sumptuousness, one may always find something within to generate forgiveness; or, if his malady be deeper, a chapter or two from the healthy one who writes up the "Aberrations" ought to restore him. Nevertheless it comes to mind that not long since the "Record" gave leading place to an argument to prove that New York has become metropolis of the country, not only in population but in art. Then one follows through a maze of words to learn how he should vote, and that in this art metropolis nothing is curbed-that no one would think of effective protest if a 25-story hotel were proposed to be built next its most cherished public monuments-that although artists form a class or clan in Greater Gotham, no one ever thought of their work as in anyway distinctive, or as that of a school.

While one is asking himself if an art metropolis is then worth while, comes that lecture of the genial Fitzpatrick from which we extract some things for another column. One reads and asks himself if years and honors are beginning to rest heavily on Fitz. Or is there really so little to show in our art for all this imperial rush and swirl of the past few years?

THE RECENT collapse of a section of Bridge Square in Minneapolis where the roadway crosses the Great Northern tracks was due to a complication of causes not taken into account sufficiently when the iron work supporting the roadway was built. The weight of the paving material has been materially increased since that time, and the trolly cars now in use are much heavier than formerly. Whatever there may be in the effect of vibrations has also been enhanced by the use of the larger cars. All of these causes combined should not, however, be sufficient to cause the collapse of the ironwork under the load of a single car, because well built bridges and structures of the sort are made to be absolutely safe if crowded with loaded wagons and all the people that can be sandwiched in, in the making of a crowd. Either the original iron structure was weaker than it should have been, or it has suffered loss of strength by corrosion. It is highly probable that the last cause will be found prominent if a fair report ever reaches the public.

The position taken by the Great Northern company is such as to make it advisable for the city and other interests to secure evidence on this point at once. The personal damages involved are miraculously small-no great harm being reported to any of the passengers of the passing train save one man—while the street car came off like a lucky small boy crossing "rubber" ice. The newspapers are preserving a suspicious reticence about this falling in of a section of roadway with the area of a decent house. We have it from one witness that the street car company at least were so far warned some weeks since by surface appearances that they, upon a Sunday evening, did not venture to carry passengers across this section, but required them to leave the cars and walk around, taking the cars-which meantime had made a sort of flying run across—on the other side. So much money is involved in the rebuilding of the supports for this roadway that the case may go to court with the result of bringing out evidence of value with reference to corrosion of iron under these conditions.

MINNESOTA has "worked up" a large and prosperous institution where instruction of various sorts is dispensed.

This was long since named a university and many of its supporters have assumed from the name that one might obtain a liberal education thereat. Former governing bodies of the university may have had the same idea, but the present Board of Regents seem to have abandoned it. They have been recently engaged in dropping out departments—among them that of fine arts. It is conceivable that young people may be graduated from this institution with little or no knowledge of the works of masters in art, yet with the firm idea that they have received a liberal education, but among many graduates we have met only one who felt he was absolutely sure of it. Or, laying aside knowledge and coming to skill, it is a safe bet that a big majority of the professors, of the sciences at any rate, would like to be permitted to part with all they retain of a dozen things taught them at colleges in exchange for a fair degree of skill in free-hand drawing.

IN THE presence of so many shades of opinion, or perhaps more properly of so many ethical standards about the business of the architect or engineer who has in hand the spending of other people's money, it is hard to see how he can satisfy any considerable majority of his entire honesty. Fewer members of either profession practice the grosser forms of dishonesty than contractors, for instance, would have us suppose. It is common enough for none too scrupulous contractors to throw out hints of the purchasable character of this one or that one, and more likely than not the more upright are most attacked by such men, for reasons well known in building circles. But among contractors are some really good fellows who play the part of the tempter now and then, we sometimes think from no better reason than from having somewhat warped ethical standards themselves.

A recent conversation with a selling agent for some excellent material largely used in engineering work developed a curious standard as favored by him—one which, if generally applied, might lead to startling results. In one locality the material had suffered greatly in reputation by the scandalously bad manner of putting it in. The conversation turning on the engineer in charge, our agent remarked that although he wasn't known to take favors from contractors or material men, he, the agent, had more respect for the honesty of the man who did, but who required good work just the same.

Not long since, that excellent journal, "Architecture," took grounds, which appeared to be none too well chosen, on the question of the obligation of the architect to keep the cost of buildings within the limitations set by the owner. It held that an architect of a private enterprise was under an ethical obligation to keep the cost close to the limit, but that such an obligation did not exist with public work, where in fact, if he found the appropriation insufficient to build becomingly, he should exercise himself to get the limit raised. Yet had "Architecture" argued differently in each case, we are bound to think its views had been sounder. Certainly if the dwelling be taken as a type of private work, architects know that, to begin with, the limiting of the cost to the figures given by the owner is out of the question; for universally owners set limitations of cost for themselves or their architects which will not bring what they desire and must and will have. It is safe to say that where an architect finds one client that will be satisfied with a house of the cost he names, ten will be found who can't be kept within that limit by from twenty-five to fifty per cent and if the same owner were by any chance to be restrained to build within his original cost limit he would be ashamed of and dissatisfied with his house. Whatever else he demands, his house must display outlay, and the architect who keeps this client informed in matters of cost may be absolved from blame on ethical grounds.

With public buildings, however, the situation may often be more easily controlled by the architect when he can control at all. It is true that he often secures commissions for such building through competition where temptations to misrepresentation are strong, and that often in the letting of public work considerations come in that are beyond his control. But if he can let contracts in the open to the lowest responsible bidders, the case is rare where the public cannot be better served by keeping the cost within the appropriations—both ethical reasons and esthetic will be joined for better service, for nothing is more obvious to the initiated than the fact that most of our public buildings suffer in character from too great outlay of money, that they lack in that simple straightforward adaptation to the needs of the case which makes for better composition and less cost—that, in fact, more of them are spoiled from being overdone than from lack of cost.

A CONTRIBUTOR to "Forest and Stream" writes about the recent Adirondaek fires from the standpoint of the "woodsman"—a term which he is particular not to have eonfused with "guide" or "gamekeeper." Woodsmen arc indeed solidly averse to guides and gamekeepers, whom they look upon as mereenaries in the pay of the wealthy people who have attempted to establish a new order in the Adirondack wilderness. The writer speaks of the "preserves" of the latter and of certain streams as "preserved" and generally of the "insolence" of gamekeeprs, in a way that shows the sentiment of the genuine resident of the woods. But while showing elearly his sympathies, he also throws lights upon the scene which may be turned to good use by those who have the conservation of forests in charge. The pulp-mill man has been allowed to work in the Adirondaeks under a system of "seientific culling" but has always elaimed it to be impossible for him to get rid of his brush. Where fires have reached his tracks, as might have been expected, the destruction of everything growing has been absolute. While many people of wealth have acquired tracts which have improved under their care, yet many of these have more than offset these efforts by other aets, as for instance, one of them has run a railroad into the region, while another pollutes a stream with the refuse of a wood alcohol factory. Proof of setting fires came under the writer's cyes in the neighborhood of one large private estate, done, no doubt, by woodsmen of the neighborhood who ehafed at being hustled off of "preserves," and at the "insolence" of gamekeepers. The correspondent gives currency to an estimate that as much as 1,000,000 acres or a fifth part of the woodland area of the Adirondaeks have been burnt over, and leaves one with the impression that the policy of the state authorities has not met with entire success. The attempt to enlist wealthy private owners in the work of preserving the woods has not been so managed as to remove frietion with the smaller earlier owners, nor has the application of "scientific forestry" in a homeopathic way placed proper curbs upon the operations of limbermen.

EXTRACTS FROM A RECENT LECTURE. By F. W. Fitzpatrick.

We judge of a people's literature by their best works, the few masterpieces they produee, not by their business letters. So with architecture. Our government buildings, our great colleges, and buildings of that character, the really permanent structures, those not affected by changing ideas and fluctuating values, are the true standards of our ability to express ourselves architecturally.

Europeans eall us a nation of engineers, not architects. And we eertainly have performed rather startling and daring feats in structural engineering that have not been equalled or even attempted abroad, but we have also shown that we are out of our architectural swaddling elothes even though we are more scientific than artistic.

I say this in no bombastie spirit, however, for, sad to relate, we stepped from swaddling clothes into adoleseenee, then rapidly into virile young manhood, full of brilliant promise and expectation, only to fall immediately into almost driveling senilty. The ease is hard to explain. Indeed, I will not try to explain it, my purpose here is but to ehronicle the faet. Heaven grant it is but a transitory period, a temporarily arrested growth. But the faet remains that our highest attainment is well *behind* us. Our best work is ten years old and we are not doing anything equal to it, nor ean we for some time to eome. We have not the men to do it with. We confess it, our architecture is decadent.

Our commercial buildings have more conveniences than those of any other country. As before stated they are marvels of engineering ingenuity, they fulfill in the highest degree every utilitarian purpose that can be imagined, and we are evolving a style, if it may be so called, that is essentially characteristic of our growth, but it is not, after all, strictly speaking, architectural; we are merely—and rightly—decorating our steel skeletons more or less suceessfully, though seldom frankly. But we have eliminated these buildings from our consideration. Broadly they are a part of our architecture, but they can hardly be called a standard of our real architectural growth.

Besides our great public buildings that mark the steps of our real progress in the art, and those other structures that we are justified in ealling permanent, there is a elass of building, exceedingly temporary in nature, but that demonstrates better than all else just what we ean do and where we really stand in architecture. Could there be a better test of a nation's skill than a national exposition? The best men in the country are selected for the task, there is unlimited money for the execution of the work, there is generally all out-of-doors to work in, one is not hampered by commercial considerations, renting space, lighting or other restrictions; the material used is plastic, easily and cheaply molded into any form the fantasy of genius may wish to give it, in fine talent is free, for once in a life time, to work as it will, not as it must.' Unfortunate is it indeed, that such groups can be perpetuated but on paper, and how careful we should be to preserve in photographic and other pictorial representations these great national efforts upon absolutely imperishable records for posterity.

I made the charge a moment ago that our art architectural was decadent. Am I justified in that statement? My only proof, and I submit that it is a sufficient one, is that what we are doing today falls far short of what was done here in 1893. My basis of comparison is our effort in the great forthcoming exposition at St. Louis alongside of the World's Fair at Chicago.

The latter showed us a group of buildings that the world has never seen equalled anywhere, nor in Athens nor in Rome. Man never before designed one such grand comprehensive scheme. There were minor discords, little slips here and there, but they were overshadowed, lost sight of—the major mass of buildings was perfect. The men who designed it were masters, they worked in harmony and with but a single object in view, and they had no strikingly successful combinations to serve them as models. They actually designed, there was no servile copying.

And now what have we at St. Louis? To me it seems like a weakly desperate effort to do something different to the Chicago exposition, an inability to get away from its thraldom, and, at the same time, a confession of inability to even copy it worthily. The general plan shows weakness of conception and lack of experience in handling mighty projects; the work of adolescents, not of masters. They had a well-wooded, sightly location to begin with a magnificent advantage, far superior to Chicago's; a slight rise and amphitheatrical formation was temptation enough to indulge in cascades and falling water effects and to crown the hill-top with their finest building. None could have resisted that, but they went farther and produced radiant lines from that central composition, devising a pretty grouping on paper, but a fizzle in reality. In execution the rise is too slight to make the scheme apparent, one must see it on paper or from a balloon to understand it : the buildings are misshapen, awkward and seem to be strung along a narrow lane, and a crooked one at that.

The art buildings that crown the hill are practically masked by a Chinese sort of festival hall and porticoed terrace placed there as a background for the fountains. Those buildings, by Cass Gilbert, of New York, afford the best opportunity of all the "palaces" for something particularly fine. An art gallery, where one has not to bother with windows, is the ideal problem one always hankers to handle. In this case Mr. Gilbert did not rise to his opportunity. He had incentives enough to try and excel, for, not only is it the crowning feature, but it is also the only permanent building of the exposition. He had poor Atwood's as a motif, and one vaguely traces it in his composition, but it lacks all that made the Chicago art palace the gem of our age. The one building was clearly the composition of a master, the other is the work of a business man whose mind must also comprehend commercial projects and financial schemes.

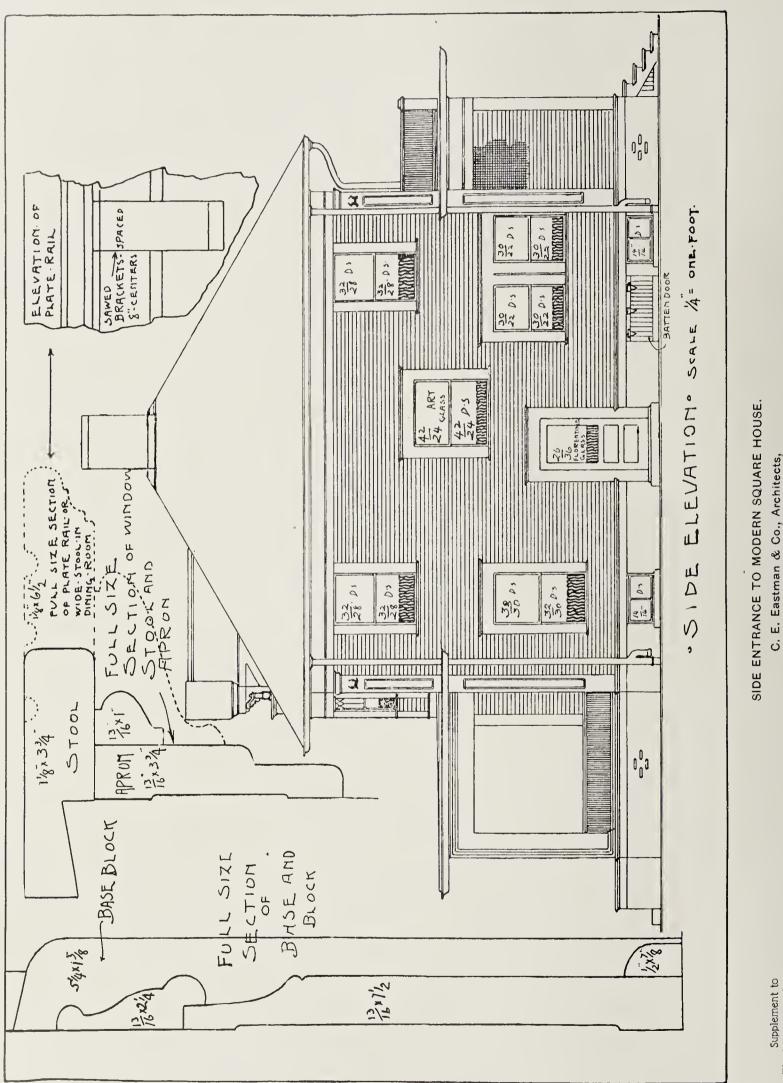
Three others of the major buildings attract attention, and call for favorable mention. The Palace of Textiles is good, very good, almost masterly. Messrs. Eames and Young, of St. Louis, did themselves credit; it is, I believe, their first great monumental effort and a most commendable one. They were not afraid of straight lines, there is dignity and repose about the whole structure, its corners are pleasingly massive, though its buttressed columns, supporting nothing, at the entrances could well be dispensed with. On the whole, I am not sure but that it is the very best building there.

Next is the government building. Atwood's Chicago art palace is apparently its motif too, but it is a frank, straightforward design, well thought out and well balanced, thoroughly academic and splendidly detailed, appropriate and a close second, if not equal to the Textile building. It speaks volumes for the improvement in goveriment methods of late years; the government building at Chicago was one of that grand exposition's little blots, an atrocity, and most of the contemporaneous federal architecture was about as bad as it could well be. Along in 1806, however, under Mr. William Martin Aitkin's administration of the supervising architect's office, and through that gentlemen's efforts that office was literally taken out of politics, clever men were employed irrespective of their leanings or their absence of "pull," and thus was begun the regeneration of government architecture. The good work has gone steadily on, and today some of the very best talent in the country is to be found right in the treasury department at Washington. In competitions between the most prominent architects of the country and the young men of Supervising Architect Taylor's office, I am sure the latter would carry off the prizes nine times out of ten.

The last to be mentioned, though not the least deserving of these three buildings, is the Palace of Machinery, by Widman, Walsh & Boisselier, of St. Louis (with whom is associated Mr. Paul Pelz, of Washington, who designed the splendid Congressional Library in Washington). It is more flamboyant than the others, more daring, but as effective and well handled; indeed, to the general masses, it will appeal most strongly, it is the only building there indulging in towers, all the others that appeared upon the first designs having been abandoned. Its corner towers compete a trifle too strenuously with its main features, and its circular-topped pediments jar one a bit, but it is a wholesome, clear-cut, creditable design.

The other buildings, with surprisingly few exceptions, are poor, unworthy of what was planned to be the greatest exposition the world has ever seen. LIPDARY OF THE UNIVERSITY OF ALLAND

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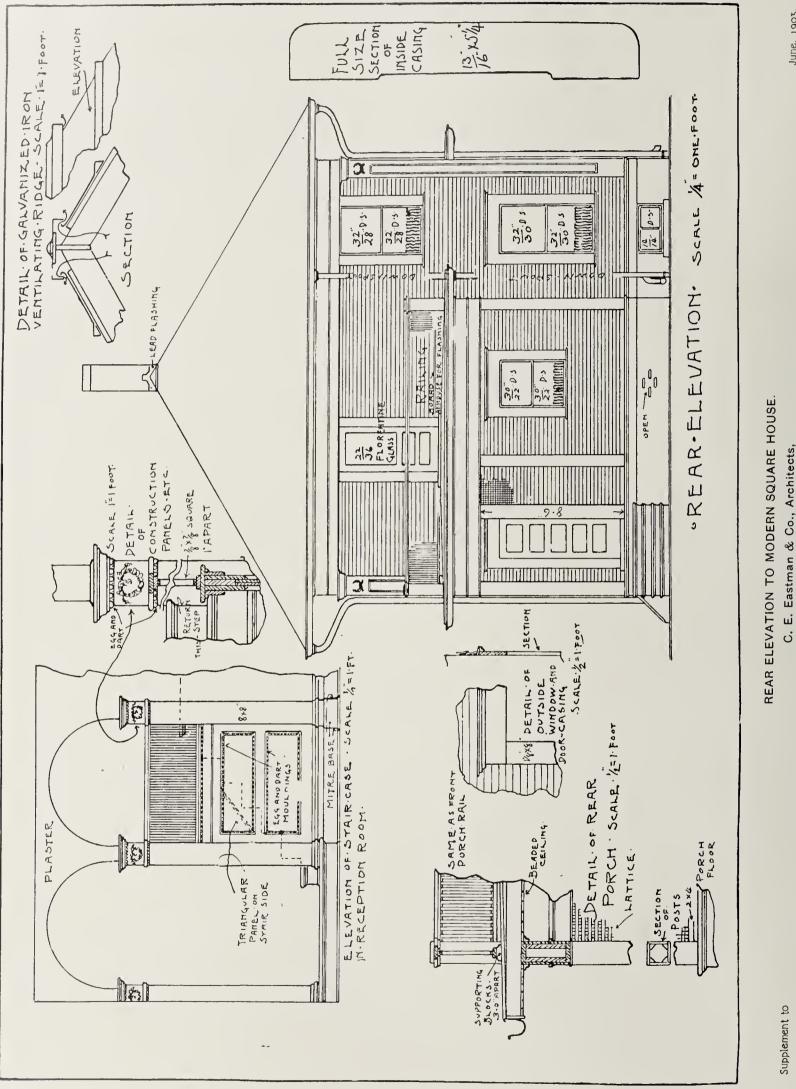
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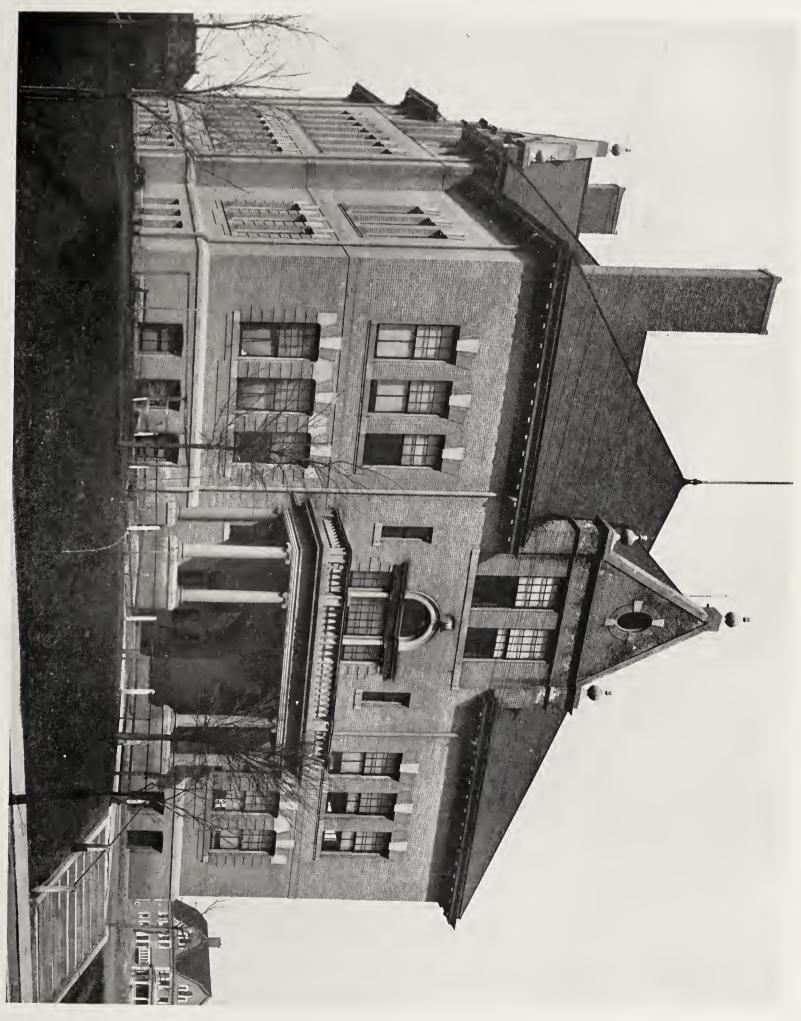


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DOUGLASS SCHOOL BUILDING, MINNEAPOLIS. W. B. Dunnell, Architect, Minneapolis.



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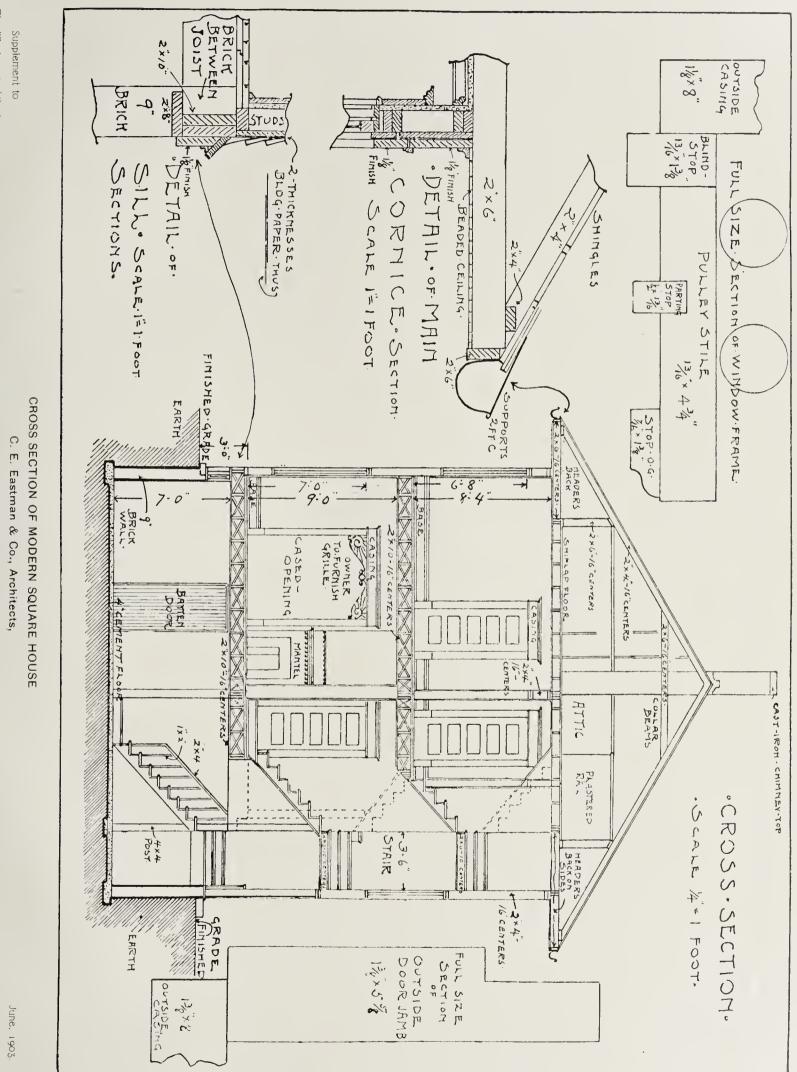
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RESIDENCE OF C. M. GRIGGS, SUMMIT AVENUE, ST. PAUL. Jas. Knox Taylor, Architect of House, Reed & Stem, St. Paul, Architects for Portico.

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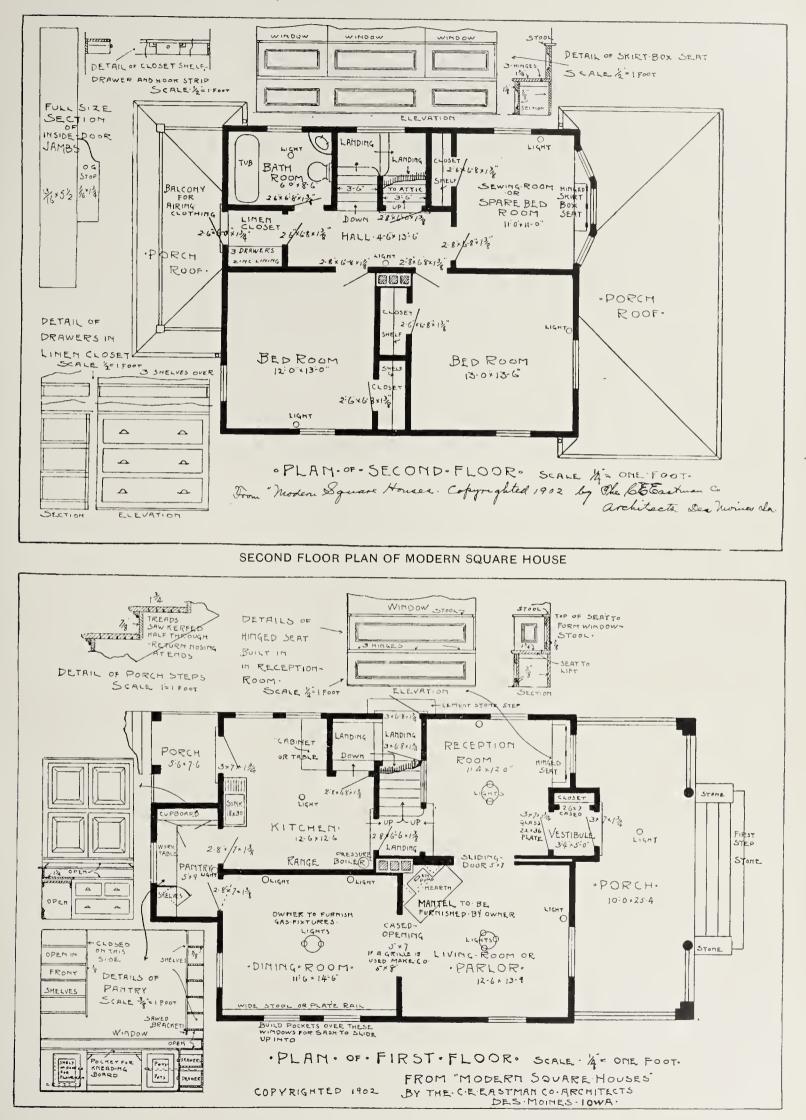
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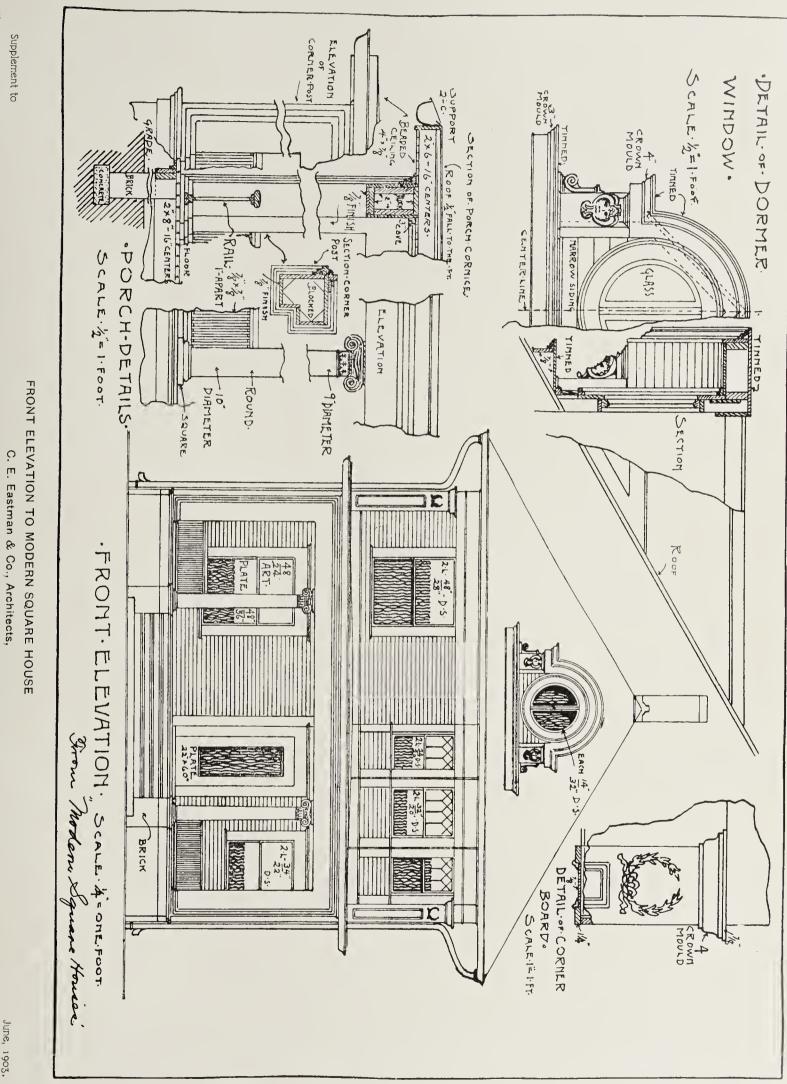
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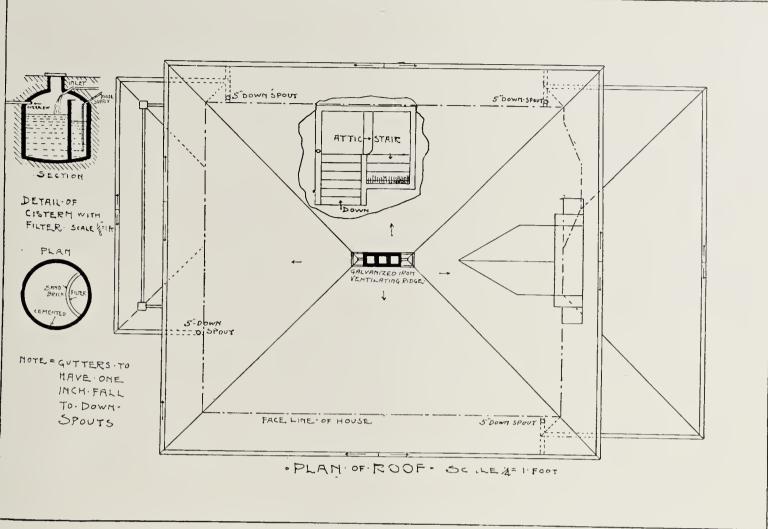
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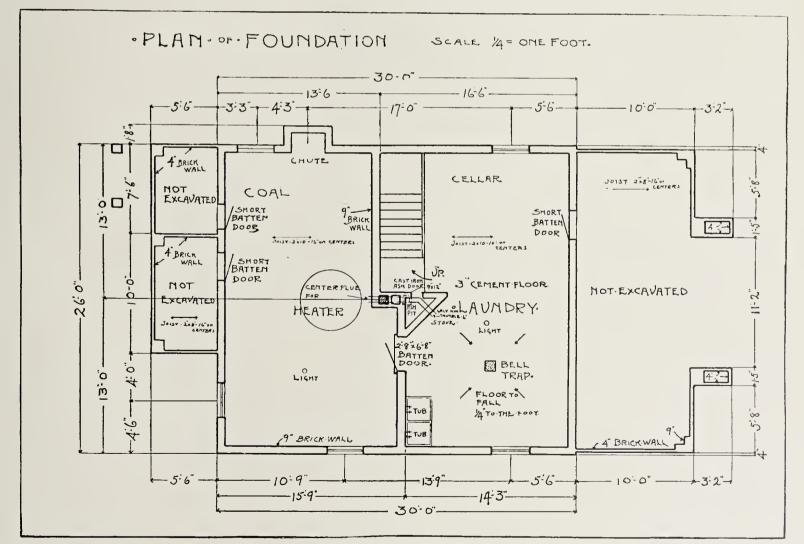
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ROOF PLAN TO MODERN SQUARE HOUSE.



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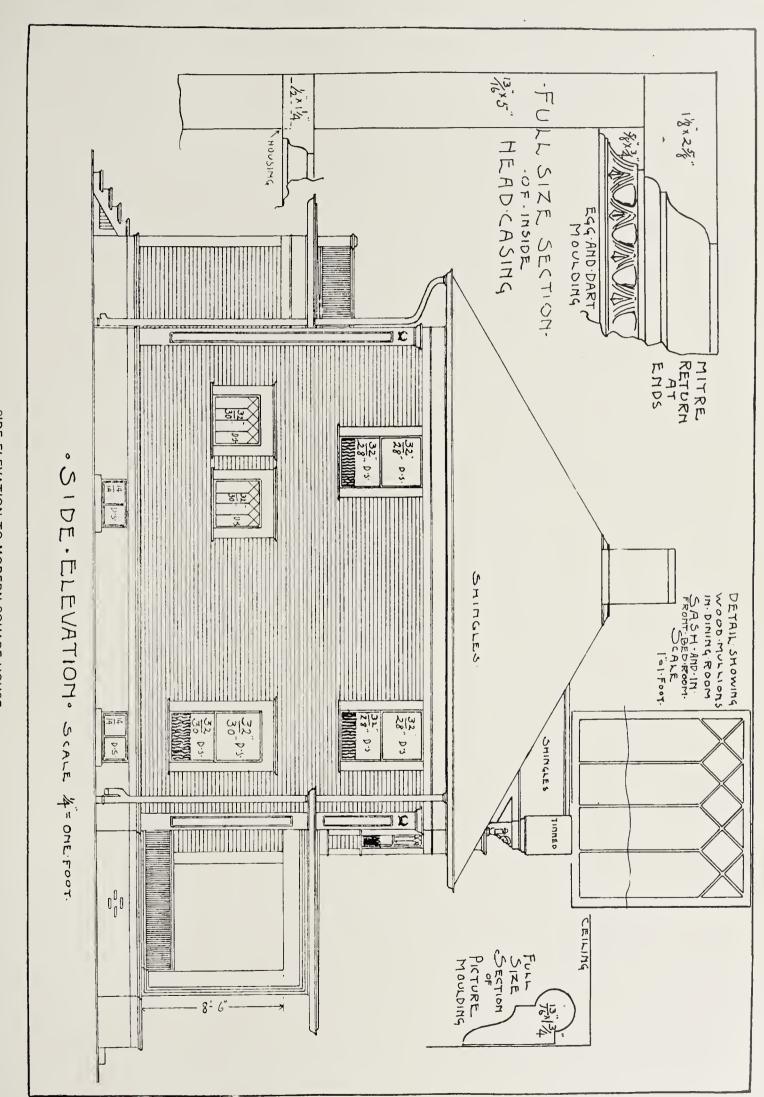
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Supplement to The Western Architect.

SIDE ELEVATION TO MODERN SQUARE HOUSE C. E. Eastman & Co., Architects, Des Moines, Iowa.



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THE KEY TO BEAUTY IN DECORATION.

By Mony E. Tillinghast.

The great question in decoration, as in all other arts, is whether or not the decoration chosen is appropriate. If it is, it is beautiful; if not, it is ugly.

This is the final, the crueial test with all decorative work. It is for this reason that the true decorator strives for the perfection of the whole by giving such attention to every detail that no detail is prominent.

This is the true spirit of all art. As the French say, "No one thing in a room should speak to you." In other words, everything should be in such harmony that no individual note is prominent enough to be felt or heard above the others.

The greatest difficulty of the deeorator is not so much to combat the ideas of his patrons as it is to educate them. We often hear people make such remarks as:

"I don't like green," or "I can't have anything blue in my rooms," or "Yellow must not be introduced," and thus they do not know the value of the color about which they are talking.

There are certain principles of decoration that must be observed in the treatment of the different parts of every home, for each part or room has its own use, and its decoration should conform to this use. For instance, the workroom or study, or library should be low, generally speaking, in tone, and should have nothing in it to distract attention.

This is the sanctum of the mind, and it should be a restful place, conducive to the best and purest and most powerful thought influences.

The dining-room, on the other hand, should be an imposing place—a room treated from an entirely different point of view. This should be used, if possible, only as an evening room, while the breakfast-room should be the morning gathering place, the place of sunshine—a room opening out upon a rose garden or overlooking a beautiful view. Few of us Americans realize the difficulty of having one room do duty for both night and day.

But to return to the dining-room. Here the walls should be a good background for pretty gowns and pretty faces. Dining is an important event. It is the most important function of the family in the household. Everyone is at his or her best.

Then there is the music-room, which is a very important feature in the houses of today. Here again the use to which the room is to be put is the deciding point in the question of decoration. With a bare floor—literally bare—without the smallest kind of a rug—light, cheerful walls and a total absence of hangings of any kind, one cannot go far wrong. I have left the most important feature of the house until the last, that is the hall. It should be in a color and type to give welcome to the visitor, and at the same time it should be in perfect accord with the rest of the dwelling.

If the house is small and eozy, the hall should give this idea; if the mansion be important, the hall should be an impressive entrance. It should be a true introduction to the home, and should partake of its character.

And so the key to all decoration is its fitness to the apartment and the uses to which the apartment is to be put. There may be more symmetry in the mechanic's cottage than in the millionaire's castle. A due proportion is necessary, and this is not only a proportion of dimensions and eolors, but a proportion to means and position—a proportion, alas! often lost sight of in this country, and one found more truly followed in England and France. And speaking of France, there is probably no country where the houses of the people are more appropriate and consequently more beautiful than in this same misunderstood France—the very home of homes.

It is there that beauty is pre-eminent; for what is done is done with this inexorable law in view, the harmonic assemblage of grades or properties pleasing to the eye—and this is the very definitation of beauty.

A book recently issued by R. T. Crane, president of the Crane Company, of Chicago, has attracted much attention for various reasons. In the first place, Mr. Crane is a man of wonderful success in his line of industry; secondly, the subject to which it is devoted is one of vital importance to those who contemplate sending their boys to college, and third, because it contains much valuable information about which there has been a great deal of discussion relating to which very little practical information has heretofore been put forth. About a year ago Mr. Crane published a small volume giving results of an exhaustive investigation made by him regarding the utility of an academie or classical education for young men who have to earn their own living and expect to pursue a commercial life. Noting the interest which the work created, he decided to go into the subject further, and has now issued a revised and enlarged edition of 110 pages, including, besides the matter contained in the former book, a considerable amount of new material bearing upon this interesting subject. In his investigation he has secured the testimony of a large number of the heads of universities, college graduates and prominent business men who show a great divergence of opinious as to the desirability of a college education as a preparation for business life.-Construction News.

PREHISTORIC ARCHITECTURE.

The government will make an exhibit at St. Louis of prehistoric buildings of the North American continent. The models are being constructed in Washington under the supervision of W. H. Holmes and Delancy Gill, of the Smithsonian Institution.

The first series represents the public architecture of the pre-Columbian age among the twelve civilized peoples of the North American continent. The Aztecs, Mayas, Quiches, Zapetecs and other races living from the borders of New Mexico southward as far as Peru will be included, and their finest examples of architecture have been selected for reproduction on a liberal illustrative scale.

The first completed model is that of the Temple of Xochicalcos, which is regarded among archaeologists as one of the most remarkable and interesting, if not beautiful, of prehistoric structures. It has been reproduced in a space five feet by six and is carried out most painstakingly in all the minutest details. The artists of the Smithsonian Institution are now at work on the palace of Mitla, in the extreme South of Mexico. It is the finest preserved example of the building of the Mixtec race.

Another reproduction will be the Casa del Gobernador, in the ruined city of Uxmal, the prehistoric capital of Yucatan. This is one of the remarkable structures of Central America. It stands on a pyramid of stone, and is 325 feet long by 80 wide. The model will be 17 feet long by 4 wide. There is great interest among the government scientists in this work, which is a new field of research. The models after the exhibition will be placed in the permanent exhibits of the Smithsonian Institution.

OBITUARY.

Bruce Price, the famous New York architect, is dead. Mr. Price went abroad with his wife in the middle of April, their daughter, Mrs. Edwin M. Post, having preceded them. Mr. Price had undergone a serious operation in that city three weeks before he sailed, and a letter dated May 17 said that he was failing rapidly. Mr. Price was associated in business here with J. H. de Sibour, under the firm name of Bruce Price & Sibour, with offices in the St. James building, at Twenty-sixth street and Broadway. He was born in Cumberland, Md., December 12, 1845. He was the son of William Price, a lawyer. On his mother's side he was descended from the Scottish Bruces, who supported the Pretender, and came to this country in 1745, just a century before Mr. Price was born. He studied with the architects and engineers, Niernsee & Neilson in Baltimore for four years and then traveled abroad. He established himself in Baltimore on his return, moving thence to Wilkesbarre in 1873, and going to New York in 1877.

UNIQUE TREATMENT OF A DWELLING.

An idea which has never before been attempted in that city, although not unfamiliar in New York, has just been carried out in connection with the external treatment of a handsome dwelling in Oakland, Cal. To people passing along the street, the glistening, sparkling effect makes the walls look as if they were studded with jewels, says Carpentry & Building.

The house, which is of striking architecture, is a massive wooden structure, and the exterior, by sanding, is given the appearance of having a brown or sandstone facing. The workmen, to get the jewel effect, crush the finest of blown glass together with the sand, and, while the wooden exterior is still damp with paint, the combination of glass and sand is thrown onto the surface and the effect is obtained of stone and sparkling facing. When the sun shines on the house the effect, while being novel in that city is extremely facinating—so much so, indeed, that almost every one passing is seen to stop and make an inspection of the building. It is one mass of sparkle from the Gothic roof to the ground.

The "sparkle decoration" was first suggested by a French architect, who had noticed the glistening of snow on the sides and roofs of houses. He was much interested in the effect and came to the conclusion that a perpetual glistening of the walls of dwellings would be a unique form of decoration, and it was he who conceived the idea of crushing glass and sand together to get the "diamond sparkle" effect.

SINKING OF VANDERBILT'S "IDLE HOUR."

The autumn home of William K. Vanderbilt, at Oakdale, Long Island, is slowly sinking into the shifting sands, like a huge caisson.

"Build this house so it cannot burn," Mr. Vanderbilt said to the architect, and that was done. Unfortunately, however, other methods of destruction have been found in the natural conditions connected with the building of this huge mansion of steel and stone, and it is not at all improbable that the second "Idle Hour" will shortly be untenable. Slowly but surely, the great building, with its tons of steel, is settling. The walls both inside and out are said to have already cracked.

The house is built on the site of the old "Idle Hour," which burned down.

There is agitation in St. Paul to establish a building line for the better residence streets. The late legislature has authorized city councils to establish such a line, to be not more than fifty feet from the sidewalk.

SNAP SHOTS AT THE OTTOMAN CAPITAL.

The following picturesque bits are translated from Henri Charnant in Le Monde Modern:

It is at the bridge connecting Galata and Stamboul, the franc quarters and the indigenous quarters, that, above all, one can have a vivid impression of the great cosmopolitan city. Precisely because it unites two populous centers, this bridge constitutes the most frequented roadway. It is as the Strand of London, the Puerta del Sol of Madrid. Built entirely of wood and supported on boats which serve at the same time as landing docks for the steamers of Scutari, Eyoub, and all the stations on the Golden Horn, it trembles every time that a carriage goes over it and shakes from end to end as if caught with one of the dancing fits of St. Guy. For a few paras spent as toll-money, a unique spectacle is offered you here. There is a perpetual procession of types of all nationalities and races; of specimens of all costumes, local and exotic. And the bridge, with the mixture of all these colors, variegates in the manner of a kaleidoscope. *

Religion holds an enormous place in the lives of the Turks. Before being citizens they are Mussulmans, and this moral cohesion in the same faith has preserved from schisms the doctrine of Mohammed. The laws of the Koran are not solely theological, in the spiritual sense of this word; they are most of all social. They occupy themselves with manners and customs, and in this way regulate the details of the daily life. Even the government itself is religious, since the sultan is the supreme pontiff, and his least edicts become sacred dogmas.

This fidelity of the believers, if I may call it so, has resulted in multiplying the mosques, the houses of the God of Mohammed, in the ancient Byzantium. As a charm of the picturesque, not less than 346 of these are counted therc. Among them, on account of the many memories which it evokes, and also on account of the splendor of its structures, St. Sophia is the queen of mosques. Its history is that of the capital of the Orient during seventeen centuries, for although burned down and reconstructed time and again, it actually dates from the time of Constantine the Great, who dedicated it to the Divine Wisdom, the Agia Sophia of the Greeks.

As we see it today, the admirable basilica reposes upon memorable columns; some snatched away from the temple of Diana in Ephesus, vestiges of the conflagration which Erostratus kindled; others taken from the temples of Jupiter in Cyzique, of the Sun in Palmyra, from the temples of Rome, Athens and the Cyclopian Thebes. So that built upon the debris of old-time pagan shrines and temples, and today transformed into a mosque, this ancient mother church of the Christian empire is composed of an amalgamation of three styles of religious architecture.

All the mosques are faced in the direction of Mecca; and it is also in the direction of their holy city that the Mussulmans always turn their faces to pray. To rectify the direction of St. Sophia, it has been necessary to place, slantingly along the length of the walls immense Mecca mattings, which cover up the ground. The mirab, digged in one of the pillars of the apsis, a red slab at the foot of the pillar, and finally a rug upon which Mohammed performed his devotions, also indicate the direction of Mecca.

The primitive colored images, the figures of angels, the naive symbols of the first Christians, have been painted and repainted with stone color, and everything has been done to give the interior of St. Sophia the aspect of "a magnificent and sinister sepulchre." Outwardly, by setting against one another structure after structure, by smothering the elegant amplitude of the cupolas, they have succeeded in giving the aspect of an unformed barbaric fortress to this grand monument which made people say of Justinian that "he had surpassed Solomon." By flanking it with four minarets they have been able to further efface the idea of Christianism which is boldly suggested throughout the edifice, and, moreover, they have planted upon its domes the most beautiful golden crescents that ever glittered under the oriental skies.

But when one stands in the middle of the nave and regards them, all detached from the objects of worship assembled there by the imams, towering above the cupola, what a sight of majesty and grandcur! So aerial and light in its colossal structure is this cupola, that it seems to be suspended and held by chains hung in space. Hence the expression of Mme. de Stael, that she thought to have seen an abyss above her head.

Upon the walls is graven the sentence "Allah is the light of heaven and earth," which Mohammed II. uttered in entering St. Sophia on horseback, at the same time that his blood-stained hand was resting against the wall as a sign of possession. To the right stands the nimbar where the radib places himself to read the Koran, a naked cimeter clenched in his first, to indicate that St. Sophia is a conquered mosque and it shall be defended to death.

Next to St. Sophia the mosque of Ahmed, the Grand Djami, is the most remarkable. It has six minarets and the Kaaba of Mecca has seven simply because it became jealous of this number. Among those to be admired are also the mosques of Bajazet, with its flocks of pigeons; of Davoud Pasha Djami, which the Christian Manuel II. was forced to erect; of Eyoub, where no giaour shall ever penetrate; of Tophane; of Mohammed the Conqueror, colossal in dimension; and above all the mosque of Suleiman I., the Magnificent, which dominates the whole city, perched upon the third hill, and which the Turkish poets sing as being built of "splendor and joy." The mosques are ornamented with fountains and

The mosques are ornamented with fountains and turbes. The fountains are built after one of the styles of a kiosk and are enclosed in gratings. One can always see there a ceaseless throng of men occupied in filling with fresh water large earthen vases, or in devoting them selves to ablutions which Mohammed orders. The fountain of Sultan Ahmed, in the court of St. Sophia, is the richest and most beautiful of all; it is a pure gem of oriental art, on account of the costliness and infinity of its flutings and carvings.

A "POURED" BUILDING AT THE ST. LOUIS FAIR.

One of the features of construction at the World's Fair at St. Louis will be a "poured" building. The poured building is the permanent power house to be erected west of the machinery building. Around a steel framework walls of cinder concrete, three inches thick, will be poured, to form a continuous wall without joint or seam. The piles were driven by W. F. Hopkins, of St. Louis. About 125 are to be used to carry the heavy iron columns, which will support the steel truss roof. The American Bridge Company has the contract for the building, which will cost about \$100,000. The work is being done at the shops of the Koken Iron Works, in St. Louis. The building is to be 220x300 feet and 50 feet to the top of the cornice. Forty-five lattice girder posts will carry the roof. The steel trusses are 36 in number, all alike, each with a 75-foot span, and each weighing about 10,000 pounds.

The Roebling Construction Company, of New York, has the subcontract for pouring the concrete walls of the building. After the steel frame is in place board casing or boxes will be fastened to the columns, leaving a space of three inches between the boards. A mixture of cinders and cement, in specified proportions, will then be made and dumped from wheelbarrows into these wooden boxes and rammed tightly into place. Some time is allowed for the mixture to harden. When the boards are then removed the walls remain seamless and fireproof.

Openings will be left on the east and west ends of the building so that railroad cars may carry the boilers for installation into the house. The area between the boiler house and the machinery building will be given up to cooling towers, briquette machines, etc. Coal will be taken in from the western side of the house. Automatic conveyances provided with crushers and screens will handle the fuel without the interposition of laborers.

TO RESTORE THE TEMPLE OF JUPITER.

The Greek Archælogical Society has decided to restore the Doric Temple of Jupiter, at Nemea, situated near the haunt of the famous Nemea lion, the slaying of which formed one of the feats of Hercules. The edifice was overthrown by a succession of earthquakes and only three columns are now standing, but the fallen shafts that lie around the temple are so little injured that it is believed it will be possible to re-erect them and the fallen entablature without much difficulty or expense, and without having recourse to new material. As soon as the ground around the temple has been cleared of the litter of fragments that now encumber it, the Greek government intends to begin excavations on the spot, and hopes to make valuable discoveries.

TALLEST BUILDING IN THE WORLD.

The tallest inhabited building in the world, and one of the greatest in point of modern furnishings and equipment, is the Park Row Building in New York City. It looms up far above its fellows, and can be seen far out in New Jersey, from Long Island, and from the deck of every ship entering the harbors. It has twenty-nine stories, and is 501 feet in height—exceeding by 50 feet the extreme height of the Great Pyramid. The structure weighs 20,000 tons, and, including its furniture and live weight, its total dead weight amounts to 61,400 tons. There are 950 rooms in the building, and its average population is fully 8,000, a number that would do credit to many a flourishing country town.

The place is provided with restaurants and handsomely furnished apartments, so that business men may live there the year round, and live comfortably, too, without going outside the enormous building.

A REMARKABLE CITY.

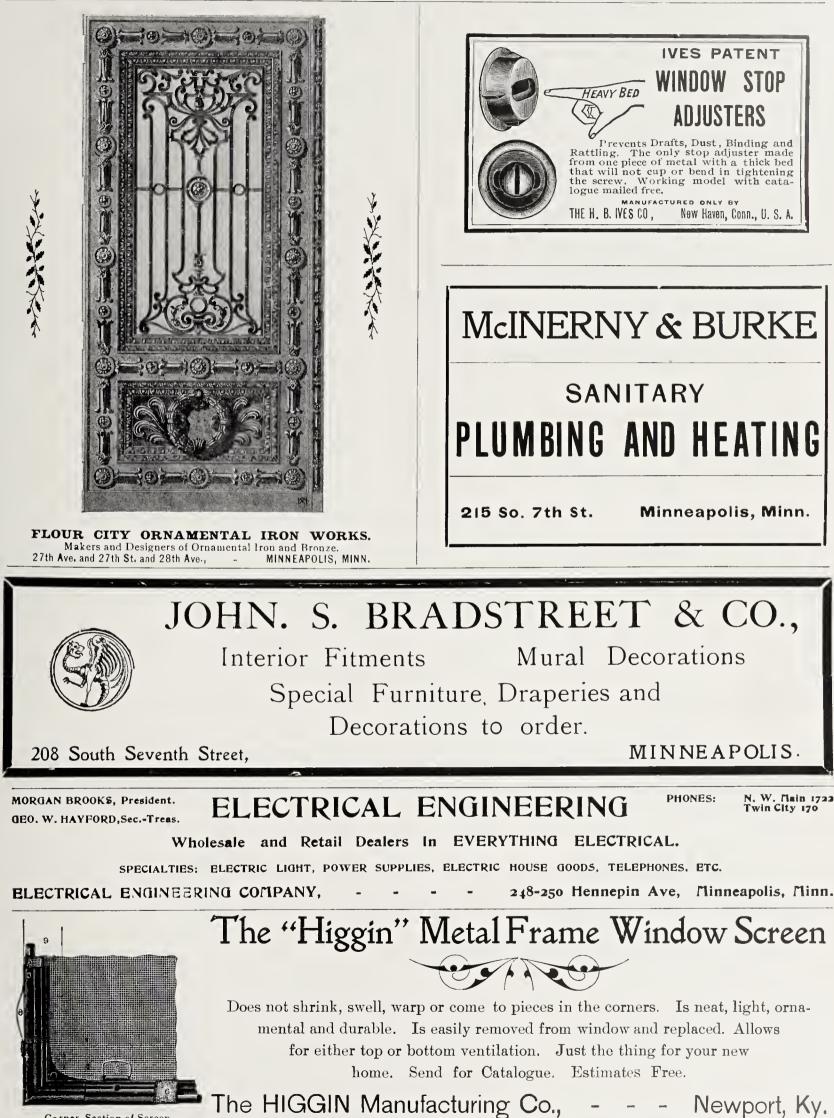
One of the most remarkable cities in the world is Kelburg, near Cracow, Poland, for, besides being situated underground, it is excavated entirely in rock salt. The inhabitants, to the number of over 3,000, are, of course, workers in the famous salt mines, and all the streets and houses are of the purest white imaginable. One of the most famous features of the city is the cathedral, carved in salt and lit with electric light, and when the late Czar Alexander visited it eleven years ago he as so fascinated with the magnificent effect of the light upon the crystal walls that he presented the cathedral with a jeweled altar cross. Such a thing as an infectious disease is unknown in Kelburg —in fact, the majority of the inhabitants die of old age.

SKYSCRAPER FOR A CHURCH.

The skyscraper idea in architecture is for the first time to be applied to a church. The plans for the New Broadway Tabernacle, to be erected at the corner of Fifty-sixth street, New York, provide for a nine-story tower, in which will be the administrative offices of the parish, the parlors, the society rooms, the Sundayschool hall, the library, etc. In the tower will be an elevator service and all the improvements of a modern office building. The tower will connect with the regular church auditorium, which will be spacious and handsome.

Some business men are afraid to tackle the proposition before them. Others see the advantage of taking up uncertain points and advertising until success comes.

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