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THE *Evening Post* contains a legal note, of interest in more than one way. A builder sued for payment for his work, under a contract, on two buildings, alleging that he had fully performed the contract, and that the architect had certified, as the contract required, that all the work on the performance of which payment depended had been done to his satisfaction. The answer denied that the contract had been performed, and denied that the architect had certified that any of the payments for which recovery was sought was due. When the case came to trial it was proved that the contract had not been performed, inasmuch as the buildings had not been completed until several weeks after the agreed time; and, in regard to the architect's certificate, while the complaint alleged that one Freeman was the architect, and that the architect had signed the certificates, the plaintiff produced at the trial only certificates signed by one Smith, for Freeman. It was claimed, in both cases, that the strict letter of the contract had been waived by the defendant, and a decision was given in the lower court for the plaintiff; but the Supreme Court of New York reversed the decision, on the ground that the complaint did not allege any waiver of the contract, or make any statement implying such waiver, contenting itself with the bare assertion that the contract had been fulfilled, which the uncontradicted evidence showed not to have been the case. When the plaintiff offered evidence to show that although the contract had not been fulfilled, as alleged, it had been waived, the defence objected to its admission, on the ground that such evidence was inconsistent with the pleading. The plaintiff's attorneys made no effort to amend their pleading, and the lower court admitted their evidence of waiver, notwithstanding the objection. The Supreme Court held that this was wrong. The Court said that the defendant had the right to suppose from the allegations of the complaint that the plaintiff based his right to recover upon performance of the contract, not on the defendant's modification of it, and that this was the issue to be tried. "That the plaintiff," said the Court, "was not 'entitled to recover, under his complaint, upon the theory that 'the contract had been modified, is so well settled that an extended discussion is unnecessary'; and it went on to say that 'it is therefore clear, under every recognized rule relating 'to pleadings, as well as under the authorities cited, that the 'objections should have been sustained, and the evidence excluded. If," said the Court, "certain provisions of the contract had been waived or modified by the defendant, that fact

"should have been pleaded, and on account of the plaintiff's 'failure to do so, the architect's certificates were inadmissible 'as evidence.' The judgment of the lower court was reversed, and a new trial ordered.

ALTHOUGH the moral of this story applies rather to lawyers than to architects and builders, it will do no harm for the latter to take to heart the clear statement by the Supreme Court of the principle of pleadings, as notifications to the Court, and to the opposing party, of the facts upon which the complainant and the defendant rely for their case, and to remember that, while a contractor can recover either on the theory that he has performed his contract, or that the other party has modified the contract, and that he has done what the other wished, he cannot make both claims at once; or, if he chooses to make one claim, he is not entitled to try to prove the other. This seems so evident that it is strange that a lawyer could have been found who would have drawn such a complaint to fit the evidence that he had to offer. It is true that a plaintiff may mislead his counsel in regard to what he can prove, but it is difficult to believe that the lawyer in this case was not at fault, either in adapting his pleading to his evidence, or in neglecting to amend his pleading when he found what the evidence was to be. That the consequence of such neglect would be to burden his client with the expense of two lawsuits, ending in final defeat, was practically certain, yet this same lawyer would probably be eager to denounce an architect who should lead a man into building a house whose foundations, "under every well-recognized rule relating to" the art of building, and, according to principles, "so well settled that an extended discussion is unnecessary," were so defective that it fell at completion, causing total loss to the owner.

A MASSACHUSETTS builder has applied a novel remedy for the collection of debts due him. Not long ago a contractor named Shaw agreed to build a wooden house on a lot in the village of Norfolk Downs. When the house was far enough advanced for plastering he applied to the owner for a payment on account. Receiving no satisfactory answer, he concluded to put a lien on the estate for his work and materials, but discovered that the property had been heavily mortgaged, and that his lien would probably bring him no return. Under these circumstances, acting, it is said, on the advice of counsel, he took a rather heroic resolution, and, making his appearance on the ground one evening, with a building-mover and sixty men, carrying suitable implements, he had the house lifted from its foundations and rolled away to another lot in the neighborhood. When the other party to the contract arrived on the scene he was, to say the least, displeased, and proceeded to enter complaint against the builder for larceny of the house, under a provision of the statutes, which applies to the purloining of real-estate the same penalties as those which attach to the stealing of personal property. The contractor and the building-mover have been notified to appear for trial, and the case promises to be an interesting one. Obviously, the important point involved is whether the house, which, although technically attached to the real-estate, had been paid for by the contractor, was the property of the owner of the lot in such a sense as would make it larceny to carry it away; and a good deal of argument can be expended on this question.

A CURIOUS case came before a New York Court not long ago. A man built a block of three houses, and afterwards died, leaving them to his heirs, as tenants in common. The heirs sold the three houses to two parties, the boundary-line between the two estates running through the middle of the middle house, which was occupied by the parties in common, and the rents divided between them. About a year ago, apparently by mutual consent of the owners, the middle house was cut in two, on the line dividing the two estates, and, immediately afterwards, one of the estates was sold to certain builders, who pulled down the house-and-one-half belonging to them, and erected a brick building. The owner of the adjoining estate then demanded damages for the loss of the use of the middle house, in which they had held rights as tenants in common, and which was now, of course, uninhabitable, half of it being occupied by the new building. Suit was brought to collect five thousand dollars, as damages already suffered, and

to compel the builders to restore the house to its original condition, but the Appellate Division of the Supreme Court has now rejected the claim, confirming the decision of the court below, that the house as a house ceased to exist when it was cut in two, and that damages for the loss of its use as a dwelling, if any damage had been suffered, could only be recovered from the person or persons who caused it to be cut.

THE Boston Society of Arts and Crafts, as has been before announced, will hold an exhibition next April, and an appeal is made to all persons interested in the development of taste and skill among American workmen, and in the enrichment of American life by that charm which the lesser arts can best give, to aid in the matter by contributing or securing exhibits, or, at least, by their sympathy. The preliminary prospectus of the exhibition is an interesting document. No exhibit will be accepted, when sent under a firm name, unless the name of the designer or craftsman employed on it, or both, is attached; the object of this rule being to encourage, by due recognition, the individual workmen, for whose benefit the exhibition is particularly intended. It seems that the Society, which has already established classes in applied art for workmen, in the Charitable Mechanic Association Building, was rather disappointed at the diversion of the Franklin Fund, at the instance of the labor champions and the Mayor, from its intended use, in instructing workingmen in their business, to some undefined scheme for encouraging oratory, and adding to the number of free public baths, with which Boston is already well provided; and the prospectus speaks with melancholy surprise of the persistent opposition of the unions to trade-schools, saying that it would, in all probability, be the children of the members of the unions who would benefit most by such schools. A more intimate acquaintance with trade-unions would have explained the matter, by showing that, where they are not utilized as cats'-paws for gathering political or financial chestnuts for their leaders, the object of their movements is simply to monopolize employment by shutting out even the sons of the members from the opportunity to learn a business which will enable them to earn, later, an honest living. One of the principal union rules is that a shop shall immediately be "struck" to which more than a very limited number of apprentices is admitted, the intention being, of course, to restrict the number of possible competitors; and one of the largest and strongest unions in Boston, that of the stone-cutters, a few years ago took the radical step of closing its books, and voting to admit no more members. The son of a Boston stone-cutter, therefore, who, under a system of real freedom, would look forward to learning from his father an honorable and well-paid business, now knows that this opportunity is denied him, and that his only chance of getting a living will be in the ranks of the professions not controlled by hoggyish monopolies. The trade-schools are the worst of all thorns in the side of the union managers. They cannot be "struck," like shops which employ too many apprentices; the pupils that they train are, as a rule, so intelligent and skilful that employers will run the risk of severe contests with the unions for the sake of securing them; and it is much more difficult to coerce such men by union methods than it has been to enslave the ignorant and improvident persons in whom the main force of the unions resides; and it is a satisfaction to see that the Boston Society of Arts and Crafts, with the great power of social influence which stands behind it, has had its attention directed to the principal enemy that it will have to encounter in carrying out its beneficent purposes.

AN extraordinary educational enterprise is, according to the newspapers, about to be launched in England. "Two young Americans," with the help of funds subscribed by American admirers of Mr. Ruskin, have taken a lease of a house in Oxford, near Christ Church College, and have arranged to utilize it as a "college for labor leaders," under the name of Ruskin Hall. Fifty gratuitous tuitions are, we are told, to be given during the first two years, and the candidates for the first year have already been selected. Those students not on the free-list will have to pay only one pound a week for board, lodging and tuition. What sort of tuition is to be given we cannot conceive. A large portion of the labor leaders in all civilized countries are saloon-keepers, who utilize the thirst for alcohol to gain influence over their constituents; while most of the others owe their position to their noisy self-assertion. Which of these classes will be trained in Ruskin Hall remains

to be seen; and if it is intended to graduate from that institution only men of honest life and virtuous conversation, who regard truth in their public utterances, and have some regard for the rights of other people, it will be interesting to see how these persons can gain any influence over "labor," in competition with the reckless and cruel tyrants who now set themselves up as "labor leaders." There is no place in the world where the duty of forbearance toward "scabs," and the wickedness of conspiring to take the bread out of other people's mouths are more efficiently taught than at Oxford, and if Ruskin Hall does not prove of great value to "organized labor" in supplying hints for the conduct of railway strikes, or novel methods for maltreating persons unprovided with tickets entitling them to earn a living, it will, we may hope, teach a few workingmen that non-union mechanics and their families have as much right as union men to life and happiness; and that the recognition of this right, and the protection of defenceless persons against the encroachments of privilege and monopoly, form the essence of modern civilization.

LABOR matters in England are in a curious condition. The success of the employers, by concerted action, in resisting the strike of the engineers last year has encouraged employers in all trades to take steps toward forming combinations to oppose the combinations of workmen. Fortunately, the scheme does not seem very likely to prove successful. One of the features proposed is that a fund shall be raised, out of which any firm engaged in resisting a strike shall be paid during the continuance of the struggle an indemnity equal to its average profits for a like period. This is an imitation of the "strike pay" system of the unions, and is likely to lead to similar results. The union leaders in England themselves admit that there are many workmen, members of unions, who could have employment if they were willing to work, but who prefer to live in idleness, subsisting on the money which their fellow-members, under the name of "strike pay," or something of the kind, are forced to contribute; and any one who knows the sharp competition between English contractors, and the uncertainty of contracting business, can readily foresee the troubles which would come from fictitious strikes, arranged in establishments which found their affairs in a bad way, for the sake of claiming "indemnity" from their associates, as well as from the attempt to collect contributions to enrich one contractor, at the expense of the others who had been, in a time of mercantile distress, impoverishing themselves for the express purpose of driving him, by their sharp competition, out of business.

MATTERS seem to have changed a little since the students of the French School of Fine-Arts, only about a year ago, ran howling through the streets of Paris, in pursuit of the trembling girls who had done them the wrong of knowing as much about fine-art as themselves, and of wishing, like themselves, to learn more from the best instructors that their country could offer them. It was observed then, to the credit of the students in the Department of Architecture, that none of them took part in hunting their fair comrades; but whether this was due to their superior consideration for the sex, or to the fact that they were in attendance at a lecture at the time of the chase, seems undetermined. Now, however, they have themselves a feminine comrade, a young girl, after passing the examinations for advanced standing, having entered the second class, where she will have serious work in architectural design to do, in competition with the best men of the next generation of architects. If she is not driven away by the rudeness of her comrades, which is hardly likely, it will be interesting to observe the development, in the feminine mind, of the subjective qualities involved in architectural design. In pictorial art, and even in composition, women in France have shown themselves the equals of men, as, for example, in the case of Madame Demont-Bréton, who carried off the honors of the last *Salon*, and who has already an important picture in the *Luxembourg*; but whether they possess in the same degree the power of abstraction, and sense of beauty in proportion and surface, remains to be seen. Of course, it would be too much to expect that the first girl to enter the Department of Architecture at the School will surpass the best of the men, brought together from all France; but, if she meets with only moderate success, others are likely to follow her, and among them may be the most brilliant lights of the architecture of the future.

THE EVOLUTION OF DECORATIVE MOTIVES.¹—IX.

THE PALMETTE AND ANTHEMION.—III.



Fig. 135. Fragment of Terra-cotta Cymatium from Attica (after R. Koldewey in Berlin Museum).

It is one of the commonplaces of the history of ornament that forms originating or developing in one branch of design sooner or later find their way into others, and sometimes into all other branches of decorative art. Thus in jewelry and cabinet-work we meet with motives strictly architectural in character, while other forms first used in textile work or embroidery are finally transferred to architecture. So in Greek art we may follow the palmette and anthemion, with other decorations occurring primarily in ceramic art, from vases to temples, from ceramics to architecture. In such transference there is always a process of adaptation and modification to fit the old ornament or pattern to its new function, and these various successive adaptations play a large part in the historical development of the motives and patterns upon which they are executed. In none are these processes and changes more important than in the case of the palmette and anthemion.

The medium of transfer of this motive (we have already seen that the anthemion and palmette are merely variants of one and the same decorative element) from vases to architecture, and of the conversion of one of the most beautiful of painted ornaments into one of the most beautiful of carved ornaments, must be sought in the use of terra-cotta details for the adornment of minor Greek structures. Of such details many fragments have come down to us, but their exact use and applications are largely a matter of speculation or inference. They consist mainly of bits of moulding and finial-like pieces which may have served as antefixes along the edge of a cornice or as acroteria at the angles of a pediment. Whether they were used on buildings of wood, stone or marble, and whether in any case the entire system of decoration, or even the entire cornice alone, was of terra-cotta, or only certain of its parts, these are questions which as yet the data are insufficient to answer. The early history of the application of terra-cotta in Greek architecture and of its relations to the more permanent and ornamental architecture of stone and marble has yet to be written, and offers, meanwhile, to the architectural archaeologist a large field for interesting and valuable research. We can in this paper deal only with the scanty material actually at hand, and with the obvious facts of their form and design.



Fig. 137. Terra-cotta Antefix, Athens (after Meyer "Ornamentale Formenlehre").

The majority of the architectural terra-cottas of Greek art are, as already remarked, bits of moulding and finials. With but few exceptions, the mouldings are decorated with painted patterns substantially identical in form with those found on vases, displaying in general the same or similar combinations of the palmette and lotus-motive, or of the anthemion proper and lotus, connected by scrolled lines of double curvature (Fig. 135). The only important modification introduced is that of color, in the substitution of red, yellow and green for the red-and-black of the vases, which would have been too sombre for effective architectural decoration. Even this modified scheme of color was sufficiently sober, when compared with the brilliant hues employed on the contemporary stone and marble monuments of the Greeks, and the persistence of this quieter and graver tone in the terra-cottas corroborates the evidence afforded by the patterns themselves that this whole scheme of ceramic architectural detail had its origin in the decoration of pottery.

Upon the finials — antefixes, acroteria or crests — the palmette received a new development, in being treated as an isolated terminal



Fig. 136. Terra-cotta Antefix from Phletri in Argolis (after drawing by R. Koldewey in Columbia University Collections).



Fig. 138. Painted Marble Antefix from Egina (after Jacobsthal).

ornament. The prototype for this very happy and appropriate use of the motive is furnished by the Assyrian and Cypriot terminal palmettes, such as are figured in Figure 111.² In these Oriental prototypes it will be noticed that the palmette is always a true palmette, i. e. fan-shaped or nearly circular in contour, with blunt



Fig. 139. Marble Antefix from Parthenon, Athens.

round-ended leaflets touching each other, and that the volutes from which it springs are always a branching pair, representing survivals of the lateral sepals of the original voluted lotus. In these Greek terra-cottas the outline of the palmette is often a vertical oval, sometimes pointed at the top; and the lotus-origin of the volutes at its base is so completely lost that the volutes are absolutely disconnected spirals touching each other, but otherwise distinct. Obviously they represent no longer a lotus or lotus-calyx, but the meeting spirals of two adjacent scrolled bands, such as in all Greek pottery-decoration connected together the elements of a running band of lotuses, anthemions or palmettes. Figure 136

illustrates such a finial from Argolis, now in the Berlin Museum, Figure 137 another, far more elaborate, from Athens. From terra-cotta to marble was but a step. In the museums of Athens, Berlin, London and elsewhere, but chiefly at Athens, are numerous fragments of marble painted with decorations similar to those we have been describing; among them the ornament (acroterium?) shown in Figure 138, from the Temple of Athena at Egina. This is perfectly flat, painted in evident imitation of the terra-cotta examples above described, and with others of its class it forms an evident intermediate step between the primitive ornamentation of terra-cotta and the fully developed carved decoration in marble. The famous antefix from the Parthenon shown in Figure 139 is the translation into carved form of the accepted type of finial decoration in color. It is interesting to compare its delicate channellings and the subtle curves of each individual leaf of the anthemion with the Assyrian prototype which it most resembles — the Assyrian ivory amulet of Figure 111. It will be observed that in this example from the Parthenon the Greek fondness for the spiral has been fully indulged; the spirals are enormous in size, and describe two complete revolutions from base to eyelet. The lotus-bud between the volutes — the nucleus of the anthemion — has become here a perfect and carefully modelled leaf.



Fig. 140. Painted Marble Cymatium, perhaps from old Parthenon (from drawing by R. Koldewey at Columbia University).

With the culmination of the Attic-Ionic style in the second half of the fifth century B. C. a new chapter was begun in the history of Greek ornament and of the palmette-anthemion. The Doric temples and colonnades of Greece had depended for their decoration entirely upon painted ornament and accessory figure-sculpture. The new style substituted decorative carving for painted ornament, and to a great extent also for figure-sculpture. Polychromy was not, indeed, wholly banished, but it was subordinated to the carved ornament, whose details were "picked out" with red, blue, green and gold. As in the Doric style, the ornament was chiefly confined to certain well-defined architectural members, such as capitals and bases, mouldings and finials. These were adorned with patterns already made familiar in the painted details of Doric buildings, but modified to adapt them to treatment in relief instead of color. The more intricate patterns were simplified in composition, but enriched in detail, and otherwise modified to fit them to the profiles to which they were applied. One may paint almost any pattern upon almost any moulding, for it is less the form and movement than the play of color which determines the excellence of the design, but with carving greater care is necessary in regard to the form of the pattern, since its effect must depend wholly on light-and-shade — that is, on form. The Greeks felt this, and took special pains with their carved mouldings, particularly with the large cymas with which they crowned their Ionic cornices. Instead of the doubled palmette bands which had been often used on Doric cymas



Fig. 141. Carved Anthemion from Erechtheum. (Repeated from Figure 134, No. 1202 of American Architect.)

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Fig. 142. Conventional Lotiform Plant from painted Moulding, Athens (Owen Jones).

¹ Continued from No. 1202, page 5.

² See No. 1198 of the American Architect.

(Fig. 140) as well as on vases, they preferred the single band, as in Figure 141. In carving this on a cyma they were careful to give to the leaves of the palmette a double curvature suited to the double-curved profile of the moulding, at the same time elongating the whole motive into a pointed oval contour. By these two changes the



Fig. 143. Stele-head, Fourth Century B. C. (Repeated from Figure 104, No. 1198 of American Architect.)

palmette lost its original aspect and became a true anthemion, its leaves resembling in outline the separate buds of a honeysuckle. The anthemion may be defined, indeed, as a variety of the palmette having a more or less oval outline, and distinct leaflets either bending outwards and downwards or doubly curved and slightly pointed at the ends. The lotus-motive was more radically modified; it was treated like a complete plant with broadly-spreading pointed leaves or blades, springing from a swathing nest of two or three base-leaves, resting on a pair of meeting scrolls. These were sometimes acanthus-like in treatment (Fig. 141). The prototypes of this elaborate plant-ornament, no longer a lotus with three leaves or with three sepals and four

petals, abound in painted mouldings of marble or terra-cotta in Greece and Sicily (e. g. Fig. 142). They illustrate clearly the combined influence of convergence towards familiar plant-forms and of decorative requirements operating on the Assyrian type of lotus (see Fig. 109 in No. 1198 of this journal). To give further decorative value to the pattern thus elaborated, the Ionic carvers fluted or channelled the connecting bands and scrolls, and applied acanthus-leaves to the points where they branched off into subordinate scrolls. The leaves of anthemions and lotus-plants (for by this name we must designate the alternating motive between the anthemions) were sometimes hollowed with a V-shaped channel, sometimes given a V-shaped convex section. The total effect of this decoration was extremely brilliant, executed as it was, with the utmost vigor of relief and delicacy of finish. Such patterns were not confined to cyma-mouldings; they were used also on bands and neckings, as in the north porch of the Erechtheum.

In like manner the isolated palmette-finial was elaborated into a sumptuous ornament carved in strong relief, and bearing much the same relation to the simple antefix of the Parthenon as does the Ionic to the Doric order. This development continued into the fourth century B. C., culminating in the magnificent sepulchral stele-heads which are among the richest artistic legacies of that splendor-loving period. In these the motive was the same as in the antefixes—an anthemion springing from between two scrolls; but as the stele-head was complete in itself and not, like the antefix, one of a long row of similar members of a building, this motive was naturally treated with greater richness of detail and carved in very high relief. The scrolls were converted into strong, round, fluted stems dividing at one or more points into two diverging volutes which were coiled to a point instead of a button; a richly modelled acanthus-leaf concealed the point of division, or wrapped around the spring of the volute like a scroll-nest, forming a complete cauliculus, and the whole was carved either in vigorous relief within an outline defined by the contour of the flat background or as a free-standing motive defining its own outline (Fig. 143). One very noticeable peculiarity in the treatment of the carved anthemion characterizes the majority of these stele-heads, and is also to be seen occasionally in antefixes and other carved examples; this is the double curvature of the leaflets of the anthemion so that the upper part of each is convex outwards while the lower part springs nearly vertically from the nucleus. By this change from the original simple outward curvature of the Parthenon antefix (Fig. 139) and of most of the painted examples, the anthemion was finally perfected; the leaflets, completely separated from each other, were given an elegance of form and movement impossible in the earlier and simpler forms of the anthemion. This final stage of development belongs to the fourth century; in even the finest carved anthemions of the Periclean age the leaves are either of single curvature outwards, as in the Parthenon example, or, if doubly curved, are concave outwards above, so that they first diverge from the nucleus, then curve upwards and then again spread outwards (Fig. 141). This movement, though it is perhaps better fitted than the other for the decoration of cyma-mouldings, is in itself less satisfactory and harmonious in effect. It is, however, noticeable and not easy to explain, that it is the only form of double-curved anthemion found on vases (with possibly rare exceptions): the painters, whose hands were wholly free as to the details of their patterns, never seem to have conceived or cared to practise the form which the carvers of the fourth century found the most elegant and perfect for their stele-anthemions.

There are also antefixes of this period nearly as elaborate as the stele-heads; as, for example, the well-known antefix from the Temple of Artemis at Eleusis. The finest works of architectural carving of the Middle Ages and of the Renaissance do not surpass these Greek

stele-heads in elegance of design or brilliancy and vigor of execution. It is interesting and instructive to compare these with their original Egyptian prototype in Figure 144.

A. D. F. HAMLIN.

[To be continued.]



THE year 1898 has gone and left us chiefly with hopes for the future; certainly no strength is being wasted on pleasant retrospective glances. Other interests aside from real-estate and architecture have undoubtedly passed through a revival during the past few months, but architectural work, as the facts from the City Building Department show, has not been at so low an ebb for years. The estimated cost of building-frontage and number of building-permits for the last eight years were published in the daily papers and it was interesting to note that not during the nineties had there been as little money spent in building or as few building-permits issued as during 1898.

The tabulated facts are as follows:—

Year.	Number of Buildings.	Feet Frontage.	Estimated Cost.
1898	4,007	133,603	\$21,288,325
1897	5,294	129,222	21,777,330
1896	6,444	158,845	22,730,615
1895	8,633	218,360	35,010,043
1894	9,755	231,567	33,863,465
1893	8,359	216,893	28,708,750
1892	13,194	327,573	64,740,800
1891	11,805	282,672	54,201,800
1890	11,608	266,284	47,322,100

The only consolation to be drawn from such a table has to come from sermons preached on texts like: "It is always darkest before dawn," "It's a long road that knows no turning," etc. This downhill road has been a long one and architects are weary of the struggle along the way. However, all branches of trade have materially improved, as every one knows, and, with this flood of prosperity which the papers are talking of, the real-estate interests will some time begin to feel it. Already there is some talk of speculation in "corner lots" which brings architectural activity in its trail. One of the largest of these castles in Spain is the dream of a great exhibition building to be erected anywhere that is "central."

One cannot help feeling that the most central place, in the minds of many of the promoters, would be the Lake Front. There are certain citizens who cling to the idea of no building on the Lake Front, and who vow they will get out an injunction the moment the first shovelful of earth is excavated for such a building. Then, again, comes the West Side, which is always wanting everything and rarely getting anything but West Side, which it has in almost limitless quantities. Some of the prominent clubs of the city, notably the Merchants' Association, brought together at a banquet many men of many minds to talk the matter over. There was an attempt to keep many minds in order by avoiding any discussion of the subject of site or actual plans, the main question being, Do we want an exhibition building? The chief query was unanimously answered with a "Yes, one of the \$2,000,000 kind, bigger, of course, than the Madison Square Garden in New York, the Crystal Palace in London, the Hippodrome building in Paris." Ministers, doctors, educators, railroad magnates, merchants and financiers were all gathered at the banquet to tell why, from different standpoints, Chicago needed such a great and glorious structure. Committees were formed to look up the matter of bonds, to invite bids in the matter of site, to petition the legislature on the Lake Front proposition. Certainly the Lake Front would seem, to one who is not especially interested in north, south, or west side, the most desirable place for such a structure. We all know what a feature the Lake as a background was at the World's Fair, and certainly a structure which is to be used chiefly in the summer is much more advantageously situated near the shore, where the thermometer stands around the nineties, than it would be out in the middle of a broiling Western prairie. It is most assuredly questionable how much right a private corporation would have to erect a building on the Lake Front, and the question certainly does arise in one's mind "Why this corporation more than any other?"

Mr. Hutchinson, president of the Art Institute, welcomed with delight the idea of the building being located just east of the Institute and seemed to feel it would be a worthy adjunct to this great educational centre. It will be most interesting to see how the plans will mature, for it looks now as if mature they would, and on generous lines which would meet the needs of the city for many years. It is to be hoped that the fact of past laurels gained will not blind the



Fig. 144. Egyptian Lotus-palmette. (Repeated from Figure 106, No. 1198 of American Architect.)

promoters to the fact that Chicago has made failures in architectural flights even since her World's Fair success: that two of the master minds who fashioned that conception no longer work among us, and that a failure when it is so big a failure would be something to make one shudder, and class us at home and abroad, among educated people, as the *nouveaux riches* that many people would like to believe we are as a city.

One of the buildings for the year will be the structure of the Methodist Book Concern, a nine or ten story building to be erected on Washington Street at a cost of \$160,000. The plans and, what is more to the purpose, the capital, are ready for building in the spring.

The Montgomery Ward Building, before mentioned in these letters, will be one of the completed structures of this year.

Several fine country-club houses have been finished this year around Chicago, notably that of the Midlothian Country Club, situated about twenty miles south of Chicago on the Rock Island road. About thirty thousand dollars have been spent on the house, which is provided with all the comforts and luxuries which are demanded in such a place. It was designed by Frost & Granger and is said to be a very charming composition. It is Colonial in style, a low long structure with generous portico and piazza, the columns of the portico extending through two stories. Broad verandas introduced as a side feature afford the outdoor room needed in such a structure. The composition is harmonious and dignified.

A very curious example of church architecture will be the structure erected this year to be the future home for the congregation of All Souls' Church, a congregation presided over by the Rev. Jenkin Lloyd Jones, one of the few flourishing congregations in the city, a congregation where religion is not compulsory, but vital and alive. The modern structure, like Mr. Jones's theology, if anything so alive with human interests can be called by so dead a name, will follow on the lines of present needs and have nothing to do with ecclesiastical traditions. On the exterior the new edifice appears to be a well-designed office-building. It will be an eight-story fireproof structure, which will be erected at a cost of \$200,000, and right in the centre, surrounded by apartments, will be the auditorium of the congregation. It might be said to be typical of the parish: plenty of room for growth, but hedged by human interest on every side. Here in Chicago certainly the churches are constantly having a struggle with the rival Sunday interests, and this certainly looks like a step in the right direction from a purely financial standpoint. When completed the structure will be an interesting one to look over.

Work is about to be resumed on our Post-office behind the big board fence. As yet there is no sign of the building rising, which goes to prove it is probably sinking to some purpose. Next October, on Chicago Day, it is proposed to lay the corner-stone with impressive ceremonies, while the Sanitary Canal Board will be asked to formally dedicate their famous water-way at the same time.

Of interest in the matter of foundations have been those which Gen. William Sooy Smith has recently put in for the Ayers Building on Wabash Avenue, the structure which was burned about a year ago, with such appalling loss of life. Gen. Sooy Smith considers these foundations as nearly permanent as anything can be made on a perishable earth. They consist actually of cylindrical columns of concrete, which are practically monoliths. These monolithic columns extend to the hard-pan, sixty feet below the basement level, or about seventy feet below the street. At the top they are about four feet in diameter, extending downward with these proportions till they reach a point about eight feet from the base, when they gradually expand, becoming about eight feet in diameter. In putting down the foundations a circular ring of piling made of planks is driven around the portion of the soil on which the column is to rest, a steel shoe forming a cutting edge for the piling as it sinks. The enclosed earth is then excavated, and after proper bracing the space is filled with concrete. In one of the buildings where this new method has been used ten wells have been completed in about three weeks at a cost of about one thousand dollars each. Gen. Sooy Smith himself says: "I would undertake to support beyond the possibility of farther sinking such buildings as the Board of Trade, or the Masonic Temple, and to do the work without any interruption to business in a single office."

A curious fact in regard to a settlement in a building has just been brought to light in the Armory of the First Regiment, corner 16th Street and Michigan Avenue. Since the elevation of the tracks of the St. Charles Air Line cracks have been appearing in the east and west walls of the massive brick building. Though inconspicuous at first, they have now become quite apparent. On the east end the cracks start at the upper row of loop-holes and extend down some thirty feet to the stonework below the brick. At the west wall the cracks extend a little lower down, if anything, and are equally wide. The building was built in 1890, by D. H. Burnham, partially destroyed by fire in 1893 and rebuilt in 1894.

At present the Art-Institute is having some especially interesting exhibits on its walls. The original sketches of some of the war correspondents for the newspapers form an interesting array. Mr. McCutcheon, Mr. Clute and Mr. Schmetgen are all strong and masterly draughtsmen, and though many of the subjects of the exhibition do not lend themselves readily as models for artistic creations, still they certainly are by no means unattractive when handled with the master hand.

Next to this black-and-white exhibit is that of the Art Students' League, a very strong showing of students' work.

But the present real attractions of the Institute are the works of Monsieur Boutet de Monvel, which are a delight in their very unique character. M. de Monvel will have an exhibition later on in New York and Boston and any one who delights in one more new interpretation of art should not fail to see this altogether charming exhibit. It consists chiefly of the artist's studies of children — nice little pigeon-toed French ones — and his series of illustrations of the career of Jeanne D'Arc, which culminates in the glory of the whole collection, the mural painting for the cathedral at Domremy, the birth-place of the heroic maid. M. de Monvel has chosen for the subject of his great painting the episode of Jeanne appearing at the court of Charles VII, where, according to some authorities, she kneels before him, singling him out under a partial disguise from all his courtiers.

The treatment of the subject is extremely decorative, as befits what is known as mural painting, but of the charming mixture of symbolism and realism too much can not be said, the result being a picture which, once seen, can never be forgotten. The realistic treatment of the rich brocades and velvets of the dresses of the courtiers is something astonishing, and yet one has to realize there is hardly what could be called a shadow in the whole picture. The faces are Japanese in effect through the use of opaque color with hardly a line or shadow in old or young alike, and yet there is not a face there which is not full of the greatest character. Especially is this true of an old woman, possibly Yoland of Arragon, mother-in-law of the King, and the beautiful young woman near her, perhaps the young Queen, Mary of Anjou. It would be interesting, aside from any artistic appreciation of the picture, to know and identify the different forms with those which rise out of that vague past, so full of subtle charm and mystery of that reign never to be understood by the light of the nineteenth century, the reign of Charles the Victorious of France.

THE DOGE'S PALACE IN VENICE.

THE Superior Council of Fine-Arts at Rome having adopted a resolution formally declining to accept further responsibility for the safety of the Doge's Palace in Venice, the Government telegraphed on Friday, Dec. 16, to Signor Boito, the well-known architect of Milan, requesting him to proceed to Venice immediately, hold an inquiry, and submit a report. The report on which the Council of Fine-Arts adopted their resolution says the building is in great danger, owing to the extensive subsidence of the walls adjacent to the Bridge of Sighs, and the decay of the timbers supporting the Library of St. Mark, the floor of which was shored-up three years ago. The ceilings of many of the other rooms are also much dilapidated, and threaten to fall in, the arches being cracked in every direction. The Palace architects say that the apprehensions entertained are greatly exaggerated, and are partly unfounded, but their declaration is not considered as reassuring, especially when other competent Venetian architects agree with the Report of the Council of Fine-Arts.

The *Gazzetta di Venezia* publishes an interview with Signor Berchet, the director, and Signor Rosso, the architect of the District Committee, who state that the alleged subsidences by the Bridge of Sighs do not exist, and that there is merely a movement of the wall caused by the oxidation of the metal clamps, threatening no immediate danger. They also deny that the timbers are worm-eaten — they are merely in a bad state, and are being gradually renewed. The floor of St. Mark's Library, they add, was shored-up because of the weight of the books, which increase in number every day, and should be temporarily transferred elsewhere to permit of repairs being carried out. The present supports, however, are quite adequate to avert all danger. As to the ceilings, they are not dilapidated, and only in the Sala del Maggior Consiglio and some others have a few decorations fallen, the fragments of which have been collected in order to be replaced when funds are available for the purpose. As to the arches, the keystone of only one is missing, and measures are being taken to repair it, the arch being meanwhile solidly propped up.

The Local Committee has at its disposal only fifty thousand francs for the work of restoration. Signor Delzotto, a member of the Council of Fine-Arts, has declared that cracks have recently appeared in many of the timber supports, and that the woodwork in many places is dilapidated. The settling of the walls, especially near the canal, is quite evident, since the weight of the sinking arch has broken the capitals of the pillars. Signor Delzotto considers that the present state of affairs justifies the gravest apprehension. Signor Rinnovamento shares these views. He points out that the ceilings of five rooms are already shored-up, and that the sinking of the walls is evidently making progress. He considers it necessary to remove the statuary collection from the archaeological museum, and the library of five hundred thousand volumes. — *Venice Correspondence for the London Times.*

A COSMOPOLITAN SCHOOL. — In the Federal Polytechnical School in Zurich there are this year 1,234 students, of whom 918 are matriculated in a regular course and 316 are "listeners," so called. Of the "regulars" there are 546 Swiss, 87 Austrians, 66 Germans, 36 Russians, 32 Italians, 23 Rumanians, 20 Americans, 20 Englishmen, 19 Hollanders, 19 Scandinavians, 9 Frenchmen, 8 Luxemburgers, 7 Danes, 5 Greeks, 5 East Indians, 5 Servians, 4 Turks, 3 Bulgarians, 2 Belgians, 1 Portuguese and 1 Spaniard. — *Zurich Letter in the Chicago Record.*

"A DISCOVERY (?) IN ARCHITECTURE."



T would really gratify us very much if we could understand the mental processes which led the writer of the following criticism which we find in yesterday's paper, and which we publish here under his own caption, to the conclusion that it would be better, more useful, safer, more discrete, more fitting, and appropriate to address it to the editor of the *New York Evening Post* rather than to us:—

TO THE EDITOR OF THE EVENING POST:

Sir,—In the last number of the *American Architect* is an article entitled, "The Palace of the Cancellaria at Rome Not Designed by Bramante." The writer, Alfredo Melani, in the opening paragraph, seems to imply that the proof of this contention has only very recently been made public, and now for the first time "excites amazement." He mentions Geymüller and his "friend Müntz" as cheerfully ignorant of the disclosures he is about to make, and then proceeds to lay before us the considerations which have brought him to his conclusion, asserting in so many words that the "demonstration" is his own.

But in the "*Archivio Storico dell'Arte*," vol. v., 1892, or about seven years ago, Signor D. Gnoli, the editor, published an article entitled "The Cancellaria and Other Palaces in Rome Attributed to Bramante," in which the same mention of Geymüller and Müntz appears, without the airy condescension for their ignorance; the same palaces and churches are examined for a comparison of style, viz, the Rucellai Palace in Florence, the Piccolomini Palace at Pienza, San Pietro in Montorio at Rome, and others. Even the view presented to the readers of the *Architect* is identical with the photograph in the "*Archivio*," and the same conclusion is reached, viz, that Bramante could not have been the architect of the Cancellaria Palace.

It is no doubt probable that Signor Melani has worked out his own demonstration from photographs; he can hardly have been unaware of the scholarly work of Signor Gnoli in the "*Archivio*," and it would have been rather more graceful if he had made some mention of it even in a journal intended for readers presumably unfamiliar with Italian authorities; yet no one would surmise from beginning to end of this article that Signor Melani was not the first to "lay these considerations before us."

R.

WILLIAMS COLLEGE, January 24:

BOOKS AND PAPERS

IT is not often that an editor receives for review a publication of such weight and bulk that because of that very fact it is absolutely lost to sight and forgotten. Curiously enough, this fate befel one of the most important publications issued from the architectural press in recent years, one of the largest publications, one of the most costly, and almost certainly the very heaviest in avoirdupois. Perhaps a year ago we received the first two volumes of the important work on modern theatres,¹ by Mr. Edwin O. Sachs. Naturally, when they came to hand, they received an immediate but cursory examination and then were laid aside for a more complete examination later; but the volumes were so big and took up so much space on the table that, to get them out of the way, they were shoved under a pile of other books of the same size, and although this pile, and so the books, has been under our eyes every day since then the wrappers in which they were enclosed did not differentiate them from other parcels and the fact of their presence and their rightful claim to our attention was absolutely overlooked, and it required a letter of inquiry from the author at the time of forwarding the third volume, just received, to bring the matter to our attention. For this piece of, as it must seem to author and publisher, impossible and inexcusable forgetfulness, while to us it is a simple and very natural one, we offer our humble apology.

This elaborate publication is intended to be in some sense a continuation of the historical and technical treatment of theatres taken up from the point where it was left by the important work by M. Clement Contant—"Parallèle des principaux théâtres modernes de l'Europe et des machines théâtrales françaises, allemandes et anglaises"—in 1842, and in comprehensiveness and intelligence of treatment it is a more than worthy successor to the original. Never in modern times has there been any subject so fully, so persistently—and so successfully—exploited as this matter of the modern theatre has been by Mr. Sachs and his one-time collaborator, Mr. E. A. E. Woodrow. Important series of articles upon the modern theatre have appeared more or less contemporaneously during the last four or five years in the *Building News*, of London, in the *American Architect*, and in *Engineering*, while occasional contributions upon related topics have appeared in other magazines, and the side-issue of "theatre fires" has been in a measure separately treated in the publications of the British Fire-prevention Committee, under the editorship of Mr. Sachs himself. The explanation for this flood of

¹ "Modern Opera-houses and Theatres." Examples selected from playhouses recently erected in Europe, with descriptive text, a treatise on Theatre Planning and Construction, and supplements on Stage-machinery, Theatre-fires and Protective Legislation. By Edwin O. Sachs, architect. Published by B. T. Batsford, High Holborn, London: 3 vols. grand folio. Price £15 15s.

interesting and useful technical matter is to be found, we believe, in part, in the work which was undertaken by the London County Council at the time of its formation. In the subdivision of its work it was found necessary to establish a department which should have the control and oversight of existing theatres, playhouses, concert-halls, and so on, and of those which might later be erected. In this department Mr. Woodrow was employed, and also, we believe, Mr. Sachs, who had had a very thorough training in the German technical schools and had been employed in one of the bureaux at Berlin. Their active employment about these buildings naturally interested these then young men, and they perceived not only the opportunity but the great desirability of reducing their observations to a series of systematic conclusions and spreading them before the public for its advantage. Ways and means were, however, necessary, and seemingly no course quite so obvious could be discovered as winning reputation and procuring income at the same time by securing publication of their conclusions in the technical press, and our readers can judge from what we say above how successfully and consistently this obvious scheme of operations has been followed out. Naturally, in making their advances to the editors of the several journals, the intending authors asked for advice and suggestion, and we remember that in our own case one of the points we suggested was, naturally enough, adopted in the series of articles which we published, and that is that each building should be illustrated, amongst other things, by a block-plan to a uniform scale, so that the comparative size, importance and general arrangement might be grasped at once. This suggestion has been adopted and improved on by Mr. Sachs in the later publication, for, while his original prospectus indicated merely the use of the same sort of block-plan that we had used in the *American Architect*, we find that in the published work he has improved upon it by indicating what portion of the block-plan is occupied by the stage and auditorium, and the collocation of this series of block-plans affords a most useful and instructive lesson, particularly when considered with reference to a parallel tabulation of the cost of each structure.

The first two volumes are altogether too big and too heavy for convenient use and, as is too often the case with English and German publications where any form of lithography is used in preparing the illustrations, the prints have a coarseness and lack of sharpness, in short, a want of that refinement and artistic propriety which is to be found in French and American lithographic work of similar pretentiousness. This result may be in part due to lack of skill and intelligence on the part of the workmen themselves, but we believe that it is almost entirely due to attempting to make the reproduction too near the scale of the original drawing, and we feel quite sure that if the whole work were reproduced from the same drawings at a third smaller scale the work, even in the hands of the same printers, would be 50 per cent more satisfactory. In spite of these drawbacks, which must be accepted, Mr. Sachs and his former collaborator, Mr. Woodrow, have produced a work of very real usefulness, and it is a great misfortune that the publication is so unnecessarily expensive. Fortunately, however, for those who are unable to purchase the final publication in its elaborate form, they can procure the major portion of the results of the examination by purchasing the original series of articles published in the several journals which we have named above. Elsewhere in this issue will be found reproductions at about half the scale they are shown in the publication, which will give our readers a general idea of the character of the illustrations employed.

As to the third volume, of which we shall give some account later, it is altogether different from, and vastly more valuable than, its earlier fellows, and it is trebly a misfortune that the matter contained in this volume is put into so inconvenient and cumbersome a form as a grand folio.

ILLUSTRATIONS

[Contributors of drawings are requested to send also plans and a full and adequate description of the buildings, including a statement of cost.]

COLUMBARIUM OF THE INDEPENDENT ORDER OF ODD FELLOWS, SAN FRANCISCO, CAL. MR. B. J. S. CAHILL, ARCHITECT, SAN FRANCISCO, CAL.

[Gelatin Print, issued with the International and Imperial Editions only.]

THE Columbarium, recently completed, is situated in the same cemetery as the crematory published in our issue for January 14 last. It is the largest built in modern times and contains nearly five thousand niches of various shapes and sizes, with accommodation for the incinerated remains of more than ten thousand persons. In plan the building consists of a central rotunda indicated on the outside by the attic-story and dome. From the outer wall of this rotunda extend four rectangular wings, in one of which is the entrance and in another the stairway. Between these four outlying wings are four other extensions or quadrants. Both wings and quadrants are two stories in height. Running all around the rotunda are galleries connecting the upper stories of the wings and quadrants

with one another. The central part of the rotunda is open from ground-floor to the top of the dome, the full height of the building. This central rotunda, supported on eight piers with tiers of balconies between, is the dominating feature of the interior. It is finished largely in bronze and marble. The walls of all the chambers and corridors are provided with niches and, where available, spaces in jambs, pilaster panels and dies of pedestals and parapets are used for niches, either open or enclosed with marble slabs. All the niches are constructed of concrete and finished with Keene's cement. The building throughout, built by day's work, is of the most solid and enduring character and absolutely fireproof.

MEMORIAL ARCH: STANFORD UNIVERSITY, PALO ALTO, CAL. MESSRS. SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS, BOSTON, MASS.

This arch is now being built as a memorial to Leland Stanford. The frieze is 11 feet in height and represents the progress of civilization in America. The arch is of yellow San José sandstone. The building is 86 feet in height, 87 feet in width, and the arch itself 44 feet in diameter and 47 feet to the crown.

HOUSE OF J. B. MILLER, ESQ., PASADENA, CAL. MESSRS. LOCKE & MUNSELL, ARCHITECTS, LOS ANGELES, CAL.

This house cost about \$6,000.

HOUSE OF D. M. SMYTH, ESQ., PASADENA, CAL. MESSRS. LOCKE & MUNSELL, ARCHITECTS, LOS ANGELES, CAL.

This house is said to have cost about \$5,000.

A COMPETITIVE DESIGN FOR THE CONGREGATIONAL CHURCH, WHITINSVILLE, MASS. MR. H. A. PHILLIPS, ARCHITECT, BOSTON, MASS.

[The following named illustrations may be found by reference to our advertising pages.]

MUNICIPAL THEATRE, ODESSA, RUSSIA. MESSRS. FELLNER & HELMER, ARCHITECTS.

PEOPLE'S THEATRE, WORMS, GER. MR. OTTO MARCH, ARCHITECT.

GRAND STAIRCASE: COURT THEATRE, VIENNA, AUSTRIA. MESSRS. SEMPER AND HASENAUER, ARCHITECTS.

THESE illustrations are published in connection with the notice of "Modern Opera-houses and Theatres" elsewhere in this issue.

[Additional Illustrations in the International Edition.]

MAIN ENTRANCE: I. O. O. F. COLUMBARIUM, SAN FRANCISCO, CAL. MR. B. J. S. CAHILL, ARCHITECT, SAN FRANCISCO, CAL.

[Gelatine Print.]

A COMPETITIVE DESIGN FOR "SHATTUCK PRIZE" FOR ARTISANS' HOMES. [LIMITED COMPETITION.] SUBMITTED BY MR. S. S. BEMAN, ARCHITECT, PULLMAN BUILDING, CHICAGO, ILL.

I HAVE endeavored to embody features along a line approaching the ideal to the extent permitted by the necessary commercial limitations of the problem. These features embrace conditions which are necessary in this class of tenements and are in part as follows:—

Abundance of direct light and pure air, the absence of closed courts and light-shafts, provision for a strong circulation of air entirely around the apartments and a pleasant outlook for nearly all the living-rooms; all toilet-rooms and staircases open directly to outside light and air; separation of families by providing frequent staircases and entrances; courts opening to the street are made of sufficient areas to serve as recreation-grounds for children; staircases built of incombustible materials, enclosed with brick walls and made of easy ascent for the comfort of those occupying the upper stories.

It is not proposed in the estimate of cost to heat the buildings by steam. Wash-trays and sinks are provided in the living-rooms and provision is to be made for screening them from view when not in use. All the finish is to be of plain oak and all floors are to be of maple. Lifts are provided at each staircase and each family is to have a private storage-room in the basement.

Provision for drying clothes is made upon the roof for those who prefer to do so, but it is proposed to provide facilities in the basement of some of the buildings for washing and drying clothes.

All alleys and rear courts are to be paved with asphalt and all

front-street courts are to be paved with vitrified paving-brick laid on edge. These courts may be embellished with a centre flower-bed.

The street-fronts are to be faced with a good quality of pressed-brick trimmed with terra-cotta and stone. The walls of large courts are to be faced with light-colored pressed-brick.

All plumbing to be of a substantial and sanitary character. The toilet-room floors are to be laid with plain red vitrified tile and wainscoted in Portland cement. Staircases are to be of cast-iron with slate treads. All public halls and stairways are to be wainscoted with Portland cement.

Estimated cost of buildings, 5,500,000 cubic ft. at 12 cents per cubic ft. \$660,000
Value of land at \$1.50 per square ft. 240,000

Total investment..... \$900,000

AREA OCCUPIED BY BUILDINGS.

Rentable floor area (typical floor).....	80,000 sq. ft.
Area occupied by 12-inch walls (typical floor).....	12,400 " "
" " " 4-inch partitions (typical floor).....	4,500 " "
" " " stairway and public halls (typical floor).....	9,100 " "
" " " alleys and courts.....	54,000 " "

Total equals area of ground..... 160,000 " "

SCHEDULE OF APARTMENTS AND INCOME.

8 stores at \$20 per month.....	\$160
378 four-room apartments at \$10 per month.....	3,780
226 three-room apartments at \$8 per month.....	1,808
116 two-room apartments at \$6 per month.....	696
40 one-room apartments at \$4 per month.....	160

Gross rentals per month..... \$6,604

Gross income for one year..... \$79,248

Taxes, insurance, repairs and vacancies..... 38,748

Net income for one year..... \$40,500

\$40,500 equal to 4½ per cent net on investment.

PLANS OF THE SAME.

ROXBURGH MANSIONS, KENSINGTON COURT, W., LONDON, ENG. MR. PAUL HOFFMANN, ARCHITECT.

INTERIOR OF THE OFFICE OF MESSRS. ISMAY, IMRIE & CO., LIVERPOOL, ENG. MESSRS. R. NORMAN SHAW & J. FRANCIS DOYLE, ARCHITECTS.



[The editors cannot pay attention to demands of correspondents who forget to give their names and addresses as guaranty of good faith; nor do they hold themselves responsible for opinions expressed by their correspondents.]

LICENSING ARCHITECTS.

CINCINNATI, O., January 23, 1899.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—About a year ago there was a bill pending before the Legislature of the State of Ohio to License Architects, and the Cincinnati Chapter A. I. A. was asked to endorse it and aid in its passage. I opposed such official endorsement, and read the inclosed paper:—

As far as the question of the protection of the interests and welfare of the public are concerned, from the malpractice of architects or so-called architects, the public have been in the past and are now satisfied with the safeguards of the common law, which is but a common-sense application of the equities of a case.

If we as architects undertake for compensation the work or duties incident to our profession,—without possessing a reasonable and competent degree of skill,—and our employer is ignorant of such lack, we will be liable to our employer for any loss or damage he may sustain. If however our employer has knowledge of our lack of such reasonable skill we will not be liable for any miscarriage of the matter in hand. It is because we as practising architects thus claim to have such skill as is essential to the exercise of our profession that we are thus liable before the law, and this common-law responsibility of man to man has been in the past, is now, and ever will be, the potential and all-sufficient protection of the public's interests and welfare.

This common-law liability renders us responsible both for defective and insufficient plans, and for defective work, where we assume to superintend the execution of the work. The common line of argument of the advocates of a License Law for Architects is to point to the status of the medical profession.

In the judgment of many thinking men, the parallelism does not hold. Not long since, in a discussion in a French journal on the value of diplomas and the especial privileges resulting therefrom, Monsieur Planat stated "that there exist in France two kinds of diplomas, one conferring an exclusive monopoly in the exercise of a profession, — the most notable being the medical profession, — given by the State, the other diploma being merely a certificate of studies pursued and knowledge acquired, as the diploma given in the School of Fine-Arts,

Paris." Monsieur Planat goes on to argue that the profession of architecture should not be limited, even though many practising architects favor it, because it would be advantageous to them to exclude the greatest possible number of competitors. He further argues that no one thinks of reducing the number of painters, sculptors and literary men, or even to impose examinations and competitions on the *début* of their career, in fact, every profession which is at the service of the public is free. He admits that there is an exception in the medical profession, but it is rightfully so, — as medicine in the hands of an incompetent man is one of the most dangerous professions. A wrong prescription might result in death, and in this matter the State has only sought to defend the interests of the public and not that of the doctors. "Can any one," he asks, "say that the free exercise of architecture is equally a public danger? This would truly be exaggerated: a badly planned building or badly studied façade does not necessarily occasion any one's death — there may be a certain inconvenience in employing an unskilled architect, but rarely a grave danger."

So, also, Monsieur Mülle, Professor of Legislation at the School of Fine-Arts, Paris, states that as regards the position of lawyers and doctors, for which a diploma was exacted, it is especially the public interest that is taken into account and not the interest of either profession, and that complaints do not come from the public, but from the architects, and it is solely in the interest of the profession that this exclusive privilege is demanded.

Dr. Rowand Anderson, late president of the Edinburgh Architectural Association, holds substantially the same views, and stated in a presidential address, when the subject of the Registration of Architects was under consideration, "that at the bottom of the controversy lay a misconception of the nature of the architectural profession as compared with the professions of Divinity, Law and Medicine. The divine had to subscribe to a creed, his historical and philosophical knowledge of which must be tested." (Remember that Dr. Anderson alludes to the condition of affairs under a State church.) "So, also, the lawyer had to interpret the laws of the country according to the fixed principles and forms of these laws and his qualifying knowledge of such must be ascertained. The physician or surgeon had to deal with disease in all its forms, and none could be successful unless he had acquired an intimate knowledge of anatomy and functions of the body and the various methods used in combating disease."

"The public dealt with the architect on a totally different footing. The architect was but the interpreter of the public idea of art at any given time and had to give what the public wanted and was prepared to pay for. No compulsory law or diploma could alter this. The law could not, or would not, protect the public from bad art, because the public could and must at all times protect itself."

I could add to the above quoted testimony the opinions of a host of similar witnesses, but suffice it to say that Messrs. Alfred Waterhouse, Norman Shaw, T. G. Jackson, Ernest Newton, Professor T. Rogers Smith, and many others eminent in our profession, are in opposition to statutory recognition and the licensing of architects. But the views of the rank and file of the profession are difficult to ascertain, but when the expediency of urging the passage through Parliament of a Registration Act was under consideration by the Royal Institute of British Architects at a meeting in London a few years ago the opponents were 106 to 37 in favor. Shortly after this London meeting a poll was taken, by voting papers, of the entire membership of the Institute in the United Kingdom. Seven hundred and eight papers were returned, which resulted in a majority of 356 in opposition to registration. There are, however, two other architectural organizations in England, and, from the information I have, I am inclined to think that a majority of their members favored the Act. It failed of passage in Parliament, and I believe that the desire for this registration is less fervent among the profession now than at the time mentioned. It may be well to note that the original Act included in its provisions the civil engineers and surveyors. These two bodies, well organized and influential, refused to join in the demand for statutory recognition and their opposition caused their elimination from the Act. Candidly considered, it would seem an illogical conclusion, as there is as much necessity for protection of the public from their malpractice as from the architects. . . .

Members of our profession are clamorous for something to be done to shut out unworthy and incompetent persons and to elevate the status of the profession in the estimation of the public. Undoubtedly the end is desirable and efforts to attain it laudable, but legislation will never do it, and a State diploma or license is weak and impotent, as indeed every remedy imposed from without will be. Our uplift must be in the nature of an evolution from within. We must exercise the functions of our profession in an honorable and righteous manner among ourselves and in the world, and who can doubt but that, in accordance with the eternal fitness of things, this desirable end will be attained? When the decision of an architect is synonymous with equity the status of the profession will be one of honor, and we shall be a power in the land.

But, it may be asked, what about the mental ability and attainments of practising architects? The same course is open to our profession as to the medical or legal. Specially educate and train your candidates, and let them pass into the fellowship of the American Institute of Architects through these channels and an examination, and if there be any merit or profit in being thoroughly equipped for professional labor and honor there can be no doubt of the result. If our profession abroad is more honored there than here it is wholly due to these influences, for there are no special laws for its protection.

The three distinct architectural confederations of England seem to have finally determined that the remedy for the brainless and unprincipled competition that has affected the profession there equally with ourselves is the application of the educational test before suggested.

I have not before me the course of studies adopted by the Royal Institute of British Architects, a mastery of which is a condition precedent to admission to Fellowship in the Institute, but I think that it is a four-years' course.

I cannot but believe if our American Institute of Architects would

put forth proper efforts to establish such a fitting educational course at some four or six centres of education in our country — and our own university is a most fitting place — they will be doing infinitely more absolute, permanent good for the profession than by their present efforts to induce State legislatures to pass laws regulating the Licensing of Architects by the medium of State commissions.

The publication in your issue of January 14, 1899 of the "Proposed Missouri License Law" brings the subject again fresh before the profession. Personally I cannot but think that the whole movement is a mistake, and that it will, if consummated, only result in plaguing the profession. As a practising architect of over forty years' experience, I can see no good that can come from it. Ability and honesty will, in the future, as in the past, always receive its reward. Those among us who possess neither need not be hedged around with any such protection.

In spite of what may be said to the contrary, the whole scheme is conceived in selfishness, and is intended to limit competition. No better proof is required of this than Section 8 of the Missouri Law, which, taking no account of a man's standing as an architect elsewhere, arbitrarily imposes a fine of \$50 to \$500 per week upon any one practising his profession in Missouri without a license. To obtain this license a man, from the outside, must submit to an examination by a Board, which meets anywhere and at any time, according to their own sweet will and fancy. The Board is obligated to meet twice a year, and may meet every six months, perhaps, in the intermediate period. Clients must wait, or the work goes by default, or the architect pays his fine.

If, as is claimed by the advocates of these measures, it was truly intended to protect the public from ignorant practitioners, it would only be necessary for an architect to file his license from his home State, as evidence of his proficiency, or, better still, a certificate to that effect from the A. I. A., but this would not be sufficient to hinder an outsider from doing business in the State of Missouri.

To my mind, all these laws savor of selfishness and small, narrow-minded "Trade-unionism."

Respectfully,

SAMUEL HANNAFORD.

NOTES AND CLIPPINGS

THE BATTLE MONUMENT AT ST. PRIVAT. — A colossal monument designed by Emperor William himself is to be erected on the battlefield of St. Privat, to complete the large group of smaller monuments which have been put up to perpetuate the memory of the heroes of the Franco-Prussian War. The Kaiser's design represents a heavily armed archangel, with a sword in one hand and a large laurel leaf in the other. His Majesty, accompanied by the Empress, inspected the work recently in the studio of Professor Walter Schott, the eminent sculptor, and urged the artist to hasten the completion of the monument. — *Philadelphia Press*.

PENALTIES FOR CHIMNEY-FIRES. — Fire Commissioner Scannell intends to ask the Legislature to amend the city charter in the matter of penalties for chimney-fires. At present, when a chimney-fire is reported to Inspector of Combustibles Murray, the occupant of the apartment in which the fire occurred is prosecuted and fined. In hundreds of these cases, it is said, the tenants are too poor to pay the amount, and it has been found also that in most cases the owners of buildings are responsible for the unclean condition of the chimneys, and not the occupants. A measure fixing the penalty for a chimney-fire at \$25 and placing the responsibility on owners instead of tenants will be introduced in the Senate and the Assembly by a Republican and a Democrat, the bill being regarded by the Fire-department as a necessity. — *N. Y. Evening Post*.

TARRAGONA CATHEDRAL. — Tarragona has its one marvel, the Cathedral, as the Cathedral has itself its marvel, the cloisters. Its façade, colored the brown of the earth and warmed with a tinge of almost ruddy gold, fills the whole space of sky at the end of the steep street by which one approaches it, whose narrow lines indeed cut into the great rose-window, and the arched Gothic portal, in which the Virgin and Child stand in the midst of prophets and apostles, carved simply and devoutly by the thirteenth-century sculptor, who has set over them a Last Judgment in relief, crowded with small, indistinguishable dead, while the great saints — each saint distinct, with his written history beside him — rise visibly from their coffins, and two flying angels blow long trumpets above their heads. Walking round it, by ways which lose and find it again, we see the long, irregular, late Romanesque structure, like house added to house, with its low octagonal turret, exactly the deep, rich color of plum-pudding. Inside, the church, with less of that properly Spanish mystery which we find in the Cathedral at Barcelona, for example, has an ample dignity, and at night, before the altar candles are lit, becomes splendid in shadow. In its detail, in the gradual accumulation of structure and ornament, the statues of the retable, the windows, doorways, columns, it is in itself an almost complete historical museum of Spanish art in stone. But it is, after all, in the cloisters that one cares chiefly to linger. To walk there, looking between the slim white columns, with their history of the Bible or of the world carved minutely and with medieval humor on the capitals; looking past them into that inner court where a garden of trees and shrubs blossoms with many greens — the green of palm, of cypress, of oleander; in that coolness under the sunshine visible upon the foliage, is to surrender one's self to an enchanted peace. Here Tarragona at least still sleeps perfectly, in that permanent dream of the Middle Ages. — *Saturday Review*.

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No. 1206.

BENT GLASS GIVES TONE TO THE STRUCTURE.

It is a well-known fact that bent glass adds to the attractiveness of any building or store front; in fact, a single pane gives extra tone to the whole structure.

To those contemplating building, or making alterations, it is important to know that common double-thick glass can be bent to any part of a circle not exceeding half circle. Polished plate can also be bent in the same manner. The difference in appearance between the two lights after bending is hardly perceptible, in fact, when not in a building it would require an expert to detect any difference at all. However, there is quite a difference in the cost. Bent double-thick glass is only about one-fifth of the cost of bent plate-glass, which is considerable of a saving in the construction of a building.

The curving or bending of double-thick glass takes away the waviness, gives a polish to the glass, and adds to its strength and resistance to high winds and severe storms. This was clearly demonstrated in the city of St. Louis by the tornado that visited that city May 27, 1896.

The largest manufacturers in the United States of bent glass exclusively is the Oriol Glass Company, of St. Louis, Mo.; this Company manufactures all kinds of bent glass for buildings, show-cases, fancy furniture, etc., the product being all of superior make and finish and shipped in large quantities not only to all points in the United States, but also to Canada and Mexico.

ORIEL GLASS CO.,
ST. LOUIS, MO.

WOODEN COLUMNS.

This kind of work is our specialty and we carry a full stock of large poplar squares for making these special columns.

We have on hand 7" x 7", 8" x 8", 9" x 9", 10" x 10" and 12" x 12" poplar squares in all lengths, and all bored with a 2½-inch hole through the centre to prevent checking. These squares are No. 1 yellow poplar and are cut outside of the heart of the log. Large squares with the heart of the log in them, even if the heart is bored out, are worthless, as they will check.

Columns larger than 12 inches in diameter are staved-up. We stave-up a great many 12-inch columns as well as making them out of the solid squares; as for this size (12 inches), we can furnish the staved-up column at the same price as the solid bored column. For sizes smaller than 12 inches the solid bored column is cheaper and just as good.

The caps and bases are made separate out of plank.

We give the shafts of the columns a coating of linseed-oil and securely crate them so that they arrive at destination in good condition.

Our built-up columns to special designs and architects' details are staved-up out of 2-inch, 2½-inch or 3-inch lumber, and with 8 to 12 staves to the column, according to the size and style, and we carry on hand a stock of dry thick poplar plank for making these staved columns. The lumber is thoroughly kiln-dried and the staves are joined together by tongue-and-groove glued joints running the entire length of the stave, which makes a perfect joint, and one that will stand. Our staved columns will not open in the joints.

We make these staved columns as large as 24 inches in diameter and 24 feet long and larger; and have on hand 3-inch poplar plank 22 feet long for making the shafts of these largest size columns. Can also furnish white-pine columns, but they cost more than poplar, as the lumber is more expensive.

We manufacture hand-carved capitals and can make the columns to be used with composition capitals.

We make a specialty of this business and have a fully equipped factory and the best of facilities, and manufacture first-class goods.

Write us for prices, giving sizes and specifications. We make prompt shipments.

THE C. T. NELSON CO.,
COLUMBUS, O.

FACTS, WHEN TERSELY PUT, CONVINCE.

Has the fact ever impressed you that spring hinges have to perform the hardest duty of any hardware?

Besides carrying the weight of a door and suffering the wearing friction of constant usage, they must automatically close it.

The importance of selecting a durable spring hinge fully able to do its work is, therefore, apparent.

Bommer Spring Hinges are made of steel in any desired finish, and possess the inherent strength which the toughness of wrought-metal gives. They are also made in bronze or brass, in which case all the bearings are reinforced and protected with steel.

The Bommer Spring Hinge combines extreme durability with a pleasing exterior, which blends harmoniously with any style of decoration and costs no more than other kinds.

"Practically unbreakable," says the World's Fair Award, Chicago, 1893.

Gold medal awarded at Omaha, 1893.

All hardware dealers can furnish them.

BOMMER BROTHERS,
BROOKLYN, N. Y.

OLD INDEPENDENCE HALL, PHILADELPHIA.

Our Calendar for 1899 gives a new front view of Independence Hall as it appears today after having been restored to its condition as in 1776.

Apart from the historical and sentimental value attaching to a picture of this building, it is of peculiar interest as being the only full front photographic view ever taken. Many attempts have been made in the past to take such a picture, but owing to the great length of the building, and the narrowness of Chestnut Street, upon which it fronts, they have never been successful. This view, however, shows Independence Hall in perfect focus throughout its entire length, and with every minute detail preserved with absolute fidelity. It has required considerable ingenuity, combined with consummate skill, on the part of the photographer, to effect this result.

N. & G. TAYLOR CO.,
PHILADELPHIA.

WOODS' STEEL CORNER.

Just around the corner is where Woods' Steel Corner gets in its work. It is a small steel device that is nailed to lath, sets into the plaster of projecting corners and prevents them chipping. This is the weakest part of every wall; Woods' Steel Corner makes it the strongest part. It straddles the corner and makes a complete union of the connecting surfaces. It produces a perfectly straight substantial corner which can be decorated or papered over without marring the decoration or wrinkling the paper. The old-fashioned wooden bead has served only as a make-shift till some one could "think out" something better, and this is the metal corner which is now being used on thousands of buildings, and among them many prominent ones.

Woods' Steel Corner is this metal-corner business to perfection.

It is the most practical and cheapest corner on the market. It is the cheapest because of its shape, for in the making practically every bit of the material is used. It is the most practical because it possesses all the points requisite to a perfect and successful metal corner. It is the outgrowth of careful study in metal-corner needs. It is so readily adjusted that the time saved by the plasterer almost pays for it.

Woods' Steel Corner can be attached to

brickwork or fireproof construction, is adaptable to the greatest variety of work, makes a neat finish, and adds to the corner all the strength of steel.

It overcomes the need of using the heavy, objectionable wooden bead, and permits of a neat miter at wainscoting. A desirable effect is thus procured when several projecting corners occur in one room. It adds to the fireproof qualities of a building.

Woods' Steel Corner is made of heavy galvanized steel. It is amply strong, and will not rust from moisture of the mortar. Its shape reduces the cost of making and the price of selling. On certain curved work it is especially applicable, and is ready for use without being curved to order.

Woods' Steel Corner is the only metal corner that adjusts itself to the inequality in "lath laying" or brickwork, and keeps the alignment. It is now being used very extensively and is specified by prominent architects.

GARA, MCGINLEY & CO. (Sole Mfrs.),
PHILADELPHIA, PA.

SMOKE-LOCKS.

THE following suggestions were published by me, *pro bono publico*, twenty-five years ago, and as hundreds of lives have in the meanwhile been lost which might probably have been saved, I take this opportunity of reiterating them for what they may be worth. The system of fireproof construction herein set forth will very much facilitate the adoption of such an arrangement.

It is a fact that in burning buildings very few persons lose their lives by being burned—the immediate cause of death is due to suffocation by smoke, and their bodies are afterwards consumed by fire; the means of escape are often shut off by smoke and not actually by fire. This was especially the case at the Newhall Hotel, Milwaukee, and the Brooklyn Theater, the Hotel Royal, and a long list of others. Experience should force upon us the necessity of providing easier and safer means of exit from burning buildings to the exclusion of the many unsightly and incompetent devices which disfigure the building, and too often lure the victim to a death more horrible than suffocation or burning, and which are applied only to fill the letter, and not the spirit, of the law.

A fire-escape should consist of a device that should not be a source of study to unravel its intricacies, or require the exercise of greater agility or courage than persons even under ordinary circumstances can command, and at a time, too, when persons are about to avail themselves of its use while under excitement incident to the condition—or, indeed, at any time.

The arrangement I refer to consists of a communication from the street provided through the cellar or basement, separate and distinct from the other portions of a building, to the base of the stairway and elevator-shafts, which should be used as a special ingress and egress in case of need, and all approaches to the stairways or elevator-shafts should be guarded by smoke-locks. This term I use in contradistinction from "compressed-air locks," as used in entering or leaving a submarine tunnel during its construction these being check-valves. The smoke-lock, as it would not have to contend against force, would simply be a smoke-tight vestibule, with an escape for any smoke which may enter with the person in passing through the doorway, and which would guard and be the only communication through which every person must pass in going to or

from the body of the building on each floor to the stairway at all times. The stair-shaft would be furnished with sliding skylights, as are already provided for by the Building Laws of the City of New York over elevator-shafts, the stages of theatres, etc., having a rope extending down the shaft to the bottom, holding the sliding skylights closed, but upon its (the rope's) severance they would immediately open, and thus provide an escape for any smoke which may have found its way into the stair-shaft and lock. The same arrangement should apply to the elevator-shafts. Smoke-locks or check-valves may also be placed in the corridors. Persons finding themselves surrounded by smoke, and having the presence of mind to crawl along the floor, keeping their heads as low as possible, would pass to the locks or check-valves in safety under the most adverse circumstances.

By this arrangement, perhaps with some modification, every person going to any part of the building above the ground-floor or basement would unconsciously pass through the smoke-lock; hence, the way of escape *via the stairway* would be the *natural and familiar* one. Of course the smoke-locks, stairways and elevator-shafts should be strictly fireproof. The arrangement throughout would not mar or affect the harmony of the building. Wire-glass, which is a sure and effective fire-retarder and essentially fireproof (*see description of this important feature in the Hayes Catalogue on Iron and Glass Construction*), may be used in the doors or fanlights of the locks.

While affording an exit and an escape for the occupants, and while remote from danger, yet in the heart of the building, great facilities would be afforded for the firemen to enter the building and rescue persons, and to fight the fire from a point otherwise unattainable.

Signs directing strangers to the stairways as a safe exit in case of fire would be all that would be necessary.

In hotels, warm dresses may be kept within the smoke-locks or stairways for the use of guests not having had time to dress themselves, thus avoiding delay, hesitancy and excitement incident upon going into the street in a night-robe. This may be announced upon a printed notice placed in the rooms.

GEORGE HAYES,
71 EIGHTH AVE., N. Y. CITY.

GLOBE VENTILATOR.

PROPER ventilation is a paying investment, guaranteeing, as it does, a large saving in fuel, as pure air can be more quickly and cheaply heated, and attracting larger audiences and more profitable patronage. The Globe insures perfect ventilation at a moderate cost, without a draught, and without the noise, expense and annoyance of an electric motor or steam-engine. When the Globe system is in the entire outlay is made; when the blower plan is adopted the expense has just begun, for there is power to be provided, experienced help must be secured, repairs constantly made, and numerous little items of cost that together serve to make its operation an expensive luxury. The Globe, on the other hand, is economical from every standpoint: its first cost is merely nominal when compared with others, its maintenance is practically nothing, as it never needs any attention beyond the opening or closing of a few dampers, as the need for fresh air is greater or less as the case may be. The Globe does its work silently and steadily, removing hot and vitiated air, steam and obnoxious gases.

The officary of all churches should see to it that their edifices are thoroughly ventilated by the use of the Globe. Should this be done, not only will the congregations be greatly increased, but larger contributions will be received at the services; and if these results are attained an important problem is solved and the Globe is certainly proved a paying investment.

Not only is it easier to preach, but it is vastly easier and pleasanter to sit and listen in an audience-room from which the vitiated atmosphere and excessive heat are steadily removed, and through which currents of fresh air are constantly circulating, yet without causing a draught.

Globe ventilators have been used on churches of all denominations, and have successfully performed the work required of them. It is the cheapest, most efficient and durable of any system of ventilation—requiring no experience to operate it, no employees to attend it, and it will last while the church stands.

We give the endorsement of the Fifth Avenue Baptist Church, from the pen of the Hon. Lewis E. Gurley; also presenting others, which tell "the old, old story" of benefits derived from using the Globe:—

TROY, N. Y., Dec. 6, 1893.

I take pleasure in saying that the trustees of the Fifth Avenue Baptist Church have recently procured two ventilators from the Globe Ventilator Co., and find them very satisfactory in use.

L. E. GURLEY,
President of Board.

ST. JOHN'S RECTORY, COHOES, N. Y., Nov. 14, 1893.

TO THE GLOBE VENTILATOR CO.,
TROY, N. Y.:—

Gentlemen,—We put two of your 24-inch ventilators in our church roof last June, and have found that they make a very great difference in the conditions of the atmosphere of the building, allowing a free discharge of the vitiated air, and a complete and uninterrupted circulation of fresh. No draught is felt, and no cold air drops from above. We only regret that we did not put them in sooner. We also remark that, while before they were put in some one of the congregation was obliged to leave during the service, almost every Sunday, on account of faintness, no one does so now.

Yours truly,
FREDERICK S. SILL, Rector.
JOHN HORROCKS, Warden.

GLENS FALLS, N. Y., March 14, 1893.

MESSRS. GLOBE VENTILATOR CO.:—

Dear Sirs,—After various unsatisfactory attempts to ventilate our church, we put the Globe Ventilator on in the spring of 1891. Two years of testing have proven our wisdom and their value, and I can heartily recommend them to all. Very truly yours,
GEORGE W. BROWN, Pastor.

Schools, whether public, private or parochial, should be perfectly ventilated to properly serve their purpose, for without such attention to the laws of health these buildings, designed as temples of knowledge, become merely nurseries of disease. Investigation has shown the presence of a much less quantity of bacteria in a well-kept sewer than in an ill ventilated school-room, yet many a parent would be greatly disturbed if his son or daughter should chance to peer into the open manhole of a sewer, who pays absolutely no attention to the class-room in which his children pass a large portion of each school day. There are countless schools in the cities where hundreds of sickly and uncleanly children are herded like cattle in close classrooms, which do not make even a pretence of being ventilated; and the penalty of the failure on the part of the authorities to observe

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Superior to any
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Company,

143 LIBERTY STREET,
NEW YORK.

THE ARCHITECTURE OF CLASSICAL ANTIQUITY — AND THE — RENAISSANCE,

BY I. BUEHLMANN.

Seventy-five steel engravings and photo-lithographic plates in portfolio, with descriptive text translated by G. A. Greene.

For Sale by American Architect and Building News Co.

proper sanitary precautions may be readily seen in the palid faces and sunken cheeks of those innocent victims of official neglect. The human breath is humanity's greatest enemy, and it should be instantly and effectively removed. The Globe system for the ventilation of schools is the best, the cheapest, most serviceable and satisfactory of any now before the public.

We present below a letter of endorsement which we are privileged to print through the courtesy of Messrs. J. K. Beans and J. W. Thorn of the Building Committee:—

COMMISSIONERS OF PUBLIC INSTRUCTION,
TRENTON, N. J., March 8, 1894.
GLOBE VENTILATOR CO., TROY, N. Y.:—

Gentlemen,—The eight 30-inch Globe Ventilators placed on the U. S. Grant School, this city, have proved entirely satisfactory. Your agents did not overrate their merits in the least, and we are greatly pleased with them.

Yours respectfully,

J. K. BEANS,

J. W. THORN,

Committee on Grounds and Buildings.

GLOBE VENTILATOR CO.,
TROY, N. Y.

NOTES.

Word came from Salt Lake City, Utah, on the 12th inst., of the sudden death of Mr. B. H. Land, of New York, on January 8th. Mr. Land was over sixty years of age. He was well and favorably known throughout the plumbing trade, having been a travelling representative for several houses for many years. He will be regretted by a large circle of friends who are scattered from one end of the country to the other. He was a native of England and came to America at an early age. Mr. Land was representing the Kenney Company, 72 Trinity Place, N. Y., manufacturers of the "Flushometer," at the time of his

death, and enjoyed their fullest confidence and esteem. He was making an extensive trip for the above Company when the end came so unexpectedly. Mr. Land not having any known relatives in this country, the Company provided that the remains were properly cared for.

The new church known as the "Pawtucketville Church," at Lowell, Mass., is being erected in accordance with plans made by architect, J. Merrill Brown, of Boston. The church will be built on modern lines. Over the interior auditorium will be placed heavy steel trusses having a clear span supporting the roof framing and ceiling. J. H. Connell & Co., Lowell, are the general contractors for the work, and the Berlin Iron Bridge Co., of East Berlin, Conn., furnish and erect the steel-work.

THE BERLIN IRON BRIDGE CO.,
EAST BERLIN, CONN.

BUILDING INTELLIGENCE.

Reported for the American Architect & Building News

OFFICE-BUILDINGS.

Boston, Mass.—Birch St., cor. Brandon St., Ward 23, four-sty' bk. office & store building, 70' x 112' x 125', flat roof, steam; \$15,000; o., B. F. Cobleigh, Roslindale; a., O. A. Thayer.
Brighton Ave., nr. Webster St., Ward 25, two-sty' fr. office, 55' x 78', flat roof, stoves; \$1,500; o., A. E. Angier & Co.; b., Albataw Construction Co.

Orange, Tex.—Two-sty' bk. & st. office-building, 65' x 155', slate roof, steam; \$32,000; o., Gulf, Texas & Northern R. R. Co.; a., Glenn Allen, Houston.

STABLES.

Boston, Mass.—Bullock St., nr. D St., Ward 13, two-sty' fr. stable, 21' x 55', flat roof; \$1,200; o. & b., Geo. C. Coreoran, 14 Sagamore St., Dorchester.
Mechanic St., No. 3, Ward 6, two-sty' bk. stable, 34' x 35', flat roof, stoves; \$7,000; o., Jos. Arano; a., F. M. Churchill, 85 Devonshire St.

Philadelphia, Pa.—Sedgeley and Montgomery Aves., two-sty' bk. stable, 90' x 97'; \$9,000; o., A. C. Cressman; b., J. S. Cornell & Son.
Montrose St., No. 817, two-sty' bk. stable, 27' x 97'; o. & b., G. M. Forbes.

BUILDING INTELLIGENCE.

STORES.

Hammond, Ind.—Hohman and Sibley Sts., three-sty' bk. store, 50' x 138', comp. roof, steam; \$15,000; o., Mrs. E. H. Tapper; a., E. W. Bump.

New York, N. Y.—Twenty-first St., No. 41, eight-sty' bk. stores & lofts, 25' x 90'; \$50,000; o., Walter M. Fernbach, 287 Fourth Ave.; a., Pollard & Steinam, 19 Union Sq.

Perry, Ia.—Three-sty' bk. store, flat & hall, 90' x 210', gravel roof, steam; \$20,000; o., Mayor Breed; a., C. C. Cross & Son.

Terre Haute, Ind.—Three-sty' bk. & st. store-building, 70' x 140', asphalt & gravel roof, steam; \$30,000; a., J. G. Vrydagh, 925 S. 7th St.

TENEMENT-HOUSES.

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One Hundred and Nineteenth St., nr. Madison Ave., four-sty' bk. & st. flats, 25' x 87'; \$75,000; o., Schmidt Bros., 112 E. 29th St.; a., Ed. Wenz, 1491 Third Ave.

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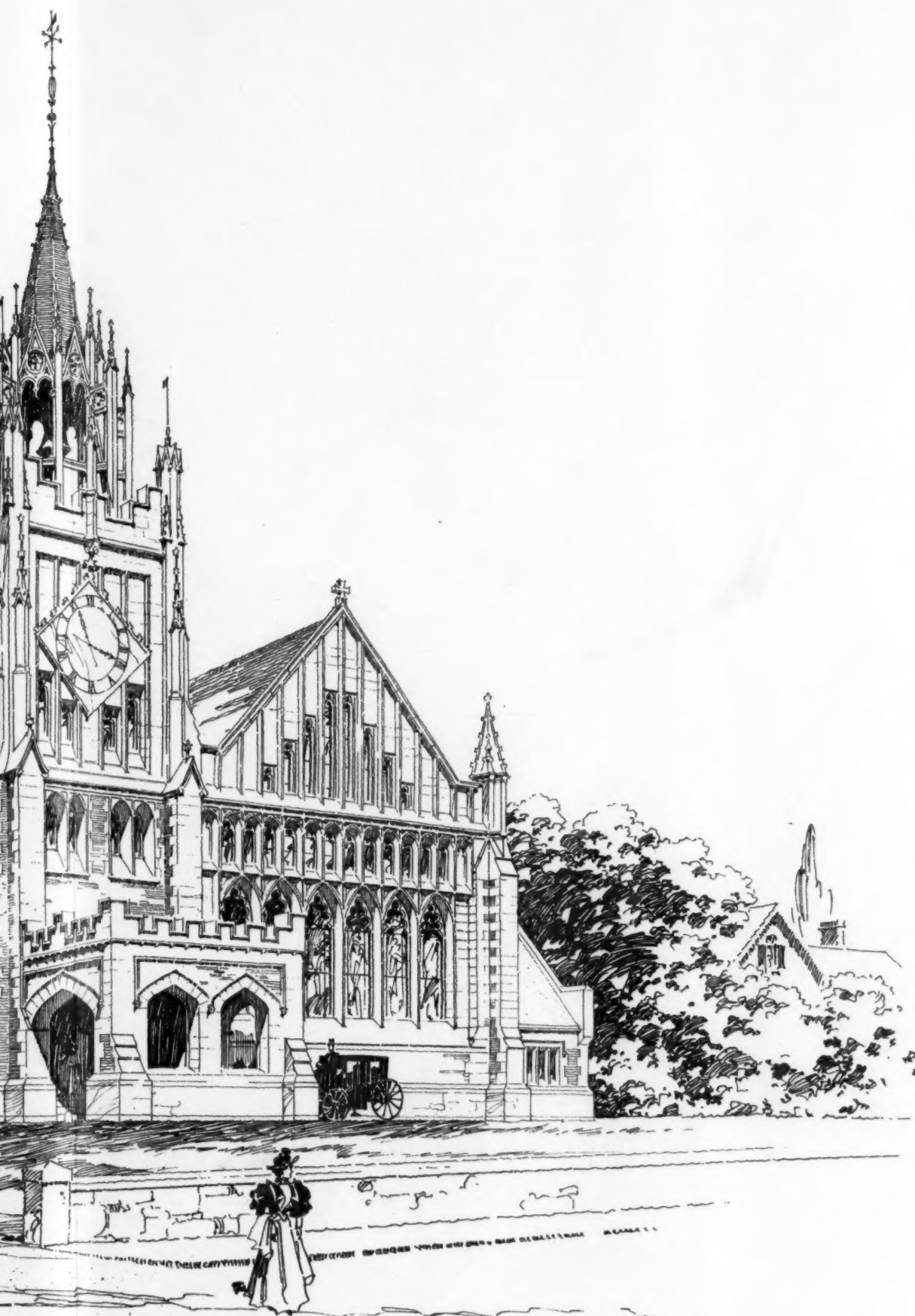
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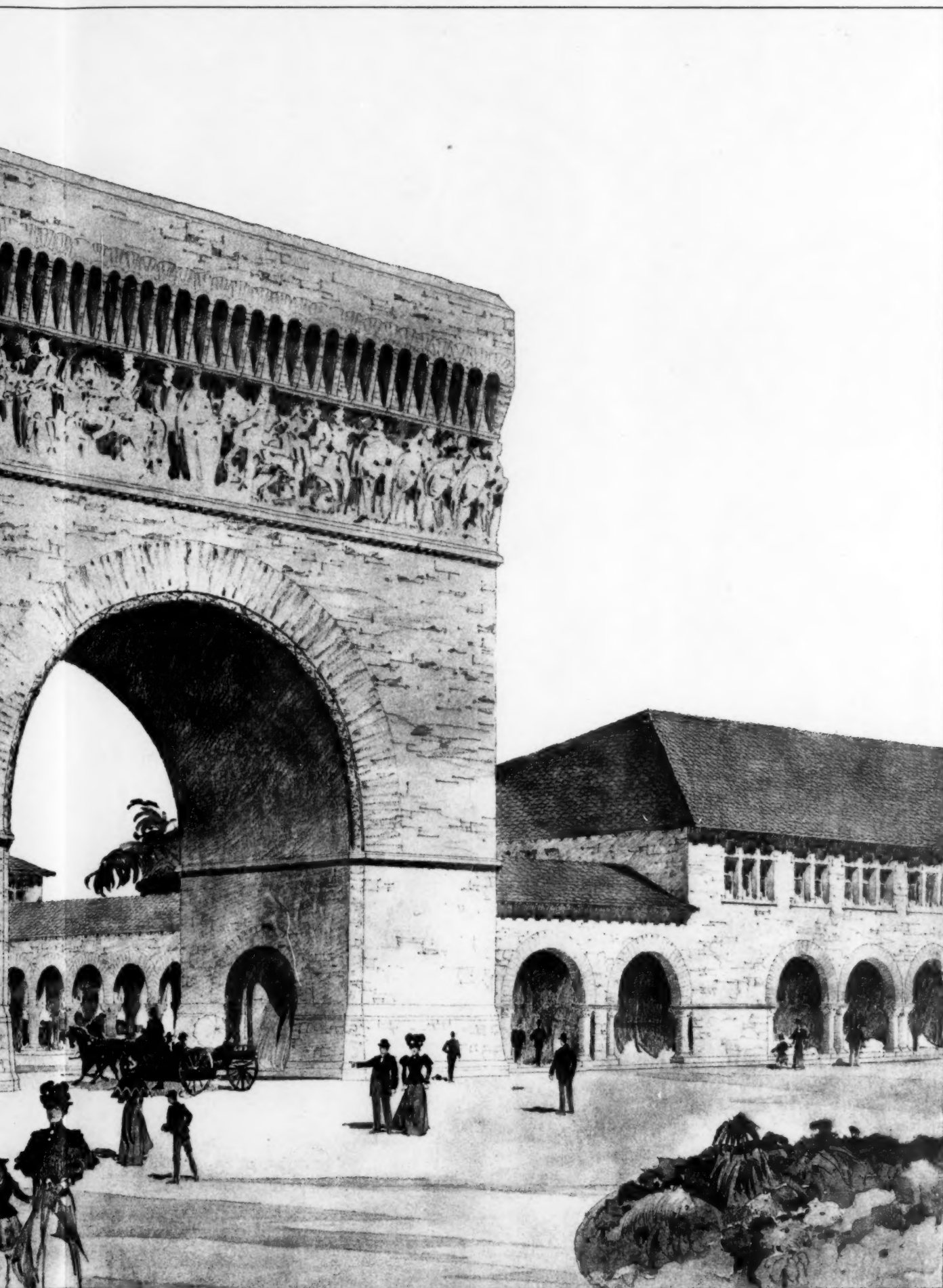
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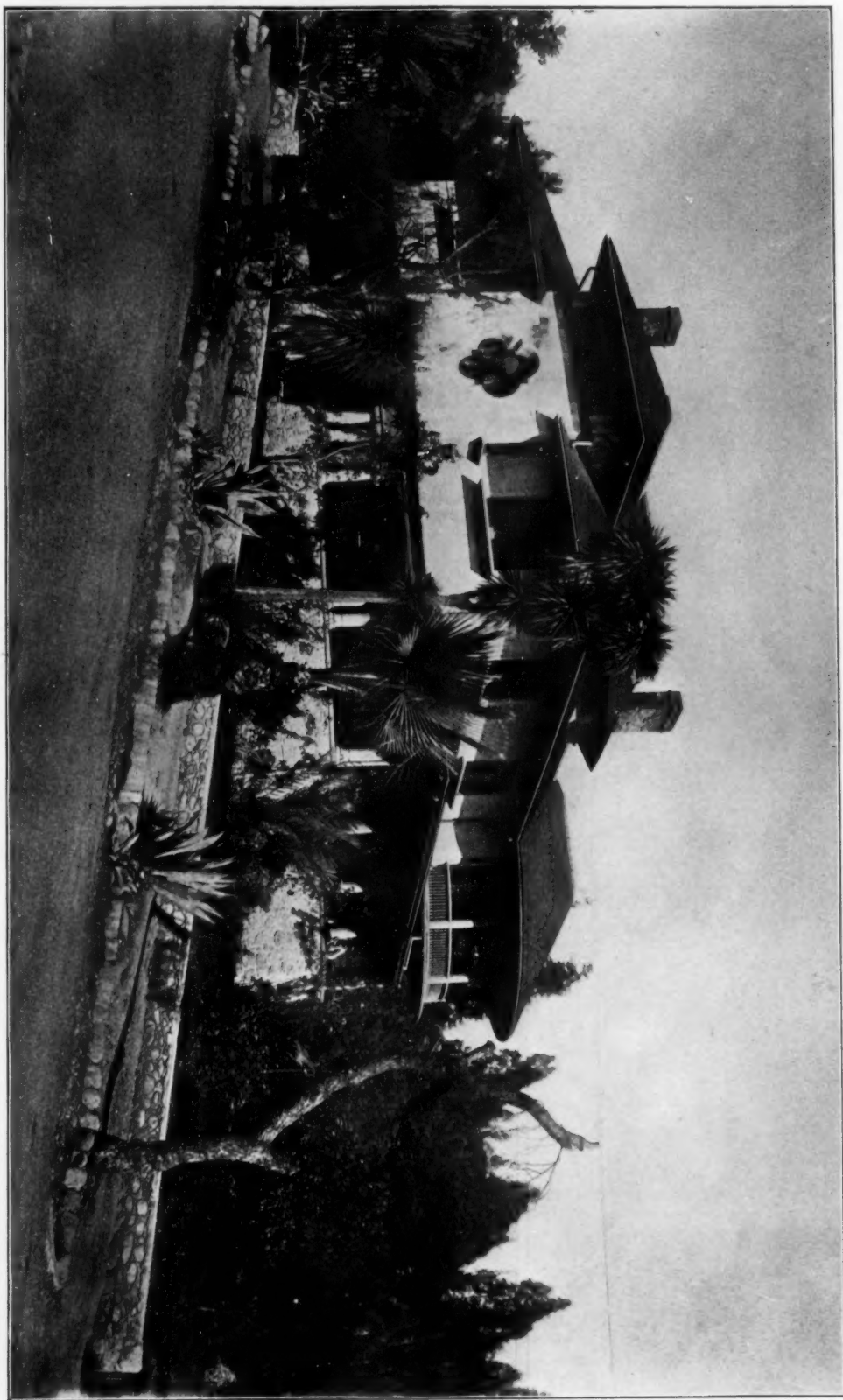


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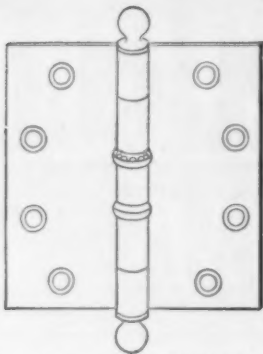
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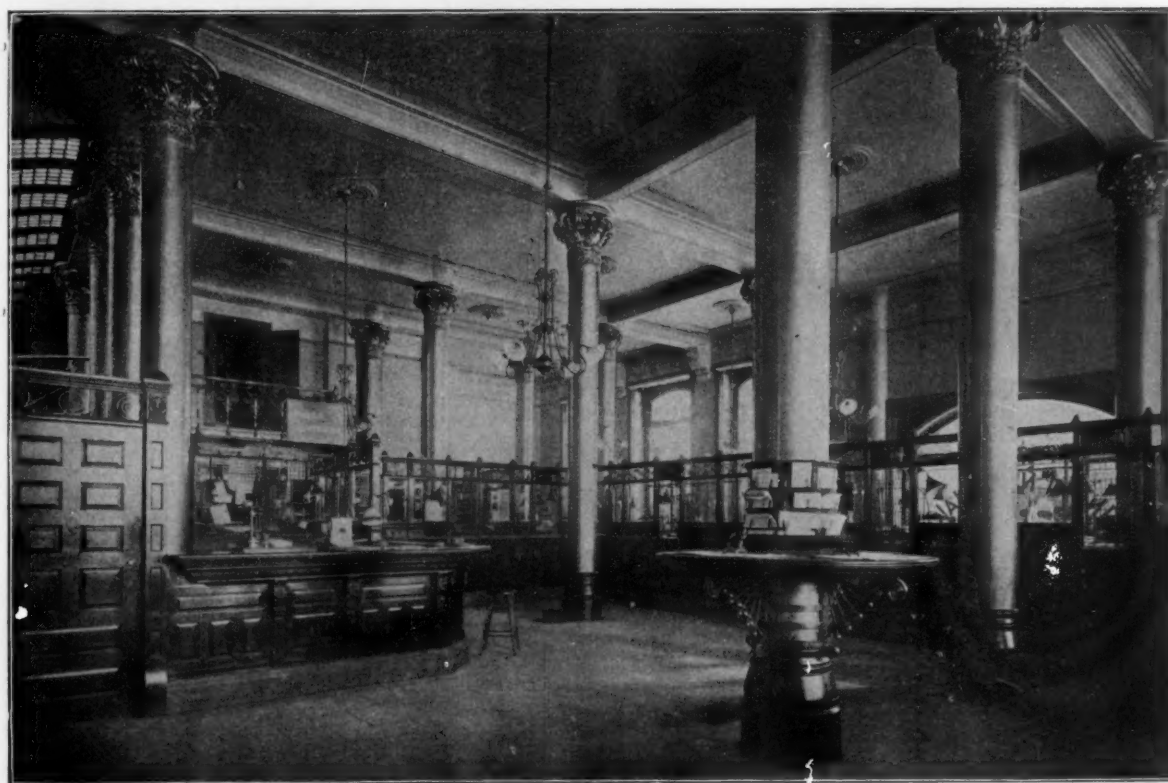
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Rubble.....	1 25 @ 1 50		9 00 @ "	1 45 @ 2 50
Sandstone:				
Longmeadow.....	80 @ 90			95 @ 1 05
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Berea.....	75 @ 1 00		45 @ 55	85 @ 95
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Potsdam Red.....	1 30 @ 1 40		@ 1 55	1 25 @ 1 35
Caen.....	@ 2 00		@	95 @ 1 05
Carlisle, English.....	@ 1 05		@	95 @ 1 05
Corse Hill (Scotch).....	@ 1 05		@	55 @ 65
Granite: (Maine)			80 @ 1 50	
Limestone:				
Bedford.....	45 @ 1 25	95 @ 1 00	20 @ 40	75 @ 85
Joliet.....	1 00		@	Richmond
Lemont.....			@	P 75 @ 1 50
Serpentine.....		10 50 per ton.	@	Perch 4 50 @ 5 50
Bluestone: (P sq. ft.)				1 in. th. 10 @ 25
Sidewalk.....	30 @ 5 00	40 @ 1 75	1 00 @ 1 25	37 @ 50
Planned.....	50 @ 6 00	@ 75	1 00 @ 1 25	
Marble: (P cu. ft.)				
Leo, Mass.....	@	1 75 @ 2 50	Not sold.	2 00 @ 2 50
Rutland, white and blue.....	@	@ 3 00	3 50 @ 6 00	2 00 @ 3 00
Sutherland Falls.....	1 25 @ 1 75	@ 2 00	3 50 @ 6 00	1 70 @ 3 00
Glens Falls, black.....	@	@	Not sold.	4 00 @ 4 50
Italian, blue-veined.....	@	@	@ 4 40	2 50 @ 2 75
Sienna.....	@	@	Not sold.	@ 5 00
Tennessee, red.....	@	@	@ 4 40	4 00 @ 6 00
Knockville.....	@	@	@ 4 40	3 00 @ 4 00
Pennsylvania, blue.....	@	@	Not sold.	2 00 @ 3 00
Vermont, white.....	@	@	3 50 @ 6 00	2 25 @ 3 00
Slate: Roofing (P square)				
Green.....	5 00 @ 6 00	4 75 @ 5 25	3 75 @ 5 00	2 90 @ 3 60
" unfading.....	5 00 @ 6 00	5 50 @ 6 50	5 25 @ 6 00	4 25 @ 5 00
Purple.....	5 00 @ 6 00	5 50 @ 6 50	5 25 @ 6 00	4 50 @ 5 50
Red.....	@ 10 00	10 00 @ 11 00	10 50 @ 12 50	11 50 @ 13 00
Black, Lehigh.....	4 25 @ 4 75	@	4 50 @ 5 50	4 00 @ 4 35
" Chapmans.....	@	@	5 30 @ 6 15	4 50 @ 5 00
Genuine Bangor.....	4 25 @ 5 50	4 75 @ 5 90	5 25 @ 6 50	4 35 @ 5 50
Unfading black.....	6 00 @ 8 50	6 00 @ 8 50	4 25 @ 8 95	6 50 @ 9 00
".....	5 50 @ 8 00	5 50 @ 8 00	5 50 @ 9 20	6 50 @ 9 00
Tiles, Am..... P M.	@	@	Salt-glazed tiles	@ 28 00
N. Peach Bottom, war. unfading	@	@	9" 8c. per ft.	5 76 @ 6 25
Fire Clay Roof Tile on cars at fac.	8 00 @	8 00 @	6 00 @ 6 50	8 00 @
LUMBER.—P M.				
Boards: (Ordinary dimensions.)				
Pine, 1st quality, clear.....	65 00 @ 75 00	55 00 @ 70 00	50 00 @ 60 00	47 50 @ 60 00
" 2d quality.....	55 00 @ 60 00	42 00 @ 50 00	42 00 @ 50 00	38 00 @ 45 50
" 3d quality.....	18 00 @ 22 00	20 00 @ 40 00	20 00 @ 25 00	27 50 @ 36 50
Spruce.....	@ 25 00	12 00 @ 18 00	Not sold.	15 00 @ 21 50
Hemlock.....	14 13 @ 14	12 50 @ 14 00	10 00 @ 12 00	11 50 @ 13 75
Yellow pine.....	20 @ 40	19 00 @ 35 00	18 00 @ 25 00	14 00 @ 20 00
Cypress.....	@	26 00 @ 40 00	30 00 @ 35 00	30 00 @ 38 00
Clapboards:				
Pine.....	@	35 00 @ 55 00	25 00 @ 30 00	14 00 @ 25 00
Spruce.....	@	24 00 @ 35 00	Not sold.	Not sold.
Framing Timber:				
Pine.....	14 00 @ 16 00	14 00 @ 16 00	15 00 @ 25 00	25 00 @ 37 30
Spruce.....	12 00 @ 16 00	12 00 @ 15 00	Not sold.	15 00 @ 21 50
Hemlock.....	18 00 @ 21 00	19 00 @ 25 00	10 00 @ 15 00	14 00 @ 20 00
Yellow pine.....	@	@	16 00 @ 25 00	22 50 @ 30 00
Laths:				
Pine..... Round Wood	@	2 00 @ 2 50	1 90 @ 2 00	2 75 @ 3 00
Spruce..... Slab.....	2 00 @ 2 25	1 90 @ 2 25	Not sold.	2 30 @ 2 35
Shingles:				
Pine, shaved..... P M.	5 00 @ 6 00	@	Not sold.	
Pine, sawed..... "	4 00 @ 5 00	@ 4 50	2 00 @ 2 75	
Spruce, sawed..... "	1 50 @ 2 00	1 50 @ 1 75	Not sold.	
Redwood..... P 125.	1 40 @ 1 60	3 00 @ 3 75	4 00 @ 6 00	
Cedar split..... P M.	@	@ 6 00	Not sold.	
Cedar sawed..... "	@	2 00 @ 3 25	2 50 @ 2 90	
Cypress. Split..... 7 x 24 "	18 00 @ 20 00	8 00 @ 6 00	@	

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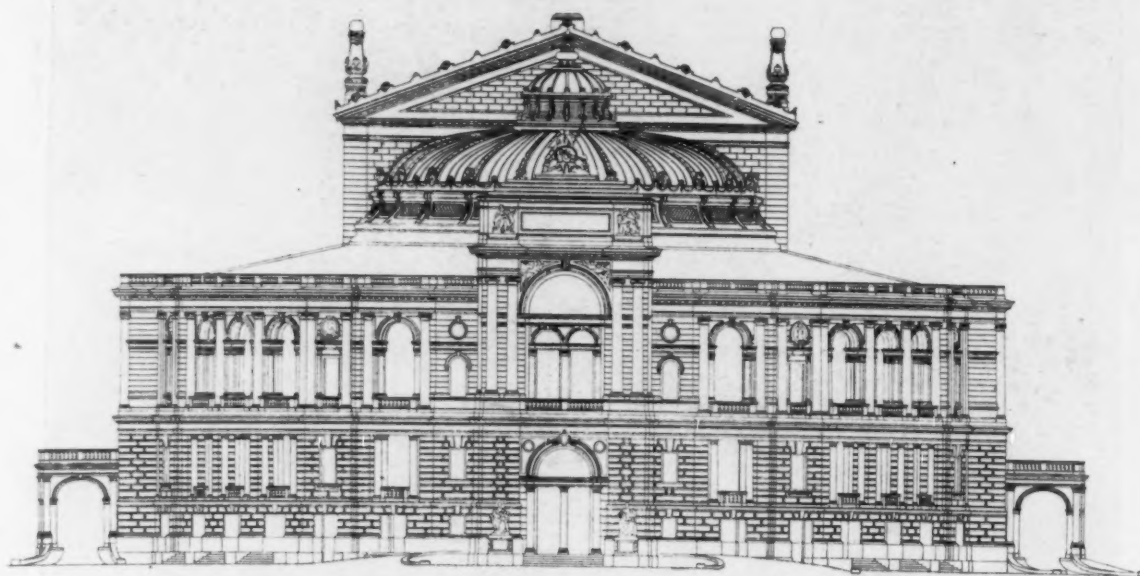
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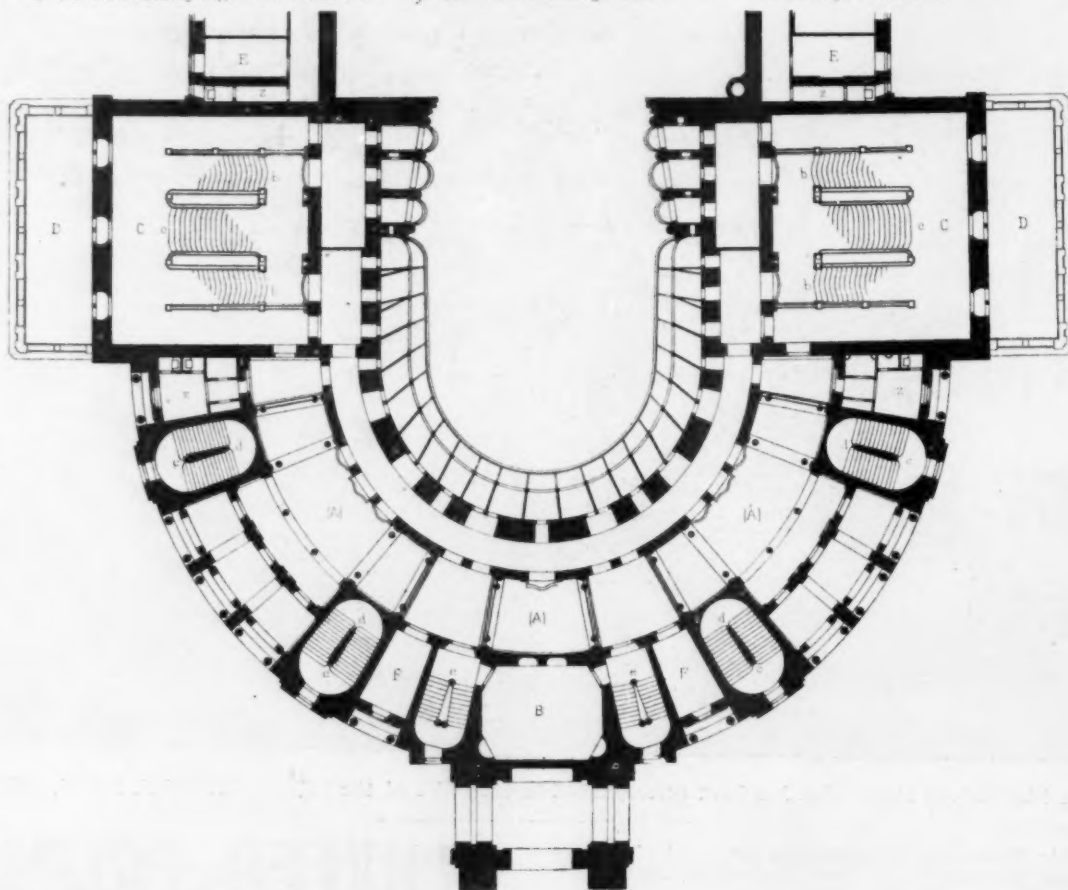
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y Cloak Counter (Kleiderablage Vestiaire)

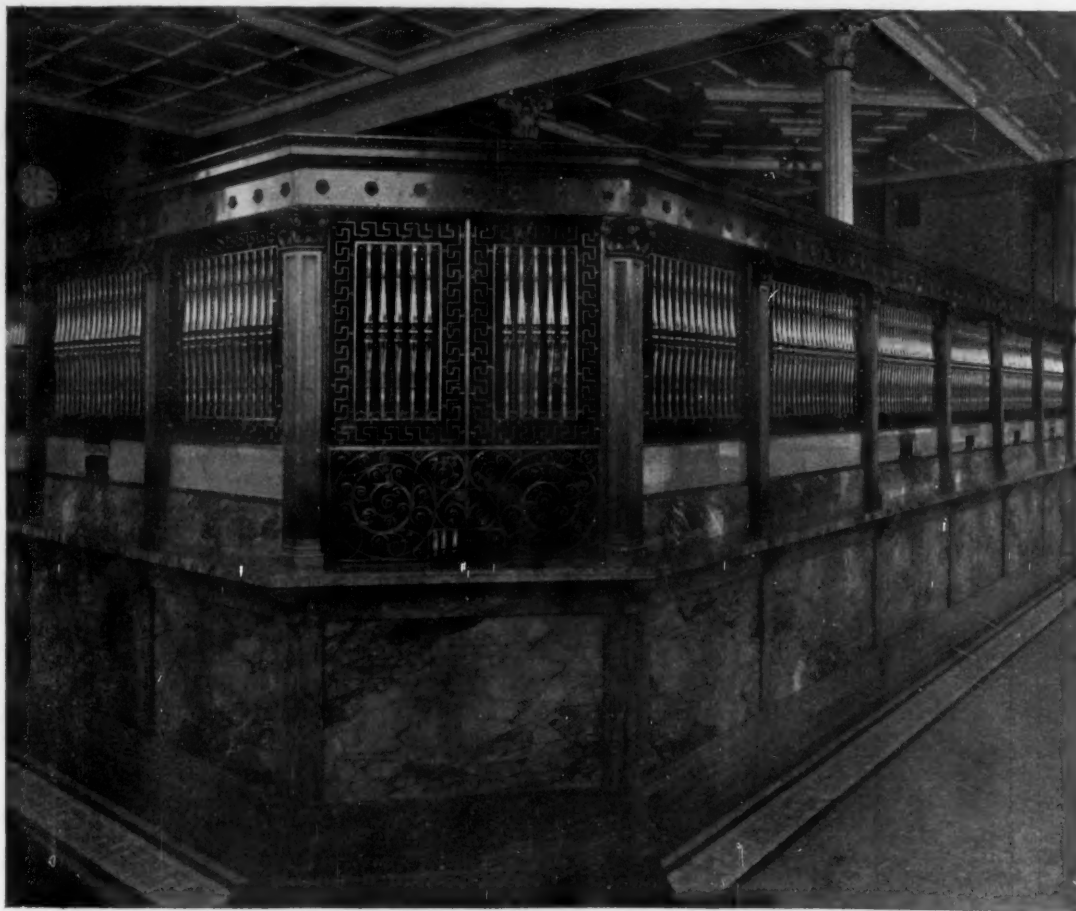
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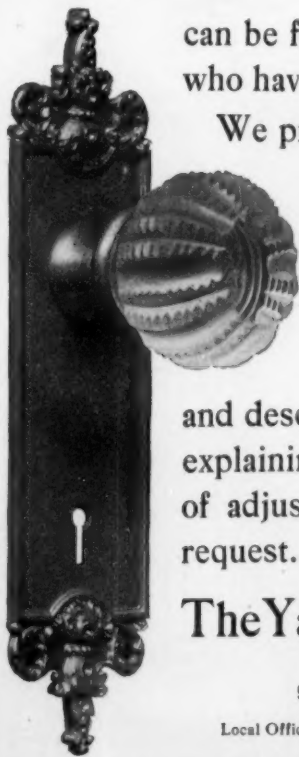


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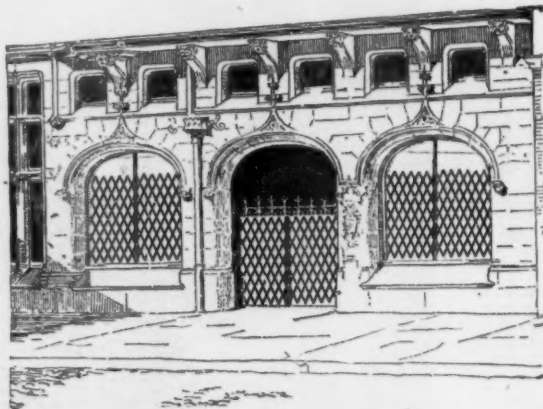
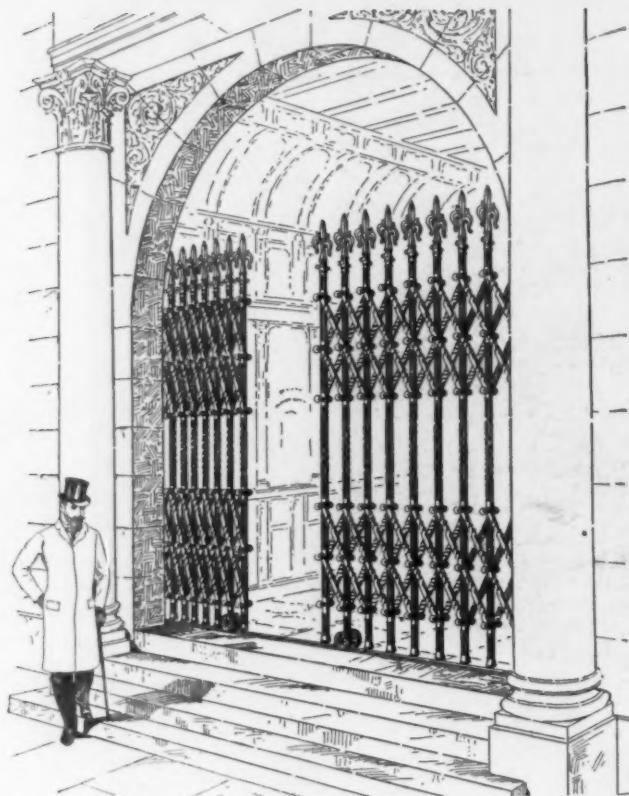
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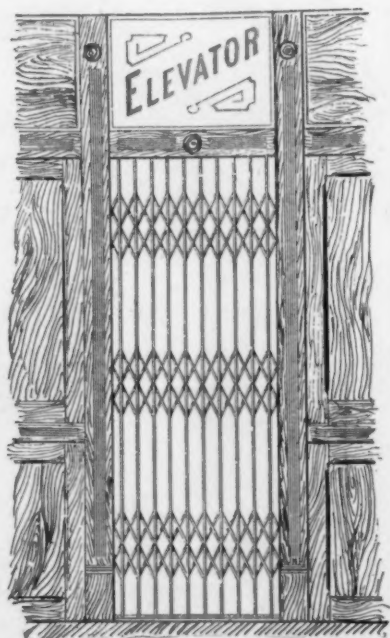
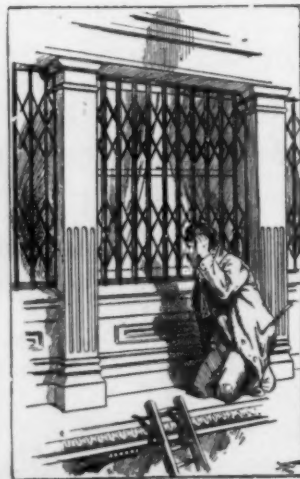
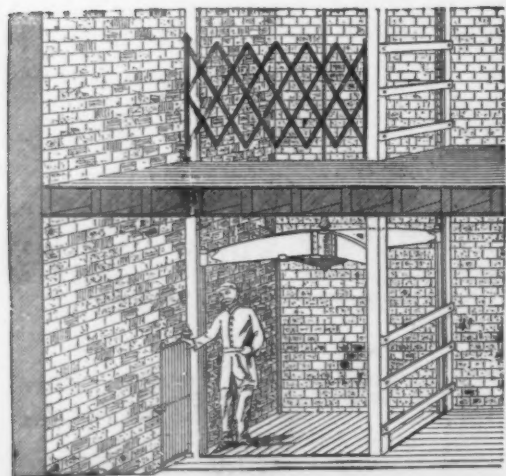
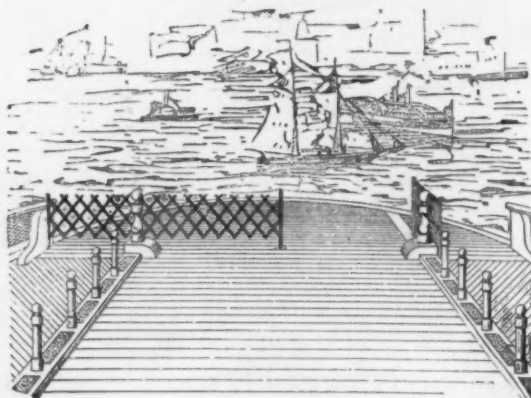
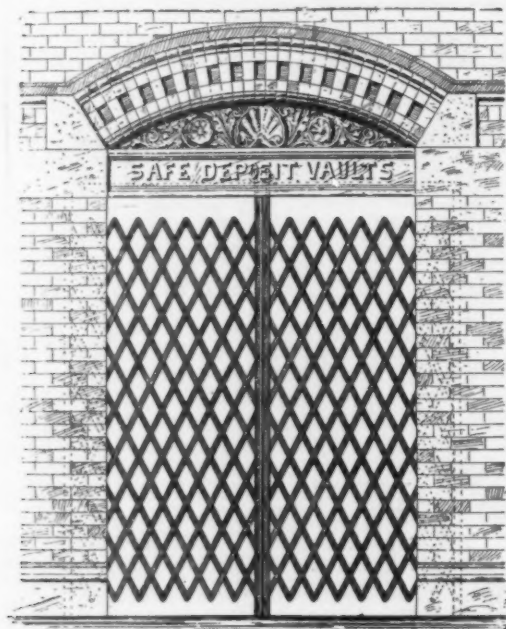
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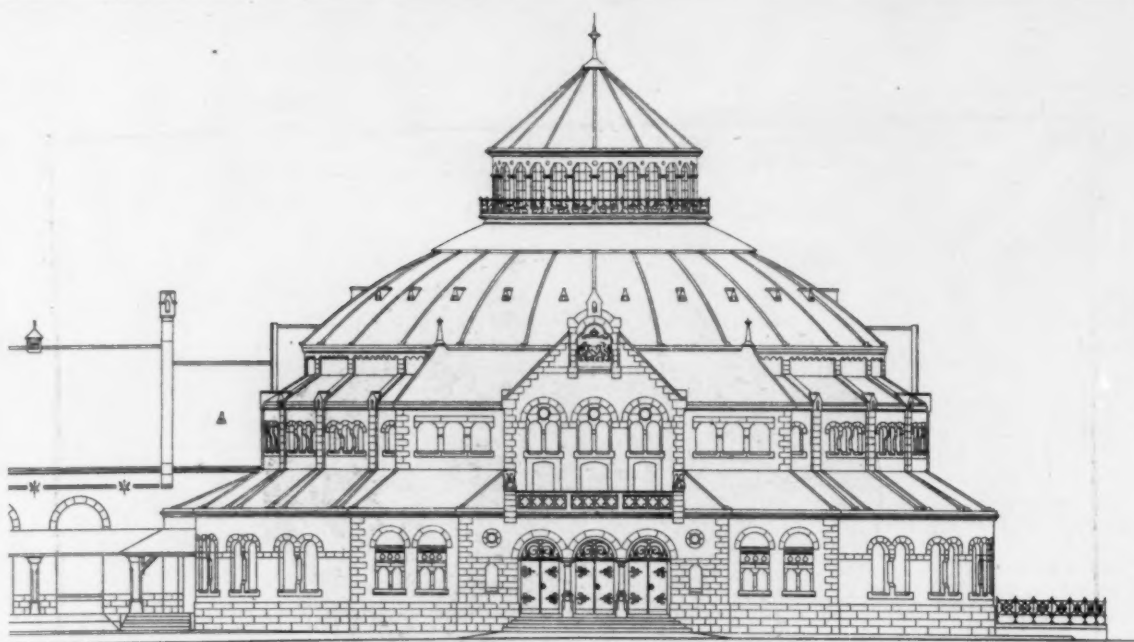
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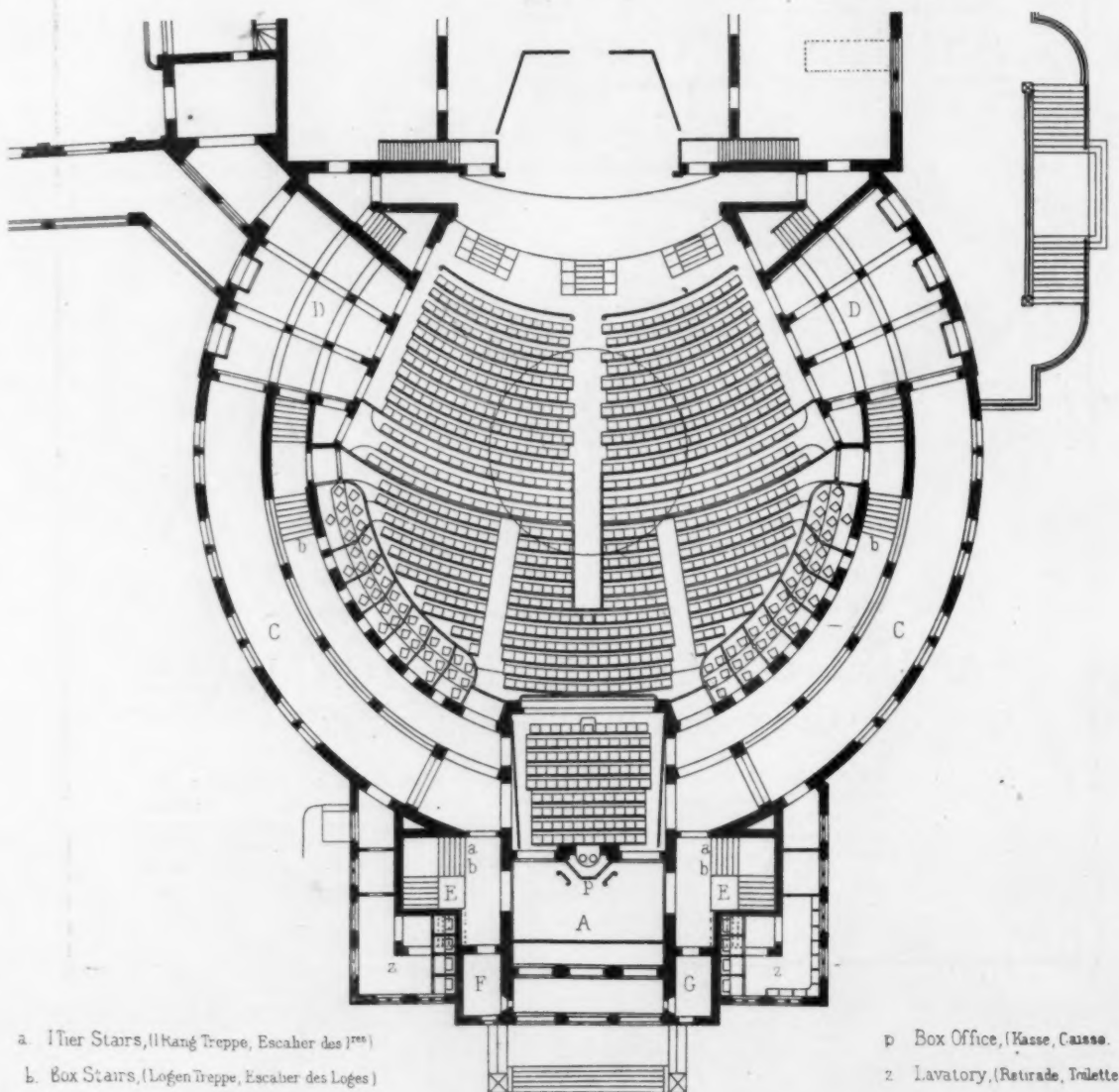
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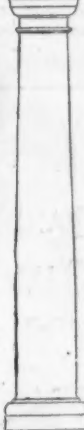
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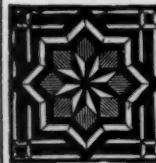
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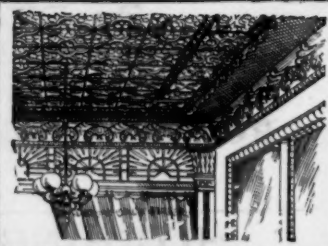
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BUILDING INTELLIGENCE.

Capt. John Palmer, ex-Secretary of State Henry H. Lyman, Lieutenant-Col. Herman Bendell, the State Commander of the Grand Army of the Republic and the Adjutant-General.

Bellefonte, Pa.—Andrew Carnegie has offered to give \$100,000 for a library building for the Pennsylvania State College, providing the State will appropriate \$10,000 annually for the maintenance of the library and museum to be connected with it. The Trustees of the Pennsylvania State College have appointed a committee to present a memorial to the Legislature setting forth Mr. Carnegie's offer and urging the necessity for such a building.

Boston, Mass.—Report states that the Ames Estate has purchased the old Public Library and will erect a theatre on the site. The citizens of the Forest Hills District are making efforts to have a fire-engine house built in that locality.

Buffalo, N. Y.—Prominent business men and property owners in the congested west side districts of the city are agitating the construction of a new west side high school. They will urge upon the council at once the selection of a site, and then will have prepared plans and specifications for a three-story brick building, costing \$200,000.

It is stated that Architects Green & Wicks have filed plans at the Bureau of Buildings for the alteration of the old Sprague mansion, at the corner of Delaware Ave. and Chippewa St., into stores and apartments. There are to be three stores on the ground-floor and two apartments on the second floor. The apartments will be equipped with modern improvements. The work will cost about \$5,000.

It is stated that plans have been prepared for a \$35,000 edifice for the First Baptist Church.

Cambridge, Mass.—A six-story student dormitory is to be erected on the land recently occupied by the old University Press Building, in Brattle Sq. It will contain sixty suites, club-rooms, reception-rooms, etc.; estimated cost, \$250,000; architects, Winslow & Wetherell, Boston.

A new recitation-hall, to cost \$175,000, will probably be built on the grounds by Harvard University in the spring. Funds for the same are provided in the will of the late Henry L. Pierce, of Milton.

Chicago, Ill.—Wilson & Marshall, 218 La Salle St., have designed a \$25,000 two-story store and office building, 100' x 150', to be erected at Grand Boulevard and 47th St., for A. O. Slaughter.

Colorado Springs, Col.—Plans are being prepared by Thos. P. Barber, architect, 74 Bank Building, for an addition to be built to the Alamo Hotel. It will be four stories high, costing about \$75,000.

Eureka Springs, Ark.—It is stated that the Emanuel Baptist Society contemplates erecting a memorial chapel, at a cost of \$20,000.

Glenwood, Ill.—The Illinois Agricultural and Manual Training School for Boys has received a donation of \$50,000 for the erection of a manual training building and a central steam plant on its grounds. The donor is a Chicago man, Edward B. Butler, president, has received the certificates of deposit and has charge of the matter.

Holyoke, Mass.—Ex-Representative William Whit- ing and William Skinner have each contributed \$10,000 towards the \$50,000 needed to secure a site and building for a library for the city promised by the Holyoke Water-power Co.

Huntington, Ind.—It is stated that the congregation of the German Reformed Church will build a \$20,000 edifice.

Lyons, Ill.—It is stated that a \$35,000 addition to the high school will be erected.

Manchester, N. H.—It is reported that the Directors of the Amoskeag Mfg. Co. propose to rebuild two of the old mills, or to build one large new mill on the site of No. 4 and No. 5 mills, to take the place of the two.

Marquette, Wis.—A company which will soon build a paper-mill at White Rapids, 35 miles from here on the Menominee River, will be organized in a few days. Oshkosh and Neenah people, including Kimberly, Clarke & Co., are interested. The mill will cost \$400,000.

McKees Rock, Pa.—The Fraternal Hall Association has accepted the plans of James Anglin, architect, 1330 Park Building, Pittsburgh, for their new \$20,000 building to be erected on Chartiers Ave. The structure will be three stories high, constructed of brick and stone.

Milwaukee, Wis.—E. R. Liebert, 107 Wisconsin St., is said to have completed plans for remodeling the House of Correction; estimated cost, \$150,000.

New York, N. Y.—The plans prepared by Whitney Warren and C. D. Wetmore for the New York Yacht club-house have been submitted. The building is to be six stories, constructed of limestone, having a frontage of 75' on W. 44th St., Nos. 37-41.

Olympia, Wash.—An addition to the Steilacoom Insane Asylum, to cost \$40,000, is under consideration.

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Orange, N. J.—Plans for an isolated hospital for the general use of the towns of Orange, East, West and South Orange, have been adopted. The building is to be a two-story structure, and cost about \$15,000.

Pekin, Ill.—The County Board, it is stated, has appropriated \$20,000 to erect buildings at the County Farm.

Philadelphia, Pa.—It is stated that plans have been prepared for a building for the University of Pennsylvania, to be used as a medical laboratory; cost, \$300,000.

The Board of Education will shortly ask bids for two school-houses, to cost about \$60,000 each.

San Francisco, Cal.—The plans of Shea & Shea are stated to have been accepted for the Mission Police-station; estimated cost, \$46,000.

Trenton, Tenn.—Plans have been adopted by the Committee for a \$30,000 Court-house, and will be submitted to the Court for final approval.

Washington, D. C.—The Senate passed a bill on January 25th providing for the erection of a \$1,000,000 building for the Department of Justice.

Waterloo, Ia.—J. T. Burkett, architect, has prepared plans for a hotel and store building to be erected on W. 4th St., by W. H. Marquis and B. F. Bailey. It will be three-story, 52' x 60'; cost, \$10,000.

White Plains, N. Y.—Architects will soon be asked to submit plans for a \$100,000 wing to the Court-house.

Worcester, Mass.—It is reported that Dr. Edward Swasey, of 1 High St., intends to erect a new residence in the spring.

Architects Fuller, Delano & Frost are preparing plans for changes and alterations to a farm building in Shrewsbury, for Philip W. Moon; also plans for a large stable for the same party.

ALTERATIONS AND ADDITIONS.

New York, N. Y.—Thirty-second St., No. 124, alteration & addition to stable; \$10,000; o. Mitchell A. C. Levy, 20 Broad St.; a. Stein, Cohen & Roth, 41 Union Sq.

APARTMENT-HOUSES.

Chicago, Ill.—N. Normal Parkway, nr. Rock Island R. R., four-sty' bk. & st. apart., 42' x 84', comp. roof, steam; \$20,000; o. John M. Young, 6642 Howard St.; a. A. K. Ingalls, 1301 Great Northern Building.

Perry Ave., cor. 70th St., three-sty' bk. & st. apart., 92' x 100', comp. roof, steam; \$40,000; o. John Spencer, Boston; a. Frank B. Abbott, 225 Dearborn St.

Forty-fifth St. and Lake and Woodlawn Aves., four-sty' bk. apart., 75' x 88', gravel roof, steam; \$50,000; o. Thos. G. Otis, 4508 Lake Ave.; a. Sidney Lovell, 355 Dearborn St.

Cleveland, O.—Wilson Ave., eight-sty' bk. & st. apart., 50' x 135', tile roof, steam; \$90,000; o. Cleveland Improvement Co.; a. Steffens, Searles & Hirsch.

Detroit, Mich.—Cass Ave., three-sty' bk. & st. apart., 40' x 73', comp. roof, steam; \$45,000; o. Wm. E. Rooney, 911 Hammond Building; a. S. C. Falkinburg, 903 Hammond Building.

Holyoke, Mass.—Chestnut St., cor. Appleton St., four-sty' bk. apart., 65' x 130'; \$25,000; o. Luther P. Trowbridge.

New York, N. Y.—One Hundred and Seventh St., cor. Columbus Ave., five-sty' bk. & limestone apart. with store, 25' 2" x 95'; \$25,000; o. Felix Phillips; a. Samuel Sass, 23 Park Row.

Boulevard, cor. 115th St., seven-sty' bk. & st. apart., 75' x 95'; \$150,000; o. W. L. Crow, 287 Fourth Ave.; a. James W. Taylor, 287 Fourth Ave.; a. Geo. F. Pelham, 503 Fifth Ave.

One Hundred and Thirtieth St., nr. 7th Ave., six-sty' apart.; \$75,000; o. b. Charles Brogan & Emil Meyer, 1165 Washington Ave.

One Hundred and Thirty-first St., nr. 7th Ave., five-sty' bk. & st. flat, 25' x 82'; \$25,000; o. b. Alfred Colburn, 208 W. 123d St.

W. Fifty-fourth St., No. 306, five-sty' bk. & st. stores, offices & flats, 25' x 85'; \$24,000; o. Mary E. Dempsey, 347 Jamaica Ave., Astoria, L. I.; a. Neville & Bagge, 217 W. 125th St.

Eagle Ave., cor. Westchester Ave., one six-sty' flat, 34' x 100'; 3 five-sty', 29' x 75', & one five-sty', 30' x 90'; \$120,000; o. a. b. Albert Rothermel, 683 E. 144th St.

Fifth Ave., nr. 116th St., 2 five-sty' bk. & limestone flats, 27' 4" x 85'; \$50,000; o. J. V. Signell, 250 W. 116th St.; a. Neville & Bagge, 217 W. 125th St.

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(Apartment-Houses Continued.)

Tenth St., Nos. 387-389, 2 six-sty' bk. stores & flats, 25' x 79' 8"; \$50,000; o. Wm. Evans, 49 E. 134th St.; a. M. Bernstein, 215 Broadway.

Second Ave., No. 128, six-sty' bk. store & flat, 26' x 107' & 104' 8"; \$28,000; o. Julius Dreyfus, 324 W. 59th St.; a. Geo. F. Pelham, 503 Fifth Ave.

Madison St., No. 110, six-sty' & base. bk. stores & flat, 25' x 87' 7"; \$28,500; o. Julius Dreyfus, 324 W. 59th St.; a. Geo. F. Pelham, 503 Fifth Ave.

Madison St., Nos. 330-336, cor. Scamell St., six-sty' bk. stores & flats, 33' x 70' 9" & 65' 10"; \$40,000; o. Morris Monsky, 8 Ludlow St.; a. Horenburger & Straub, 122 Bowery.

Third St., Nos. 221-225, 2 six-sty' bk. stores & flats, 27' 1" & 41' x 83' 2" & 84' 1"; \$57,000; o. a. b. Harry Fischel, 215 E. Broadway; a. Sam'l Sass, 23 Park Row.

Second St., Nos. 229-231, 2 six-sty' & base. bk. stores & flats, 24' 9" x 68' 8" & 69' 7"; \$50,000; o. Abram Bachrach, 3 Henderson Pl.; a. G. F. Pelham, 503 Fifth Ave.

Prince St., Nos. 7-11, 2 six-sty' bk. stores & flats, 30' & 25' 2" x 66' 6" & 78' 9"; \$35,000; o. Isaac Marx, 118 First St.; a. Horenburger & Straub, 122 Bowery.

St. Nicholas Ave., cor. 119th St., seven-sty' bk. & st. apart., 50' x 95', also a six-story bk. & st. fire-proof bachelor apart. adjoining same on avenue, 50' x 75'; \$250,000; o. Houpst & Hunter, 3649 Third Ave.; a. Neville & Bagge, 217 W. 125th St.

Ninety-sixth St., nr. 1st Ave., 2 five-sty' bk. & st. flats, 30' x 86'; \$60,000; o. Mrs. Silverman, 230 W. 126th St.; a. Neville & Bagge, 217 W. 125th St.

One Hundred and Forty-ninth St., nr. Boulevard, 3 five-sty' bk. & st. flats, 33' x 87'; \$100,000; o. a. b. McCracken & Bagnall, 400 W. 152d St.

One Hundred and Sixty-eighth St., cor. Union Ave., 5 four-sty' bk. flats, 25' x 85' & 25' x 75'; \$77,000; o. Geo. Ledgard, 1460 Herkimer St., Brooklyn; & William Quilan, 1577 Broadway, Brooklyn; a. W. C. Dickerson, 149th St. & 3d Ave.

One Hundred and Thirtieth St., cor. Lenox Ave., eight-sty' bk. & st. apart., 85' x 100'; \$200,000; o. Trustees of John Jacob Astor Estate, 23 W. 26th St.; the following architects are competing: Lord, Hewlett & Hull, Hoppin & Koen and Warren & Wetmore.

One Hundred and Forty-sixth St., nr. Brook Ave., five-sty' bk. & st. flat, 25' x 83'; \$22,000; o. a. b. Martin Tully, 734 E. 145th St.

Eighty-fourth St. and Riverside Drive, nine-sty' bk. & st. flat, 57.33' x 50.93' & 74.01'; \$180,000; o. James M. & Wm. R. Stewart, 131 Columbus Ave.; a. Geo. Keister, 140 W. 34th St.

Eighth Ave., cor. 112th St., five-sty' bk. stores & flat, 25.23' x 95'; \$35,000; o. Alex. McDowell, 388 Manhattan Ave.; a. G. A. Schellenger, 128 Broadway.

West End Ave., cor. 105th St., seven-sty' bk. flat, 95.11' x 75'; \$140,000; o. H. M. Wood, 57 W. 96th St.; a. James & Leo, 967 Boulevard.

One Hundred and Forty-sixth St., nr. Courtlandt Ave., five-sty' bk. & st. flat; \$20,000; o. b. Thomas B. Malcom.

Henry St., Nos. 243-245, 2 five-sty' bk. flats, 23' x 80'; \$40,000; a. N. Langer, 276 Madison St.

Henry St., No. 221, five-sty' & base. bk. flat, 23.6' x 87.6'; \$20,000; a. N. Langer, 276 Madison St.

Lewis St., Nos. 120-122, 2 six-sty' bk. stores & flats, 25' x 87.9'; \$40,000; o. Elizabeth Schlesinger, 120 Lewis St.; a. Nathan Langer, 276 Madison St.

Pike St., Nos. 70-74, six-sty' & base. bk. store & flat, 60' x 52'; \$50,000; o. Jacob Fischel, 197 Henry St.; a. Horenburger & Straub, 122 Bowery St.

Henry St., cor. Rutgers St., six-sty' bk. stores & flat, 25' x 99'; \$32,000; o. Fay & Stacom, 337 Pleasant Ave.; a. Chas. Rentz, 153 Fourth Ave.

One Hundred and Twelfth St., Nos. 233-235 E., six-sty' & base. bk. store & flat, 37.6' x 90.11'; \$32,000; o. Max Vogel, 50 West 119th St.; a. G. F. Pelham, 503 Fifth Ave.

Philadelphia, Pa.—Fortieth and Sansom Sts., six-sty' bk., st. & terra-cotta apart., 50' x 100'; o. Miss Ella Clement; e. Wm. R. Dougherty; a. Dull, Peterson & Coates.

Published Last Saturday

PART III

“THE GEORGIAN PERIOD”

Part III, though it contains only the same number of plates as does Part I, includes *seven more* Gelatine Plates than did that one.

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PART IV [in contemplation.]

American Architect and Building News Co.,
211 Tremont Street, Boston, Mass.

BUILDING INTELLIGENCE.	BUILDING INTELLIGENCE.	BUILDING INTELLIGENCE.
(Apartment-Houses Continued.) Providence, R. I. — Waterman and Thayer Sts., six-st'y bk. apart., embracing 14 suites of 7 rooms each; cost about \$75,000; o., Syndicate; gen'l c., Hartwell, Williams & Kingston; a., Fred E. Field. Worcester, Mass. — Lincoln St., four st'y fr. apart.; \$12,000; o., Wm. Banaghan; a., Earle & Fisher. CLUB-HOUSES. Lynbrook, L. I., N. Y. — On the Merrick Road, three-st'y fr. bicycle club-house; \$45,000; o., Wheelmen's Club; a., Dehli & Howard, 1193 Broadway, New York City. FACTORIES. Brooklyn, N. Y. — Classon Ave., nr. Willoughby Ave., three-st'y & base. bk. factory, 60' x 120',	(Factories Continued.) gravel roof; \$20,000; o., Wm. Bonner, 1201 Flatbush Ave.; a., J. G. Glover, 186 Remsen St. Hoboken, N. J. — Fifteenth St. and Park Ave., two-st'y bk. wall-paper factory, 100' x 256'; \$50,000; o., Potter Wall Paper Mills; a., Pollard & Steinman, 19 Union Sq., New York City. Peoria, Ill. — Aceryville, 1½-st'y st. & bk. factory, 80' x 442', iron, glass & gravel roof, hot air; \$100,000; o., Kingman Plow Co.; a., Chas. W. Traeger, 107 Huriburt St. Philadelphia, Pa. — Buttenwood St., nr. 16th St., four-st'y bk. building for truck-shop, 60' 4" x 193' 6"; o., Baldwin Locomotive Works; c., Macey, Henderson & Co. Woodland Ave., nr. 63d St., three-st'y bk. building, 56' x 162'; o., J. G. Brill Car Co.; c., Macey, Henderson & Co.	HOSPITALS. Greensburg, Ind. — Two-st'y bk. & st. asylum, 142' x 176', slate roof, steam; \$30,000; o., I. O. O. F. of Indiana; a., Philip F. Jeckel, Anderson. HOTELS. Boston, Mass. — Atlantic Ave. and Essex St., eleven-st'y steel-fr. fireproof construction, bk. & terra-cotta hotel, occupying a plot of 10,800 square feet of land; cost of site and building \$850,000; lessees, Messrs. F. A. & David S. Hammond, of New York City; o., Syndicate; gen'l. c., George A. Fuller Co.; a., A. H. Bowditch. HOUSES. Adrian, Minn. — Two-st'y bk. dwell., 38' x 60', shingle roof, hot water; \$5,000; o., Rev. S. Shels; a., G. A. Tenbusch, Duluth.

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(Houses Continued.)

Boston, Mass.—*Normandy St.*, nr. Stanwood St., Ward 25, 4 two-sty' fr. dwells., 24' x 51', flat roofs, furnace; \$20,000; o., a. & b., Geo. W. Johnson, 55 Devon St.

Stanwood St., nr. Normandy St., Ward 20, 3 two-sty' fr. dwells., 24' x 51', flat roofs, furnace; \$15,000; o., a. & b., Geo. W. Johnson, 55 Devon St.

Bowdoin St., cor. Greenbriar St., Ward 20, two-sty' fr. dwell., 36' x 37', pitch roof, furnace; \$5,000; o., Wm. O'Connell; a. & b., J. A. Silver, 48 Congress St.

Wellesley Park, nr. Melville Ave., Ward 20, 6 2½-sty' fr. dwells., four 20' x 26' x 35', one 27' x 40', one 27' x 45', pitch roofs, furnace; \$25,000; o., a. & b., Haddock & Allen, 12 Vinson St., Dorchester.

Clayton St., nr. Dickens St., Ward 24, 4 three-sty' bk. dwells., 23' x 38', flat roofs, stoves; \$20,000; o. & b., Gipson & Knight, 204 Dudley St.

Roosevelt St., Nos. 24-22, Ward 12, 2 three-sty' bk. dwells., 23' x 47', flat roofs, stoves; \$16,000; o., a. & b., B. F. Connolly, 93 Dale St.

Spring St. and Savin Hill Ave., Ward 20, 2 two-sty' fr. dwells., 31' x 35', flat roofs, stoves; \$8,500; o., Crescent Assn.; b., N. W. Wanger, 7 Grafton St., Dorchester.

Washington St., cor. Cambridge St., Ward 25, 3 three-sty' bk. dwells. & stores, one 47' x 47', one 27' x 31' x 52', one 36' x 56', flat roofs, steam; \$35,000; o., John E. Carlson; b., H. J. Ecklund, Oak St., Brighton District.

Lorraine St., nr. Colberg Ave., Ward 23, two-sty' fr. dwell., 28' x 37', pitch roof, hot water; \$4,500; o., a. & b., Thos. E. Hovey, Roslindale.

Corona St., Ward 20, two-sty' fr. dwell., 24' x 27' x 31', pitch roof, furnace; \$3,000; o., a. & b., Thos. S. Murdock, 15 Bearse St.

Kent St., No. 37, and *Vernon St.*, Nos. 78-80, Ward 19, 3 three-sty' bk. dwells., two 20' x 40', one 20' x 23' x 44', flat roofs, stoves; \$12,000; o. & b., Louis Goldman, 30 Rochester St.

Morris St., No. 57, Ward 1, two-sty' fr. dwell., 21' x 43', flat roof, stoves; \$4,000; o. & b., J. Goldniger, 155 Meridian St.

Dove St., nr. Dorchester St., Ward 14, 3 two-sty' fr. dwells., 22' x 35', flat roofs, stoves; \$12,000; o., a. & b., S. W. Johnson, 591 Broadway, S. Boston.

W. Second St., nr. Dorchester Ave., Ward 14, 2 two-sty' fr. dwells., 22' x 35', flat roofs, stoves; \$8,000; o., a. & b., S. W. Johnson, 591 Broadway, S. Boston.

Bellevue St., nr. Alden St., Ward 23, two-sty' fr. dwell., 22' x 26', pitch roof, stoves; \$2,500; o., a. & b., J. A. Hovey, Fresno St., Roslindale.

Shepton St., nr. Denver St., Ward 24, two-sty' fr. dwell., 25' x 31', pitch roof, furnace; \$4,000; o., F. J. Stark; b., Andrew Crawford, 62 Draper St., Dorchester.

BUILDING INTELLIGENCE.

(Houses Continued.)

Corona St., nr. Geneva Ave., Ward 20, 2 two-sty' fr. dwells., 26' x 41', flat roofs, furnace; \$9,000; o., John Cook, 38 Everett Road; b., James Cook.

Anson St., nr. South St., Ward 23, two-sty' fr. dwell., 24' x 44', flat roof, stoves; \$3,800; o., a. & b., Wm. Swanson, 88 Wenham St., W. Roxbury.

Beech St., nr. Colberg Ave., Ward 23, two-sty' fr. dwell., 25' x 40', pitch roof, steam; \$5,000; o., Albert E. Heitz, 170 Beech St., Roslindale; a. & b., Richard Duffie.

Maverick St., Nos. 210-212, Ward 2, 2 three-sty' bk. dwells., one 23' x 28' x 60', one 23' x 36' x 60', flat roofs, stoves; \$15,000; o., Vincenzo N. Bellizia; a., S. S. Joslin, 218 Tremont St.

Poplar St., nr. Heathcote St., Ward 23, two-sty' fr. dwell., 25' x 30', pitch roof, furnace; \$2,500; o., Annie C. Warner; a. & b., W. H. Warner, 10 Conway St., Roslindale.

Nixon St., nr. Mather St., Ward 20, 2½-sty' fr. dwell., 26' x 49', pitch roof, furnace; \$4,000; o., Sarah Eaves; a. & b., H. A. Black, 24 Norfolk St.

Cheney St., No. 5, Ward 21, two-sty' fr. dwell., 30' x 51', flat roof, furnace; \$6,000; o. & b., A. C. Chisholm, 100 Devon St.

Westville St., No. 212, Ward 20, two-sty' fr. dwell., 25' x 47', flat roof, stoves; \$4,700; o., a. & b., Frank Fryer, 18 Harbor View St.

Moultrie Ave., nr. Centre St., Ward 26, 2½-sty' fr. dwell., 26' x 51', pitch roof, furnace; \$4,500; o., Mary E. Sundberg; b., John S. Mann, 7 Charles St., Dorchester.

Chelsea Ave., nr. Saratoga St., Ward 1, two-sty' fr. dwell., 23' x 30', flat roof, stoves; \$2,000; o., Maria Ruffo; b., C. H. Bates.

Custer St., Nos. 6 & 8, Ward 22, 2 two-sty' fr. dwells., 24' x 50', flat roofs, furnace; \$8,000; o., Bridget T. Ryan; a., W. W. Dinsmore, 28 School St.

Bennington St., No. 533, Ward 1, two-sty' fr. dwell., 22' x 56', flat roof, stoves; \$4,500; o. & b., A. Finkelstein, 177 Chelsea St., E. Boston.

Brooklyn, N. Y.—*Lexington Ave.*, nr. Throop Ave., 5 three-sty' bk. dwells., 27' x 65'; total cost, \$32,500; o., a. & b., Joseph Taylor, Garfield Building.

Nostrand Ave., cor. Degraw St., three-sty' bk. dwell., 21' x 80' x 60', gravel roof; \$7,500; o., Wm. R. Pearce, Jersey City, N. J.; a., J. L. Hill, 996 St. John's Pl.

Nostrand Ave., cor. St. John's Pl., three-sty' bk. dwell., 21' x 80' x 67', gravel roof; \$7,500; o., Wm. R. Pearce, Jersey City, N. J.; a., J. L. Hill, 996 St. John's Pl.

Forty-second St., nr. 12th Ave., two-sty' & attic fr. dwell., 26' x 41', shingle roof; \$5,000; o., Jose A. Pesant, 435 First St.; a., B. Driesler, 1432 Flatbush Ave.

Patchen Ave., nr. Lexington Ave., 5 three-sty' bk. dwells., 20' x 55'; \$32,500; o. & b., Jacob Voel-

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Cleveland, O.—*Cedar Ave.*, 2½-sty' fr. dwell., 45' x 80', slate roof, furnace; \$5,000; o., J. H. W. Wigman; a., Steffina, Searles & Hirsch.

Chicago, Ill.—*Kimball Ave.*, No. 1427, two-sty' fr. dwell., 48' x 51', shingle roof, furnace; \$5,000; o., M. Kimball; a., Fred Ahlschlager, 70 La Salle St.

Dayton, O.—Two-sty' bk. dwell., slate roof, furnace; \$6,000; o., J. L. Layman; a., Frank J. Otter & Co., McIntire Building.

Two-sty' bk. dwell., slate roof, furnace; \$5,000; o., Russell Bates; a., Frank J. Otter & Co., McIntire Building.

Detroit, Mich.—*St. Aubin Ave.*, 2½-sty' bk. dwell., 38' x 46', slate roof, furnace; \$6,000; a., Kastler & Hunter, 927 Chamber of Commerce Building.

Jersey City, N. J.—*Central Ave.*, nr. Charles St., 3 two-sty' bk. stores & dwells., 50' x 75'; \$18,000; o., Mrs. Elizabeth Vervenne; a., Emile Guhl, 19 Charles St.

Marshalltown, Ia.—Two-sty' fr. dwell., cedar roof, hot water; \$7,000; o., Chas. Hall; a., Prescott & Crocker.

Minneapolis, L. I., N. Y.—2½-sty' fr. dwell.; \$6,000; o., Geo. H. Kennedy, 10 St. James Slip, New York City; a., Clarence K. Birdsall, Bayshore.

Mt. Carmel, O.—2½-sty' fr. dwell., 36' x 45', slate roof, hot air; \$10,000; o., Guy R. Johnson; a., Andrew R. James, 2637 Park Ave., Cincinnati.

Mt. Kisco, N. Y.—2½-sty' fr. dwell., 34' x 36'; \$5,500; o., Artificial Granolithic Paving Co.; a., Fred R. Meres, 579 Union Ave., New York City.

Newton, Mass.—*Carver Road*, Ward 5, two-sty' dwell., 30' x 38', furnace; \$6,000; o., Mrs. C. M. Smith; b., G. E. Willmington.

Woodman St., Ward 6, two-sty' dwell., 27' x 50', furnace; \$5,000; o., B. S. Poole; b., W. Kellar.

New York, N. Y.—*Ocean Ave. and St. Paul's Ct.*, two-sty' fr. dwell.; \$8,000; o., W. A. Brown, 493 Eighth St.; a., J. J. Petit, 186 Remsen St.

Lenox Ave., No. 229, four-sty' bk. dwell., 25' x 78'; \$20,000; o., Riverside Building Co., 459 Boulevard; a., Clarence True, 459 Boulevard.

Eighty-sixth St., Nos. 313-323, 6 five-sty' bk. & st. dwells., 17', 18', 17.2' x 62'; three \$18,000 and three \$20,000; o. & a., Alonzo B. Kight, 102 W. 81st St.

Oak Park, Ill.—One-sty' bk. dwell., 25' x 36', shingle roof, steam; \$6,600; a., Wm. Arthur Bennett, 311 Unity Building, Chicago.

Summit, N. J.—2½-sty' fr. dwell., 30' x 75'; \$10,000; o., O. F. Livingston; a., R. S. Shapter.

St. Louis, Mo.—*Victor St. and Grand Ave.*, 2½-sty' bk. dwell., 25' x 48', slate roof, furnace; \$6,000; o., F. W. Eggers; a., O. J. Wilhelm, Granite Building.

Vincennes, Ind.—Two-sty' & base bk. dwell., 40' x 70', slate roof, hot air; \$9,000; o., Dr. L. M. Beckes; a., Thos. Campbell.

Two-sty' & base st. dwell., 42' x 47', slate roof, hot water; \$7,000; o., John Hartigan; a., Thos. Campbell.

Two-sty' fr. dwell., 48' x 76', shingle roof; \$6,000; o., Powell Bros.; a., Thos. Campbell.

Worcester, Mass.—*Southbridge St.*, three-sty' fr. dwell., 30' x 50'; \$5,000; o., William Stanton; c., Patrick Casey.

Clifton Pl., three-sty' fr. dwell., 32' x 60'; \$5,000; o. & c., C. A. Stone.

Frederick St., 2½-sty' fr. dwell., 26' x 54'; \$4,000; o. & b., Andrew K. Nelson.

Tainter St., three-sty' fr. dwell., 28' x 62'; \$5,000; o. & c., Patrick Hogan.

Berkman St., 2 two-sty' fr. dwells., 26' x 32' each; \$8,000; o. & c., Geo. Kingston.

MERCANTILE BUILDINGS.

Boston, Mass.—*Fulton St.*, Nos. 7-11, Ward 6, five-sty' bk. business-building, 43' x 100' x 100', flat roof, steam; \$60,000; o., Rebecca A. Green; a., Peabody & Stearns, Exchange Building.

Buffalo, N. Y.—*Main St.*, cor. Mohawk St., seven-sty' bk. & steel business structure, 48' x 80'; \$75,000; o., J. B. Mayer and Louis Weil; b., Chas. Mosier.

Cleveland, O.—*High and Middle Sts.*, six-sty' bk. & copper business building, 56' x 82', gravel roof, steam; \$50,000; o., M. A. Bradley, Ajax Building; a., Carnegie Steel Co., Cuyahoga Building.

New York, N. Y.—*Eighth Ave.*, cor. 42d St., one-sty' bk. bank-building, 49' 7½' x 99' 11½'; \$150,000;

Continued on page xvii.)

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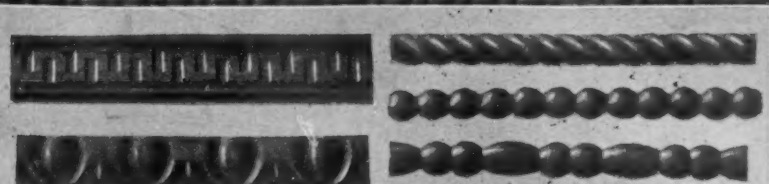
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Henry F. Kilburn, Architect. 10 views
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Alfred Zucker, Architect. 11 views
- "EXCHANGE CLUB-HOUSE," Boston, Mass.
Ball & Dabney, Architects. 12 views
- "CENTURY CLUB-HOUSE," New York, N. Y.
McKim, Mead & White, Architects. 7 views
- "COLUMBIAN CLUB-HOUSE," St. Louis, Mo.
Alfred F. Rosenheim, Architect. 13 views
- "MARYLAND CLUB-HOUSE," Baltimore, Md.
Baldwin & Pennington, Architects. 8 views
- "GROLIER CLUB-HOUSE," New York, N. Y.
Romeyn & Stever, Architects. 5 views
- "UNIVERSITY CLUB-HOUSE," Philadelphia, Pa.
W. Eyre, Jr., Architect. 3 views
- "DUQUESNE CLUB-HOUSE," Pittsburgh, Pa.
Longfellow, Alden & Harlow, Arcts. 6 views
- "ART CLUB," Philadelphia, Pa.
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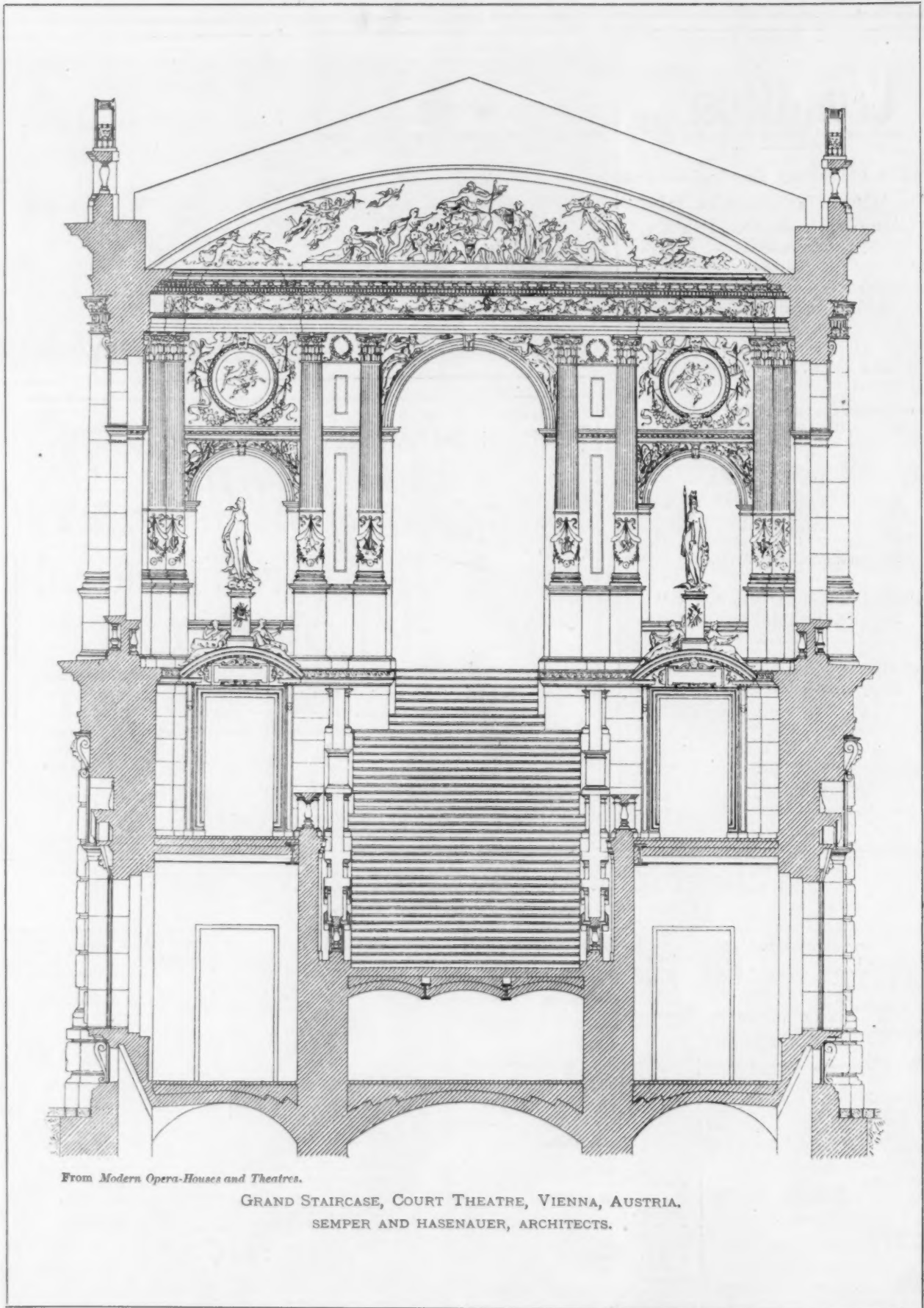
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Clinton. Clinton Wire Cloth Co. [Metallic Lathing.]		NEW YORK.		New York Belting and Packing Co., Ltd. [Belting.]		Taylor Co., N. & G. [Tin Roofing.]	
		Brooklyn. Bommer Brothers. [Spring Hinges.]		New York Mastic Works. [Mastics.]		Thorn, J. S. Co. [Sheet Metal.]	
		Irvington-on-Hudson. Lord & Burham Co. [Conservatories.]		Northrop & Co. [Metal Ceilings.]		Pittsburgh.	
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		NEW YORK.		U. S. Mineral Wool Co. [Mineral Wool.]		[Architecture.]	
		Brooklyn. Bommer Brothers. [Spring Hinges.]		Warren Chemical & Mfg. Co. [Asphalt Roofing.]		WISCONSIN.	
		Irvington-on-Hudson. Lord & Burham Co. [Conservatories.]		Williams, John. [Wrought Metal.]		So. Milwaukee.	
		New York City. Aschmann & Pollarin. [Marble Mosaics.]				Stowell Mfg. & Fdry. Co. [Parlor Door Hanger.]	



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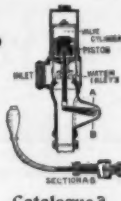


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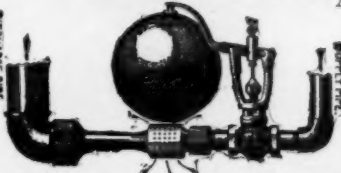
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COMPETITIONS.

COURT-HOUSE.

[At Wilkesbarre, Pa.] Competitive plans and specifications are wanted March 15 for a Court-house. A. D. HAY, Chmn. Co. Commrs. 1207

PROPOSALS.

Treasury Department, Office Supervising Architect, Washington, D. C., January 23, 1899. Sealed proposals will be received at this office until 2 o'clock P. M. on the 23d day of February, 1899, and then opened, for fixing in place complete the boiler-plant, low-pressure and exhaust steam-heating and mechanical ventilating apparatus, supply-pumps and tanks for water-supply, etc., and pipe and duct covering for the United States Post-office and Court-house building at Kansas City, Mo., in accordance with the drawings and specification, copies of which may be had at this office or the office of the superintendent at Kansas City, Mo. JAMES KNOX TAYLOR, Supervising Architect. 1207

SCHOOL-BUILDING.

[At Flandreau, S. D.] Department of the Interior, Office of Indian Affairs, Washington, D. C. Sealed proposals will be received until February 23, 1899, for furnishing and delivering the necessary materials and labor required in the construction of one brick school and assembly build-

PROPOSALS.

ing at the Indian school, Flandreau, S. D. W. A. JONES, commissioner. 1207

ELECTRIC WIRING.

[At St. Albans, Vt.] Treasury Department, Washington, D. C. Sealed proposals will be received at this department until February 14, 1899, for the installation of a system of conduits and wiring for electric lighting in the U. S. Custom house, St. Albans, Vt. W. B. HOWELL, assistant secretary. 1206

ELECTRIC WIRING.

[At Akron, O.] Treasury Department, Washington, D. C. Sealed proposals will be received at this department until February 14, 1899, for the installation of a system of conduits and wiring for electric lighting in the U. S. Post-office, Akron, O. W. B. HOWELL, assistant secretary. 1206

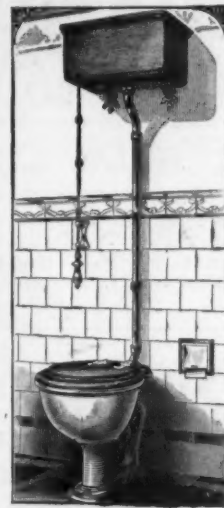
ELECTRIC WIRING.

[At Pottsville, Pa.] Treasury Department, Washington, D. C. Sealed proposals will be received at this department until February 14, 1899, for the installation of a system of conduits and wiring for electric lighting in the U. S. Post-office, Pottsville, Pa. W. B. HOWELL, assistant secretary. 1206

BOILER-HOUSE.

[At League Island, Pa.] Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, D. C., until February 18, 1899, for the construction of a workshop and boiler-house for ordnance at the Navy Yard, League Island, Pa. MORDECAI T. ENDICOTT, Chief of Bureau. 1207

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[At Savannah, Ga.] Bids are wanted February 21 at the U. S. Engineer Office for cement and broken stone, delivered at Tybee Island, Ga. CASSIUS E. GILLETTE, Capt. Engrs. 1207

OPERA-HOUSE.

[At Columbus, Ga.] Bids will be received until April 1 for erecting a brick and stone opera-house for Springer Bros., of Columbus. It is estimated to cost \$25,000. 1207

COURT-HOUSE.

[At Buckhannon, W. Va.] Bids are wanted February 16 for a Court-house. R. A. DARNALL, Chmn. Co. Commrs. 1206

ARMORY.

[At Annapolis, Md.] Proposals will be received at the Bureau of Navigation, Navy Department, until the 16th day of February, 1899, for the construction of a boat-house and an armory at the Naval Academy, Annapolis, Md. A. S. CROWNSHIELD, Chief of Bureau of Navigation. 1206

COURT-HOUSE.

[At Arkadelphia, Ark.] Bids will be received until March 1 for erecting a Court-house. J. H. CRAWFORD, Chairman Committee in Charge. 1206

SCHOOL-HOUSE.

[At Ellendale, N. D.] Bids will be received until February 16 by the Industrial School Board for erecting a new school. 1206

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SECTION 1. No Member should enter into partnership, in any form or degree, with any builder, contractor, or manufacturer.

SECTION 2. A Member having any ownership in any building material, device or invention, proposed to be used on work for which he is architect, should inform his employer of the fact of such ownership.

SECTION 3. No Member should be a party to a building contract except as "owner."

SECTION 4. No Member should guarantee an estimate or contract by personal bond.

SECTION 5. It is unprofessional to offer drawings or other services "on approval" and without adequate pecuniary compensation.

SECTION 6. It is unprofessional to advertise in any other way than by a notice giving name, address, profession, and office hours, and special branch (if such) of practice.

SECTION 7. It is unprofessional to make alterations of a building designed by another architect, within ten years of its completion, without ascertaining that the owner refuses to employ the original designer, or, in event of the property having changed hands, without due notice to the said designer.

SECTION 8. It is unprofessional to attempt to supplant an architect after definite steps have been taken toward his employment.

SECTION 9. It is unprofessional for a Member to criticise in the public prints the professional conduct or work of another architect except over his own name or under the authority of a professional journal.

SECTION 10. It is unprofessional to furnish designs in competition for private work or for public work, unless for proper compensation, and unless a competent professional adviser is employed to draw up the "conditions" and assist in the award.

SECTION 11. No Member should submit drawings except as an original contributor in any duly instituted competition, or attempt to secure any work for which such a competition remains undecided.

SECTION 12. The American Institute of Architects' "schedule of charges" represents minimum rates for full, faithful and competent service. It is the duty of every architect to charge higher rates whenever the demand for his services will justify the increase, rather than to accept work to which he cannot give proper personal attention.

SECTION 13. No Member shall compete in amount of commission, or offer to work for less than another, in order to secure the work.

SECTION 14. It is unprofessional to enter into competition with or to consult with an architect who has been dishonorably expelled from the "Institute" or "Society."

SECTION 15. The assumption of the title of "Architect" should be held to mean that the bearer has the professional knowledge and natural ability needed for the proper invention, illustration and supervision of all building operations which he may undertake.

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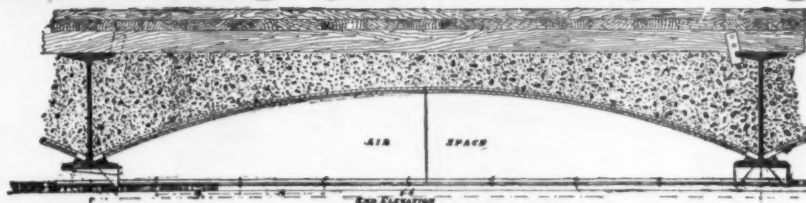
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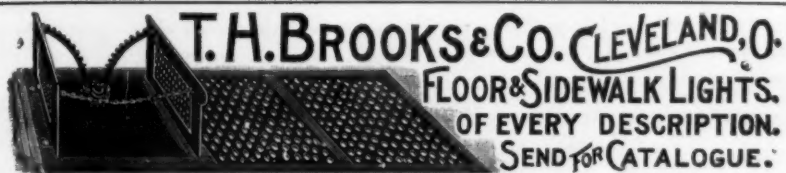
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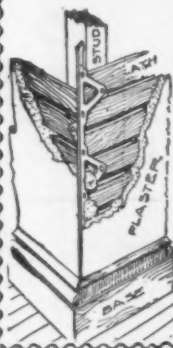
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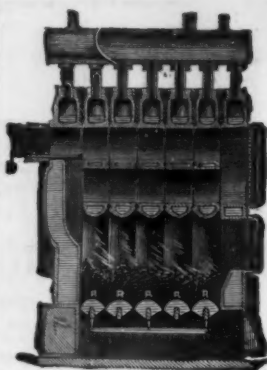
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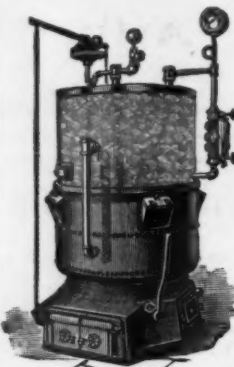
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