

THE WESTERN ARCHITECT

VOL. II. No. 2.

MINNEAPOLIS and ST. PAUL, February, 1903.

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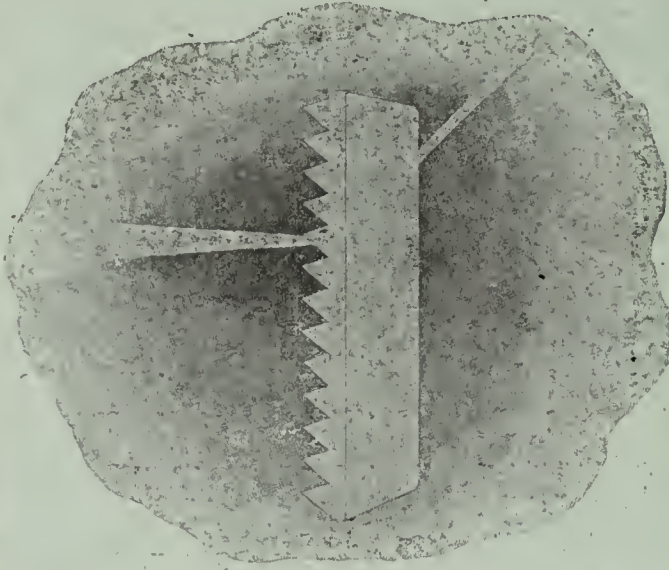
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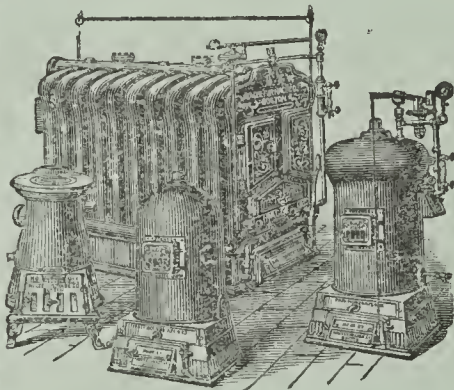
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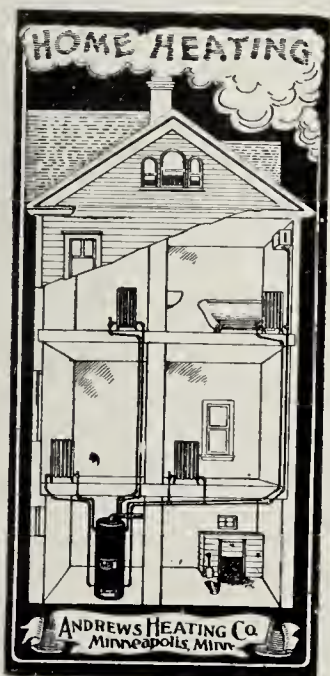
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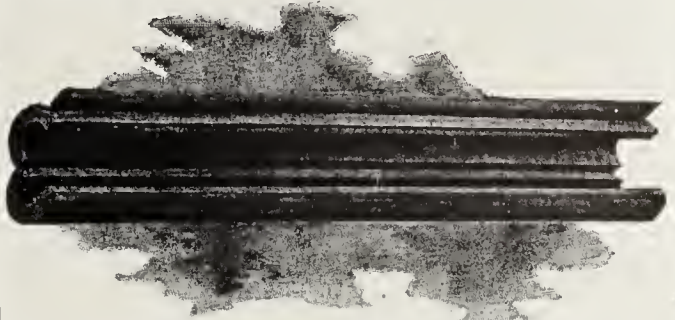
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THE WESTERN ARCHITECT

IS PUBLISHED THE 15th OF EACH MONTH BY

THE WESTERN ARCHITECT PUBLISHING COMPANY.

FRED'CK KEES, Minneapolis, Minn., President.

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F. A. GREENLAW, General Manager.

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STAR VENTILATOR.

Merchant & Co., Inc., Philadelphia, Pa., are manufacturers of the Star Ventilator shown herewith:

The "Star" Ventilator consists, first, of a tubular structure, surmounted by a corrugated conical deflector in such a manner that no opening exists between it and the tube. The ventilator itself is surmounted by a conical cap, properly ornamented; and between the cap and corrugated deflector, another conical deflector is placed midway. A cylindrical tubular band is fastened to the tube, deflector and cap, in such a manner as to encircle all and leave an appropriate space between itself, the deflector and the cap. A glance at Fig. 2 will make this clear. It will be seen that when the wind strikes the band, should it pass over the top edge thereof, and enter the said band, it will either strike the intermediate deflector or the corrugated deflector at the bottom, and thus directed upward, creating a partial vacuum in the tube or flue, and the wind is prevented from being blown into the same. Should the wind pass under the lower end of the band or strike the corrugated deflector direct, the same result is occasioned, and thus the ventilation of the room or apartment is reliably effected, or an unobstructed draft is created in the chimney or flue, as the case may be. The intermediate deflector also acts as a guard, for preventing the wind and rain blowing under the cap from being directed into the tube. Should the wind strike this surmounting cap from above, it descends around the outer edges of the intermediate and corrugated deflectors and creates a downward draft between the cap and the deflector, which creates an upward draft in the tube or flue. In order to prevent the lateral deflection of the wind, as it strikes the lowest deflector, the latter is corrugated, forming a series of channels or pockets, which serve to



Fig. 1.

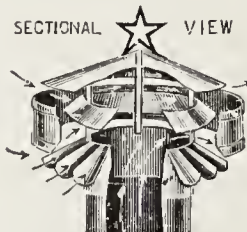


Fig. 2.

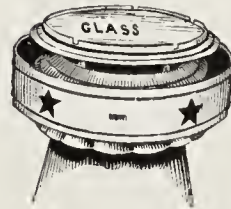


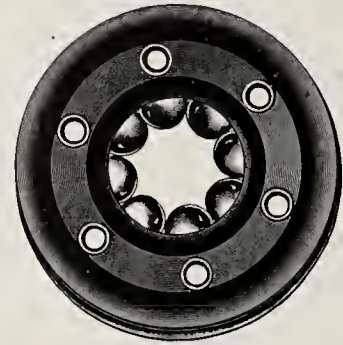
Fig. 3.

catch the wind and direct it unflinching upward, above the top of the tube or flue, thus creating a draft in the latter.

Perfection in the combination of light and pure air is attained in the form of this ventilator, shown in Fig. 3, and known as the Combination Skylight Glass Ventilator, which, without sacrificing in any particular its high ventilating and storm-proof qualities, combines with these a perfect weather-tight skylight, the light area of which is actually one-fourth (25 per cent) greater than the actual area of the ventilator itself, of whatever size it may be.

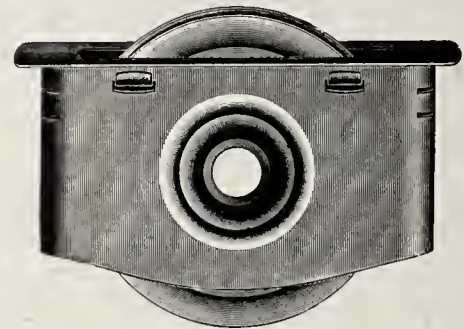
A PERFECT SASH PULLEY.

The present day is marked by sharp and sometimes by bitter competition in every trade, and in no line is it carried to a greater extent than in the building trade. With the market flooded with many spurious and unreliable devices, the only safeguard to the architect, contractor, or owner is to adopt that which has always given absolute satisfaction, and which



is guaranteed in every manner by a concern whose reputation for reliability is above question.

In this connection, we desire to speak of the "Ottumwa Steel Ball-Bearing Sash Pulley," which is considered mechanically perfect, and which accomplishes all that could in any way be desired of a sash pulley. This pulley, cuts of which are shown herewith, is made by patented processes, is perfectly noiseless, frictionless, easily set, and indestructible. These pulleys are correct in theory and admirable in practical use, satisfactorily filling every demand and requirement. They are simply beyond criticism in point of workmanship, style of finish, and ease of operation, and, last but not least, they are of the greatest durability. A test will convince the most skeptical that we have modestly stated rather than over-estimated their superior advantages.



These ball-bearing short pulleys are made by the Johnston & Sharp Mfg. Co., of Ottumwa, Iowa, whose reliability is unquestioned. Write them for catalogue and prices.

The plumbing firm of J. P. Courtney & Co., whose name has almost been a household word in the plumbing and sanitary line in Minneapolis for nearly twenty years, has recently moved into new and commodious quarters at No. 515 Second Avenue south. Mr. Courtney first started in business on Central Avenue, with a Mr. McCarthy, the firm name being McCarthy & Courtney, and after several years' partnership in that locality, he went with J. S. Kearney & Co., who were one of the old time plumbing concerns located on Third Street, between Nicollet and First Avenues south. After severing his connection with J. S. Kearney & Co., Mr. Courtney went to Chicago early in 1893, the World's Fair period, where he did some prominent work, and was generally quite successful. On returning from Chicago, late in 1893, he again located in Minneapolis, at 240 Second Avenue south, where he has since been.

In his new location at No. 515 Second Avenue south, Mr. Courtney hopes to see all of his old customers and many new ones, whom he will try to serve in the most practical, scientific and conscientious manner in the way of plumbing and sanitary work for either new or old buildings.

DISSOLUTION OF PARTNERSHIP.

The firm of Wishart and Hansen, manufacturers of roofing and cornice work, has been dissolved by the mutual consent of both parties, and the business will be conducted in the future by Mr. H. A. Hansen, under the name of the Minneapolis Roofing and Cornice Works. Mr. Hansen has had years of experience in the roofing and cornice line and will be pleased to hear from his old customers as well as new.

A CALENDAR THAT WILL BE CONSULTED.

The Menomonie Hydraulic Press Brick Company has issued for its friends again this year, a handsome and convenient memorandum calendar. In their "Memorandum" accompanying the calendar, they say:

"Once more we have the pleasant privilege of handing you our Calendar,—1903. We trust you will accept the Calendar in the spirit in which it is given. May it prove a link that shall bind closer than ever, our relationship.

"Take it, keep it close at hand, use it; and in that hour of need—that hour when you feel that you really must buy Building Material—then consult the Calendar, and to the firm whose name adorns the top thereof, send a letter—a letter telling just what you want. A reply will be immediately forthcoming, giving the required information.

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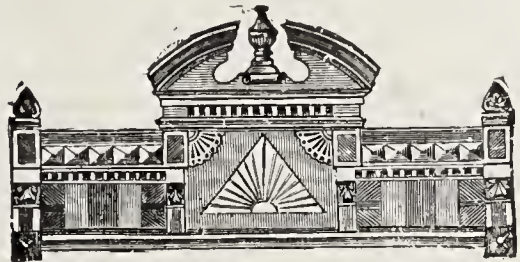
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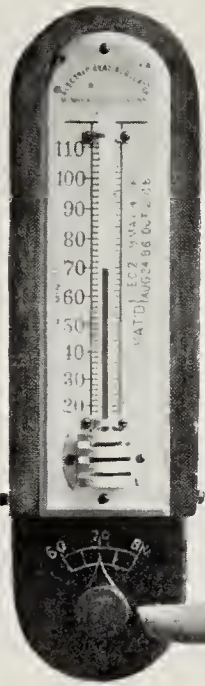
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Adjust here



It's Automatic

<p>February 4th, 1903, "I enclose check for bill herewith. I do not take advantage of your 30 day guarantee, because I find your apparatus works perfectly and to my entire satisfaction." JACOB SCHREINER, The Schreiner-Flack Grain Co., St. Louis, Mo.</p>	<p>New York, January 5th, 1903. "After experimenting with your Regulator for a month, I find that it is exactly what I have been looking for. It is eminently satisfactory, and in sending you my check I want to add a word of commendation." HARRY T. SHRIVER, Of T. Shriver & Co., 333 E. 56th St., New York.</p>	<p>January 14th, 1903. Enclosed please find check for the amount of my account. The Regulator appears to be perfectly satisfactory and I believe will fully meet the requirements. F. E. V. SHORE, Occulist, Des Moines, Iowa.</p>
---	--	--

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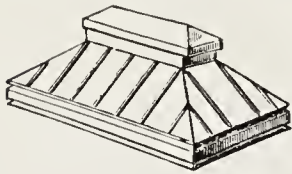
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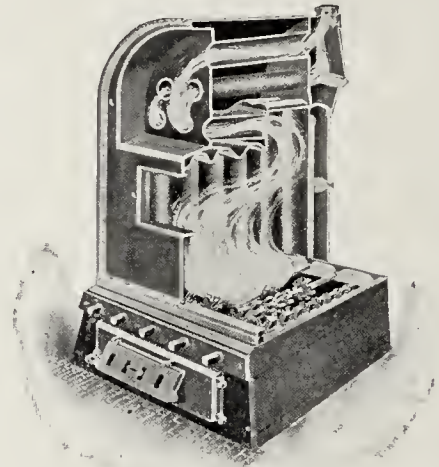
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THE *Western Architect*

AN ILLUSTRATED MONTHLY JOURNAL
DEVOTED TO ARCHITECTURE AND ALLIED ARTS

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CHICAGO has had some awful experiences with fires lately that have led to amendments to the building ordinance relating to tenements, which term is made to cover flats, apartments, or other lodgings in which "housekeeping" is carried on. These amendments are a great advance in several ways, noticeably in the construction of hallways and elevator shafts. The height to which buildings of common or of slow-burning construction may be built is greatly reduced—the common construction not being allowed for more than a basement and three stories, while the slow-burning construction may be carried to five stories only.

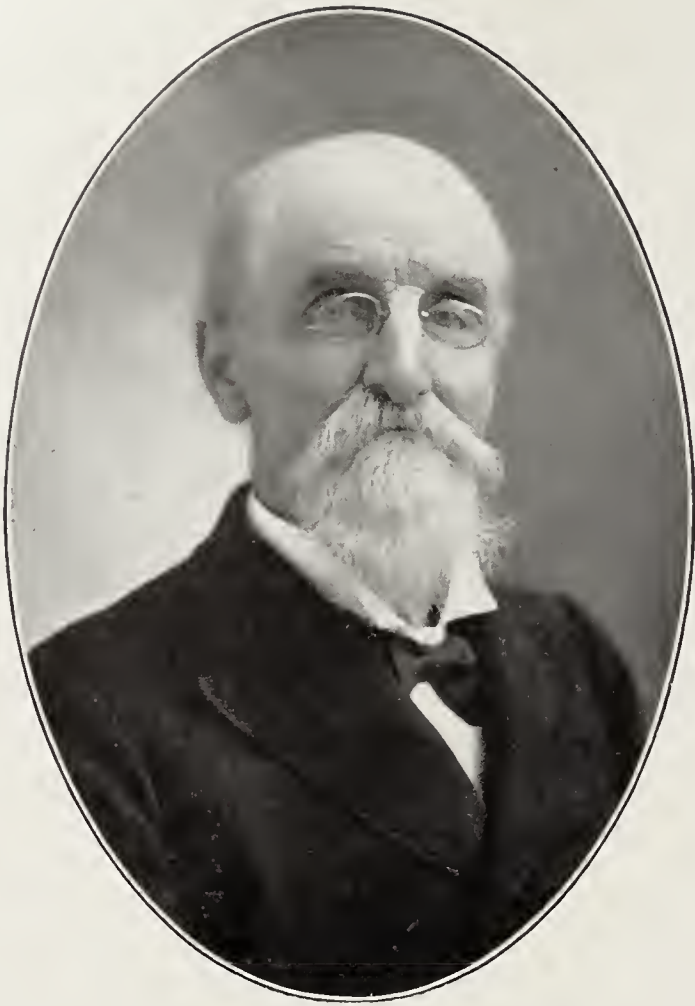


WHILE the Anglo-Saxon in the Antipodes has been making bold innovations in the way of self-government and the Anglo-Saxon at home has been lost in contemplation of the text "The Weak Shall Inherit the Earth," or varying this with rare spasms of pity for the decadent nations of Europe, the Italian has made a selection from an assortment of new "waves" brought to light by the German professor, and using it to throw talk to the Anglo-Saxon from across the Atlantic.

So wonderful is this performance of Marconi that when another Italian promises us to shortly transform daylight into all the heat and power we want, nobody is inclined to question him. Are we to have a second Italian Renaissance?



THACKERAY gave as his opinion that a smart woman could marry whomever she chose, and we know a matron who, after watching the growth of the rising generation, gives it as her opinion that a smart girl can grow in whatever direction she pleases. This may account for the fact that the coming girl—or the girl that has come—is taller than her mamma, but it does not explain the fact that the young man about town is taller than his father. Professors do not, as far as can be learned, verify this fact by measurements of co-eds and their parents, but it is too evident to be disputed, at least among the well-to-do class of city people. On the part of the girls it may be due to their own determination, but it is doubtful if boys can lay it to anything more than better foods, housing and hygiene. Colleges should be making comparative measurements of both sexes and of their respective parents at once, before the passing of the Gibson Girl. Then by taking the difference between the excess in height of the average young man over the average father from the excess of the daughter over her mamma, the gain brought about by the girl's desire may be accurately determined.



CHARLES G. MAYBURY,
Minnesota's Oldest Architect.

Charles G. Maybury was born January 13, 1830, in the town of Solon, Cortland County, N. Y. His father was a stone-cutter by trade, and was employed during the building of the Erie canal dressing stone for the locks, etc., on the line of that great waterway at Lockport and Syracuse. He was also employed on the same work during the enlargement of the canal in later years. The father also owned and worked a farm, where the son was employed until he was nearly 16 years of age, when he was apprenticed to a prominent contractor and builder in Central New York, with whom he remained as an apprentice for over five years. The boss was not an architect, but he made plans for the buildings he erected, but not in as complete a condition as are made today by practicing architects.

Learning the trade of a builder under these conditions led the apprentice to turn his mind in the direction of a practicing architect. His education was obtained in the public schools of New York, except two or three terms in a private select school, as such were often kept fifty or sixty years ago for people who wished to give their children a higher education.

After his term of apprenticeship had been served he entered the firm as a partner, remaining for three years, when the firm was dissolved and he went into business for himself as a draughtsman and builder. Continuing for two years in the east, he concluded to take the advice of the late Horace Greeley, to go west and grow up with the country. Coming west in the spring of 1856, not knowing where he would locate, after looking over parts of Illinois and Wisconsin, he

settled down about the first of June in Winona, and went into the building business. During that summer he built what old pioneers remember as the Sanborn building, which was 60x120 feet on the ground, three stories high, much the largest building that had been erected in Winona up to that date. He carried on the making of plans and contracting until the spring of 1865.

A. M. Radcliffe, architect, came to Winona in 1862, and practiced until the spring of 1865, when he concluded to leave Winona and locate in Minneapolis, from which place he had come to Winona. Mr. Maybury took Mr. Radcliffe's office, and bought his office furniture, and from that date he has run an exclusively architectural office. During the year 1865 he closed up the business of contracting and has since devoted himself to the work of an architect.

During the thirty-eight years given to the profession he has had many students who drew their first lines in his office, and were with him from one to three years. Among these were Adolph Rudolph of Duluth, Minn.; Frank D. Hyde, now practicing in Chicago; Frank S. Blanchard of Chicago; and Austin W. Lord, of the firm of Lord & Hulitt, of New York City. This firm have in commission the agricultural building for the government at Washington, D. C., which will cost about \$2,000,000. Mr. Lord spent two years in Europe, having been fortunate enough to secure a traveling scholarship. After being two years in Rome, Italy, at the head of an architectural school, Warren P. Laird, another student of Mr. Maybury, is now professor of architecture of the University of Pennsylvania, at Philadelphia. Mr. Laird has also spent two years in Europe.

Jefferson N. Maybury, the eldest son, commenced in his father's office when a young lad. In 1880 he was with Architect E. P. Bassford, of St. Paul. In January, 1881, he became his father's partner, the firm being known as C. G. Maybury & Son. The junior has an appointment as specifications architect for the Louisiana Purchase Exposition, where he has now served for thirteen months.

W. H. Stevens of Winona is a student from Mr. Maybury's office, and at the present time is in the employ of the office.

Charles G. Maybury is now 73 years old, but is still actively engaged in his business.



WHILE the American people never knew so much about fuels as they do now, it is freely predicted by some that the great coal strike has set up such a thirst for learning in this line that it will in the end have proved a blessing in disguise. Many believe that the fuel briquette will be well established in popular esteem very soon as one result of the scarcity of fuel this winter. If one believes half that is told by people who present a fair claim to being informed, vast stores of different materials capable of making good briquettes are now running to waste at nearly everyone's door. Many peats are said to contain just enough bitumen to make the material cohere nicely in the briquette, all that is needed being to compress the dried peat at suitable temperature. Everybody now is told that the briquettes of lignite are easy and simple, while all manner of mixtures are suggested. Yet unless the briquette, when it arrives, is superior to most of the strange fuels that have found their way into the fires of the past few months, anthracite will not be without friends for some time to come.

VARNISHES ought not to be dismissed without noting that there are several makers of them in the country striving to get trade on the merits of the goods produced. Competition between makers has been keen for the past few years, and the way in which many manufacturers have conducted this competition has carried the impression that they were striving to improve their goods and were appealing for trade on that basis. People of good taste have had a certain grievance against the trade in this, that makers have catered too much to the modern folly of smearing hard woods with stains and muddy "fillers," but as varnish makers are not responsible for the perverted notions that made a demand for these finishes, it is perhaps unjust to hold resentment towards them for their part in the desecration. Any one who has given thought to the beauties of old mahogany and some other woods knows that the taste of the last few years in finishing such woods will make it necessary for the next generation, if they ever come to know the beauties of old woods, to go back of the specimens we will leave them. Before these stains and mud fillers came into vogue people varnished their furniture and that was all there was of it. If the varnish didn't suit, they had it scraped off and other put on, but what color the wood got it got from light and time and such varnish as penetrated the wood; while had they begun by rubbing mud into the pores we should never know the beautiful glints of light that we get in looking over these old mahoganies, the pores of which are filled with transparent gums instead of mud. At least one progressive varnish maker has realized this, and is making a strong push for a return to the old way of varnishing on the bare wood, and is showing samples of very successful work in that line. When manufacturers put a stout shoulder to a reform of this kind it ought to make it easier for the architect of taste to combat a pernicious fashion.



OF THE advertisers who look upon the outlay simply with the idea of gaining trade thereby, not all may be set down as without skill in making this sort of investment. Not long since a conversation with a gentleman who places the advertising of some allied firms who make many millions of dollars worth of house fixtures annually, led to the statement by him that he had placed "souvenir" publications, along with architectural "magazines" issued by firms and "companies" for the purpose of selling their designs in the country, under the ban—that he had no further use, time nor money for any other than journals of character, circulating among the profession on their merits. But he did not class the exhibition catalog among the "souvenirs," "portfolios" or the "Hints for the Home" issued by some "architectural company" to inform the waiting world where they could buy something for two dollars and a half that would enable them to build a four thousand dollar house for two, no matter where located.

Among the many hundred weight of advertising matter that finds its way into architect's offices via the mails—and mainly out again via the waste-basket—

came recently a bit that received more than usual attention by reason of its novelty. Certain makers of varnish sought to make themselves and their wares known to the architects by confessing how that they had contrived a varnish of such superlative virtue under all circumstances that they were unable to devise a name that would match its merits, and they therefore appealed to the profession of architecture in their dilemma, agreeing to give good money to him who should help them to a suitable name. All this might pass for a shrewd and not essentially debatable way of calling the attention of the profession to a line of goods by a person expert enough in advertising to know that the ordinary circular letter hardly reaches the hand of the person addressed before it takes its place in the limbo of the waste-basket. The proposition involved could hardly be said to be likely to lead any architect to experiment with unknown goods at the possible detriment of a client. But in a following circular announcing the selection of a name, the veil was removed. This circular, after repeating the virtues of the goods, proposed a cash bonus to architects who should specify a certain quantity of the varnish for use on work actually executed within a time specified.

It is a little out of the common for an advertiser to combine in himself abilities so extreme, for while it must be admitted that the first circular was far from "coarse," it would be hard to find anything more so than the second.

This the advertiser learned it seems when returns came in from the second circular, for he now finds it necessary to issue a third, withdrawing the second and protesting his innocence of intent to bribe.



CERTAIN echoes of rumblings and mutterings about a phase of the advertising question have been heard for the past few months, purporting to have had their origin in the plaint of a member of a nameless firm of dealers in materials, alleged to have been aggrieved and mulcted by a request to advertise in an Architectural Exhibition catalog. These rumblings, whether issuing from some real material house or from the inventive head of some publisher, made enough stir to develop that all the architectural societies in the country save one do obtain advertisements for their catalogs. It may be said in passing that there are very likely good manufacturers and material men who would be glad to advertise in that catalog, not primarily as a business venture, but because there is a large and growing number among them whose sentiments lead them to a good degree of liberality in promoting the educational side of good building, and they know that architectural exhibitions are nine-tenths educational. Architects who put their time and effort into exhibitions do not as a rule expect direct money returns, but contribute them to the cause of the advancement of the calling, and there can be no question that much of the pecuniary help given by advertisers is given in the same spirit. If the nameless aggrieved one ever really existed, it is safe to say that his firm was pretty much alone in regarding their advertising in the catalog as a "hold-up." That it was not a "hold-up," in the sense of giving no value in return, every one familiar with the business knows. Granting the circulation promised, these catalogs are usually so attractive that they are filed by every one interested and looked upon as of exceptional interest. Some of them are so attractive that the reader can not stop with looking at the pictures of exhibits alone, but is lured to examine everything from cover to cover.



BY GEO. E. BERTRAND.

It frequently happens that the most insignificant work of the architect from a revenue standpoint is at once the most fascinating to him, and in many respects the most important to the community. The greatest achievement of the architect is in making a virtue of necessity.

In a general way the term cheap has come to mean ugly. It is a common belief that an artistic thing will necessarily be expensive, and in the great majority of cases when the man of limited means proposes to build for himself a home of very limited cost, it does not occur to him that the designing of his house will afford the greatest opportunity for the display of genius in the entire architectural field.

The designing of a cheap house that will appeal to the sense of honesty and propriety, and fulfill its modest function both from the standpoint of usefulness and of correct taste, is a problem which, to be solved successfully, will tax to the utmost the resources of the designer. Economy will be the watchword from beginning to end. How to obtain dignity without commanding features; a certain degree of elegance without the assistance of ornamental detail; and how to impress the classical sentiment upon the composition without indulging too much in the delicacies of classical enrichment, will be a hard problem to solve. It will be an experience in the practice of moderation—a lesson in the husbanding of the crude materials of nature, which become precious in proportion as the thought and feeling of man are wrought into them.

It is not the intention here to go into the technicalities of the art, but simply to indicate what will be demanded of the man who shall design a cheap house that will fulfill the requirements, both from the utilitarian and the aesthetic standpoints.

First of all he must be a sincere lover of the beautiful, not only as to purely architectural forms, but as to the sound, color and rhythm as exemplified in music, pictorial and decorative art, and poetry; for all these will have their influence upon his temperament, and his creation of the cheap house will be their unconscious summing up in concrete form. The owners of the cheap house may have scanty means, may be out of reach of many social diversions perhaps, will have their times of anxiety and depression, and will need, far more than people of affluence, the restful and redeeming influence of harmonious surroundings, well proportioned rooms, wholesome colorings, the peace of propriety and unobtrusiveness and decorum, and all the infinitude of refining touches which are the expression of the artist who loves his work, and the human philosopher who has a

broad and sympathetic conception of the social needs of his fellow man.

Such a man will do something more than simply to arrange rooms with reference to their convenience of access, one with another; to indicate the kinds of material to be used; to indicate in the regular manner all the minutia incident to the joining together of the various materials that enter into the construction of a house; all of which is not architecture as an art, but the mere operation of building.

He will do far more than all this: his work will not only be a shelter from the elements, but it will be animate with suggestion, companionship, and ennobling influences. It will be a home. He will confer something upon his client which shall be a lasting obligation, and which cannot be estimated in dollars and cents. He will infuse into the inanimate stone and brick and mortar and wood and paint a something that was in him, which will be a lasting enjoyment.

Because the house is cheap, there can be no luxurious play of fancy in the design, and no elaborate enrichment of details, and it will be far better so, for then it will be more truthful and more in harmony with its tenants.

But it will be none the less classical in sentiment, nay, more so, for then its beauty of expression will depend more upon the composition of the mass, and the harmonious relation to each other of its different features.

The term classical means in its broad sense much the same in architecture as in literature or music. When certain dispositions or relations of voids and solids in architectural composition, universally inspire the admiration and emulation of cultivated minds a sufficient length of time to become a canon of law in design, then it becomes classical.

Repose, balance, symmetry—these are terms almost synonymous with the term classical, and when a building conforms to the requirements of these terms, in general, it may be said to be classical in sentiment.

It is a matter of sincere regret that many who are influential in giving direction to public thought, from a lack of true artistic sense, or insufficient training in the theory of architectural design, so misapprehend the true meaning of the term classical in its broad sense, as to discourage its application to architecture as though correct grammar or symmetrically formed bodies were not desirable or necessary.



FRENCH laws are quite different from our own. A fire having begun in a paint shop and spread to damage neighboring property, the authorities found that because of neglect of proper care of his premises, the owner of the place in which the fire started became responsible for the loss incurred by his neighbors, and as the evidence showed that the official inspector had failed to require better care of the premises, he was fined for neglect of duty.

SOME QUESTIONS ABOUT JOIST HANGERS.

MAKERS of all styles of joist-hangers not represented in the break-down at the Bement-Darling warehouse floors seem to be finding reasons other than the purely sympathetic for regretting that disaster. The trade in this line of goods has been worked up in comparatively recent times, and different kinds seem to have sold pretty nearly in proportion to the advertising and pushing done by their respective makers. The subject of hangers has not received as much careful attention by purchasers and their advisers as its seriousness warrants. Those "highly recommended by the agent" seem to have led the sales. Now manufacturers seem to think that they will have to encounter a more skeptical public, and that in any event fewer will be sold. While each maker would have people think that his goods have stood thorough tests and competitive tests, he is really conscious that experts in building have not been convinced that anything very conclusive is known about the relative merits of the different kinds. Some that are meritorious in form and proportions may be defective in material or method of manufacture. Will not the building expert conclude to get along with less of them at any rate?

The maker who is positive as to the merits of his line of goods sees that he must make extra effort to convince purchasers of their superiority.

In fact, there are some makers who have learned something from experience, and if they were to place a new line of goods on the market it would most likely differ considerably from what they are selling. For it turns out that not only does a joist-hanger need to be strong, but it needs to be uncommon strong. Here are joists that may safely be loaded with 250 pounds per square foot, uniformly distributed, and which if habitually loaded much beyond that limit would be unsafe. Really those joists are never loaded uniformly, for the convenience in handling goods and such knowledge as warehousemen have both tend to keep the center of the spans clear and the loads at the ends of the joists. Placing the load at the ends of joists admits of doubling that load or more without injury to the joist, but how about the hangers? How many buildings have hangers safe at two or three times the safe uniform load for the joists?

Then there are plenty of minor questions that have never been satisfactorily settled. Metal may be cast into shapes meeting theoretical requirements with less waste than if made from rolled sheets or bars but is this cast (malleable) metal so uniform in strength as the other? Again, having selected the sheet-steel hanger of most desirable form, how shall it be wrought, cold or hot? Designers of timber floors want joists and girders to be framed flush on top and to remain so. In order to reduce the difference in level that comes from shrinkage some makers have with greater or less ingenuity suspended their hangers by inserting into the neutral portion of the girders. How much if any does this practice injure the girder? The discussion on none of these questions is closed.

THE LONGFELLOW—FJELDE HIAWATHA AGAIN.

MR. LORADO TAFT is reported in the Minneapolis Journal as favoring the design by the late Jakob Fjelde illustrating the couplet in Longfellow's Hiawatha, a photo from the plaster cast of which appeared in our November issue.

"It would look very well as a bronze group among the foliage of Minnehaha Park. Fjelde has done a legitimate work there. * * * * It would no doubt afford a great deal of pleasure to the school children who paid for it if they could see it in the park. The group would have a praiseworthy effect. It is poetic and imaginative and harmonizes well with the poem that it is intended to illustrate."

Learning afterwards that the group had fallen under the official ban of the art commission, Mr. Taft did not hedge noticeably. While admitting that the group was not altogether perfect in technique, he thought such perfection not always desirable. As to the features, he had seen quite famous Indian groups in which the modeling of the faces was far less realistic. He intimated that what is known to whites as the Indian type of features is more or less of a convention, and if any one were to make a composite photograph of government Indian school pupils he would come to the same conclusion. A photograph of a pure-blood Cree maiden—the favorite model of a prominent western artist—shows that with a different costume and dressing of the hair it would be most difficult for a stranger to place her ancestry.

Mr. Taft's criticisms are such as might be expected from one who has himself contended with such problems. He recognized at the outset what the commission seem to have overlooked entirely, that the group was made to illustrate Longfellow.

"No, Minnehaha creek wasn't a rushing river when I last saw it, although the Fjelde group is supposed to recall Longfellow's mention of such a stream. Neither would the late Mr. H. have played automobile for his wifey, even on a very wet occasion, had he been a genuine Sioux or Ojibway. But Fjelde was illustrating Longfellow, and the statuary is quite as aboriginal as the poem."

Naturally, also, he did not share the worry of the moving spirits of the commission over the fact that the idea of avoirdupois was somewhat suppressed in modeling the group. The Journal man reports a member of the commission thus: "Among the objections to the group which we regarded as unsurmountable is a grave anatomical error. Had Hiawatha actually tried to hold Minnehaha in the position in which he is represented he would have fallen flat upon his face—and bruised the lady, I'm afraid."

One can imagine this stickler for realism in art going down to Swift's or Armour's cold storage place and building his notions of what ought to be upon observation of the "groups" on their way to load the delivery wagons. Sculptors, however, from the time of the reliefs at Khorsabad till now, appear to have done more.

If the commission have a well-fixed notion that the incident is closed, they hardly appreciate the significance of the fact that Mrs. L. P. Hunt has a thousand dollars toward casting the group in bronze. Whatever the school children expect, she expects to see the group in bronze, and if Minnehaha Park proves inhospitable, it need not excite wonder if, armed with Mr. Taft's certificate, she can induce Mankato or some other community to make a home for the group.

"HIGHCROFT," LAKE MINNETONKA MINN.

By F. H. NUTTER.

"Highcroft," at Lake Minnetonka, Minn., the country house of the late F. H. Peavey, Esq., ranks among the finest country places of the Northwest. Originally a stock farm and boasting a well known herd of Jersey cattle, it is still maintained as such, but the farm buildings are so well concealed as well as sheltered by the wooded hills of the estate as to be but very little in

and the accompanying illustrations give a very good idea of its "old colonial" stateliness as viewed from without, but the interior scene discloses only a few of the beauties within which meet the gaze of the visitor.

The original plan for the grounds was prepared by F. L. & J. C. Olmsted of Boston, but afterwards developed and completed by Mr. W. H. Manning.

As already stated, the house is placed in the midst of the open farm lands, which are still maintained as hay meadows. Through these a finely built drive of ma-



Formal Garden, "Highcroft."

evidence to one who lingers on the lawns and porches of the house.

Unlike most of the summer homes of the lake-dwellers, this house is located at a distance both from the highway and the shore, and was built upon an open plateau, though with a background of ancient maple and linden trees. Thus a desirable privacy was obtained for the owner, and a much broader view of the landscape also, for from the north to the south and



Entrance to Forecourt, "Highcroft."

cadam, with a strip along either side kept in lawn and planted with ornamental trees, leads with graceful curves to the forecourt, a distance of about two thousand feet from the entrance. The vine-clad walls of the forecourt, and the trees and shrubs that screen the drive, conceal the distant view, and it is not till one has entered the house and, passing through the reception hall, stands upon the porch that faces the rising sun, that the full beauty of the scene is appreciated. In



House and Main Lawn, "Highcroft."

southwest are seen the gleaming expanses of many of the bays which go to make up this most irregular and picturesque of the Minnesota lakes, while through the rest of the circle the eye rests on the hills and valleys of a farming district carved out from what the old settlers called the "Big Woods."

The house was designed and its construction superintended by W. C. Whitney, architect, of Minneapolis,



Formal Garden, "Highcroft."

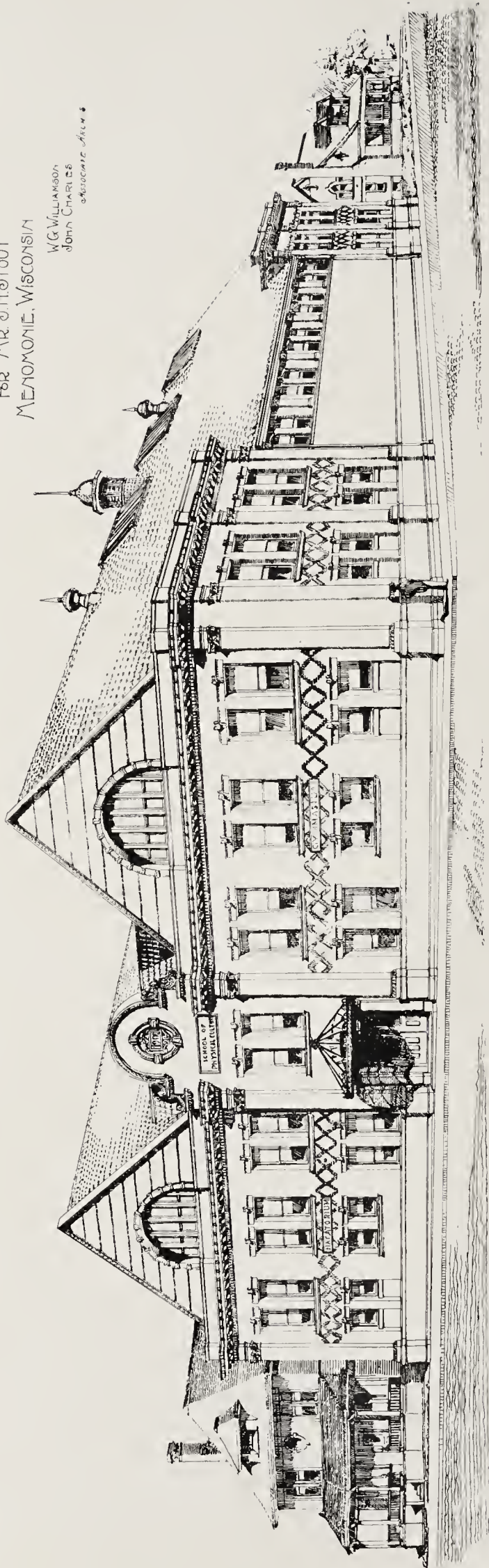
front of the house is a lawn of about seven acres, its well kept surface the more beautiful from contrast with the meadows from which it is separated by a border of vines and shrubs, while beyond the meadows and the summer house along the shore, and considerably below the observer's station Wayzata Bay and Gray's Bay stretch away to their wooded eastern shores.

At the south end of the house is a formal garden en-

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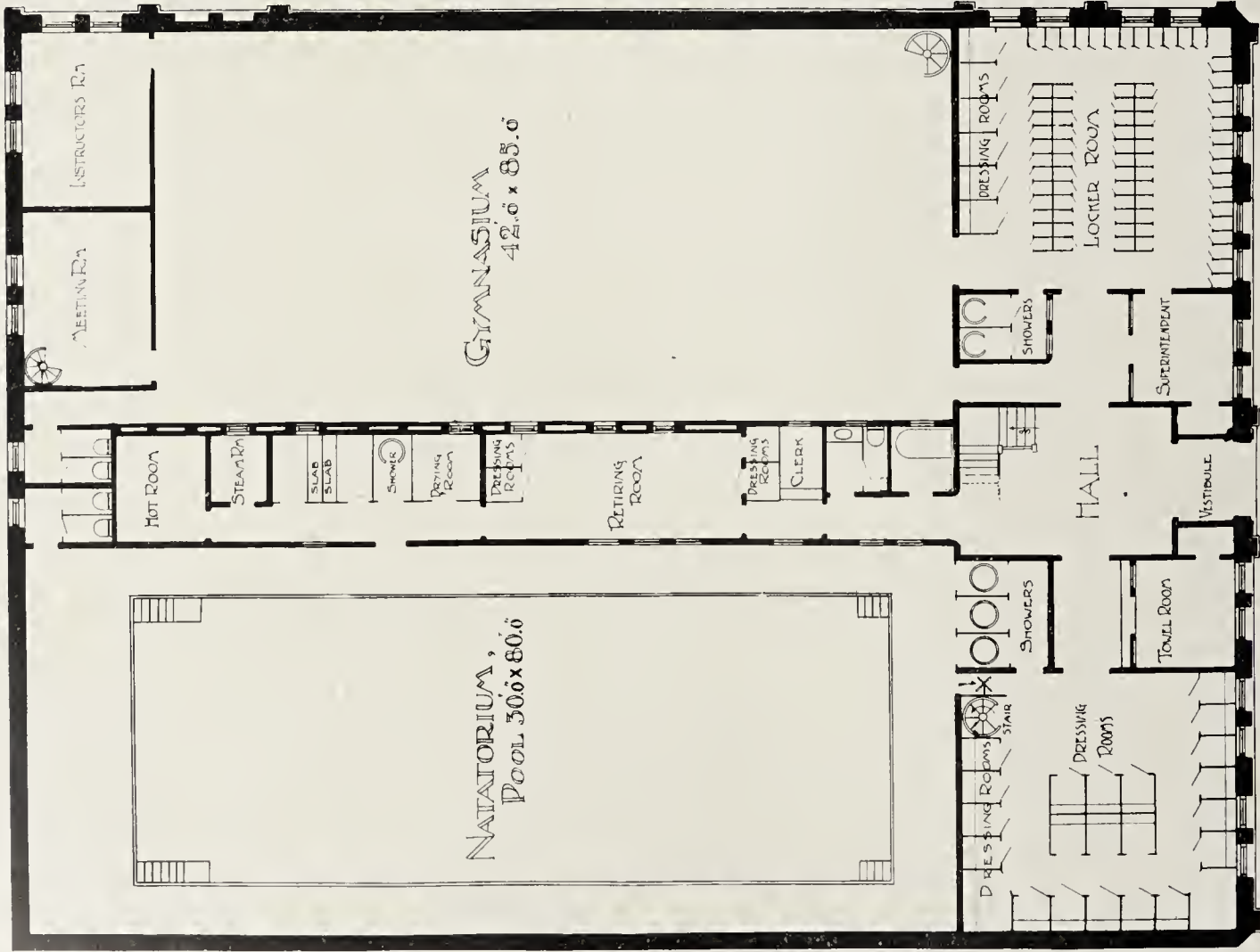
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W. G. Williamson—John Charles, Associate, Architects.

February, 1903.

Supplement to
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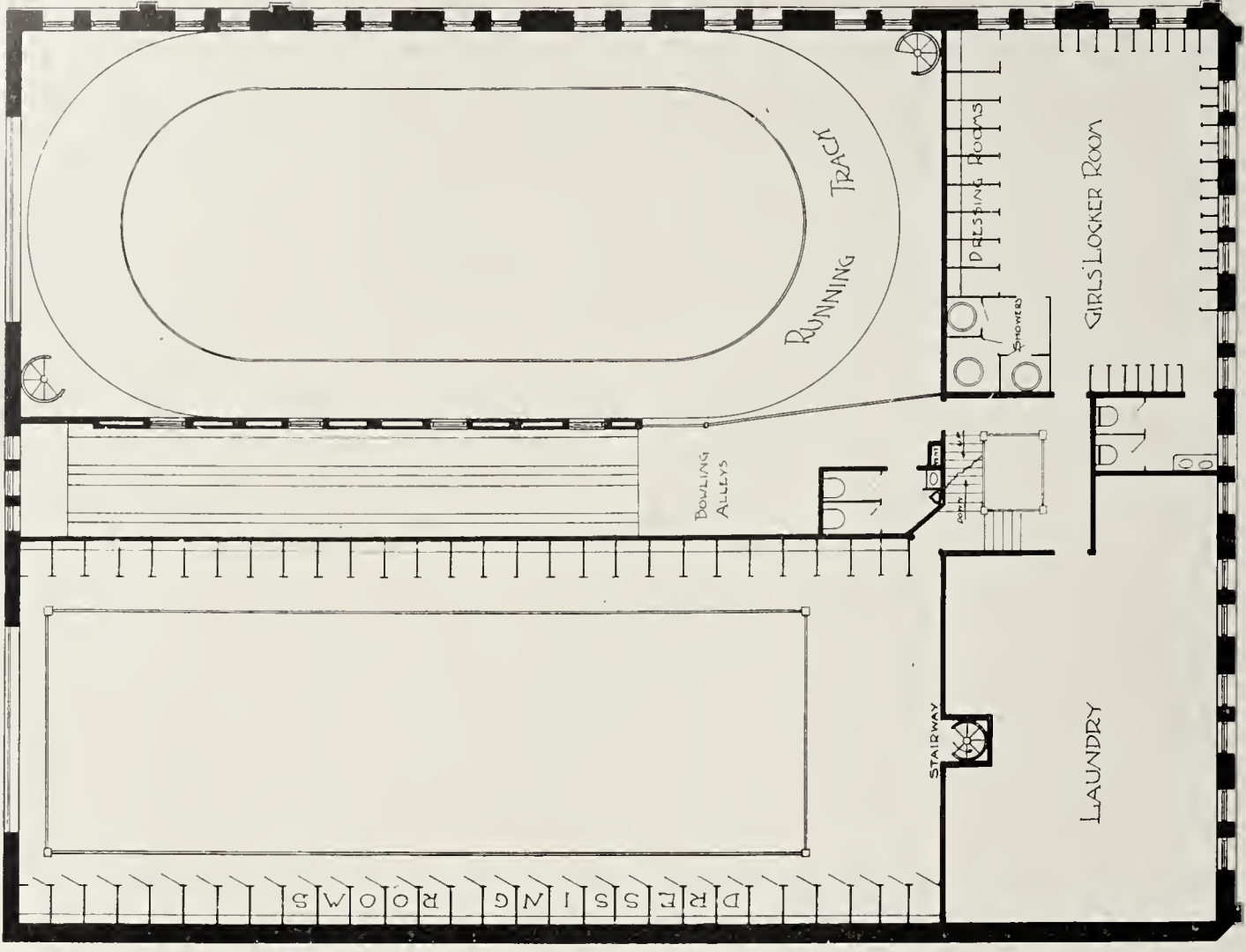
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February, 1905.



"HIGHCROFT"—EAST FRONT—FROM LAWN,
Minnetonka, Minn.

W. C. Whitney, Architect,
Minneapolis.
February, 1903.

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"HIGCROFT" RECEPTION HALL.
W. C. Whitney, Architect, Minneapolis.

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I. V. Hill, Architect,
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closed from the main lawn and sunken below the general grade thereof.

The views we print show the forecourt, the formal garden and portions of the main lawn, in connection with the house itself; also the service drive, which, branching from the main drive before it reaches the forecourt, leads to a separate and enclosed service court at the kitchen wing.

It is of interest to note that all the trees on the lawns and along the drives were set out after the building was under way, as the site was entirely bare at first. Many



Service Drive, "Highcroft."

of these trees were six to nine inches in diameter when transplanted, being moved in the winter time from a distance of several miles, with a ball of earth frozen to their roots; so carefully was this done that hardly a tree was lost.

For the proper maintenance of so large a house, and such extensive lawns and gardens, an abundant supply of water is necessary, which is obtained from a spring lake some six hundred feet distant and sixty feet below



Forecourt at "Highcroft."

the house. On the shore of this little lake is located the pump-house, which also contains the steam plant for heating and the electric plant for lighting the house, connection being made through a tunnel of ample size.

Although the sudden death of the owner removed him when his work of home-building was barely completed, it is a matter of congratulation that he made ample provision for the future care of the place in

which he took such loving pride, and doubtless "Highcroft" will be for years what it now is—the place, par excellence, of Lake Minnetonka.



OAK TABLE IN FRENCH RENAISSANCE STYLE,
Designed and executed by Wm. Yungbauer, for C. S. Mellen,
President Northern Pacific Railway, St. Paul, Minn.

CEMENT CONSTRUCTED HOUSES.

One of the standing arguments for frame construction is its cheapness. R. B. Coltrin, of Jackson, Mich., is building two houses of cement blocks and claims that they will cost him considerably less than if he had used the ordinary frame construction. This seems almost incredible, but is given as the result of actual calculations. The foundations measure 42x24. The cost of the foundations, which are of cement, 138 lineal feet, is less than \$200. This is without cellar. He makes the cement blocks for the walls with a machine of his own invention. The blocks are two feet long and eight inches high, and will make a wall ten inches thick, including an air space, taking up about one-third of the thickness of the wall. The blocks, each of which makes a complete section of 10-inch wall two feet by eight inches in dimensions, cost him ten cents each. Mr. Coltrin estimates that the cement houses will cost about 25 per cent less than frame houses of the same size. He uses unskilled labor. Four parts of fine gravel are mixed with one part of cement on mortar-boards, first dry and then with water sufficient to moisten the mixture so that it will pack. Then the concrete is shoveled into the block machine, tamped down thoroughly, taken out immediately and piled up to season. Nothing is left to be done but to lay the blocks, after they are hardened, as a brick wall is laid, and the result is a perfect wall with an air chamber. For chimneys a section of an air-chamber is cemented and the chimney is enclosed in an absolutely fire-proof wall.

MEMORIAL TO JAMES WATT.

Andrew Carnegie has notified Greenock, Scotland, that he is prepared to give \$50,000 to erect a memorial to James Watt, who was born in that city on January 19, 1736, in recognition of his engineering achievements; or he will head a movement in America to raise a large fund which, with sums raised in Great Britain, will provide for a more extensive scheme of commemoration.

THE CHICAGO ARCHITECTURAL CLUB.

Sixteenth Annual Exhibition, Art Institute, Chicago— Circular of Information.

The exhibition will be held in the galleries of the Art Institute of Chicago, from March 26th to April 13th inclusive.

Entry blanks are to be returned not later than February 24th.

Exhibits will be received up to 6 p. m. Tuesday, March 10th, and will be discharged Wednesday, April 15th.

The exhibition will include works of architects and the allied arts.

Drawings must be framed or mounted, and the omission of glass is requested in frames larger than 2x3 feet.

All exhibits accepted by the Jury of Admission must remain until the close of the exhibition, and unless particularly requested not to do so, the C. A. C. will consider the authority has been granted to reproduce any exhibit it desires in the illustrated catalogue.

The exhibition will be held in the fireproof galleries of the Art Institute, and all handling will be done by experienced men, thus insuring the least possible risk. The Chicago Architectural Club will not be responsible for accident.

Labels for each exhibit must be securely fastened, and these, together with the entry blanks must be carefully and correctly filled out with the name and address of the exhibitor, and the full title of the exhibit.

It is important that this instruction be observed, as the catalogue lists are compiled from these blanks.

All exhibits will be returned directly to the exhibitor at the close of the exhibition unless a written order,

signed by the exhibitor is received, to forward said exhibit to some other destination.

The Chicago Architectural Club will arrange for collectors and shippers in Philadelphia, Boston, New York, Washington and St. Louis, and exhibitors notifying Mr. Birch Burdette Long, Chairman, Art Institute, Chicago, of their intention to exhibit will be advised at what date and by whom their exhibits will be collected.

All expenses attached to the collection and shipping of exhibits will be borne by the Chicago Architectural Club, provided the same is done by their authorized agents.

Exhibitors from points other than those mentioned can send their exhibits to the agents of the Chicago Architectural Club in any of the above cities.

All works thus sent are to be plainly marked "Chicago Architectural Club Exhibition." The agents will then forward and return them without expense other than for transportation from and to the exhibitor's address.

The expense of handling and shipping any exhibits other than as above stated must be borne by the exhibitor.

Additional entry blanks, labels and circulars can be had on application to Birch Burdette Long, Chairman Exhibition Committee, Art Institute, Chicago.

Address all entries and communications to the Chairman.

WHAT IS BIRDS-EYE MAPLE?

In a recent number of a wood working magazine an article was published which stated that bird's-eye maple was not a peculiar maple, but simply ordinary maple cut in a certain way. In a recent issue of the New

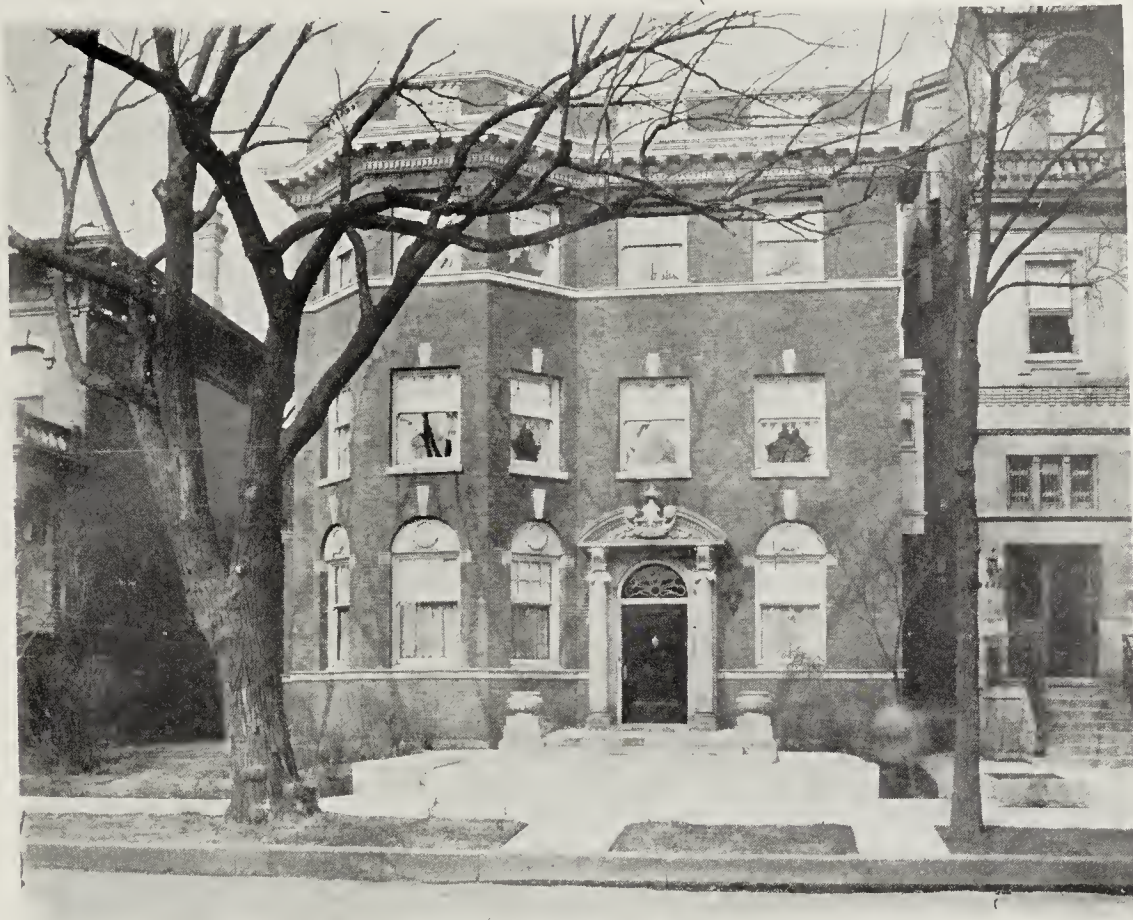


C. A. STONEHILL'S RESIDENCE,
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H. R. Wilson, Architect,
Chicago, Ill.

York Sun that statement is refuted. It is there stated, on the authority of a wood worker, that bird's-eye maple and curly maple are both cut only from the logs of the rock maple tree, acer saccharinum, in which a beau-

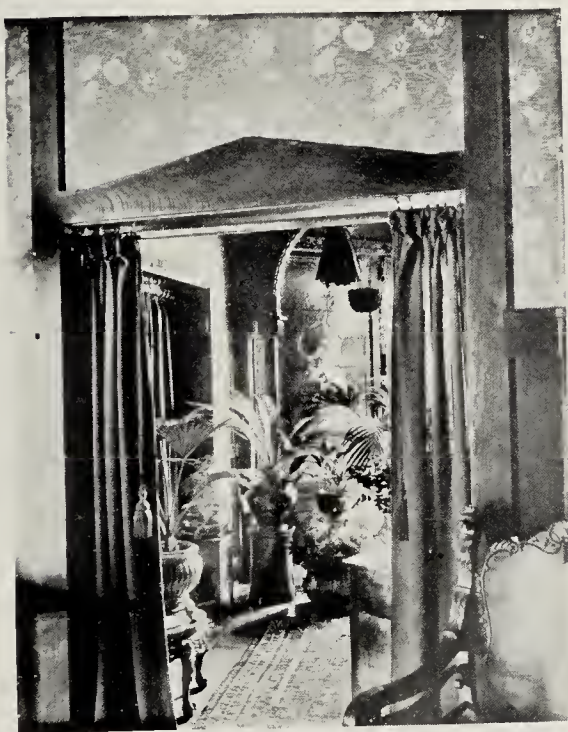
tiful lustrous grain is produced by the sinuous course of the fibres. This tree is not at all the common hard maple. It is a hard maple, but is full of little gnarls called eyes. Men looking for bird's-eye maple logs go through the standing timber and pick out the bird's-eye maple trees, paying for them from \$30 to \$50 per 1,000 feet in the woods. Ordinary hard maple logs are worth only from \$6 to \$7 per 1,000 feet. It would be



Facade to Mrs. Harry W. Farnham's Home, Chicago, Ill.
B. H. Marshall Architect, Chicago.

tiful lustrous grain is produced by the sinuous course of the fibres. This tree is not at all the common hard maple. It is a hard maple, but is full of little gnarls called eyes. Men looking for bird's-eye maple logs go

impossible to cut a piece of veneer with eyes in it from a common hard maple log, and it would be equally impossible to cut a bird's-eye maple log, no matter how you cut it, so that it would not show the eyes.



Entrance to Conservatory at Mrs. Farnham's Home.



Yale Den in the New Farnham Home.



SOLID MAHOGANY WALL CABINET AND TABLE,

Designed by Lawrence A. McIvor, for Minneapolis Commercial Club.



FOR BETTER SANITARY CONDITIONS.

A contributor to the Indianapolis News says: "There should be a sanitary committee appointed in some way to report on the ventilation of public buildings, including business offices, lecture halls, churches, theaters, school rooms, traveling conveyances and all other places where people are wont to congregate. In nine cases out of ten in entering these places one is met with a stifled, dead air, if not nauseating, and then we are ready to criticise the indifference or impoliteness of the employes, when the truth is they are partially mad from the constant brain stuffing of poisoned air. Carbonic acid gas, the effusions of tobacco, liquor and the results of bad dietetic habits of those who visit or work in the room, all being thrown off, with little ventilation, is the fate of a large majority of those who occupy public places of business. A woman cannot ride in a public conveyance with the benefit she should receive, because of this same negligence. If she ask for better ventilation she is ignored or rather told others do not desire it.

"It was to be hoped that in the discussion of recent

pure air developments as a curative agent in consumptive diseases the public would become aroused to the value of pure air in the public buildings. No signs are visible, however.

"We are told that there are 1,200,000 suffering with tuberculosis in this country. This disease is not confined to the slums nor to the very poor. A visit to the dumps and bathhouses shows the bright eye and ruddy complexion when the dirt begrimed face permits, demonstrating the wonderful exhilarating effects of fresh air counteracting other unsanitary habits."

ABOLITION OF SYMPATHETIC STRIKES.

It is gratifying to know that the rank and file of the mechanics in the building trades are opposed to the sympathetic strike, and while there may be temporary factional differences over the matter, the advocates of the measure will soon see that they are far in the minority and will give up an attitude which, upon mature reflection, they will find is untenable. The building trades in Chicago, and all over the country for that matter, are enjoying unprecedented prosperity. Never in the history of the city have such high wages prevailed, with the exception of the brief period just before the World's Fair. Shortly after the fair the sympathetic strike was inaugurated, and the walking delegate became more brazen than ever. Backed by the power of this community of interest plan, the sympathetic strike, he at once began to limit the amount of work a mechanic should perform in a day, and the culmination came in one of the most prolonged and bitter struggles ever known. Men were murdered and injured by the score, and thousands of good mechanics left the city. This state of affairs lasted considerably over a year and amounted to losses extending into the millions before the spring of 1901, when the struggle came to an end by the abolition of the sympathetic strike idea and the limitation upon the amount of work which a mechanic should perform in a given number of hours. It would seem that they would appreciate the folly of attempting to foist this idea upon the people at this time. Existing conditions, it would seem, should have a tendency to put an end to the talk about impending labor troubles as a result of the refusal of employers to enter into anything that would seem like an agreement to recognize the sympathetic strike, which has been the cause of so much annoyance in past years. When mechanics are receiving higher wages than ever have been paid in the history of the city, bricklayers getting 72 cents an hour and plumbers in a fair way to receive \$5 a day, it does not indicate that they are suffering great hardship. The fact that the Building Contractors' Council has a fund of \$100,000 in the treasury and has within two years come out victorious in one of the most bitterly contested struggles that the building trades have ever known, does not augur well for the strike movement at this time. The bulk of the unions ask an increase in wages, and it seems that their demands will be granted, in part, at least. The old and new scales are as follows: Plumbers are now getting \$4 a day and want \$5; gasfitters are now getting \$4 a day and want \$5; plasterers are now getting \$4 per day and want \$4.50; bridge and structural iron men are now getting \$4 a day and want 60 cents an hour; sheet metal workers are now getting \$3.50 a day and want 50 cents an hour. The carpenters are asking an increase of 5 cents an hour over their present rate of 45 cents. All of the old scales, save that of the bridgemen, expire on April 1.—Carpentry and Building.



Colonial Portal to the New Home of Mrs. Harry W. Farnham.

NOVEL AND SUCCESSFUL HEATING PLANT.

By E. H. Roberts, of the Roberts Heating and Ventilating Company, Minneapolis, Minn.

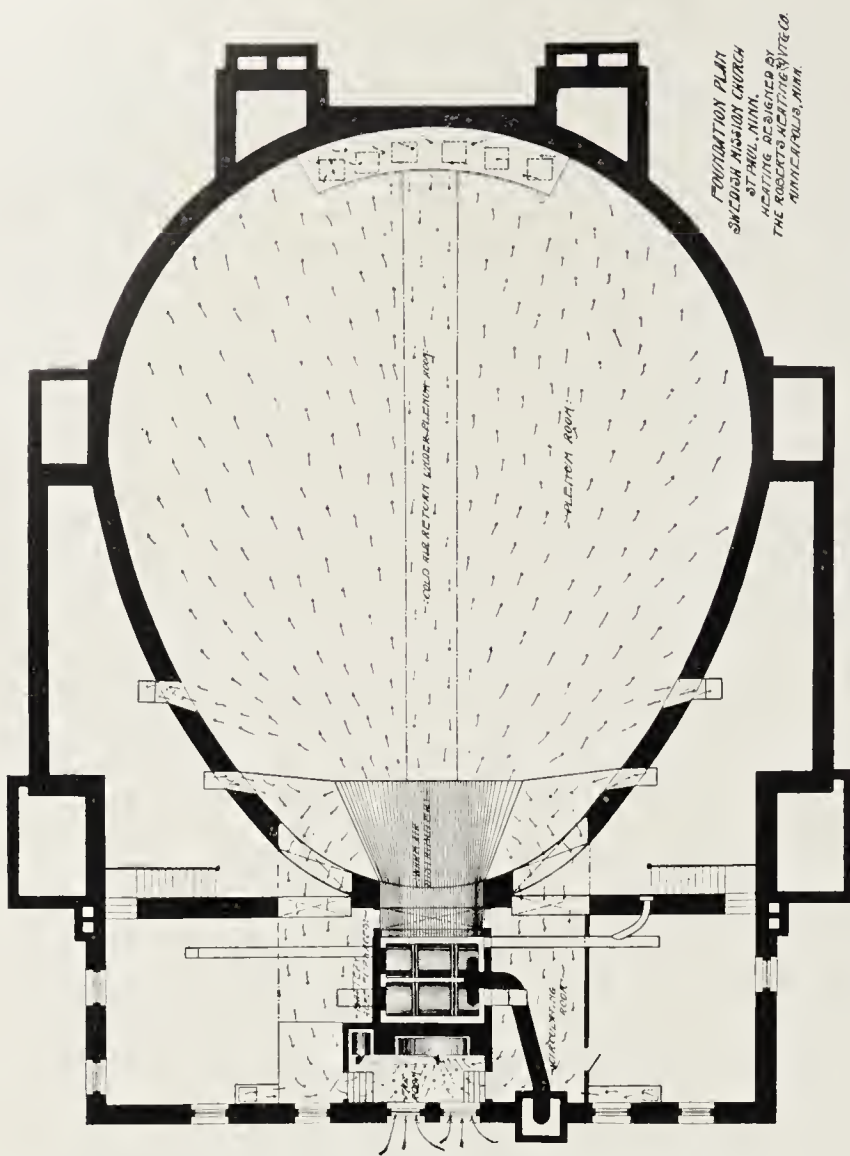
The Swedish Tabernacle at St. Paul was designed with particular reference to its acoustics. To preserve these and to effect an even distribution of the heat with the least possible expense were the problems laid before the writer by a committee having the matter in charge. This committee had made a tour of all the principal churches in the Twin Cities, and had reached the conclusion that a plant such as would meet their requirements could not be installed for less than \$4,000 to \$5,000. As the money available for this purpose did not exceed one-third of that sum, it was apparent that they must decide on something radically different from anything they had seen, or they must resort to other means to increase their funds.

It is sometimes easier to suggest ways of cheapening the installation of heating plants than to secure satis-

factory results after a plant is in, but this plant is so satisfactory in every particular that we believe architects generally will be interested to know something of the system and the apparatus used.

A battery consisting of two masonry furnaces, nine feet long and each capable of heating 200,000 cubic feet of air per hour, is set as shown in the accompanying diagram. These heaters are sectional, each section having a multiplied exterior or radiating surface amounting to seven times the interior or heat-absorbing surface. The products of combustion travel forty feet before reaching the smoke outlet, and this long fire-travel, combined with the immense heating surface, makes the furnaces very economical in the amount of fuel required. Both bodies and radiators of these furnaces rest on ball bearings so that there is no danger of cracking or warping from rapid expansion or contraction.

Connecting with the furnace chamber is a 72-inch fan of the propeller type, with its base four feet below the bottom level of the heaters, so that the air can



circulate freely to every part of furnace chamber. This fan has an initial delivery of 60,000 cubic feet per minute when revolving at a speed of 250 R. P. M., and is operated by a 5-H. P. electric motor.

From the top of side of brick work opposite the fan a galvanized iron distributor is built out to connect with the plenum-room, which extends under the whole auditorium. Through this plenum-room, which is about two feet high, the warm air is forced by the pressure from the fan, and finds an outlet through

small openings between the risers of the seats in the auditorium.

The cold air is carried down from the rear of the auditorium into a large return duct beneath the plenum-room, and also through side ducts, all of which connect directly with the revolving-room at the rear of the furnaces. By opening the door leading to the fire-room the air from the church is kept in rapid circulation, and the temperature in the auditorium can be changed from ten below zero to 70 degrees above in less than two hours.

During services or whenever the necessity for ventilation becomes apparent, the door between the fan-room and the revolving-room is closed, the iron door in the vent-flue opened, and the windows of the fan-room raised to admit fresh air. Heat is also supplied from furnaces to the parlors, library, kitchen, and classroom on the first floor, and to the pastor's study on the second floor.

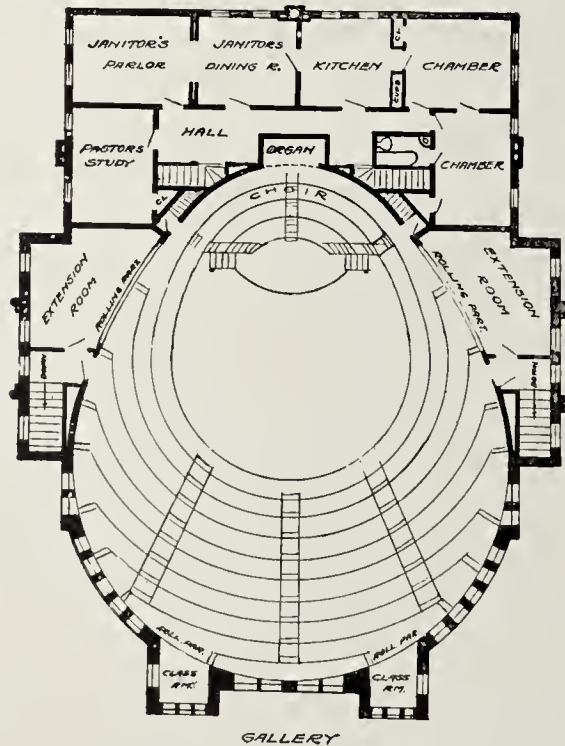
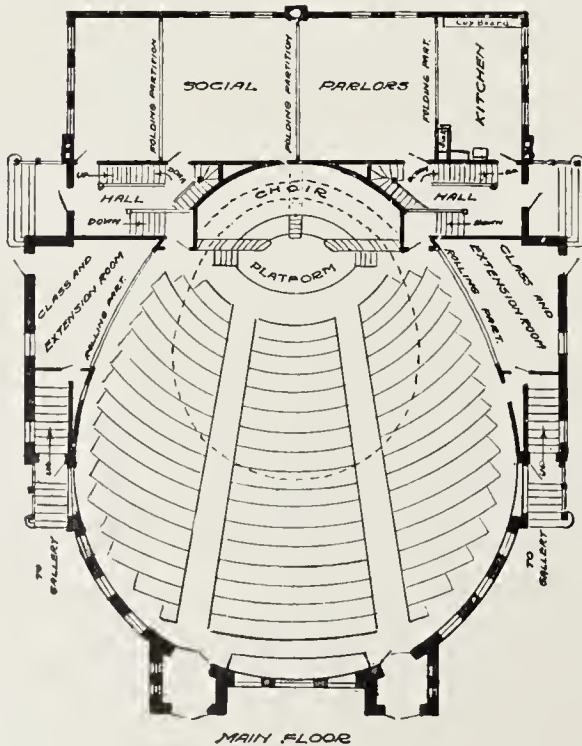
That the heating plant is entirely satisfactory is best evidenced by the following statement made by the pastor, Rev. Hjalmer Sundquist:

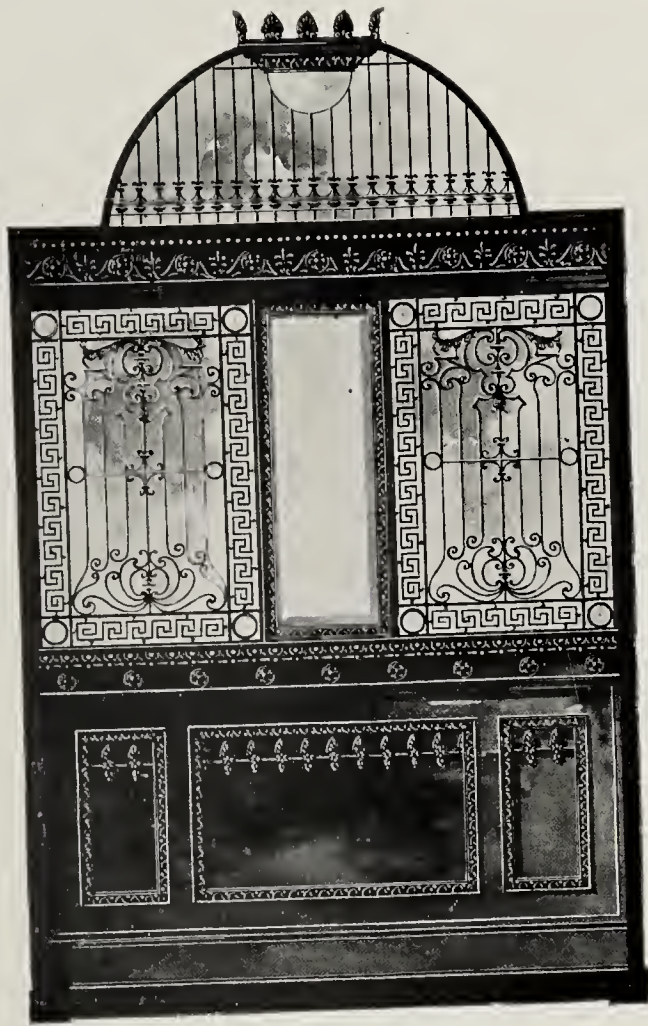
"The heating plant in our new church, the Swedish Tabernacle, has now been thoroughly tested in all kinds of weather, and has proven a success in every particular. Our church auditorium contains about 200,000 cubic feet of air space to be heated. It has a seating capacity of 1,200 which on special occasions can be extended to 1,500, and we have found no difficulty in heating the whole building to perfection in less than two hours, even in the coldest weather, when the temperature has been as low as 20 degrees below zero.

"Owing to the perfect circulation produced by the fan and the peculiar arrangement for admitting the warm air, we have no trouble from a cold floor and an overheated ceiling, the lower part of the house being just as warm as the upper.

"It has been a real comfort to us this winter, when the coal famine has made the heating problem, to almost everybody, a problem indeed, to be able to heat our spacious church in so short a time, with almost any kind of fuel and so little of it.

"A special feature of our plant, which should not be overlooked, is the system of ventilation, which we believe cannot be excelled."





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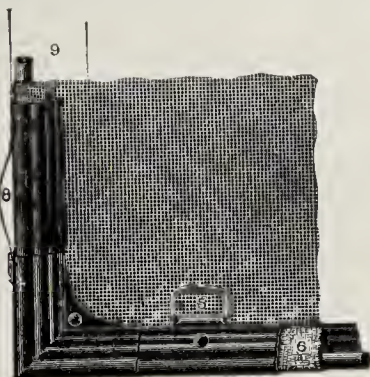
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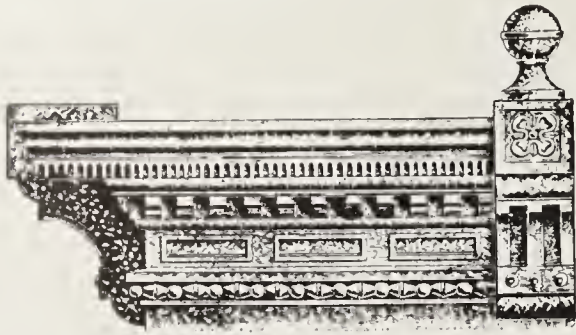


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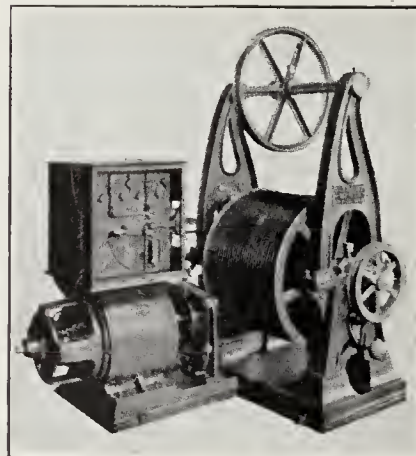


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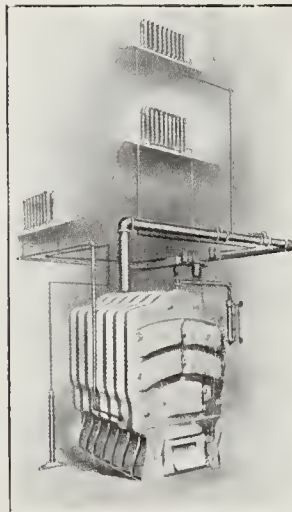
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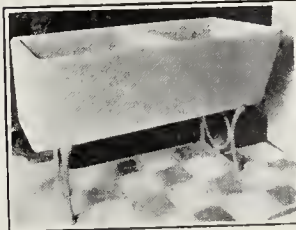
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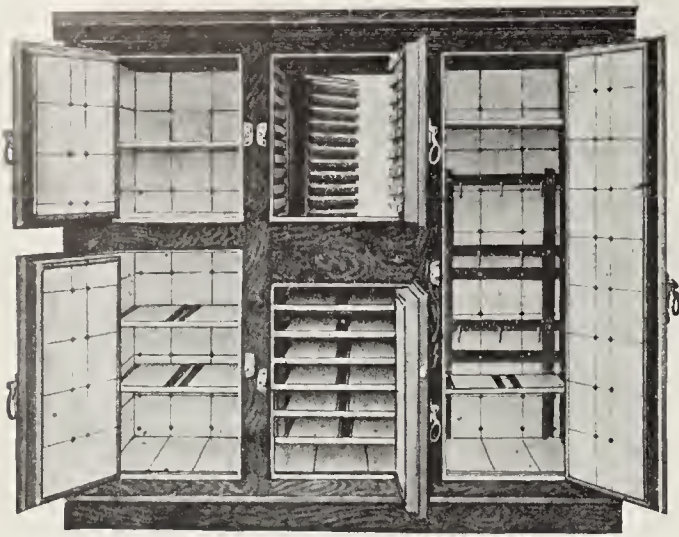
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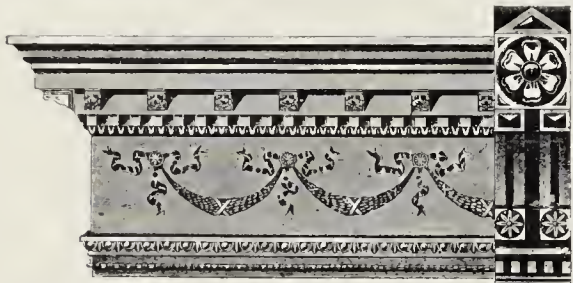
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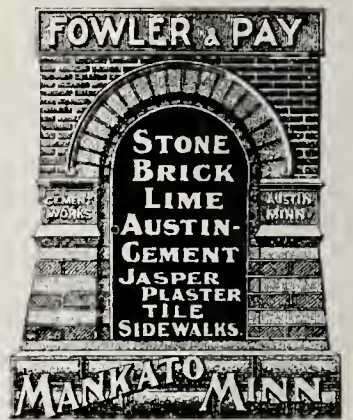
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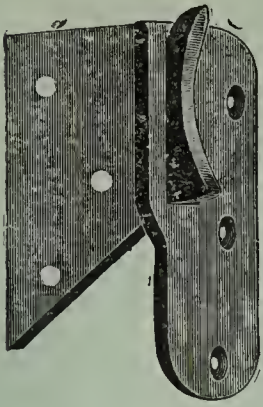
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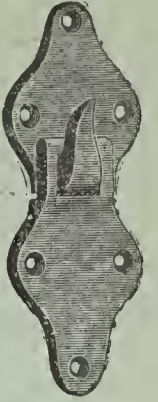
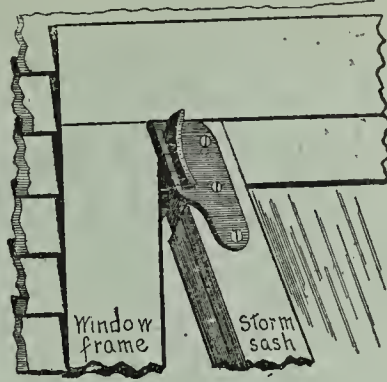
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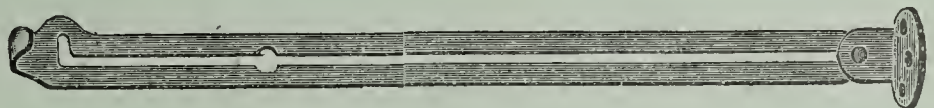
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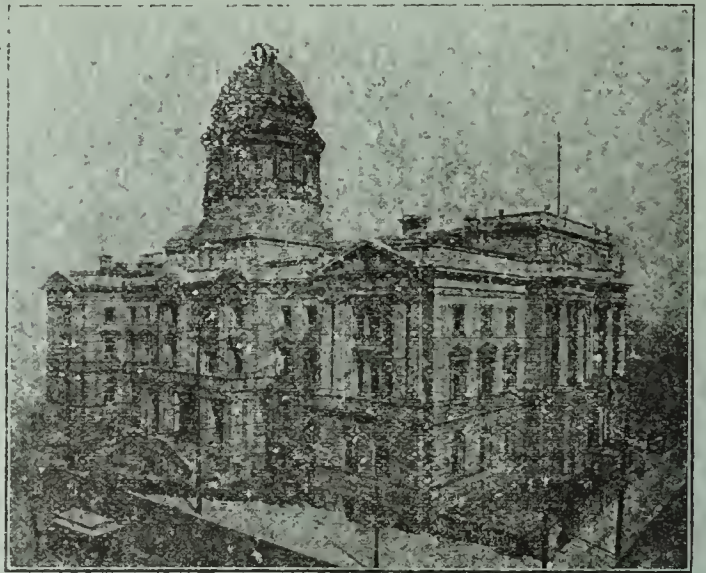
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



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