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THE current *Bulletin of the Department of Labor* is devoted mainly to the Report of the Anthracite Coal Strike Commission, and a more deeply interesting document was, perhaps, never issued by the Department. It has been said so many times that the country was fortunate in finding such men to serve on the Commission that we need not repeat the expression; but, in addition to their earnestness and fairness, the Commission showed a clearness of sight in dealing with the matters before it that cannot be too highly praised. As every one knows, the Report places a part of the blame for the strike on the miners, and a part on the mine-owners; but it adds that both were responsible for the "cruel suffering" inflicted upon the country by their conduct in regard to matters of relatively small importance, which might easily have been arranged by arbitration or mutual concessions, if either the operators or the men had paid due regard to their responsibility to the public. These strictures, which are only too well deserved, apply, of course, more particularly to the mine operators, as the better instructed and presumably more intelligent party; but we trust that, before another strike of the kind occurs, means will have been found to enforce the responsibility of both. Meanwhile, the Report gives a sad picture of the brutal cruelty practised by the unions, not only on non-union men, but on women and children not even connected with the mines. In one case, a young schoolmistress was dismissed from her employment by some cowardly school-committee, at the demand of the unions, simply because her brother, who did not even live in the family, had consented to work in a mine. In another case, a boy of fifteen, employed in a drug-store, was discharged by his employer, in obedience to the order of some walking-delegates, because his father, a union man, had gone back to work before the strike was called off; and many tradesmen were threatened for supplying provisions to the families of men who chose to work. It is not surprising that the non-union miners joined in an appeal to the Commission, praying for defence against the "insult, outrage, violence, molestation or interference" from which, as they believed, the law of the land protected them.

SOME of the other petitions contained in the memorial of the non-union mine-workers read curiously. They ask for increase of pay, but "instead of desiring a reduction in the hours of employment," they "insist" upon their right to work "as many hours as they choose, and as opportunity affords," in order "to better their conditions, and increase their earning capacity," even though their superior industry, and longer

hours, "may result in less work being done by another employé, who, through indisposition, is not willing to work when the opportunity affords, or by reason of any contract with the mine-workers' union, restricting his own class of labor." It will be remembered that a favorite trick of the union miners has been to prevent a non-union man, or a union man whom the leaders wanted to injure, from getting cars upon which to load the coal that he cut down, or, if he got the cars, to overturn or delay them; so that the non-union men ask official authority for a rule that cars shall be furnished as wanted by the miners, and not in such a way as to favor any particular man, or set of men. It is gratifying to find that the Commission, in answer to this request, "adjudged and awarded" that the mine-cars should be equitably distributed among the miners, and that no attempt should be made by the miners to limit the output of the mines except in accordance with an agreement between the mine operator and a majority of the miners employed by him. Another excellent recommendation of the Commission is that order should be maintained in the mining-regions by the regular county and State officers, strengthened to any necessary extent, rather than by deputies paid by the owners of the mines. It has been the practice of the State officials, in terror of the "labor vote," to leave the defence of the mining property mainly to "coal-and-iron policemen," paid by the owners of the mines. This practice the Commission condemns as vicious, and as tending to excite disorder, instead of allaying it; and its opinion is obviously justified.

MR. PEREZ M. STEWART, lately Superintendent of Buildings for New York, was summarily removed last week, and Mr. Henry S. Thompson appointed in his stead. No reasons are made public for this proceeding, and, so far as is known, none exist beyond the undoubted right of his superiors to put the control of the important Bureau of Buildings into the hands of any person that they may consider worthy of the charge. It is generally understood that Mr. Stewart has done much to reform the administration of an office in which there was, when he took it, a great deal to be reformed; and he has, at least, made the work of continuing the reform comparatively easy for his successor. Of the latter not very much is known in the building world, although he was for some years prominent as the financial head of the Thompson-Starrett Company, now merged in the George A. Fuller Company. He seems, however, to be regarded as a man of independence and ability, and his appointment by Mr. Cantor may be evidence that he possesses these qualifications.

MR. CORNELIUS O'REILLY, of New York, was killed last week by a fall from a ladder in a new church which he was constructing in Amsterdam Avenue. Mr. O'Reilly was one of the most respected of the sturdy immigrants who have made their way in New York, not by political corruption, but by integrity and industry, to responsibility and wealth. For a long time he had been conspicuous as a builder, and as a director in various banking and other institutions, as well as in the Catholic Church, of which he was a devoted member. At the time of the erection of the tomb of General Grant, on Riverside Drive, he served as Chairman of the Building Committee; and, at the time of his death, he was a Trustee of the New York Ophthalmic Hospital, and a Director of the College of Dentistry.

ARCHITECTS in and about Boston should not fail to make a farewell visit to the house on Beacon Street, opposite the Common, now being demolished to give place to a twelve-story apartment-house. The building is one of two houses, built about thirty years ago for Mr. Martin Brimmer, by the late Richard M. Hunt. Mr. Hunt was, at that time, at the very height of his powers, and no other of his works, to our mind, shows so much of his exuberant and original genius as this little block. Of course, we no longer cut away stone as if it were cheese, and tile inlays and other exterior ornaments of the kind have long been obsolete; but, considering the fact that this was the style of that period, and that in these chamfers and corbellings and inlays the architects of the past

generation thought they saw the regeneration of art, the sympathetic architect will see in Mr. Hunt's work a wonderful delicacy of feeling, and appreciation of effect. We should say, also, that the Brimmer houses showed an originality which has long disappeared from American architectural design, if it were not that Hunt himself followed, although with an independence peculiarly his own, the great French masters of the Neo-Grec. Whether entirely original or not, however, the Brimmer houses are among the most interesting works of architecture in Boston, and we are sure that the architect of the building which is to replace one of them will not accuse us of casting any reflection on his talent if we express the hope that the new structure may be as beautiful as the old one.

THE city of Paris has just been defeated in a peculiar lawsuit. Many of the Parisian houses, like those in other places, have their windows furnished with outside blinds. It is common in the fashionable quarters of Paris to make the windows with deep reveals, and to divide the blinds, which are usually of steel plate, so that they will fold back against the sides of the opening. Where this is done, no charge is made for them; but where, as is common in the poorer quarters, the blinds fold back against the outside of the wall, a tax of five francs a pair is collected for them, on the ground that they encroach upon the public street. It has been the practice of the city authorities to collect the tax upon all blinds folding back on the face of the wall, even when the wall was set back of the street-line, and also upon blinds of dormer windows, placed behind the plane of the face of the wall; but some one seems to have had the courage to resist this imposition, and, after long litigation, the highest court has decided that no tax can be collected except for blinds which actually swing over the public street.

THE preliminary report of the expert appointed by the French Government to examine the famous tiara of Saitapharnes has been published. The expert chosen was M. Clermont-Ganneau, a learned archaeologist, as well as a cool investigator, who has already exposed several archaeological impositions. M. Elina, who "confessed" that he made the tiara for a Parisian dealer, and put private marks on it, has again "confessed" that his first story was a pure fabrication, intended to call attention to the tiara, and, incidentally, we suppose, to himself. However, another goldsmith, one Rachumowski, of Odessa, has also "confessed" that he made it; and, as he is known to be a very skilful imitator of antique work, the French Government has brought him from Odessa to Paris to substantiate his story. Meanwhile, M. Clermont-Ganneau, after careful examination, pronounces decidedly against the authenticity of the tiara. This object is a sort of cap, after the fashion of a bishop's mitre, or of the triple crown of the Popes, with three distinct bands of ornament. The lower band, known as the Scythian division, is pronounced by M. Clermont-Ganneau to be a complete forgery, having no relation to ancient work, either in design or execution. The second band was, he thinks, inspired by some genuine antique fragment, the ornaments of which the forger copied. The third division, comprising the top of the tiara, presents, he says, a mixture of imitations of ancient work and modern inventions.

NO all this M. Salomon Reinach, a noted and highly esteemed archaeologist, who has always defended the genuineness of the tiara, and advanced a part of the money for its purchase, replies that the inscription on it is in good Greek, of the period to which it is attributed, and that it is preposterous to attribute to a Russian goldsmith the composition of such an inscription; while, as for the second band, believed by M. Clermont-Ganneau to be in part copied from a genuine antique fragment, he asks where that antique fragment is to be found. In the same way, in answer to the suggestion that the forger, if there was any forger, may have taken his ideas for the first band from some book, he declares that no book in existence contains anything like the motives of the ornament on the band. If there has been forgery in connection with the tiara, he maintains, with much reason, that some expert archaeologist must have been connected with the forgery, and the discovery of the man of science who composed and plotted such a deception would be quite as interesting as the detection of the forger himself. Meanwhile, some historian observes that nothing is known of any person named Saitapharnes among the kings of Scythia; so that the forger, supposing M. Clermont-Ganneau's

opinion to be justified, must have had to invent a plausible bit of history, together with his antique ornament.

THE Report of the City Engineer of Providence, R. I., contains some interesting information in regard to the operation of the new sewage-precipitation plant, which has just completed its first year of full service. People who laugh at the idea that the sewage of a city can contaminate tide-water may be surprised to learn that the removal of the organic matter in the sewage "has resulted in producing a very much clearer water in the bay below the outlet," while the water in the harbor "is greatly improved over what it was several years ago." Precipitation is effected by lime and sulphate of iron, and about seventeen million gallons a day were treated during the year. The sludge is pressed, and used for filling, no better way of utilizing it having been discovered. The plant seems to have been intelligently and efficiently operated, and is, apparently, one of the best models of a disposal-system for a large city yet established in this country. As in so many other cities, electrolysis of water-pipes, by return currents from electric railways, has given much trouble, and tests have been made at various points, to determine the conditions existing there. In places where iron water-pipes are in ground soaked with sea-water corrosion has been rapid; and even steel bridges have been found to be affected in a manner which cannot easily be explained, but which seems to be connected with electrical action, as tests showed currents passing through the girders of the bridges. The Assistant City Engineer in charge of the matter, Mr. Knudson, reports that conditions, as shown by tests, are gradually improving, as railway lines are better laid and electrically connected; but he thinks that nothing short of a double trolley system, by which both positive and negative currents shall be insulated from the ground, will entirely prevent corrosion of water-pipes in streets through which the tracks run.

THE Brooklyn Plasterers' Union seems to be determined to win the first place, even among plasterers' unions, for ridiculous eccentricities. The Union has given notice of a demand, to be enforced by a strike, if necessary, that, after a given date, every two journeymen shall be accompanied by a "foreman," who is to be paid by the employer of the journeymen, but is not to be allowed to do any work himself, his valuable time being occupied in seeing the others work; and, incidentally, we presume, in seeing that they do not do too much work in a day. It appears that the Brooklyn builders are likely to yield to this demand, adding the wages of the useless foremen, of course, to the amount of their contracts, and increasing in proportion the rents which poor people will have to pay for rooms in the tenements which they build. It is curious that the poor people here, as elsewhere, fail to understand that it is they who pay the walking-delegates, the "supervising foremen" and the other useless incumbents of the unions; that all the money spent on "sympathetic strikes" comes out of their pockets, and that they carry on their backs the army of shirkers who control the unions. Some time, when legislators, courts and public opinion have been so far awakened as to give real protection to non-union men, the difference between the work of independent and ambitious citizens and that of the slaves of the walking-delegate will become more conspicuous, and this country, at least, will be called upon to choose whether it prefers industrial freedom or a system of insolent tyranny which becomes every day more degrading and intolerable.

THE people who imagine, from the story of Mr. Morgan's having paid four hundred thousand dollars for a single piece of tapestry, that all pieces of tapestry cost as much may be reassured by the account of the auction sale of some tapestries belonging to the artist, Holman Hunt. Whatever we may think of Mr. Hunt as a painter, there is no doubt as to his knowledge of artistic accessories, and the prices paid for objects undoubtedly collected many years ago, when there was little demand for them, by so accomplished a connoisseur seem astonishingly low. The highest price was paid for an old Burgundian panel, eleven feet by thirteen, which brought fifty guineas, or about two hundred and sixty dollars. An old Brussels tapestry, measuring twelve by fifteen feet, with figures of Niobe's children, only brought thirty guineas; and another old Brussels panel, ten and one-half by thirteen feet, was sold for twenty-five guineas.

ROMAN AND ROMANESQUE FRANCE.¹—VIII.

AVIGNON.



Entrance to Avignon.

ONE of the historians of Avignon sums up its beauties thus: "Noble in its antiquity, agreeable for its situation, superb in its walls, joyous in the fertility of its sunniness, charming through the gentleness of its inhabitants, magnificent by reason of its palace, beautiful in its streets, marvellous for the construction of its bridge, rich in commerce and known throughout the world."

This was written years ago, but still holds good; indeed, so far as the modern traveller can see, the "beauty" of the streets could not have been what it is now, since narrow tortuous streets have given place to broad ones flanked by stone houses, after the manner of every French town, North, South, East and West. The old architects protected the inhabitants from sun and wind, for the streets of Avignon are either hot-beds or funnels, through which the *mistral* rages, according to the season; but the new city is a prey to both extremes. Doubtless, it is healthier for having light and air, but the plan of a city in the North cannot suit the South; and knowing how one dreads the sun even in Paris, where day after day, for six or seven weeks, it rises cloudlessly during a hot July and August, one cannot imagine the same conditions in Avignon with an extra twenty degrees of temperature. Such as Paris, Rouen and Amiens are architecturally, so are the new parts of Avignon, Cannes, Nice and Antibes. The old narrow streets are, doubtless, nurseries for every

said, rather a "citadelle d'Ali-Pacha, plutôt que la demeure de Jean XXII." Everything was sacrificed by the builder to its means of defence; and it remains a perfect specimen of the military architecture of the period. Outside and inside one sees gigantic walls, spotted here and there by windows. Had a successful assailant surmounted the difficulties of the outer walls, the courtyard offered still further difficulties; and when a Pope was obliged to fly, after hiding in a corridor, or in an apartment in the thicknesses of the walls, he could take refuge in a postern on the edge of the river, to which access was given by a subterranean passage. Such a siege occurred under Marshal Boucicaut, followed by the flight of Benedict XIII, but the troops were unsuccessful.

From a balcony above the entrance, the Popes gave the benediction; within the walls they lived in luxurious profligacy.

The Italian patriot Rienzi was imprisoned in the castle, and fed from the Papal table; but he probably found greater happiness in the study of his Bible and the works of Titus Livius, said to be his favorite books. However, he gained his freedom through the intervention of Petrarch with the Pope, and to the poet he probably owed his life.

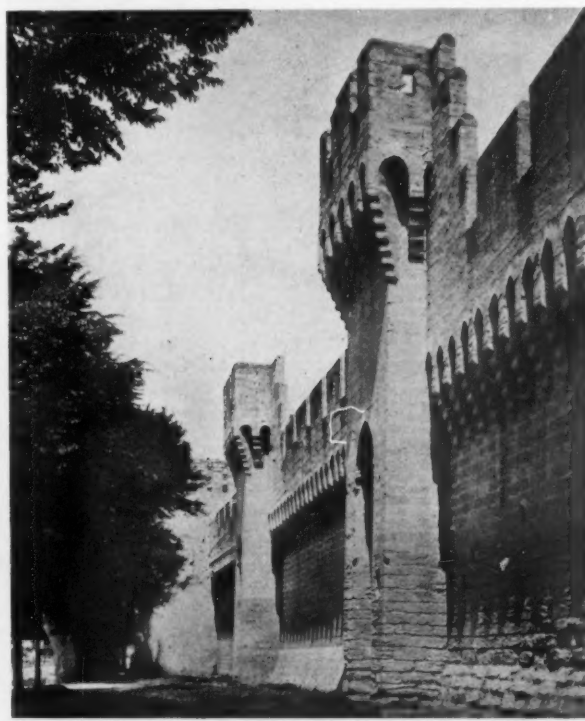
It would take the space of this entire journal to record even briefly the history and the crimes of the Papal Palace. The visitor is shown the tower of La Glacière, where a massacre took place during the Reign of Terror; but the Salle du Consistoire owes its sub-name of "Brûlée" to an equally hideous atrocity committed in 1441 by the Papal Legate Pierre de Ludi, when he caused the hall to be blown up with all the assembled nobles of Avignon, because his libertine nephew had been murdered by the outraged inhabitants.

A pleasanter subject to contemplate is the beauty of Simone Memmi's frescos in this hall and in the two chapels. They are but fragments at present; but the careful restoration which is being carried on by removing whitewash brings more and more to light.

The palace has been much destroyed since it has been occupied as a barrack; but as the new building for the troops is now finished, we may, before long, see the old feudal castle restored to its pristine beauty, and become the home of the municipal museum.

Part of the Papal Palace has already been restored and made over to the Archbishop as his episcopal residence. How complete the destruction and desecration have been may be judged by the fact that the largest hall has been cut into two stories. The cathedral was built upon the rock at the end of the spur occupied by the castle and its grounds overhanging the Rhone, where the traveller may walk about and enjoy the beauty of the views as well as the charms of an Italian garden.

Notre Dame des Doms was begun in the eleventh century. The



The Walls, Avignon.

imaginable disease, and during the Empire they were considered a help to Revolutionists; but is there no medium?

The principal building in the city, the one which all the world goes to Avignon to see, is the mediæval stronghold, the majestic Palace of the Popes. Situated on the edge of the only hill for some distance round, it is an impregnable castle; as Alexandre Dumas

portico is Classic in design. The pediment, painted in 1339 by Simone Memmi, is supported by Romano-Corinthian columns; but the beauty of the massive tower has been marred by a huge statue, gilded of course, of the Blessed Virgin, out of all proportion to the building. These vulgar and tasteless gilded statues are to be seen all over the South of France tacked on to the old churches. The octagonal lantern is of curious construction, having a circular dome ornamented at the angles by fluted Corinthian columns, upon a square base.

¹ Continued from No. 1426, page 28.

This is fully described and illustrated in Viollet-le-Duc's "*Dictionnaire d'Architecture*."

The chapel containing the exquisite fourteenth-century monument of Pope John XXII was formerly a passage leading into the Papal Palace. The tomb has a fine canopy, richly carved; but the effect is lost by the smallness of the chapel, reminding one of the position of Orcagna's monument in the church of Or San Michele at Florence. At the Revolution the tomb was taken to pieces, and thus saved from destruction; and for further safety it was re-erected in the ante-sacristy instead of in its former position. An ancient altar-slab supported by five pillars may be seen in a side-chapel of the nave.

The papal throne, of white marble, is of the twelfth century and shows extraordinary vigor in the carving of the emblems of SS. Mark and Luke which support the arms. It is of rare beauty for so early a work.

Avignon contains a few interesting churches and still more interesting towers. In wandering about, one sees a fine campanile, but one searches in vain for its church. One of these is in a public garden, and, as far as I could see, a large portion of the church remains; part of the nave forms the entrance to a private house, and the southern aisle is the home of plants—in fact, it is a potting-house! However, the city was probably much over-churched, and it is satisfactory that the towers have been allowed to remain as ornaments surmounting the dead level of houses.

The architecture of St. Pierre is somewhat florid, but the pulpit is fine. The west front was built in 1512 and is a good specimen of the period.

The Musée Calvet contains a number of Roman antiquities, found in the foundations of ancient Avenio and the neighborhood, notably some fine bas-reliefs from Vaison, and a number of exquisitely carved funeral urns, perhaps the finest examples remaining. But the pleasure of my visit was marred by a bevy of troops who were acting as guardians. They objected to my taking notes, and their ignorance and incapacity for the work they were doing was proved by the spokesman telling me it was *défendu* to take photographs! I showed them my note-book with the merest scribbles as memoranda of the works I was describing, but the intelligent artillery-man persisted in calling these photographs! I could get permission "to photograph," if I went to the Curator—"possibly." Naturally I went, and M. le Directeur was most courteous. "Of course, I could take notes as much as I liked with pen or pencil; I told them so"—and he shrugged his shoulders significantly, as a mute "*Imbecile*." Back I went to the museum, but, the military gentlemen having nothing else to do, and no other visitors to worry, they "shadowed" me for another hour, when I found such conduct so incompatible with



A Church Tower, Avignon.

the peace of mind necessary for the study of the contents of a museum that I beat an ignominious retreat. Surely this species of guardian is unfitted for a collection of art-treasures; and when a visitor, having shown the Curator his credentials, his cards of the Salon, etc., or his passport, and obtains the former's permission to make enough sketches of some funeral urns, a linesman ought to be sufficiently disciplined to obey his chief (while he is in office in the museum) and leave visitors in peace.

The old bridge of St. Bénézet is now reduced to four arches, but it formerly crossed the island and reached the opposite shore of Villeneuve-les-Avignon, where the entrance-tower still remains.

The legend of the building is quaint. There lived in the twelfth century a young shepherd called Petit Benoit. He was born in the Vivarais, in 1165, and became inspired with a desire to supply Avignon with a bridge, for here the Rhone is very rapid and is divided by an island into two arms, one much longer than the other. Moreover, near the rocks upon which the Dom stands, the river is very



The Town-hall, Avignon.

deep, and, hence, constant inundations occur, and with a river rising five metres, the construction of a bridge is naturally a difficult matter.

In the twelfth century the fraternity of the Hospitaliers Pontifes was established for bridge-building and for assisting travellers in passing rivers. The order was first established at Maupas, in the diocese of Cavaillon, in 1164, according to l'Abbé Grégoire. St. Bénézet (Petit Benoit) became the head of the institution, and after building the bridge of Maupas, he turned his attention to the works of Avignon.

The bridge was begun in 1178 and finished in 1188. It was 900 metres long and 4 metres 90 centimetres wide, including the parapets. To resist the strong current of the river and the thawing of the ice in winter, the piers measure 30 metres from one side to the other, and terminate above and below stream in a sharp point.

Some of the arches were rebuilt by Pope Clement VI. In 1395, during the siege of the palace, it was cut by the Spaniards, but was repaired in 1418; but from some cause the newly built arch fell again, carrying three others with it, and later, in 1633, two more fell. Again, during the winter of 1670, two more arches were destroyed. It is interesting to see on a map of the city attached to a book by Simon Tassin that two arches were destroyed in 1652.¹ The arches are from 20 to 25 metres wide. The town at the Villeneuve side of the river still remains, but it is not known what the termination was on the Avignon side. It is noticeable that the arches are composed of separate sections, or ribs, placed side by side in the same manner as those of the Roman Pont du Gard; and, also, that the piers, like most of those built by mediæval architects, are boat-shaped.

In Viollet-le-Duc's "*Dictionnaire d'Architecture*," Vol. VII, p. 222, a long account of the bridge will be found, and a plan, or, rather, a bird's-eye view of it. Every one knows the rhyme, "*Sur le pont d'Avignon, on y chante et on y danse*"; but no one can tell us why and wherefore. Was this the bridge, and were the broken arches convenient to dance and sing upon? The ramparts still almost surround the town, but they have been much, possibly overmuch, restored. They were erected in 1348-64. Vandal authorities have tried to destroy them, and one, the mayor of two years ago, absolutely began to demolish a portion; but the feeling was too strong

¹ "*Plans et profils des principales villes de France*."

for him, and the scheme was abandoned. To pretend that they render the city unsanitary is nonsense, as there is a clear space of several feet between them and the houses. So few walled towns remain in Europe, it would be foolish to destroy these or any others in order to make way for modern improvements, unless the health of the inhabitants absolutely demands destruction. S. BEALE.

TELE-PHOTOGRAPHY, A MEANS OF SECURING PHOTOGRAPHS OF ARCHITECTURAL DETAILS.

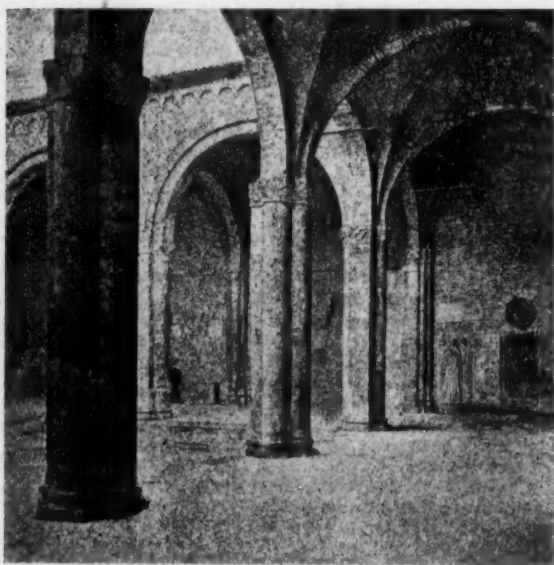


Fig. 1. Atrium of S. Ambrose, Milan.

THE difficulty, or rather the impossibility, of obtaining photographs of the interesting architectural details about or inside large public buildings must be familiar to every architect. General views of small interest can almost always be bought in the

enterprise, or the public demand is not large enough to warrant the outlay involved in the making of the necessary negatives. Prior to the introduction of tele-photography (about the year 1892) it was often only possible to take large-scale photographs of detail by the



Fig. 3.

use of staging, and the expense of such a method is prohibitive to a travelling photographer. The tele-photographic lens makes it possible to record a piece of detail on a building from a greater distance; its height above ground-level is a matter of less consequence to the tele-photographer, so long as there is a fair amount of space in front of the subject.

An illustration will make this point clear to the reader. Figure 1 is a view in the atrium of the church of St. Ambrose, in Milan, taken with a 6-inch lens. The lens was fifteen yards away from the second pillar — not the nearest one, but that next to it, and about the middle of the photograph. These pillars are 15 or 16 feet high, and a staging

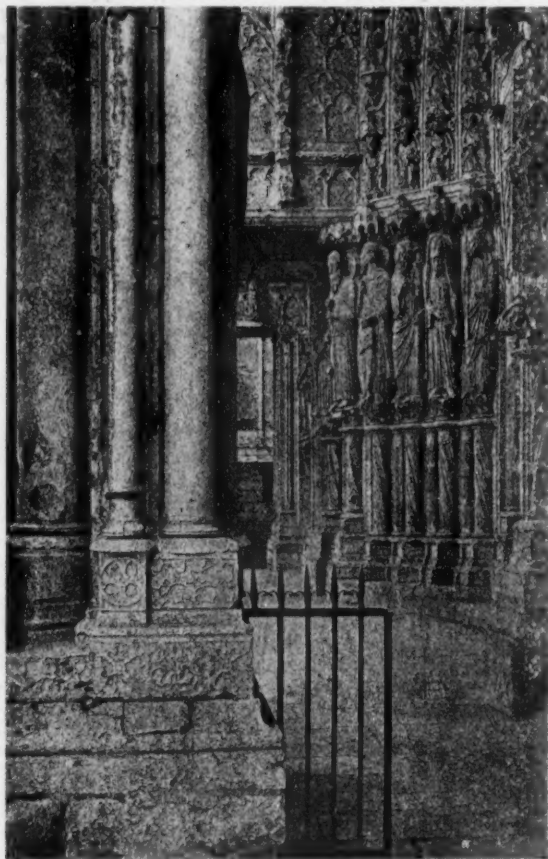


Fig. 2.



Fig. 4.

town, but, go where you will, photographs of important structural details cannot be found. The local photographer has insufficient

some 10 feet from the pavement would be required if the capitals were to be taken with an ordinary lens. The camera should be nearly on

a level with the subject if a near point-of-view is chosen, and a near standpoint is essential if the capital is to be photographed with an ordinary lens, unless a minute scale will suffice. The capital on the nearest column gives an idea of the alteration in perspective brought about by a nearer point-of-view. Figure 3 is a tele-photograph taken from the same spot as the previous example; the same 6-inch lens was used, but a tele-photographic attachment was added to it, and the scale of picture multiplied by twelve. As Figures 1 and 3 have been equally reduced in making the half-tone blocks, the exact gain in scale due to the use of a tele-photographic lens is shown. In this atrium there are eighteen free pillars, with capitals carved on the four sides, similar to those which are reproduced; the subjects are varied, no two being exactly alike. The capitals to the pilasters against the walls are also worthy of note; there are over twenty of these, including the capitals to the doorways on the west front. It will be seen what a large field of usefulness tele-photography opens out in the study of design and decoration to the architect and sculptor.

For architectural tele-photography an expensive lens is not required; the negative attachment can be fitted to any good ordinary lens at a cost of from £3 to £5. A tele-photographic lens has another great advantage over ordinary lenses, besides the increased scale of the photographs, viz, that the focal length can be altered at will. In buying a tele-photographic attachment, you have secured a number of lenses in one.

The camera and tripod should be strong, even at the cost of some increased weight. The size is a matter for individual choice. I use a $7\frac{1}{2}'' \times 5''$ camera (of which Figure 5 is a scale-drawing) but would recommend a whole-plate camera in preference, as $7\frac{1}{2}'' \times 5''$

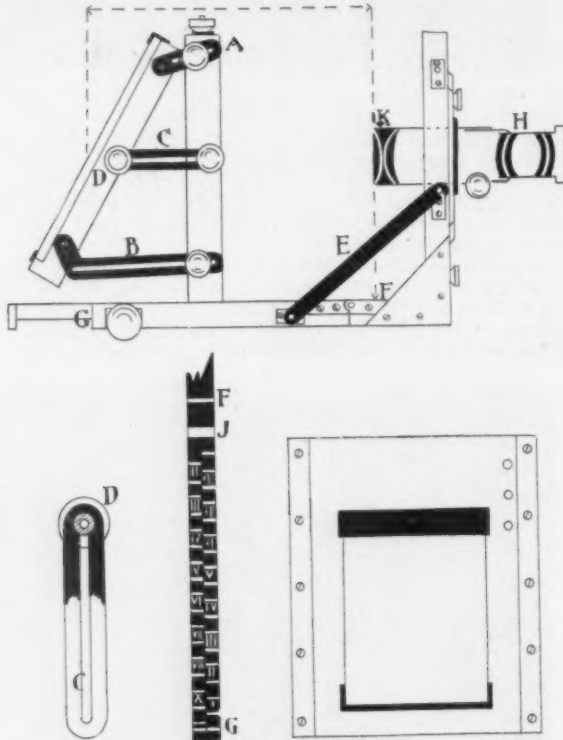


Fig. 5.

plates are not quite so easy to get, and the shape is rather narrow for architectural subjects. The half-plate camera has less extension, and is on that account less suitable for tele-photography; upon the length to which the camera will rack out depends the scale of the tele-photograph. The most suitable type of camera has square parallel bellows and fixed front; triple extension is very undesirable. The camera outlined in Figure 5 (I omit the bellows for the sake of clearness) is of the usual design, the chief difference being in the method of swinging the back. The common pattern only allows a slight amount of swing to be obtained, whilst for tele-photography a range of thirty degrees should be practicable. The brass stays A and B explain themselves; B is crooked in order that it may not project when the camera is closed. The front strut E must be bent outwards slightly in the middle to clear the screw D under the same condition. The screw D and the stay C are of special form, better shown in the detail. The slot in C ends in a round hole, and there is a shoulder on the screw D, shaded in the plan, which fits this hole; the shoulder is a trifle deeper than the thickness of the stay, so that the screw cannot bind the stay. D thus forms a pivot upon which the back swings until it is clamped in position by the binding screws on the stays A and B. Turning again to the camera, H and K represent a tele-photographic lens. H is an ordinary rectilinear lens, and K the negative lens of the tele-photographic attachment. Focussing is performed by moving H by means of the rack and pinion farther from or nearer to K.

The point F on the base marks the distance the negative lens pro-

jects inside the body of the camera. The distance between the negative lens and the screen, indicated at the top of the plan by a dotted line and arrow-heads, should always be noted before making an exposure. A pocket measure should be carried for this purpose if suitable scales do not form part of the camera. In a camera of this pattern, the back is clamped to two stout brass strips running along the base; these can be engraved with scales; $\frac{1}{4}$ -inch gradations will be sufficiently small, or, if the metric-system is preferred, five-tenths of a centimetre. The detail shows a convenient form of the scale; it is marked in half-inches. F and G refer to the points so marked on this scale. J is the break in the continuity of the strip, which comes at the hinge of the camera. The scale on the right starts from the end of the fixed base-board at G; using G as an index, the length to which the camera has been racked is read off. The other scale to the left shows the distance that the back has been moved along the guides from a given starting-point, the bottom of the swing-back, if it is closed against the upright, marks the extension, and the addition of the two measurements gives the total extension. If the scales are intended solely for use with one tele-photographic lens, zero of the left-hand scale should be placed at the point F, but if they are to be used with other tele-photographic lenses which do not project inside the camera to the same extent, or with ordinary lenses, the outside face of the flange on the camera front is probably the best starting-point.

A camera that is to be used for architectural photography with ordinary lenses should have a wide range in the rising front. A useful plan for increasing the extent of this movement is shown in detail. The drawing represents the front of my camera with the rising and cross front removed. The black slip is rabbeted into the camera and is movable. When rise is required it is placed as shown; if it is desirable to lower the front as much as possible, the slip is taken out and placed at the top, where it fits into the space indicated by the heavy line. The slot in the front itself should be long and protected with a brass plate, and several screw-holes for the binding screw should be made in the body of the camera; one is insufficient.

Whether or not the architectural photographer takes up tele-photography, his outfit is incomplete without a tilting-table. It is not possible to tilt the camera to any great extent by means of the tripod and at the same time maintain stable equilibrium, while photographs of floor or roof detail are impossible without a tilting-table, or some bulkier substitute. For architectural tele-photography a tilting-table is absolutely essential, because the lens should be kept in the centre of the camera front. Raising the lens by means of the rising front to any appreciable extent will result in the plate being imperfectly covered, especially when the distance between the negative lens and the plate is short, and, further than this, it is very ineffective, as the alteration in the field of view is slight.

Mention has been previously made of the fact that the scale of the tele-photograph depends, other things being equal, upon the extension of the camera; as the scale increases the requisite exposure increases. The exposure should be directly proportional to the square of the magnification. By magnification is meant the linear increase in the size of the image in the tele-photograph compared with a photograph taken with the ordinary lens alone; compare Figures 1 and 3. As Figure 3 is an example of twelve magnifications, the exposure should have been 144 times that necessary for the part of Figure 1 which it represents, using the same stop in the ordinary lens in each case.

Without some means of finding out the magnification, exposures would be largely a matter of guesswork. To find the magnification, divide the distance from the negative lens to the screen by the focal length of the negative lens and add one; the result is the magnification. For example, the focal length of the negative lens is 4 inches, the distance between it and the screen 12 inches; then the magnification is $3 + 1$, or four times, and the exposure must be sixteen times what you would give if the ordinary lens alone were used at the same aperture, say $f/16$.

Another way of increasing the magnification and scale is to use a negative lens of shorter focal length. The details, Figures 2 and 4, were photographed from the same spot. They are details from the beautiful north porch of Chartres Cathedral. Figure 2 was taken with an ordinary lens, Figure 4 with a tele-photo lens and a moderate camera-extension, 13 inches from negative lens to screen; for other details a shorter negative lens was used, and this distance increased to 16 $\frac{1}{2}$ inches. From this spot, and with the same camera and lenses, the scale of the tele-photographs could have been varied to any extent between the limits shown.

There is one fault which a beginner is almost certain to make in work of this kind; he does not see that his plate is properly covered; there is detail in the centre of the negative, but its corners are transparent and print out black. The natural tendency at first is to keep the camera too close to the object which is to be tele-photographed; then the camera-extension must be short or the detail will be too large for the plate. With a shortened camera-extension, the covering-power of a tele-photograph lens is diminished. To remedy the defect, the camera is moved away from the object and the extension increased, to make up for the consequent loss in size; with the increased extension of the camera, the plate will be found to be properly covered. One of my earliest attempts at tele-photography had three obvious defects. Failure to cover the plate, because the lens was probably raised above the centre of the plate, hence the upper corners were more devoid of detail than the lower ones. The lens

was not focussed sharply; this was owing to the fact that the capital was on the dark side of the arch, but the difficulty might have been overcome by placing a candle on or close to the capital and focussing either on the flame itself, or by the light cast upon the capital. A piece of bold type placed on the object is often very useful in a case of this sort. The third defect was that the perpendicular lines of the columns diverged, which is evidence that the camera was tilted, but the back was not swung, and consequently was not perpendicular at the time of exposure.

The following advice may be useful to the novice: All photographs of detail should be taken in diffused light if possible. If the sun is shining, sometimes an obliging cloud will obscure it for a time sufficiently long to enable an exposure to be made in diffused light. If a series of photographs is to be made of a large building or cathedral, begin work in the morning on the south side and go to the west as soon as the sun interferes; the north side may be safely left to the afternoon, when any exposures should also be made upon the east end. The final focussing of the tele-photograph should be made with the same stop in the front lens as that which is used for making the exposure. Do not take tele-photographs of detail against the sky if it can be avoided.

Somewhat different conditions come into force when more distant views of buildings are the objects to be portrayed. In many cases sunlight will be helpful, especially if the sun is not too high and overpowering. — Ernest Marriage, in *The Builder*.

BOOKS AND PAPERS

MESSRS. LONGMANS have done the world a service in collecting in a pleasant little volume, light and easy to hold, and beautifully printed from the Kilmecott Press type, eleven of the essays of William Morris, some of them contributions to reviews, and some papers read before various societies. We must confess that we do not always take up Morris's writings without apprehension. Lofty and moving as his sentiments usually are, there are occasions when a critical reader finds in his expression of them a certain extravagance which goes far to destroy their effect; but this particular collection of papers shows him, to our mind, at his very best, utilizing his great knowledge of art for the benefit of people already somewhat familiar with the subject, as in the lectures on the History of Pattern-Designing, and on Textile Fabrics, or endeavoring to inspire with his own convictions audiences quick to detect and resent any affectation, as in the lecture on Art, Wealth and Riches, or the noble essay on the Lesser Arts of Life, delivered in support of the Society for the Protection of Ancient Buildings, and one of the most inspiring papers on an artistic subject ever written.

Strictly, the whole of the book is devoted to architecture, since architecture is essentially a studied combination of all the arts; but the profession in this country, which is more familiar with Morris's designs than with his writings, will be glad to read, or, perhaps, to read again in convenient form, whether it agrees with it or not, the essay on the "Revival of Architecture," and those on the "Influence of Building Materials on Architecture," and on the "External Coverings of Roofs." In all of these there are many suggestions of practical value. Fortunately, we do not have to count upon seeing our buildings turn black in the course of a few years, like those of London and Liverpool, but if that should ever become the habit of buildings here, we may remember, with advantage, the advice to keep the exterior as simple as possible.

ILLUSTRATIONS

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

GENERAL VIEW: AVIGNON, FRANCE.

SEE article "Roman and Romanesque France" elsewhere in this issue.

CARVED DOORS: CHURCH OF S. PIERRE, AVIGNON, FRANCE.

TOMB OF POPE JOHN IN THE CATHEDRAL, AVIGNON, FRANCE; — PULPIT IN THE CHURCH OF S. PIERRE, AVIGNON, FRANCE.

REAR VIEW: PALACE OF THE POPES, AVIGNON, FRANCE.

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AN INTERIOR ANGLE OF THE WALLS, AVIGNON, FRANCE; — COURT-YARD OF THE POPES' PALACE, AVIGNON, FRANCE.

MONUMENT COMMEMORATIVE OF THE UNION OF THE COMTÉ VENAISIN WITH FRANCE AT AVIGNON.

HAVING this photograph at hand, we have thought it proper to add this monument to the illustrations that are appropriate to the article on "Roman and Romanesque France" elsewhere in this issue, and give it a companion in the very similar monument to the Republic in Paris.

MONUMENT TO THE REPUBLIC, PARIS, FRANCE. M. CHARLES MORICE, ARCHITECT; M. L. MORICE, SCULPTOR.

ENTRANCE TO THE PALACE OF THE POPES, AVIGNON, FRANCE.



[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 QUESTION OF COMMISSION.

NEW YORK, N. Y., April 27, 1903.

TO THE EDITORS OF THE AMERICAN ARCHITECT: —

Dear Sirs, — Will you kindly express an opinion on the matter of commission due an architect under the following conditions: —

A client of long standing, upon acquiring a piece of property, determined upon alterations being made. Plans, specifications and details were prepared, and estimates obtained, the lowest bid amounting to \$12,000.

It was then decided to change plans to the extent that new plans and specifications and details were necessary, the lowest bid on changed plans being \$15,000.

The ten per cent on alteration work being agreed upon previous to starting work, between client and architect, under the circumstances are the architects entitled to the *pro rata* commission, that is, seven per cent on the two amounts?

Your opinion would be appreciated.

Very truly yours, THOMAS PINCH.

[THE answer to this question depends upon several considerations. The usual and fair rate of compensation in cases where the architect has done all his work, except superintendence, and his employer abandons the scheme, is seven-tenths of the full fee. Was this the case in regard to the twelve-thousand-dollar plan? It often happens that estimates, sufficiently accurate for their purpose, are obtained on drawings and specifications to which some considerable addition would have to be made before execution. In this case, the owner has a right to expect that his architect will make proper allowance for the work which he does not do. Another material question is: Was the abandonment of one scheme, and the substitution of another, due in any degree to the architect's misunderstanding of his employer's instructions, or to his having, whether intentionally or not, misled his employer in regard to the cost of execution of the first plan, or in any other particular connected with it, so as to contribute toward its abandonment? If so, the employer has a right to expect his architect to make due allowance for such mistakes. Of course, we have no means of knowing the circumstances of this particular case, but if the architect will put himself frankly in his employer's place, and study the question from that point, he will not have much difficulty in settling upon the proper charge, and he will be prepared to discuss the matter amicably with his client, and, in all probability, to come to a satisfactory agreement. — EDS. AMERICAN ARCHITECT.]

"WIRE-GLASS WINDOWS."

NEW YORK, N. Y., May 4, 1903.

TO THE EDITORS OF THE AMERICAN ARCHITECT: —

Dear Sirs, — The particular occasion of this is a page devoted to "Wire-glass Windows" in your issue of September 27, 1902, which confronts me to-day for the first time. The page in question reproduces the paper read by the Chief Engineer of the New York Fire Department at the Thirtieth Annual Convention of the International Association of Fire Engineers, held in this city last September, and also contains editorial comment.

The certificate of the efficiency of wire-glass as a fire-retardant accredited to Chief Croker, whose experiences, observations and conclusions are necessarily and essentially those of an expert, is warranted by actual demonstrations and for the publicity which you have given it I thank you.

Your editorial comment to the effect that "it has undesirable, even dangerous, qualities," I take exception to. The installation cited, the South Terminal Station, Boston, shows all of the defects which you have specified, but these defects are not chargeable to wire-glass. The fact of the matter is that the material used was intended as a substitute for wire-glass.

A rival company attempted to "get next" by inserting an asbestos-covered wire in glass, and produced what became known as "Besto Glass." The asbestos covering resulted in an increment of the bulk of the fabric, prevented cohesion between the wire netting and the glass, thereby introducing a system of veins or arteries which resulted in structural weakness. When cracked, moisture and gases

penetrated to the wire and corrosion and frost followed, causing disintegration. Combined with this cardinal physical defect, the glass in which the asbestos-covered wire was inserted demonstrated chemie defect when submitted to solar influences and changed color.

When these defects became known, underwriters and architects withheld their approval of "Besto Glass" as a substitute for wire-glass and it became unmerchantable. The stock in hand was sold for less than it cost to manufacture it. Of this a considerable quantity was installed in the South Terminal Station and that which has not been replaced by "Mississippi Wire-glass" is there to-day—a menace to those who have occasion to pass beneath it. The manufacture of "Besto Glass" has been discontinued.

Mr. Sanborn, General Manager of the Boston Terminals, has stated that the "Mississippi Wire-glass" used in the Back Bay Station, Boston, is of uniform color and excellence, and he has no complaint to make of breakage. In consequence, he specifies this make of glass to replace the broken glass in the South Terminal Station, and he finds it in all respects satisfactory. This recognition of the efficiency of wire-glass is general among the masters of great buildings, and is based upon consideration of the factors usually held to be most weighty in determining values of devices and materials.

Your criticism of the glass under discussion is well within reason, but your reference to it as wire-glass, instead of "Besto,"—the name given it by its projectors,—is misleading and calculated to create the impression that wire-glass is not a perfectly safe material to use. There is nothing fictitious in the worth of "Mississippi Wire-glass" for the purposes for which it is designed and it seems not unreasonable to ask your intelligent consideration of this Company's position in the premises. Yours truly, E. S. HAND.

[In the remarks to which Mr. Hand refers we made no reference to any particular brand of wire-glass and very possibly might not have found it worth while to speak of the matter at all but for the fact that all the work done at the South Terminal Station was carried out with extraordinary care and exceptional skill—thanks, largely, to Mr. G. B. Francis, the resident engineer—and it was seemingly inferable that the wire-glass used was the best in the market at the time. We have no reason for modifying our statements and our correspondent only confirms them, but he seems to give a plausible explanation of existing fact. The point we really wished to call attention to, and on rereading our comments we see that we did not give it sufficient emphasis, is that of all possible positions the one least favorable to wired window-glass is where the sheets are set vertically and exposed to the rising sun. The radiant heat-rays here strike the glass and embedded wire when they are coldest, pass through the translucent glass with little immediate effect on it, but are intercepted by the wire, which they excite to an immediate expansion which seems, on the evidence, to be enough to crack and splinter the enclosing glass.—EDS. AMERICAN ARCHITECT.]

NOTES AND CHIPPINGS

PLUMBING-LAW.—A decision of interest to plumbers, as bearing on their rights where one of two partners is not registered and has no certificate of competency from the Examining Board of Plumbers, was rendered recently by the Appellate Division. The Court held that the language of Section 1 of Chapter 803, Laws of 1896, which requires that each and every member of a co-partnership engaged in the business of master-plumbers in the city of New York shall possess a certificate of competency and be registered, is absolute and mandatory; that compliance with the law is a condition precedent to the right to recover for work done, and that, therefore, a recovery could not be had for plumbing-work performed by partners one of whom did not possess such certificate and was not registered, although it appeared that he exclusively attended to keeping the books of the firm and attended to its financial affairs and that the other partner, who exclusively superintended and attended to the plumbing-work, had complied with the law. The case is entitled "Robert Schnaier against the Navarre Hotel and Importation Company," and was submitted to the Appellate Division on an agreed statement of facts. "The regulations prescribed by the Act and the rules adopted pursuant thereto," said Justice Hatch, for the Court, "are in the nature of a police regulation for the protection of the public health, and as such it is a constitutional enactment." Justice Ingraham dissented. He said there was nothing to show that the unregistered member of the firm had anything to do with the plumbing-work, and that, as the provision in question was highly penal, it should be strictly construed.—N. Y. Times.

BOSSI'S INLAID MANTELPIECES IN DUBLIN.—The wealth of beautiful work of the school of the Italian Renaissance produced in Dublin in domestic decoration in the eighteenth century is known to some survivors of an older generation who witnessed its waste and destruction in the evil days for art early in the Victorian era. It is appreciated in a present generation by the now rare survivals of beautiful work in ceilings and wall decoration, in stucco, in metalwork, and especially in mantelpieces of exquisite sculpture, in marble and woodwork, and in inlaid marbles in white Carrara. All this work came to Dublin with foreign emigrants, Huguenot fugitives after the revocation of the Edict of Nantes, and afterwards with Italian settlers brought to Ireland in the early eighteenth century by an Earl of Portarlington, and later by the famous Earl of Charlemont and other patrons of refined art among the nobility and gentry of Ireland before the union. On the fine mantels and fireplaces which were a fashion among these old patrons of art, a singularly refined school of artist-workmen lavished real genius. Forty years ago such mantels were still abounding in old

Dublin houses. Bad taste and neglect destroyed many, and the modern bric-à-brac hunter and dealer has pretty well swept old Dublin of what has survived. What examples remain are known, counted and treasured. When one comes into the market it changes hands at a large price, which is continually rising. Among the rarest now are the works of one Italian, Bossi, whom tradition of workmen preserves in memory as having advanced from mere inlay in pattern of one or two diversified marbles to inlaying in exquisite colors and in a cement body, known only to himself, floral and riband devices in entablatures and pilasters. It was, in fact, that same Italian traditional craft which an Indian mogul had brought from Italy to Agra, long before, for the decoration of the world-famed Taj Mahal mausoleum. Bossi's drawing of Italian Renaissance ornament was admirable, and his reticence and harmonious color-scheme fine art. Imitations of him by less refined followers were invariable failures and lapsed into vulgarity. It was, in fact, a somewhat irreverent saying of his fellows, preserved traditionally, that there was "but one Creator and one Bossi." The first of Bossi's imitators who has appeared successfully after 150 years is Mr. Henry Emery, of Sharp & Emery, 17 Great Brunswick Street, Dublin, once an art student at Liverpool, and for thirty years known among Dublin architects as an artistic architectural sculptor in wood and stone, and a thorough student of styles and periods of art, and versatile in adapting himself to them. He has also shown a refined sense of color-decoration, and there is little of the old Italian Renaissance work of Dublin which he has not made a life-study of. The writer of this, who has made it a study too, and to whom few of the examples that Dublin could show in forty years past have been unknown, ventures to think that the work he has seen by Emery in the manner of Bossi is, without mere copyism, no less refined, and to be valued as highly hereafter as the prized work of the ancient master. Whatever the Italian tradition or mystery, if secret there may have been, of the cement color-medium inlaid in the incised marble, it is mastered, and its perfection of durability and capability of fine polished surface is no less in Emery's than in that of the older work.—The Architect.

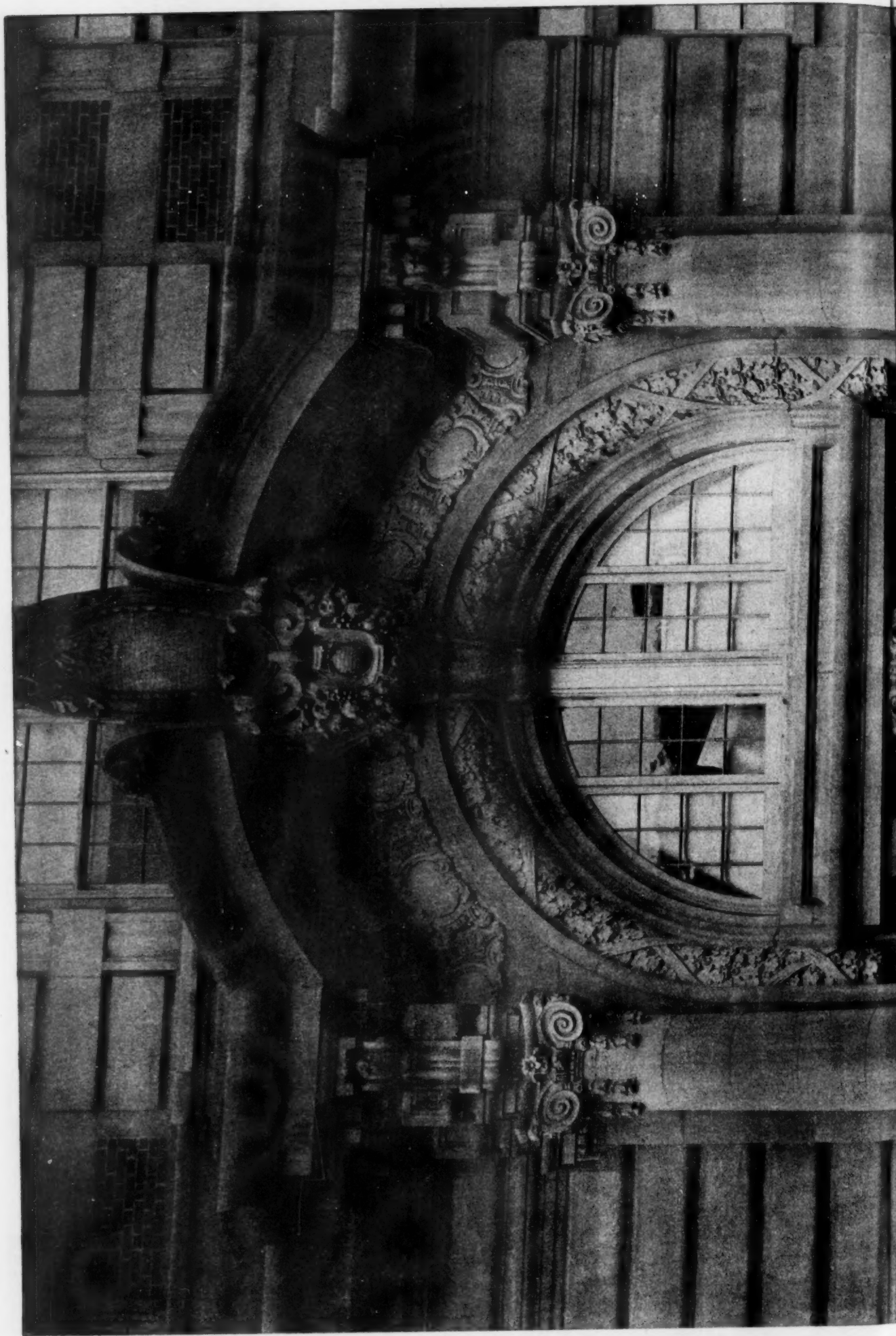
THE THOUSAND-FOOT TOWER FOR THE ST. LOUIS FAIR.—The Eiffel Tower will have to take second place when the spiral-elevator tower is put up at the St. Louis Exposition. The new tower is to be 1,000 feet high, 16 feet higher than the Eiffel Tower and several hundred feet higher than the Ferris wheel. The round trip on one of the elevator-cars, owing to the twisting course, will be two miles long. The strangest and most startling feature, however, is the way the cars are to run suspended from an overhead track, round and round the tower, to the top, and then back to the bottom in the same manner. The frame is to be an immense skeleton of the strongest and most durable steel. The space covered by the base will be an area about equal to that of the Madison Square Garden. The tower gradually gets smaller and smaller, until at the top the diameter is only 100 feet. On the outside of the lofty frame will run the track, revolving dizzily upward, having the appearance of the threads on a screw. At about the twelfth loop is the top platform, where the passengers may get out and see how they like to breathe the rarefied air. Then the track twists back again, and as the cars go down they pass others coming up, for the spiral continues endlessly, there never being any necessity for one train to wait for another to come down. For every twist of the rails the up-track and the down-track cross each other twice, one being farther out from the steel frame than the other. When a train of cars gets to the bottom it continues along the track around the power-house, which is only a few yards away, and then back to the tower and up the spiral again. When the idea of this unique elevator entered the head of the inventor he had not forgotten the great cyclone that passed through part of St. Louis a few years ago; he has allowed in his estimates for all possible contingencies of that kind. The frame is designed to resist a wind of fifty pounds per square foot, which represents a wind-speed something more than a hurricane.—N. Y. Times.

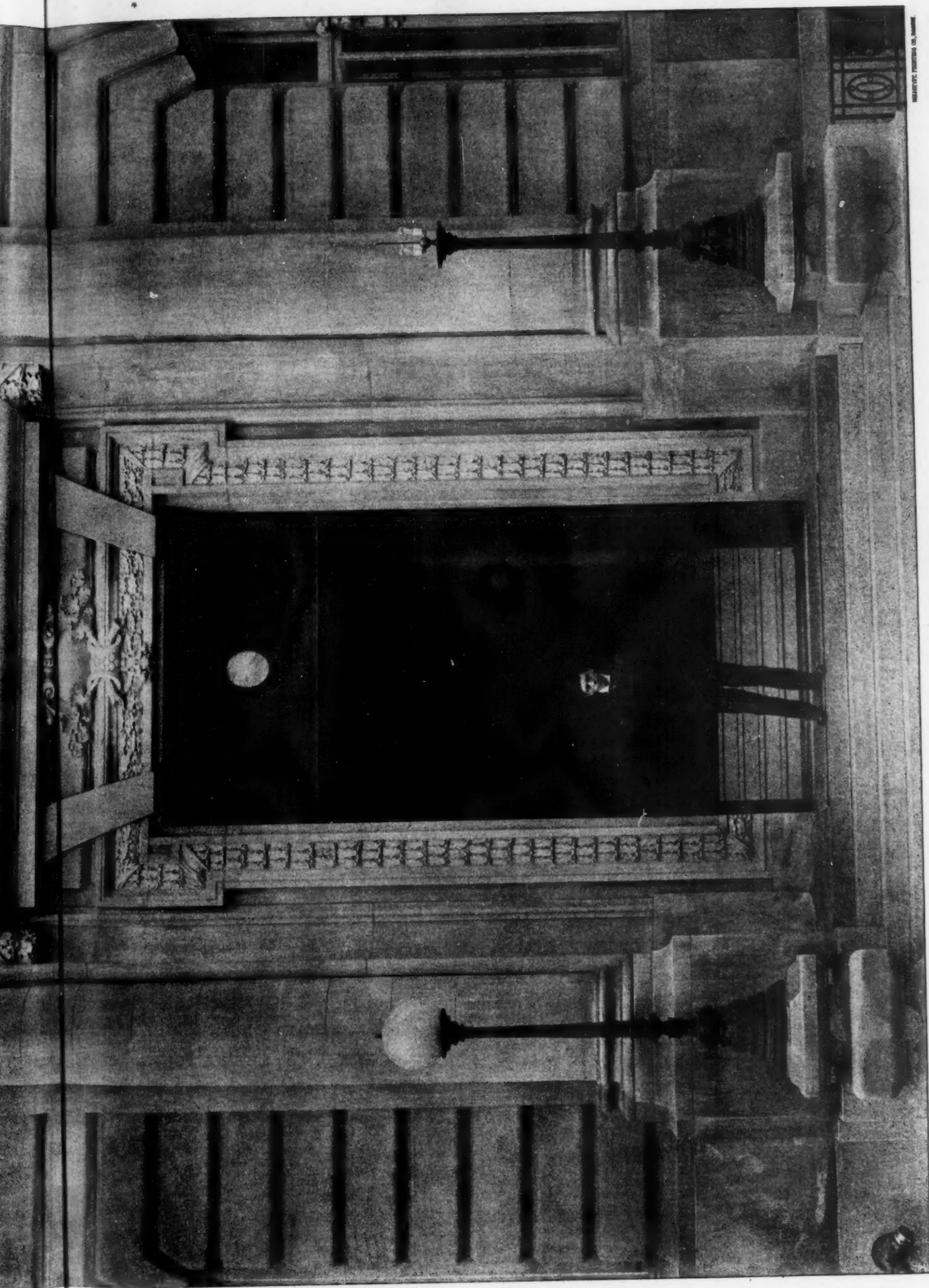
THE CAUSES OF THE MISSISSIPPI FLOODS.—The people who look upon the great yellow-brown river that flows past this city do not realize what a vast flood of water and what an enormous assemblage of forces are concerned in its movement. The area drained by this river and its tributaries equals one-third of the territory of the United States. This area may be divided into the following drainage-basins, with their respective areas:—

	Square Miles
The Missouri River.....	518,000
The Upper Mississippi.....	169,000
The Ohio River.....	214,000
The Arkansas and White.....	189,000
The St. Francis River.....	10,500
The Red River.....	97,000
The Yazoo River.....	13,850
The small tributaries.....	28,688

This immense area covers some twenty-eight States of the Union and extends from the thirty-fifth to the fiftieth parallel of latitude and from the seventy-ninth to the one hundred and fourteenth meridian of longitude. Although the greatest tributaries come in from the West, draining as they do the wide region extending to the Rocky Mountains, fortunately for the people along this mighty river the rainfall over that region is small; otherwise the Mississippi valley would be wholly untenable. If the Missouri, which is three thousand miles long, carried as much water in proportion as does the Ohio, which has a length of only twelve hundred miles, the main river would be five times as great as it is. The Ohio is the chief factor in producing a flood, but alone its waters are comparatively harmless when they get into the main river; it is when they are supplemented by freshets out of the Arkansas and the Red that they become dangerous. The Upper Mississippi is only to be feared when its frozen waters break under a thaw earlier than usual. The Missouri freshet waters seldom come before June.—New Orleans Picayune.







ENTRANCE TO HOTEL SEYMOUR, WEST 45TH STREET, NEW YORK, N. Y.
LUDLOW & VALENTINE, ARCHITECTS.

The American Architect
May 9, 1903.
No. 1428.

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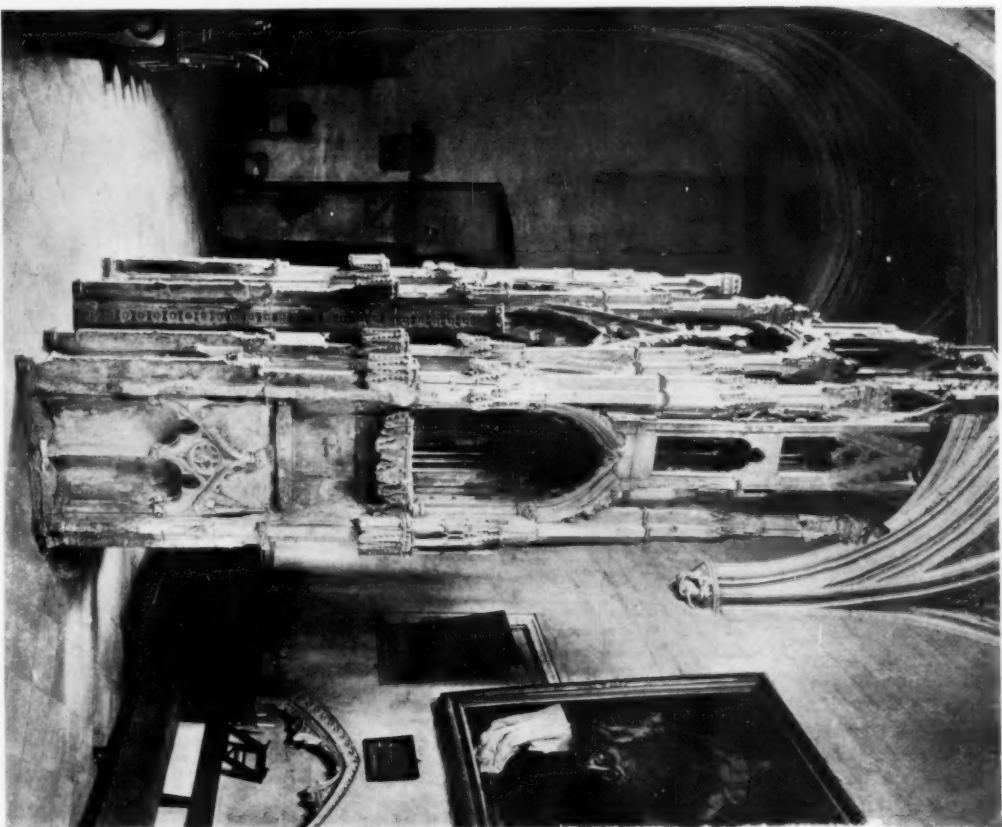
REAR VIEW: PALACE OF THE POPES, AVIGNON, FRANCE



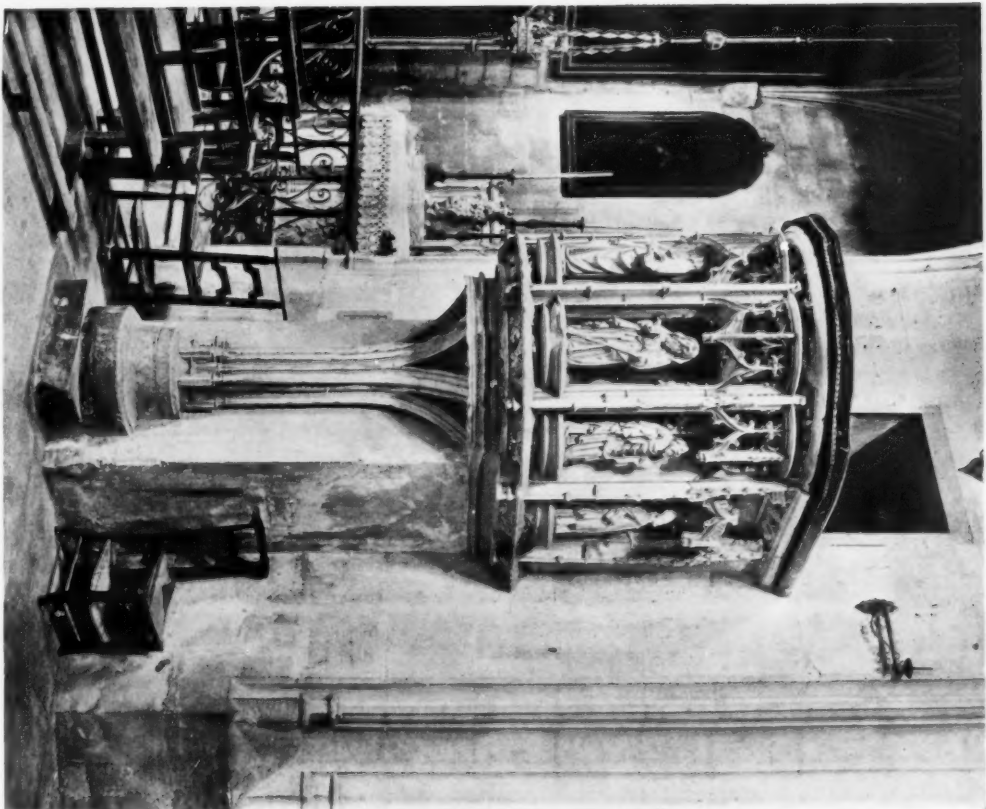
CARVED DOORS: CHURCH OF S. PIERRE, AVIGNON FRANCE.

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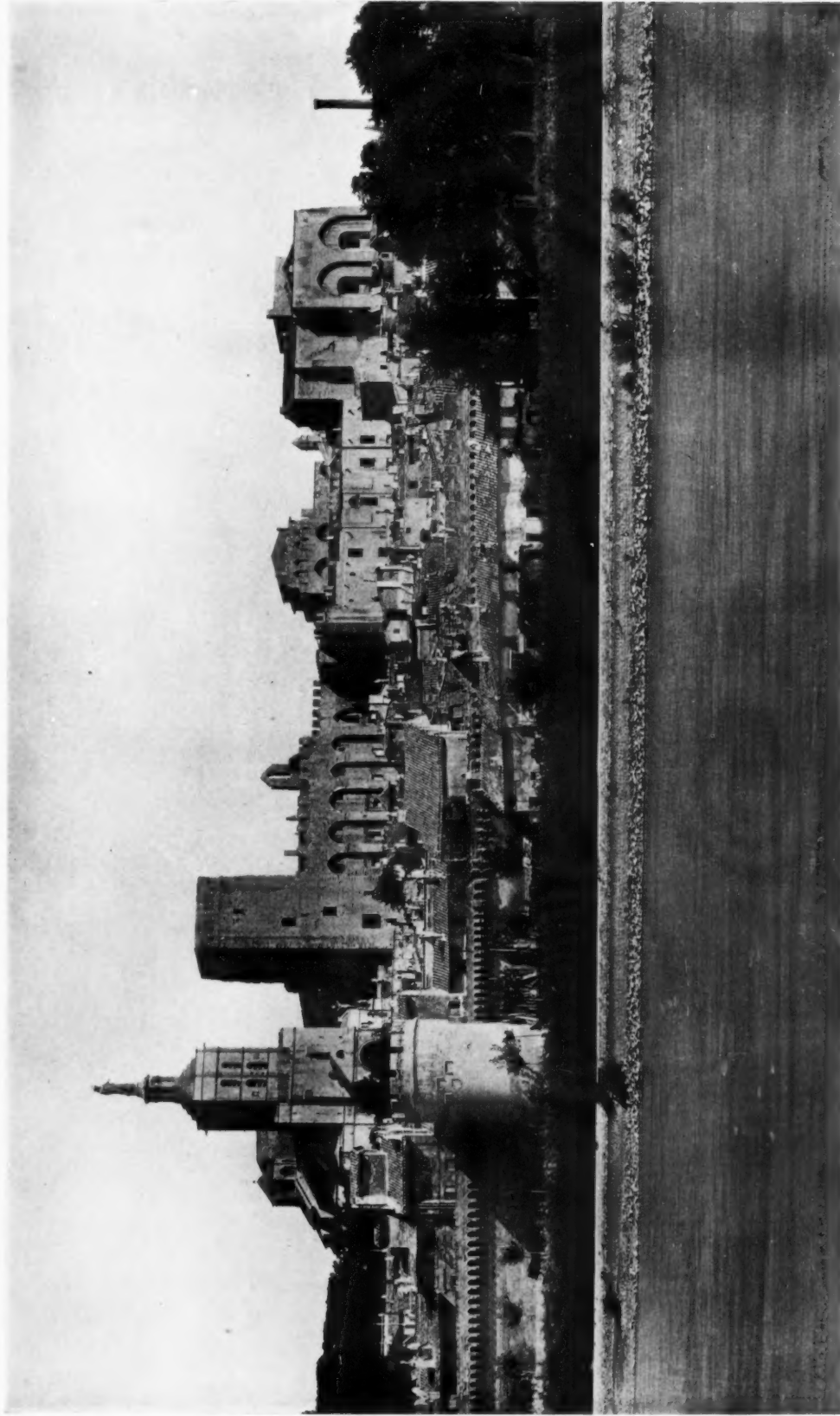
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TOMB OF POPE JOHN IN THE CATHEDRAL, AVIGNON, FRANCE



PULPIT IN THE CHURCH OF S. PIERRE, AVIGNON, FRANCE.



GENERAL VIEW : AVIGNON, FRANCE.

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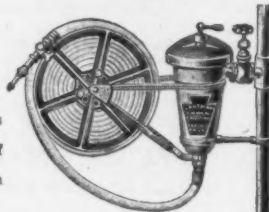
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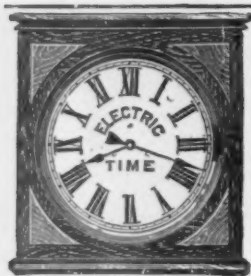
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ARTICLE I.

Obligation of Principal Contractor to Sub-Contractor.

A principal contractor is under obligation to treat upon an equal basis all estimates which he "receives" prior to putting in his own bid. Estimates must be considered as "received" when they come into a principal contractor's possession, either by his direct solicitation or by being accepted by him. The opening of a bid, knowing it to be such, constitutes receipt of the same.

A principal contractor is under no obligation to use a bid which he has not solicited, accepted, or received, but if he does not wish to use the estimate of a sub-bidder he should decline it, if proffered personally, or should return it unopened if sent to him by mail or otherwise. The retention of a bid should be construed as a receipt of the same.

A principal contractor, when making up his estimate, is not entitled to receive bids from sub-contractors if he is at the same time making himself their competitor by figuring their portion of the contemplated work. It is legitimate for a principal contractor to figure all portions of work, depending upon no one for what are usually known as sub-estimates, but it is not legitimate for him to receive bids from others for sub-work if he is himself figuring those portions independently.

ARTICLE II.

Award of Sub-Contracts.

The principal contractor having been awarded a general contract should immediately award the sub-contracts to the lowest bidder in each branch.

ARTICLE III.

Penalty for not Awarding Contract to Lowest Sub-Bidder.

A principal contractor failing to award a sub-contract to the lowest sub-bidder to whom he is under obligation as previously provided should be liable to pay damages to the said lowest bidder, in amount not less than ten per cent of the amount of the estimate.

Payment of such damages will not relieve the principal contractor from liability to discipline under provisions of Article X of the By-Laws of this Association.

ARTICLE V.

Payments to Sub-Contractors.

Unless the contracts made with sub-contractors otherwise provide, payments during the progress of the work should be made by the principal contractor to the sub-contractors upon the same basis of payment, in relation to amount of work performed, as is prescribed in the contract made by the principal contractor with the owner.

Final payment to a sub-contractor should be considered as due at the expiration of thirty days after the completion of his work and its approval by the architect or owner, unless otherwise provided by the sub-contract or agreement.

ARTICLE VII.

Obligation of Sub-Contractor to Principal Contractor.

Should a sub-contractor refuse to contract at the amount of the estimate he has given to a principal contractor who has used the said estimate in good faith, he then should be liable to the said principal contractor for damages in amount not less than the difference between the amount of the estimate which was submitted by him and the amount at which the principal contractor may be obliged to contract the work.

Payment of such damages will not relieve the sub-contractor from liability to discipline under provisions of Article X of the By-Laws of this Association.

ARTICLE X.

Bids to Architects or Owners.

When bids for separate departments of work on a building are solicited by the architect or the owner, they should be submitted with the understanding that they are direct estimates, for which direct contracts are to be made by the owner with the lowest bidder, and no other disposition of such bids should be permitted without consent of the bidder submitting the same.

Sub-bids should be given only to the principal contractors who are estimating the work in question, and should not be left with architects or owners for the inspection and information of principal contractors. Sub-contractors must understand that bids thus left with architects or owners are in great danger of losing their confidential character, and that if they so leave them they cannot claim protection or redress under the first article of this Code.

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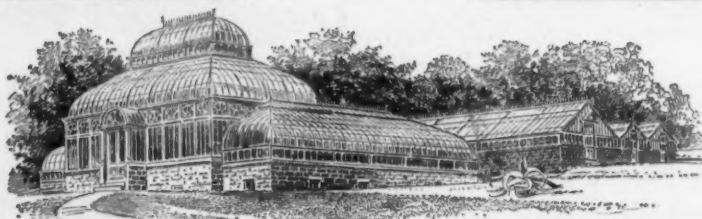
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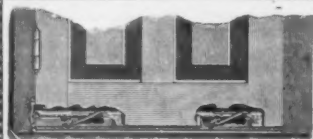
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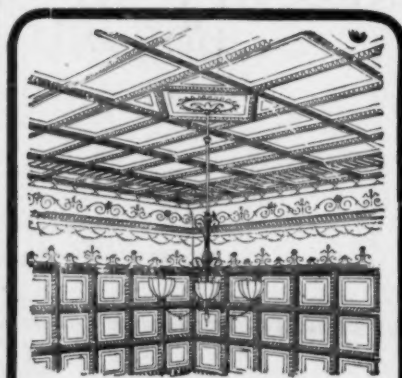
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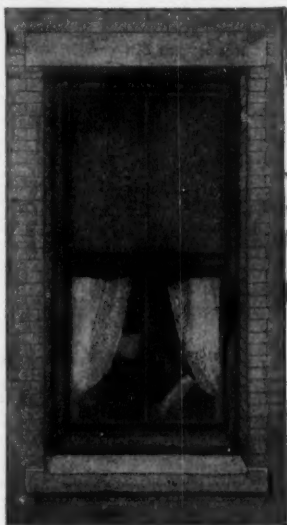
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New Advertisements.

HARRY ELDREDGE GOODHUE (Cambridge, Mass.), Memorial Windows. Page xv.
E. PERCY OLIVE (Boston, Mass.), Photography. Page xv.
THE SOCIETY OF BEAUX-ARTS ARCHITECTS (New York, N. Y.), School. Page i.

See last or next issue for the following advertisements:—

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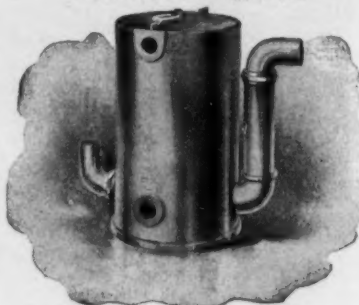
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BUILDING INTELLIGENCE.

(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.

Ashland, Wis.—The city will erect a high-school building this summer to cost \$75,000. Plans will be secured at once.

Atlanta, Ga.—A new engine-house is to be erected at corner Frazier and Richardson Sts.

Austin, Tex.—N. J. Clayton, of Galveston, is the architect for the rebuilding of the St. Edward's College, which was recently destroyed by fire, at a loss of \$150,000.

Baltimore, Md.—An appropriation of \$30,000 has been made for the erection of a school at Ramsay and Smallwood Sts., and \$40,000 for a school at Hollins St. and Fulton Ave.

Battle Creek, Mich.—A \$40,000 public library building will shortly be erected in this city.

Blomarek, N. D.—Plans are to be drawn by M. E. Beebe, of Fargo, for an addition to the State capitol building. Bids will be called shortly and it is expected to have work begun about July 1. Cost, \$100,000.

Boise City, Idaho.—Bishop Funsten has had plans prepared for an addition to St. Luke's Hospital, to cost \$50,000.

Boston, Mass.—At the social session of the annual meeting of the Women's Educational and Industrial

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Union, Mrs. Kehew, the president, emphasized the need of a new building. Every department is overcrowded, and it is rumored that the present buildings may soon be removed and a new and up-to-date structure be reared on the present site.

A twelve-story bachelor apartment-house is to be erected at once on the site of the Julia B. French estate, 48 Beacon St. The syndicate is known as the "48 Beacon Street Trust," the trustees being Richard C. Storey and Robert H. Gardiner. The plans for the new structure were drawn in the office of Arthur H. Vinal and J. Sumner Fowler. The building is to be of red brick, with terra-cotta trimmings and will be 104 feet deep and 22 feet wide. Work will be begun at once and it is expected that the building will be ready for occupancy in the late fall or early in 1904.

Branchtown, Pa.—Architect Philip H. Johnson is preparing plans for a fire-house on Broad St.

Brooklyn, N. Y.—Peter W. Rouse has purchased a site at Prospect Park West and Garfield Pl., for the erection of a \$100,000 residence.

The Ladies' Aid Society, of the St. Catherine's Hospital, which has a membership of 600, has started to raise \$150,000 for the establishment of a hospital for consumptives. \$14,000 has already been raised. The proposed building will be five stories high, will have a frontage of 135 feet in Manjer St., and will be 95 feet deep.

Cambridge, Mass.—The sum of \$12,000 has been given by Andrew Carnegie toward the new philosophical building, for which Harvard University hopes to lay the corner-stone on May 25, the centennial anniversary of Ralph Waldo Emerson's birth.

Cedar Rapids, Ia.—The Cedar Rapids Sash & Door Co. has been formed with \$25,000 capital and will install a plant.

Chicago, Ill.—Plans are stated to have been completed for the erection of the club-house for the Union League at Jackson Boulevard and Customhouse Court, approximate cost, \$100,000.

A long-cherished plan of President Harper of erecting permanent houses for the twelve fraternities at the University is being carefully considered

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

by a committee representing the different fraternities and the faculty. It has been proposed that the university erect twelve fireproof buildings on Lexington Ave., opposite the new student club-house, and that the fraternities have their own tables in the men's commons.

Deal, N. J.—The borough council will purchase a hose wagon, 1,000 feet of new hose, etc., and will erect a building for apparatus.

East St. Louis, Ill.—It is stated that plans have been adopted for the erection of the Summit Ave. Methodist Episcopal Church at 13th St. and Summit Ave. Cost, \$50,000.

Erie, Pa.—Plans for a \$35,000 four-story brick hotel

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

building for E. Bennett and others have been prepared by Architects J. W. Yard & Son, Downing Building.

Fenelton, Pa.—Plans are being prepared by Sidney F. Heckert, 341 Sixth Ave., Pittsburgh, for Father Hickey's Memorial Church, to be erected here at a cost of \$60,000.

Franklinston, La.—About \$100,000 will be spent by the Toure Infirmary for the erection of a new building.

Grove City, Pa.—Plans have been approved for a building for the Odd Fellows of Western Pennsylvania and Eastern Ohio; estimated cost, \$50,000.

Harrisburg, Pa.—It is reported that a bill has

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

passed both the Senate and the House appropriating \$6,500,000 for road and highway improvements in the State of Pennsylvania.

Helena, Mont.—The Montana club building which was burned with a loss of \$150,000 will be rebuilt.

Hoboken, N. J.—The 12th Ward Improvement Association urges appropriation for new fire-house.

Kenosha, Wis.—The Park Ave. Methodist Episcopal congregation will erect a new \$40,000 church.

Lawrence, Mass.—The contract for the construction of the new theatre to be built by Col. John P. Sweeney and Peter Sweeney has been awarded to Dick, Driscoll & O'Brien, of this city. The structure, together with an office-building, will cost \$100,000. The contract calls for the construction of two buildings, bordering on Hampshire and Methuen Sts. The office-building will be on Hampshire St. It will be five stories in height, and built of yellow brick, the theatre building being of red brick, and somewhat higher.

Lexington, Ky.—The Y. M. C. A. has succeeded in raising a fund of \$40,000 for the erection of its new building, which is now assured.

Los Angeles, Cal.—It is reported that the City Clerk has been directed to secure bids to supply the city with 20,000,000 bricks and about 40,000 barrels of cement, for the construction of the outfall sewer and the storm drains.

Lynn, Mass.—William B. Littlefield has had plans drawn by H. K. Wheeler for large brick block to be erected in Essex St., Central Ave. and Sutton St., now occupied by a three-story wooden structure known as The Octagon, which will be sold for removal. The proposed building will be V-shaped, three stories above the basement, and will contain 8 stores and 64 rooms for lodging-house rental.

The plans of John Chandler Fowler, of Boston, for a brick primary school building have been adopted by the committee on education, on condition that the specifications bring the cost within the appropriation of \$30,000. The building will be erected in Boston St., Ward 7. It will contain

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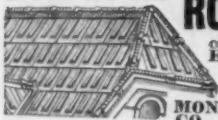
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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

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mined later.

Manhattan, Kan.—It is stated that the building
committee of the board of regents have decided to
have plans prepared for the erection of a new
chapel to cost about \$40,000.

Marion, Ind.—A site has been selected upon which
to build a home for aged women in this city. The
home will cost \$25,000.

Memphis, Tenn.—Plans have been prepared for
the erection of a \$50,000 stone structure for the con-
gregation of the Grace Episcopal Church.

Mercersburg, Pa.—Architect James M. Huston,
of Philadelphia, has made plans for a new dormi-
tory to be erected for the Mercersburg Academy.
It will be a three-story building, 70' x 40', of brick
and stone, and will cost \$35,000.

Milwaukee, Wis.—The University Club contem-
plates erecting a club-house to cost \$40,000. A. C.
Eachweiller and Howland Russel will be associate
architects.

Minneapolis, Minn.—Plans have been drawn by
Wm. Channing Whitney for an addition to the
Lafayette Club-house at Lake Minnetonka. It will
be two-story, frame, to contain 30 additional rooms.
Cost, \$20,000.

Leck & Prince have the contract to erect the
Reformed Hebrew Temple on 10th St. and 5th Ave.
S. It is to be of pressed brick, 62' x 90'. Kinney &
Detweiler, architects. Cost, \$26,000.

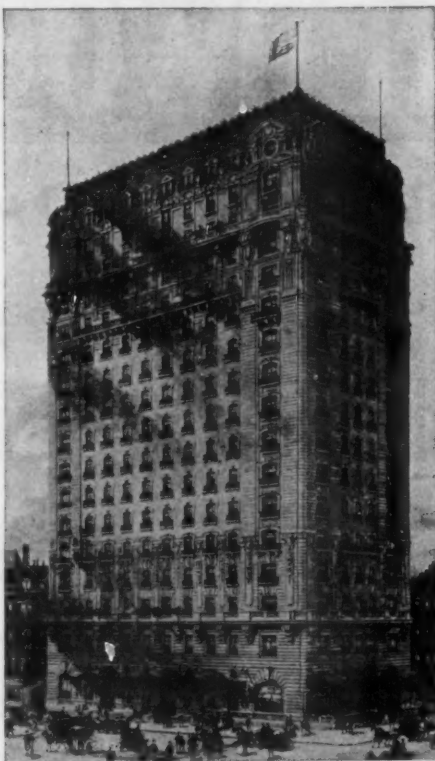
Mountain Lake, Minn.—The village will erect a
\$25,000 school-house and has adopted plans by H. C.
Gerlach, architect, of Mankato.

Nashua, N. H.—The Church of the Immaculate
Conception has plans for a new edifice, and is call-
ing for bids for same. Address Rev. Mr. Buckle.

New Castle, Pa.—Plans for a \$30,000 temple for the
Odd Fellows of this city have been prepared by
Architects C. C. & L. A. Thayer.

New Durham, N. J.—A site will be purchased on
the Hudson Boulevard for new house of Americus
Hose Co.

New London, Conn.—The council has voted \$25,-
000 for new fire station.



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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Newport News, Va.—The House of Delegates has
passed a bill authorizing the issue of \$100,000 bonds
for the erection of a municipal building.

New York, N. Y.—Plans have been filed at the
Bureau of Buildings, Manhattan, for a five-story
and basement armory for the 71st Regiment, to be
erected on the east side of Park Ave., between 33d
and 34th Sts. The building will be of brick and
granite. Clinton & Russell are the architects.

Plans have been filed for a six-story and basement
brick dwelling-house, to be erected for Morton F.
Plant. The building will be of brick and Indiana
limestone, and will face 100 feet in 52d St. and 50.5
feet in 5th Ave. E. W. Gibson is the architect.
The cost is estimated at \$300,000.

A Maltbie D. Babcock Memorial, the cost of
which may be \$250,000, is to be erected on the west
side by the congregation of the Brick Presbyterian
Church, of which the Rev. Dr. Babcock was pastor
for a little more than a year, and is to consist of
buildings for Christ Church, 35th St., between 7th
and 8th Aves. The present buildings of the church
are to be sold.

It is the hope of Dr. Russell of the Teachers'
College to provide for a special building in domestic
science and domestic art. For this purpose he
requires about \$300,000 to erect a building and add
to the staff of instructors. At present there are
over twice as many applications for instructors in
domestic science as the college can meet with its
inadequate facilities.

An appropriation of \$250,000 to assist in the con-
struction of the new buildings at the City College
has been granted. The money will be chiefly em-
ployed in providing for better club and society
facilities. The trustees have asked for an additional
appropriation, and the matter will be discussed at
the next meeting of the Board of Estimate.

Northampton, Mass.—Andrew Carnegie has given
\$50,000 for the erection of buildings here for the
Home Culture Club, whose headquarters are here.

Ocean City, N. J.—Dixey & Reilly, of Atlantic City,
have secured the contract to pave the principal
streets of the city, at a cost of \$70,000.

Orange, N. J.—A stock company has been formed
to build a big hotel on the site of the present Park
Hotel. According to the plans that have been
drawn, the old hotel will not be disturbed while the
new one is being erected around the old structure.

Orono, Me.—The Trustees of the University of

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Maine have accepted the plans of Thomas & Crow-
ell, of Bangor, for a new shop for the mechanical
and electrical departments, for which \$35,000 was
voted by last Legislature.

Pasadena, Cal.—J. F. Atkinson, of Los Angeles,
has the contract for erecting the high school, for
\$74,777.

Philadelphia, Pa.—Plans and specifications have
been completed and estimates are being taken by
Philip H. Johnson, architect, on a large addition to
F. C. McGrath's stable at 1715 N. 12th St. Plans
provide for a three-story brick and stone building,
to cost \$32,000.

Architect C. P. Beyer is about to let contract for
extensive interior and exterior alterations to G. A.
Schwarz's store at 1006 Chestnut St. Plans call for
a new front and interior improvements.

Pittsburgh, Pa.—A \$50,000 four-story brick and
terra-cotta club-house will be erected here for the
Bellevue Club in accordance with plans by Archi-
tect James T. Steen, Smith Building. It will have
steam heat, slate roof, etc.

Princeton, N. J.—The first definite step looking
towards the building of a joint memorial dormitory
by the classes from 1892 to 1901 was taken recently
by the Executive Committee of the class of 1895.
The funds already in their class treasury, amount-
ing to about \$6,500, were pledged towards the joint
memorial. Each of the ten classes is expected to
contribute \$10,000 towards the project.

Providence, R. I.—A building will be erected in
Weybosset St. for the Manufacturers' Outlet Co.,
constructed of stone, iron and brick; cost, \$120,000.

This spring a six-story addition to the building
occupied by the John Shepard Co. in Westminster
St., with frontages on Union and Clement Sts., will
be erected.

Norcross Bros. have the contract for the eight-
story addition to the Providence Journal Co.'s
building at the corner of Westminster and Fulton
Sts. Plans by Peabody & Stearns, of Boston.

Work is under way on the Y. M. C. A. building at
Brown University, to be erected through the gener-
osity of John D. Rockefeller. McKim, Mead &
White are the architects, with Professor Ware of
Columbia College as consulting architect.

Roanoke, Va.—The Norfolk & Western Railroad
has let the contract to Wilson & Seay, of Lynch-
burg, for the building of a new signal tower, scale
house and machine shop at Bluefield to cost \$35,000.

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An Improvement in
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KINBALL ELEVATOR CO., 141 Vincent
St., Cleveland, O.
New York Office, 120 Cedar St.

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Roxbury, Mass.—Plans for 2 three-apartment houses, to be erected in Fisher Ave., have been prepared by S. Rantlin & Son. One will be built for John McCusker and the other for Edmund Butler.

Saginaw, Mich.—W. R. Burt has offered this city \$150,000 toward the erection of a Manual Training School.

San Francisco, Cal.—It is reported that Scott & Van Arsdale will erect an eight-story brick fireproof building at Mission and Jessie Sts., to cost \$215,000.

Scranton, Pa.—Bids are being received for the erection of the new Church of the Nativity, of which Rev. J. A. O'Reilly is pastor. Cost, \$75,000.

Sioux City, Ia.—Bishop Carrigan will erect a Catholic orphanage with buildings to cost \$100,000. It is stated that the Christian Scientists will build a church to cost about \$60,000.

Somerville, Mass.—A studio building will be erected by J. H. Howard on lot numbered 330 Broadway, to cost \$6,000. The building, which will be 30' x 50' and constructed of brick and stone, will contain, besides the studios, a store and suite of offices.

Spokane, Wash.—Julian & Williams have prepared plans for a \$75,000 R. C. Church to be erected in this city.

St. Louis, Mo.—Plans have been prepared for a \$75,000 addition to the Etna Foundry Building.

Stoneham, Mass.—The town has accepted Andrew Carnegie's offer of \$15,000 for a public library.

St. Paul, Minn.—The Women's Christian Home Society have purchased a five-acre tract of land at Lake Como and propose to erect a home. Estimated cost of new building, \$15,000.

Swampscott, Mass.—\$12,000 will be expended on land for an engine-house building.

Tacoma, Wash.—The Pacific Meat Co. packing house was burned; will be rebuilt on a larger scale. Cost, \$159,000.

Terre Haute, Ind.—The Trus. of Indiana Normal School will soon receive bids for erecting the Manual Training School; estimated cost, \$50,000.

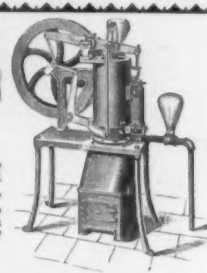
Tuskegee, Ala.—Andrew Carnegie has given \$600,000 to the Tuskegee Industrial Institute, of which Booker Washington is president.

Washington, D. C.—It is stated that the Royal Arcanum is preparing to erect in this city a seven-story building, to cost \$250,000. It is reported that the contract for the erection of a new St. Vincent Church to be built on S. Capitol and M Sts. has been awarded to W. E. Spier. The District appropriation bill includes \$30,000 for site for engine-house in southeast section.

Wellesley, Mass.—It is reported that Wellesley College will lease a house to be put up in this village by a syndicate of townsmen for use as a dormitory, capable of lodging about 50 students.

Williamstown, Mass.—It is reported that Boston architects and Boston builders have been awarded the contracts for the erection of a memorial church edifice here for Williams College, the gift of Mrs. F. F. Thompson, to cost \$150,000 above the land. The materials which will enter into its construction will be selected and finished stone and brick. In dimensions the edifice will be 88' x 144', with a tower 150 feet high. Allen & Collins are the architects. The general contract has been taken by L. D. Willcutt & Son, and the carpenter contract by E. Noyes Whitcomb.

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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Winthrop, Mass.—A frame building, five stories high, and 37' x 90', will be erected here to be used for a summer hotel. It will be situated at Ocean and Crest Aves. and will cost about \$25,000 above the land. H. W. Peck & Co. have the general contract. Plans by H. F. Briscoe.

Wrightsville, N. C.—It is stated that a \$50,000 hotel will be erected at Wrightsville Beach.

APARTMENT-HOUSES.

Chicago, Ill.—Roscoe Boulevard, cor. Elaine Pl., three-sty' bk. & st. apart., 98' x 120', steam; \$40,000; o., C. A. Londehus; a., J. F. & J. P. Doerr, 138 Washington St.

Yale Ave., Nos. 7557-7559, three-sty' bk. & st. apart., 42' x 85', steam; \$30,000; o., A. Burns; a., A. G. Lund, 602 W. 23d St.

Frairie Ave., Nos. 5714-5718, 2 three-sty' bk. & st. apart., 47' x 63' & 24' x 77', steam; \$40,000; o., Earl Armstrong; a., C. W. Van Kuren, 78 La Salle St.

Philadelphia, Pa.—Chelten Ave., cor. Morris St., six-sty' bk. & st. apart., 92' x 104'; \$100,000; b., John W. DeLong.

St. Paul, Minn.—Farrington Ave., nr. Dayton St., three-sty' bk. apart., 47' x 110'; \$35,000; o., Casper J. Ernst.

EDUCATIONAL.

Worcester, Mass.—Gage St., three-sty' bk. parochial school, 94' x 116'; \$60,000; o., Rev. Jos. P. Tuitte, pastor; a., John W. Donahue, Springfield; e., McDermott Bros.

HOTELS.

Chicago, Ill.—Dearborn Ave., three-sty' bk. & st. hotel, 25' x 70', steam; \$30,000; o., Timothy Dwight; a., J. E. O. Pridmore, 126 State St.

HOUSES.

Afton, Ia.—Two-sty' & base. bk. & st. dwell., 40' x 60', hot air; \$7,000; a., H. Arnold, 440 Boston Block, Minneapolis, Minn.

Chicago, Ill.—Grand Boulevard, No. 4323, three-sty' bk. & terra-cotta dwell., tile roof, hot water; \$30,000; o., Raymond G. Sykes; a., E. A. Mayo, 204 Dearborn St.

Minneapolis, Minn.—Pillsbury Ave., No. 2312, two-sty' bk. dwell., 35' x 43', furnace; \$7,500; o., S. H. Davis; a., Henry Ingham.

S. Irving Ave., nr. 18th St., two-sty' fr. dwell., 34' x 44', combination heat; \$6,000; o., A. E. Pagel; a., L. A. Lamoreaux.

Groveland Ave., No. 216, 21-sty' bk. dwell., 44' x 52', with stable, 28' x 36'; \$25,000; o., F. H. Willcome; a., Fremont D. Orff.

BUILDING INTELLIGENCE.

(Houses Continued.)

Tenth Ave., No. 1721, two-sty' fr. dwell., 27' x 58'; furnace; \$4,000; o., Christian Peterson.

Worcester, Mass.—Millbury St., three-sty' fr. dwell., 38' x 58'; \$8,500; o., Peter & William Cinkser; a., J. P. Kingston; o., H. F. Banister.

Providence St., three-sty' fr. dwell., 28' x 63'; \$5,500; o., Miss Catherine Sullivan; a., A. J. Harrington; e., F. F. Melican.

Ashton St., three-sty' fr. dwell., 27' x 60'; \$5,000; o., August Johnson; a., Edwin Carlson; o., John S. Doyle.

Park Ave., three-sty' fr. dwell., 27' x 49'; \$4,000; o., H. C. Fisher; day work.

Park Ave., two-sty' fr. dwell., 26' x 31' 6"; \$3,000; o., H. C. Fisher; a., C. F. Wesson.

Forest St., 24-sty' fr. dwell., 28' x 44'; \$3,000; o., Frank L. Allen; day work.

Millbury Ave., 24-sty' fr. dwell., 24' x 30'; \$3,000; o., Chas. A. Bartlett; e., Jules Fortier.

Newport St., three-sty' fr. dwell., 22' x 44'; \$5,000; o., Mrs. Catherine Corliss; a., W. H. Harvey; e., E. D. Ward.

Waller Ave., three-sty' fr. dwell., 26' x 46'; \$3,500; o., Ida G. Doane; e., Chas. L. Doane.

Ingleside Ave., 24-sty' fr. dwell., 30' x 52'; \$4,800; o., Mrs. Charlotte L. Larson; a., Erik Erikson; e., A. I. Fortier.

Alvarado Ave., two-sty' fr. dwell., 22' x 38'; \$2,500; o., Frank H. Cutting; e., E. D. Ward.

Halmsted St., three-sty' fr. dwell., 26' x 52'; \$4,500; o., Robert Smith.

Stafford St., 24-sty' fr. dwell., 26' x 51'; \$3,600; o., e., Harry Ballard.

Fairview Terrace, three-sty' fr. dwell., 26' x 50'; \$4,250; o., Edwin Johnston; a., Nils Peterson; e., L. M. Peterson.

Pleasant St., two-sty' fr. dwell., 33' x 38'; \$4,800; o., Chas. H. Sibley; a., Frost, Briggs & Chamberlin; day work.

Westland St., 24-sty' fr. dwell., 35' x 40'; \$6,000; o., Olive M. Child; a., W. H. Harvey; day work.

Fiske St., 14-sty' fr. dwell., 28' x 36'; \$3,500; o., e., James I. Elliott.

Santon Ave., 14-sty' fr. dwell., 27' x 52'; \$3,000; o., P. E. Jenberg; a., Erick Erickson; e., C. E. Anderson.

Tatnuck Hill, 14-sty' dwell., 30' x 53'; \$10,000; o., L. H. Torrey; a., Frost, Briggs & Chamberlin; e., A. P. Robbins.

Reeves St., three-sty' fr. dwell., 30' x 50'; \$5,000; o., Verner G. Anderson; day work.

MERCANTILE BUILDINGS.

St. Paul, Minn.—Prince St., bet. Pine St. & Broadway, six-sty' & base. wholesale building, 104' x 222'; \$150,000; o., Foley Bros. & Kelly; a., J. Walter Stevens.

STABLES.

New York, N. Y.—Twenty-fourth St., nr. 11th Ave., six-sty' bk. stable, 57' x 93'; \$50,000; o., James J. Duffy, 625 W. 24th St.; a., Horgan & Slattery, 1

Bank
Counter
Railings



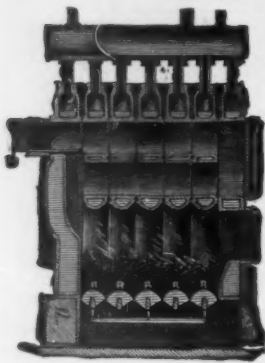
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(Stables Continued.)

Madison Ave.; m'n, Thos. D. Comas, 1123 Broadway.
E. Thirty-second St., Nos. 157-159, five-st'y bk. stable, 50' x 167', slag roof; \$55,000; o., S. Mount, 4 W. 21st St.; a., John H. Friend, 148 Alexander Ave.
Kelly St., nr. 167th St., two-st'y bk. stable, 25' x 64'; \$5,000; o., James C. Gaffney, 1137 E. 167th St.; a., William F. Garvey, Brown Ave., nr. Miama St., Van Nest.

Worcester, Mass.—Loudon St., 1½-st'y fr. stable, 31' x 38'; \$2,000; o., Mrs. S. L. Heath; a., Geo. H. Clemence; e., C. A. Colburn.

Richmond Ave., one-st'y stable, 22' x 25'; \$1,000; o., Frank T. Williams; a., J. P. Kingston; e., E. B. Rogers.

Thomas St., one-st'y bk. stable, 40' x 50'; \$2,600; o., Walker Armington Co.; e., E. D. Ward.

TENEMENT-HOUSES.

New York, N. Y.—Broome St., Nos. 26-28, six-st'y bk. tenements & stores, 50' x 62'; \$50,000; o., Seider, Stoller & Teitelbaum, 221 Henry St.; a., Bernstein & Bernstein, 111 Broadway.

E. Fourth St., Nos. 332-334, six-st'y bk. tenement & stores, 45' 2" x 82' 9"; \$46,000; o. & b., Max Miller, 212 E. 77th St.; a., G. F. Pelham, 503 Fifth Ave.

One Hundred and Twenty-fourth St., nr. Broadway, six-st'y bk. tenement, 50' x 87' 11", tar & gravel roof; \$85,000; o., A. A. Edelman, 29 W. 128th St.; a., P. H. Peppmuller, 121 W. 42d St.

Madison St., Nos. 306-308, six-st'y bk. tenement & stores, 39' x 93' 3" x 92' 10"; \$45,000; o., Louis Frank, 58 E. 4th St.; a., Bernstein & Bernstein, 111 Broadway.

Avenue A, Nos. 276-282, 2 six-st'y bk. tenements & stores, 42' x 50' x 89' x 82' 6"; \$75,000; o., Max Gold, 1711 Madison Ave.; a., Horenburger & Straub, 122 Bowery.

Avenue A, cor. 13th St., six-st'y bk. tenement & stores, 51' 8" x 90'; \$65,000; o. & b., Max Kessler, 68 W. 118th St.; a., G. F. Pelham, 503 Fifth Ave.

Avenue C, Nos. 73-77, 2 six-st'y bk. tenements & stores, 36' 4" x 76' 11"; \$76,000; o. & b., Meyer Frank, 17 Attorney St.; a., G. F. Pelham, 503 Fifth Ave.

WAREHOUSES.

New York, N. Y.—Hudson St., cor. Beach St., eight-st'y bk. warehouse, 100' 3" x 74' 8", tile roof; \$180,000; o., Protestant Episcopal Soc. for Promoting Religion and Learning in State N. Y., 62 William St.; a., Chas. C. Haight, 452 Fifth Ave.

MISCELLANEOUS.

New York, N. Y.—Intervale Ave., nr. Home St., two-st'y & attic bk. fire-house, 50' x 10' x 75' & 34'; \$23,000; o., City N. Y.; a., Alexander Stevens, 157 E. 67th St.

PROPOSALS.

CHURCH.

[At Columbus, O.]
Proposals will be received until May 18 by Frank L. Packard, architect, 16 E. Broad St., Columbus, for the erection of the Eastwood Congregational Church. 1428

CEMENT.

[At Zanesville, O.]
U. S. Engineer Office, Zanesville, O. Sealed proposals for furnishing about 700 barrels American Portland cement will be received here until May 18, 1903. Information furnished on application here to Assistant Engineer Edmund Mooser. MAJOR ERNEST H. RUFFNER, Engrs. 1428

ALTERATIONS TO GUARD-HOUSE.

[At Fort Morgan, Ala.]
Sealed proposals will be received until May 25, 1903, for constructing extension to and alterations in guard-house here. U. S. reserves right to reject or accept any or all proposals. Information furnished on application. Inclose proposals in sealed envelope marked "Guard-house," addressed A. D. RAYMOND, Q. M. 1429

PROPOSALS.

BUILDING.

[At Chamberlain, S. D.]
Department of the Interior, Office of Indian Affairs, Washington, D. C. Sealed proposals will be received at this Office until May 31, 1903, for furnishing the necessary materials and labor required to construct and complete at the Chamberlain School, S. D., one dormitory, one school-house, one addition to dormitory, all of brick, with plumbing, acetylene gas piping and steam heat, for extension of water and sewer systems and one gas machine house, with plumbing and heat, in strict accordance with plans and specifications and instructions to bidders, which may be examined at this office. For further information apply to John Flinn, Superintendent, Chamberlain, S. D. A. C. TONNER, Acting Commissioner. 1428

Treasury Department, Office of the Supervising Architect, Washington, D. C., April 27, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 3d day of June, 1903, and then opened, for the construction, (including plumbing, heating apparatus, electric wiring and conduits) of the U. S. Court-house, Post-office, etc., extension at Springfield, Ill., in accordance with drawings and specification, copies of which may be had at this office or at the office of the Custodian at Springfield, Ill., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1428

Treasury Department, Office of the Supervising Architect, Washington, D. C., April 27, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 8th day of June, 1903, and then opened, for the general construction of the U. S. Post-office, Custom-house and Court-house at Cleveland, Ohio, in accordance with the drawings and specifications, copies of which may be had at the discretion of the Supervising Architect, on application to this office or the office of the architect, Arnold W. Brunner, 33 Union Square, West, New York, N. Y. Application must be accompanied by a certified check for \$250, which will be held at this office until the return of drawings and specifications. JAMES KNOX TAYLOR, Supervising Architect. 1428

POWER-HOUSE.

[At Shoshone School, Wyo.]
Department of the Interior, Office of Indian Affairs, Washington, D. C. Sealed proposals will be received at the Indian Office until May 18, 1903, for furnishing the necessary materials and labor required to construct power-house, move machinery and install boiler and smokestack, at the Shoshone School, Wyo., in strict accordance with plans, specifications and instructions to bidders, which may be examined at this office. For further information apply to U. S. Indian agent, Shoshone Agency, Wyo. A. C. TONNER, Acting Commissioner. 1428

ROAD.

[At Bluffton, Ind.]
Bids are wanted by the Co. Comrs. until May 19 for constructing 56,592 feet of gravel road. 1428

BUILDING.

[At St. Louis, Mo.]
Proposals will be received by the architect, F. L. Packard, 16 E. Broad St., Columbus, O., until May 31st, for the Ohio Building for the World's Fair. 1428

ADDITION TO DORMITORY.

[At Pipestone, Minn.]
Department of the Interior, Office of Indian Affairs, Washington, D. C. Sealed proposals will be received at the Indian Office until May 23, 1903, for furnishing the necessary materials and labor required to construct and complete an addition to a stone dormitory, with plumbing, steam heat and gasoline gas piping at the Pipestone Indian School, Minn., in strict accordance with plans, specifications and instructions to bidders which may be examined at this office. For further instructions apply to Dewitt S. Harris, Superintendent, Indian School, Pipestone, Minn. A. C. TONNER, Acting Commissioner. 1428

PROPOSALS.

Treasury Department, Office of the Supervising Architect, Washington, D. C., April 25, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 1st day of June, 1903, and then opened, for the construction (except heating apparatus) of the extension of the U. S. Court-house, Post-office, etc., at Montgomery, Alabama, in accordance with drawings and specification, copies of which may be had at this office, or at the office of the Custodian at Montgomery, Alabama, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1428

Treasury Department, Office of the Supervising Architect, Washington, D. C., April 23, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 4th day of June, 1903, and then opened, for the construction (including plumbing and heating apparatus) of the U. S. Post-office, etc., extension at Scranton, Pa., in accordance with drawings and specification, copies of which may be had at this office or at the office of the Custodian at Scranton, Pennsylvania, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1428

Treasury Department, Office of the Supervising Architect, Washington, D. C., April 28, 1903. Sealed proposals will be received at this office until 3 o'clock P. M. on the 10th day of June, 1903, and then opened for the alterations to the U. S. Custom-house at St. Paul, Minn., in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Custodian at St. Paul, Minn., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1428

SUPERSTRUCTURE.

[At Carrollton, Ky.]
Proposals for constructing the superstructure of St. John's Catholic Church will be received until May 15 by Rev. I. M. Aumann. 1428

ROADS AND WALKS.

[At Fort Greble, R. I.]
Office Constructing Quartermaster, 209 Thames St., Newport, R. I. Sealed proposals will be received here until May 20, 1903, for constructing macadam roads and granolithic walks, Fort Greble, R. I. Information furnished on application. CAPT. THOMAS H. SLAVENS, Quartermaster. 1428

BUILDING.

[At Charleston, S. C.]
Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, until May 23, 1903, for constructing a three-story brick and steel building for equipment at the Navy Yard, Charleston, S. C. Limit of cost, \$125,000. Plans and specifications can be seen at the Bureau, or will be furnished by the Commandant of the navy yard named upon deposit of \$20 to secure their return. MORDECAI T. ENDICOTT, chief of bureau. 1429

BUILDING.

[At Norfolk, Va.]
Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, until May 23, 1903, for constructing a one-story steel storage building at the Navy Yard, Norfolk, Va. Appropriation, \$27,500. Plans and specifications can be seen at the Bureau, or will be furnished by the commandant of the navy yard named. MORDECAI T. ENDICOTT, chief of bureau. 1429

CEMENT AND STONE.

[At Fort Wool, Va.]
Engineer Office, U. S. Army, Room 2, Custom-house, Norfolk, Va. Sealed proposals for furnishing and delivering Portland cement and broken stone at Fort Wool, Va., will be received here until May 27, 1903. Information furnished on application. 1429

PUMPING STATION.

[At Allegheny, Pa.]
Proposals for the erection of a brick pumping station will be received by D. L. Fulton, director department of public works, until August 1. 1429

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. . . CODE OF ETHICS . . .

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ADOPTED BY THE SOCIETY, FEBRUARY 1, 1895.

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

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

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

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

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

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

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

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

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

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

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

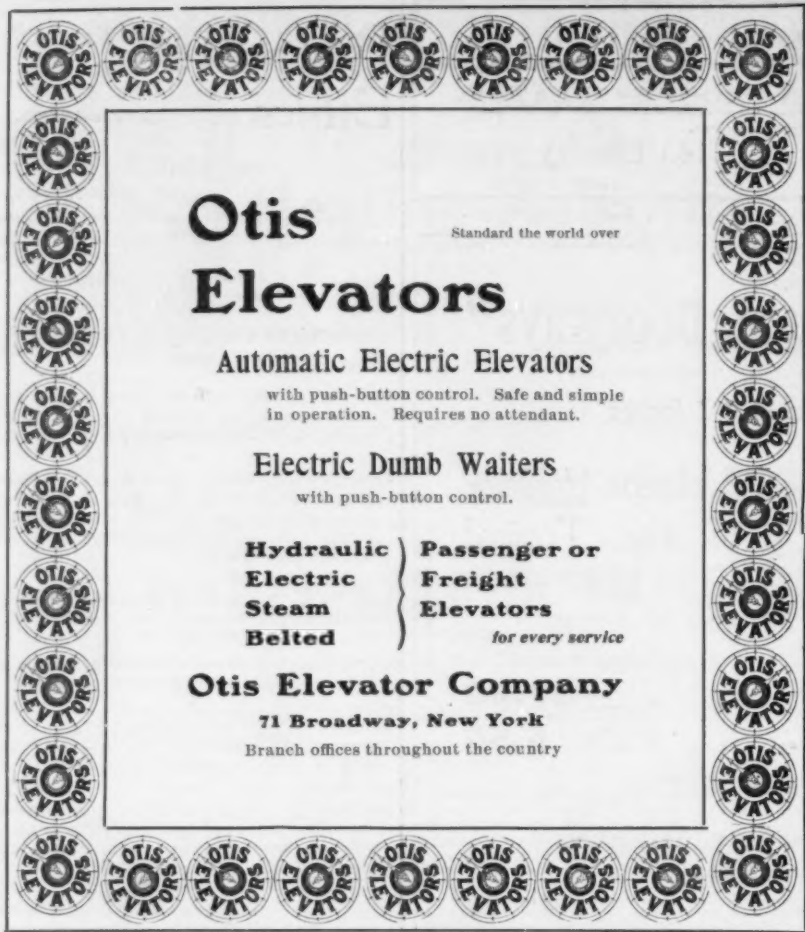
SECTION 12. The American Institute of Architects' "schedule of charges" represents minimum rates for full, faithful and competent service. It is the duty of every architect to charge higher rates whenever the demand for his services will justify the increase, rather than to accept work to which he cannot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

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

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

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