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THE heat and dryness of the summer has had, probably, something to do with the unusual extent of the fire-losses reported within the past four months, and great conflagrations caused by riotous laborers seem to have begun to add their contribution to the total. As usual, the newspaper editors and insurance men have begun to discourse upon the matter, to repeat the ancient fallacies and bring forward the same old plans for meeting the evil that have been proposed, without effect, for half a century. It is needless to say that the insurance men think that the first thing to be done is to raise premium-rates. Not one insurance man in a hundred cares how many fires there are, provided the premium rates are high enough to pay the losses, and liberal salaries to the officers of insurance companies in addition. As it is the underwriters who fix the rates, the outsider finds it difficult to understand why they should not themselves apply their panacea; but one of the New York papers affords us a glimpse of the explanation, by observing that "general rate advances are difficult to obtain, and reforms are impossible without concerted action in profitable territories." Obviously, a profitable territory for the underwriter is one in which risks are small, and rates high in proportion to the risk, and the "concerted action" which the business needs means, apparently, a combination to raise the rates on solid and well-constructed buildings, owned and occupied by careful and conscientious persons, which are already far higher than they should be, in order to offset the losses of the companies from insuring, in competition with each other, at inadequate premiums, buildings and property owned by reckless and irresponsible persons, who can make money by an occasional conflagration. As, obviously, this manner of carrying an insurance business discourages the careful people, while it favors the reckless ones, the suggestions of the average underwriter in regard to fire-protection, which usually take the form of calls for higher rates, or for additional legislation for the control of building-operations, are of much less value than those of the architects, whom the underwriters affect to despise, but who have no private ends to serve in the expression of their views, and who are not afraid to call attention to the actual ratio between the premiums and the losses in different classes of buildings.

THE newspaper editors, as a rule, lift up their voices to demand "legislation which, by preventing fires, or reducing the amount of their damage, shall make fire-insurance a matter of minor importance." This, no doubt, sounds very

eloquent to the average reader, but it makes the architect smile. What does the newspaper editor conceive to be the nature of the legislation which would prevent fires? If he has any notion about it in his head, why cannot he make it public? The architects have been at work for a thousand years in devising forms of construction which would resist the flames, and a draft of a bill which, when passed by a Legislature, would "prevent fires" would be an extremely interesting document to them, as well as to the community in general. Perhaps the newspaper editor would deign to add to the draft of his proposed legislation a suggestion as to the means of enforcing it. He would hardly expect to provide for the patrolling of all the country roads in the United States by an enormous army of inspectors, to see that his law was not disregarded, yet nothing else would give it any efficacy. We have before us the returns of the more important fires in the United States for the month of August, the losses in which foot up somewhere in the neighborhood of thirteen million dollars. Of these fires only four, with an aggregate loss of about half a million, were in cities which have anything like real municipal control of building operations. All the others were in country villages or provincial towns, where official inspection is impossible. The heaviest single loss was in the lumber yards at Ashland, Wisconsin, where property to the value of a million and a quarter dollars was destroyed. We quite agree with the newspaper editors that such a loss is deplorable, and that legislation that would "prevent fires" would be an excellent thing; but we await with anxious expectation the results of the labor of their invention on the details of legislation which would prevent the burning of lumber-yards.

IN this matter, as in many others, self-enforcing legislation is the only kind which will ever be of any use, and we are glad to see that another distinguished insurance man, Mr. U. C. Crosby, President of the New Hampshire Fire Insurance Company, has begun to realize the immense influence on building of the European principle of neighborhood liability. "In France," as he says, "the party on whose premises the fire originates is liable for all the damage extending outside of his own property." This is not quite adequately stated, for the law is the same in Italy, Spain and Austria as in France, and the consequence is to be seen in the extreme rarity, even in the rural districts of those countries, of a destructive conflagration. It is not true, as we are told by one newspaper editor, that buildings in Brussels, Amsterdam, Rome, Lyons, or Marseilles, or in any other Continental cities, "are of necessity fireproof buildings," or that "their areas and height are rigidly limited." On the contrary, the art of real fireproof building is little understood or practised on the Continent, and although limits are placed upon the area and height of structures, they are so liberal that the average height of buildings in Paris and Rome is far greater than the average of those in New York or Boston. The example of the great Printemps department store, which, although all of iron and stone, burned so rapidly, some years ago, that the clerks had to run for their lives without stopping to get their coats; of the Charité Bazaar, which no American inspector of buildings would have permitted to be opened to public use; and, we might add, of the buildings of the present Exposition, which, notwithstanding the admirable provision of danger-exits and extinguishing apparatus, form, with the wooden bridges, trestles, "passerelles" and fences among which they are crowded, a group from which the architectural visitor from the United States emerges with thankfulness for his escape, and with a devout hope that the great and splendid fair may be brought to a conclusion without a catastrophe, shows how little scientific fire-prevention is thought of in Europe; and the undoubted truth that "what we should term a conflagration practically never occurs" on the Continent, outside of Switzerland and Russia, simply shows that the system of neighborhood liability, by leading every householder and tenant to fill-in between floor-joists with mortar, or even with loam; to make cellar ceilings of brick or tile arches, and to cover kitchen floors with tiles, has effected, what no legislation could accomplish, the separation of blocks and buildings into small isolated risks, fires in which are easily controlled. The same end might be accomplished here by the same means, and there is no reason why they should not be

adopted. The forest-owner who would have to pay his neighbor's losses, in case of the spread of fire from his woods, would soon find a way of keeping the ground free from underbrush and dead leaves; and the owner of a wooden house in a crowded suburb, who now views with equanimity his neighbor's mansion, of the same construction, three feet away, would, if a fire in his premises might expose him to payment for two or more houses, instead of one, soon apply to modern science, in the person of an architect, for advice as to some simple method, by the use of iron-lath and plaster, or similar materials, for keeping his conflagrations to himself; and the chances are that, in addition, he would get an iron ash-barrel forthwith, and would give some stern directions to his family in regard to the disposition of matches and cigar-stumps.

THE construction of the Rapid-transit tunnel in New York is likely to be followed, we are informed, by that of many private tunnels, connecting the underground stations with office-buildings, hotels and other structures in the neighborhood. Where a hotel, or office-building, or still more, a large department-store, is near a station, this would be a very natural thing to do, and, undoubtedly, a profitable thing also, but it is worth reflecting whether some difficulties may not be connected with it in future. Supposing, for example, A's department-store, which is close to the station, to have its private subway, and, by means of it, to secure several thousand additional customers a day, it will certainly not be long before B, who has a similar department-store a little farther off, will also want a subway; and C and D, still farther away, seeing A and B getting their business away from him, will soon follow their example. Owing to the peculiar laws in New York in regard to the ownership of the fee in streets, it is doubtful whether any one who wishes to build tunnels under the street adjoining his house can be prevented from doing so; but, even if the public authority had unquestioned control over the earth beneath the streets, it would not be easy to grant permission for a tunnel to one person and deny it to another, and the construction of one private tunnel is sure to be followed by that of many others. Whether it is really desirable for the owners of office-buildings and stores to ventilate the subway into their buildings, by means of tunnels, which would conduct air from the excavations into the warmer and higher structure, is a question which experience alone can answer; but, in any case, before any private tunnels are built, rules should be adopted in regard to their construction, to which all works of the kind should be required to conform.

A STARTLING discovery has been made in the Philadelphia Public Building, a brick pier, three feet square, in the office of the Fairmount Park Commission, having been found to be badly cracked in several places. The authorities say that this phenomenon indicates "no immediate danger," but architects would be glad to learn of the effectual shoring of the work dependent on the pier. The architect of the building has calculated the weight on the brickwork, and finds that the pier was originally ample to carry its load; but it sometimes occurs that settlements in the neighborhood of such piers throw undue strains on them, and, although the floors seem quite level in this part of the building, it is not impossible that some distortion may have taken place. If the trouble is not due to this, it will be interesting to know what is the reason of it, and architects will be anxious to hear Mr. Powell's account, later, of what he finds when the brickwork is removed.

THE Wachusett dam, bids for the construction of which were opened by the Metropolitan Water Board in Boston a few days ago, is to be a rather remarkable affair. While the length, some fourteen hundred feet, is not very unusual, the height in the middle will be two hundred feet above the rock foundation, and to resist the great pressure of a column of water of this height, the masonry at the foot of the dam will be one hundred and seventy-five feet thick, while the thickness at the top will be twenty-three feet. The specifications call for a construction of rubble masonry, faced with coursed ashlar, and the contractor is allowed to take granite from a ledge owned by the Board, at a distance of a mile and a half from the site of the dam. The bids received varied from sixteen hundred thousand dollars to more than twenty-seven hundred thousand, the lowest bidder being a Chicago firm.

A TECHNICAL question of some importance has been raised in England in regard to the rights of trades-unions. The Amalgamated Society of Railway Servants interfered with non-union men during a strike on a railway in Wales, and an injunction was served on the officers of the Society, to restrain them from doing so. The Society opposed the application, on the ground that it was not incorporated, and, therefore, could not be held responsible for the acts of its members. The High Court of Justice held, however, that, although unincorporated, the Society was nevertheless liable for the actions of its members, and the question is likely to go to the House of Lords. As the law does not permit the incorporation of trades-unions in England, there is a certain justice in pleading this denial of corporate privileges as involving a limitation of corporate liability; but, as we know only too well in this country, the practice of avoiding corporate liability by means of voluntary associations, without charters, and without official control, has increased to a threatening extent, and the decision in England, if upheld, will have a more important bearing on the future of trusts than it will on that of trades-unions.

WE hope that the architectural clubs and sketching societies, in their programmes for their winter's work, will not forget the suggestions made in Sir Wm. Richmond's paper before the Architectural Congress. Although the tone of the paper was a little defiant, as was, perhaps, natural to an artist who had recently been sharply criticised for decorating St. Paul's in a fashion foreign to the style of its architecture, there were some ideas in it which, properly put before young architects, might be of great benefit to them and to their art. It must be confessed that logic is not Sir William's strong point, and, in saying that no first-rate sculptor or painter will work with an architect who insists on "styles," and illustrating this by pointing to the example of the decorations of Santa Maria Novella, in Florence, where, as he says, Ghirlandajo did not paint in the style of Giotto, nor Giotto in that of Cimabue, he forgets that a sensitive painter, working in a building of a given style, will instinctively adapt his design, and the scale of his detail, to that of the building, not putting Byzantine "Majesties" into panels surrounded by Renaissance arabesques, or hanging mediæval heraldry on a Classic frieze, and that architects are not likely, in their anxiety to preserve purity of style, to insist on much more than a competent and sensitive decorator would wish to do for himself.

HOWEVER that may be, Sir William's idea, that architect, painter and sculptor should learn to work together, and that every architect should be also more or less a painter and sculptor, is one which cannot be too much insisted upon. In these utilitarian days it is unnecessary to apprentice the young architect to a builder, "to learn the anatomy of his art . . . just as the painter and sculptor learn anatomy." Fra Angelico and Ghirlandajo painted very creditably without ever having dissected a subject, and young architects are not likely to be ignorant of the principles of construction; but no knowledge of anatomy, or of construction, can take the place, with an architect, a painter or a sculptor, of that "artistic temperament," as Sir William calls it, which is, undoubtedly, a gift of heaven, but which can be developed by proper training, or may be destroyed by disuse or vice. In its essence, the artistic temperament is the same in all branches of art, consisting, at first, in a sensitiveness, and capacity for being affected by beautiful things, which develops, in the artist who possesses and uses this capacity, into the power of selecting and combining forms, colors, words and musical tones so as to induce in others the emotions which inspired the artist in his work. To a certain extent, each of the different arts deals with a separate class of emotions, those which inspire true architectural art, and are inspired by it, being the most subtle, although the noblest, of all; but there is no fixed line of distinction between them; and, as each gains by combination with the others, it is one of the most useful, as well as most refreshing, of exercises for the architect to practise the three arts occasionally together, finishing, at least, his sections with their decorations in full color, and, if possible, modelling his sculptured detail himself. Naturally, he will not be expected to execute the fresco-painting on the finished work, although it would do no harm for him to be able to do so, but he will take far more interest in his building, and will be able to guide more sympathetically and efficiently the painters and sculptors employed in it, for having more completely realized it in his own mind.

THE OLD GEORGE HOUSE, SALISBURY.



"Old George House," Salisbury.

THE first notice of the old hospitium, or hostelry, of St. George is in the city archives of 1401. It probably derived its name from the patronage of the inn by the corporation guild of that name. It changed hands many times up to the end of the fifteenth century. Cavaliers and gallants frequented it, and we find Robert Hungerford, second Lord Moleyns, breaking sconces with the citizens, when he was lodging at "The George" before his departure for the army in Guienne, commanded by Talbot, Earl of Shrewsbury, in 1454.

The house is situated in the High Street and is entered through a long passage. This was formerly faced by a pointed archway, adorned on either side with carved oak panel-work of the time of Edward III or Richard II. On each side above the shops are large projecting bay-windows, and the front appears to have been adorned with parquetry. The old passage opened upon a large court, 38' x 30', having on one side a covered gallery forming a means of communication with the different apartments. One of these still retains its wooden panelling and solid beams of chestnut, partly carved.

The inventory of furniture in the ancient George hostelry attached to a lease dated April 9, 1473, gives an insight into the interior arrangement of such houses in the fifteenth century. Salisbury being in the neighborhood of the Royal residence of Clarendon, "The George" may be looked upon as a good specimen of hostleries of the period. The number of guest-chambers was thirteen: viz, the principal chamber, the Earl's chamber, the pantry adjoining, the Oxford chamber, the Abingdon, or middle, chamber, the Squire's chamber, the Lombard's chamber, the garret, the George, the Clarendon the Understent, the Fitzwaryn and the London chambers. There were besides, the tavern, or wine-cellar, the buttery, the tap-house, the parlor above the buttery, the kitchen, the hostry, the hostler's chamber, and the parlor called the warehouse. The furniture was of the most homely description; the beds, of which there were one, two, or three in a chamber, were classed according to the number of planks, which supplied the place of the modern spring-mattress. These "planks" were, doubtless, the forerunners of the wooden "laths" of the four-poster of our grand-parents, and the predecessor of the "sacking." There were two to five of these "planks" in each bed, presumably one for each guest. The guests appear to have messed together in their respective bedrooms, as in each chamber we find the same kind of accommodation, namely, a dining table of oak or beech, tressels to support it, and forms for seats, evidently adapted to the table. The principal chamber enjoyed the distinction of a cupboard. Good Queen Bess put up at "The George" during a visit to Salisbury.

Theatrical representations were held in the inn, and it is probable that the court-yard was used as a theatre, it being frequently the practice in the reign of Elizabeth to have plays performed in the yards of carriers' inns. The comedians raised a temporary stage, and the galleries round the court formed the boxes for the audiences. From this resulted the modern theatre with its tiers of

boxes and a pit, where, in Shakespeare's time (as at the old Globe Theatre), the common people stood, and obtained the name of "groundlings." These were dubbed by Ben Jonson, "the understanding gentlemen of the ground." Possibly, here at the old George house, the plays of Shakespeare, Ben Jonson, and Beaumont and Fletcher may have been given by some strolling company of comedians.

In 1412, the inn, with the laundry, cellars, shops, houses and appurtenances, was held at the yearly rental of £20.

Pepys visited the inn in 1668, and his diary gives us some characteristic notes thereon: "Came to the George Inn, where lay in a silk bed, and very good diet. Up, and Mr. Hewer and I up and down the town, and find it a very brave place. The river goes through every street and a most capacious market-place.¹ The city great; I think greater than Hereford. But the minster most admirable; as big, I think, and handsomer than Westminster, and a most large close about it, and houses for the officers thereof, and a fine palace for the Bishop. So to my lodgings back, and took out my wife and people to show them the town and church, but, they being at prayers, we could not see the choir. A very good organ; and I looked in and saw the Bishop, my friend Dr. Ward. Thence to the inn, and there not being able to hire coach-horses, and not willing to use our own, we got saddle-horses very dear. Boy that went to look for them, 6d. So the three women behind Mr. Hewer, Murford, and our guide, and I single to Stonehenge over the plain, and some great hills to fright us. Come thither and find them as prodigious as any tales I ever heard of them and worth going this journey to see. God knows what their use was. They are hard to tell, and yet may be told. Gave the shepherd woman for leading our horses 4d. . . . So back home, and there being light, we to the church, and there find them at prayers again, so could not see the choir. But I sent the women home and I did go in, and saw many fine tombs. . . . Home to dinner, and that being done, paid the reckoning, which was so exorbitant, and particular in rate of my horses, and 7s. 6d. for bread and beer, that I was mad, and resolved to trouble the mistress about it and get something for the poor, and come away in that humour."

The house has been very well restored, all old work which remained being carefully repaired. Some of the beams still retain the interlaced dragon, or griffin, ornament, and the spandrels in one room have a lion and a unicorn in the centres. The house is now used as a sort of private hotel.

S. BEALE.

ARCHITECTURAL INSTRUCTION IN NEW YORK AND PARIS.²

N respect to the methods by which these ends are reached, we find ourselves, as we learn the lessons of our own experience, departing more and more in matters of detail from Paris traditions. This is what was to be expected — and, indeed, hoped for. The Ecole des Beaux-Arts is, indeed, our *fons et origo*, but the conditions are too different, there and here, for close imitation to be safe. In Paris the *nouveau* is thrown into the deep waters of the *atelier* to flounder as he may, with a dozen *anciens*, of greater or less degree of maturity, to teach him his strokes and to see that he does not hopelessly go under. By hook or by crook, he picks up a knowledge of what he needs to know, finding always somebody at hand who, in requital for such services as he can render, will answer all his questions as they arise. It is an admirable system, prompt and efficient, but it requires *anciens* to work it; and *anciens* — that is to say, skilful and experienced men — would not stay in school after they had become experienced, if they had not the *Grand Prix de Rome* to look forward to. But they would not even go to Rome, and there spend three or four of the best years of their lives in further academic study, if they had not the promise of Government patronage to look forward to on their return home. It is upon this Government patronage that the whole Paris system rests. The *camaraderie* and mutual help that make the system of *atelier* instruction so delightfully efficient would be of little value without it, for the *anciens* would not stay long enough to get really old.

The Paris schools possess the further advantage that the best architects in France find leisure to take an active part in them, supplementing and completing the works of the *anciens*. This advantage cannot be had in this country. In a school like our own, all the instruction has to be given by two or three men — two or three teachers to eighty or a hundred students. The work must needs be done in classes, not man by man, and we must make up for this disadvantage by improving and perfecting our methods. For the purposes of class instruction the work has to be analyzed and systematized into a series of carefully graded exercises. In this we have made good progress and have already achieved excellent results. The more elementary work is done quite as well as it is done in Paris, and more promptly and surely. Even the more advanced work seems to be quite up to the Paris standard for work of the same grade, and considerably more uniform in excellence, as would naturally happen from the greater uniformity of the teaching. All this leads us to hope that, if the time ever comes when we can keep

¹ Salisbury was, consequently, called the English Venice.² Extract from a paper by Prof. W. R. Ware on the School of Architecture in Columbia University, published in the *Columbia University Quarterly*.

our men as long as the *ateliers* keep theirs—or, which comes to the same thing, can begin our work with students already advanced—it may equal also the more advanced work of the *Ecole*. Meanwhile, the best thing our men can do, if they want to carry their schooling farther, is to go to Paris; and that they do in large numbers, making for themselves there an excellent name.

But it is in the internal administration of the school that there is the greatest departure from the Paris traditions. For the last hundred years, at least—that is to say, ever since Napoleon proclaimed the *carrière ouverte aux talents*—the system of competition for place has pervaded French institutions. The *Ecole des Beaux-Arts* is an admirable and efficient organism of tests and examinations, mentions, medals and all sorts of honors, calculated to stimulate its students to their utmost endeavor and to add the spur of emulation and personal distinction. For all this machinery the promise of Government support to the man who wins in the race furnishes the motive power. The whole is so complete in every part, so smooth and effective in its workings, and the result so sure, that one is disposed to think that like effects can be produced only by like causes, and that the best anyone could do would be to profit by so brilliant an example and follow it point by point. But in this country such a course is impossible. The mainspring of Government patronage is wanting; and, though one might fancy that, even so, the forces of rivalry and personal ambition would suffice to accomplish the same ends, it is doubtful whether even in Paris, where all the habits and traditions of society are in harmony with the system, the medals and mentions, even the *Prix de Rome* itself, would prove to have any lasting validity without it. It is not the piston or the driving-wheel that moves the train, not even the boiler behind them, but the coal hidden under the boiler. In this country, where the whole system of examinations and competitions and prizes is unfamiliar, uncongenial to our habits and in general distasteful, there would seem to be little chance of making it effectual, even if what experience of it we have had did not discourage the expectation. And, in fact, the present tendency seems to be the other way. The prizes for scholarship established by a previous generation have not worked as was expected; and the establishment of new prizes for school-work is, in this locality at least, officially discouraged. The traditions and habits, as well as the underlying forces, that render this system so successful abroad seem to be lacking here. Even in a *jardin d'acclimatation* it is not the exotics but the native varieties, sprung from the soil, that best flourish and grow. Different people have different ways, and in this country the ultimate energies that make the world go round reside not in the Government but in private persons, and we rely upon personal interest to carry to an end what personal initiative has begun.

Moreover, the conditions which in Paris reduce to a minimum the disadvantages of the system are also lacking in this country and are not likely to be supplied. Gossip and scandal, charges of partisanship and undue influence among the judges, and of intrigue and bad faith among the competitors are, indeed, not unknown even in Paris. But these things need not be taken too seriously, for they are inseparable from the system. But the more offensive and obnoxious elements of personal jealousy and hostility are there largely eliminated by the fact that the rivalry and emulation in the School of Fine Arts is not between persons, so much as between different *ateliers*. This raises the whole tone. For private quarrel is substituted, as it were, a state of public war, with the dignity and responsibility and the freedom from personal feeling that common sacrifices in a common cause naturally involve. Between members of the same class in the same school there is no such protection from the baser passions.

Besides, after all, we must believe that even in France—in France, indeed, more than anywhere—the real motive power in all their splendid achievements is to be found, not in any external conditions or inducements whatever, neither in the hope of Government employment nor in academic honors. The somewhat second-rate men who through the Government schools, in the hope of escaping military service, may very likely need these pricks and goads to keep them up to their work. But with the best of the Frenchmen, as with the large and brilliant company of American students who join their ranks, the motive forces, as we must believe, are to be found within. It is the importance and interest of the subject and their own enthusiasm for it that animate the men at the top of the school and crown its work. So in England. The English may be a nation of shop-keepers, as Sam Adams called them, and the extraordinary prevalence of money prizes for every species of scholastic endeavor may seem to give evidence of a most mercenary spirit. But this is a mere national habit, a curious tradition; and one must believe that English culture and scholarship would be the same, if all the exhibitions and foundations were abolished, the English people being what they are. It is not these that achieve the result, but intellectual character and elevation of mind.

For our own part, at any rate, these are the lofty foundations on which we prefer to build; and so far we have found little occasion for serious misgivings and little inducement to change our policy.

PREHISTORIC TOMBS.—Between Worms and Frankenthal there has been laid bare an immense tomb filled with prehistoric remains four thousand years old. The skeletons show that they are those of a tall, strong race. The bodies were all buried in a stooping position.—*N. Y. Tribune*.

PROFITABLE SANITATION.

THE following letter from Dr. Vivian Poore, F. R. S., appeared in a recent number of the *Times*:—



Sanitary works which have not been a ruinous expense to ratepayers are so rare that I trust you will allow me to call public attention in your columns to the highly successful issue of an experiment which we owe to the spirited action of the city of Manchester. This experiment has not yet attracted that amount of public attention which it merits, possibly because no patents or royalties are involved in it. All big cities are confronted with the difficulty of getting rid of their accumulations of refuse, both organic and inorganic. The difficulties of Manchester have been unusually great because the ordure from nearly 80,000 small houses has to be systematically removed and dealt with.

Travellers between Manchester and Liverpool on the Northwestern line are familiar with a tract of boggy moorland, part of which, known as Chat Moss, caused no little trouble to George Stephenson.

It was in 1886 that the city of Manchester bought part of this moorland with the object of providing an outlet for its refuse. The part so purchased, known as Carrington Moss, is separated from Chat Moss by the ship canal, which now affords a ready means of transit between the city and its estate.

The nearest railway-station to Carrington is Flixton, and the mile or so of road between the station and the Moss is none of the best.

It was in August, 1898, that I paid my first visit to Carrington, and what I saw was, to me, so interesting that I repeated my visit on July 21 last.

The Carrington estate is 1,100 acres in extent, and when it passed into the hands of the city in 1886 the greater part of it was let for 1s. an acre for sporting rights. The estate was mainly an unmitigated peat-bog having an average depth of about 13 feet. Considerable sums have been spent on the construction of a wharf and farm-buildings, the cutting of deep trenches to facilitate drainage, the making of roads, and the provision of narrow tram-lines.

In thirteen years this estate has received more than half a million tons of refuse from Manchester—ordure and muck for fertilizing, clinker and hard material for road-making—and to-day the city finds itself in possession of one of the most fertile tracts of land in the country, the whole of which is let to first-rate tenants at an average rental of £2 per acre. These tenants use some 25,000 tons per annum of manurial matter, for which they pay the corporation at the rate of 1s. 3d. a ton, and thus the Carrington estate returns some £3,500 per annum to the ratepayers, while the outgoings tend gradually to dwindle.

Let me say emphatically that Carrington is not a "sewage farm." The muck is dry, and is spread on the surface of the land and ploughed-in in the ordinary way. There is no excess of water. Sewage-farming in which the living humus is drowned by tons of water leads surely to agricultural bankruptcy.

At my visit in 1898, and again in July of this year, I had ocular proof of the fertility of this reclaimed land. The hay harvest was just over, and had been a good one, and the standing crops of wheat and oats, potatoes and carrots, would be hard to beat in any part of England. The wheat was especially good, and one field of 17 acres, which Mr. McConnell, the manager, estimated would yield over 40 bushels to the acre, was certainly the finest I have ever seen. Much of the land is now passing into the hands of nurserymen and market-gardeners. The ornamental shrubs (except conifers, which have no appetite for manure) were in splendid condition, and I am told that these nursery-gardens are exceptionally brilliant when the rhododendrons are in bloom. The physical change which has taken place in this bog as the result of the agricultural and other operations which have been carried out upon it is very interesting. The downward drainage by the deep trenches, and the upward drainage by the heavy crops, which to a large extent prevent the rain from percolating, have resulted in the sinking of the surface and the general compression of the bog, so that the land tends steadily to get firmer. Formerly, when ploughing, it was necessary to put "pattens" upon the horses' hoofs in order to prevent them from getting "bogged," but this necessity, I was informed, now seldom arises.

The farmhouse at Carrington stands on solid and deep foundations, but that the land around it is gradually sinking is well shown by the fact that it is found necessary to provide an additional step for the back door at recurring intervals. Between 1898 and my late visit a new step had been placed. At my visit in 1898 Mr. McConnell, who then occupied the farm at Carrington, gave an interesting demonstration of the character of the soil by driving an iron rod, 11½ feet long and half an inch in diameter, vertically through the turf of his lawn up to the handle. I easily did the same thing, for the rod having passed the first foot or so met with little resistance, and when withdrawn was found to be streaming with moisture. Mr. Carter, the present occupier of Carrington, kindly allowed me to repeat the experiment at my late visit. I managed, with some difficulty, to drive the rod into the soil for about 8 feet, but the increasing resistance prevented me from driving it completely "home." When withdrawn, the rod was not wet, but was coated with moderately moist soil. The rapid desiccation and consolidation of the moss was thus made evident.

I would respectfully suggest to the corporation of Manchester that this great experiment merits systematic observation by men of science. A few "surface" wells for the periodic examination of the water by chemists and bacteriologists are much to be desired, and the changes of earth temperatures, the progressive alterations in the physical condition and the flora and fauna of the soil ought to be systematically recorded.

The success attained at Carrington Moss has induced the corporation to purchase some 2,500 acres of Chat Moss which is now being subdued under the experienced guidance of Mr. McConnell, so that, eventually, the corporation will be in possession of a fertile estate of 3,600 acres. Allowing 10 per cent for roads and other works, they will have about 3,240 acres under cultivation, or land capable of producing annually 13,000 quarters of wheat and 8,000 tons of straw where none grew before. Assuming that the land is capable of receiving 20 tons of refuse per acre *in perpetuo*, the city will be in possession of a "destructor" capable of consuming about 65,000 tons of organic refuse per annum, and each ton of refuse will ultimately return about a bushel and a half of wheat and 2½ cwt. of straw (the chief ingredients for 100 pounds of bread and perhaps 1,000 straw hats).

This, surely, is better than burning, or fouling rivers. This Manchester experiment should set us all thinking. Is there no possibility of bringing about a profitable interchange of produce between the great cities and the unreclaimed bogland of Ireland? Is there not here a lesson for the consideration of every village council throughout the kingdom—a lesson which has been taught, not by the Utopian dreamer, but by hard-headed men of business?

THE ROMAN FORUM.



WHEN one visits the Roman Forum one cannot escape regretting the culpable ignorance of the adventurers and princes who, in the obscurity of the Middle Ages, profaned, demolished and destroyed precious monuments which Roman civilization had erected during several centuries and which, after the reverses, the decadence, the invasions, should have remained an eloquent and imposing proof of the richness and the grandeur of a people whose domination had known no boundaries.

What remains to-day is enough, nevertheless, to allow the visitor to reconstruct this historical region and see once more, although very imperfectly, the splendors of Roman architecture, the sumptuous temples, the immense amphitheatres, the vast palaces and the innumerable monuments that a powerful and ingenious people had accumulated, from the Capitol to the Aventine hill.

In the early days of this century, when the first excavations were carried out, the level of the Forum, which was then the site of the actual market, had become raised about eight metres because of the enormous quantity of debris which had been cast into it since the Middle Ages. The Italian Government entrusted the excavations to men of experience and energy who spared no endeavor to uncover the ruins and once more give to the Forum, as much as possible, its full extent and primitive character.

The new researches, begun during the ministry of Baccelli, which are being carried out with much activity, are yielding very good results. Signor Giacomo Boni, one of the ablest of archaeologists, who has conducted the successful investigations carried out between the Temple of Castor and Pollux and the Atrium of Vesta, has had the good fortune to lay hands on a small altar of the third century, and exactly determine its original position above the small Well of Juturna.

The ruins of the ancient buildings which surrounded the fountain of Juturna have been at length freed from the soil which covered them, as well as the foundations and walls, much less ancient, of the Church of Santa Maria Liberatrice, which was built above the ruins in question in the course of the seventeenth century. In front of this fountain there has been brought to light a little structure, in the centre of which the ground-level is raised so as to furnish a pedestal for some statue; amongst the debris, in fact, has been found the lower portion of a female statue which might have been that of the nymph Juturna, to whom was dedicated the fountain whose relics have just been discovered.

Signor Boni minutely, slowly and patiently, examined the putéal to the depth of 15 feet, but only found fragments of glass and terracotta and numerous amphoras belonging to different epochs and of the most diverse styles. Here the learned archaeologist is now busy in reconstructing and drawing out the several objects discovered, especially the amphoras which were used in dipping up the water.

If the fountain of Juturna has been found as it was left after its last restoration, it is only through providential good luck: when the foundations of the Church of Santa Maria Liberatrice were built, the sacred well was miraculously saved by the arrangement of three of the foundation-walls which surrounded it and enclosed it within a triangle, but without touching it.

Between the little structure which touches the fountain of Juturna and the Temple of Castor there have been found an infinity of fragments of columns, capitals, pedestals and marble decorations belonging to temples and buildings still unidentified and of various epochs, from the archaic to the classic. Among the most remarkable of the objects discovered in these excavations must be mentioned a fourth-

century sarcophagus, which still encloses human bones and has an admirable frieze ornamented with masks, palm branches, elegantly and gracefully designed and of remarkably fine workmanship, which recalls the best productions of the Tuscan artists.

Near the fountain is an edifice the destination of which seems to have been—according to inscriptions and the *cippi* which were found with it—to serve as offices for the magistrates employed by the water-service. In the largest room of this structure, in the walls of which there are enormous niches, have been found several fragments of statues of considerable worth. Within the limits of the central niche has been uncovered a headless statue of Esculapius, and further on a splendid torso belonging to a statue of Apollo, of which have also been discovered the plinth, the feet and the two knees, one of which still is attached to the laurel-tree trunk against which the god is leaning. There has also been found in the lower part of the edifice a female figure which might very well be Hygeia.

Signor Boni proposes to make a stratigraphical exploration of the fountain of Juturna, as he has already done with success in his earlier discovery of the *lapis niger*, and he is carrying out excavations in the neighborhood of the Emilian basilica, in order to determine the exact limits of the early basilica and the later edifices. These researches are going on contemporaneously with those carried on in the Cloaca Maxima, in the hope of rediscovering a section the existence of which has long been suspected.

The pupils of the School of Applied Engineering are, under the direction of Signor Boni, drawing an altimetric plan of the Roman Forum, and here are some of the important results which will be incorporated in it:—

The lowest portion of the historical city is exactly at the spot where to-day is found the altar of Cæsar (12.622 metres above sea-level), and the highest spot is the *cella* of the Temple of Venus at Rome (33.896 metres).

The *lapis niger* is at the level of 13.195 metres.

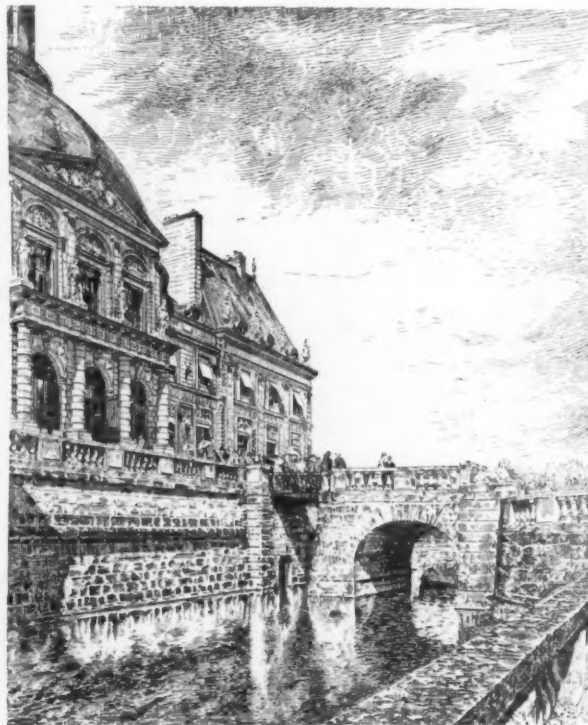
The Temple of Vesta (indicated by the steps of the *sacrarium*) is at the level of 14.922 metres.

The *clivum* of the Via Sacra is at the level of 17.397 metres.

The Arch of Titus is at the level of 30.417 metres, and the Colosseum at 23.909.

H. MERREU.

THE WALLACE COLLECTION.



From l'Architecture.

Chateau de Vaux-le-Vicomte, France.

AT the Demidoff sale in Paris, in 1868, the "Peace of Münster," by Terborch, was knocked down to the Marquess of Hertford for £7,280, much to the chagrin of Sir William Boxall, who had tried to secure it for the National Gallery of England; but £6,000 was the limit of the Treasury purse. Some years later a somewhat shabby gentleman called upon Sir William, and persistently desired to see him. The visitor carried a picture-case which he began to unstrap. Boxall remonstrated, and refused to see the work—the stranger could call again, if he liked to leave the picture, although it was against regulations; but the gentleman suggested that it would do no harm for the keeper to see the picture. Both men were obstinate; and as one strap was undone by the stranger, the other was done up again by Sir William. At last the visitor triumphed, and

the keeper's feelings may be imagined when he saw that the case contained the Terborch he had coveted, and that the possessor, Sir Richard Wallace, had brought "The Peace" as a gift for the National Gallery. "I nearly fainted," said Sir William, "at the thought that I tried to refuse such a gift!"

This anecdote shows the sort of man to whom the British nation owes one of its greatest treasures. The Hertford Collection was begun by the third Marquess, Thackeray's my Lord Steyne, the old reprobate of whose follies in Paris the wildest stories were related. His successor first lived in the Rue Lafitte, where he collected exquisite furniture and everything which could make a house beautiful. All the door-handles and window-fastenings, etc., were works of art. But the collection outgrew the frame and the Marquess moved to Bagatelle, in the Bois de Boulogne. All this time the treasures were increasing, "Mr. Richard" being the purchaser for Lord Hertford, and the ultimate possessor of his collection. In 1897, Sir Richard's widow died, leaving the whole of it to the British nation on condition that a suitable house should be obtained for it; and after much debating, it was decided to purchase the one which had been the home of the donors, as well as of their works of art. To the ordinary mind such a decision was the natural one, and did not require five minutes thought; but law-officers of the Crown, committees and other officials took time to consider the matter, as is their wont (the country nearly lost the Tate Collection by deliberation, when the public had arrived at the common-sense solution of "conditions" in half a minute!); but at last the official mind decided, with the result that London now possesses one of the most perfect palaces of art-treasures which can be seen anywhere in Europe.

The collection may be said to be mainly of French art of the eighteenth century. The furniture is the most perfect of its kind; much is by Riesener, Gouthière and Boulle. The Sevres porcelain is of the best — *turquoise, rose du Barry, gros bleu, vert pomme*. The clocks, the tapestried chairs (mostly Beauvais), the bronzes, the jewellery and the pictures, are principally eighteenth-century. There are pictures of all schools, but those of the French, from Watteau onward, abound. And the charm consists in the arrangement of the treasures. With the exception of a few standing cases in the centres of the rooms, they all look habitable. Take away the rails and cords which protect the furniture against the walls, lift out from their places a few of the chairs and tables, and the rooms would cease to be museum-like.

To mention only a few of the paintings of the French school, there are nine examples of that graceful and masterly trifler, Watteau; fourteen Paters and eleven Lancret's; nine frivolities of another great painter and consummate draughtsman, Fragonard; twenty-one Bouchers, and twenty-one of the master of double entendre and weak drawing — Greuze. Nearly every French master of the eighteenth and nineteenth centuries is represented; and no less remarkable is the "Earl of Hertford" by Clouet, and the "Mary Stuart" of one of his followers — one of the pictures which were termed *Le deuil blanc*; this particular work being probably a portrait of the Queen taken soon after the death of her first husband, François II.

The fluctuations of taste in art are curious. Fifty years ago many painters — Watteau, Constable and Hobbema, for example, could be purchased for as few pounds as they would now fetch thousands. Why in the world did our ancestors prefer Sassoferrato to Velasquez, and Carlo Dolce to Hogarth? Why did they value Wilson above Constable, and the Carracci above Hobbema?

Next in interest to the dainty work of Watteau and his followers is Prud'hon's, so little known out of France. A tiny example of "Le Zéphir," here called "Boy Bathing," is very charming. A larger example, some 24" x 22", is in the Leipsic Museum. One or other was exhibited at the *Salon* in 1806; or did the painter repeat his *Salon* picture a quarter the size and call it "Boy Bathing"? We are not told whether the latter name was given by Prud'hon or Sir Richard, or by the present curator.

It seems ungraceful to grumble at such a magnificent gift-horse, but was it requisite to rename so many pictures? Many have totally different names from the engravings, which is confusing; and all have been put into English, which seems unnecessary in these days. At all events, might not the original French name have been retained? In the case of Meissonier it is particularly troublesome. Some of this master's little panels are early works, painted before the artist over-finished and became heavy and brickly in color.

The Barbizon school is fairly well represented; and besides, there are pictures and miniatures by Scheffer, Isabey, Géricault, Vernet, Cogniet, Bellangé, Bonington, Brascassat, Decamps, Delacroix, Delaroche, Robert, Gros, Gudin, Lagillière, Oudry, Desportes, Rigaud, Lami, Le Moine, Lépicier, Ziem, Pils, Couture, and others less known. From this list it will be seen how rich the collection is in the French school, the only important omission (a very curious one) being Chardin, the incomparable painter of still life. Hitherto, the national collections have been weak in British art, and almost without examples of French masters; now, through the generosity of Mr. Tate and Lady Wallace, London possesses magnificent collections of each school. Perhaps the most wonderful picture in the galleries is Velasquez's masterly "Femme à l'éventail," now renamed "A Spanish Lady." It belonged originally to the Bonaparte Collection and was engraved by Pistrucchi in 1812. It was bought for £31 for the Aguado gallery. In 1843 it had mounted to the price of £525, when it became Lord Hertford's, and had it been sold within he last twenty years, it is not improbable that five figures would

have been necessary to cover its cost. Goya is another absentee from Hertford House.

Among the Flemish pictures are some fine Van Dycks and Rubens's celebrated "Rainbow Landscape," and by Rembrandt, among others, is the "Black Archer," a wonderful study of color. It came from the celebrated Stowe Collection. Other Dutchmen are represented in profusion — notably, Franz Hals's well-known masterpiece, the "Laughing Cavalier" is here. There is a dash, a "go," in Hals which few painters have excelled; but any one standing in front of it and the "Spanish Lady," cannot fail to note, that although Hals's work is as living as Velasquez's, it has not the strong pliability in the flesh-painting that we see in the great Spaniard's. You feel that if you pricked the cheeks of this man and this woman, sawdust might issue from the Cavalier's face, but blood would infallibly soil the lady's neck.

Such is the Wallace Collection, or, rather, a mere bird's-eye view of it, for its richness is such that the furniture, porcelain, carvings, etc., would absorb many days in serious study, to say nothing of the pictures, the armor and other valuables. Architects will appreciate the beautiful Louis XIV wrought-iron balustrade, which came from the old Bibliothèque Nationale, Paris, and which was to have been removed had the Government decided to build a new Palace of Art.

PENGUIN.

THE PHOTOGRAPHIC METHOD OF PREPARING TEXTILE DESIGNS.¹



Pavilion of the Touring Club: Paris Exposition. M. Rives, Architect.

From *La Construction Moderne*.

THE preparation of designs for the loom has, throughout the history of weaving, been regarded as a purely manual process controlled by the intelligence, ingenuity, and skill of the craftsman. It is only natural, therefore, that the invention of apparatus for this specific purpose should have created much interest amongst both British and foreign textile experts. Photography, as understood and practised, appeared as incapable of aiding the artist in the actual painting of his picture as the designer in the transference and execution of the plain sketch of the pattern on to the "scale" paper of the loom. Within the wide range of technical and scientific data in the construction and embellishment of woven fabrics there is, perhaps, no phase of the work more difficult to assail, by mechanical devices, than the application and adjustment of the manifold "weave" units which compose all figured textiles.

Design acquired in the loom is a distinct type of ornamentation involved in varied technicalities. It is not the result of one but of a number of processes, overlapping each other, and yet uniting to construct and perfect the same woven effect. Fabric and design

¹ Abstract of a paper read before Section G of the British Association at Bradford, by Professor Beaumont.

have to be simultaneously obtained. These can only be divorced by resorting to the arts of printing, embroidery, and painting. Obviously in the preparation of the "design" sketch for weaving, numerous limitations have to be encountered, which, on a first consideration, seem liable to be increased rather than diminished by a photographic process of design-development. Much ingenuity has been exercised by Szczepanik in his solution of these "weave" problems. Szczepanik's apparatus is not for the origination of designs either in the theoretical or technical form, for in both processes the knowledge of the expert is demanded; but its province is to lessen, and, in some instances, dispense with, the monotonous manual labor necessitated by the present system. There are large areas of point paper in elaborate designs to which the same weave effect has to be applied, and where some labor-saving device is much needed. Further, in the enlargement of the artist's sketch to scale there is much mechanical work that it ought to be possible to reduce. The photographic inventions of Szczepanik profess to accomplish these objects, and the designs submitted prove that there are possibilities of success in certain styles of pattern. A new field for experiment has been discovered, the extent of which it is not possible to forecast, but it may reasonably be anticipated that the genius and temerity of the discoverer will prove equal to its more complete exploration.

The essential purpose of Szczepanik's invention is to develop from the ordinary sketch and enlarge to a prescribed scale the technically-prepared design, marked with the thousands, or maybe millions, of dots grouped in different orders and so fitted together as to impart precise definition to the several portions of the woven figure or design. The process is three-fold, consisting (1) of the preparation of the ruled paper; (2) the development of the design from an ordinary photographic negative; and (3) the application of the weave units to the several parts of the figure. Primarily the apparatus consists of an optical lantern with a suitable arrangement of lenses. One important factor is the "raster," or multiplying plate, containing some 435,600 perforations, through each of which the weave type passes, and is printed on the enlarged design. In addition there are weave-plates for determining the details of the pattern, and small metal slides for producing particular sections in distinct forms of type, so that they may be as readily distinguished from each other as if sketched in various colors.

The light from the lantern passes through the negative of the design, entering a pair of lenses between which is fixed the small metal plate of the proper shape for developing the marks on the sensitized paper. The process consists in dividing and subdividing the "scale" pattern into rectangular spaces, and of marking each with the correct weave type. When there is no negative in the lantern this type is repeated as many times as there are holes in the perforated plate, showing the feasibility of marking every square photographically on any kind of weaver's paper.

In the first place, the negative is made of the complete design, and all parts erased but the ground-sections, allowing of these being printed with their supplementary weave elements. Negatives of every part of the pattern are similarly printed in succession until the entire design has been obtained. For the production of shaded work, *e. g.*, portraits and pictorial subjects, selecting plates are employed. These secure an accurate graduation of tones perfectly in harmony with the photograph from which they are derived. Provision is made for the execution of patterns in compound as well as in single structure fabrics; but, it follows, the more complex the build of the texture, the more intricate the process of design production. Certain textile designs may evidently be produced photographically by the Szczepanik system, so that it is now a question for demonstration whether designs so produced are comparable in legibility and equal for all practical purposes — as forcible in detail, as vital in execution — as those prepared by the much slower hand method.



ENGINEERS' CLUB OF PHILADELPHIA.

AT the meeting September 15, Mr. L. Y. Schermerhorn presented the paper of the evening upon "The Water-jet as an Aid to Engineering Construction." After briefly describing the method by which a powerful jet of water, directed under water at the lower end of a pile, will disintegrate the sand or mud at the bottom and facilitate the sinking of the pile, a brief history of the use of this system was given. From this it would appear that Lieut. George B. McClellan suggested its first use, which occurred in 1852 at Matagorda Bay, Texas. The balance of the paper consisted mainly of brief descriptions of the methods of applying the water-jet in the most important engineering operations in which it has played a part. The water-jet was not recommended as a complete substitute for the driving-hammer, but as an important supplement to it in suitable locations. The use of the water-jet in making borings through earthy materials to determine their character, for stirring up mud or sand in hydraulic dredging, and its application in California in hydraulic mining, were also pointed out.

The reading of the paper was followed by a discussion participated in by Messrs. George C. Davis, I. Wendell Hubbard, James Christie, E. M. Nichols, Henry M. Chance, W. Copeland Furber, J. K. Little and the Chairman.

L. F. RONDINELLA, Secretary.



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

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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.]

A CORRECTION.

WASHINGTON, D. C., September 26, 1900.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Will you kindly mention in your next issue that the library at Chevy Chase, Md., which was published in your last number, was designed by A. B. Heaton, W. B. Wood associated, instead of by myself alone. Yours truly, W. B. Wood.



THE CAVE OF PSYCHRO IN CRETE.—It has been known for some years that a large cave above the village of Psychró, in the Lasithi district of Crete, was a repository of primitive votive objects in bronze, terra-cotta, etc. As this cave is situated in the eastern flank of the mountain which dominates the site of ancient Lyttos, and is the only important cave known in the neighborhood, it was conjectured that it was the Lyttian grotto connected with the story of the infancy of Zeus in the legend, whose earliest version is preserved by Hesiod. A thorough exploration of it, undertaken in May and June of the current year by Mr. D. G. Hogarth on behalf of the British School at Athens, aided by the Cretan Exploration Fund, has served fully to confirm this view. The cave is double. On the north is a shallow grotto, the upper part of which was cumbered with immense fallen fragments of the roof. The lower part contained deep black earth, partly ransacked by previous diggers. This was thoroughly dug out this year, and when the

great blocks had been broken up with blasting powder and removed the deposit on the higher slope was also searched. The result was the discovery of a rude altar in the middle of the grotto, surrounded by many strata of ashes, pottery and other refuse, among which many votive objects in bronze, terra-cotta, iron and bone were found, together with fragments of some thirty libation tables in stone, and an immense number of earthenware cups used for depositing offerings. The lowest part of the upper grotto was found to be enclosed by a wall partly of rude cyclopean character, and partly rock-cut; and within this temenos the untouched strata of deposit ranged from the early Mycenaean age up to the geometric period of the ninth century B. C. or thereabout. Only very slight traces were found of later offerings. The earliest votive stratum belongs to the latest period of the pre-Mycenaean age, that marked by the transition between the "Kamaraes" fabric of pottery and the earliest Mycenaean lustre-painted ware. But below all is a thick bed of yellow clay, containing scraps of primitive hand-burnished black and brown pottery, mixed with bones of animals. This bed seems to be water-laid, and to be prior to the use of the cave as a sanctuary. Probably, when it was in process of formation, the cave was still a "Katavothron" of the lake which once occupied the closed Laethi basin; but before the Mycenaean period the present outlet had opened, and the plain was dry. The southern, or lower, grotto falls steeply for some 200 feet to a subterranean pool, out of which rises a forest of stalactite pillars. Traces of a rock-cut stairway remain. Much earth had been thrown down by the diggers of the upper grotto, and this was found full of small bronze objects. But chance revealed a more fruitful field, namely, the vertical chinks in the lowest stalactite pillars, a great many of which were found still to contain toy double-axes, knife-blades, needles and other objects in bronze, placed there by dedicators, as in niches. The mud also at the edge of the subterranean pool was rich in similar things, and in statuettes of two types, male and female, and engraved gems. These had probably been washed out of the niches. The knife-blades and simulacra of weapons are probably the offerings of men; the needles and depilatory tweezers of women. The frequent occurrence of the double-axe, not only in bronze, but moulded or painted on pottery, found in the cave leaves no doubt that its patron god was the "Carian" Zeus of Labranda, or the Labyrinth, with whom perhaps his mother, the Nature goddess, was associated, and the statuettes probably represent the two deities. Here was the primitive scene of their legend, afterwards transferred in classical times to a cave on Mount Ida. — *The Architect*.

"DUNNAGE" AND "QUOINS." — In the labyrinth of streets contiguous to the London Docks are to be found innumerable establishments devoted to the catering to the multiform requirements of sea-going vessels. Here and there signboards affixed to hoardings bear the legend, somewhat recondite, "Contractor for dunnage and quoins." For an elucidation of this abstrusely worded phrase it is necessary to stroll within the hoardings. Acres of ground are concealed by small mountains of wood, one glance at which reveals the debris of many a conflagration. The "dunnage" contractor on the first intimation of a fire dispatches his agent, whose duties are to contract with the insurance companies for clearance of every atom of wood which the ravages of fire have spared. This wood, known as "dunnage," is eagerly purchased by steamship owners owing to its adaptability as a non-conductor of dampness. The floors of the holds of vessels being lined with the "dunnage," permeation is prevented. The cargo may then be safely stored away in the hold, the desideratum, an absolutely dry floor, being obtained. Steel rails, invariably stocked athwart in the hold, frequently have a few inches of space between them and the sides of the vessel. Were not the intervening spaces filled with "dunnage" the oscillation of the ship would be responsible for serious damage, for the steel rails have been known to pierce a hole in the ship's sides. A paucity of fires does not in the least disconcert the "dunnage" contractor, for the demolition of houses furnishes him with fresh material for his calling. This wood not having passed through the vicissitudes of an ordeal by fire is consequently of cleaner appearance, thereby permitting its being sawn into lengths of six inches to resemble wedges, and is hereafter termed "quoins." The "quoins" are destined to counteract the oscillating effects of a ship when the cargo is composed of casks or barrels. A "quoin" is inserted between the casks to ensure the stability and rigidity of the cargo, thus defying all the efforts at a dislodgement of the wave or storm tossed vessel. The number of people engaged in this peculiar industry is very small. — *London Mail*.

THE ACADEMY OF DESIGN NON-TAXABLE. — The property of the Academy of Design of New York, a plot 200' x 171', having been assessed for taxes, the referee has decided that this property is not subjected to taxation. The referee finds that no rents, profits, or income have been derived from the property, and that no part of it has been leased or used for any purpose other than the lawful and authorized purposes of the society. The Academy of Design not having the means requisite for the erection of a main building, has constructed schools and offices for temporary requirements. The referee, then, appreciating what are the exact conditions, finds that the academy "has been and is in good faith organized and conducted exclusively for educational purposes, its object being the cultivation and extension of the art of design." — *Exchange*.

HYDRAULIC LIME VS. PORTLAND-CEMENT. — At the last meeting of the British Association, Mr. J. F. Deacon alluded to the comparative values of Portland-cement and hydraulic lime, and stated that whereas Portland-cement mortar, composed in the proportion of 2½ of sand and 1 of cement, might in common practice be expected to stand from 300 pounds to 400 pounds per square inch, there was plenty of hydraulic lime in England, which, used in the same proportions, would stand from 400 pounds to 500 pounds. He had brought some from Italy which would stand over 600 pounds, and he had recently been testing a sample from Russia which stood 1,200 pounds per square inch. Much depended upon the manipulation. — *Engineering*.

ANCIENT STAINED-GLASS DESTROYED. — The only stained-glass window left in the ancient round tower of the Temple Church was loosened during the recent gales, with the result that the upper part of the glass fell out a few days since, and was destroyed. The window represented the "Saviour glorified," and it is understood that its restoration will be carried out so as to render it as much like the original as possible. The tower in which the window was placed is upward of eight hundred years old. — *London News*.

THE FRANZENS BRIDGE, VIENNA. — Apropos of the Alexandre III bridge in Paris, we may remark that the new three-hinged bridge over the Danube Canal, in Vienna, is of almost identical design, although some details are different. Early in 1896 competitive designs were invited, and the prize was awarded to Mr. Frank Pfeuffer, Chief Engineer of the State Railway Company, and a member of the Austrian Society of Engineers and Architects. The centre span is 174 feet long, and there are two approach spans of 27 feet each. Nine three-hinged arches, with braced spandrels, are comprised in the main span. The approach spans are of masonry, constructed so as to oppose the thrust of the steel arches, with the view of keeping the resultant line of pressure within the middle third of the abutment pier. The bridge has a total width of about 79 feet, including a roadway, 52 feet 6 inches wide, and two footpaths, each 13 feet 3 inches wide. The new structure takes the place of a chain suspension-bridge, with span of 296 feet, and which it was found necessary to supercede in consequence of the great increase of heavy traffic. If the French and the Austrian designs are both original we find in them a remarkable instance of what we may term simultaneous illumination. — *The Builder*.

A MOVING-PLATFORM FOR RAILROAD-STATIONS. — A novel device for a moving-platform has been suggested by John Perry, President of the English Institution of Electrical Engineers. He proposes to place at each station of the underground road in London a turn-table about 500 feet in diameter. This turn-table is kept continuously revolving at such a rate that its rim travels at the same speed as the moving train. At the centre of the turn-table is a spiral staircase, which, being in the centre, of course, moves very slowly, by which the passenger reaches the main floor. He then walks towards the circumference. The speed at which he is being carried along gradually increases, until at the edge he is travelling at the rate of the moving train, which he here finds seemingly at rest, and with the doors open. He enters, and as the moving-platform is left behind the doors are automatically closed until the next station is reached, when they are automatically opened again. With such an arrangement the track, of course, at each station would be built on a curve closely following that of the turn-table for about half the latter's circumference. Mr. Perry thinks that with this system it might be expedient to have a continuous train, on such roads as the underground of London, or the elevated of New York City, so that no matter when a passenger might arrive, he would always find a car open and apparently waiting for him. — *N. Y. Evening Post*.

A LEGEND OF LINCOLN CATHEDRAL. — The tourist who rather wearily "does" the English cathedrals hears very little of the legends and quaint stories, the fun and the pathos associated with the buildings, so it is rather a treat to stroll through Lincoln Cathedral, via the *July Temple Magazine*, and read how stones may disappear. When William the Norman presented his relative Remigius with the bishopric in 1067, that prelate found the whole of it in a state of disorganization. . . . Remigius had a passion for building, and determined to erect a cathedral the like of which had never been seen in England before. He wished to change the headquarters of the see, and he therefore chose Stowe, which had been the head of the diocese previous to Dorchester. The bishop decided to rebuild the old church that had been founded in honor of St. Etheldreda and destroyed by the Danes. Builders got to work, but what they accomplished in the day was pulled down at night, and the stones were carried away. This went on for some little time, until the bishop made up his mind that it was no use trying to build there longer. The stones were found on the top of the hill at Lincoln, so he took that circumstance as a sign that his church was to be built there. Stowe was left in an unfinished state, and the edifice now standing was begun. The story and figure of an imp got mixed up with the beautiful carving in the "angels' choir" and explains to a puzzled stranger how, as is said, "the devil watches over Lincoln." "One day the wind in its wanderings paid a visit to Lincoln to see how the new part of the minster was getting on. The wind was accompanied by two imps, who were both impressed with the grandeur and beauty of everything they saw. One of them determined to go inside and see what was happening there. His curiosity cost him dear; he was so awed and astonished at the loveliness of all round him that he turned to stone, though not before taking up his abode in the most beautiful part of the building. The other imp waited in vain for his brother, and flew round and round, not daring to go inside. Tired out at last, he seated himself on the shoulders of a witch and was likewise turned to stone. The latter imp may be seen just outside the south porch on the witch's back, and from this fact arose the saying that 'The devil always watches over Lincoln.'" Big Tom of Lincoln is almost as well known as Big Ben, but once on a time he became a little cracked, so was put in the melting pot and with him the Lady-bells, a fact much to be regretted, as they were very sweet and were only put in to swell the importance of Big Tom. However, no one likes ghosts, and a story runs that they were sacrificed to exorcise them from the minster. "The big bell was rung to frighten them away; it was apparently of no use, as the ghosts still remained. So when the big bell had to be recast it was decided to make it larger by putting the Lady-bells with it, in the hope that the increase of sound might exorcise the spirits. Since that time no ghosts have ever haunted the cathedral. This sounds rather far-fetched, but it is only one of numbers of similar tales that gather round any such place. The pity is that Big Tom was ever made larger, and that the small bells were destroyed, for then Lincoln would have been the only cathedral with two peals of bells."

THE AMERICAN ARCHITECT AND BUILDING NEWS

ADVERTISERS' TRADE SUPPLEMENT.

No. 221.

SATURDAY, OCTOBER 6, 1900.

VOLUME LXX.
No. 1253.

REMOVAL AND ENLARGEMENT.

THE increasing sale of Cabot's Shingle Stains and Sheathing Quilt in and about Chicago has forced an enlargement of quarters, and the Chicago agency now occupies the store No. 28 Dearborn Ave., which is devoted exclusively to the storage, display and shipping of the Cabot Specialties.

In addition to the uniformly high character of this concern's products, its success is in no small measure due to originality in the products themselves and the methods of making them known. Mr. Cabot is the creator of shingle-stains and is entitled to great credit for this broadening of the artistic possibilities of our frame-houses, and his striking and refined advertising is known and admired by every one interested in the building trades. That this admiration is shared by the competitors which his success has brought forth, the imitation of his methods plainly shows.

His Sheathing and Deafening Quilt is as great a novelty as the Stains, is advertised with the same taste and liberality, and — has already its imitators! As a scientific and rational successor to the primitive and clumsy methods of insulation and deafening previously in vogue, "Quilt" merits the support of every one who wishes to improve our methods of construction.

DIXON'S SILICA-GRAPHITE PAINT.

At the ninth annual convention of the Association of Railway Superintendents of Bridges and Buildings, Detroit, Mich., October 17 and 18, 1899, during the discussion of a paper on: "What is the Most Economical Method of Painting Railway Bridges and Buildings, and the Best Material to Use," Mr. J. Y. Hill, roadmaster Southern Railway, Knoxville, Tenn., said: —

"Since I have been on the Southern Railway System I think I have used about five or six different kinds of paint for bridges. We have used Mexican Graphite, Superior Graphite, Dixon's Graphite, and are now using — Paint. It seems to be the standard to use nothing but graphite on our road. About a year ago I ordered some paint, and our general superintendent furnished me with a barrel of Dixon's Silica-Graphite Paint for testing. I painted a structure, an overhead bridge, where we have about twelve tracks running underneath, and are constantly switching night and day, which is a pretty severe test for any kind of paint. That paint has been on there one year now, and has given good satisfaction so far. I had about twenty gallons of this paint left; and where I am

using — Paint at present is on a bridge of ten spans. It takes about twenty-six gallons of — Paint to a span, and I painted one span with Dixon's Graphite, which was with the twenty gallons I had left, and I think there is a saving in Dixon's Paint of about, well, 15 per cent; and from my own observation I am very much in favor of that kind of paint. It covers better and leaves a well filled-in surface, as it ought to. I am very much pleased with Dixon's Paint."

JOSEPH DIXON CRUCIBLE CO.,
JERSEY CITY, N. J.

THE "GLOBE" VENTILATOR.

No plan of ventilation is perfect that does not amply provide for three very important things: —

First — The prompt exhausting at the ceiling of the hot, oppressive and super-heated air, that in its place may come something that is pure and breathable. This is a necessity at all seasons of the year, but is especially beneficial and pleasant during the warm days and nights of the summer time. This will be readily understood when it is remembered that carbonic oxide, one of the most deadly of gases which often leaks from the heating-apparatus, the fetid vapors from the water-closets and defective soil-pipes, which, having no perceptible odor, are undetected, and the illuminating fluids, all being lighter than air, naturally rise and gradually accumulate at the top of the room, filling it in a downward direction until they reach a level where they are inhaled by the occupants. And as this enervating, disease-producing, pleasure-destroying atmosphere works its way down, it reaches the occupants of the gallery, the orator on the platform, the preacher in the pulpit, the judge upon the bench, and lastly, the auditors in the lower seats.

Second. — Ventilating flues of as large dimensions as possible should be built into the walls, running from the floor to the attic, there grouped and connected with a ventilator on the roof, or by direct stacks, each extending directly to the roof, and there capped with a ventilator. To secure best results, each flue should have but one opening. The plan recommended will give a free avenue of escape for the foul and vitiated air, which, being of greater gravity, quickly settles to the floor-line.

Third. — The placing of the intake pipes in the open air and away from all contaminating surroundings. Too frequently the air so received, instead of being pure and serviceable, comes from some dark, damp cellar,

where a ray of sunlight or draught of fresh oxygen rarely if ever enters.

The "Globe" Ventilators have been well known to architects, builders and the trade generally for twenty years, during which time hundreds of thousands have been used, and their continued and growing sale is of itself valuable evidence of their utility, superiority and effectiveness. Mr. Justice Fursman states that the new Rensselaer County Court-house, erected at a cost of \$300,000, upon which eight 24-inch "Globe" Ventilators were used, is the most complete and perfect building of the character he has ever seen.

GLOBE VENTILATOR COMPANY,
TROY, N. Y.

THE GURNEY "400 SERIES" STEAM-BOILERS.

We commend the Gurney "400 Series" Low-pressure Sectional Steam-boiler, for hard or soft coal, as a first-class construction in every particular, and, being conservatively rated and reasonable in price, it will, we believe, be generally appreciated.

The water and steam sections above the fire-pot have in them a number of flues of sufficient area to economically allow the products of combustion to find their way to the chimney. These flues, however, are so arranged that the fire and heated gases come in direct contact with the heating-surfaces of each section of the boiler before their final exit to a smoke-chamber, on which is a connection for the smoke-pipe. It will be seen by this arrangement that the water in the sections readily absorbs the heat from the products of combustion, the greatest amount of heat being thereby utilized from the fuel consumed.

The sections and steam-dome are easily accessible for the purpose of cleaning, by means of clean-out doors provided for that purpose.

We have furnished the "400 Series" Steam-boiler with a triangular revolving-grate, which is easily operated and very efficient, the ashes and clinkers being evenly removed from the bottom of the fire. Any grate-bar can also be easily and quickly replaced at any time without disturbing the boiler or piping.

It will also be noted that this boiler is fitted with a large circulating and equalizing pipe, which ensures a steady water-line, and the delivery of dry steam to the mains and radiators.

A large number of the "400 Series" Steam-boilers are now in use. They have been

thoroughly tested under all conditions and proved satisfactory. They generate steam quickly, and carry with ease their rated capacities. They maintain a perfectly steady water-line, and are also exceedingly economical of fuel.

It is absolutely necessary, when erecting a steam-boiler, to see that there is a good draught to the chimney, also that the automatic damper-regulator is properly connected and adjusted so that it will control the draughts in an economical manner. It is also important to use the proper size coal when firing the boiler.

These boilers are made of best quality of cast-iron, and are carefully inspected and tested before leaving our works, each boiler carrying with it our guaranty of perfection of construction, durability and efficiency.

Every steam-boiler, after being installed and tested, should be "blown off," and fresh water supplied. It is of the utmost importance that the boiler and the water be perfectly clean to generate steam.

GURNEY HEATER MFG. CO.,
BOSTON, MASS.

ENLARGING THEIR PLANT.

N. & G. TAYLOR Co. advise us that they are running night and day their entire five mills at Cumberland, Md., and continue full of orders for all their departments. They have lately added to their Cumberland plant unusual facilities and some of the latest improvements, and consider their plant one of the finest in the country.

They also advise us that they have lately added to the tinning capacity of their Tinplate Works in Philadelphia, which are always full of orders, and are about making extensive additions and improvements in order to still further increase their capacity.

AN IMMENSE DOOR.

A STEEL rolling door, 35 feet 6 inches wide by 20 feet high, has just been made by the Kinnear Mfg. Co., Columbus, O., for a car-house at Worcester, Mass. This door is the largest, by far, ever constructed, and reflects great credit on the makers.

It is built on the well-known and excellent principles of the Kinnear Steel Rolling Doors, and, regardless of its immense proportions, operates with the greatest ease.

The makers report that they are supplying a great many doors for car-house purposes, as well as for all classes of railroad and public buildings, the automatic Steel Rolling Doors, Shutters and Partitions having found great favor among purchasers.

Durability, ease of operation, compactness, fireproof qualities, together with the minimum cost of repairs, are among the most prominent features of the Kinnear doors; merits which are greatly appreciated by the Company's many customers.

KINNEAR MFG. CO.,
COLUMBUS, O.

IMPORTANT NOTICE.

ALL patents covering "Broomell's Vapor System of Steam-heating" are owned and controlled by the Vapor Steam-heating Co., of York, Pa.

This Company is prepared to furnish drawings and specifications for the installation of the Vapor System in buildings of every kind and size. No building is too large or complicated for this system. It is especially adapted to large office-buildings, hotels, schools, etc. The attention of owners, architects, engineers

and contractors is invited to the following plan of operation.

The objects to be obtained are:—

First.—To secure to the owner an absolutely reliable, satisfactory and perfect steam-heating apparatus at a reasonable cost.

Second.—To assist architects in securing for their clients a heating-plant that will be much nearer perfect than any other they have ever used heretofore, that will heat the building perfectly in the coldest weather, and that will be a credit alike to the architect, owner and contractor.

Third.—To share with the steam-heating contractor the responsibility in connection with the installation of this system and to join with the contractor in guaranteeing the successful operation of the heating-plant. The Vapor Steam-heating Co. proposes to sell to the owner the right to use the Vapor System in a certain building at a fair and reasonable cost. When furnished with proper and sufficient information, sketches, etc., the Vapor Steam-heating Co. will furnish the owner with a full and complete set of working-drawings together with complete specifications covering the entire installation of the apparatus in every detail. Capacity of boiler will be named, number and size of radiators of all rooms, size and locations of pipes, fittings, etc., with full and complete directions for putting in the work.

The drawings will be made in such manner that steam-fitters will find no difficulty in erecting the work properly. The specifications will be complete and drawn to cover all points. After the owner has received the plans and specifications thus prepared he can ask for bids from such steam-heating contractors as he would like to have figure on the work and can safely let the contract to the lowest responsible bidder.

All contractors will figure on the same plans and specifications and there should not be much variation in the prices submitted, and there will be no opportunity to put in an inferior and insufficient apparatus.

The architect can rest assured that his client is securing the best kind of heating-plant. The owner will have the satisfaction of owning the most perfect system of steam-heating in the world and that at a fair and reasonable cost.

While we prefer to have all plans and specifications made out at our office and under our supervision, we will be glad to make special arrangements with experienced and responsible heating-contractors so that such contractors may manage the entire business, dealing with the owner or architect direct, making their own plans and specifications. In this event, however, at least until such contractors become familiar with the Vapor System, it is understood that such plans and specifications are to be submitted to the Vapor Steam-heating Co., for approval. When the plans and specifications are furnished by the Vapor Steam-heating Co., or when plans and specifications made by architects or heating engineers have been submitted to us for examination and approval, we will countersign the guaranty given by the contractor for the proper heating of the building according to the specifications.

If you are considering the matter of heating any building, whether it be large or small, and no matter what kind of a building, we will be glad to have you send us particulars as to size, location, number and size of rooms, etc., with sketches if possible, showing the different floors of building to be heated, and we will advise you approximately as to the

number of radiators and the amount of radiating surface required. We will also advise as to the amount of royalty or license fee for use of the Vapor System in the building under consideration.

If, on receipt of this information, you conclude to adopt the system for your building, you can then return to us order blank, which we will furnish properly filled out and signed. On its receipt we will prepare the drawings and specifications. Drawings and specifications will be made in duplicate, so that the owner can retain one copy for his own use while the other is being used to secure bids for the work.

VAPOR STEAM-HEATING CO.,
YORK, PA.

A SURPRISED PAINTER AND A PLEASED CUSTOMER.

A STATIONER in Western New York who handles the Dixon Pencils and knows them to be good, recently had occasion to use some paint for one of his buildings and wrote to the Dixon Company for information as to quantity required, method of applying, etc. The Dixon Company replied that for the surface mentioned, five gallons would be sufficient. When the stationer's painter came to apply it he said there was not enough paint for the surface and that it would require eight or nine gallons at least. The stationer, however, had faith in what the Dixon Company had written him, and told the painter to go ahead and follow the Dixon Company's instructions literally. The painter did so and when the job was completed he had one gallon of paint left over. It is needless to say that the painter was surprised and pleased as well as the stationer. Furthermore, it was demonstrated that the claims for Dixon's Silica-graphite Paint are founded on facts. Dixon's Silica-graphite Paint is the most economical paint as well as the most durable, and covers more surface than any other paint.

JOSEPH DIXON CRUCIBLE CO.,
JERSEY CITY, N. J.

NOTES.

THE new ship-building plant for the Risdon Iron Works at San Francisco, Cal., will be built by the American Bridge Co., of New York, and will consist of a boiler-shop, machine-shop and foundry, all of the latest design and most modern description.

SAMUEL CABOT, who perhaps shows in his methods of advertising as much artistic ingenuity as any one in the country, has just sent to our desk a delightful series of half-tone prints of houses of varied cost and size upon which Creosote Shingle Stain has been used. As usual, he is sedulously careful to give credit to the designing architect of each building.

It is by this time well known that in the total number of prizes awarded at the Paris Exposition of 1900, the United States stands next to France, while in the matter of Grand Prizes it changes places with Germany for the second place. As the actual number of these Grand Prizes is small it is only natural that the Winslow Brothers Company, of Chicago, have been extremely pleased that their work was found deserving of one of these choicer marks of approbation, although those who are as familiar with their work as architects are cannot pretend to be surprised by the results. The Grand Prize, which is awarded

Atlas PORTLAND CEMENT

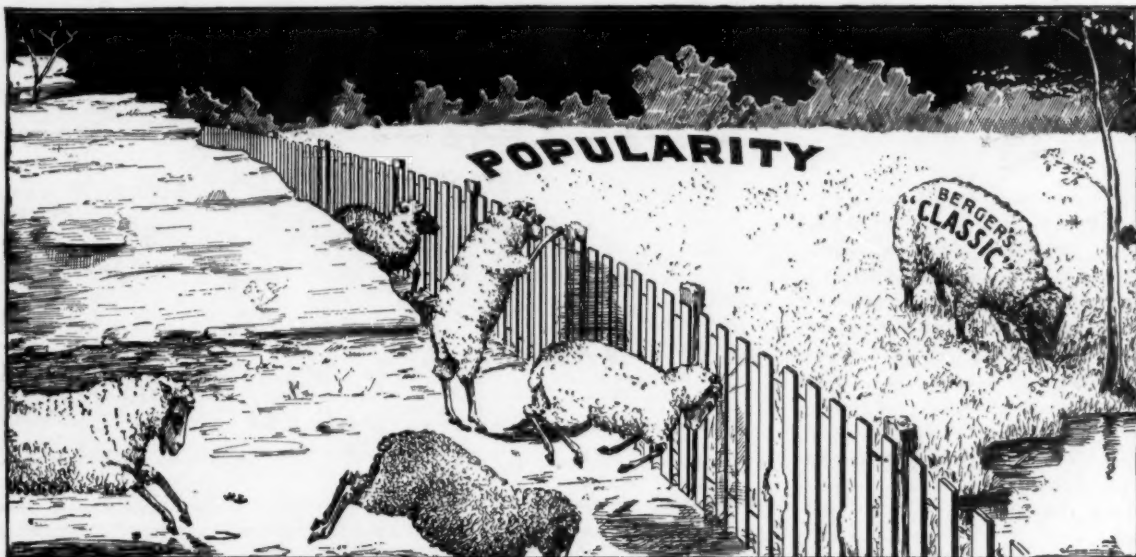
The
Standard
American Brand.

Used Exclusively in the Following New York Buildings:

HAVEMEYER STORES	SINGER BLDG.
ST. PAUL BLDG.	UNIVERSITY CLUB
AMERICAN SURETY BLDG.	N. Y. LIFE INS. BLDG.
BANK OF COMMERCE	STANDARD OIL BLDG.
JOHNSTON and PRESBYTERIAN BLDGS.	
AND MANY OTHERS.	

Atlas Portland Cement Company

143 LIBERTY STREET
NEW YORK



TRYING TO FOLLOW THE LEADER.

It is probably only a matter of time when other Metal Ceiling manufacturers will try to follow in our footsteps. We took an advanced position when we originated and put in practice the idea of producing metal ceilings in complete "Classified" designs of famous artistic styles.

This advanced position we have been holding ever since, and in keeping with the character of our goods we have adopted for them the distinctive and appropriate name of "Classic" Metal Ceilings.

As a matter of course, the trade appreciates their value and superiority. Even competing manufacturers recognize the advantages of Berger's "Classic" Ceilings (although, of course, they can't be expected to admit it).

We venture, however, to predict that they will eventually proclaim the fact by themselves bringing out a few more-or-less complete "Classified" designs, perhaps they may even use the distinctive name "Classic" that we have adopted, and advertise their goods as "Classic" Metal Ceilings, who knows?

In any event we will still be found heading the procession. Our line is not only by far the most complete and comprehensive, but we are steadily adding to it, thus further increasing the already safe distance by which we lead.

For up-to-date Ceilings, come to us.

THE BERGER MFG. CO., Canton, Ohio.

EASTERN BRANCH: 210 E. 23d St., New York, N. Y. WESTERN BRANCH: 1428 N. Broadway, St. Louis, Mo.

SPECIALTIES: Ceiling, Roofing, Siding, Eave Trough, Conductor, Hangers, Etc., Etc.

to only one competitor in each line of manufacture, was actually awarded them for their design and execution of the façade of the United States Government Exhibit of Mines and Metallurgy and the manufacturers will gladly furnish to applicants a half-tone print of this exhibit.

ONE thing is generally admitted by those who believe in the possible construction of really fireproof buildings and that is, that the contents, the finish and the furniture of rooms in such structures are capable of developing enough heat during combustion to severely test the best systems of construction, even to their defeat. Varnished office desks, chairs and cabinet-work generally are often present in sufficient bulk to develop a goodly number of heat units and cause much danger through

their combustion. There is one concern in the country which is undertaking to minimize this great risk in a sensible and agreeable way. The Art Metal Construction Company, of Jamestown, N. Y., is turning its attention to the manufacture of office-furniture made wholly of steel, and as it has adopted a line of agreeable and sensible designs, it will probably not only build up a large business for itself but do much to minimize the losses of owners and underwriters.

THE Barr Pumping-engine Co., of Germantown Junction, Philadelphia, have recently closed a contract with the city of Haverhill, Mass., for a 6,000,000 gallon horizontal cross compound condensing crank and fly-wheel pumping-engine. This engine is to be in all respects similar to one that has been installed

by this Company for the city of Waltham, Mass., and which, on test, gave one of the highest duties that has ever been recorded for compound pumping-engines.

THE American Bridge Co. announce that Mr. August Ziesing has been appointed as the General Western Representative of the Company, with headquarters at Chicago, Ill.

THE Holophane Glass Co., whose incandescent-light bulbs, among other things, add so much to the comfort of those who have to occupy ill-lighted offices, has removed its offices to 15 E. 32d St., New York.

WITH largely increased facilities the Ludlow-Saylor Wire Co. is in the market offering painted fly-screen cloth of its own manufacture.

ALSEN'S PORTLAND CEMENT

Highest Quality, Most Reliable, Best Color, Most Enduring Surface, Greatest Bulk to the Barrel.

NOTABLE INSTANCES WHERE ALSEN'S CEMENT HAS BEEN USED BECAUSE OF ITS SUPERIOR QUALITY.

CATHEDRAL OF ST. JOHN THE DIVINE, N.Y.
WASHINGTON LIFE INSURANCE CO.'S BUILDING, N.Y.
MANHATTAN LIFE INSURANCE CO.'S BUILDING, N.Y.
AMERICAN SURETY CO.'S BUILDING, N.Y.

THE U. S. NAVAL OBSERVATORY, WASHINGTON, D. C.

ELECTRIC R.R. SUBWAY, BOSTON.
METROPOLITAN SEWERAGE WORKS, BOSTON.
SEA WALL, LAKE FRONT, CHICAGO.
BRIDGES OVER HARLEM RIVER, N.Y.

Alsen's Portland Cement Works, New York Office, 143 Liberty Street.

AGENTS AT BOSTON: WALDO BROS., 102 Milk Street.

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STEAM-FITTERS and engineers will please take particular notice of the following:—

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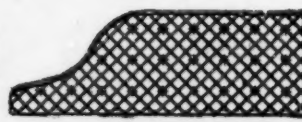
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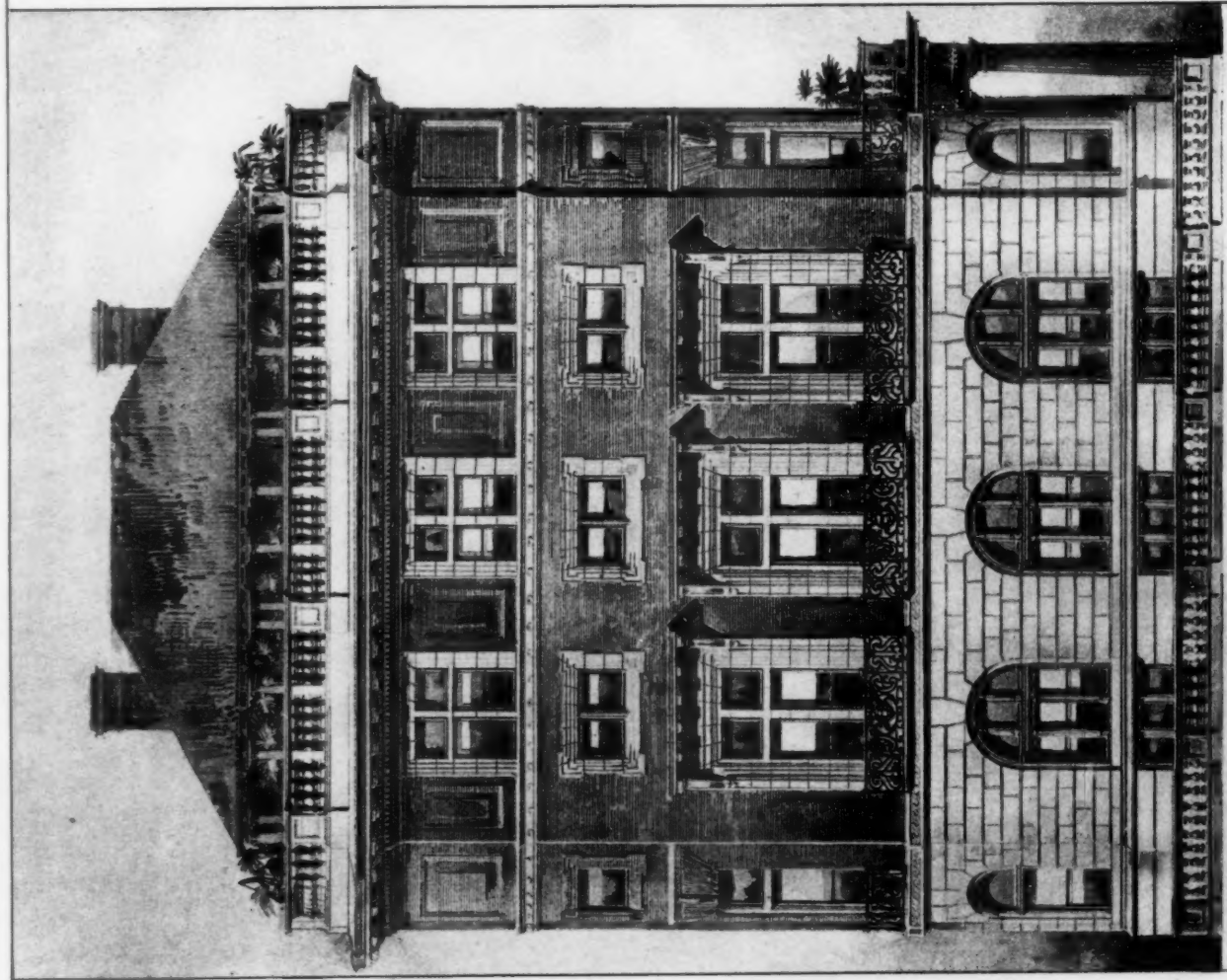
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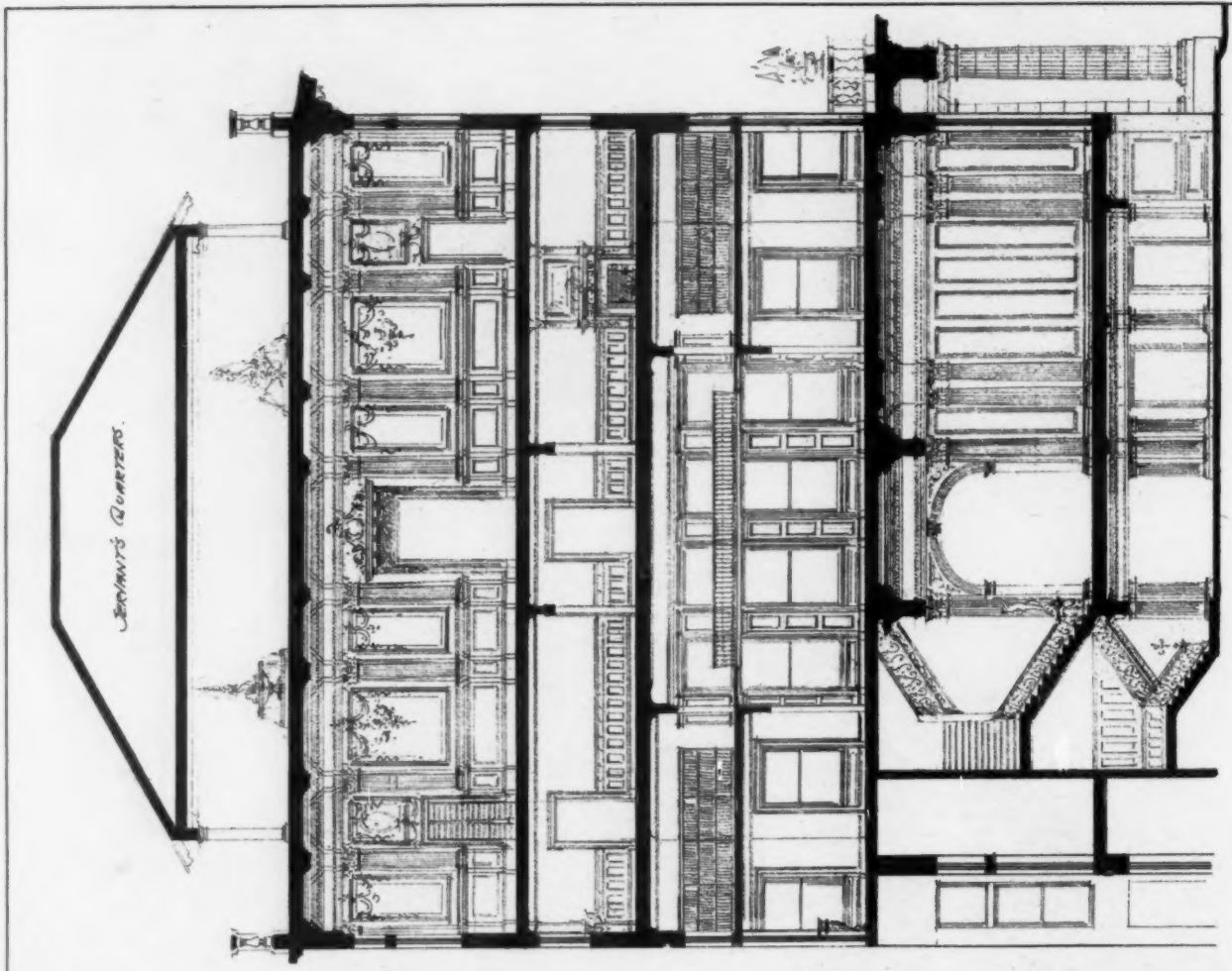
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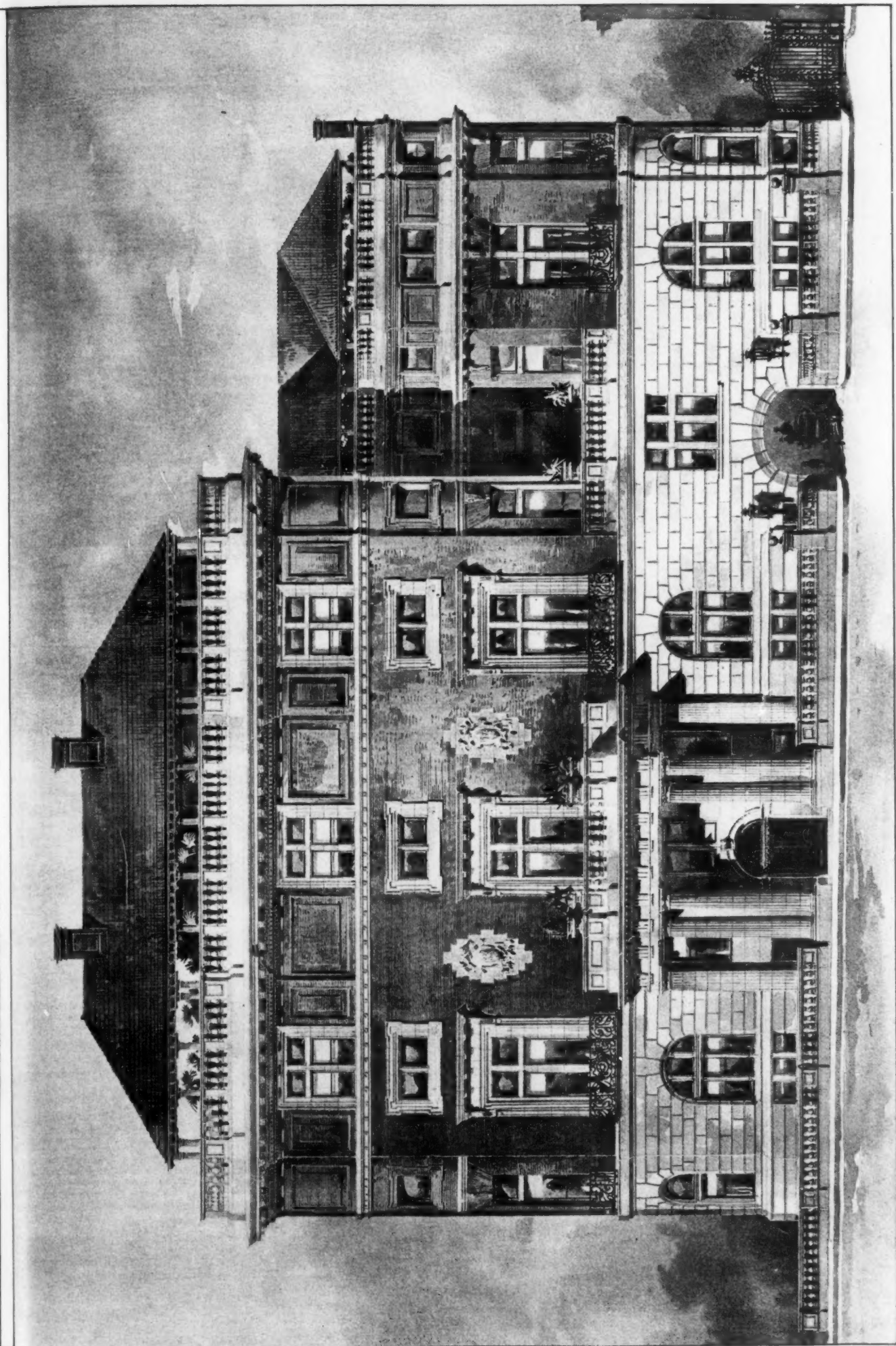
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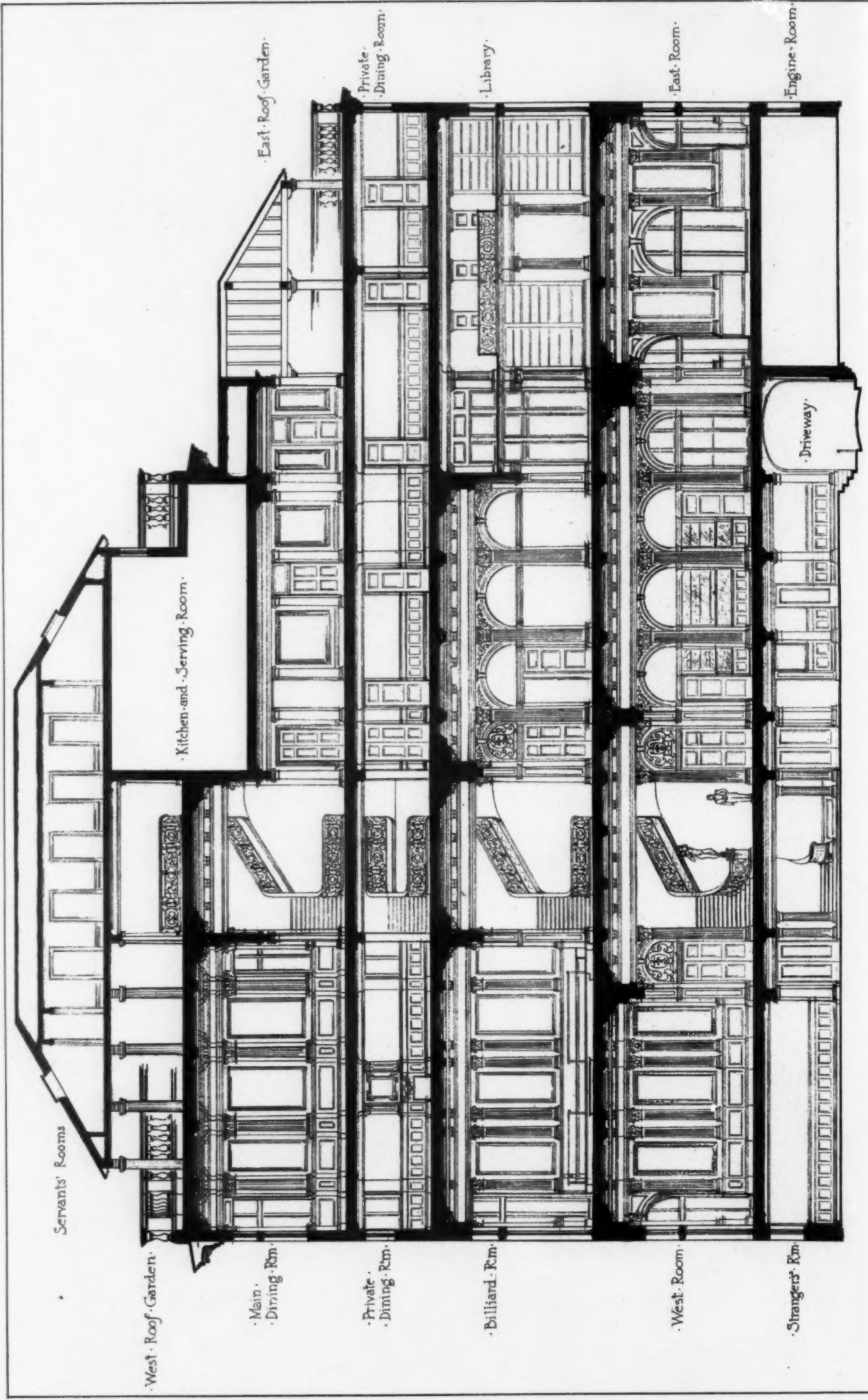
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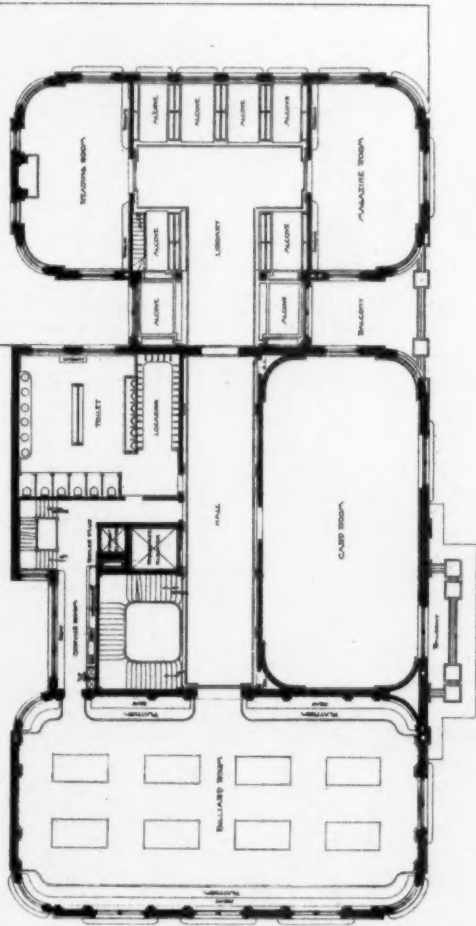
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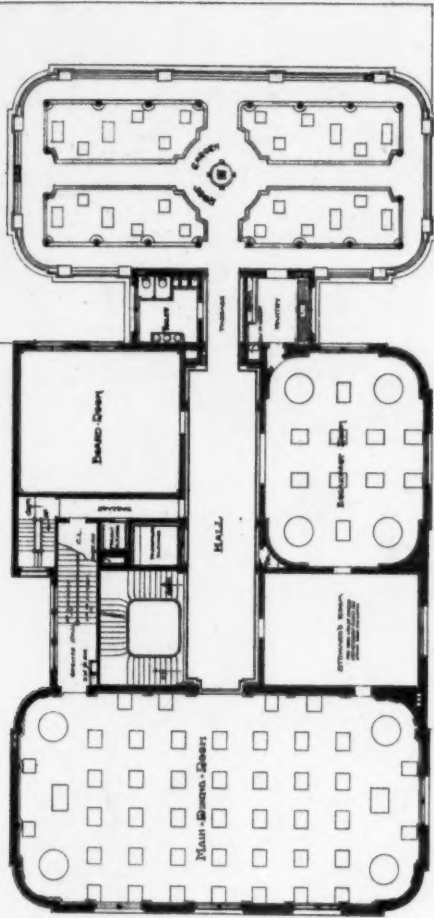
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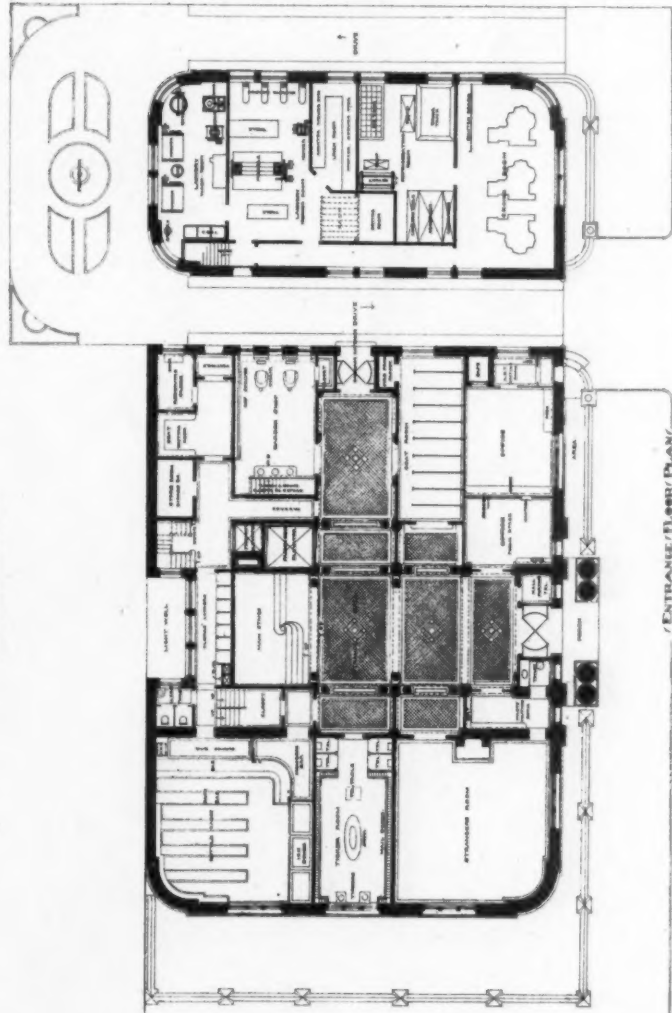
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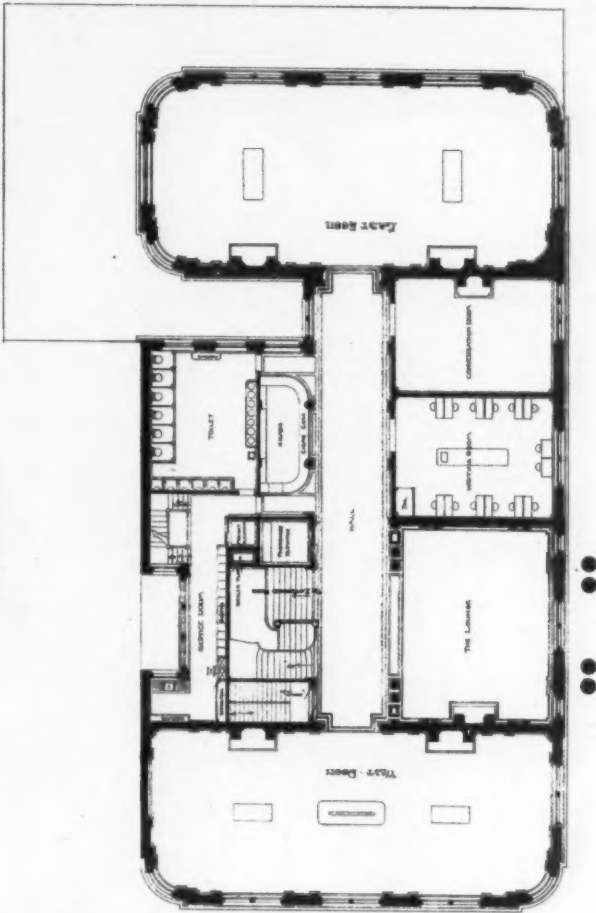
Second Floor Plan



Third Floor Plan

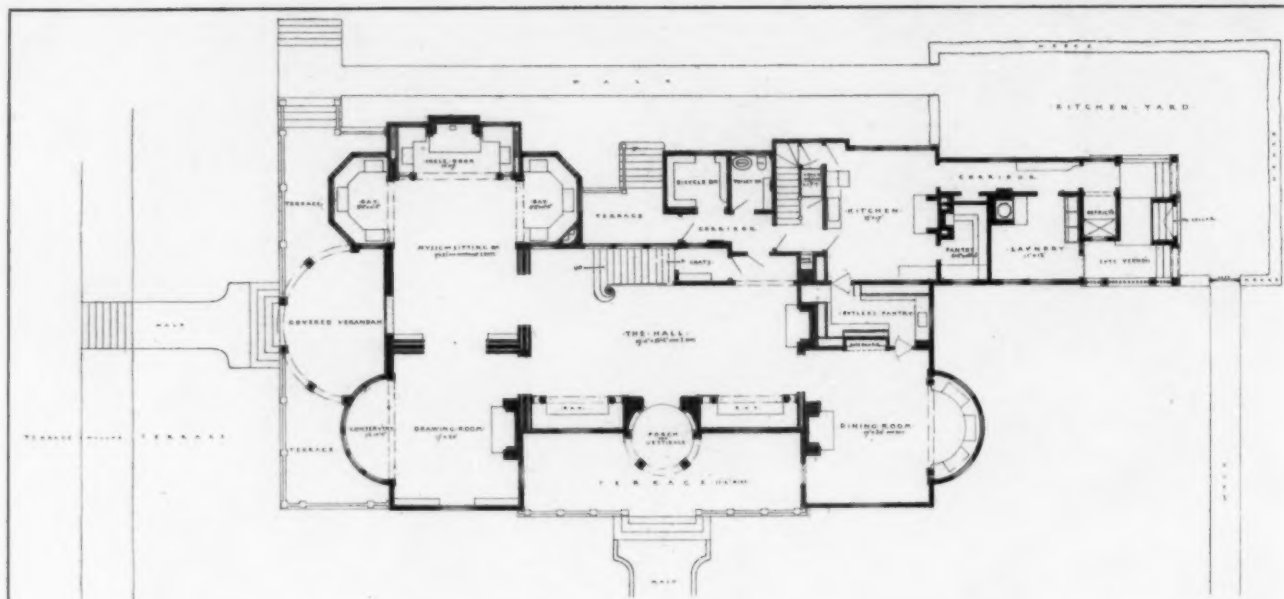


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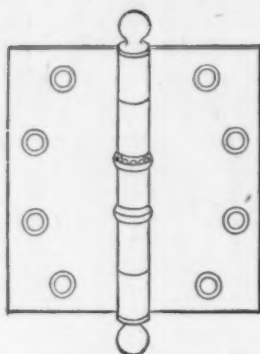
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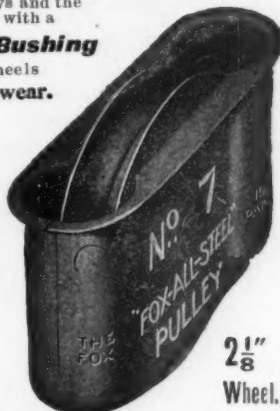
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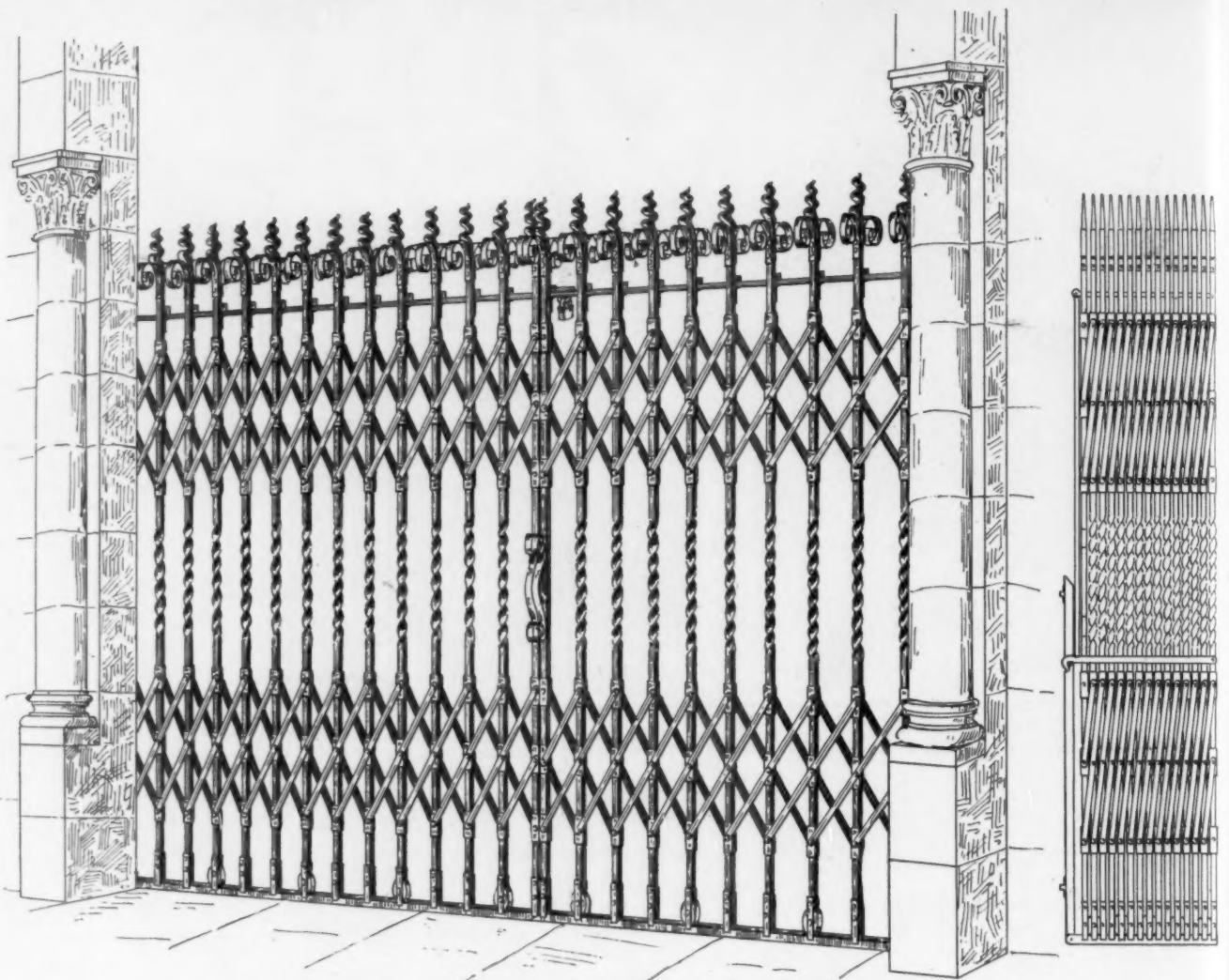
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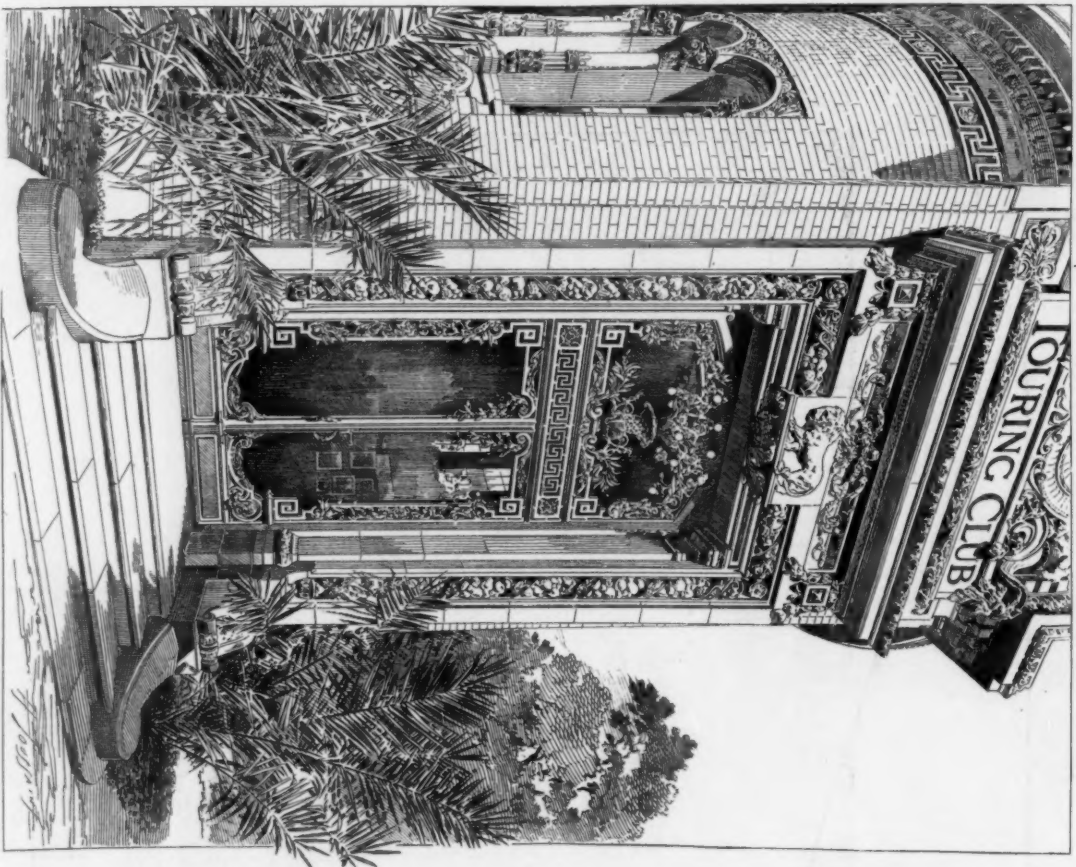
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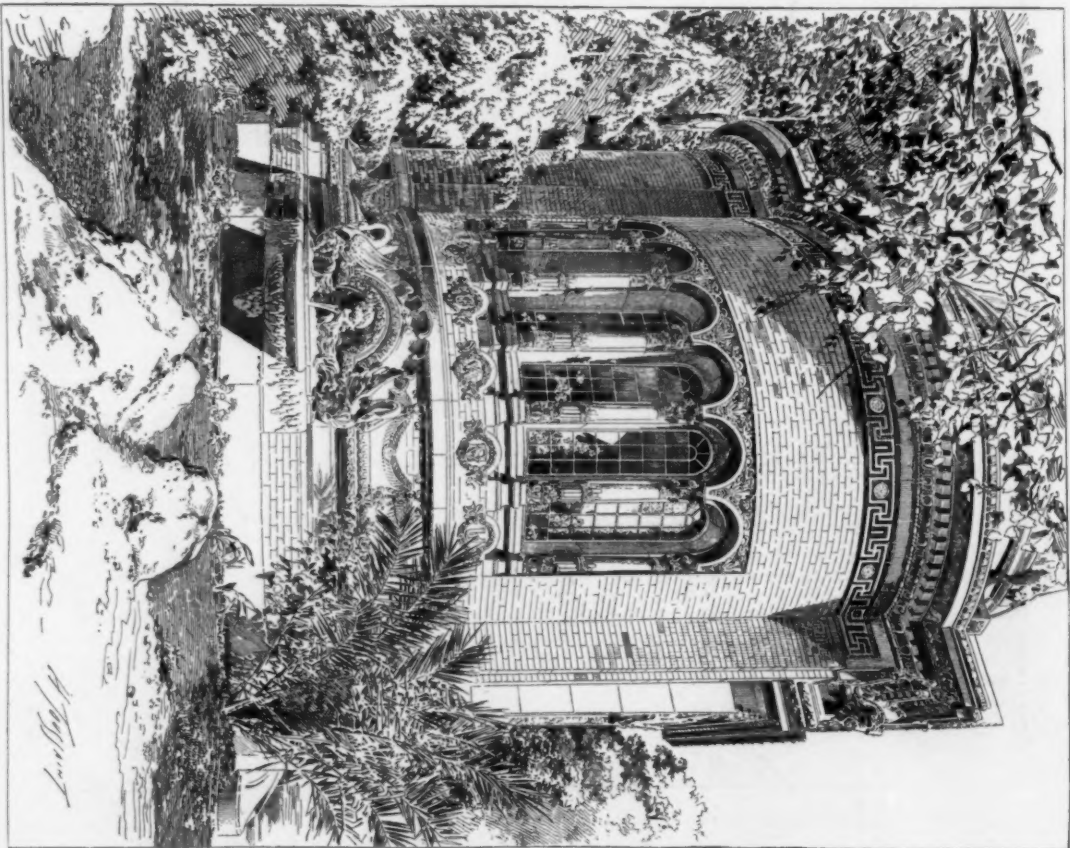
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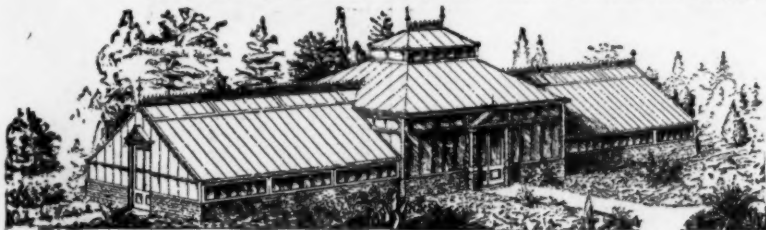
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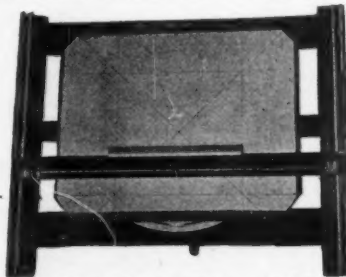
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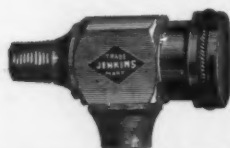


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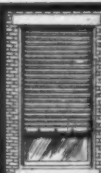
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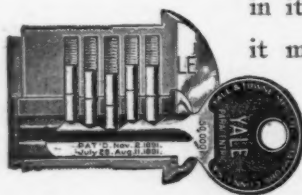
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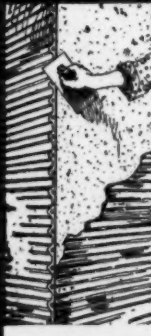
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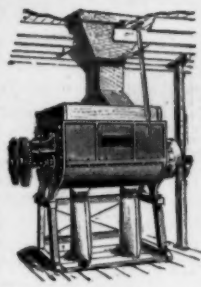
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(Continued in Supplement.)

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.

Buffalo, N. Y.—Mary A. Reiman will erect a residence at 186 Ashland Ave. It will be a two-story

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

frame structure fitted with all modern conveniences and of unique design; cost, \$5,000.

Churchill & Co., grain brokers, contemplate the erection of a large transfer elevator on the Lake Shore R. R., near the junction of Elk St. and Abbott Road. It will have a capacity of 500,000 bushels and will be so built as easily to allow of alterations and additions to handle a much larger quantity. It will be a steel structure.

Chicago, Ill.—William Ashton has had plans prepared by Architect H. K. Holman for a pressed brick apartment-building, 60' x 82', to be erected at Prairie Ave. and 41st St.; cost, \$25,000.

J. C. Cookburn will erect a three-story brick and stone apartment-building, 100' x 110', at Surrey Ct. and Fullerton Ave., after plans by L. M. Mitchell; cost, \$40,000.

Columbus, O.—William Lawson is having plans for a flat-building drawn by Architect R. A. Roberts. It will be a three-story brick structure, 35' x 75', to cost \$20,000.

Denver, Col.—Varian & Sterner, architects, have drawn plans for a brick and stone church to be erected on Logan St. and 14th Ave., for the Christian Science congregation; cost, about \$80,000.

Des Moines, Ia.—Cross & Son are preparing plans for a flat of pressed brick with Bedford stone trimmings to be erected at 25th St. and University Ave.; cost, \$7,500.

Guildhall, Vt.—Gay & Proctor, architects, 12 Pearl St., Boston, Mass., have drawn plans for a three-story frame building, 40' x 45', to be used as a public library and lodge hall; cost, \$15,000.

Hinsdale, Ill.—Architect M. L. Beers, Chicago, is drawing plans for a residence of the old English type, with frame, plaster and beam exterior to be built here; cost, \$8,000.

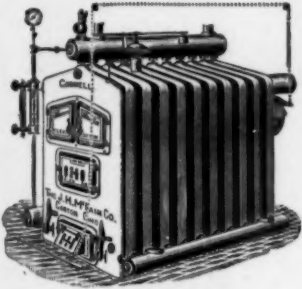
Knoxville, Tenn.—J. T. Brownlee and others will

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(Advance Rumors Continued.)

organize a company with a capital of \$50,000 to build a knitting-mill here.

Maywood, Ill.—The Maywood Foundry & Machinery Co. have had plans prepared for a machine-shop by M. J. Morehouse, Chicago. The building will be of steel construction, 60' x 100'.

Milwaukee, Wis.—Mrs. Jessie H. Hovey will build a two-story, 31' x 36', brick Colonial dwelling in Merrill Park; cost, \$6,000.

Minneapolis, Minn.—Charles R. Aldrich has prepared plans for the Pillsbury Home for Girls. It will occupy the site at 2d Ave. and 8th St., will be three stories in height, 42' x 80', and will be built of brick and stone.

Kees & Colburn, architects, are preparing plans for the Chamber of Commerce Building to be erected at 4th St. and 4th Ave., S. It will be 130' x 156', and eleven stories in height, the two lower stories of which will be built of St. Cloud granite, the upper portion of the building being constructed of gray mottled brick with terra-cotta ornamentation and trimmings. Cost will be about \$400,000.

Newark, N. J.—The Fire Department has had plans drawn for a new engine-house to cost \$12,000; architect, L. A. Virtue.

New York, N. Y.—Alexander Haft will build on Lenox Ave., west side 138th to 139th Sts. which property he recently purchased, 12 five-story light brick, limestone and terra-cotta flats after plans by Architect Geo. F. Pelham; cost, \$225,000.

Ottawa, Ill.—Gen. M. T. Maloney will build a \$60,000 brick and terra-cotta, 52' x 110', five-story office building. Wilson & Marshall, 218 La Salle St., Chicago, architect.

Philadelphia, Pa.—Architects Hazelhurst & Huckle have prepared plans for a six-story brick and stone office, factory and storage building to be erected by Fleck Bros., at 44 to 50 N. 5th St.

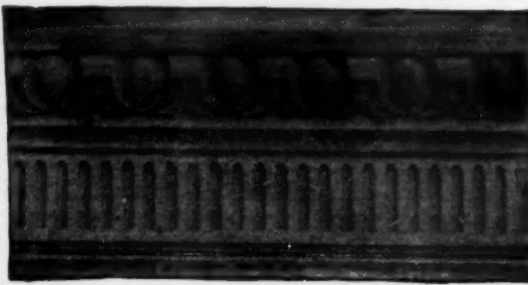
Porter, Ind.—The Chicago Stopper Co., 153 La Salle St., Chicago, Ill., will build a brick glass-factory with truss roof here, to be 128' x 141'; and cost \$35,000.

Superior, Mich.—An addition is to be built to the Nelson Dewey school-building at a cost of about \$30,000. The proposed addition will be used for high school purposes.

Toledo, O.—The Hotel Co. of America, in which B. R. Ayres is interested, will, it is reported, erect a large hotel in this city to cost \$650,000.

ALTERATIONS AND ADDITIONS.

New York, N. Y.—Amsterdam Ave., No. 760, wall removed & extension wall built up; also general alterations; \$16,000; o., City of New York; a., Building Supt. N. Y. Fire Dept., 157 E. 67th St.



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(Advance Rumors Continued.)

Third Ave., cor. 57th St., general alterations, interior & exterior; \$30,000; o., Nineteenth Ward Bank, 953 Third Ave.; a., Horgan & Slattery, 1 Madison Ave.

Lexington Ave., cor. 50th St., new iron columns & beams & new floors; \$10,000; o., Chas. E. R. Smith, 149 E. 22d St.; a., Harry A. Jacobs, 16 E. 23d St.

Philadelphia, Pa.—Hutchinson and Oxford Sts., six-sty bk. & yellow-pine factory addition, 83' x 53' 6 1/2' x 111'; \$35,000; o., Frank Schable & Co.; b., Charles Auchter; a., J. Franklin Stuckert & Son.

APARTMENT-HOUSES.

Boston, Mass.—Stanford St., nr. Green St., three-sty bk. aparts., 21' x 31', flat roof, stoves; \$8,500; o., Jennie D. Steuer; b., B. Steuer; a., G. H. Smith.

Brooklyn, N. Y.—President St., nr. 5th Ave., 3 four-sty bk. flats, 27' x 71' 7", gravel roofs; \$27,000; o., Elizabeth Assip, 224 Sixth Ave.

Sands St., nr. Bridge St., 2 four-sty bk. aparts., 25' x 65'; \$30,000; o., Forstrick & Lanster, 217 W. 125th St., N. Y.

Quincy St., nr. Lewis Ave., 4 four-sty bk. flats, 25' x 70'; \$24,000; o., P. Berlebach, 858 Flushing Ave.; a., W. B. Willis, 17 Troutman St.

New York, N. Y.—Amsterdam Ave., cor. 157th St., five-sty bk. flat & store, 24' 11" x 100'; \$30,000; o., Wm. C. Schmidt, 461 Lenox Ave.; a., Cleverdon & Putzel, 41 W. Union Sq.

Broadway, cor. 103d St., seven-sty bk. flat & store, 95' 7" x 120', tin & plastic slate roof; \$380,000; o., Daily & Carlson, Broadway & 102d St.; a., Henry Andersen, 1180 Broadway.

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Eighth Ave., cor. 150th St., seven-sty bk. flat, 99' 11" x 98'; \$80,000; o., Myer Hellman, 15 E. 92d St.; a., Hugo Kafka, 99 Nassau St.

Southern Boulevard, nr. Home St., three-sty bk. flat, 25' x 70'; \$12,500; o., James O'Hara, Hoe Ave.; a., M. Bernstein, 245 Broadway.

Henry St., No. 232, six-sty bk. flat & stores, 23' 5" x 100'; \$20,000; o., Abraham Cohen, 168 Park Row; a., Horenburger & Straub, 122 Bowery.

Broadway, cor. 121st St., seven-sty bk. & st. flat & bachelor apartment, 100' 11" x 95'; \$250,000; o., Geo. E. Wilson, 135 Bowery; a., Neville & Bagge, 217 W. 125th St.

One Hundred and Thirty-eighth St., nr. Broadway, five-sty bk. flat, 25' x 86' 4"; \$22,000; o., John J. Dorgan, 459 W. 155th St.; a., Neville & Bagge, 217 W. 125th St.

W. Forty-third St., No. 421, five-sty & base, bk. flat, 25' x 83' 11"; \$27,000; o., John Frick, 255 W. 27th St.; a., M. Bernstein, 245 Broadway.

Seventh Ave., cor. 142d St., 4 five-sty bk. & st. flats, 24' 11" x 25' x 75'; \$91,000; o., Fleischmann Bros., 1487 Fifth Ave.; a., G. F. Pelham, 503 Fifth Ave.

One Hundred and Forty-second St., nr. 7th Ave., 2 six-sty & base, bk. & st. flats, 25' x 82'; \$46,000; o., Fleischmann Bros.; a., G. F. Pelham.

BUILDING INTELLIGENCE.

(Apartment-Houses Continued.)

One Hundred and Fiftieth St., nr. St. Nicholas Ave., seven-sty bk. semi-fireproof apart., 85' x 90'; \$200,000; o., Moore & Ashley, 435 W. 147th St.; a., Moore & Landsiedel, 148th St. & 3d Ave.

E. Eighty-fifth St., No. 345, five-sty & base, bk. flat, 25' x 87' 8"; \$25,000; o., A. Bachrach, 610 Broadway; a., M. Bernstein, 245 Broadway.

CHURCHES.

Boston, Mass.—W. Fifth St., Nos. 73-75, bk. church, 52' x 117', pitch roof, steam; \$30,000; o., Rt. Rev. J. J. Williams; a., P. W. Ford; not let.

Brooklyn, N. Y.—St. Paul's Pl., cor. St. Paul's Ct., bk. church, 69' 10" x 148' 10", iron roof, steam; \$73,000; o., St. Paul's Episcopal Church; a., H. R. Brewster, 45 Exchange Pl., N. Y.

Ocean Parkway, nr. Sheepshead Bay Road, bk. church, 57' 4" x 102' 2", slate roof, steam; \$55,000; o., Rev. J. J. Cullen; a., Ingie & Almirall, 10 E. 23d St., N. Y.

Carbondale, Pa.—Fall Brook St., fr. church, 50' x 85'; \$13,000; o., Italian Roman Catholic Society; a., P. J. Morris.

Chicago, Ill.—Washington Boulevard, Nos. 770-780, two-sty bk. church, 90' x 120'; \$75,000; o., Third Church of Christ, Scientist; a., H. M. G. Garden, 172 Washington St.; b., O'Brien & Dungan, 212, 145 La Salle St.

Joplin, Mo.—Pearl St., bk. & st. church, 68' x 70', zinc roof, furnace; \$18,000; o., First Christian Church; a., Leon A. Hunter.

New York, N. Y.—W. One Hundred and Fortieth St., No. 185, one-sty bk. church, 37' 6" x 100'; \$6,000; o., Evangelical Zion Church, 173 W. 140th St.; a., Niels Toelberg, Home St. & Southern Boulevard.

FACTORIES.

Boston, Mass.—Semmer St., nr. Liverpool St., fr. mechanical building, 30' x 68', flat roof, steam; \$20,000; o., John E. Lynch; a., Webber & Smith; not let.

Brooklyn, N. Y.—Clermont Ave., nr. Fulton St., five-sty bk. factory, 50' x 98'; \$24,000; o., Michael Marlborough's Sons, 467 Clermont Ave.; a., G. Lowden, 471 Clermont Ave.

Stratton's Walk, nr. Ocean Ave., two-sty bk. boiler-house, 38' 8" x 87', gravel roof; \$10,000; o., Gilbert Stratton, Surf Ave. & W. 8th St.; a., P. M. Coco, 8 Union St.

Newark, N. J.—Belmont Ave., No. 144, one-sty bk. church, 55' x 100'; \$30,000; o., St. Stanislaus Society, Rev. V. Masnicki; a., Louis H. Giele.

Philadelphia, Pa.—Broad St., nr. Curtin St., three-sty bk. & yellow-pine chemical factory, 60' x 80'; \$6,700; o., N. E. Groves; b., Andrew Mowbray.

Twenty-eighth St. and Pennsylvania Ave., one-sty bk. tank-shop, 69' x 155' x 197'; \$18,000; o., Baldwin Locomotive Works; b., Roydhouse, Arey & Co.

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St.: a., Bruce Price, 1133 Broadway; b., D. C. Weekes & Son, 289 Fourth Ave.
Fifth Ave., nr. 72d St., five-st'y bk. dwell., 40' x 67' 6"; \$95,000; o., Samuel Thorne, 8 E. 55th St.; b., D. C. Weekes & Son; a., Bruce Price.

Philadelphia, Pa.—N. Broad St., No. 2317, four-st'y bk. & st. trimmed dwell., 22' x 75', mansard roof; \$18,000; o., N. M. Nathanson; b., Francis T. Maguire; a., W. L. Plack.

Somerville, Mass.—Benton and Westwood Roads, 2½-st'y dwell., 40' x 45', pitch roof, hot water; \$8,000; o., S. F. Moses; b., J. M. Andrews & Son; a., J. Harrold.

LIBRARIES.

Southington, Conn.—One-st'y bk. & st. library, 32' x 40'; \$10,000; o., Town of Southington; a., Wilson Potter, 3 Union Sq., N. Y. City.

MERCANTILE BUILDINGS.

Chicago, Ill.—Wabash Ave., Nos. 117-121, nine-st'y building, 70' x 150'; \$300,000; o., Mandel Bros.; a., Holabird & Roche, Monadnock Building; b., Paul F. P. Mueller, 909 Schiller Building.

Boston, Mass.—Huntington Ave., cor. Massachusetts Ave., bk. office-building, 25' x 87', flat roof, steam; \$100,000; o., W. B. Thomas; b., Jas. Smith; a., A. H. Vinal.

East Liverpool, O.—Three-st'y st., bk. & terra-cotta bank building, 30' x 70'; \$30,000; o., The Potters National Bank; a., Mowbray & Uffinger, 49 Liberty St., New York City.

PUBLIC BUILDINGS.

Petokey, Mich.—Two-st'y bk. city-hall, jail & fire-station, 60' x 70', slate roof, steam heat; \$20,000; o., City; a., J. H. Daverman & Son, Grand Rapids.

STABLES.

New York, N. Y.—Southern Boulevard, nr. 149th St., two-st'y bk. stable, 49' x 95'; \$15,000; o., M. & W. North, 721 Westchester Ave.; a., T. W. Ringrose, 3d Ave. & 149th St.

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st'y & base. bk. club-house, 76' x 97' 6", copper roof, steam heat; \$300,000; o., Young Men's Christian Association, W. B. Miller, Montclair, N. J., secretary; a., Parish & Schroeder, 3 W. 29th St., N. Y.

HOUSES.

Bay City, Mich.—Centre Ave. and Birney St., two-st'y bk. & fr. dwell., 72' x 84', \$25,000; o., F. L. and F. B. Ward.

Boston, Mass.—Fletcher St., nr. South St., 2½-st'y fr. dwell., 26' x 47', pitch roof, furnace; \$5,500; o. & b., H. C. Brown; a., S. Rantlin.
Bay State Road, No. 111, three-st'y bk. dwell., 26' x 70', flat roof, hot water; \$30,000; o., Thomas S. Lockwood; b., W. A. & H. A. Root; a., Winslow, Wetherell & Bigelow.

Dorchester Ave., cor. Parkman St., three-st'y fr. dwell., 27' x 40' x 47', flat roof, furnace; \$5,000; o., Julia McDonough; a. & b., William Riley.

Brooklyn, N. Y.—Sea Gate Ave., cor. Maple Ave., two-st'y & attic fr. dwell., 26' x 32', shingle roof, hot water; \$6,000; o., F. D. L. Prentiss; a., J. A. Hamilton, 32 Broadway, N. Y.; b., Ferguson & Brown, 1357 Rogers Ave.

Sea Gate Ave., cor. Cypress Ave., two-st'y fr. dwell.; \$6,000; o., Mrs. Kate L. Prentiss, Norwalk, Conn.; a., J. A. Hamilton.

E. Twelfth St., nr. Beverly Road, two-st'y & attic fr. dwell., 35' x 35' 6", shingle roof; \$6,800; o., G. S. Moore, 758 Ocean Ave.; a., J. S. Kennedy, 384 E. 16th St.

BUILDING INTELLIGENCE.

(Houses Continued.)

Plaza Pl. and Flatbush Ave., 4 four-st'y & base. bk. dwells., 18' 9" x 53'; \$72,000; o., C. E. Paterson, 460 Seventh St.; a., Roosen & White, 68 Fort Greene Pl.

Chicago, Ill.—Wellington Ave., Nos. 1823-1825, two-st'y bk. dwell., 37' x 42'; \$12,000; o., Mrs. Margaret True; a., Huehl & Schmid, Metropolitan Block; b., John P. Flick, 1240 Montana St.
Sheridan Drive, No. 3424, two-st'y fr. dwell., 30' x 53'; \$10,000; a., W. W. Burson, 322 Racine Ave.; a., W. H. Milner, 108 La Salle St.; b., W. H. Woolcott, 1101 Early Ave.

Greenwood Ave., No. 4426, two-st'y bk. dwell., 36' x 50'; \$15,000; o., Jay Morton, 932 Monadnock Building; a., H. W. Tomlinson, 1106 Steinway Hall; b., Swan J. Nihlan, 3629 Forrest Ave.

New York, N. Y.—Beck St., nr. 156th St., 2 two-st'y bk. dwells., 20' x 50'; \$12,000; o., Geo. F. Johnson & Sons, 156th & Dawson Sts.; a., W. C. Dickerson, 149th St. & 3d Ave.

Beck St., nr. 156th St., 8 two-st'y bk. dwells., 20' x 50'; \$48,000; o., Geo. F. Johnson & Sons; a., W. C. Dickerson.

Kingsbridge Road, nr. Prospect Ave., two-st'y fr. dwell., 22' x 50'; \$5,000; o., Chas. Knauf, Classon Ave.; a., Jos. C. Cocker, 1034 Freeman St.

E. Seventieth St., No. 118, five-st'y bk. & st. dwell., 20' x 63' 7", terra-cotta & tin roof; \$100,000; o., Grace Lathrop Luling, Ridgely, Conn.; a., Trowbridge & Livingston, 287 Fourth Ave.

Fifth Ave., nr. 72d St., five-st'y bk. dwell., 26' x 67' 10"; \$55,000; o., John W. Sterling, 21 E. 47th

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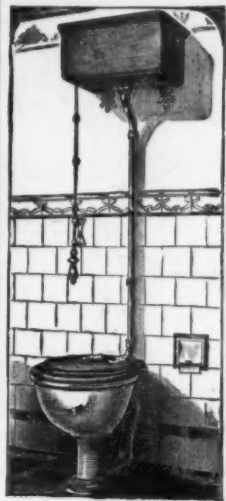
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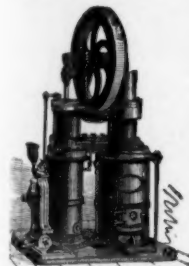
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TENEMENT-HOUSES.

Brooklyn, N. Y.—Fourth Ave., cor. Warren St., four-sty' bk. stores & tenements, 25' 8" x 60'; \$9,000; o. Della McGarry; a. R. Dixon.

New York, N. Y.—Bristol St., nr. Jennings St., 5 three-sty' fr. tenements, 20' x 60'; \$30,000; o. Max Arburtal, 835 Southern Boulevard; a. T. W. Ringrose, 3d Ave. & 142d St.

One Hundred and Thirtieth St., n. s., 270' w 3d Ave., 3 five-sty' bk. flats & stores, 25' x 84' 4"; \$60,000; o. John Scheuring, 418 E. 91st St.; a. John Hauser, 1961 Seventh Ave.

E. Ninety-seventh St., Nos. 104-108, 3 five-sty' st. front tenements, 25' x 84' 3", plastic slate roof; \$75,000; o. John J. Mahony, 51 W. 94th St.; a. A. De Saldern, 130 Broadway.

E. Eleventh St., No. 406, six-sty' & base. bk. tenement, 25' x 79' 10"; \$28,000; o. L. Lippmann, 168 E. 103d St.; a. M. Bernstein, 245 Broadway.

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Wichita, Kan.—Two-sty' bk. warehouse & office-building, 75' x 125'; \$15,000; o. The United Sash & Door Co.; a. E. Dumont.

MISCELLANEOUS.

Boston, Mass.—Congress St., nr. L St., fr. coal-elevator, 35' x 250', flat roof; \$35,000; o. Curran & Burton; a. & b. A. R. Hooper.

Medford St., No. 199, fr. coal-trestle, 22' x 180', 24' x 260', 12' x 260', 40' high; \$14,000; o. Minnie H. Stone; b. M. McLean.

New York, N. Y.—Depot Sq., nr. 300th St., one-sty' bk. & st. railroad-station, 22' x 107' 4", shingle roof; \$18,000; o. N. Y. C. & H. R. R. Co., Grand Central Depot; a. G. A. Nichols.

COMPETITIONS.

LIBRARY.

[At Davenport, Ia.]

The library trustees will receive competitive plans until November 15th for a library building. S. F. SMITH, pres. 1295

PROPOSALS.

POLICE STATIONS.

[At New York, N. Y.]

Sealed bids will be received by the police department, 300 Mulberry St., until October 11, for furnishing all the labor and materials necessary to build and complete the new station-house, prison and stable on Sedgwick Ave., north of E. 16th St., in the Borough of the Bronx. A similar building at junction of Liberty and E. New York Aves., Borough of Brooklyn; and a similar on Bathgate Ave., north of E. 17th St., in the Borough of the Bronx. WM. KIPP, chief clerk. 1293

STOREHOUSE.

[At Fort Mott, N. J.]

Sealed proposals, in triplicate, will be received until October 13th for the construction of an ordnance storehouse at Fort Mott, N. J. J. DE LÉ LAFITTE. 1293

SCHOOL-HOUSE.

[At Kellogg, Minn.]

The School Board will receive bids until October 10th for the erection of a school-building. W. H. O'BRIEN, clk. school board. 1293

PROPOSALS.

HOSPITAL.

[At Richmond, Va.]

Sealed bids are wanted until October 10th for building the Charlotte Williams Hospital. PERCY GRIFFIN, archt. 1293

SCHOOL-HOUSE.

[At New Martinsville, W. Va.]

Sealed bids are wanted until October 10th for a brick and stone school. L. J. WILLIAMS, secy. bd. education. 1293

Treasury Department, Office Supervising Architect, Washington, D. C., September 29, 1900. Sealed proposals will be received at this office until 2 o'clock P. M. on the 6th day of November, 1900, and then opened, for the plumbing and finish of toilet-rooms for the U. S. Custom-house building at Portland, Oregon, in accordance with drawings and specification, which will be furnished at the discretion of the Supervising Architect at this office, or at the office of the Superintendent of the building at Portland, Oregon. JAMES KNOX TAYLOR, Supervising Architect. 1294

LIBRARY.

[At Lincoln, Neb.]

Sealed proposals will be received until October 17th for the erection of the Carnegie Library. S. L. GEISTHARDT, chmn. com. on plans. 1294

SCHOOL-HOUSE.

[At Albany, N. Y.]

Sealed proposals are wanted until October 8 for erecting a school. ISIDORE WACHSMAN, clerk board of contract and supply. 1293

HOTEL.

[At Birmingham, Ala.]

Sealed proposals will be received until October 15th for the erection of a hotel. HOTEL HILLMAN CO. 1294

STABLE.

[At Detroit, Mich.]

Sealed proposals will be received at the office of the Chief Quartermaster, Chicago, Ill., until October 11th for constructing a brick stable at Fort Wayne, Detroit, Mich. E. B. ATWOOD, Lieut.-col. and chief quartermaster. 1293

CHURCH.

[At Selma, Ala.]

Sealed proposals will be received until November 1st for a church for the First Baptist Society. WILSON & EDWARDS, archts., Columbia, S. C. 1293

ASYLUM.

[At Abilene, Tex.]

Sealed proposals will be received by the Comptroller of Public Accounts until October 8th for the erection of asylum building. T. W. ROBBINS, treas. 1293

ARCH BRIDGE.

[At Rock Creek, D. C.]

Sealed proposals will be received until October 13, 1900, for the construction of a Melan arch bridge across Rock Creek in the National Zoological Park on the line of the Quarry Road. LANSING H. BEACH, engineer commissioner, Washington, D. C. 1293

DORMITORY.

[At Umatilla, Ore.]

Sealed proposals will be received until October 23 for furnishing the materials and labor required in the construction, at the agency school, of a frame or brick dormitory, for remodeling and improving the present boys' dormitory of the agency. W. A. JONES, 1293

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PROPOSALS.

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STABLE.

[At Fort Yellowstone, Wyo.]

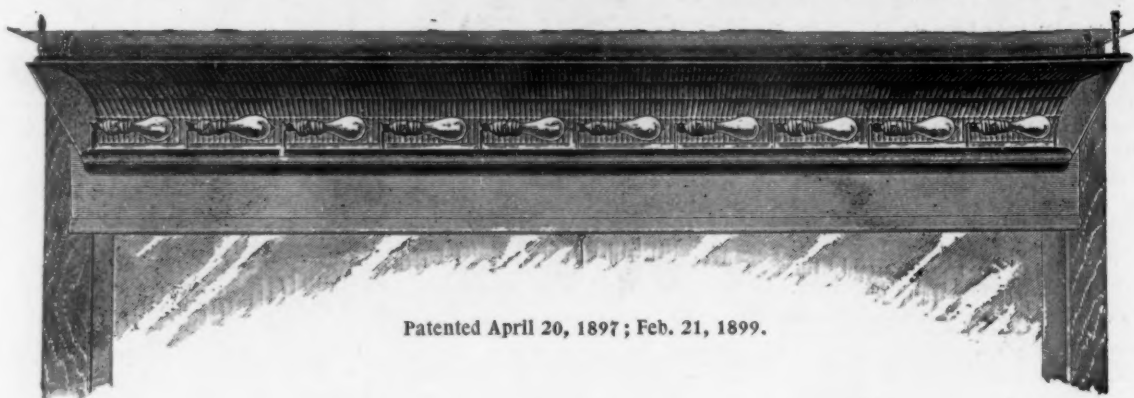
Sealed proposals, in triplicate, will be received until October 17th for the erection of a quarter-master's stable, wagon-shed, teamster's quarters, shops and an addition to the commissary storehouse. GEO. E. POND, C. L. M., St. Paul, Minn. 1294

Treasury Department, Office Supervising Architect, Washington, D. C., September 20, 1900. Sealed proposals will be received at this office until 2 o'clock P. M. on the 8th day of October, 1900, and then opened, for the installation of a wiring system for the U. S. Post-office Building at Newport, Ky., in accordance with the drawings and specification, copies of which may be obtained at this office or at the office of the Superintendent of Construction at Newport, Ky., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1293

Treasury Department, Office Supervising Architect, Washington, D. C., September 22, 1900. Sealed proposals will be received at this office until 2 o'clock P. M., on the 15th day of October, 1900, and then opened, for new plumbing and interior finish of toilet-rooms for the U. S. Treasury Building at Washington, D. C., in accordance with drawings and specification, which will be furnished at the discretion of the Supervising Architect at this office. JAMES KNOX TAYLOR, Supervising Architect. 1293

Treasury Department, Office Supervising Architect, Washington, D. C., September 22, 1900. Sealed proposals will be received at this office until 2 o'clock P. M. on the 23d day of October, 1900, and then opened, for the construction of the basement of the U. S. Post-office building at Butte, Montana, in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Postmaster at Butte, Montana, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1293

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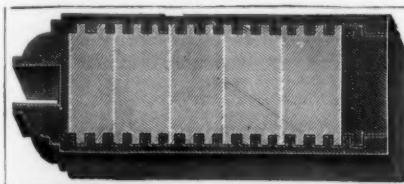
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. . . CODE OF ETHICS . . .

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ADOPTED BY THE SOCIETY, FEBRUARY 1,
. . . 1898. . .

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 criticize 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.

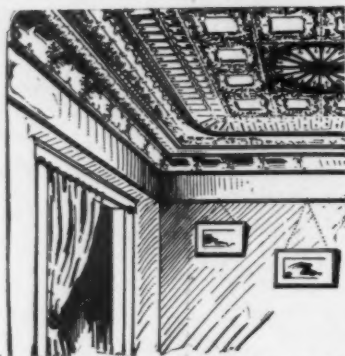
SECTION 12. The American Institute of Architects' "schedule of charges" represents minimum rates for full, faithful and competent service. It is the duty of every architect to charge higher rates whenever the demand for his services will justify the increase, rather than to accept work to which he cannot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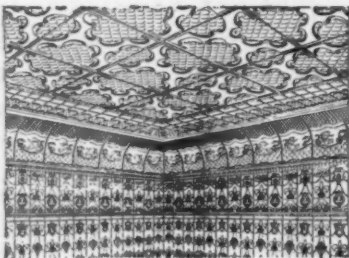
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