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AS the complications that always attend a busy subscription-season are this year made much more serious and involved by the impending discontinuance of our Imperial Edition, we must ask the subscribers to that edition to lighten our difficulties and remove our uncertainties by notifying us promptly as to what is to be their action, in each case, under the circumstances; and we therefore beg them to let us hear from them during the next fortnight, whether with or without a remittance. It is important to know how these quondam subscribers are to divide themselves between the two remaining editions—International and Regular—since, if we are at the last moment forced to guess, we are quite as likely to go to press, for our issue of January 6, with an edition too small as with one too large to meet the actual demands of subscribers, and we would be as unwilling to cause disappointment and delay in the receipt of the journal by any subscriber as to incur the cost of printing a supplementary edition. When, a few weeks ago, we spoke of this change, we neglected to make the statement that in the cases of subscriptions paid beyond the close of the year the necessary adjustment of the account would be made as rapidly as possible. The copies of the International Edition sent during the past month to those not at present subscribers to it deserve to have their claims considered and tested by figures and any standard of comparison. They were not specially prepared for the purpose, but merely exhibit the ordinary make-up of our International issues. To tell the truth, they are rather below than above par, since, not foreseeing that they would be needed for such use, we did not increase the edition of plates imported from abroad and so had to expand to the required number by copying, and the copy of a reproduction is never satisfactory.

THERE is one further reason for asking subscribers to give prompt notice of their intentions. As announced, the Fifth Part of the "Georgian Period" will be given free to full-paying subscribers to the International Edition for 1900, but we cannot go to press with this Fifth Part until we know how large an edition will be required.

SOME months ago, we ventured to observe that the present position of the Boston Museum of Fine-Arts, on Copley Square, was unsuited to the proper display of works of art, particularly for pictures, on account of the colored light reflected from the higher buildings in close proximity to it, and that, as the land on Copley Square was now very valuable, it might be wise for the Trustees to secure a tract of the vacant land in the neighborhood of the Back Bay Fens, which could

now be had at a low price, and would afford ample space, and unobstructed light, in a situation which would before long be very central. This suggestion was received at the time with derision by the Boston Transcript, but it seems that the Trustees of the Museum thought as we did, and, by purchases from a considerable number of owners, they have, during the past few months, secured a fine tract at the Huntington Entrance to the Fens, extending from Huntington Avenue to the Fenway, and containing something like twelve acres. In this large area a building can be planned which will accommodate the present and future collections of the Museum for many years to come, under the best conditions of lighting, freedom from dust, and isolation from other buildings, at the same time that it will be readily accessible, by way of Huntington Avenue, from nearly all parts of the city and suburbs. Under such circumstances the Museum should become more useful than ever, not only on account of its more central position in the residence portion of the metropolitan district, but because its galleries, better lighted, and freer from dust, and from danger of fire, than they can be in Copley Square, will be likely to attract a greater number of the loan collections, which have always formed an interesting and important feature of the Art Museum collections. It will be remembered that the Boston Museum of Fine-Arts is, in proportion to the population of the community in which it is situated, visited by more persons than any other in the country, except the one in Chicago, and it is a satisfaction to think that the efforts of the Trustees, who have made it such an important element in Boston life, will no longer be hampered by the unfavorable conditions which have, of late years, affected them in Copley Square.

IT is rather early to indulge in biographical comments on the old Museum building, as it is likely to continue in use for its present purpose for some time to come; but it may be interesting to recall the fact that it was one of the first buildings in the United States in which terra-cotta was used. When it was built, about twenty-five years ago, the Museum at South Kensington was barely completed, and Mr. Sturgis, one of the architects of the Boston building, had just returned from London, full of enthusiasm over the new material which had been used so successfully there. It can hardly be said, perhaps, that his choice of Italian Gothic as the style of the new building was quite happy, but it must be remembered that the Gothic Revival was then in full career, and, at that time, nearly all English architects, and a large proportion of American ones, resorted naturally to the mediæval styles to help them out of such difficulties as were presented by the necessity of designing a lower story filled with windows, surmounted by one almost without openings. Considering, therefore, the architectural tendencies of the time, Mr. Sturgis produced a composition which was at least interesting, and in good keeping, while certain portions of the building, including much of the terra-cotta detail, can justly be called beautiful. If we are not mistaken, all the terra-cotta work in the original part of the building was modelled and burned in England, and set up in Boston under the direction of a representative of the English makers, who, when his task was over, remained in this country, to direct the establishment of a small manufactory of terra-cotta, the pioneer enterprise in what is now a great American industry. Besides the new terra-cotta material, Mr. Sturgis introduced other technical novelties. If we are not mistaken, the South Kensington Museum was the first building in which Colonel Scott's "selenitic cement" was used, and Mr. Sturgis employed the same material to a certain extent in the Boston building, using, for preparing it, a mortar-mixing machine, then almost an unknown device here; and for the stonework, of which there is not much in the building, he selected a peculiar milky-white granite, from Randolph, Mass., which has, so far as we know, never since been used in any structure in Boston.

THERE are many symptoms that the culmination of the present high prices for building-materials has been reached, and that it will not be long before a substantial decline is witnessed. Iron, which is protected by an enormous duty, will probably be kept at the highest possible point, as long as the manufacturers can sell their surplus product abroad at a profit, but the price has already declined in London, and a fall abroad,

which would make it unprofitable to export iron, would be likely to lead to an accumulation of stock here, and consequent material concessions in price; while the new iron-working plants which are in process of formation in various places in this country and Canada will naturally try to get a share of the business by competition in prices. The check which building operations have suffered in consequence of the advance in materials is likely also to be felt in the iron market, as it has already been felt in the lumber market, pine being now sold in Chicago for less than it brought a few weeks ago, at the same time that the output is being immensely increased. With, as has been predicted, twice the usual quantity of new lumber for sale next spring, and an unusually small amount of building to use it for, prices would naturally fall, as lumber-dealers do not like, any more than other people, to pay interest and insurance, and, perhaps, storage, on unsalable stock. With Southern pine, for which there is a large export demand, prices can be kept up, in the same way as with iron, by keeping the stock at home small enough to avoid domestic competition, and to take full advantage of the tariff; but spruce and pine cannot be exported from the United States in competition with Canada, and any overproduction will produce its natural effect. Whether other metals will decline in sympathy with iron it is impossible to say. Tin-plate is lower, owing to a considerable fall in the price of block tin, and this should also affect the price of solder and of bronze; and copper and brass have also fallen slightly; but the great hardware manufacturers, who are large consumers, both of brass and bronze, are said to look for prices for their goods next year higher than the high ones which now prevail. On the other hand, a great reduction has been made in prices of window-glass, a cut of thirty-three and one-third per cent in single-thick, and forty per cent in double-thick, being just announced by the combination which controls most of the business. It is surmised that this is an attempt to crush the competition of the multitude of small manufactories which have sprung up, but it is probable that, even at the reduced prices, the small establishments can do business at a profit, and, so long as this is the case, prices are not likely to be restored.

AN extraordinary case of larceny is reported from Chicago. Some time ago, a man named De Young bought a double lot, with a house on it, on the corner of two streets in a certain part of the city. The house being vacant, he advertised for a tenant, and, in course of time, an applicant appeared. Mr. De Young went with his customer to see the house, and was, not unnaturally, surprised to find only the foundation. There were no marks of fire or tempest on the premises, and, in his search for the ruins of his property, he received another surprise at discovering the superstructure of his building in a lot some two blocks away, resting on a new foundation, and occupied by a tenant, who professed to know nothing of the migrations of his abode, and said that he was paying his rent regularly to the owner of the lot on which the house now stood. Mr. De Young, not being able to carry his house back to its place himself, has now brought suit against the owner of the lot on which it stands, Mrs. Jane G. Patterson, to compel her to restore it to him, and to account to him for the rents which she has received for its use.

IT is not probable that Mrs. Patterson was a party to the stealing of the house, which is more likely to have been an enterprise of one of those "hustling" business-men of whom, as we are told, Chicago is so proud. It would not be difficult to move a wooden house, such as this seems to have been, a few hundred feet over level ground, and set it on a new foundation, prepared, ready for it, on a lot belonging to the speculator, and sell the whole at a bargain to some one with money to invest; and the operation would be comparatively safe; for the moving of a house is an everyday occurrence, which would not excite the suspicions of the neighbors, and the new purchaser, finding the title to the land unencumbered, and receiving a satisfactory explanation of the moving of the building, would pay, with full and justifiable confidence, the purchase-money, which it is needless to say, would immediately disappear from the view of attaching officers and sheriff's deputies. Meanwhile, the real owner would be likely to find some difficulty in getting pecuniary satisfaction for his loss. It is very doubtful whether an innocent purchaser of land is obliged to ask whether the buildings that he finds on it came there honestly, or can be compelled to give them up to another claimant, for the reason that the laws concerning real-estate are framed, in general,

with the purpose of preventing disputes, by requiring notices and records, so that a person who has complied with the necessary formalities in buying can rest secure in the possession of his property, without fearing to be deprived of it by ancient or trumped-up claims against former owners. This is certainly in the interest of reason and justice, and, while the owner of portable goods, which have been stolen from him, can reclaim them wherever he finds them, the case is, and should be, different with a building. No doubt, the man who steals a house can be punished as a criminal, if he can be caught, but it will be interesting to see whether the house itself can be recovered from an innocent purchaser.

THE five principal artistic societies of Detroit, including the Architectural Club, the Michigan Chapter of the American Institute of Architects, the Water-color Society, the Art Association and the Ceramic Art Club, at the instance of the Architectural Club, have taken steps to form what is to be known as the Detroit Federation of Art. This organization is intended to unite the resources of the various societies in encouraging local art, and influencing and directing public opinion in artistic matters, and it should have a great opportunity for usefulness in what is already one of the most beautiful cities in the United States.

M. CHEVALLIER, a well-known architect of Nice, in France, describes an advertising scheme of his invention, which will interest many people here, as well as abroad. It appears that the principal street in Nice, the Avenue de la Gare, is greatly frequented, and rents have risen to such a height that a certain building within M. Chevallier's knowledge, which cost, including the land, fourteen thousand dollars, is now leased for five thousand dollars a year. Naturally, every tenant cannot afford to pay such a rent, yet the people who do not possess establishments on the Avenue de la Gare would like to make their existence known to the people who walk along that street; and one of M. Chevallier's clients, a restaurant-keeper, requested him to devise a plan for accomplishing this object. The architect, reflecting that people in city streets walk with their eyes directed generally downward, so as to see where they are to step, concluded that the best location for an advertisement would be the sidewalk. Studying the nature of the advertisement that would be most suitable for his client's purpose, he decided, if he could get permission, to cut a little pit in the middle of the sidewalk, and cover it with a sheet of thick glass, on which the announcement desired should be inscribed. In the present case, the inscription would merely call attention to the fact that an excellent restaurant was open at a certain number on a neighboring street, but this simple piece of information, which was to be rendered intelligible at night by two incandescent lamps beneath it, was to be reinforced by a graphophone, also placed in the pit, which would recite at frequent intervals the *menu du jour*. The Grande Voirie, or, as we should say, the Department of Public Works, of the city approved the plan, and one of its officials even suggested the use, in place of the glass, which would become dim with wear, of a plate of sheet-iron, with the letters cut through it; but the Voirie Urbaine, or Street Department, made difficulties, and M. Chevallier has not yet been able to carry out his idea, which he willingly imparts to his professional brethren.

THE Museum of Natural History in New York has just thrown open a fine collection of casts of Mexican and Maya sculptures, and of copies of manuscripts in the Mexican and Maya hieroglyphic writing, so that now, perhaps for the first time, the student is enabled to compare a large number of inscriptions, and in this way, probably, to discover the key by means of which they can be interpreted. When once the key is found, a new chapter in the history of America and of the human race will be opened to us, just as the discovery of the Rosetta stone, and, later, Rawlinson's successful study of the cuneiform inscriptions, extended our definite historical knowledge over a period, anterior to the first Olympiad, from which history proper formerly took its beginning, nearly three times as long as the whole period from the first Olympiad to the present day. Except that we have no traditions or poetic legends to give a clue to the Maya history or mythology, there is no reason why the Central American hieroglyphics should not be deciphered, perhaps as easily as the cuneiform inscriptions; and it is to be hoped that the New York collection may attract many students, ambitious to win the reputation which certainly awaits the person who first interprets them.



BUILDING TROUBLES.—THE RESOLUTION OF THE BUILDING-CONTRACTORS' COUNCIL.—AN ARCHITECT SUEDE BECAUSE OF FAULTY ESTIMATE.—THE DECORATIVE SUCCESS OF THE RECENT CIVIC CELEBRATION.

VOLUMES have already been written by the local press concerning the present state of the labor troubles here in Chicago, and the more one reads the less one seems to know about the actual condition of affairs, and certainly the farther off seems any chance of adjustment. As mentioned in our last letter, the demands of the Unions have simply been growing beyond the point of endurance and the contractors' associations have at last turned, like the proverbial worm, and now it is a question with many right-minded people which are being the most exacting, and while actually neither one nor the other may be entirely right or wrong, the fact remains that all building interests are completely stifled here in Chicago and a quietus put to all building activity as effectually as when faint-heartedness lighted on the builders of the Tower of Babel. Building enterprises in neighboring cities have, it is said, increased about nine per cent over those of last year, while with us almost no new contracts are being signed for 1900, and the work now on hand is being pushed as rapidly toward completion as circumstances will permit.

As far as the Unions are concerned, the walking-delegate is one of the primal causes of all the trouble, and the contractors' associations seem to take the stand, that the time has come for fighting his meddling interference, and are no longer struggling for an amicable settlement that will start up activity again in building circles, but have set their faces firmly against the disagreeable fact, have squared their jaws and say, "No! we will not starve as soon as some other people, and we'll fight it out now, in this year of grace 1900, which is about to dawn for us." So their attitude has not been one of conciliation, and the calamity of enforced idleness to hundreds and hundreds of men in our city, of all classes, from the architect down, seems to be the direct outcome of the trouble, though what the ultimate result will be it is at this writing impossible to tell.

About two weeks ago the Building Contractors' Council, which is practically a committee representing all the various trades, issued the following resolution, which shows, in a nutshell, the existing conditions on one side of the question.

"Whereas, all branches of trade and commerce in Chicago, except the building trades, are sharing the general prosperity of the country; and,

"Whereas, in contrast to other large cities, a steady decrease has taken place in the number and amount of the building-permits issued in Chicago; and,

"Whereas, the cost of building-construction in Chicago has been increased by the action of the Trades' Unions affiliated with the Building Trades' Council, in limiting the amount of work a man may perform in a working-day, in some instances cutting his activity in half; and,

"Whereas, an additional expense has been caused by the prohibition on the part of certain Unions, members of the Building Trades' Council, of the use of labor-saving machinery; and,

"Whereas, the cost of construction has been further increased by the costly and harassing delays caused by strikes, sympathetic strikes and lock-outs, due to the arbitrary, unjust, and often lawless, acts of the business agents of said Unions; and,

"Whereas, this state of affairs has reached a stage where the best interests of workmen, contractors, architects, owners and the city at large are in jeopardy; therefore, be it

"Resolved, That, on and after the first of January, 1900, the trades represented in the Building Contractors' Council shall not recognize:—

"First.—Any limitation as to amount of work a man shall perform during his working-day.

"Second.—Any restriction of the use of machinery.

"Third.—The right of any person to interfere with the workman during working-hours.

"Fourth.—The sympathetic strike.

"Fifth.—Any restriction of the use of any manufactured material, except prison-made.

"Sixth.—The right of the Unions to prohibit the employment of apprentices.

"And be it further

"Resolved, That a copy of these resolutions be sent to the Building Trades' Council and its affiliated Unions, as outlining the position of the Building Contractors' Council with respect to conditions existing in the building trade at the present time that are detrimental to the welfare of all the parties concerned, with the assurance that there is no disposition on the part of the Building Contractors' Council to question the present rate of wages, hours, or the principle of legitimate Unionism."

The Building Contractors' Council represents some of the strongest master-contractors' organizations in the city, and the names of nearly all the large contracting firms are enrolled in some one of these organizations. Consequently, it ought not to be a weak organization which has taken a stand against what we all know is a hydra-headed power, the Chicago Labor Unions. Notwithstanding the fact that strong organizations are represented in this Council, the only one which has as yet formally pledged itself to accept them is that of the plumbers, and they have actually thrown down the gage of battle. It is not improbable that before January 1, many, if not all, of the remaining trades will, themselves, follow this example, although there seems yet to be considerable question on this point. As a matter-of-fact, these master-contractors are as yet only very lightly bound to the association and a most extraordinary amount of jealousy and bitter feeling, occasioned by very sharp competition and often equally sharp dealing, causes many of the members to be so arrayed against one another as to make any really strong concerted action extremely difficult.

So much for the conflict between the contractors and the Unions, which is in reality but a very small part of the difficulty. Besides this actual friction with the workers the various masters' associations are so bound and tied by various regulations and rules, compelling them to buy material only of certain parties, that all reasonable freedom of competition has been lost, and yet any infringement upon such regulations is followed by a sure and quick fine of sufficient proportions to terrify contractors of ordinary capital. To shake themselves free of this incubus and, at the same time, shake off the rule of the Unions is the great problem to be solved by the building trades. Consequently, the outlook for building in our city was never worse than it is now at the close of the year 1899, and time alone will show what will be the outcome of it.

Now that our minds are no longer distracted by the sight of noble buildings rising towards the blue around us, or by any similar flight of hyperbole, and our thoughts are kept constantly on strikes, lock-outs and decisions of the court, a matter of the last character bids fair to become of especial interest to architects from its very novelty.

This is a suit brought against an architect, Warren H. Milner, by a client of his, Mr. W. S. Barbee. Mr. Barbee claims that he arranged with his architect for plans and specifications for a building which should cost \$37,500. The price agreed on for such plans was \$1,500, a sum considerably less than the customary five per cent. The architect "warranted" the plans and specifications were for a building which should not cost more than this stipulated sum. What this warrant consists of will be the key to the situation. When the final contracts were let, the cost of the building was found to be \$48,000, and this advance in price, it is claimed by the plaintiff, has entirely ruined him, as he has been obliged to sell the property at a sacrifice.

Should this case be carried through it would be one of a great deal of interest to the profession. Such a condition of affairs does often exist between clients and architects, and more is the pity. The architect, on his side, is often not honest with his client as to the estimated cost of the structure, while, on the other hand, the client oftener than not forgets the luxurious extras he has ordered and only keeps the original modest figures in his head. Should the suit be decided against Mr. Milner it might be a means of changing the too often undesirable relations existing between client and architect.

In the last letter the fall festival in commemoration of the Chicago fire, the war with Cuba, or some other forgotten event was mentioned. The celebration was to consist entirely of civic parades and municipal decoration. It was in anticipation, in these letters, that the whole affair was looked upon with the eyes of the pessimist, and cold shivers were spoken of as being in readiness to run down the back of any artistically inclined person upon sight of the decorations. It was all a tremendous surprise and an agreeable one, and you were lost in amazement how in a short year we could have learned so much. The actual celebration now is ancient history, but the spirit which animated it, we hope, has come to remain with us and thrive. There was not the sprinkling of decorations all over the city, with a hit-or-miss, go-as-you-please air which resulted in nothing or worse than nothing. This year all was grouped in one street, it had been studied out as a whole and had been put into hands competent to handle it. Staff and plaster entered largely into the decorations, and the architectural features were very strong ones. At each end of the allotted space triumphal arches marked the limits, the northern one being especially successful, bearing huge allegorical groups, the work of Mr. Lorado Taft. The general scheme was very charming, and especially in the evening, when festoons of electric-lights stretching from Venetian masts made everything brilliant, and huge torches of gas smoked and flamed from rostral columns. It was hard to realize that this was the usual,

matter-of-fact State Street known to our elegant shoppers or eager bargain-hunters. The thing itself was pleasing, but the spirit which animated it and produced such results was of all the most gratifying.

MARBLE.¹—II.

WHERE are dozens of old quarries on the island of Eubœa that have been examined by French, Germans and Italians during the last twenty years for the purpose of re-working, but in all cases it was found that the Romans had taken all the good stuff away. About four years ago a mountain that slopes down to the sea and away from any mule track was found, on its sea-face, to have a large number of old quarries. These contain an almost inexhaustible quantity of first-class marble, which can be got in large sizes.

These quarries I am now working, and those interested can see monoliths made of it, some fourteen feet long, for the new Roman Catholic Cathedral at Westminster, and you will also see it at the Royal Academy in the vestibule improvements. Some twenty years ago a Swiss Cipollino was found with colorings very similar to the old, but with very different markings, as it does not produce when opened out grand patterns, and, although it stands well in detached monoliths, experience proves it will not stand on new walls or floors.

Some thirty years ago a very extensive deposit of arragonite was found near Tlemcen, in Algeria, and the old quarries were here from which the Moors obtained this beautiful marble, so plentifully used in their mosques at Tlemcen. The purchaser of these quarries was Signor Del Monti, an Italian resident at Oran, and he it was who for commercial purposes named the material onyx, from its translucency, like the finger-nail. This misnomer "took on," and is now generally applied to all this class of very translucent marbles, some of the most beautiful of which have of late years been found in Mexico and in South America. Just recently it has been found in the Caucasus. The name onyx appears very appropriate; but it would be better to call it lime-onyx, so as not to confound it with onyx proper, which is silicious. The formation of this material is most likely a deposit from hot springs, such as goes on now at several well-known springs in different parts of the world—the rock Oriental alabaster used so extensively by the Egyptians, of which the most exquisite example is the famous sarcophagus in the Sir John Soane Museum. The Egyptian quarries are in the eastern desert; they were re-opened and extensively worked by Mahomed Ali for his great mosque at Cairo.

The beautiful monoliths which support the baldachino over the high altar at St. Paul's, outside the walls of Rome, were presented by Mahomed Ali. This Arragonite marble is produced chiefly by the lime-water droppings from the roofs of caves forming stalactite and stalagmite.

A short time ago I visited some very interesting deposits in Trazos Montes, Portugal. One very large cave had a floor thickness of some six feet, with hundreds of stalactites actually extended until they were engaged to the floor-mass, forming a labyrinth of natural columns, and other caves had become completely filled up, so that blocks of very large size could be extracted quite sound. Last year also was discovered at Amiato the quarries that supplied Rome, Sienna and Naples with the brown, yellow and honey varieties.

The coloring of these marbles is usually iron in solution. As beautiful as the Mexican varieties of onyx are, they are rarely successful when used in architecture, for wall-surfaces, or mouldings. For articles of vertu, as room embellishments with ormolu, as used by the French, they are a decided success. The yellow-and-brown variety, which is Algerian, is less translucent, as seen in the Paris Opera-house, and there is not the same difficulty in using.

The serpentine marbles, of which we have extensive and massive rocks at The Lizards, in Cornwall, and Banff, in Scotland, although beautiful, have never proved of much architectural value, chiefly owing to the thin veins of steatite containing iron pyrites, which expand when exposed and cause the work to split up.

It was used considerably thirty years ago in Gothic work, and several good fonts were made.

There is no doubt the broader and simpler the material can be treated the better.

The French would seem to have been more successful than we have with this our own material, as there is in Paris an important front near the Place de l'Opéra which is certainly very good and is standing well.

The massive architraves to the doorways of the old museum in Berlin, by "Schinkel," are made in a gray-green serpentine, very dark in color. These large doorways are grand and impressive.

France is very rich in colored marbles; the most important are those of Sarrancolin, the reds of Cannes, near Carcassonne, the yellows of the Jura and Du Var.

The Roman quarry of Bianco, Nero Antico.

The mottled reds and greens of Campan, and the green of Maurin.

There is a complete series of 700 cubes of French marbles in the National School of Public Works, in Paris.

Algeria is famous for rich reds. Those of Oran and Chennoua are the best; the latter were used in our National Gallery.

Spain has also grand marbles. A good collection of these, which number about two hundred and fifty, will be found in the Mineralogical Museum of Madrid.

Portugal has famous quarries of rose-color, near Cintra.

You are all familiar with our beautiful Devonshire red and gray marbles, of which there are a considerable variety, many of which are sound and good, and far superior to the Belgian reds, but owing to heavy railway rates cannot compete at all in price. The same remarks apply to the Derbyshire and Staffordshire ones, which have almost gone out of use. This is sad when we consider the first marble mills in this country were those of Ashford, near Bakewell.

Ireland has good marbles, too. The Connemara green is unique and the black is excellent, but still the carriage and bad quarrying beat them.

The fact is that more beautiful foreign marbles, owing to water carriage, can be got into London for as little or less cost than our own. It is pleasing to know that England has always held her own in marble work. I do not think anything can be found better done or more difficult than our old Purbeck, Early English and Early Decorated work. You will call to mind Westminster Abbey (with its chapter-house and tombs), the Temple Church, Salisbury and Lichfield, and Royal Tomb of Edward II at Gloucester, the Shrine of St. Alban, the Grey Monument at York, and the elaborate Bishop's Tomb at Rochester.

We have in Derbyshire extensive deposits of a beautiful decorative stone that is used extensively for interior work, and which comes in cost between marble and stone.

I mean the sulphate of lime, alabaster. This must not be confounded with Oriental alabaster, which is a carbonate of lime, and hard, while our English alabaster is comparatively soft, but tough, and takes a good polish. For monumental work it has been used since the thirteenth century, and during the Decorated and Perpendicular periods it became the material most used for effigies and altar tombs, most of which are very beautiful, but the grandest period for its use was the English Renaissance. The important monuments erected in this style are artistic productions with an individuality of which we have reason to be proud. Just look at the examples in Westminster Abbey; their delicate and bold mouldings in contrast, the alabaster with a dull polish, only sufficient to show the color; their inscription slabs and columns of black marble, the whole effect heightened and brought together by a judicious use of color and gold; further to perfect their color-scheme, they sometimes diapered their black shafts with delicate surface-work. Their inscriptions were cut with a flat ground, not V-shaped; the result is they are readable at any angle.

In the modern finish and polish of alabaster my conviction is that in intricate and delicately moulded work, with carvings and sculpture, glass polish is a mistake. And as alabaster is used instead of marble on account of cheapness, if we leave out the polish we further reduce the cost. Nothing looks worse than some parts polished and others not. Sooner than polish carvings, do as the mediæval men did, gild them.

In Rouen Cathedral is a splendid monument of the time of Francis I, executed in English alabaster. In the north of Spain, near Burgos, we find grand monuments, made in a delicately yellow-tinted alabaster, nearly as hard as marble. The old workings would appear to be lost; I have spent much time in trying to find them, without success, although I found an inferior variety something similar.

Alabaster is an excellent material for lining the walls of hospitals, as it is non-absorbent, and is not affected by acids. It contains about fifty per cent of water, and is so hydrated that it will not absorb any more liquid, but if heated to over two hundred degrees Fahr. it parts with its water and turns to plaster-of-Paris, so it is not suitable for chimney-piece work next the fire. Most of the imitation marbles that periodically appear are alabaster baked, which will then absorb any fluid color you like to apply. The Italian statuettes we see so much about are often only white translucent alabaster of Volterra, which is boiled, producing an effect similar to statuary marble.

Although not marbles, granites are decorative stones, and a very important industry that has made immense progress the last thirty years is that of granite work. The Scotch of Aberdeen are entitled to the credit of this revival, which may be accounted for by the superior quality of their granites, their grays, reds and rose-colors being excellent. The amount they do in monumental work alone is enormous, immense quantities of which go to America.

The last few years have made us acquainted with the beautiful granites and labradorites of Norway and Sweden. These the Aberdeen workers import in rough block. It is only of late years that granite could be sawn economically. This is now done by the aid of chilled-iron shot or crushed steel, which are American inventions; and lately they have given us another still harder material, carborundum. This is next to the diamond in hardness, but it appears to lack toughness, as it soon crushes up into mud.

There has been used within the last few years in our street buildings a large amount of polished granite work, and when it is broadly detailed and kept to one tone of color it looks well. But I do not think we should like to see Waterloo Bridge and the Embankment polished, and certainly polished cemetery work generally looks very hard and uninteresting, while all monuments designed on Celtic lines are ruined whenever polished, and nothing can be worse than trying to get effect by cutting off the polish to produce a pattern.

Of all decorative architectural stones ever discovered, none has yet been found to surpass the Imperial Egyptian porphyry of the

¹ A paper by Mr. William Brindley, F. R. G. S., read before the Architectural Association, November 10, 1899. Continued from No. 1250, page 87.

Romans. Its purple color is unique, which color it will retain for ages unimpaired; it is rich, but not gaudy, and is one of the chief color-glories of the churches of Rome. What would Henry III's tomb look like if the porphyry slabs were removed? Porphyry columns are the chief glory of St. Sophia in Constantinople, and it is so appreciated by every custodian of an Italian church that if he has only a fragment he is sure to show it you.

The old quarries of Mons Porphyrites are only about twenty miles off the entrance to the Gulf of Suez. There is an inexhaustible quantity of the choicest material remaining, and through the Suez Canal it can now be got to Europe at a very reasonable cost, and with improved methods of working might be available to us for structural decoration, the same as it was with the Romans.

The only thing wanted to achieve this is twenty-five miles of tramway. The gradient to the sea is one in eight.

A very complete collection of the marbles of the United Kingdom will be found in the Museum of Practical Geology, also in the Natural History Museum. Foreign as well as British specimens are fairly collated. Then, again, in the British and South Kensington Museums many interesting pedestals and works of art in colored marble may be seen; also good examples of Roman pavements.

In the University Museum of Oxford is the famous "Corsi" collection, consisting of 1,000 specimens; these, I am delighted to say, have now fallen into the keeping of Professor Miles, who has had them placed in a good light. Many at present are in drawers, but he will be pleased to show them to anybody interested. There are two similar collections to the Corsi, made by Belli — one in Brussels, Musée du Parc, the other at the University Museum in Rome. The museums of Edinburgh and Dublin have each a fine collection, chiefly British.

Labor with the Classic Greeks was of little consideration, as they certainly finished their works regardless of cost, but their white marbles in architecture they never polished (except the joints, where it could not be seen); everything was left from the tool. There were no bright shining surfaces to reflect and injure the form. Polish you do not see anywhere on the Acropolis at Athens, and in the hundreds of beautifully sculptured "stelæ" of the museums of Athens, London, Paris and Berlin you find nothing but tool finish.

For London and English towns, with our smoke and dust, we may require a finished surface that dust will not cling to, but I do not think bright polish helps us very much, for we all know how dirt will even cling to the surface of glass.

Colored marbles, to bring out their beauty, have to be polished, but even in these, glass polish has sometimes a glaring look.

The pavements of the Egyptians and Classic Greeks were close-jointed thick slab blocks. Later the Greeks produced a few examples of tessellated mosaic. But the most important pavement period was undoubtedly that of the Romans, which in the beginning of the empire was a continuance of Greek designs and methods, most likely executed by Greek artists and workmen.

The universal system soon became, throughout Rome and her extensive colonies, that of tessellated mosaic, which they executed in such a way that has never been equalled since. Just call to mind the infinite variety of design seen in these pavements; many are figure subjects, heads and every description of animated life, from fish of all sorts, swimming in the waters, shell-fish, and nets on the beach, animals of all types in quick motion and *passant*, grouped and posed naturally and artistically, that few artists even now can equal. In addition to all this animated drawing, tree foliage was treated freely, growing, full of life, but adapted in the ablest of design to its purpose; plants of all sorts were grouped, and conventionalized, to fit their position. Leaves and flowers arranged in circling wreaths, others as borders, straight and curved, of fret and guilloche, interlacing round circles and angular forms, with the greatest of ease and freedom.

All we now know and can do by the aid of reference help, the Romans knew in the third century. They also knew how to execute durable work by having a good, proper foundation, and using tesserae three times as deep as ours, making that much firmer key.

How little we know about the artists and art-workers of these Roman tesserae pavements! It would appear that with every Roman legion there must have been a corps of sappers and miners, as they practically found everything in the way of useful rock and mineral veins, which they worked on scientific methods. They, further, must have had a sort of artists' corps, consisting of art designers and workers, or these art pavements never could have been produced. We may further ask: What became of the art in this and other colonies when the Roman occupation ceased? It would appear to have departed with them, as the pavements which had been universal now became obsolete.

The art never went quite out in Italy, as the Popes were always caring for old pavements in way of removing and repairing, and at Venice the enamel mosaics of Murano kept the art alive. The modern revival we have to thank the French for, in the building of their Opera-house and the importation of Venetian workmen to carry out their designs. From France the art came here, and soon spread throughout Europe and America. For these pavements a good concrete foundation is absolutely requisite, and it ought to have time to dry out.

The method of sticking the tesserae on a paper cartoon, which is turned over and rolled or beaten into the coating of lime plaster, and afterwards rubbed down with soft grits, is familiar to you all.

When large slabs of color are introduced to get contrast it is requisite to insert a dummy slab of common stone while the beating of the tesserae is being done. The dummy slab is then broken up to get it out; this does not disturb the bedded tesserae. Wood will not do, as it swells with the wet. The Romans sometimes used tesserae of 1 inch, covering large areas with one color only — red or green porphyry or Giallo Antico. The effect is very imposing when enhanced with a flowing border of great width, as seen in the Baths of Caracalla. These 1-inch tesserae of marble in black-and-white in a variety of patterns are used for the street pavements and public squares of Lisbon, and answer well, as it is very hilly.

The sectile or slab pavement, arranged in different patterns of marble and porphyry, is very effective. There are examples in Rome on the Palatine, the Basilica of Julia, and the Pantheon. The simplest are the best. These are large slabs of rich marble, opened out with only a border slab of another color round, such as large slabs of Pavonazzetto, opened out with simple borders of yellow statuary. Also Pavonazzetto slabs, with St. Ambrosio Verona for border, are a success. Carystian Cipollino so treated, with Verde Antico bands, makes a rich but retiring pavement. Pavements of marble squares, black-and-white, have been used in England since the sixteenth century, if not earlier; they are bright and clean, very durable and not costly. Red-and-white is also good, but I prefer the black not polished, which is a soft gray-black. These now have in a great measure superseded encaustic tiles.

The Opus Alexandrinum pavements which abound in Rome, and an example of which we have in Westminster Abbey, are geometrical patterns made with porphyries and marbles, the grand effect being produced by the "values," obtained by large circular slabs in contrast with delicate pattern-work. The large circles are section-slabs of Egyptian porphyry columns, the smaller circles are usually green porphyry of Laconia. The grand pavement under the centre dome of St. Mark's, Venice, which consists of twelve Carystian slabs, making a square 30' x 26', with a rich mosaic border all round — you will all remember the Ruskin Street controversy as to its irregularity some years ago — is now levelled and done up; and not this alone, but most of the pavements in the church, and nearly all the grand ones which are the glory of Rome, have all been made "brand new" the last few years.

Other sorts of pavement, very effective, are the Florentine ones of the Baptistery and San Miniato; they are foliage and figure patterns, inlays of black-green Verde de Prato into white. The subject is always the white slab. The same treatment is applied to the wonderful pavement of Sienna Cathedral.

In designing marble pavements, use as few colors as possible, and put the work on a good foundation. The Italians and French during and since the Renaissance period have used marbles and porphyries in various ways for furniture and objects of vertu. Many of the Florentine and Milanese tables are real works of art and costly productions. They further introduced marble plaques into ebony cabinets, which are still sought after by collectors. The various French works in marble and ormolu, especially of the Empire period, are generally refined and good. Much of this class of work made by the Chinese and Japanese is good and suggestive.

From the time of the Early Egyptians down to the present the best materials obtainable have been employed for memorials to the dead. With the Egyptians no stone was too hard or too difficult to work. The Greeks chiefly used marble, and all who have had the pleasure of studying their monuments in the museum of Athens cannot help being impressed with their simplicity and beauty. Each one tells its own tale at a glance without attempting to decipher the short inscription.

Architecturally there is a great variety. The "stelæ" have mostly a flat pediment, to throw off the rain, with simple mouldings; the profile sections are flattened on the face; the sides invariably taper; the simpler have a relief panel of two or three figures, showing the farewell shaking of hands, with often the faithful dog looking on. Nothing can be more pathetic. The more important have sculptured figures in high relief, often two-thirds life-size. The sculpture comes boldly in front of the side pilasters. The whole thing gives the idea of the design and execution being by the same artist. I do not think they are "art and craft" productions.

We are much indebted to Dr. Murray, of the British Museum, for bringing out of the basement and dark stores an interesting collection of these monuments. He has placed them in a good light, in a separate room, at the end of the Parthenon Gallery. South Kensington has some good casts which might, for educational purposes, be added to.

The Greek sarcophagi were always refined, and are well worth study. The museums have usually obtained those that are richly detailed and filled with sculpture; but simple moulded ones, like the one at Gergenti, I think show better the Greeks' skill in subtlety of detail. The Romans at the first worked on Greek lines, but later got into a bold and unrefined type of work, especially in their sarcophagi and altar form of monument. But, like the Greeks, their small sarcophagi and urns for funeral ashes are of great variety, beautiful in form and, as marblework, exquisitely wrought. The British and Sir John Soane's Museums contain excellent collections.

The Byzantines made sarcophagi of enormous dimensions in "porphyry" and "Verde Antico." They were large enough to take the deceased in full robes; the designs were simple in detail to suit

the colored material. The Verona tombs of the Scaligers of later date are much on the same Etruscan lines.

How interesting most of the cathedrals and old churches of this country and the Continent are, owing to the Christian monuments they contain. Many of these buildings are real museums, the monuments giving the history, national, parochial and architectural. Unfortunately, owing to church restoration, we have lost many, while others have been skied where they cannot be seen. The want in many of our cold-looking church interiors is color. This could be largely helped by colored marble monuments. How cold most of the white monuments in St. Paul's Cathedral look, many of which are very costly, but how little they add in way of color. Contrast the sculptured ones with the Parthenon sculptures that we now know had color pattern on them, or the beautiful works of Donatello and others in Italy, where gold and delicate color are freely used. But we need not go abroad for color precedent, when all our grand monuments in Westminster Abbey, from Henry III down to James I, are full of color.

For modern work in sculpture, Rosso Antico, Giallo Antico, and black produce good work, especially for reliefs. The Romans and Florentines have left us numerous examples in most colored marbles.

There ought to be an effort made to get back memorials into our churches, for it is sad to know that a person who has been a constant worshipper in a church, has taken interest in parish affairs, and done good in various ways, should at his decease have no simple record placed to his memory in his church.

He is buried in some distant cemetery amongst thousands of others who have piled over them masses of marble or granite void of merit in design. The friends of the deceased feel bound to erect what they call an imposing monument or it will never be noticed. Now, would it not be better instead of placing a costly pile in the cemetery (where it is frequently not seen until the next interment) to erect over the grave a simple record in durable material and place on the church walls a small but artistic monument? I say small, because the church walls can only hold a certain number. If the memorial is to a man entitled to arms, then give him his arms and a short inscription; or it may be a small panel of sculpture, portrait or anything appropriate with color. By this means we enrich the church and record the deceased; but little can be done until the clergy can fully appreciate its importance, and if they give permission — not say to the artist it must be in this style or that, to suit the church or match some poor one already there.

Masonry jointing for built work is the proper method, but when marble has to be applied to iron-construction as covering of stanchions and girders, then special methods have to be adopted for the occasion, the things to guard against being expansion and vibration. In wall-surfacing with marble slabs, vertical angle-joints with a mitre quarter-of-an-inch-square check answer very well; and in strongly-marked marble mouldings going round a tablet, or even small opening, the ordinary picture-frame mitre is the best for effect.

In the fixing of slab work it is best to leave a small open space at the back, and use bronze clamps with a projecting notch to prevent the slabs being knocked inwards.

I find when a piece of marble one foot in length is heated up to 230 degrees Fahr. it expands about one-thirtieth of an inch, at 300 degrees Fahr. one-sixteenth, and up to red heat one-eighth, but in each case on cooling it only contracts half of the expansion.

For skill in chimney-piece-construction we must go back to early monastic times. These builders found out that a long lintel in one stone could not resist breaking when over their large wood-fires. To obviate this they jointed their "heads," using some form or other of wavy or stepped joint. And when marble is similarly exposed to a great heat this is the only safe method of jointing.

I have made two experiments with white marble, and find that a piece of marble 4 feet long expands, when nearly red hot, five-sixteenths of an inch, but on cooling it only goes back half of the expansion.

North Italy, in the provinces embracing the cities of Genoa, Florence, Venice and Milan, was the country for early chimney-pieces, dating from 1400 to 1600. Venice, owing to its local building-material, being Istrian or Verona marbles, "was always a marble-working city"; in addition to these they brought from Greece, along with their colored columns, blocks of white. Istrian stone or marble, which is hard and receives the most delicate chisellings, was the favorite material.

The designs, which are Renaissance, mostly consisted of rectangular projecting canopies with architrave, frieze, and cornice, supported by corbels well built into the wall, under which are pilasters or ornamental columns with caps and bases. Most of the chimney-pieces are beautiful in design and well executed.

The "antique mongers" of Florence and Venice have grabbed them whenever they had a chance, and they copy and make "new old" ones to the fullest extent by staining and smoking over wood-shaving fires until it will almost defy any expert to say if it is new or old. When buying these chimney-pieces purchase them on their merit and not as antiquities; then you are safe.

Belgium, which is a marble country, has produced many good canopied chimney-pieces. The most famous is the grand one in black marble at Bruges. France is perhaps the richest country for good chimney-pieces in every style and date. They are found in every old palace, château and castle; there is a series of simple ones

in the rooms of the Louvre in Paris, one in Egyptian porphyry, another in lapis lazuli, another Rosso Antico, and so on. These have ornolu mouldings.

The refined Adam's chimneypieces take a lot of beating, either in design, execution or economy of good material. The original drawings of many of these are in the "Soane" Museum. A bold "ovolo" moulding in colored marble all round the fireplace opening is always safe.

You will see in the room a number of specimens, others showing methods of jointing and color combinations. In conclusion, I will say, use as few colors as possible in your work, and the nearer you keep to one the better.

CRAWFORD'S DOORS FOR THE UNITED STATES CAPITOL.

CURIOUS tourists visiting the Capitol (the unappreciative Washingtonians never go there unless they are obliged to) are directed by their guide-books to note the imposing decoration of the tympanum of the pediment above the portico of the Senate extension. They are told that the group of figures designed and modelled by Thomas Crawford represents "The Progress of Civilization in the United States," and they are also told (casually) that it cost \$49,950. They are appreciative, and gaze with admiration and then naturally betake themselves to the southern portico, where a disappointment awaits them, for there the pediment boasts nothing more than a blank wall-space. If they pursue their investigations further they will be surprised to find that, while the main entrance on the Senate side is adorned with Crawford's magnificent bronze doors, decorated in *alto relievo* with incidents in Washington's life, the equally prominent entrance on the House extension still remains without any embellishment whatever. This difference in richness of ornamentation between the two wings is not alone confined to the exterior. The Senate wing possesses by far the greater number of paintings and busts, many of which were added within recent years, while the luxury of appointments and furnishings is much more pronounced than that of the House.

It is said that designs and a model for a bas-relief for the pediment, now blank, were furnished by one William Barber, a Virginia sculptor, but the mists of oblivion seem to have swallowed both William Barber and his design. He had planned to commemorate the discovery of America, which would have served as an excellent supplement to the group already executed by Crawford, but were the designs still in existence it is hardly likely they would be adhered to to-day.

However, there is a model of bronze doors for the House entrance. Crawford's order contemplated two sets of doors, but he had at the time of his death, in 1857, though both his designs were complete, furnished only one model — that for the doors of the northeastern portico, which were duly cast and placed in position in 1868. In the meantime, however, Crawford's designs for the other doors had been carried out in plaster by his pupil, W. H. Reinhart (who received \$9,000 for this work), and have now been buried in some dusty corner of the crypt since the Civil War, their casting still protracted from session to session at the will of an extremely dilatory House. It seems the greater pity that they cannot be cast and swung, as both sets of doors, illustrating, as they do, scenes from the life of Washington, were conceived as an entirety, and neither, consequently, is complete without the other.

Perhaps it is unfortunate that all appropriation bills for decorating purposes have to originate in the house that intends the decoration, for in this matter, at least, the two houses of Congress are like two different families. Though, of course, it is easier to pass a matter of no great moment through the smaller house, the Senate is characteristically the more liberal. All offices which pertain especially to the two branches of the legislative body are more liberally salaried by the Senate, as, for instance, that of the chief engineer, which on the Senate side receives \$21,000, but on the House side only \$17,000, though the latter office requires by far the greater amount of work. The Senators being older men, generally richer than their colleagues of the House, and usually remaining so long in their positions as to feel a home interest in the Capitol, are naturally more solicitous of their personal comfort, as the more elegant appointments of the Senate wing testify. The Senate orders new decoration, apparently, whenever the spirit moves it, and, its members being personally accountable to no one concerning expenditure, the decoration is usually a sumptuous affair.

The House of Representatives, on the contrary, has always curbed any unruly yearnings toward elegance with the softly whispered word "economy." Perhaps each Representative tries to avoid the awkwardness of explaining to constituents whose æsthetic tastes have possibly not been developed large appropriations for statuary or mural painting. If any bill proposing to beautify the Capitol does happen to struggle to the floor, it is almost always sent back to the shelter of its committee-room by some member with the idea of another two years firmly fixed in his mind. So, as it is, the southern wing of the Capitol still remains somewhat bare and comfortless. — *N. Y. Tribune.*



CENTRAL NEW YORK SOCIETY OF ARCHITECTS.

AT the annual meeting of this Society held at Ithaca, N. Y., Wednesday, December 7, a revision of the Constitution and By-laws was made and adopted. The name of the Society was changed, and is henceforth to be known as the *Central New York Chapter, American Institute of Architects*.

The changes made in the Constitution and By-laws were such as to make them conform to the present Constitution and By-laws of the American Institute of Architects.

The following officers were elected to serve until the next annual meeting: *President*, J. H. Pierce, Elmira, N. Y.; *Vice-President*, Prof. A. B. Trowbridge, Cornell University, Ithaca, N. Y.; *Secretary*, Arthur N. Gibb, Ithaca, N. Y.; *Treasurer*, Prof. C. A. Martin, Cornell University, Ithaca, N. Y.; *Member of Executive Committee*, J. Foster Warner, Rochester, N. Y.

A committee was appointed to confer with the Buffalo Chapter to consider the question of holding the next annual meeting of the two chapters together in Buffalo.

After the business sessions the Chapter was entertained by Messrs. Green and Cary of Buffalo, who with the aid of plans and sketches gave a description of the work being done at Buffalo for the Pan-American Exposition.

Professor Martin also gave an exhibition of lantern slides illustrating a wheeling tour abroad.

A dinner in the evening, an informal exhibition of photographs of recent work done by members and an exchange of amusingly decorated menus brought the meeting to a close.

ARTHUR N. GIBB, *Secretary*.



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

STABLE AND ENTRANCE GATE: ESTATE OF GIRAUD FOSTER, ESQ., LENOX, MASS. MESSRS. CARRÈRE & HASTINGS, ARCHITECTS, NEW YORK, N. Y.

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

HOUSE OF ANDREW CARNEGIE, ESQ., NINETY-FIRST ST. AND FIFTH AVE., NEW YORK, N. Y. MESSRS. BABB, COOK & WIL-LARD, ARCHITECTS, NEW YORK, N. Y.: TWO PLATES.

A COMPETITIVE DESIGN FOR THE HOUSE OF THE AMERICAN SOCIETY OF CIVIL ENGINEERS, W. 57TH ST., NEW YORK, N. Y. MESSRS. W. B. BIGELOW AND FRANK E. WALLIS, ARCHITECTS, NEW YORK, N. Y.

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

EQUESTRIAN STATUES OF JOAN OF ARC.

[Additional Illustrations in the International Edition.]

THE SOUTH FRONT: HOUSE OF GIRAUD FOSTER, ESQ., LENOX, MASS. MESSRS. CARRÈRE & HASTINGS, ARCHITECTS, NEW YORK, N. Y.

[Gelatine Print.]

THE GALATEA FOUNTAIN ON THE EUGENE-PLATEAU, STUTTGART, GERMANY.

[Gelatine Print.]

THIS fine work of art was unveiled and presented to the people of Stuttgart, in April, 1890. It stands upon the upper edge of a grassy slope, about fifty feet high by sixty-five wide. The water, which, after falling into the upper basin, escapes through a lion's jaws from the base of the fountain, leaps downhill over the many steps of the slope, forming a graceful cascade, into a basin at the foot of the slope, whence it reaches the sewer. The fountain is the work of Herr Otto Rieth, architect and sculptor, an artist having already won wide fame, notwithstanding his youthfulness. His wealth of imagination has been attested by three volumes of "*Architektonische Skizzen*," published in rapid succession, which have astonished the profession. As a sculptor, Herr Rieth is strictly self-taught, with what effect may be seen from the statuary of the Stuttgart fountain, which is the first-fruit of his labors. The design for

the Galatea statue and the landscape-architecture as well was obtained in 1884, by a general competition, resulting in awarding the work of Herr Rieth a third prize. Queen Olga of Württemberg, however, was so captivated with the beauties of his composition that she commanded its selection for execution. The success of the work subsequently showed her confidence in the artist's ability to have been fully justified. The principal statue dominating the composition is the bronze figure of Galatea, the daughter of Nereus, surrounded by cupids. The nudity of this lovely figure gave rise, nine years ago, in the Suabian capital to a heated discussion for and against the nude in art, that in degree of bitterness on the side of the would-be moralists was not, by far, equalled by the similar discussions evoked in Boston by Mr. MacMonnies's "*Bacchante*" and those quite recently called forth in Chicago by Mr. Lorado Taft's "*Nymphs*." The embitterment of the opponents of "*Nudity in Art*" became so intense that their organs were not ashamed to publicly invite rude vandalism to their aid. Fortunately, the police proved too watchful for these evil designs to be carried out. It redounds to the late King Karl's lasting credit that he replied to the dastardly attacks upon the artist and his admirers by honoring Herr Rieth with the presentation of the "*Gold Medal*" for Art.

Considerable difficulties were encountered in constructing the foundations for the monument. The hill being composed chiefly of the débris of a former quarry, it became necessary to go down 40 feet to rock-bottom, and erect four big pillars of cement-concrete. Upon the tops of these was placed a huge block of concrete, 5 feet thick, which formed the base of the monument. The pedestal, in graceful Rococo forms, consists of the beautiful, greenish-white sandstone quarried at Stuttgart, the two sphinxes in the rear, and the copings of the balustrades, etc., of Savonière limestone. The statuary, the basins, and the orifices, are of bronze. The height of the statue of Galatea measures 11½ feet, or 38 feet, including the pedestal. The total cost of the fountain amounted to only 85,000 marks (equal to \$20,400), which sum was defrayed by the Stuttgart Society for the Advancement of Art, assisted by Her Majesty Queen Olga, of Württemberg, and the city of Stuttgart.

THE TOWN-HALL, ROLAND PILLAR AND ST. MARY'S, STENDAL, PRUSSIAN SAXONY.

[Gelatine Print.]

STENDAL, thirty-six miles north by east from Magdeburg, with a present population of 18,000, was once the capital of the "*Altmark*." The traveller who approaches this old town from afar is struck with the large number of stately towers and steeples that greet his eye. They speak to him of the important rôle Stendal once played in the history of the "*Old Mark*" (German for "*frontier*"). While the neighboring Tangermünde was conspicuous as the residential city of the Margraves, and at times even of the German Emperor, Stendal, with its granite walls and gate-towers, represented a strong bulwark against the savage onslaught of the Slavish frontier tribes, and with its churches and monasteries, a protecting agency to civilization in an age when the Church was the militant and powerful ally of the Emperor in the sanguinary struggle waged against barbarism and crude paganism. The highest pair of church-towers, that of St. Mary's, rises from the very centre of the town, having at its feet the town-hall, which encloses two sides of the Market Square, as seen in our plate, with the tall and clumsy Roland pillar (erected 1525) standing nearby. The town-hall did not always cut off the view from the square upon the Cathedral-front. Originally it consisted only of the taller wing, erected in the thirteenth century in Gothic forms, and terminating at each end in double gables in the familiar forms of the North-German brick-architecture. The lower wing, starting at a right angle from the earlier portion, was added in the fifteenth century. Hence, it is clad in the garb of the German Renaissance, at least outwardly, while the Council-chamber, which occupies the entire upper floor, contains some interesting vaulting and fine wood-carving in late Gothic, completed in 1462. Only one of the two narrow sides of the Chamber has preserved its wainscoting, which extends up to a height of 16½ feet for a width of 26 feet. These carvings are considered the most valuable specimens existing of the woodcarver's art in the "*Old Mark*" country.

PROPOSED DEPOSITORY FOR HARROD'S STORES, LIMITED, BARNES, SURREY, ENG. MR. W. G. HUNT, ARCHITECT.

THE QUEN-MOTHER'S SITTING-ROOM, AMSTERDAM, HOLLAND.

RESIDENCE, PLYMYARD PARK, BROMBOROUGH, CHESHIRE, ENG. MESSRS. WILSON & TALBOT, ARCHITECTS.

VANDYCK'S BURIAL-PLACE. — *Apropos* of the Vandyck celebrations, the Archdeacon of London writes a brief but interesting letter recalling the fact that the burial-place of the great artist was old St. Paul's Cathedral. This, adds Dr. Sinclair, was the origin of the burial of presidents of the Royal Academy and other great Academicians in Artists' Corner in the present building. Any monument to Vandyck perished in the fire of 1696, and as there is no tablet or record of the great painter in the modern cathedral, the fact of his interment is unknown to the crowds who daily throng St. Paul's. — *London Globe*.



[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.]

"AN AWARD CRITICIZED."

COLUMBIA UNIVERSITY, NEW YORK, N. Y., December 6, 1899.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Having had my attention called to two communications from Mr. A. B. Jennings in recent issues of the *Architect* relative to waste of labor in a recent competition, and having noted also your comments thereon, I beg to say a few words by way both of explanation and reply. The quotation from the expert adviser's report in Mr. Jennings's first letter (issue of November 11) serves to identify the competition referred to as one which I recently had the honor to judge, and in my report upon which I used the language quoted.

Mr. Jennings is certainly correct in his protest against the requirement of useless drawings and excessive labor in competitions. This is an evil against which I have battled as earnestly as any one, and I am sure all architects will applaud and echo every protest against this abuse. But Mr. Jennings is mistaken in citing this particular competition as a case in point. Although I had no hand in drawing up its requirements, they were in the main modelled after those of an earlier competition in which I was consulted, and on examining the designs for the award I found that not one of the eight drawings could have been omitted from the requirements. The passage quoted from my report refers only to the preliminary examination, the object of which was to eliminate hopeless and vicious designs, and thus to reduce the number to be more carefully compared for the final award. As the latter part of my report, which was not quoted in your correspondent's letter, plainly shows, eleven out of the forty-four designs were thus retained for further examination, and in comparing them I was obliged successively to examine every one of the five floor-plans submitted, since some excelled in the arrangement of one floor and some in another, and all these various merits and defects had to be weighed and balanced with great care to make sure of an equitable result. The submission of five floor-plans was made necessary by the extremely complex nature of the building. While the plans of the first, second and third floors sufficed to show the general merit and quality of each design and to throw out thirty-three out of the forty-four, the remainder required that detailed comparison which could not be complete without the study of the basement and upper floors, both as to constructive propriety and convenience and artistic distribution. The same was true of the front elevation and of the perspective.

It should also be remembered that it is not always possible to foresee just what drawings may prove unnecessary in the final judgment. Very often the perspective plays no part in this award, and yet it often enough serves either to turn the scale for, or against, a design, or to confirm and fortify an impression otherwise received, to make it quite unsafe, in most cases, to omit it from the requirements. Sometimes there is so obvious and pronounced a superiority in one design over the rest that the award can almost be made on a casual inspection of a single plan and elevation; yet such a result can never be foreseen; and as it quite as often happens that there is a nearly even balance between two or three designs, requiring a very nice weighing of details, it would be obviously dangerous to limit the requirements in expectation of the first result.

Your comments, made in ignorance of the actual circumstances, were nevertheless so just, and came so near the truth of the particular case—in substance, not detail—that your readers will, I think, be interested in this confirmatory evidence. Thanking you for the opportunity to set myself right on this important matter with those competitors who may have felt as Mr. Jennings did, that the work required in this (Scranton) competition was excessive and some, at least, of the drawings needless, I remain,

Yours respectfully, A. D. F. HAMLIN.



LONDON'S CATHOLIC CATHEDRAL.—Now that the Roman Catholic Cathedral which is in course of erection at Westminster has been carried high, the general body of the structure and the character and magnitude of the building are discernible from the streets surrounding the site. The striking outlines of the huge Byzantine building are consequently attracting much notice, and when the cathedral is completed it will become one of the sights of the metropolis. Completion, in the sense which will imply the fulfilment of the aspirations of Cardinal Vaughan and those who share with him the burden of this enormous undertaking, must necessarily be in the somewhat remote future; but

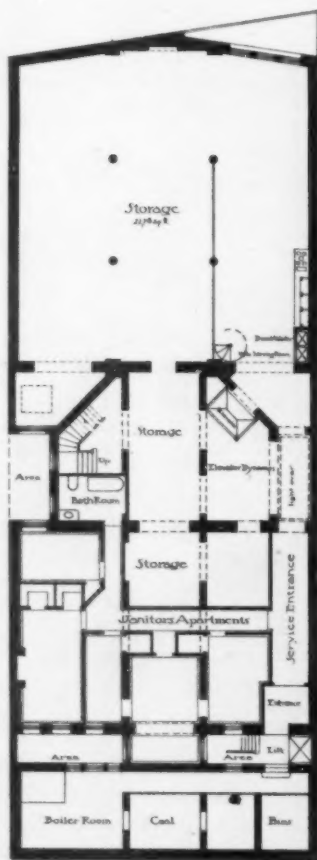
it is anticipated that the building itself, apart from the elaborate ornamentation that is contemplated, will be finished a year hence, so that it may be opened for worship on September 29, 1900, the golden jubilee of the Roman Catholic Hierarchy in England. The roofing has been begun, and will probably be completed by the end of the year; some of the minarets and domes are almost finished, and the lofty tower, which will form a striking feature of the building, has been carried to about half the intended height. The nave is the largest in England, having an area of 14,040 square feet, as compared with the 13,244 square feet of York Minster. Among the columns by which this area will be divided from some of the chapels will be a number formed of exquisite Grecian marble recently brought over from Thessaly, where, among other spoils of war, they were seized by the Turks when they overran that province.—*Birmingham Post*.

VANDALISM IN BERLIN.—A shameful act of vandalism was perpetrated in Berlin recently. Four of the beautiful statues on the right side of the Sieges-allee, presented by the Emperor, have been mutilated. In the group representing Albrecht the Bear, the shepherd's crook, which the Elector carried in his right hand, is completely broken off. In the group of Otto I, Prince Pribislaw has had his nose knocked-off and his face cut; the Abbot Sibold has had all the fingers of his right hand, his shepherd's crook, and his nose smashed. In the group of Otto II, Henry of Antwerp has had his goose-quill and Johann Hans von Putzitz his parchment roll broken off. Nor has the group of Albrecht II escaped damage, Hermann von Salz having had his nose broken off, his sword-hilt and his parchment roll destroyed; while Eike von Repkow has lost his nose and his goose-quill. Not content with this, the iconoclasts have also damaged the marble seats to the rear of the statues. Each of these seats is supported by an allegorical eagle with a crown on its head. The crowns in the group of Otto I and Albrecht II have, in addition, a cross on the top, and these crosses have been knocked away. The monuments in the Sieges-allee are always guarded by the police, one policeman being told off to every six monuments. This, however, has always been considered by the general public to be quite insufficient, and the present act of vandalism is certainly due to the absence of adequate precautions. It would be very difficult to restore the mutilated groups. Professor Begas is of the opinion that, even if they can be restored, the traces of this work can never be completely obliterated, since even if the broken parts are renewed, they will scarcely have the original plastic effect, and will not be weatherproof. The damaged statues will, therefore, have to be entirely replaced. The barbarous mutilation was discovered early the next morning by the police, who found the pieces of broken marble scattered round the statues; but by that time, of course, the perpetrators of the crime had disappeared. The result of the investigations made by the detective-police shows that the act was committed by means of a blunt instrument, which has not yet been found. The public are greatly irritated at the affair, and the comments one hears, especially from foreign residents, are not very flattering to Berlin. A sum of 500 marks has been offered as a reward for the detection of the miscreants.—*Berlin Correspondence London Standard, October 24*.

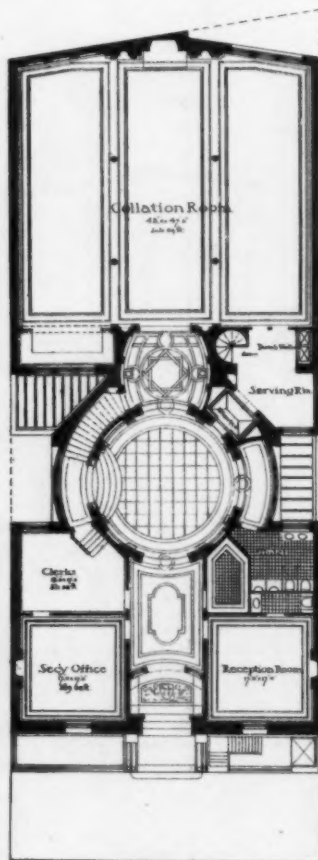
LIQUID-AIR AS A BLASTING AGENT.—The *St James's Gazette* quotes from a foreign source an account of a series of tests of liquid-air made a few weeks ago by the Vienna Crystal Ice Company in the presence of representatives of the Austrian Technical Military Committee. The fluid was obtained from Linde's works in Munich, and conveyed to Vienna in open flasks, having the Dewar vacuum-jacket to check evaporation. When it was despatched the mixture contained 75 per cent of oxygen; but seventy-two hours later, when the stuff was used, enough nitrogen had evaporated to make the percentage of oxygen 85. Cartridges were made of liquid-air, mineral oil (petroleum), and Kieselguhr. The oil seems to have taken the place of charcoal in gunpowder in supplying an inflammable material which would develop a large quantity of gas. The liquid-air was almost pure oxygen, and tended to promote combustion. The Kieselguhr served the same purpose that it does in dynamite. It is a silicious earth used as an absorbent to hold the nitro-glycerine. The cartridges are spoken of technically as "oxy-lignite." They were prepared in two ways. First, the Kieselguhr and oil were mixed in a basin, and the liquid-air was added gradually. The resulting paste was ladled into the cartridge-case, which was coated with asbestos, probably to check the absorption of heat from surrounding substances. The second method of preparation was to charge the cartridge with Kieselguhr and oil, and add the liquid-air later. The second set of cartridges were encased in sheet-lead. Owing to the intense cold the men did not care to handle the cartridges vigorously, and there was difficulty in attaching detonators and fuses. In the meantime much of the oxygen evaporated, especially from the cartridges having lead cases. These latter proved weaker than the first set. One of them missed fire altogether. The cartridges were inserted in holes 30 inches deep in the rock when fired. Artillery General Engineer Hess made the following comment on the tests: "The preparation of the cartridges is wasteful and dangerous to the eyes, and, owing to the rapid evaporation, it is further impossible to guarantee the strength of the cartridge, even in the roughest way. Kieselguhr and oil seem to be suitable absorbents, and oxy-lignite an effective blasting agent, though comparative tests have not been made yet. The cartridges must be used within, say, fifteen minutes of their preparation. There is no danger, hence, from missing fire. But, on the other hand, it will be difficult to fire many cartridges simultaneously, and, strictly speaking, the cartridges should be made on the spot, and be in a very hard condition. That would scarcely be possible below ground; the spurting liquid might break the glasses of the hot safety lamps, and it remains to be investigated whether the large volumes of oxygen might not lead to spontaneous ignition of marsh-gas or coal-dust. The evaporating oxygen would, on the other hand, improve the air, and the blasting would not contaminate it."

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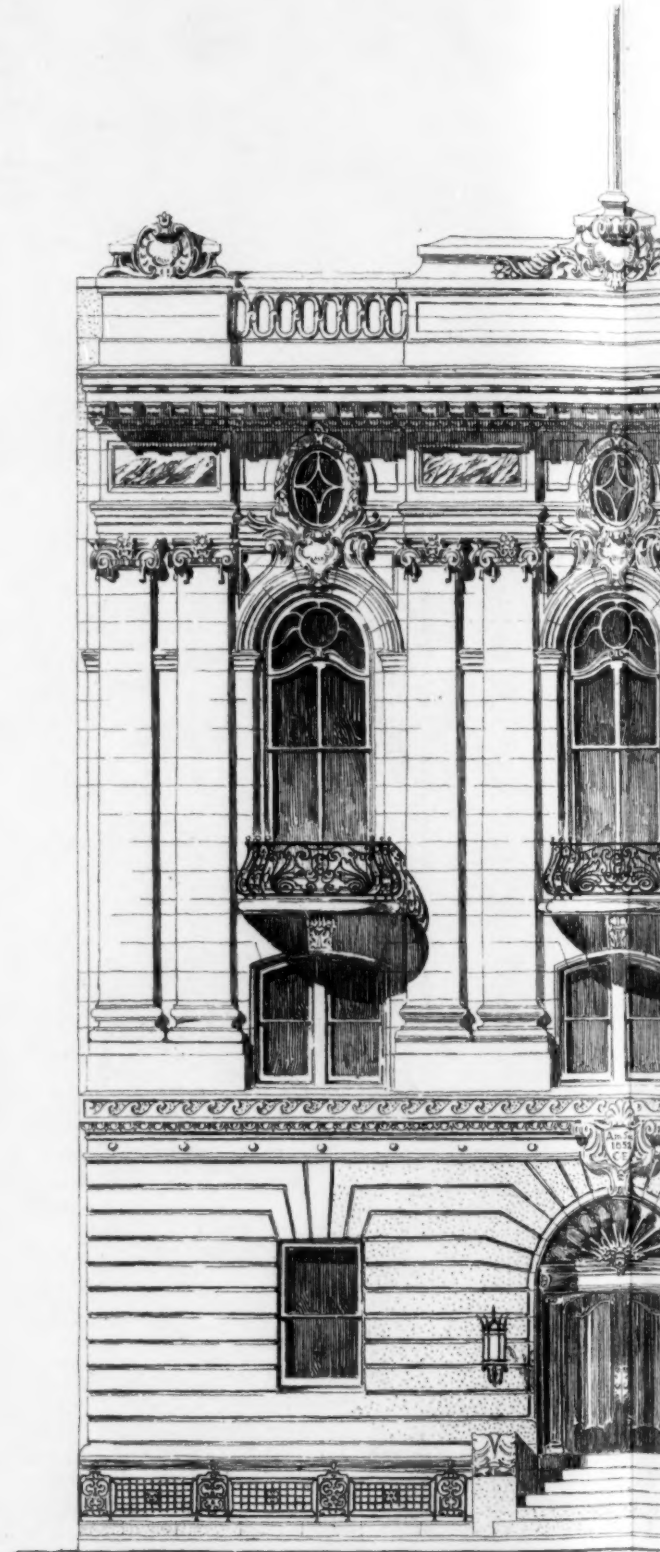
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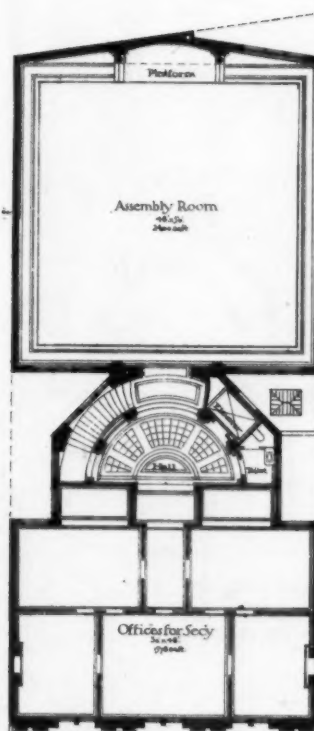
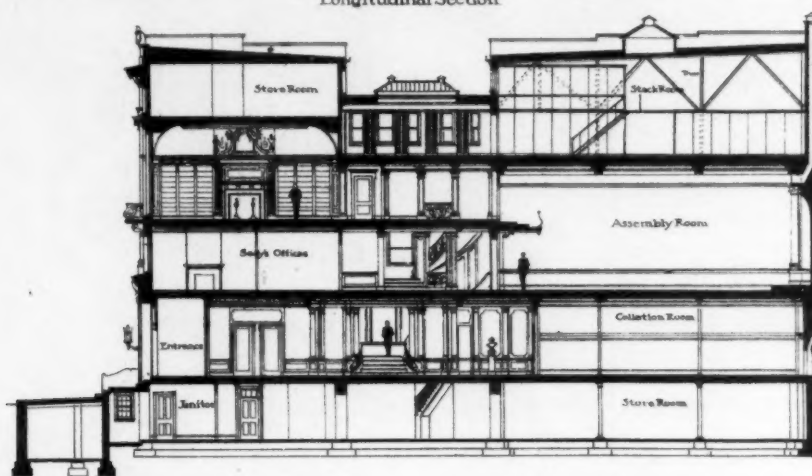


Plan of First Floor

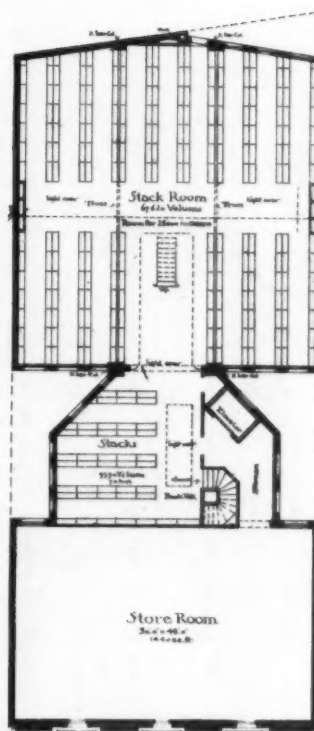




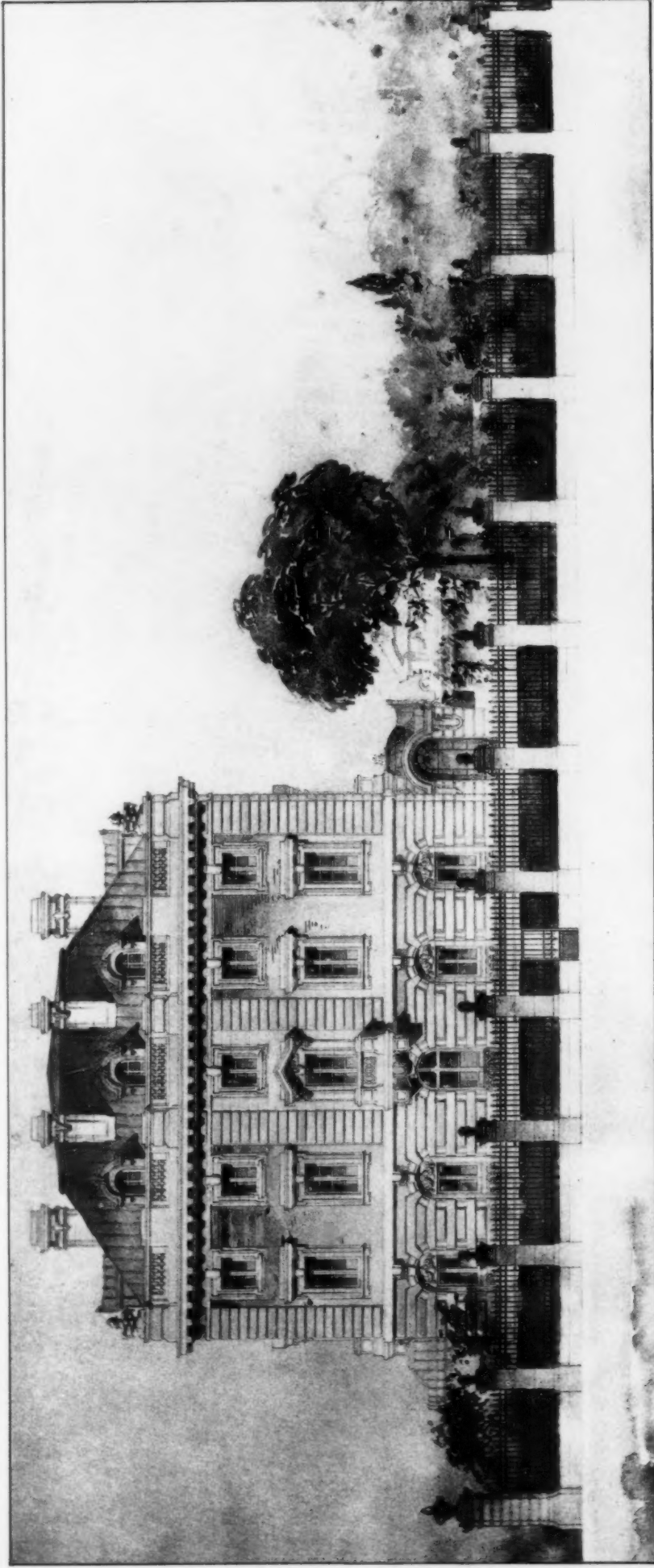
Longitudinal Section



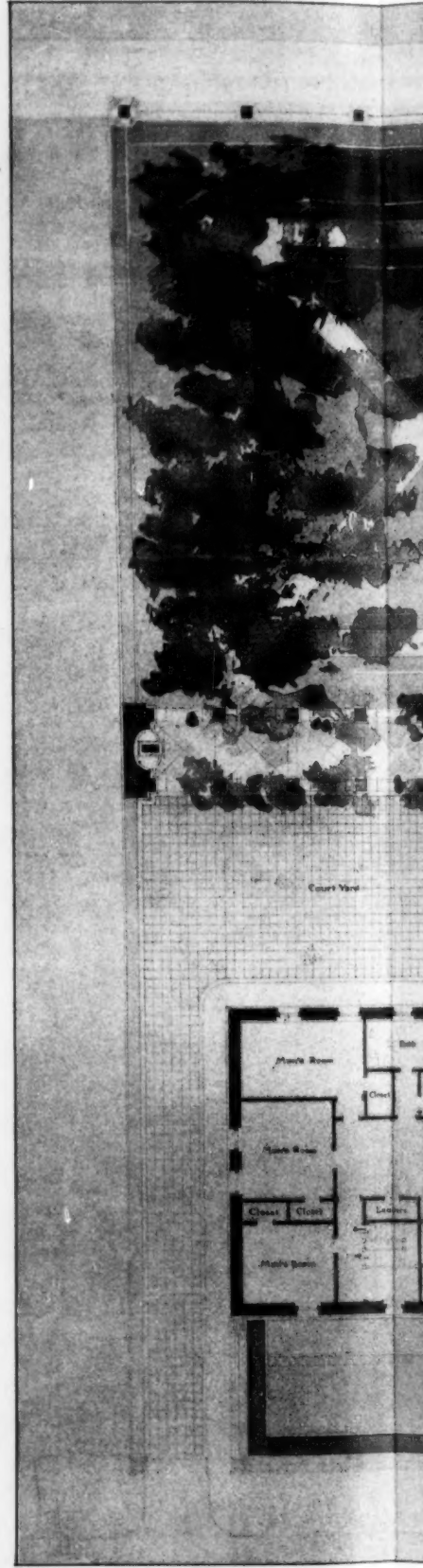
Plan of Second Floor

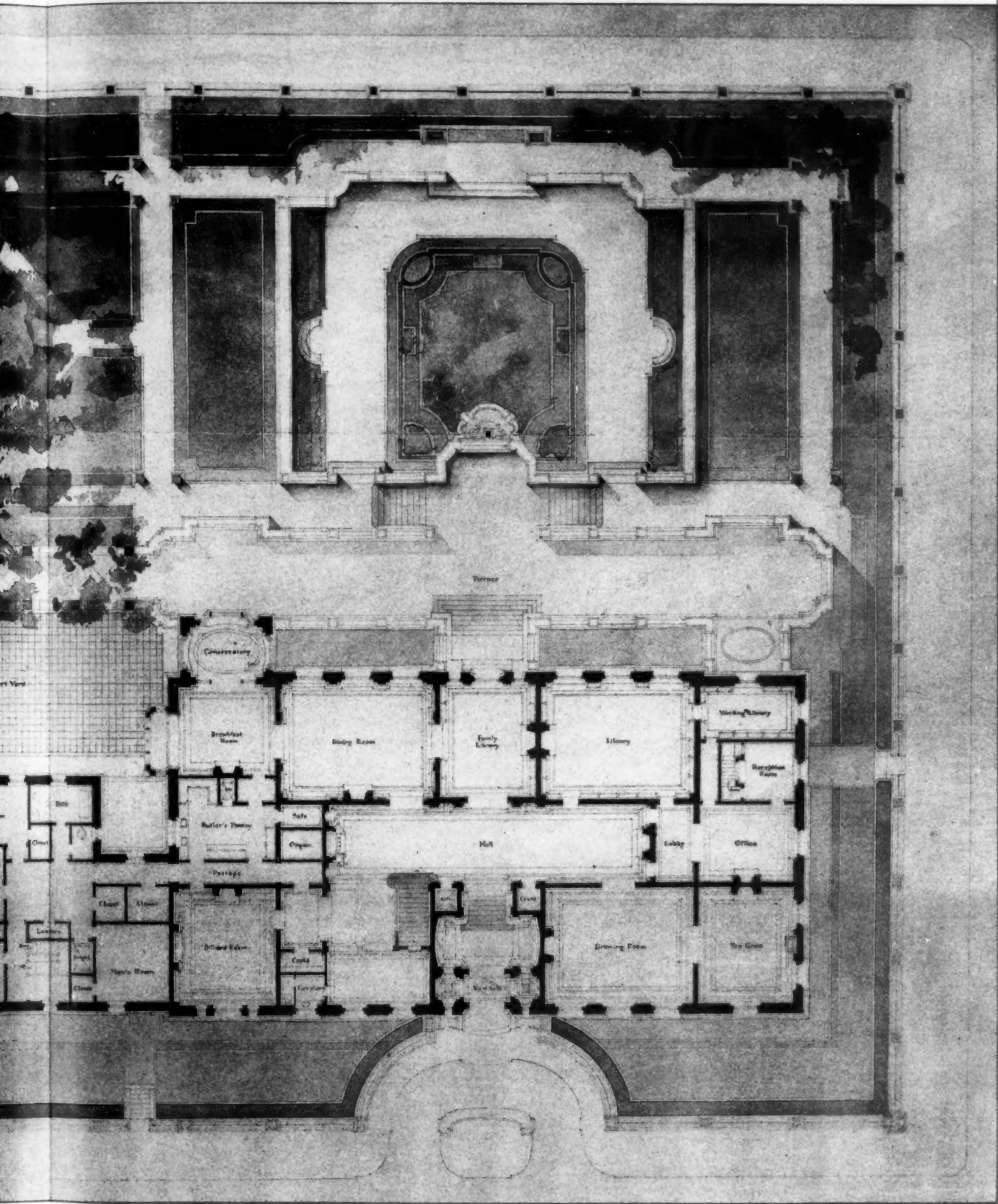


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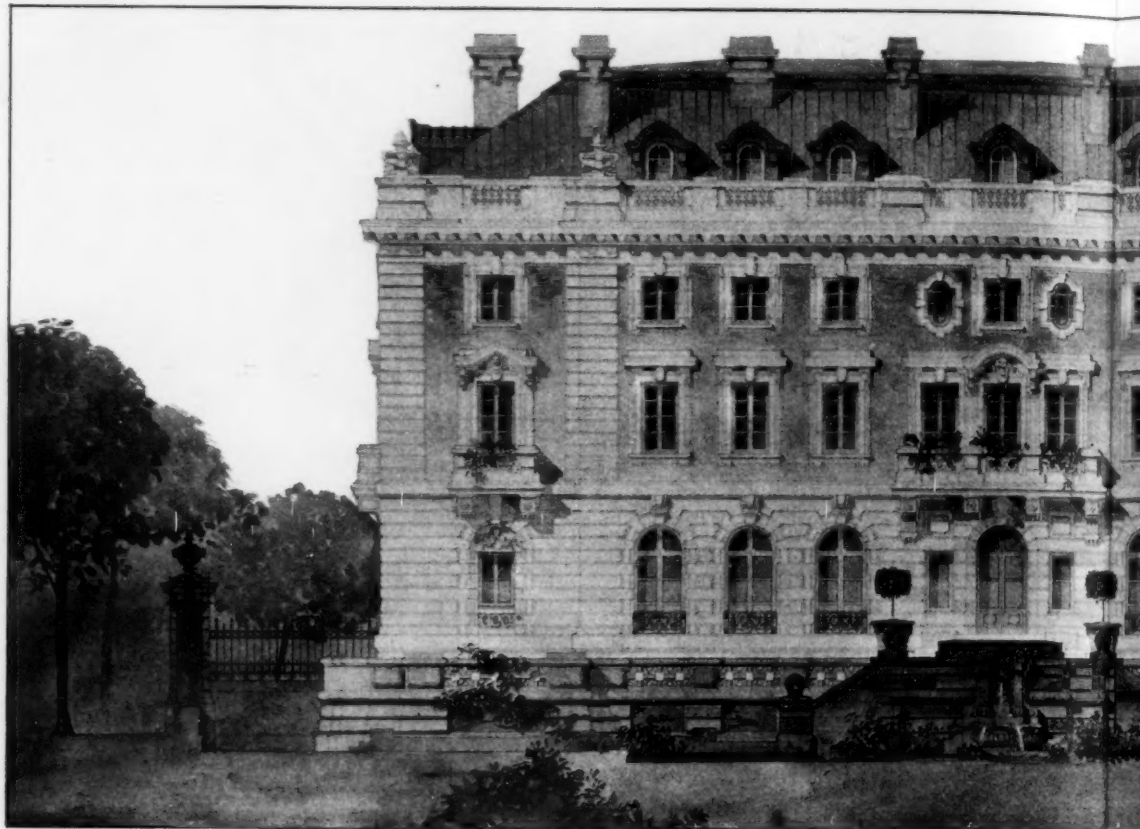
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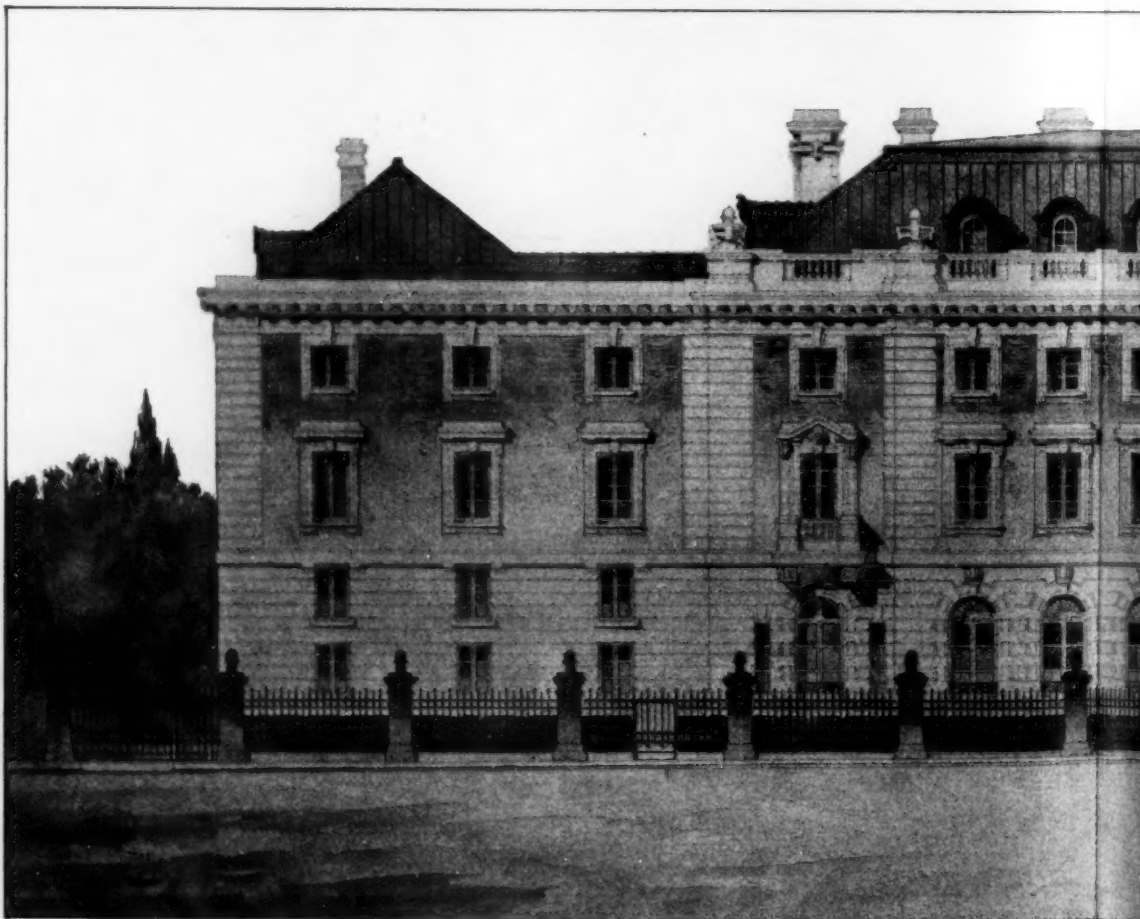


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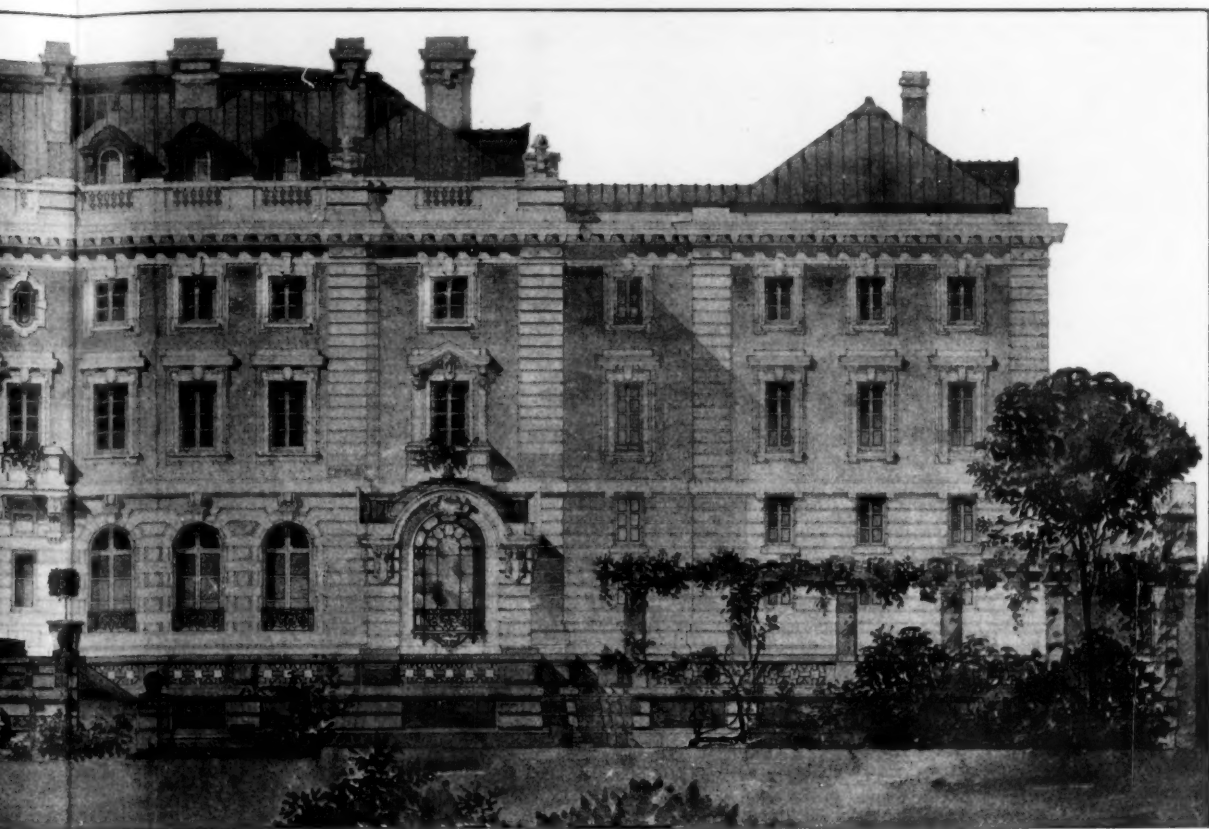


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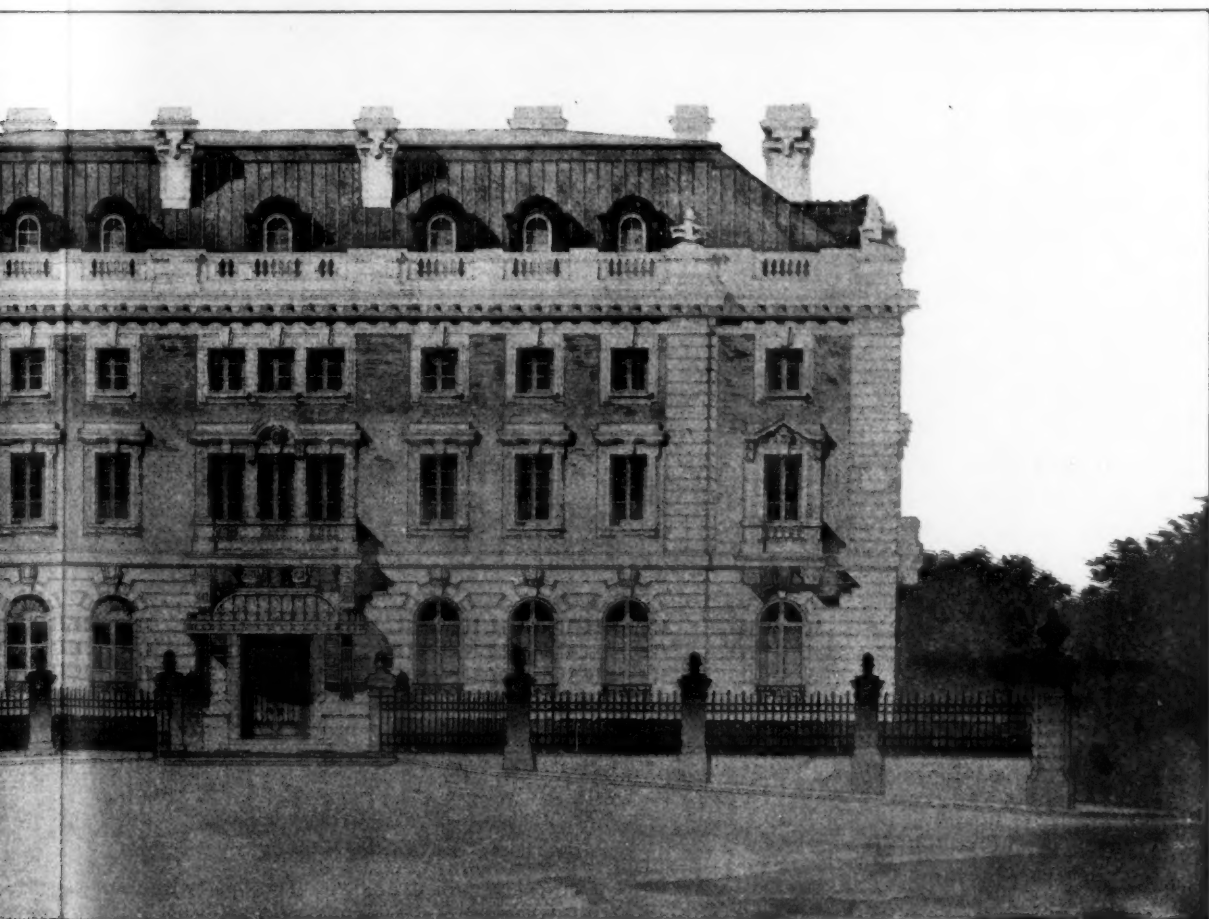


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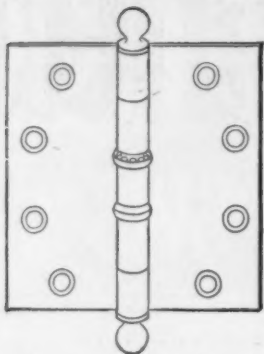
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New Britain. The Stanley Works.....[Wrought-Steel Butts.]		MICHIGAN. Aldine. Aldine Mfg. Co.....[Wood Mantels.]		Dayton. Dayton Automatic Elevator Gate Co.....[Elevator Gates.]		Columbus. Kinnear & Gager Co., The.....[Steel Ceilings.] Steel Rolling-Shutters.....[Steel Ceilings.] Nelson Co., The C. T.....[Capitals (Carved).]					
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[Date, 1796.]

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4. Doorway of Lefferts Homestead, Brooklyn, N. Y. Date, 1750.
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7. Mantel in Erasmus Hall, Brooklyn, N. Y.
Date, 1787.
[Gelatine.]
9. House of John Bartram, Philadelphia, Pa.
Date, 1730.
- 10=13. St. Paul's Chapel, Broadway, New York,
N. Y. Date, 1764=94.
[Two Gelatines.]
- 14, 15. Old South Church, Boston, Mass. 1729.
16. St. John's Chapel, New York, N. Y. Date,
1803=6.
[Gelatine.]

17. First Church, Hingham, Mass. 1681.
18. The Cloisters [“Saal”] Ephrata, Pa. 1744.
- 19, 20. Taylor House, Roxbury, Mass. 1790.
[One Gelatine.]
- 21, 27, 29. Independence Hall, Philadelphia, Pa.
1729=34.
[Two Gelatines.]
28. Mantels in a South Third Street House,
Philadelphia, Pa.
[Gelatine.]
- 30, 32, 33, 35, 36. Mount Pleasant Mansion, Philadelphia, Pa. Date, 1761.
31. Interior of Christ Church, Philadelphia, Pa.
Date, 1727.
[Gelatine.]
34. Cupolas from the Pennsylvania Hospital,
Philadelphia, Pa. Date, 1755=96.
[Gelatine.]

TEXT

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| “The So-called Colonial History of the United States,” | Olof Z. Cervin |
| “The Roof of the Old South Meeting House,” | W. G. Preston |
| “The Seventh Day Baptist Church, Newport, R. I.,” | G. C. Mason |
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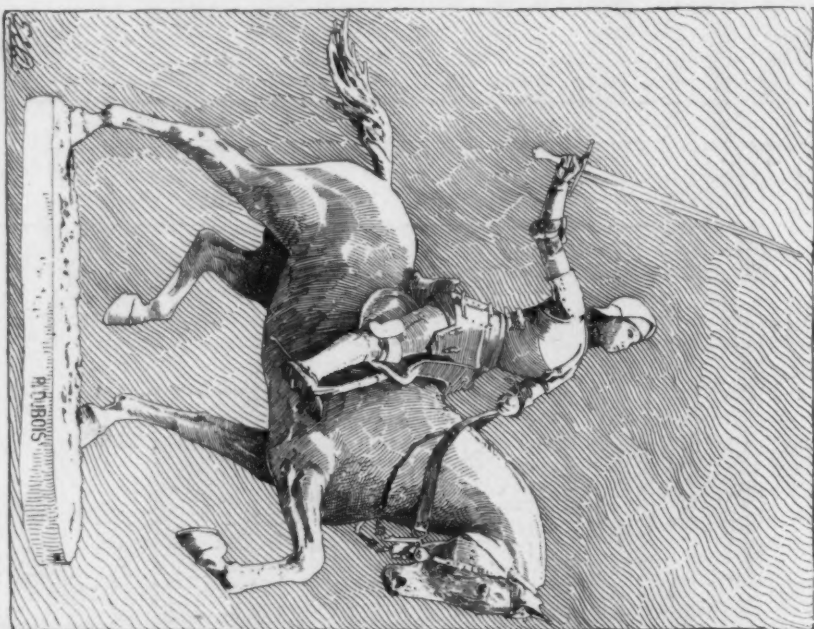
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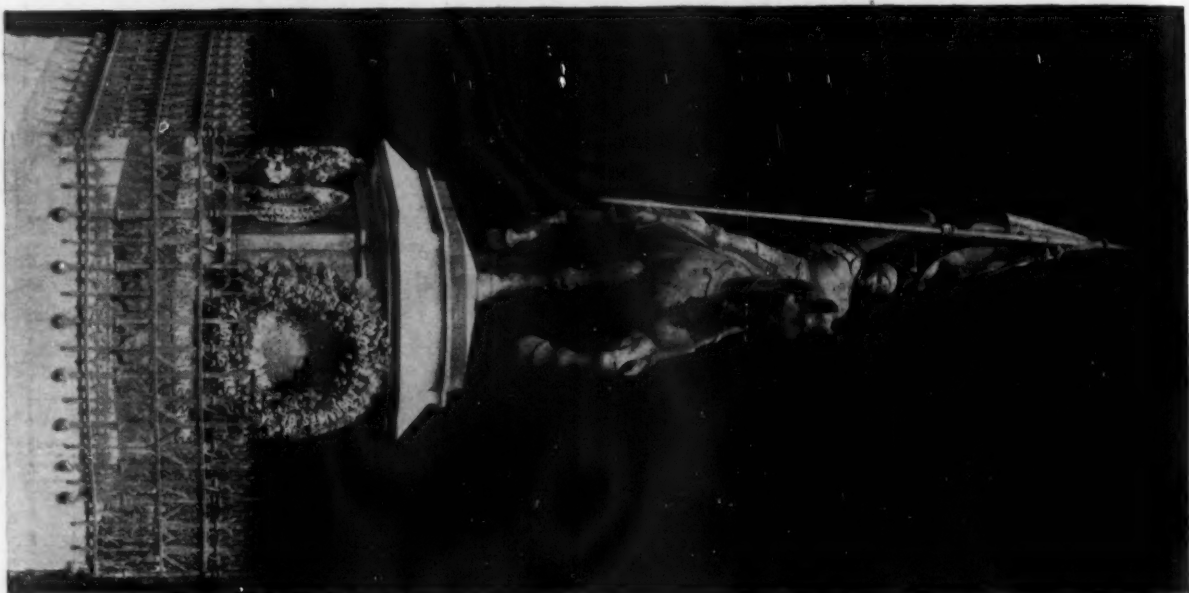
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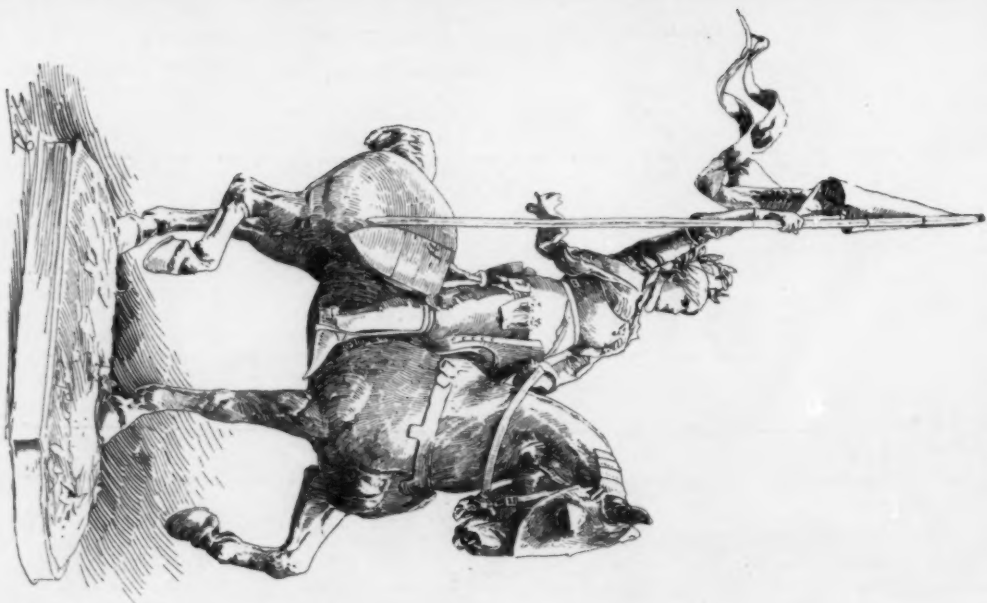
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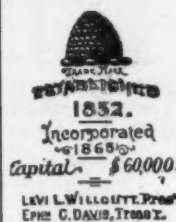
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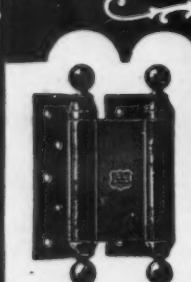
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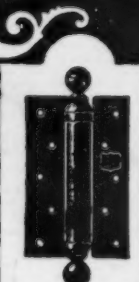
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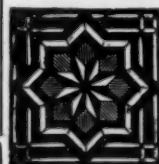
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638,686. TREAD FOR STAIRS, ETC.—Frederick W. Haestis, Boston, Mass.

BUILDING INTELLIGENCE.

(Reported for The American Architect and Building News.)

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

ADVANCE RUMORS.

Alexander City, Ala.—W. P. Pinckard, of Birmingham, and associates will build a cotton-factory to be operated by water-power. They have bought shoals and land near here where they will locate the plant.

Allentown, Pa.—The erection of a new Y. M. C. A. building is being agitated.

Anaconda, Mont.—Smith & Kern, architects, of Butte, have prepared plans for rebuilding the McDermott Hotel. Two stories will be added; cost, \$50,000.

Ashland, Wis.—It is reported that the Wisconsin Central Ry. will expend \$500,000 to \$750,000 in the construction of a steel ore dock.

Atlantic City, N. J.—Representative Gardner has introduced a bill in Congress for the purchase of a site for a public building here.

Boston, Mass.—The trustees of the Boston Museum of Fine Arts have bought a large tract of land in the Back Bay Fens, for the purpose of erecting a building that will meet the present and future needs of the institution. The land includes more than 600,000 square feet and is near the Huntington Ave. entrance to the fens.

Bridgeport, Conn.—The Berlin Iron Bridge Co., of East Berlin, are about to complete for the American Ordnance Co. a new machine-shop with travelling-cranes, runways, etc. The building is to be covered with the Berlin Iron Bridge Company Patent Anti-condensation Corrugated Iron Roof Covering.

Buffalo, N. Y.—The Bell Telephone Co. will build an additional story to the building on W. Seneca St., occupied by the company as a central station.

Mary E. Meyer will build a three-story brick residence at 194 Bidwell Parkway. It will cost about \$8,000.

The Schoellkopf estate is having plans drawn by Architect Esenwein for a five-story brick theatre. The site, which is on Main St., near Edwards St., is 73' x 192', and the structure will cost about \$100,000.

Carlton, Ga.—The Carlton Manufacturing Co. has been formed to erect a cotton factory. Capital stock is \$60,000, with power to double it.

Clinton, Mass.—Architects Barker & Nourse, of Worcester, have prepared sketches for the proposed addition to the Clinton Hospital, the addition to be used for surgical purposes. The building will be 34' x 42', of brick. The estimated cost is \$5,000. The work will be done by contract.

Council Bluffs, Ia.—Wickham Bros. and a local stock company have had plans prepared by J. C. & W. Woodward, architects, for a five-story brick warehouse, 50' x 150', gravel roof, brick cornice, d. s. glass, cement plaster, steam heat; cost, \$30,000.

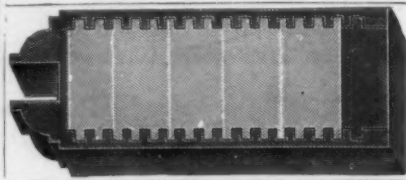
Deadwood, S. D.—It is reported that the Masonic Benevolent Association will finish the large Masonic Temple, which was begun in 1892; cost complete, \$40,000.

Des Moines, Ia.—Proudford & Bird, architects, are making plans for the stucco mill to be erected at Fort Dodge. It will be frame, with stone foundation, 56' x 146'; cost, \$25,000.

East Aurora, N. J.—Charles A. Sweet will have extensive alterations to cost \$10,000 made to his residence. Architect Loverin is drawing the plans.



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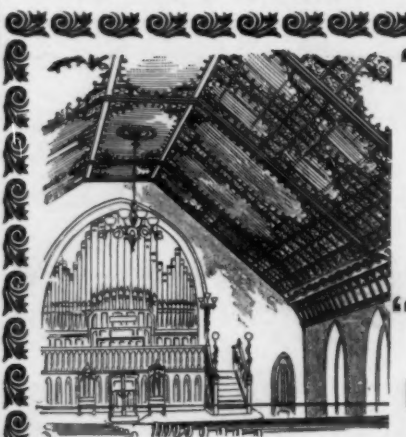
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**BUILDING INTELLIGENCE.**

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Fairfield, Me.—The Somerset Fiber Co. will spend about \$150,000 in making additions and alterations to its plants. Among other improvements six buildings will be erected.

Findlay, O.—Lewis Kramer, architect, is preparing plans for a \$35,000 church to be erected by the Presbyterian Society.

Fitzgerald, Ga.—A \$60,000 company has been organized to build a mill here. W. R. Bowen is president.

Gaylord, Mich.—Charles Hoag, of Saginaw, is preparing plans for a Catholic church to cost \$12,000. Rev. Father Casimar Skory, pastor.

Humboldt, Tenn.—A company has been organized here for the erection of a 5,000 spindle cotton factory, the leading business men being interested.

Iowa City, Ia.—O. H. Carpenter, architect, has prepared plans for a building for the C. S. P. S. Society. It will be two-story, 42' x 72', of stone and brick, steam heat; cost, \$5,000. P. A. Korab, secretary.

Laurel, Miss.—The Laurel Cotton Mills have formally organized and will place contracts for immediate erection of plant. The capital stock is \$200,000, and the privilege is had of increasing to a million dollars if desired.

Louisville, Ky.—Mrs. P. Wooldridge is having plans drawn by Architect McDonald for a six-story office-building, 30' x 60', to be built early in the spring at 5th and Court Pl., at a cost of \$50,000.

Marshalltown, Ia.—The Glucose Sugar Refining Co. contemplates erecting a syrup and storage house at a cost of \$50,000.

McKeesport, Pa.—The W. Dewees Wood Co. is to enlarge its plant. Wm. B. Seale & Son, of Pittsburgh, have the contract.

Milwaukee, Wis.—It is reported that the A. Weinecke Toy Co. will erect an addition to its willow factory in the spring; cost, \$20,000.

Architect Ellison has plans for a church to be erected at 22d Ave. and Madison St., at a cost of \$5,000.

Buenning & Dick, architects, have plans out for a modern residence, to cost \$9,000.

It is said that J. H. Rice will erect a three-story brick store building at 18th St. and Fond du Lac Ave. to replace the building which was burned about a year ago; cost, \$12,000.

C. H. Rische will erect a brick veneered apart-

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

ment building on the corner of Grand Ave. and 23d St., containing six flats; cost, \$20,000.

D. Quis will erect a two-story brick flat-building at Market and Biddle Sts., from plans by Messmer & Son, architects, 26' x 65'; cost, \$5,000.

A. D. Meiselbach will erect a brick veneered store and flat building, 45' x 95', at North Milwaukee. Plans by Messmer & Son, architects; cost, \$6,000.

Nashville, Tenn.—It is stated that the Chamber of Commerce will erect a building to cost \$140,000. A. J. Harris, pres.

New Brunswick, N. J.—The matter of building a county asylum for the insane is being agitated. The Middlesex County Board of Freeholders favor such an institution and it is probable that the matter will soon be submitted to the voters.

Newton, Ia.—It is stated that the Iowa Automatic Fire Alarm Co., recently incorporated with a capital of \$50,000, will erect a factory at once. The incorporators are W. C. Bergman, W. W. Houston and T. G. Bryant.

New York, N. Y.—It is said that the Road Horse Association is considering the building of a clubhouse with a half-mile track adjoining, near the Speedway.

Peoria, Ill.—The Peoria Beer Co., recently incorporated, have had plans drawn for a two-story frame storage building, which they will erect in this city at a cost of about \$6,000.

Philadelphia, Pa.—Plans and specifications are now being prepared for a proposed seven-story apartment-house, to be built at the southeast corner of 13th and Walnut Sts., for C. F. Rumpp. The site has a frontage of 38' x 125'. It is understood the construction will be started soon, provided the estimated cost does not exceed \$250,000. Agent J. A. Patterson has the matter in charge.

It is reported that the American Bank Note Co., which has recently secured properties at 408-416 Library St. and adjacent property, is preparing to erect a ten-story office-building on the site. It is proposed to call the new structure the American Building.

John W. DeLong, of Germantown, has had designs prepared by Architect Fred Fox for a proposed seven-story apartment-house, 80 feet square, to be known as the Delmar apartments, and to be built at the corner of Cheltenham Ave. and Knox St. The cost, it is thought, will reach \$150,000.

Plans are being completed for the erection of a

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

new building for the Drexel Relief League No. 1, Ancient Order of United Workmen. The building will be located on Columbia Ave., near 18th St., and will have a frontage of 36 feet. It will be a three-story brick structure. The building will be erected under the supervision of Hazlehurst & Huckel, who are at work on the plans.

Pittsburgh, Pa.—James H. McCutcheon will erect a \$40,000 residence on 5th Ave. Rutan & Russell, Tradesman Building, architects.

San Antonio, Tex.—A \$25,000 canning and cold storage plant is to be established here by local capital. E. G. Holden and A. Seidel among others are interested.

Savannah, Ga.—It is said that A. B. Gibbs is preparing to erect a residence to cost \$15,000.

Seranton, Pa.—The Y. M. C. A. building, valued at \$71,000, destroyed by fire two years ago, will be replaced soon, it is said, by a larger and more costly building.

Somerville, Mass.—The Winter Hill Baptist Church is to be enlarged and altered in the interior; cost, about \$10,000.

St. James, Minn.—Pass & Shippey, Mankato, are drawing plans for a new city hall to cost \$5,000.

Taylorville, N. C.—A new court-house for Alexander County to cost about \$12,000, after plans being prepared by Hayden, Wheeler & Schwend, Charlotte, will be erected in the spring.

Turtle Creek, Pa.—Plans for a new Roman Catholic Church, drawn by Architect F. C. Sauer, of Pittsburgh, for St. Coleman's parish, have been accepted by the Building Committee and contracts will be let at once; cost, \$40,000. Rev. Wm. A. Cunningham, pastor.

Union, S. C.—The Monarch Cotton Mills have been incorporated with capital stock of \$200,000 for the purpose of building a 10,000 spindle plant promoted by John A. Fant. All the capital stock has been taken and details for building contracts will be completed soon.

Waterloo, Ia.—It is proposed to erect a building for the post-office; cost, about \$20,000.

Watertown, N. Y.—Land has been purchased and plans are being made to erect a two-story cold storage warehouse, 50' x 165', near the Watertown Steam Engine Works.

Wayne, Neb.—W. R. Parsons & Sons Co., architects, of Des Moines, Ia., have drawn plans for the new court-house to be erected here; cost, \$45,000.

Winchendon, Mass.—The Allen, Thompson, Whitney Co. are to build a three-story factory, 40' x 120'.

Worcester, Mass.—Architect Geo. H. Clemence has completed plans for a 10 room residence for the West Side Land Co. The cost will be \$8,000.

Architect J. W. Fatsion is receiving estimates for the construction of a new car-barn and powerhouse to be erected at Templeton for the New England Electric Railroad Construction Co. of this city. It will be of brick and stone with gravel roof and steam heat. The cost will be \$8,000.

Architects Frost, Briggs & Chamberlin are preparing plans for 2 residences to be built for Messrs. J. H. & F. H. Howland. One will be erected at corner of Pleasant and Elm Ave., two-and-one-half stories high, 24' x 38', with an ell 6' x 25'; the other will be erected at corner of Midland St. and Elm Ave., two-and-one-half stories high, 26' x 36', with an ell 5 1/2' x 17'. The cost will be \$8,000.

Architect Louis Plack, Jr., has completed plans for a two-and-one-half-story residence to be erected on Midland St., for William B. Howe, builder; cost, about \$4,500.

Architects Earle & Fisher have plans under way for the new Adams Square Baptist Church. It will be of wood, 60' x 60', with a seating capacity of 350. The cost will be \$8,000.

Youngstown, O.—It is reported that the American Tin-plate Co. are interested in the erection of a \$1,000,000 plant. The site has not yet definitely been selected, but it is thought that the advantages of three trunk lines will bring it here.

ALTERATIONS AND ADDITIONS.

Brooklyn, N. Y.—Harrison Ave., n w cor. Gerry St., two-sty' bk. extension, 25' x 50'; \$5,000; o., Chas. Lorenz, 190 Harrison Ave.; a., E. Schrupf, 306 Stockton St.; b., J. B. Mueller, Bushwick Ave. & Meserole St.

Marion, Ind.—Railroad Ave., four-sty' bk. addition to stock-house, 54' x 134', flat roof; \$35,000; o., Indiana Brewing Association; a., Louis Lehle, Schiller Building.

Milwaukee, Wis.—Seventh Ave. and Park St., additional story to bk. building, 40' x 110', new three-sty' bk. building, 40' x 50'; \$20,000; o., Cream City Sash and Door Co.; a., Wm. H. Mason.

New York, N. Y.—Grand St., Nos. 107-113, six-sty' extension; \$45,000; o., Jas. K. Roosevelt estate; a., A. Milton Napier.

Broadway and Forty-seventh St., five-sty' & cellar extension; \$20,000; o., John S. Sutphen; a., Geo. M. Walgrove; b., O. T. Mackey & Co.

APARTMENT-HOUSES.

Boston, Mass.—Westland Ave., cor. Hemmenway St., eight-sty' bk. aparts., flat roof, steam; \$200,000; o., E. A. Bangs & als., trustees; b., F. S. Robbins; a., John Lavallo.

Bowdoin Ave., nr. Elder St., 4 three-sty' flats, 25' x 60', steam; \$25,000; o., A. John O'Brien; b., William O'Connell.

Brookline, Mass.—Foster St., 9 three-sty' bk. aparts., 34 1/2' x 40'; \$90,000; o., H. C. Birtwell; b., Boston Construction Co.

Brooklyn, N. Y.—Carlton Ave., n e cor. Dean St., four-sty' & cellar bk. flat, 25' x 95', gravel roof, steam heat; \$15,000; o., Bessie L. Martin, 350 Cumberland St.; a., A. S. Hedman, Arbuckle Building.

Eighth St., s e, nr. 7th Ave., four-sty' bk. & st. flat, 27' x 70'; \$12,000; o., Charles Nickenig, 328 Seventh Ave.; a., Thomas Bennett, 198 Fifty-third St.

New York, N. Y.—W. Central Park, s w cor. 91st

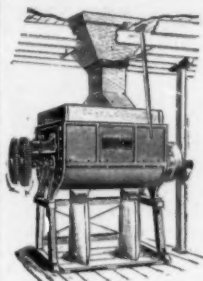
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(Apartment-houses Continued.)

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E. Fifty-eighth St., Nos. 422-424, six-sty' & base. bk. flat, 40' x 85' 9"; \$40,000; a., G. F. Polham, 503 Fifth Ave.

Broadway, nr. 108th St., seven-sty' bk. flat & store, 25' 8" x 76', 81' 9"; \$40,000; o., H. Dongan, 2643 Broadway.

Livingston Pl., s e cor. 16th St., six-sty' bk. flat, 34' 8" x 71'; \$35,000; o., Jos. Polstein, 220 Henry St.; a., M. Bernstein, 245 Broadway.

One Hundred and Thirtieth St., nr. Lenox Ave., 2 five-sty' bk. flats, 20' 30" x 86' 6" & 89'; \$54,000; o., Israel Lebowitz, 21 Washington Pl.; a., Edw. Wenz, 1491 Third Ave.

Seventh Ave., n w cor. 113th St., seven-sty' st. front flat, 95' x 109' 11"; \$150,000; o., Emil Block, 85 W. 88th St.; a., G. A. Schellenger, 130 Fulton St.

BUILDING INTELLIGENCE.

(Apartment-Houses Continued.)

St. Ann's Ave., nr. 150th St., five-sty' bk. & st. apart., 44' x 68' 6"; \$30,000; o., E. Mulholland, 3106 Park Ave.

One Hundred and Fiftieth St., n e, 200' w St. Nicholas Ave., six-sty' bk. & st. flat, 25' 4" x 88' 6"; \$45,000; o., Owen C. Moore, 433 W. 147th St.; a., Moore & Landsiedel, 148th St. & 3d Ave.

Livingston Pl., s e cor. 17th St., seven-sty' & base. bk. flat, 53' x 107'; \$150,000; o., Polestein & Cohen, 315 E. 79th St.; a., M. Bernstein, 245 Bowery.

St. Nicholas Ave., nr. 113th St., seven-sty' bk. flat & sto e, 59' 2" x 110' 11"; \$140,000; o., Gundlach & Koch, 204 E. 86th St.

W. Forty-fifth St., Nos. 137-139, six-sty' bk. bachelor apart., 34' 7" x 85' 5"; \$130,000; o., W. H. Stearns, 156 Fifth Ave.

Kelly St., s e cor. 165th St., 2 three-sty' fr. flats & stores, 20' 25' x 60'; \$10,500; o., W. T. Lavelle,

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Worcester, Mass. — Newbury St., four-st'y bk. aparts., 48' x 48'; \$15,000; o, Thos. Skelthorne; b, John Skelthorne; a, A. J. Harrington.

CHURCHES.

Detroit, Mich. — Aubine Ave., n w cor. Maple St., bk. & fr. church; \$8,000; b, N. Wardrop.

New York, N. Y. — E. One Hundred and Fifty-sixth St., Nos. 678-682, one-st'y & base. bk. church, 53' x 100'; \$20,000; o, St. Adalbert's R. C. Church, 593 Eagle Ave.; a, G. H. Streton, 289 Fourth Ave.

CLUB-HOUSES.

New York, N. Y. — E. Seventy-ninth St., Nos. 334-336, three-st'y & base. bk. club-house, 34' x 102' 2"; 59'; \$20,000; o, Cherokee Club, 334 E. 79th St.; a, Jas. J. F. Gavigan, 1123 Broadway.

EDUCATIONAL.

Brooklyn, N. Y. — Fourth Ave., e s, extending from 13th to 14th Sts., three-st'y bk. public school, 64' 4" x 141' 4"; gravel roof, steam heat; \$120,000; o, City of New York; a, C. B. J. Snyder, Park Ave. & 59th St., New York.

FACTORIES.

Brooklyn, N. Y. — Surf Ave., nr. W. 17th St., one-st'y bk. boiler & engine-room, 35' x 103' 6"; tar & gravel roof; \$4,500; o, Geo. C. Tilyou, Surf Ave. & W. 15th St.

Frankford, Pa. — One-st'y bk. factory, 26' x 75'; \$7,000; o, Sol. Jacob's Sons, 406 E. 103d St., New York City; a, W. B. Wills, 17 Troutman St.

Frankford, Pa. — One-st'y bk. factory, 53' x 369', two-st'y varnish and drying room, 147' x 202', one-st'y workshop & store-room, 50' x 82', one-st'y boiler & engine house, 51' x 71'; \$59,000; o, Wolf Process Leather Co.; b, George W. Pierson; a, Stearns & Cator.

HOTELS.

Brooklyn, N. Y. — Bushwick Ave. and Conway St., 2½-st'y fr. hotel, 60' x 60'; \$30,000; o, Springfield Breweries Co., Springfield, Mass.

Yonkers, N. Y. — Yonkers Ave., near entrance to Empire City Park race track, 2½-st'y fr. hotel, 95' x 100'; o, George H. Huber, 106 E. 14th St.

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HOUSES.

Boston, Mass. — York St., No. 11, three-st'y fr. dwell., 30' x 50', pitch roof, furnace; \$5,000; o, b. & a., Victor Wolmer.

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Hecta St., nr. Dorchester Ave., 2 three-st'y fr. dwells., 27' x 47', pitch roofs, furnaces; \$10,000; o, b. & a., D. F. Riley.

Mather St., nr. Silloway St., 2½-st'y fr. dwell., 31' x 39', pitch roof, furnace; \$5,500; o, Louis S. Galoupe; b. & a., Block & De Witt.

Brockton, Mass. — Lexington St., 2½-st'y dwell., 29' x 47', steam; \$6,000; o, Fred R. Crocker & Co.; b., Fred R. Crocker; a, W. Sweat.

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Regent Circle, 2 three-st'y bk. dwells., 24½' x 63'; \$36,000; o, H. M. Whitney.

Brooklyn, N. Y. — Eighth Ave., s w cor. 1st St., 2 four-st'y bk. dwells., 21' 6" x 48'; \$27,000; o, a. & b., Peter S. Collins, 67 Clermont Ave.

Linden Boulevard, nr. Nostrand Ave., 3 three-st'y bk. dwells., 20' 8" x 42', slate & tin roof, steam heat; \$18,000; o. & b., Geo. F. Harrison, Avenue I, nr. E. 34th St.

Bay Twentieth St., s 88th St., two-st'y fr. dwell., 38' x 40'; \$6,000; o. & b., Mr. Pringle, Ft. Hamilton Ave.; a, Thomas Bennett, 198 Fifty-third St.

Avenue F, Nos. 538-540, three-st'y & base. bk. & st. dwell., 29' x 44'; \$10,000; o, Daniel A. Magrino; a, D. Borgia, 338 E. 21st St., New York City.

Greene St., n e cor. Clinton St., 4 four-st'y bk. & st. dwells., 22' x 70'; \$20,000 each; o. & b., Henry B. Moore, 387 Flushing Ave.; a, Herbert R. Brewster, 45 Exchange Pl., New York City.

E. Eighteenth St., nr. Avenue D, two-st'y & attic fr. dwell., 35' x 38', pitch roof, steam; \$4,500; o, Samuel T. Sherwood, 1134 Flatbush Ave.; a, J. A. Davidson, 828 Flatbush Ave.

Buachmann's Walk, nr. Surf Ave., two-st'y bk. store & dwell., 24' x 57', tar & gravel roof; \$4,500; o, Camelia Massa; a, E. H. Brinkerhoff, Bowery & Schweikert's Walk.

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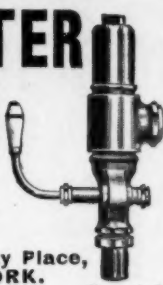
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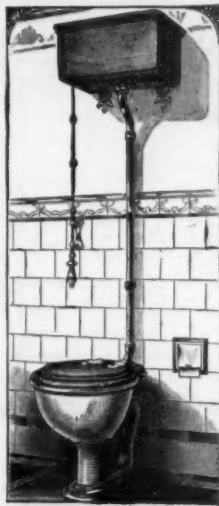
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Brooklyn, N. Y. — Sandford St., nr. Myrtle Ave., two-st'y bk. stable, 28' x 30'; \$700; o., John Clark, 675 Willoughby Ave.

New York, N. Y. — Avenue A, s w cor. 68th St., one & two-st'y bk. & st. stable & office, 20' x 25' x 27' & 55'; \$1,000; o. & a., Bart Dunn, on premises.

One Hundred and Seventy-sixth St., nr. Fulton Ave., one & two-st'y fr. stable, 25' x 40' 6"; \$500; o., W. Bergen; a., C. S. Clark.

Crotona Pl., cor. 171st St., two-st'y fr. stable, 29' 6" x 89'; \$1,300; o., Hana McGrath, 23 Crotona Pl.

Philadelphia, Pa. — Delancey St., nr. 19th St., three-st'y bk. stable, 30' x 50'; \$8,500; o., E. B. Smith; b., John S. Cornell & Son.

STORES.

Boston, Mass. — Dorchester Ave., No. 2267, fr. store, 40' x 65', flat roof, stoves; \$5,000; o., Adeline Smith; b., C. H. & H. B. Horne; a., E. T. Nolte.

Brooklyn, N. Y. — Fourth Ave., nr. 53d St., four-st'y bk. store & flats, 40' x 52'; \$12,000; o., Oscar F. Gronland, 180 Thirty-ninth St.

New York, N. Y. — Broadway, n e cor. 13th St., eight-st'y bk. flats & stores, 62' 6" x 220' x 250'; \$400,000; o., Wm. W. Astor, London, Eng.; a., Clinton & Russell, 32 Nassau St.

Philadelphia, Pa. — Main St., No. 4364, three-st'y bk. store and light storage building, 31' x 77'; \$12,000; o., Forster Bros.; a. & b., John Maginnis.

Worcester, Mass. — Two-st'y bk. store-building, 50' x 75', flat roof; \$7,500; o., Carlson Bros.; b., John H. Skoglund.

TENEMENT-HOUSES.

Boston, Mass. — Lubec St., three-st'y bk. tenement, 23' x 46', flat roof, stoves; \$6,000; o., Ignazio Mesino; a. & b., F. F. Morton.

Camden St., Nos. 16-18, 2 three-st'y bk. stores & tenements, 20' x 40', flat roofs, stoves; \$10,000; o., Mary McGrath; b., Wm. Smith; a., E. P. Morse.

Glenway St., cor. Erie St., three-st'y fr. flats, 23' x 26' x 50', stoves; \$5,000; o. & b., Geo. M. Fernald; a., E. R. Fernald.

WAREHOUSES.

New York, N. Y. — Fifth Ave., No. 164, seven-st'y bk. flats & stores, 28' x 67'; \$75,000; o., Mrs. M. Budd, 53 W. 57th St.; a., Paritt Bros., 26 Court St., Brooklyn.

Seventh St., No. 111, six-st'y bk. storage building, 21' x 79' 10" & 89'; \$12,000; o., S. E. Jacobs, 35 Nassau St.; a., Hy. Regelmann, 133 Seventh St.

Hudson St., s w cor. Vestry St., seven-st'y bk. warehouse & store, 33' x 95' x 100' & 100'; \$45,000; o., W. C. Dewey, 5 E. 14th St.; a., Wagner & Jahn, 109 University Pl.

E. Broadway, s e cor. Catherine St., seven-st'y bk. warehouse, 48' 6" x 97', 92'; \$50,000; o., Lazarus

BUILDING INTELLIGENCE.

(Warehouses Continued.)

Levy, 31 E. Broadway; a., M. Bernstein, 245 Broadway.

Philadelphia, Pa. — Sixty-second St. and Wood-lawn Ave., one-st'y storage building, 100' x 164'; \$20,000; o., J. G. Brill & Co.; b., Macey, Henderson & Co.

Filbert St., Nos. 1707-9, five-st'y bk. & fr. storage warehouse, 40' x 116'; \$11,000; o., Wm. A. Gregg & Co.; b., John Maginnis.

St. Louis, Mo. — Lewis St., seven-st'y cold-storage building, 130' x 202'; o., St. Louis Refrigerator and Cold Storage Co.; b., A. W. Kellermann & Co.

PROPOSALS.

FURNITURE.

[At West Point, N. Y.] Sealed proposals, in triplicate, will be received at the office of Quartermaster U. S. M. A., until 12 M., December 18, 1899, for furniture, etc., for Memorial Hall. MALVERN-HILL BARNUM, Lt. and Q. M., U. S. M. A. 1251

SANITARIUM.

[At Pueblo, Col.] Bids will be received after January 1 for the construction of a sandstone and brick sanitarium, to cost \$60,000. WESTON & CO., Pueblo. 1252

Treasury Department, Office Supervising Architect, Washington, D. C., November 29, 1899. Sealed proposals will be received at this office until 2 o'clock P. M., on the 1st day of February, 1900, and then opened, for the construction (except heating apparatus, elevator, electric wiring and conduits), of the U. S. Public Building, Boise, Idaho, in accordance with the drawings and specification, copies of which may be had at this office or the office of the Postmaster at Boise, Idaho, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1251

COURT-HOUSE. [At Santa Ana, Cal.] The Board of Supervisors of Orange County will receive plans and specifications until December 18, for a court-house to be erected on block 21 of the city of Santa Ana. W. C. BECKETT, clerk. 1251

LATERAL WING.

[At Mansfield, O.] Sealed proposals will be received until December 20, for the construction of the east cell and lateral wing of the Ohio State Reformatory. C. H. WORKMAN, sec. board of mgrs. 1251

COUNTY JAIL.

[At Alexandria, Minn.] Sealed proposals will be received until January 4, 1900, for the erection and construction of a county jail for Douglas County. E. P. WRIGHT, county aud. 1252

COUNTY JAIL.

[At Alexandria, Minn.] Bids will be received until January 4 for the erection of a county jail, from plans by Beechner & Jacobson, architects, St. Paul. E. P. WRIGHT, county auditor. 1251

COUNTY JAIL.

[At Ventura, Cal.] Bids will be received December 19 by the Ventura County Supervisors for alterations to the Court-house, estimated to cost about \$12,000. J. H. BRADBEER, of Los Angeles, architect. 1251

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PROPOSALS.

JAIL.

[At Stockton, Cal.] Sealed bids are wanted until December 19, for erecting a jail. OTTO GRUNSKY, clerk board of supervisors. 1251

ELECTRIC LIGHT PLANT.

[At Christiansburg, Va.] Sealed bids will be received December 1st for the construction of an electric-light plant to cost \$10,000. GEO. W. WALKER, clerk. 1251

WATER-WORKS.

[At Charlestown, Mass.] Sealed proposals will be received until January 1 for the construction of a water-works and electric-light plant. C. R. HAY, eng. 1251

JAIL.

[At Greensboro, N. C.] Bids are wanted December 6 for a jail. W. C. BOREN, Chmn. Bd. Co. Commr. 1251

ALTERATIONS TO COURT-HOUSE.

[At Ventura, Cal.] Bids will be received December 19 by the Ventura County Supervisors for alterations to the Court-house, estimated to cost about \$12,000. J. H. BRADBEER, of Los Angeles, architect. 1251

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. . . CODE OF ETHICS . . .

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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.

SECTION 16. A Member should so conduct his practice as to forward the cause of professional education and render all possible help to juniors, draughtsmen and students.

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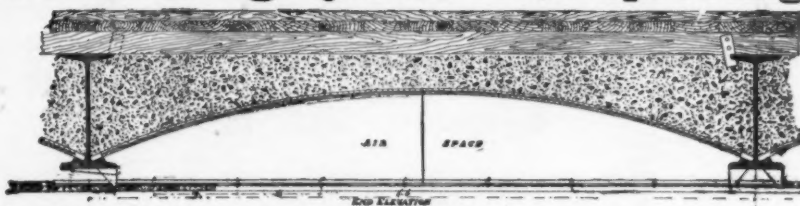
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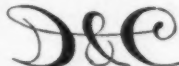
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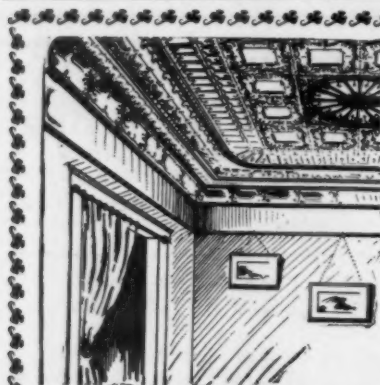
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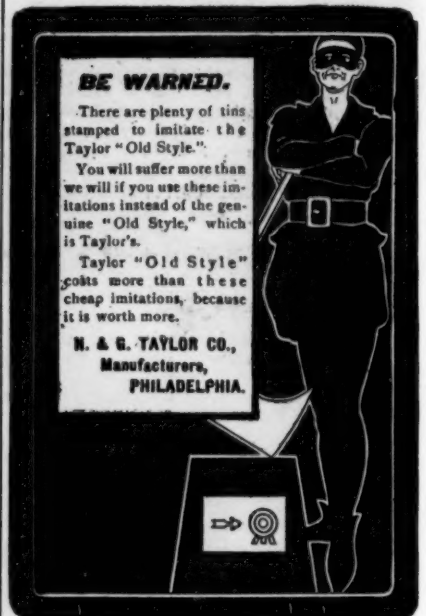
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" 1st.....	@ 5 25			
Hollow.....	@ 7 00			
Fronts:				
Croton, Brown.....	@ 12 00			
" dark.....	@ 12 00			
" red.....	@ 12 00			
Chicago pressed.....				
" Moulded.....				
Baltimore.....	37 00 @ 41 00			
Philadelphia.....	19 00 @ 21 00			
Trenton.....	17 50 @ 18 50			
Milwaukee.....				
Moulded:				
Red Pressed.....	@ 29 00			
Buff.....	@ 27 00			
Moulded Red & Buff.....	45 00 @ 70 00			
Enamelled: Imp.....	85 00 @ 100 00			
Enamelled (edge and end).....	90 00 @ 110 00			
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Utica, Akron, Buffalo, Milw'ke.	Not sold.			
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" (White's).....	2 65 @ 3 00			
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" (Dyckerhoff).....	2 75 @ 3 00			
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" Stettin, (Anchor).....	2 35 @ 2 45			
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Keene's coarse.....	4 25 @ 4 75			
" superfine.....	@ 6 50			
Lime:				
Lime of Tell.....	@ 4 00			
Hydraulic Lime.....	@ 1 45			
Chicago Lime in bulk.....	{ St. John			
Wisconsin Lime.....	75 @ 80			
Rockland and Rockport, (Conn.).....	85 @ 90			
Rockland, finish.....	@			
Kelley Island Lime, finish.....	@			
State, Com. cargo rates.....	@ 65			
State, finishing.....	@ 75			
Plaster of Paris (calcined).....	1 30 @ 1 40			
" (casting).....	@ 1 60			
Hair (cattle) & bush.....	14 @ 16			
" (Goat).....	17 @ 19			
Sand, & load.....	1 00 @ 1 25			
Domestic Com.....				
8 50 @ 9 50				
Domestic Face.....				
18 00 @ 25 00				
Philadelphia.....				
35 00 @ 40 00				
10 00 @ 11 00				
Phila. mould.....				
50 00 @ 80 00				
Enamelled B'k.....				
Imported.....				
Enam. (edge).....	105 00 @ 120 00			
" (edge & end).....	120 00 @ 135 00			
Domestic.....				
Enam. (edge).....	90 00 @ 100 00			
" (edge & end).....	110 00 @ 115 00			
Building 4 50.....				
sewer add 1 00.....				
hollow, add 1 25.....				
Enam. Imp. Bk.....	125 00 @ 145 00			
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Select Red Sand.....	Mold.....10 00			
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Chicago, do.....	assorted shades			
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Not sold.....				
75 @ 1 00.....				
75 @ 1 00.....				
2 50 @ 2 60.....				
2 50 @ 2 60.....				
2 50 @ 2 60.....				
2 50 @ 2 60.....				
3 75 @ 4 25.....				
2 90 @ 3 20.....				
2 80 @ 2 90.....				
3 10 @ 3 30.....				
2 75 @ 2 90.....				
2 85 @ 3 00.....				
2 75 @ 3 25.....				
6 00 @ 7 00.....				
9 00 @ 10 00.....				
Not sold.....				
45 @ 55.....				
45 @ 55.....				
Not sold.....				
Not sold.....				
1 00 bulk, 75c.....				
Not sold.....				
Not sold.....				
1 65 @ 1 75.....				
1 75 @ 1 90.....				
12 @ 20.....				
30 @ 25.....				
1 00 00 1 25.....				
In Yard.....				
Sq. Hard 800 @ 9 00.....				
" @ 7 00.....				
Salmon @ 5 50.....				
Sq. " @ 5 50.....				
Light Stretchers.....				
9 00 @ 11 00.....				
Medium.....	@ 12 00			
Red.....	@ 12 00			
Dark.....	@ 12 00			
Pressed.....	@ 17 00			
Paving.....	11 00 @ 13 00			
Second.....	@ 12 00			
Third.....	@ 10 00			
Dom. { @ 65.....				
" @ 85.....				
1 30 @ 1 50.....				
S.H.F.'s 1 20 @ 1 50.....				
2 85 @ 3 15.....				
2 30 @ 2 60.....				
2 85 @ 3 15.....				
2 75 @ 2 85.....				
Bel'n 2 10 @ 2 40.....				
Hemmoor.....	2 50 @ 2 75			
2 75 @ 2 85.....				
Johnson.....	2 60 @ 2 75			
3 00 @ 3 25.....				
2 75 @ 2 85.....				
B. Egl. 2 50 @ 2 75.....				
3 00 @ 3 50.....				
6 50 @ 7 00.....				
8 00 @ 9 00.....				
White Lime & bush.....				
25 @ 30.....				
White Mash.....				
1 25 @ 1 50.....				
1 00 @ 1 00.....				
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