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**MR. EDWARD CLARKE CABOT**, who may justly be called the beloved head of the profession of architecture in Boston, died a few days ago at his home, at the age of eighty-one. Born of an old and distinguished Boston family, Mr. Cabot learned his profession, as the architects of his generation were obliged to do, mainly by himself, but he learned it well, and no more refined and scholarly work has ever been done in this country than that which he designed. He was, like so many architects, more particularly abroad than here, a skilful water-color painter, and frequently contributed his works to the local exhibitions, but in architecture he found the widest field for his great and refined talent. The best of his buildings is, to our mind, the Boston Athenæum, on Beacon Street, one of the most beautiful works in the Italian Renaissance style in the country; but that by which he is best known is, perhaps, the Boston Theatre, which is not only peculiarly refined and elegant in detail, but is, in its acoustics and planning, still one of the best of modern theatres. Besides these two important structures, Mr. Cabot, at first either alone, or in connection with his brother, Mr. F. Elliot Cabot, and, later with Mr. Chandler, now Professor Chandler, of the Massachusetts Institute of Technology, designed a great number of buildings, generally distinguished by some delicately artistic feature which made them a common subject of discussion among architects. It was Mr. Cabot, we believe, who set the pretty fashion of painting wooden country-houses of an olive green, to melt them in with the foliage about them, and we remember that, when his own house was built, he modelled with his own hands in the wet plaster a frieze of leaves and flowers, which was afterwards painted. Personally, Mr. Cabot was a model of kind and gentle dignity. He was for many years President, and recently Honorary President, of the Boston Society of Architects, which, if it could, would have kept him perpetually in that office, and, even after he absolutely refused to stand for election for another term, his wise and considerate advice was constantly sought. Some ten years ago, he retired altogether from practice, his failing health obliging him to confine himself closely to his home, but he has been not the less the object of the affection of all those who ever knew him, and the Boston Society of Architects will mourn him as its best, as well as its oldest, friend.

**WE** regret to learn that the completion of the Hunt Memorial, on Fifth Avenue, opposite the Lenox Library, is delayed on account of the inability of the Memorial Committee to raise the balance of the money required to pay for the two statues, by Mr. Daniel C. French, which form a part of the monument. The statues are completed, and are now on exhibition at the galleries of the National Academy of Design, but forty-five hundred dollars still remain to be made up of the twenty-one thousand three hundred which represents the total cost of the monument; and the Committee, very

properly, hesitate to take the statues before they are paid for. At the same time, Mr. French, whose work has been to some extent a labor of love, ought to have his money, and the Committee feels itself in a rather embarrassing position. Every architect cherishes the memory of Mr. Hunt, whose personality was as interesting as his talent was remarkable, but the incomes of architects have, as a rule, been small for the last three or four years, and those who subscribed at the outset as much as they could afford have not felt themselves justified in making a second contribution. Perhaps the coming season will witness a change in the conditions of professional business, and, if so, the grateful architects will, undoubtedly, be willing to help again to complete the memorial to the most distinguished of their American brethren.

**THE** movement in favor of the licensing of architects in New York seems to be gaining favor in that State, under the advocacy of some of the best members of the profession, and it seems quite probable that the bill, printed on another page, may pass. Although we are quite sensible of the advantages of having buildings designed only by competent architects, we are not so sure as we would like to be that the measure proposed would infallibly eliminate the quacks from the profession, or prevent unscrupulous builders from erecting dangerous structures. In fact, even under the present system, it is not often the architect or his plans which are responsible for disasters to buildings. If all structures were required, under heavy penalties, to be carried out in strict accordance with the plans, and under the direction of any architect now practising in New York, whether licensed or unlicensed, there would be few accidents; but where, as too frequently happens, the builder disregards plans and directions, and, with the favor of the inspectors, makes his walls of such dimensions, and of such materials, as he sees fit, no licensing system applied to architects can prevent an occasional catastrophe. Where, also, as under the Illinois law, the licensing system practically shuts out all but Illinois architects from practising within the State, we are of opinion that it does no good to art, or to professional advancement. While we favor local development in all the arts, it is not promoted by having the local artists shut out everybody else from their territory, and sit down comfortably to enjoy their monopoly, and it is very likely that the New York architects, being not only residents of the most cosmopolitan of all cities, but sincerely and intelligently devoted to the best interests of their profession, will recognize this, and provide for the employment of outside architects under the smallest practicable restrictions.

**OUR** readers know about the law of New York which requires that all stone used in public contracts, except paving-blocks, shall be dressed or carved within the State of New York. This ridiculous statute came up in the courts the other day, in connection with a contract for sewers. The contractor carried out his agreement faithfully, and to the satisfaction of all the officials concerned, and presented his bill, with the necessary endorsements of approval, to the Comptroller for payment. The Comptroller, however, who had heard that one of the sewer basins had been "carved" in Hoboken, refused to pay the bill, on the ground that the law had been violated; and the unfortunate contractor was obliged to bring suit for his money. After the usual delays, the case has just reached the Appellate Division of the Supreme Court, and has been decided in the contractor's favor, the Court taking the ground that, in the absence of any claim on the part of the city that the contract price had been forfeited, it was not for the Comptroller, whose duty in such matters is merely ministerial, to raise a claim which had not been made by the proper authorities. As to the constitutionality of the law itself, which is a matter of serious doubt, the Court expressed no opinion, but it is to be hoped that the taxpayers, out of whose pockets is in this way indirectly taken the money to buy labor votes for the cheap politicians, may soon have the question settled.

**THE** Fire Marshal of New York has reported the result of his investigation of the fire and explosion in the Tarrant building, in October last, by which seven persons lost their lives. The report is accompanied by a statement from

Professor C. F. Chandler, of the School of Mines of Columbia College, who believes, from the evidence, taken by the Fire Marshal, that the disaster was due to the explosion of chlorate of potash, of which about thirty-five tons were stored in the building, side by side with one hundred and eighty-six barrels of sulphur, two hundred and five kegs of nitrates of strontia and baryta, and various other dangerous chemicals, including a large quantity of acids. Any one who has seen a mixture of chlorate of potash and sugar take fire and burn violently on being touched with a drop of sulphuric acid, or has amused himself with "red fire," consisting of nitrate of strontia and sulphur, will conceive without difficulty the probable effect of the combined combustion of the substances stored in the building, under the stimulus afforded, perhaps, by the breaking of a carboy of sulphuric acid. The Fire Marshal thinks that electric wires may have been illegally altered, after inspection, or that tar, melted out from the protecting layer between the floorings by steam-pipes, may have dripped on the barrels of chemicals in such a way as to assist in the catastrophe, but it is not necessary to apply to either hypothesis to account for the facts.

WE spoke a few weeks ago of a case in Massachusetts, where a contractor for heating-apparatus, who had warranted the performance of the apparatus, pleaded, as a justification of its failure to do what was promised, that the purchaser had failed to furnish "flues of sufficient draught," as he had agreed to do in the contract, the flues furnished not being large enough to give theoretically perfect combustion in the firepot. The owner replied that he had furnished flues of the usual size; and the question whether his agreement meant a flue sufficient to give the usual draught for such apparatus, or one large enough to give the theoretically perfect draught, came the other day before the full bench of the Massachusetts Supreme Court, which ruled, in agreement with the decisions of the inferior courts, and, we should say, in agreement with common sense, that, "the words, 'sufficient draught' must be intended to mean, in the absence of anything to show that the ranges would require a greater draught than is commonly used, a sufficient draught for the particular range." The newspaper report of the decision does not explain, with the clearness that might be desired, what the Court thought was a "sufficient" draught; but, in the light of the previous decisions, it is probably to be interpreted as such a draught as is found reasonably satisfactory with such apparatus in other cases.

THE case is one of great importance to architects, builders and owners, who are continually obliged to rely upon the guaranty of those who make and install apparatus for heating, water-supply, electrical service and many other things, as well as to the makers of new apparatus, which is rarely adopted by architects and owners without such a guaranty, and would seek in vain for recognition from the profession without confidence that the guaranty would be fulfilled, if necessary. Every attempt, therefore, to escape from such a condition, or to give to it an interpretation which the architect and owner would not naturally have given to it, not only shuts out the party making it from the further confidence of the profession, but puts a serious impediment in the way of the introducers of new, and perhaps meritorious, devices, who, as the architect thinks, may follow the example of trying to avoid their obligations. As an instance of the importance to such contractors of the literal fulfilment of their promises, we may mention the case of a certain manufacturer of furnaces, who put in half a score or so for our own clients, some years ago, in accordance with our specifications. They gave satisfaction until a case arrived in which some mistake was, as we believed, made in the location of the furnace, and it failed to do its work. A change in its position would probably have remedied the trouble, but the furnace was put in under the usual guaranty, and, as architects do not like to dictate in such cases, the contractor was simply called upon to make good his agreement. After months of evasion, during which the owner shivered patiently in his new house, the contractor at last flatly refused to do anything about the matter; and, as a new furnace cost less than a lawsuit, a new one was put in. It is needless to say that, out of the many thousands of dollars' worth of furnaces since put in from that architect's specifications, not one has been of the make referred to, while more than half have been put in by a manufacturer who, in a similar case, promptly ful-

filled his agreement, and replaced, at his own expense, a furnace which had proved to be too small with a larger one.

AN interesting expedition is to be made, under the charge of Dr. James Edgar Banks, to investigate the ruins of Mugheir, in Mesopotamia, spoken of in the Bible under the name of "Ur of the Chaldees," and mentioned as having been the birthplace of Abraham. The site of Mugheir is only about two miles from the modern town of Nasarieh, where the explorers can find comfortable quarters, without being obliged to form a camp at the excavations; and Dr. Banks thinks that two years will be long enough for the thorough investigation of the place. Since the time of Layard, Mesopotamia has been the field of many explorations, and the history of the Chaldeans and Babylonians is now probably illustrated by more documents than that of any other ancient people; but Ur appears to have been the seat of the most ancient civilization, even of Mesopotamia, and whatever is found may be expected to be of special value.

A RECENT address of the new President of the Institution of Civil Engineers, Mr. James Mansergh, gives some curious information in regard to ancient Roman waterworks. It is a common idea that ancient Rome was far more abundantly supplied with water than any modern city, but Mr. Mansergh shows that this idea is erroneous. Although Rome had many aqueducts, the flow through them was not rapid, and it is probable, according to the calculations of Mr. Clemens Herschel, from whom Mr. Mansergh takes his figures, that the average daily quantity of water brought into Rome at the time of Nerva and Trajan was not more than thirty-two million gallons. Assuming the population of the city to have been one million, which is probably rather under the truth, the average daily supply was less than thirty-two gallons per head, which is much less than that of many modern towns. As, however, water-service in the tenement-houses, in which most of the people of Rome lived, was unknown, and there were no manufactories or railroads to consume large quantities, the surplus of water left after the poor people had filled their jars with what they needed for cooking was sufficient to supply the baths and fountains of which we read so much, as well as the fountains in the houses of the rich. It is interesting to read that, in A. D. 86, the aqueduct known as the Aqua Claudia, large portions of which are still standing, was improved by driving a tunnel under Monte Affliano, cutting off the long bend of the original conduit around the mountain. This tunnel was three miles long, and was executed, of course entirely by hand, by a contractor named Pasquedius Festus. Mr. Mansergh also mentions that he was called upon, some twenty-five years ago, to explore the remains of an aqueduct, also built by Claudius, to bring water to the city of Naples from the Orciuoli springs in the Apennines. At that time, although an estimate was made of the cost of reconstructing the aqueduct, nothing further was done; but, more recently, the scheme has been revived, and the work carried out, and Naples has now a fine water-supply from the same source from which it was supplied eighteen hundred years ago.

THE *Tribune*, which certainly cannot be accused of lack of conservatism in business matters, looks rather with favor on the renewed movement for the establishment of the metric system of weights and measures in this country. Although the unit of measure of length, the metre, is a far less convenient one than the foot, the advantages of decimal reckoning, and the superiority of the metric scale of weights over the unspeakable jumble of Apothecaries, Avoirdupois and Troy weights under which we suffer, are sufficient to commend the metric system, as a whole, to the public; while the necessity, to a commercial nation, of using weights and measures similar to those of its customers is more apparent every day. So long as our commerce was only with Great Britain, our exporters did not need to trouble themselves about Continental measures, but now that our manufactured goods go all over the world the necessity for conforming to the standards of European civilization has become serious. It must be remembered that even conservative Great Britain has taken steps toward the acclimatization, so to speak, of the metric system; and an understanding between the United States and the country with which we have still much more extensive dealings than with any other might help both to the introduction of more rational standards than those which they now use.

THE GROUPING OF PUBLIC BUILDINGS IN A GREAT CITY.<sup>1</sup>

THE title of the paper that I have been asked to prepare implies the admission of the fact that buildings of any description gain in effect by being grouped, and that isolated buildings, of whatever individual merit, are insignificant in comparison with massed constructions, even if these latter be comparatively mediocre in quality. It requires but little argument to uphold this statement. Every famous architectural pile in the world testifies to it, and the buildings of modern expositions are additional witnesses.

It is, then, a manifest waste of opportunity to erect monumental buildings so far apart from each other that they cannot be seen together excepting from a balloon.

The fact admitted that buildings should be massed, the conditions influencing such massing are next to be considered.

Primarily they are conditions of utility. Buildings are placed where they will do the most good, where they can be the most conveniently approached, and will hold the most practical relations to each other.

If these conditions are allowed to act, all public buildings are naturally gregarious. There is one other important factor: that of the avoidance, so far as may be, of the disturbance of existing conditions. From these conditions have resulted the Ring Strasse of Vienna; the boulevards of Brussels, Antwerp and Frankfurt, and the consequent placing of important buildings upon them.

The demolition of ancient city-walls and subsequent filling-in of moats gave room for municipal improvement without demolition and preserved a tradition while embellishing the city.

The mediæval city-market or meeting-place, whether within or without a citadel, no longer exists as the pulsing heart of a city, for the cities have become of such extent that squares or places must multiply in number. What in the old days was the heart has now become a series of ganglions, or nerve-centres, connected by avenues, parks or boulevards. What was formerly a *coup d'œil* has become a series of points of interest which should not have mean approaches. The picturesque masses of castles and cathedrals were the more interesting from the contrasting hovels clustering around their feet, but the dignity of modern civic buildings does not accord with such a setting. The city of to-day has grown too large to be picturesque; its avenues are too broad, its spaces too vast, its distances too great. Accident must give place to intention, or the general effect of the city will be haphazard, incongruous and incomplete. The impression of incompleteness is characteristic of American cities for the reason that, with few exceptions, they have either no initial scheme in plan or a meagre one. There is, it is true, the numbered and lettered gridiron plan of Philadelphia and Chicago, which "grinds down their stones to a pale unanimity," in which all streets are alike and one view as good as another, but such planning can hardly be considered an achievement. Washington has a plan of a higher type and greater possibilities, and in spite of the numerous indignities to which it has been submitted, it still gives the city its individual character and much of its undoubted attractiveness.

This plan is based upon centres of interest, not too far apart to be seen from each other, and, therefore, vistas terminate with a monument, sculptural or architectural. This is a very great gain and exists in only two other cities — Paris and Rome. Nothing is more ignominious than a broad avenue leading to nothing and fading away at either end into the frayed skirts of a city.

The same mind that first conceived a plan where all streets were alike arose to a loftier height of inspiration and introduced final perfection into his plan by assuming that a very broad, perfectly straight avenue of infinite length was the finest possible street for a great city. There can be no greater blunder in planning. What is more wearisome than endless streets of which the destination cannot be foretold? All scale is lost by too long perspective; and unless avenues are viewed from an eminence or are terminated by an important mass of buildings raised high in the air, it is safe to assume that half a mile is quite long enough for any uninterrupted vista. One of the fundamental principles of architectural planning is that of axes, upon which are strung both the voids and solids of the masses of building. A great avenue is a great axis, a great void, but it should not be that alone; it should lead to the greater solid masses at either end. It is important, then, that the chief buildings should be, not upon the sides, but upon the axes of great avenues, and, in fact, in most cases where the buildings have been first established, the axial avenues have later been constructed by demolition. Unfortunately, the reverse process does not as often occur. The avenue once established becomes a public right-of-way, and there is nothing so repugnant to the Anglo-Saxon mind as to interrupt or interfere with anything which has once become public property. Even bridging a right-of-way is considered an injustice; it must remain open to the stars themselves. Fortunately, in Washington, the necessity for constructing centres of interest on the axes of avenues is not felt. They already exist. The danger seems to be this: that the sides of the existing, or to be created, avenues are held to be adequate sites for new Government buildings, while in point-of-fact those buildings should be built upon their axes. Unter den Linden, in Berlin, is, in this respect, an excellent object-lesson. Despite some admirable buildings upon its sides, such as the Russian Embassy and the Arsenal, this famous avenue is ineffective until one

end is reached, when the Brandenburg Gate, a puerile imitation of the Propylæa, is thrown frankly across its axis and at once dignifies it. At the other end of the Unter den Linden is a marvellous example of purposeless planning. There is prevalent another impression in regard to great avenues, which is this: that a bridge is of greater value and merit than the avenue leading to it, and can be considered as a terminal unit, and that it is of greater importance than the avenue leading to it. As a matter of fact, a bridge is an integral part of the avenue, and counts but little in effect when seen from the avenue.

The architectural merit of a bridge, which may be great, is seen from up or down the stream. Its artistic value as a monument is entirely due to the uniformity and symmetry of its sides and the contrast of open spaces to high façades, and to the treatment of its approaches. When the bridge is a very long one, any treatment of its centre, far from either bank, is necessarily isolated, and when such treatment is suggested by constructive conditions, as in the case of a draw, it need not be unduly exaggerated. In most cases the merit of a bridge is in its long horizontal reaches, its repetition of spans, and the introduction of perpendicular motives is unnecessary. On the other hand, the ends, or approaches, of bridges admit of admirable monumental treatment, and absolute symmetrical treatment of these approaches is not essential. One of the most effective bridges in existence is the old bridge at Prague, which is most unsymmetrical in treatment. Another is the bridge at Heidelberg. The great towers of the new bridge in London are most picturesque, but the length of the bridge is comparatively short, and the towers are but little isolated from the approaches at the ends. On the other hand, the long bridge at Worms, of a similar conception, is ineffective. The ends of bridges should open into spaces or squares, affording ample opportunity for approach and circulation. It is at these points that excellent sites for the erection of monumental buildings occur. An avenue leading to a bridge need not be considered of sufficient importance to warrant the erection of the chief buildings along its sides. There exists also the river frontage. Buildings upon such a frontage are effective under the following conditions:

1. When the stream is narrow and they can be seen from the opposite bank.
2. When they are near the ends of bridges and can be seen from the bridges.
3. When the stream curves, and the planes of the façades are changing to conform with the curve.

In all cases the embankment should be carefully treated on the stream side. A terrace set back from the river, leaving the bank unkempt and rough, abandoned to the accidents of river traffic, is not successful. The Elbe at Dresden is a case in point. It is well, if possible, to have ample space between the façades of the buildings on the river and the embankment, and to keep all wharves and commerce from the frontage, or confine it to defined and isolated points. The treatment of a river-front must be undertaken thoroughly. Half-measures are sure to prove troublesome in the end.

In one essential, American architecture has been peculiarly deficient—that is, in the monumental treatment of grades. Abrupt changes of grades are not obstacles, but opportunities. We have been abundantly satisfied if our buildings were planted, not set—that is, if the surface were levelled for them and they had no apparent connection with the ground on which they were placed. The Capitol is one of the most admirable exceptions to this fault. There is nothing more attractive than walls, steps, terraces, balustrades and buttresses, which are integral parts of most buildings abroad, and which, when the natural grades have not given excuse for their existence, have been deliberately created as necessary setting to the buildings.

In our case in Washington, there is every opportunity for this class of work, and it is of infinite variety and advantage. It can be made to soften too great austerity of design, and to dignify too great license. In many cases, the approaches to a simple inexpensive structure exalt it above a pretentious, but undeveloped, neighbor, and in any scheme for the embellishment of a city too much stress cannot be laid on these important accessories to the higher architectural achievements. Much of the beauty of cities of to-day also is due to judicious laws preventing unsightly structures, especially when these structures are erected by the municipalities themselves. For instance, it is a wise precaution that backgrounds to monuments, sculptural or architectural, should be, so far as possible, agreeable to the eye. There should be, therefore, civic laws which would make it impossible for any large, unsightly building, manufacturing or otherwise, to be erected in proximity to public buildings; that is, the city should have the power of approval or disapproval of the design for such proposed buildings. At present there is in Dresden a large power-house with a huge yellow chimney, being built directly behind the great opera-house, of which Dresden is so justly proud, and which was Gottfried Semper's best work. The Dresdeners have erected a statue to Semper in the square, but they have permitted this intolerable structure to dwarf everything about it.

In Berlin, the great war-monument to Emperor William has for a background a cheap furniture establishment, covered with signs, and a red-and-yellow-brick industrial school. It is proposed to paint out the one and tear down the other, both of which would have been unnecessary if the monument had been well placed. If a monumental avenue is established, it would be well to follow the example of Buda-Pesth in relation to its great Andrássy Strasse; that is,

<sup>1</sup> A paper by C. Howard Walker, F. A. I. A., read before the Thirty-fourth Annual Convention of the American Institute of Architects.

there should be specific laws passed in relation to the façades upon the avenue as to height and character, and the existence of unsightly party-walls should be made an impossibility. If possible, the city should have similar control of the corners at the crossing of all great avenues, and of buildings upon the axes of great avenues. A final, apparently minor, detail, is of the utmost importance.

Every city should control the designs and location of all flag, gas, electric, and trolley poles, of all curbs and drinking-fountains, of all signs beyond a specified size, and of all kiosks. Many beautiful streets and buildings in foreign and our cities are made hideous by signs and kiosks.

These restrictive laws would be specific laws for specific and worthy purposes; they would be unjust to none and calculated to appreciate rather than to depreciate real-estate. Accident and disorder went far to make the picturesqueness of the ancient city. Its time has passed. Order and restraint are essential to the beauty of the modern city.

Thus far are general considerations applicable to all cities. It is now a question as to their direct application to Washington, in order to make it compare favorably with the great capitals of the world. Let us see what those capitals have done with their opportunities. In most cases they are upon rivers, and have taken advantage of the river-banks. In many cases they were walled cities, and when, under modern conditions, these walls were removed, their places have been taken by boulevards encircling the centre of the city. In either and in both cases, public buildings have been placed upon the river-embankments and upon the boulevards: in all cases, bridges have been made monumental. In addition to this, eminences have always been considered as fitting sites for the most noble buildings. In most modern cities in Europe the condition enforced by the already existing remains of the past has made a comprehensive scheme of treatment difficult, and the most that could be done was to make the best of possibilities. Paris and Buda-Pesth are perhaps exceptions; in both cases nothing has been allowed to interfere with a broad, well-studied scheme. Overcoming obstacles and adapting conditions are very apt to add an additional charm to results, and to produce a more attractive, though less formal, city. The different capitals of Europe have treated their problems as follows:—

*London* has chosen to make its river embankment and bridges its chief monumental feature, its great secondary feature being its parks. In no case are there fine vistas or impressive avenues in London, if we except perhaps Waterloo Place and the Duke of York's Column. The river-front is its great architectural effort.

*Berlin* has ignored its river, the Spree, which, while insignificant, could have been made attractive. There has been an effort made at the bridges. The great avenue, the Unter den Linden, is effective when it broadens before the Brandenburg Gate, which is thrown across it. At the other end it spreads into a waste of squares upon which the Opera House, the Palace, the Cathedral, and the old Museum are placed with little regard to grouping. As they are, however, all important buildings, they make a very effective showing despite their careless arrangement.

Outside the Brandenburg Gate is a long, wooded avenue leading through a park to Charlottenburg. At a little distance from the gate, crossing it at right angles, is the new Seiges Allée, or Avenue of Victory, with sixteen exedras on either side, with a marble figure of a Prussian ruler in each, and on either side of the statue busts of his principal subjects. The avenue leads up to the Column of Victory, which is in the midst of a great circular place, on one side of which is the new theatre and on the other the new Reichstag. The scheme of this avenue is fine, but it is somewhat disconnected from the city-plan.

*Dresden*.—Here there is an effort to make the river effective. On one side is the new Finance Building, on the other the beginning of the Brühl Terrace, with the façades of the Arcadeneum and the Art Building. The bridges are fine. The commerce of the river has been allowed to remain between the terrace and the stream, and the effect is the effect of incompleteness.

The group of great buildings in the Schloss Platz, the Cathedral, Museum, Opera and Palace, while having little relation to each other, and no consistent scheme of plan, are like those in Berlin, from their importance and the fact that no mean environment appears, most effective.

*Madrid*.—The river is unconsidered; the Palace alone is well placed and effective.

*Rome*.—The river is now being edged with embankments and boulevards which some day will be attractive. The bridges are strong, vigorous and effective.

The magnificent scheme of approach to St. Peter's, one of the greatest architectural *tours de force* in existence, is too well known to need long description. The equally fine Plaza del Popolo, with the Pincio at one end and the new bridge leading to a long avenue and to St. Peter's, is the second great piece of architectural planning in Rome. All avenues in Rome have a terminal group of buildings, and its vistas are extremely fine.

*Buda-Pesth* is exceptional, inasmuch as it is essentially a modern city, and has been laid out upon a well-devised scheme, especial attention having been paid to the river-front and to the bridges, and a great boulevard, the Andrássy Strasse, being carried out to the pleasure-parks. Upon the embankment only large and important buildings have been erected, with long façades; in fact, in the entire length of the river-front, over a mile in length, there are but twenty-three façades, so that the importance and length of each can be imagined. In addition to this, the embankment is planted with trees, and

is devoted to foot-passengers only, carriages being stopped at the points where the streets and avenues debouch on the embankment. On the opposite side of the river, in the old town of Buda, rises the Palace, terrace after terrace, finely placed and set.

The Andrássy Strasse has harmonious buildings its entire length, there having been control of the design of the façades by the municipality.

*Brussels*.—The old mediæval square is one of the finest in Europe, but it has no connection with the plan of the modern city. There are two sets of boulevards—one around the city, occupying the site of the old walls, the other across the city, where the old canal formerly served for commerce. The other set is too far from the centre to be important. The cross boulevards are about thirty-five years old, and prizes of from 1,000 francs to 4,000 francs were offered for the best designs for façades. Many buildings were built from these designs, and the result is pleasing but not especially monumental. There are few effective terminations and vistas. The far-famed Palais de Justice, one of the largest buildings in the world, and certainly one of the worst architecturally, is well placed on an eminence, but with very poor approaches—bare and crude. The great Rue Royale leading to it has some good façades upon it, but they are juxtaposed to badly-designed mercantile buildings, and there is, therefore, no effect of *ensemble*, as in Berlin, Dresden, Vienna, Paris or Buda-Pesth. The Palace is on a parked square, and is mediocre.

*Frankfort*.—Another city with interesting ancient central square, now left at one side, new boulevards taking the places of old walls, and in other respects a city of broad avenues with occasional monuments and fountains; not especially interesting.

*Florence*.—With its fine mediæval square apart, new boulevards instead of its walls, but without interesting buildings upon them, but with excellent bridges and good embankments on the river Arno.

*Prague*.—Apart from occasional old buildings, its entire interest centres upon its embankment, its fine bridge, and the magnificent situation of the Cathedral and Hradchin, or palace, on the heights across the river. The Cathedral is not a great one architecturally, and the Hradchin is commonplace to the last degree, but their size and situation make them most impressive. The bridge is very elaborate, with end towers and arches, and heavy buttresses and high groups of statuary on its sides. It is extremely monumental.

*Vienna* has not made much of the embankments of the Danube, though work to that end is now in progress. On the other hand, its Ring Strasse, a very broad boulevard around the city in place of its former walls, is a very fine performance. All the principal buildings are on this Ring Strasse, and as its direction changes every few thousand feet, they are seen at the ends of vistas and at all points-of-view. They are vast in dimensions and in most cases fine in design. The famous Prater is a great avenue through a wooded park, and, like all others of its class—such as the Avenue du Bois de Boulogne, the Thiergarten Avenue, the avenue at the Hague, the Cascine in Florence, etc.

*Paris* has taken advantage of every inch of its river-bank, and by the fine scheme of the Champs Elysées and the gardens of the Tuileries terminating at one end in the Arc de Triomphe and at the other end in the Louvre, and by the series of radial avenues from the Arc de Triomphe and the Avenue de l'Opera, has created a series of architectural vistas unequalled in other cities. The restrictive laws in regard to buildings and the careful control of designs of monumental work in Paris is greater than elsewhere, and the effect is manifest in the streets of the city.

It is apparent that the most attractive cities are those where some broad and comprehensive plan of treatment has been conceived and adhered to, and where, if poor surroundings or inferior architecture forced itself into prominence, its effect was minimized either by planting-out with trees or by interrupting continuous vistas by a monument or building. Also, that in many cities the most attractive feature is merely a collection of the most important buildings, even if these are not planned in relation to one another. It is not necessary to be enamored with the idea of magnificent distances. It is not within the capability of human effort to make all things in the range of vision agreeable to the eye. Let us minimize the difficulties and shorten the range of vision. A great city resembles an articulate animal; it is made up of a number of parts jointed to each other. It grows in that way. Each part must, however, be complete in itself, though subordinate to the general scheme. Let us apply this reasoning to Washington. By looking at the old plan of the city it is seen that there was a marked and definite initial scheme. Two great centres were created, one the Capitol, the other the White House; from these radiated the avenues, like spokes of a wheel. The main axes, however, of these buildings, which were at right angles to each other, were broadened into great parks extending west from the Capitol and south from the White House to the river—the park from the Capitol being naturally much larger than the other. It was manifestly first intended to erect important public buildings upon either side of this long park; in fact, they are indicated on the plan. This would have created a great National Court of Honor. In some ways it may be regretted that this scheme was not carried out; in others it may be the better in the future that it was not, as the plan was unnecessarily formal and uninteresting. There was, apparently, never any well-considered treatment at the crossing of the axes of the parks. At present the great Monument is, then, not exactly on either axis, but sufficiently near for all purposes. The scheme went entirely to pieces when it approached the water-front, undoubtedly for good reasons, as the water-front was not established. This great

scheme is still the base for the architectural treatment of Washington. It cannot be ignored. It is perfectly apparent from both the Capitol and Executive grounds and from the river. What up to this time has been done with it? It is perfectly evident that the original intention was that the White House should terminate the vistas of New York and Pennsylvania Avenues, which vistas are now closed by oblique views of the Army and Navy Building and the Treasury Building. At this point, therefore, the conditions are changed and fixed. The Executive grounds are left open and intact to B Street. It is well they should remain so. The long park to the Capitol is largely untouched. It is crossed by 3d, 4th, 6th, 7th, 12th and 14th Streets, and is thereby divided into the public gardens—Armory Square, Smithsonian grounds, Agricultural grounds and Monument grounds. These have received surface-treatment only as natural parks, and no formal treatment, even of paths, while it will be remembered the original treatment was extremely formal. The only buildings erected are on the southern side of the park, and, beginning at the east, are as follows: Fish Commission, Medical Museum, National Museum, Smithsonian Building, Agricultural Building. They bear no relation to each other, but from east to west are gradually pushed forward towards the central axis of the park. They do not, however, in any way interrupt it or interfere with it, and can be so far isolated by trees that they in no way conflict with each other. So that these buildings may not be disturbed (they are, to an extent, venerable and have traditions): all treatment of the park up to the Monument grounds should be entirely upon the central axis and confined largely to surface treatment; that is, to central fountains, monuments and formal reaches of path accenting the axis, and flanked by statues or exedras.

I do not know to what extent it is desirable to erect future buildings on these grounds; they are eminently fitted for them, but if they are to be erected they should be placed on the northerly side, opposite the existing buildings and on their cross-axes. When the Monument grounds are approached the problem assumes larger proportions. The Monument is now alone. An obelisk is impressive from its simplicity and size, and is even more impressive from a distance than near at hand. Especially is it desirable in the case of an obelisk of as great size as is the Washington Monument to have buildings near enough to it to indicate its relative scale. All the great obelisks were, and are, associated with monumental buildings. Those in Egypt were placed before the pylons of the temples. In the Piazza of St. Peter's, the Piazza del Popolo, and in front of Santa Maria Maggiore in Rome, and on the Embankment in London, the obelisks are grouped with architectural backgrounds. There is, therefore, no objection to be made to the erection of buildings on the Monument grounds on the score that they will detract from the impression made by the Monument; they will, on the contrary, enhance it. In what way should buildings be placed on these grounds? Certainly, no large masses should intercept the view of the Monument from either the Capitol or the White House; therefore no large masses should be on the axes of these buildings between them and the Monument. This does not, however, forbid the construction of open colonnades or monumental groups on either side of the axes. Towards the river both axes should be brought to an adequate termination. In fact, looking from the White House south towards the river, the problem is not unlike that of the Court of Honor at Chicago, looking from the Administration Building towards the lake—only here distances are much more vast and methods of treatment must, therefore, be much more comprehensive.

The chief architectural problem is, without doubt, at the crossing of the axes of the Capitol and of the White House. Here should be the nucleus for future architectural effort, and the Monument is sufficiently great and simple to be in no wise injured by the proximity of buildings. The White House vista will extend to the river; the Capitol vista may or may not, as conditions will decide. At all events, the axis will be cut across in some way at the continuation of Seventeenth Street. Between Seventeenth Street and the river, westerly, may be left as park-land, securing an uninterrupted and extremely effective view of this bridge from the Monument grounds. If buildings should be erected on this land, they should be so placed that they will not intercept the view of this bridge from the Monument grounds. The river-bank, southeasterly from the end of New York Avenue, admits of unusually fine landscape, terrace, and balustrade treatment, leading up to buildings on the Monument grounds, and effective from the river, and it is difficult to imagine that more space should be required for any future public buildings than is to be found at the corners of the Monument grounds and on the northerly sides of the Agricultural and Smithsonian grounds.

In every American city, without exception, the effect of the public buildings has been lost by their separation and isolation. This is as true of colleges and institutions as of Government and municipal buildings.

The power of correlation of co-operation is as great in artistic effect as it is in practical action. There is a close relation between aesthetics and mechanics, and they have been too long divorced.

The concentration of the chief buildings of a city in its acropolis or market-place is what has made the architectural grandeur of Athens, Florence, Venice, Buda, Moscow, and Paris. Imagine the grouped buildings of these cities separated and isolated in obscure places, and you go far to destroy the wonders of the world. On the other hand, imagine, if you can, the isolated best buildings of New York or Chicago, or of Washington, brought together into one group, and, incongruous as they might be, they would be worth long

travel to see. This, however, it is impossible to compass, but it is possible to consider the fact in future building, and it is also possible to unite existing buildings by arcades, colonnades, or even formal avenues of trees with balustrades and sculpture. It is a mistake to consider these of secondary importance. And we should not too much eliminate foliage. Only the great arteries of a city require unobstructed street surface. Elsewhere boulevards and squares are all the better for having grass and trees, and such planting and setting in connection with public buildings is most attractive. There is, as we know, an unusual opportunity to make our Capital compare with the other great cities of the world: the will is not wanting, neither do I believe is the ability to secure the wished-for result.

## THE LATE PARIS EXHIBITION.—II.

### RETROSPECTIVE NOTES FROM A NOTE-BOOK.

OF the making of furniture there is no end; but it is interesting to note certain facts connected with this trade. In France, the taste of the three Louises (XIV, XV, XVI) still prevails, the modern exhibits reproducing the retrospective specimens. The latter are many and various, by Boule, Gouttière, Riesener and their schools, the collection hailing from the Garde Meuble—the contents of the old palaces—and from some private sources. But, although these styles prevailed in most of the French (modern) exhibits, we found in the Indo-China pavilions at the Trocadéro a clever combination of the eighteenth-century European (French) style with the native Chinese. Every one knows the general ugliness of Indian and Chinese furniture, but it is an ugliness of form only; the decorative part is mostly rich and beautiful. Now, it seems to have occurred to the French nation alone that a happy combination of these two elements might be successful. Thus we have wardrobes, chairs, bureaux, bedsteads, all manner of furniture of French form, inlaid with encrusted mother-of-pearl and enamel work, in the most exquisite Oriental taste. Embroideries—satin, silk and woollen fabrics—are treated in like fashion.

Cashmere exhibited some furniture of a different character—white-wood ornamented with designs in color similar to those on the Taj Mahal at Agra, and highly varnished. These are very cheap and very beautiful. Naturally all were sold at once, but, oddly enough, whereas in the Italian Palace exhibits were stuck all over with strings of cards marked "Vendu," here in the Indian Court nobody seemed able to help you to procure more of these exquisite productions from Cashmere! Are the French better masters and exploiters of Oriental craftsmen than the British, when the improvement and nursing of art industries is necessary and desirable?

The buildings on the Trocadéro, being reproductions of houses in the French and Foreign Colonies, were many of them charming. Spain gave us the Alcazar and a Spanish street, the former being, without doubt, the most beautiful tower architecturally in all Paris: seen from every point-of-view far and near, from the height of the Autenil bridge or from the level of the quay at Passy, under every condition of light, and especially clothed with reflected gold from the setting sun, it was such an ornament, such a work of beauty that one cannot but wish it might have stayed with us. And what a contrast is this graceful art of the fifteenth century to the mighty tower across the river, the successful and not especially ugly product of nineteenth-century engineering—the one modest in its perfection of form and color; the other aggressive and rejoicing in its persistent domination over all its brother towers and spires.

Nothing could exceed the ingenuity with which so large a part of the city was requisitioned by the Exhibition builders; and the beauty of the Trocadéro pavilions will always remain a pleasant memory to all who saw them—especially the Chinese corner of the garden, with its brilliant yellow and green gates, its red-and-green pagodas and houses. So, too, the Japanese houses, and the reproduction of the huge Cambodian Pagoda of Pnom-Peuh on the top of a hill, to which a long flight of steps ascended. Lake-dwellings, Indian, Dahomian and other strange buildings were jostled about the garden amongst its streams and arcades. It was all exceedingly pretty, and especially at night with the innumerable lanterns; indeed the whole show gained by the mystery of night and the fascination of colored lamps. But when all has been said in praise of the 1900 Fair, there remains a feeling that it would have gained in general effect by concentration, and if we compare the photographs of the Chicago Exhibition with those of the Paris one, we cannot but admit that there was a grandeur, a nobility, a sober dignity about the buildings upon the shore of Lake Michigan which those bordering the Seine did not possess. Chicago kept to Classic models; Paris in the Champ de Mars and Place des Invalides ran riot in ornamental confectionery. Most exhibitions err more or less in this way, possibly from the necessity for innumerable pinnacles from which to fly flags, and the equally necessary use of iron. Where the iron is hidden, the Grand Palais façade is fine; but where iron and glass assert themselves in the roof, this fine effect is marred. The most beautiful part of the Grand Palais is the circular vestibule, with its wide flight of steps, and its exquisite sculptures.

In the principal Japanese pavilion, a very rich collection of old lacquer and arms was exhibited, as well as some pictures of large size. One of them, representing scenes in Japanese domestic life, (some 8' x 5') was singularly beautiful. The artist, Ontamaro, has

<sup>1</sup> Continued from No. 1301, page 69.

placed in the foreground a terrace in perspective. On this are some women playing various instruments, and in the background, a piece of water, bounded by hills, on which a fleet of sailing-vessels is riding at anchor. Another work representing Saints (?) with nimbi, in black and white, by Motonoba-Kano-Kazunobue (1816-63), came from the Temple of Rei-oun in Kioto. Landscapes by Miyaké, a more modern painter, were interesting as showing European influences, without destroying the national characteristics. The native conventionalities have disappeared in these examples, but only to be succeeded by a closer study of nature. The aerial perspective of European art has taken the place of Japanese conventions; but the dexterity of the brush so peculiar to Japanese artists still remains. The portrait of an old man was a marvellous example of the assimilation of the characteristics of European methods of painting with the Oriental style of portraiture. This work is as strong as a Baudry; but for all that, it is as Japanese in character as the flat paintings on decorative panels or screens.

To the archaeologist, few of the artistic works of former times sent to the Exhibition equal in interest the Treasury of Petrosia, taken by Athalaric in the eighth century, and lent by the King of Roumania on condition that it should be housed in the Louvre for safety. It may be compared with the Greek and Etruscan jewellery in the same room, and with the mitre-shaped tiara which was given to King Saitapharnes by the people and senate of Olbia. In refinement these treasures do not equal the finest Greek work, being somewhat barbaric in design and decoration, and they may be classed with the treasure found in the so-called tomb of Agamemnon at Mycenæ, reproductions of which in *galvano-plastique* were shown in the Greek pavilion. These must date back to 1500 or 1200 B. C., and it is surprising to find how superior this early work is to our modern goldsmiths' productions. The ancients possessed gold in larger quantities than we, probably, and yet their innate taste prevented them from esteeming weight of precious metal the principal attraction. Yet it must be admitted that a great deal of the modern French jewellery presented a very fine appearance both in design and decoration; and probably it is a fact that if there were a greater demand for artistic work in silver and gold and precious stone, the men would be found to produce a supply. But it must never be forgotten that ancient art of all kinds owes its success in a great measure to forced labor, i. e., slave labor.

The Mycenæ treasures consist in the mask of a man with long eyes, clean-shaven chin, moustache and beard; two cups decorated with lions (of which Homer sang) from the tombs of the Kings of Sparta, and a sword and dagger in *nello*, with ivory handles.

Of the Fine-Arts Section of the Exhibition one may be allowed to express some disappointment. The main idea of the Commissioners being to exclude from exhibition in the Centennale what had been seen in 1889 they were debarred from re-exhibiting many of the finest works of the French school. Some of course reappear, having been transferred from the '89 D cennale to the 1900 Centennale. But when one remembers the Barbizon-school exhibits in the former exhibition, one cannot but lament that some of them have not reappeared. Corot, for instance, was seen this year principally as a figure-painter, by studies made in his young days in the studio. But these *atelier* sketchings, although interesting historically, are not what we love in our Corot. (By the way, visitors to Rouen should not pass by the museum. Not only is Puv s de Chavannes's great fresco there, but also two most perfect and superb Corots.) Daubigny was represented by a splendid snow landscape—a most perfect study of this phase of nature; and the same may be said of Millet's "Voyageur," a traveller fighting his way across a heath in torrents of rain and battling with a tempestuous wind. The Daubigny obtained the *M daille d'honneur* in 1875.

One of the revelations of 1900 was the work of Daumier. As a caricaturist and illustrator of books, we all know him; but as a painter, I think, he is unknown out of his own country. The extraordinary vitality, the effective light thrown upon his figures, is startling. That he took much from Goya may be surmised, just as both of the older men have evidently influenced M. D gas and his friends; but for true impressionism, we may point to Daumier as the master. "Le Drame" illustrates with extraordinary intensity the various passions influencing a crowd of people; and as to his doctors, barristers and "La Malade Imaginaire," nothing can be more perfect as character studies.

Another surprise is Delacroix's "Still Life," a study of a lobster, a hare and a pheasant; and a sketch of two Indian men, done by half a dozen skilful strokes of the brush, is a marvel of handling. Trutat (1824-48) is a name which should be noted in case any of my readers should come across it; the work—several studies of heads full of "go," most dexterously painted in. Bastien-Lepage's "Sketch of the Prince of Wales and Sara Bernhardt," the well known (shown in the Ville de Paris pavilion), only made one pine for more by this great artist.

But what of the more modern Frenchmen? As we wandered along those ill-lighted galleries, one's reflection could not be otherwise than that the Centennale rooms contained better examples of the great men of the day than the D cennale—that is, of course, inevitable, as middle age is the best period, intellectually, of most men's lives. There were many old friends to welcome: M. B raud's fine "Descente de Croix," and his "Madeleine chez le Phariseen," less impressive and less dignified in feeling, but full of a character of its own; one can trace every passion, good and bad, upon the features of those guests of the Pharisee; you could even ticket each

man with one or other of the deadly sins, and a very few with some of the cardinal virtues.

M. Benjamin-Constant's portrait of "Queen Victoria" is dignified and queenly; he has treated a difficult subject with success, and possibly may be able to improve the likeness.

A delightful panel of wall is filled by the refined and dainty art of M. Boutet de Monvel, the master *par excellence* of the science of modelling with the least possible amount of paint.

Satire, and truthful satire, is illustrated by the remarkable picture by M. Debat-Pousan "Le Christ sur la Montagne" (S. John XIII). On one side a line of warriors and persecutors, many of them those whom history tickets as "great," fades away into a distance of burning towns and villages. In the centre another line of slaughtered men, women, and children retires into the distant flames, while on an eminence to the right stands Our Blessed Lord sorrowing at the apparent failure of His teaching. Here is a lesson which M. Debat-Pousan is not, by any means, the first to inculcate. And yet, after two thousand years we are all in the same boat as those distinguished brigands; we waste our millions on slaughtering our fellowmen; we hate each other, we display every evil passion (as nations)—envy, hatred, and malice—and the only redeeming quality of our wars, certainly a great one, is our care of the wounded, the sick, the suffering and the innocent non-fighters. But the French artist will pipe in vain, as the Russian has piped; and it is doubtful if men will ever be just enough to one another to substitute civilized arbitration for barbarous war.

But after passing by works by MM. Gervex, Bonnat, Flameng, Harpignies, Henner, Lhermitte, Carri re, Richemont, Morot, Olive, Rixens, Montenard, Roll, Dupr  and a host of others, one cannot but give the palm to Paul Baudry. His "Charles Garnier," for luminosity, color and form, is one of the finest portraits in the exhibition; nothing could be more exquisite than the little portrait with a green background we all know so well, a marvel of light—a veritable *chef-d'oeuvre*.

It is impossible to name a tithe of the pictures which merited some notice in all the Section; but few persons will be found, I think, to dispute the fact, that in spite of the fine things exhibited by the artists of America, Great Britain, and in a less degree, of Germany and Austria, and of the interesting advance in things artistic of Russia and the Scandinavians, in spite of these admissions, France remains where she has been since the decadence of Italy and Flanders, the first nation in all that is included in art and artistic industries. In certain products we others may excel—we need only record the names of Tiffany and Powell as examples of artistic glass-workers out of France; but speaking generally of the fine-arts and of decorative arts, France still holds the palm for skill, knowledge and taste, however much we others may have advanced in the last thirty or forty years. S. BEALE.

#### NEW YORK STATE ARCHITECTS' REGISTRATION LAW.

AN ACT TO REGULATE THE PRACTICE OF ARCHITECTURE.

**SECTION 1.** *The people of the State of New York, represented in Senate and Assembly, do enact as follows:* Within sixty days after the passage of this act, the Governor of the State of New York shall appoint nine persons to constitute the New York State Board of Architects. The nine members of the State Board of Architects first appointed by the Governor shall divide themselves by lot into three classes of three members each. The first class shall serve for three years, the second class for two years, and the third class for one year from the date of their appointment, and thereafter there shall be appointed by the Governor, each year, three persons to serve three years to supply the place of the class retiring. Appointments necessary to fill vacancies which may occur in any of the classes shall be made by the Governor within sixty days after the vacancy has occurred. All appointments shall be made in writing and shall be filed with the Secretary of State. The members of the Board shall serve without compensation or reimbursement for their services and expenses except as hereinafter provided.

**SEC. 2.** The members of the New York State Board of Architects shall, before entering upon the discharge of their duties, take and file with the Secretary of State the constitutional oath of office. They shall annually elect from their number a president and a secretary, who shall also be treasurer, to hold office for one year.

**SEC. 3.** The Board may adopt rules and regulations to govern their proceedings not inconsistent with this act. The Board may adopt a seal, and the secretary shall have the care and custody thereof, and shall keep a record of all proceedings of the Board, which shall be open to public examination.

**SEC. 4.** Six members of the Board shall constitute a quorum, but the Board may delegate the examination of applicants to a committee of less number to report the examination to the Board.

**SEC. 5.** Special meetings of the Board shall be called by the secretary upon the request of any two members by giving at least five days' written notice of the meeting to each member. The New York State Board of Architects, with the approval of the Governor of the State of New York, may adopt rules and regulations for the examination and registration of applicants for registration to practise architecture in accordance with the provisions of this act, and may amend, modify, and repeal such rules and regulations from time to time.

**SEC. 6.** The Board shall immediately upon the election of each officer thereof, and upon the adoption, repeal, or modification of the rules and regulations for the registration of applicants, file with the Secretary of State, and publish in at least two architectural journals, the name and post-office address of each officer, and a copy of such rules and regulations, or the amendment, repeal, or modification thereof.

SEC. 7. Provision shall be made by the State Board of Architects for holding examinations of applicants for registration to practise architecture at least once a year, if there shall be any application therefor, in each of the judicial departments of the State, and any person over twenty-one years of age, upon the payment of a fee of five dollars to the Board, shall be entitled to enter any examination appointed for determining the qualifications for such registration.

SEC. 8. If the examination of any applicant shall be satisfactory to a majority of the Board, a certificate shall be issued to the applicant authorizing him to practise the profession of architecture, upon payment of an additional fee of fifteen dollars. A person who shall at the time of the passage of this act be engaged in the practice of architecture in this State shall be entitled to registration without fee or examination, on presenting to the State Board of Architects an affidavit to that effect, or a certificate from a similarly constituted board in another State. Each person registered shall cause the same to be recorded in the clerk's office of the county of his residence, or, if a non-resident of the State, in the county in this State in which he shall have an office, and the clerk shall record the same upon payment to him of his fees at the same rate as for recording a deed. Upon every change of such residence or office from such county to another county in this State, the holder of such a license shall cause the same to be recorded in like manner in the clerk's office of the county to which such residence or office shall be changed.

SEC. 9. The Board shall keep on file in the office of the Secretary of State a correct list of all registered architects. Any certificate of registration so granted or obtained by affidavit may be revoked by the State Board of Architects for gross ignorance, recklessness, or dishonest practices of the holder thereof, but before any certificate shall be revoked such holder shall be entitled to at least twenty days' notice of the charge against him, and of the time and place within the county of his residence of the meeting of the Board for hearing and determining of such charge.

SEC. 10. For such purpose the Board shall have the powers of a court of record, sitting in the county in which their meeting shall be held, and to issue subpoenas and to compel the attendance and testimony of witnesses. Witnesses shall be entitled to the same fees as witnesses in a court of record, to be paid in like manner.

SEC. 11. The accused shall be entitled to the subpoena of the Board for his witnesses, and a reasonable opportunity to produce his witnesses before them and to be heard in person or by counsel in open public trial; and no certificate shall be revoked except upon the unanimous vote of all members of the Board. If a person shall pursue the practice of architecture in this State, or shall engage in this State in the business of preparing plans, specifications and preliminary data for the erection or alteration of buildings, or shall advertise or put out any sign, card, or drawing designating himself as an architect, having an office or doing business within this State without a registration therefor, in accordance with the provisions of this act, he shall be guilty of a misdemeanor, and upon conviction, shall be fined not less than \$50, nor more than \$500.

SEC. 12. But nothing herein contained shall be constructed to prohibit any person in this State from acting as designer of his own building, or as designer for any person employing him with full knowledge on the part of such employer that the person so employed is not a registered architect in accordance with this act; nor to prohibit architects residing in other States and not having an office or carrying on a general business in this State acting as architect for any building, or from visiting the State for such purpose in person; nor to prohibit students or employees of registered architects from acting for or upon the authority of such architects.

SEC. 13. The registration fees received by the Board may be expended for the payment of the travelling and other expenses of the members of the Board.

SEC. 14. An itemized account of such receipts and expenditures shall be kept by the Secretary of the Board, and a report thereof for each year ending with the thirtieth day of September, duly verified by the affidavit of the Secretary of the Board, shall be filed with the Secretary of the State within sixty days thereafter.

SEC. 15. Any surplus of such fees exceeding \$500 shall be paid annually by the Board to the Treasurer of the State.

SEC. 16. This act shall take effect immediately.



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

THE PALACE OF JUSTICE, ROME, ITALY. PROF. GUGLIELMO CALDERINI, ARCHITECT.

THE unity of Italy with Rome as capital, which had been the aspiration of liberal minds from Dante down to the present day, having been accomplished, the holy city under a free government has felt the influence of modern civilization, and in fact, Rome is now traversing a period of radical changes and if till now travelers have come here from all parts of the world to admire its ancient monuments, silent witnesses of its former grandeur, they will soon come to study and praise also its modern works.

In building, as well as in all the fine arts pertaining to architecture, there has been great progress, and it would seem that the newly acquired liberty has revived the study of science and art in a people who gave Michael Angelo and Galileo to the world.

And with the Monument of Victor Emanuel, which when completed will contain innumerable art treasures, with the Palace of Justice, the Policlinico, the new Parliament Houses, and many other

notable edifices all in process of construction, Rome shows, as well as all of Italy, that the spirit of enterprise of her ancestors is not yet extinct and that Latin activity was not entirely destroyed by the invasion of the barbarians, who retarded so long the regular development of civilization in Italy.

The monument that Rome has decided to dedicate to Justice would be sufficient in itself to convince us of this, and it was a happy thought, the erection of this sumptuous though severe piece of architecture, which will fitly represent the ancient temple of Themis, where many memorable sittings of art and justice took place. For this conception all merit is due Giuseppe Lanardelli, an eminent member of the Roman bar, who, as minister, revised the Roman laws, adapting them to the new form of government, and, as a worthy close to his masterly labors, conceived and initiated the work of the erection of the Palace of Justice.

Conquering the many petty obstacles and the serious differences existing between the city and the Papal Government, he secured a suitable site for the colossal building, and in the presence of the royal family, on March 14, 1889, that site, measuring 670' x 575', was dedicated. Programmes were immediately given out for the whole work and after passing through various ministries, it was finally awarded to Guglielmo Calderini, Professor of Architecture at the Pisa University, who now dedicates the greater portion of his time to the work.

There was much justifiable curiosity as to the style of architecture to be employed and it was rightly observed that as the people and national character of to-day have been formed not only from natural tendencies, but also from past influences, so it would be necessary in order to create a pure style of architecture that should fully represent the Italian nation of to-day to keep it in close relation with the architecture of the past, and in this case as connecting-link was chosen that of the sixteenth century, as being daughter of the ancient Roman and representing the period of the Renaissance.

Calderini borrowed from this style the perfect proportions, as a whole, that we admire in the works of Bernini, but avoided the exaggerations and incongruities of ornamentation that marked Bernini's works and more especially those of his imitators. It was the accurate study of this style which enabled Calderini to give to his facade its imposing and severe aspect. More efficient, however, than words are some of the general dimensions to give one an idea of the grandeur of this building. The outside measurement is 590' x 508', the central building has a height of 169 feet, while the height of the side wings is 105 feet, and from these last figures may be obtained an idea of the height of the rooms, these wings being but two stories high. The main walls are of large blocks of travertine and the columns are built up of combined travertine and Brescia marble.

A notable feature in the plan is the large court, which, while contributing to the æsthetic and imposing effect, has been made use of by Calderini to keep the court-rooms entirely independent of each other, a requirement of the programme and a system now generally adopted by European architects in buildings of this class, where the first attention has been given to a proper combination of art and convenience.

Among other requirements was the use of the basement-rooms as dependent offices for the offices on the ground-floor above, where are various offices—the Court of Assizes, two minor courts, a council-hall for lawyers and king's counsellors, each with a direct communication to its respective basement-offices. On the second floor was placed the Supreme Court, the Court of Appeals, the Library and a large hall for public meetings. A new system, consisting in a series of ante-chambers, has been introduced, whereby the public accesses to the courts are kept entirely separated from the private corridors for the judges, etc. These different requirements have been admirably complied with by Calderini, who has had also many other serious technical difficulties to overcome.

On account of the geological formation of the site presenting more than ordinary difficulties, the construction of the foundations became a serious problem. As is well known, parts of the city offer great obstacles to builders, and often in the case of ordinary buildings, where no extraordinary weight has to be sustained, it has been found necessary to dig down as deep as 130 feet to reach solid ground. Calderini employed the system of a general cemented area, which in this case measured 585' x 504'. The cost, though heavy, remained inferior to that by the ordinary method, as, taking into consideration the unusual size and weight to be provided, the excavation would have had to be carried to an extraordinary depth.

The first estimates have been already greatly exceeded, the building being now under roof and 16,000,000 of francs having now been expended. It is now estimated that 26,000,000 francs will be the total cost, and by the terms of the proposals it is to be completed by April, 1902. While many technical difficulties have been overcome, still much remains to be done, and a large field for study yet offers itself to those interested in art, and this building will be a worthy example of the progress that has been made not only in practical life but in art and science by the Italian people.

JAMES GILMORE.

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It is hardly necessary, so well known are the Harvard buildings, to say that the Phillips Brooks House, which is devoted to the religious and ethical well-being of the students, is the building at the left. Our purpose in taking this particular view was to point out how successfully the placing of this building has created one more open-sided "quad," with Stoughton at the back and Holden Chapel on the right.

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**ELECTROLYSIS DAMAGES.**—Electrolysis as a source of danger to gas and water pipes, and to the steel frames of office-buildings in large cities, and the right to recover for resultant damage—a somewhat novel problem—was discussed recently by Judge Carter of the Indiana Superior Court. This was an action by a natural-gas company for \$50,000 damages for injuries to its gas-pipes. The facts as stated by the judge were that the system of operating the street-cars seriously injured, and in some cases destroyed, the gas-pipes, and that the street-car company, by means of an improved appliance, and at reasonable expense, could operate its cars so as to avoid injuring the pipes. It was impossible, however, for the gas-company to protect its pipes. This action of the street-car company the judge characterized as a "seizure" and use of the pipes as a conductor for its return current. The street-car company demurred to the complaint on the ground that the facts alleged by the gas-company did not constitute a cause of action. In deciding that there was a cause of action, the judge said that both companies were lawfully in the street, and that neither had a monopoly, or a right to needlessly injure the other. In such a situation, the judge said, the test of liability depends "on the fact whether the party complained of has made use of means which in the progress of science and improvement have been shown to be the best." Hence, the judge could not see "any difference in principle between a case in which liability attaches from a failure to adopt the best-known device, and one where there is a failure to adopt any device whatever, when there are devices by which the injury could be avoided, and the utility of which has passed the point of being a mere experiment." Supplementing this idea, the judge declared the duty of a corporation operating under a public franchise to do so in a careful manner, as follows: "Where a corporation is exercising a public franchise, and does so in such a manner as to cause actual material injury to legal rights, and destruction of property, when at reasonable expense, by the adoption of well-known and approved appliances, the injury could be avoided, and the person injured is powerless to prevent or guard against such injury, then I think it must be held to be negligence in the use of its franchise on the part of the corporation not to adopt such approved appliances." As suggesting the possible or probable danger from electrolysis, the judge said: "Take the situation in this city. The number and size of the cars propelled through the streets by electricity is ever rapidly on the increase. Suburban lines are coming into the city from every direction, with cars larger than ever before used on the streets, and the currents of electricity which now are, or soon will be, discharged into the earth of the streets are very large, and if it be true, as claimed in some of the cases which I have examined, that these currents not only attack gas and water pipes, but the steel frames of tall buildings as well, and that such steel frames may be deteriorated and weakened so as to imperil such buildings, is there no remedy in the law to prevent it, or to compel the street-railway company to control its return current, when it is conceded that it is reasonably in its power to do so?"—*N. Y. Evening Post*.

**PERRY MEMORIAL FOR JAPAN.**—There is in Japan a movement on foot to mark with a suitable memorial the place of Commodore Perry's landing, a distinguished and influential committee having charge of the scheme. It is likely that it will take the form of a lighthouse on the dangerous Plymouth rocks, at the entrance of Uruga Bay. This beacon is to be surmounted by a bronze figure of the Commodore.—*Exchange*.

**BURSTING OF WATER-TANKS.**—The last monthly report of the Boston Manufacturers Mutual Fire Insurance Company says that "the warning as to the danger of the bursting of sprinkler supply-tanks was given in good time to the members of the Company. A large number of tanks have been examined; the hoops of several have been found in a dangerous or depreciating condition and safeguards have been applied. One complete collapse of a sprinkler supply-tank has occurred during the last month in a Mutual risk not insured by this Company. The account of the inspector is given herewith. There is but one course to be taken to meet this hazard. It is evident that all or nearly all the wooden tanks yet made and now in position have been defective in not having the iron hoops painted or set in paint when the tank was put together.

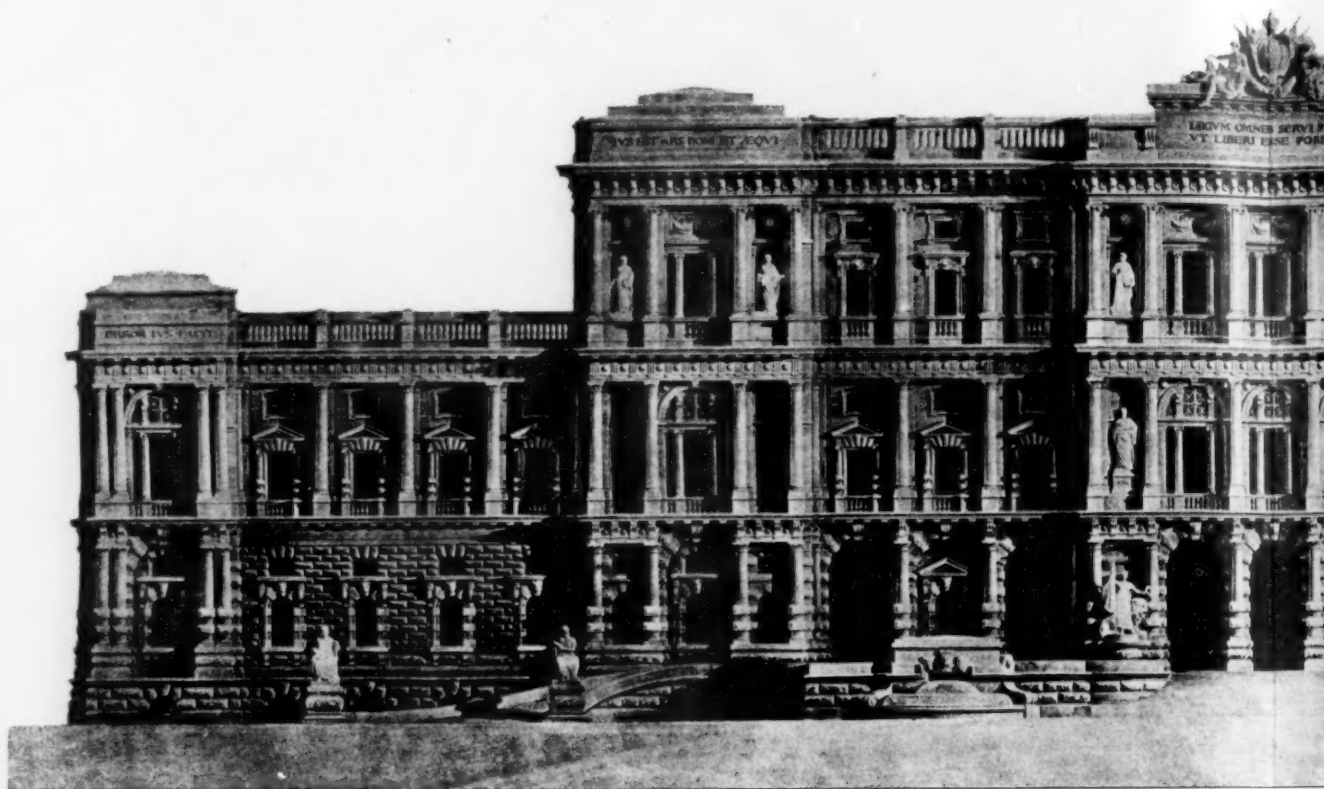
'On November 27, 1900, at about 9.45 P. M., the sprinkler tank in a risk insured among the Mutual Companies, but not by this Company, burst. This tank was the primary source of supply to the automatic sprinklers, and held, with the ordinary depth of water, 8,600 gallons. It was 11 feet 6 inches diameter by 11 feet 2 inches deep, and supported by a 12-foot wooden trestle above the stair-tower in angle of Nos. 1 and 2 Mills. It was erected in 1892, and had been painted four times, the last being in May or June of this year. The next previous painting was in 1898. The staves and bottom were 2½ inches in thickness and held together by nine bands or hoops ½" x 3½". The falling hoops broke two skylights and allowed water to enter and wet down about one-fourth of three upper floors of Nos. 1 and 2 Mills. The principal damage from water is in the fourth and fifth stories of No. 1 Mill. The main body of water descended directly to the yard. No damage was done to trestle or sprinkler pipes, and apparently little to the roof, except the breaking of two skylights referred to above. Seven hoops—all except the extreme top and bottom ones—parted, and eight or ten staves, distributed at four different points in the circumference, were broken 7 to 8 feet from the top. The tank did not fall, but was taken down the following day. An examination shows the inside of all hoops to be covered with a scale of rust of varying thickness, extending in some places entirely through the metal. This undoubtedly caused them to fail, except one which sheared off the two rivets holding it together. The outsides of hoops appear reasonably smooth and the scale of rust maintains the apparent thickness of the metal, so that the defect would hardly be discovered except by a careful examination. There is no paint inside of the hoops. The tank was apparently well cared for and ordinary precautions taken for its preservation. It has never given trouble by leaking. The staves are sound, but being water-soaked kept the inside surface of the hoops continually moist, which evidently accounts for the rapid corrosion. If this inside surface could be treated in such a manner as to prevent this action, the main difficulty would be overcome. The need of careful inspections of all tanks is also evident. A further defect in construction appears in the weakness of the joints of the hoops, which in this instance caused one to fail by the shearing off of the rivets.'

**RECENT DISCOVERIES IN THE FORUM.**—The excavations in the Forum of the last few days have resulted in "finds" of extraordinary value and interest. Among the objects discovered are the following: (1) Two equestrian statues of Castor and Pollux. These statues, which belong to the best period of Grecian sculpture, stood before the Temple of Castor and Pollux. The statues were broken by the barbarians, but all the pieces have been found, and the sculptures can be completely restored. (2) A large Greek statue of Æsculapius. (3) A magnificent Greek statue of Apollo. (4) A Greek bust of Jupiter. (5) Two arches in Parian marble, with Greek bas-reliefs. (6) The Fons Juturna, which belongs to the epoch of Rome under the Kings. (7) The Rostra of the Republic, which every one thought had disappeared. (8) A portion of an aqueduct, dating back to before the foundation of Rome. (9) A prehistoric inscription which as yet has not been deciphered. The most important discovery is that of a great Christian basilica in the Palatine. Magnificent frescoes, marble columns and beautifully decorated sarcophagi have been found. The basilica belongs to the third century A. D.—*The London News*.

**THE COLLEGE OF ÆSTHETICS.**—A new institution, called the School, or College, of Æsthetics, and also the Academy of the Beautiful, has been founded in Paris by a young literary man, M. de Bouheliier. His object is to unite, on a common ground, poets, painters, sculptors, musicians, and all who are interested in the beautiful in art. M. Zola has been nominated honorary president of the new establishment, and he writes a characteristic letter to the secretary, M. le Blond, giving his views on the new foundation. In the first place the novelist remarks that he does not believe in æsthetic instruction of any kind, being convinced that genius grows and develops by itself. As the new college, however, does not intend to impose rules and regulations on its students or members, but only to group them together and encourage them in an atmosphere of sympathy and enthusiasm, M. Zola gives his hearty support to the undertaking.—*Boston Transcript*.

**PUBLIC SHOES FOR PUBLIC SCHOOLS.**—A simple yet valuable suggestion in regard to school hygiene which deserves wide attention has been made by the district government of Cologne. It is to the effect that the country school-boards provide an appropriate number of felt and wooden shoes to be placed at the disposal of the children. By this system those who come from a distance with wet footwear will have an opportunity to exchange it for dry shoes.—*Exchange*.





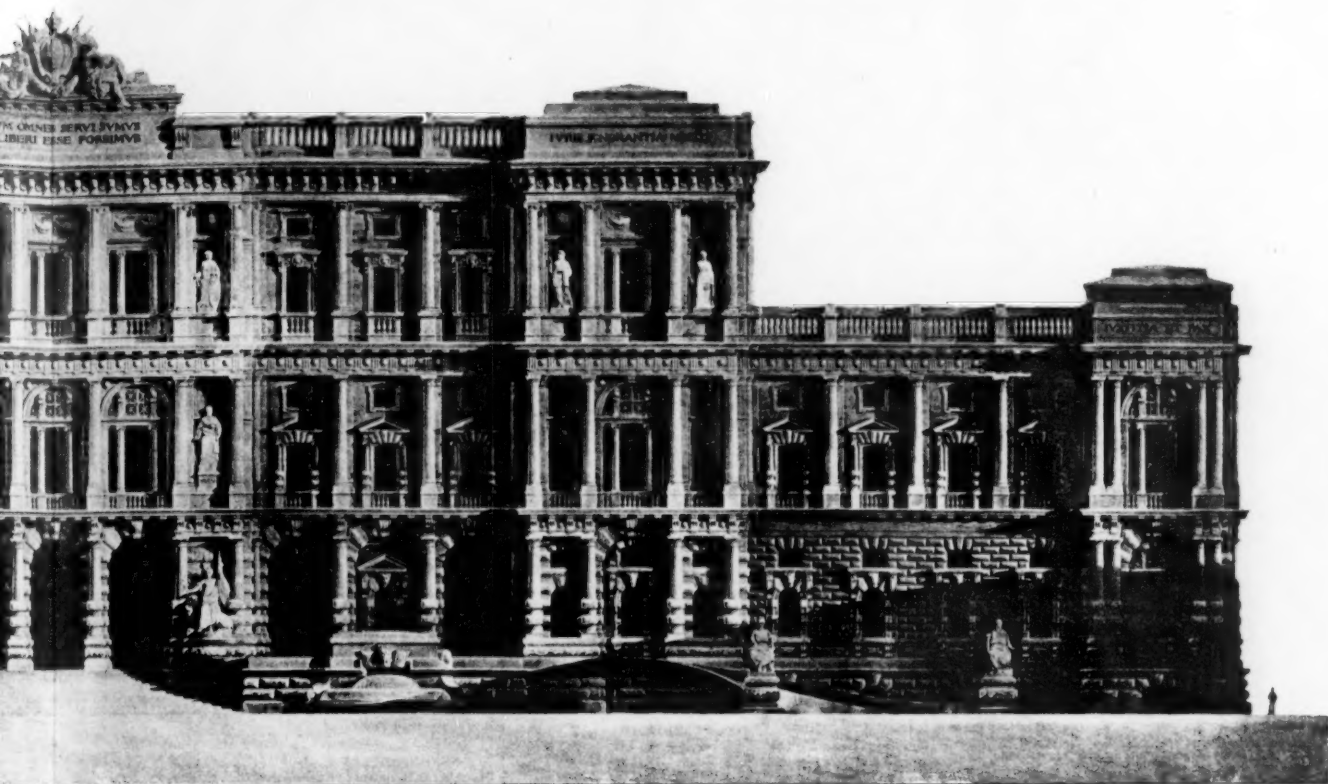
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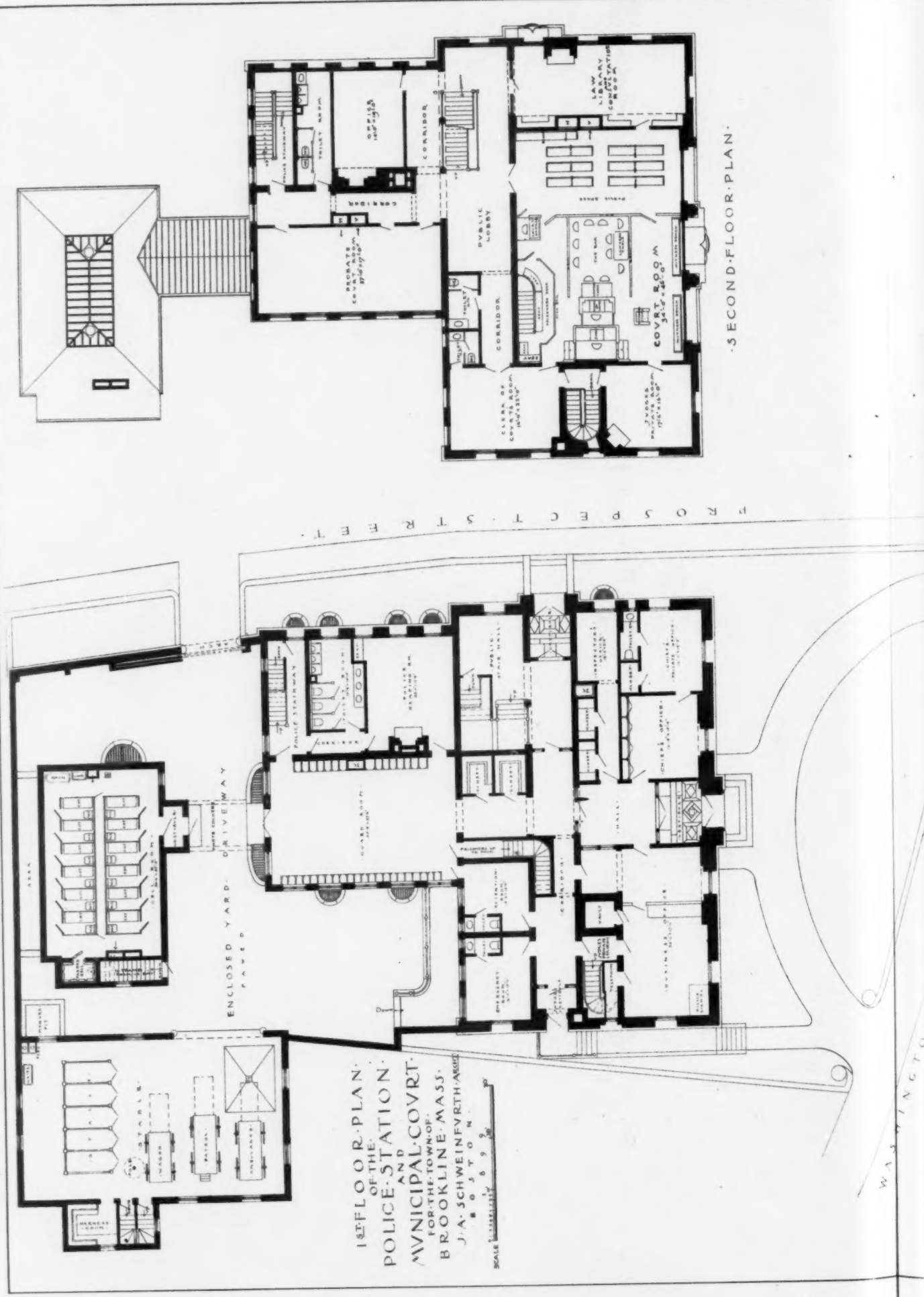


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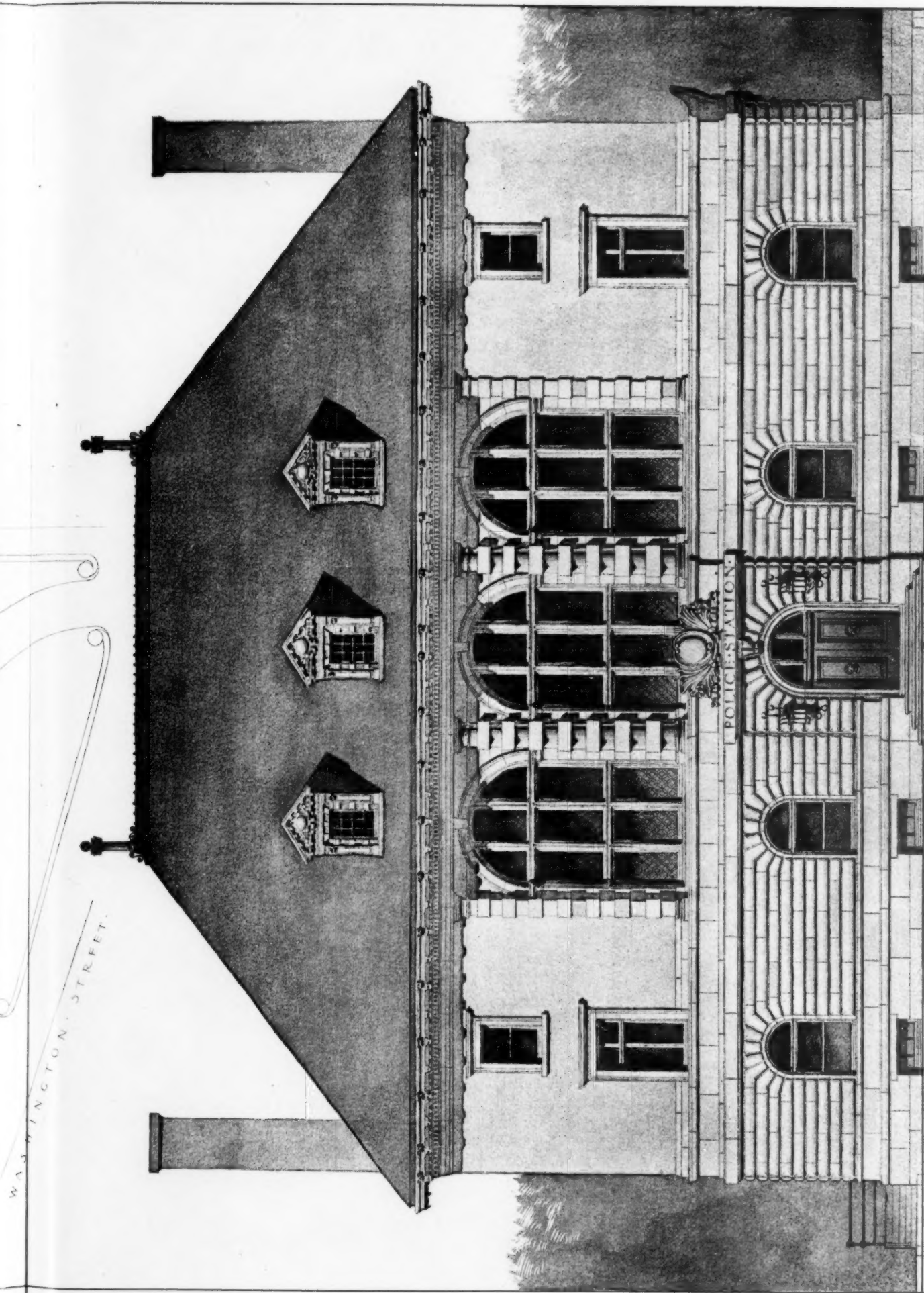
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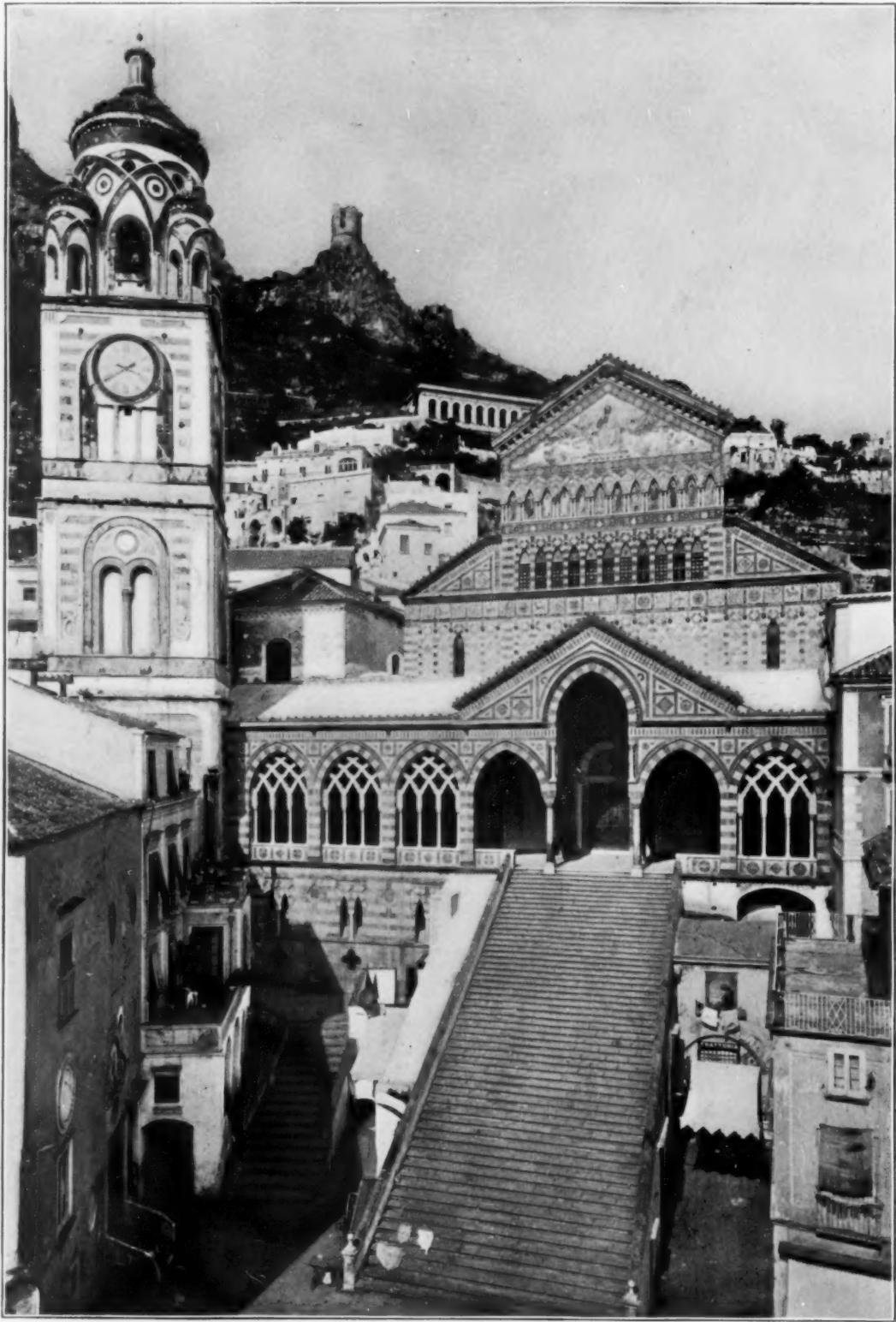
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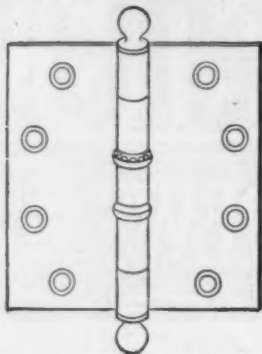
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| Northwestern Terra-Cotta Co.....[Terra-Cotta.                              | NEW JERSEY.<br>Jersey City.<br>Dixon Crucible Co., Jos.....[Graphite. | Gorton & Lidgerwood Co.....[Boilers.                      | Kinnear Mfg. Co.....[Steel Rolling-Doors.                   |
| Peck Brothers Company.....[Furnaces.                                       | PATERSON.<br>Passaic Rolling Mill Co.....[Structural Iron.            | Hayes, George.....[Metallic Lathings.                     | Nelson Co., The C. T.....[Capitals (Carved).                |
| Pioneer Fireproof Construction Co.....[Fire                                | Perth Amboy.<br>Perth Amboy Terra-Cotta Co.....[Terra-Cotta.          | Hitchings & Co.....[Greenhouses.                          | DAYTON.<br>Dayton Automatic Elevator Gate Co.....[Eleva-    |
| proofing.                                                                  | NEW YORK.<br>Brooklyn.<br>Moore, Benjamin.....[Muresons.              | Holophane Glass Co.....[Holophane Glass.                  | tor Gates.                                                  |
| Taylor, J. W.....[Photographs.                                             | Irvington-on-Hudson.<br>Lord & Burnham Co.....[Conservatories.        | Hurd & Co.....[Wall-Ties.                                 | PHILADELPHIA.<br>Electric Storage Battery Co.....[Chloride- |
| Winnow Bros. Co., The.....[Ornamental Iron                                 | Jamestown.<br>Art Metal Construction Co.....[Art Metal                | Jackson Architectural Iron Works.....[Iron Work.          | Accumulators.                                               |
| and Brackets.                                                              | Work.                                                                 | Jenkins Bros.....[Valves.                                 | French & Co., Samuel H.....[Mortar Colors.                  |
| MASSACHUSETTS.<br>Boston.<br>Amer. Mason Safety Tread Co.....[Stair Tread. | NEW YORK.<br>Brooklyn.<br>Moore, Benjamin.....[Muresons.              | Jones, T. W.....[Furnaces.                                | Gara, McGinley & Co.....[Steel Corner.                      |
| Bartlett Lumber Co.....[Redwood Lumber.                                    | Irvington-on-Hudson.<br>Lord & Burnham Co.....[Conservatories.        | Kaufel & Ziser Co.....[Drawing Materials.                 | Harrison Brothers & Co.....[Protective Paints.              |
| Batcher Polish Co.....[Floor Polish.                                       | Jamestown.<br>Art Metal Construction Co.....[Art Metal                | Laughlin-Rough Co.....[Drawing Tables.                    | Loomis Filters Improved System.....[Filters.                |
| Cabot, S.....[Shingle-Stains.                                              | Work.                                                                 | Mott Iron Works, The.....[Iron Work.                      | Maxwell & Co., J.....[Gypsum Water Paint.                   |
| Campbell, Walter M.....[Perspective.                                       | NEW YORK.<br>Brooklyn.<br>Moore, Benjamin.....[Muresons.              | Neuchatel Asphalt Co.....[Asphalt.                        | Merchant & Co.....[Tin Roofing.                             |
| Carter Ink Co.....[Ink.                                                    | Irvington-on-Hudson.<br>Lord & Burnham Co.....[Conservatories.        | New Jersey Zinc Co.....[Zinc White.                       | Morse, Williams & Co.....[Elevators.                        |
| Folsom Snow Guard Co.....[Snow Guards.                                     | Jamestown.<br>Art Metal Construction Co.....[Art Metal                | New York Belting and Packing Co., Ltd.....[Belting.       | Taylor Co., N. & G.....[Tin.                                |
| Gurney Heater Mfg. Co.....[Hot water, etc.                                 | Work.                                                                 | Olden & Co.....[Paint (Roofing).                          | Thorn, J. S. Co.....[Sheet Metal.                           |
| Haberstroh & Son, L.....[Decorators.                                       | NEW YORK.<br>Brooklyn.<br>Moore, Benjamin.....[Muresons.              | Portland Cement Co.....[Portland Cement.                  | Pittsburgh.<br>Scaife, Wm. B. & Sons.....[Filters.          |
| Helixtype Printing Co.....[Art Printing.                                   | Irvington-on-Hudson.<br>Lord & Burnham Co.....[Conservatories.        | U. S. Mineral Wool Co.....[Mineral Wool.                  | Scranton.<br>International Correspondence Schools, The      |
| Lombard & Co.....[Architectural Ornamenta-                                 | Jamestown.<br>Art Metal Construction Co.....[Art Metal                | Warren Chemical & Mfg. Co.....[Asphalt Roofing.           | Architects.                                                 |
| tion.                                                                      | Work.                                                                 | Williams, John.....[Wrought Metal.                        | York.<br>Vapor Steam Heating Co., [Heating Apparatus        |
| New England Felt Roofing Works.....[Roofing.                               | NEW YORK.<br>Brooklyn.<br>Moore, Benjamin.....[Muresons.              | Rochester.<br>Cutler Mfg. Co.....[Mail Chunks.            | Steam.                                                      |
| Sanson Cordage Works.....[Cordage.                                         | Irvington-on-Hudson.<br>Lord & Burnham Co.....[Conservatories.        | Emerson, W. F., Mfg. Co.....[Drawing-Tables.              |                                                             |
| Spaulding Print Paper Co.....[Blue Prints.                                 | Jamestown.<br>Art Metal Construction Co.....[Art Metal                | Syracuse.<br>Dunning, W. D.....[Water.                    |                                                             |
| Whitmer Machine Co.....[Elevators.                                         | Work.                                                                 | Troy.<br>Globe Ventilator Co.....[Ventilators.            |                                                             |
| Cambridge.<br>Lawrence Scientific School.....[School.                      | NEW YORK.<br>Brooklyn.<br>Moore, Benjamin.....[Muresons.              | Troy Laundry Machinery Co.....[Washing Ma-                |                                                             |
| Clinton.<br>Clinton Wire Cloth Co.....[Metallic Lathings.                  | Irvington-on-Hudson.<br>Lord & Burnham Co.....[Conservatories.        | chines.                                                   |                                                             |
| Palmer.<br>Flyn Building & Construction Co.....[Building                   | Jamestown.<br>Art Metal Construction Co.....[Art Metal                |                                                           |                                                             |
| Contractors.                                                               | Work.                                                                 |                                                           |                                                             |

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The matter already illustrated may in small part be classified thus:

## PUBLIC BUILDINGS

|                                          |           |              |
|------------------------------------------|-----------|--------------|
| City Hall, New York, N. Y.               | . . . . . | Date 1803-12 |
| Old State House, Boston, Mass.           | . . . . . | " 1748       |
| Pennsylvania Hospital, Philadelphia, Pa. | . . . . . | " 1755       |
| Carpenters' Hall, Philadelphia, Pa.      | . . . . . | " 1770       |
| Independence Hall, Philadelphia, Pa.     | . . . . . | " 1729       |
| Faneuil Hall, Boston, Mass.              | . . . . . | " 1741       |
| and others.                              |           |              |

## CHURCHES

|                                                 |           |           |
|-------------------------------------------------|-----------|-----------|
| King's Chapel, Boston, Mass.                    | . . . . . | Date 1749 |
| Seventh-day Baptist Church, Newport, R. I.      | . . . . . | " 1729    |
| Christ Church, Alexandria, Va.                  | . . . . . | " 1767    |
| Christ Church, Philadelphia, Pa.                | . . . . . | " 1727    |
| St. Paul's Chapel, New York, N. Y.              | . . . . . | " 1764    |
| Old South Church, Boston, Mass.                 | . . . . . | " 1729    |
| First Church, Hingham, Mass.                    | . . . . . | " 1681    |
| St. John's Chapel, New York, N. Y.              | . . . . . | " 1803    |
| First Congregational Church, Canandaigua, N. Y. | . . . . . | " 1812    |
| St. Peter's P. E. Church, Philadelphia, Pa.     | . . . . . | " 1758    |
| Gloria Dei Church, Philadelphia, Pa.            | . . . . . | " 1700    |
| and others.                                     |           |           |

## IMPORTANT HOUSES

|                                      |           |           |
|--------------------------------------|-----------|-----------|
| Fairbanks House, Dedham, Mass.       | . . . . . | Date 1636 |
| Royall Mansion, Dedham, Mass.        | . . . . . | " 1737    |
| Philipse Manor House, Yonkers, N. Y. | . . . . . | " 1745    |
| Tudor Place, Georgetown, D. C.       | . . . . . | " 179-    |
| Mappa House, Trenton, N. Y.          | . . . . . | " 1809    |
| Woodlawn, Va.                        | . . . . . | " 1799    |
| Mount Vernon, Va.                    | . . . . . | " 1743    |
| and others.                          |           |           |

Incidentally there are shown special measured drawings or large views of the following features and details:

|                      |           |             |
|----------------------|-----------|-------------|
| Porches and Doorways | . . . . . | 54 Subjects |
| Staircases           | . . . . . | 18 "        |
| Mantelpieces         | . . . . . | 76 "        |
| Pulpits              | . . . . . | 6 "         |
| Fanlights            | . . . . . | 60 "        |

In addition to the subjects enumerated above there is a large quantity of measured and detailed drawings of Cornices, Ironwork, Gateposts, Windows, Interior Finish, Ceiling Decoration, Capitals, etc., together with elevational and sectional views of entire buildings.



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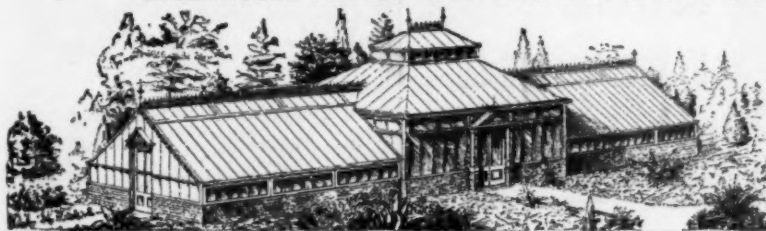
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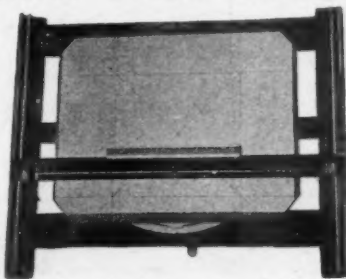
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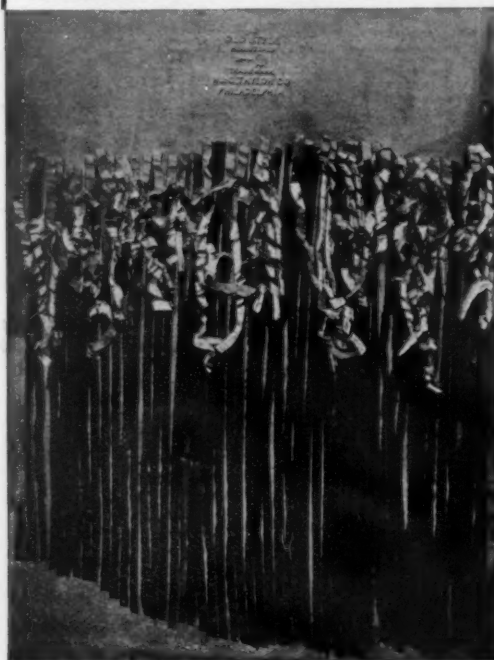
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### BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Cement Co. has been awarded the Structural Iron & Steel Co., of Baltimore, Md.; cost, \$50,000.

**Des Moines, Ia.**—Plans are being drawn by Hallet & Rawson for a three-story apartment-building, with all modern improvements. The arrangement of suites will be similar to those of the well-known Beacon Court apartments in Boston, and, with the land, it will represent an investment of \$68,000.

**Duluth, Minn.**—Architects Tenbusch & Hill have prepared plans for a \$10,000 two-story residence to be erected at the corner of E. 23d Ave. and Superior St. for F. A. Patrick.

**Elizabeth, N. J.**—The Ball & Wood Engine Co., of this city, is enlarging its plant on Trumbull St. When the new addition is finished the capacity of the works will be doubled.

**Fairmount, O.**—The Lunkenheimer Brass Co. will erect a new \$100,000 plant here on a site bounded by Beekman, Tremont, Waverly and Lawway Sts. Plans by Holl & Taylor, Esplanade Building, Cincinnati. The main factory building will be 160' x 200', five stories in height and of heavy mill construction, while the foundry will be one-story and of fireproof construction throughout.

**Jenkintown, Pa.**—Architect Adin B. Lacy, 1020 Chestnut St., Philadelphia, is taking figures for the erection of a \$25,000 three-story and basement brick and stone residence, for John I. Rogers.

**Los Angeles, Cal.**—G. S. Holmes of the Knutsford, Salt Lake City, will erect an \$800,000 hotel at Spring and 4th Sts.

**Mason City, Ia.**—It is reported that 3 buildings will be erected in the spring for the Memorial University of the United States. The main collegiate building will cost \$75,000, without the plumbing or heating. The armory and the administration buildings will cost as much more.

**New York, N. Y.**—The contract for the construction of the foundation of the New York Custom-house has been awarded to Isaac A. Hopper & Son, for \$369,610.

The present settlement buildings at the pro-cathedral having proved inadequate, a meeting was held recently for the purpose of raising a fund of \$103,000 to build a community house on the east side.

Plans have been submitted to the Department of Buildings for a twelve-story brick, limestone and granite hotel, 60' x 89', to be erected on the north side of 45th St., 120' west of 6th Ave., for the Central Realty Co. Henry B. Mulliken, who perfected the plans, estimates the cost at \$310,000.

**Parkersburg, W. Va.**—The First National Bank has had plans drawn for hotel and bank building to cost \$150,000.

**Perth Amboy, N. J.**—The First Presbyterian Church, of this city, of which the Rev. Dr. H. G. Mendenhall is pastor, is to have a new \$25,000 church building. Less than three months ago it was announced that if \$10,000 could be raised by January 1 the church could be built. The last of the \$10,000 was pledged with the close of the year.

**Pittsburgh, Pa.**—A handsome apartment-house, costing in the neighborhood of \$300,000, will probably be erected in this city. Edward H. Glidden has drawn plans, and among those interested are Messrs. Geo. R. Webb, president Maryland Telephone & Telegraph Co.; E. M. Noel, the well-known builder; Louis Yakel, president of the Kohler Drug Co.; Geo. B. Yeakel, vice-president of the Commonwealth Bank. The building will be located at the corner of 5th and Clyde Aves., and will be modern in every respect.

**Poughkeepsie, N. Y.**—Report states that the contract for erecting the two and five-story brick and stone dormitory for Vassar College, has been let to Dodge & Devaney, 180 Columbus Ave., Pittsfield, Mass. Allen & Vance, architects, 220 Devonshire St., Boston, Mass.

**Seattle, Wash.**—The Clise Investment Co. will erect a \$65,000 hotel and business block on 1st Ave. and Seneca St.

### BUILDING INTELLIGENCE.

#### ALTERATIONS AND ADDITIONS.

**Brooklyn, N. Y.**—Eighteenth Ave., nr. 58th St., three-sty' & base, extension to training school, 26' x 30' 0"; \$30,000; o., City of New York, Room 35, Municipal Building.

**Des Moines, Ia.**—W. Fifth St., nr. Grand St., four-sty' addition to hotel, 80' x 132'; steam; \$50,000; o., H. C. Hansen.

**New York, N. Y.**—Twenty-second St., Nos. 10-12, two-sty' extension, 21' x 28'; \$12,000; o., Caroline McCready, 4 E. 75th St.; a., E. W. Grauert, 10 W. 22d St.

#### APARTMENT-HOUSES.

**Chicago, Ill.**—Calumet Ave., nr. 43d St., three-sty' & base, st. front apart., 30' x 100'; \$15,000; o., Harry Homewood, 6606 Rhodes Ave.; a., Arthur Foster, 4310 Cottage Grove Ave.

**Greenwood Ave., Nos. 6312-14**, three-sty' bk. apart., 50' x 73'; \$17,000; o., John Hughes; a., Bishop & Co., 189 La Salle St.

**Stony Island Ave., bet. 62d & 63d Sts.**, three-sty' & base, st. apart., 92' x 100'; \$40,000; a., L. M. Mitchell, 145 La Salle St.

**Detroit, Mich.**—Lincoln Ave., two-sty' bk. apart., 24' x 40', comp. roof, steam; \$20,000; o., Chas. W. Dailey, 44 Lincoln Ave.; a., A. C. Varney & Co., 58-61 Newberry Building.

**New York, N. Y.**—Seventy-ninth St., nr. West End Ave., seven-sty' bk. flat, 92' x 100'; \$160,000; o., Thomas P. Sinnott, 647 Columbus Ave.; a., Edward P. Wenz, 1491 Third Ave.

**W. Eighth St., Nos. 3-5**, eight-sty' bk. & st. bachelor apart., 56' x 93'; \$130,000; o., Edward Jansen; b., Henry Kapka.

**Caulfield Ave., nr. 161st St.**, 3 four-sty' fr. flats, 33' 4" x 83' 6"; \$90,000; o., Max Weinstein, 887 Jackson Ave.; a., Moore & Landsiedel, 148th St. & 3d Ave.

**One Hundred and Twenty-fourth St., nr. Broadway**, 2 seven-sty' bk. & st. flats, 52' x 90'; \$160,000; o. & a., Jno. Caggiano, 508 W. 147th St.

**Broadway, cor. 94th St.**, seven-sty' bk. bachelor apart., 33' x 146'; \$250,000; o. & a., E. and M. A. Bingham, 4 E. 116th St.; a., Neville & Bagge, 217 W. 125th St.

**Madison Ave., cor. 80th St.**, seven-sty' bk. flat, 37' x 38' x 95'; \$175,000; o., David Rothchild; a., G. F. Pelham, 503 Fifth Ave.

**One Hundred and First St., nr. 1st Ave.**, 7 six-sty' & base. bk. flats with stores, 28' x 29' x 85'; \$196,000; o., S. Ginsberg, 176 W. 95th St.; a., M. Bernstein, 245 Broadway.

**Prospect Ave., cor. 156th St.**, five-sty' bk. flat & store, 25' x 84' x 85'; \$24,000; o., L. E. Bates, 39 Kelly St.; a., H. T. Howell, Brook Ave. & 138th St.

**Twelfth St., Nos. 525-527**, 2 six-sty' & base. bk. & st. flats, 25' x 89' 2"; \$58,000; o., Irwin I. Kompner, 35 Nassau St.; a., G. F. Pelham, 503 Fifth Ave.

**Prospect Ave., cor. 156th St.**, five-sty' bk. & st. flat, 25' x 25'; \$24,000; o., Louis E. Bates; a., Harry T. Howell, 138th St. & Brook Ave.

**Grand St., cor. Attorney St.**, six-sty' bk. flat, 20' x 95' 1"; \$30,000; o., A. Goodman, 269 Madison St.; a., M. Bernstein, 245 Broadway.

**Pueblo, Col.**—Tenth St., cor. Main St., three-sty' & base. bk. & st. apart., 85' x 120'; \$40,000; o., Co. A. A. Pope, Boston, Mass.; a., Arthur M. Vinall, Boston, Mass., and F. W. Cooper, Pueblo.

#### CHURCHES.

**New York, N. Y.**—Russell St., bet. Nassau & Driggs Aves., one-sty' bk. & st. church, 50' x 90'; \$20,000; o., English Lutheran Church of the Messiah; a., Dodge & Morrison, 45 Exchange Pl.

#### CLUB-HOUSES.

**New York, N. Y.**—One Hundred and Sixteenth St., One Hundred and Twentieth St., Boulevard, Amsterdam Ave., three-sty' bk. & st. students' club-room, 39' x 100'; \$100,000; o., Columbia University; a., McKim, Mead & White, 160 Fifth Ave.

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#### HOUSES.

**Baltimore, Md.**—N. Charles St., Nos. 1006 1008 four-sty' st. & terra-cotta dwell., 39' x 93'; \$40,000 o., W. Graham Bowdoin; a., Wyatt & Nolting.

**Boston, Mass.**—Ranelagh Road, nr. Corinne Road, Brighton, 2 1/2-sty' fr. dwell., 36' x 36', shingle roof, hot water; \$7,000; o., Wm. N. Parsons; a., Geo. E. Parsons, Tremont Building; b., J. S. Ourich, Brighton.

**Calder St., nr. Canterbury St.**, Ward 23, 2 1/2-sty' fr. dwell., 26' x 46', pitch roof, furnace; \$5,000; o., Alfred Kaubbeck, 39 Adams St., Dorchester; a., Geo. A. Fuller.

**Bragdon St., nr. Ernst St.**, Ward 22, 8 three-sty' bk. dwells., 18' x 22' x 55', flat roofs, stoves; \$45,000; o., Ellen Connell; a., Geo. E. Parsons, 650 Tremont Building.

**Spencer St., nr. Park St.**, Ward 20, five 2 1/2-sty' fr. dwells., pitch roofs, furnaces; \$25,000; o. & b., Alex. Hammond, 49 Appleton St.; a., J. R. McPherson.

**Ranelagh Road, nr. Corinne St.**, Ward 25, 2 1/2-sty' fr. dwell., 36' x 36', pitch roof, furnace; \$5,000; o., Wm. N. Parsons; b., J. S. Ourich, Hobart St., Brighton.

**Francis St., nr. Huntington Ave.**, Ward 19, 2 1/2-sty' fr. dwell., 26' x 52', pitch roof, furnace; \$5,000; o. & b., Wm. S. Cole, 813 Parker St.; a., R. A. Watson.

**Codman Hill St., nr. Dimock St.**, two-sty' fr. dwell., 24' x 55', furnace; \$5,000; o. & a., Patrick R. Kiekhahn, 11 Codman Hill St.

**Brooklyn, N. Y.**—E. Twenty-fourth St., nr. Avenue F, two-sty' & attic fr. dwell., 28' x 41' 4"; \$6,000; o., C. Baur, E. 24th St. & Foster Ave.; a., B. Driesler, 1432 Flatbush Ave.

**Avenue D, nr. E. 16th St.**, two-sty' & attic fr. dwell., 26' x 45' 4", shingle roof; \$6,500; o., A. Taylor, Avenue C & E. 16th St.; a., B. Driesler, 1432 Flatbush Ave.

**Eighty-first St., nr. 2d Ave.**, two-sty' & attic fr. dwell., 23' x 44', shingle roof; \$5,500; o., Grace M. Lauter, 4th Ave. & 77th St.; a., H. L. Spicer, 326 Fifty-sixth St.

**Avenue U, cor. E. 17th St.**, two-sty' & attic fr. dwell., 25' x 32'; \$6,000; o., Emilio Sontomillo, 96 E. Houston St., N. Y.; a., F. Murty, 287 Bowery, N. Y.

**Eighty-third St., nr. 19th Ave.**, 2 two-sty' & attic fr. dwells., 23' x 34', shingle roofs; \$10,000; o., Wm. Johnston, 224 St. John's Pl.; a., C. Schubert, 1832 Bath Ave.

**St. Paul's Pl., nr. Crooke Ave.**, two-sty' & attic fr. dwell., 26' x 50', shingle roof; \$6,000; o., J. C. Sawkins, 81 Church Ave.; a., D. Isham, 1134 Flatbush Ave.

**E. Seventeenth St., nr. Avenue D**, two-sty' & attic fr. dwell., 26' x 50' 6", shingle roof, steam; \$5,500; o., G. W. Egbert, 126 E. 19th St.; a., C. Gastmeyer, 1172 Jefferson Ave.

**E. Seventeenth St., nr. Avenue C**, two-sty' & attic fr. dwell., 36' 0" x 50' 6", shingle roof; \$7,500; o., T. F. Ford, 149 Broadway, N. Y.; a., G. F. Morse, 141 Broadway, N. Y.

**Eighty-first St., nr. 2d Ave.**, two-sty' & attic fr. dwell., 36' x 42' 6", shingle roof, steam; \$6,000; o., F. F. Koehler, 270 Fifty-third St.; a., Parfitt Bros., 26 Court St.

**Meeker Ave., nr. Gardner Ave.**, two-sty' bk. dwell., 35' x 50'; \$5,000; o., Charles Liebmann

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*E. Fourteenth St.*, nr. Albemarle Road, 2½-st'y fr. dwell., 30' x 50', shingle roof, steam; \$14,000; o., Alex. S. Bacon, 297 Vanderbilt Ave.; a, J. E. Ritchie, Park Row Building, N. Y.  
*Avenue E.*, cor. E. 5th St., 2 two-st'y & attic fr. dwells., 20' x 32', shingle roof; \$7,000; o., R. Hieslinke, 875 E. 14th St.; a, G. Palleiser, 32 Park Pl., N. Y.

Columbus, O.—Two-st'y bk. dwell., 40' x 49', slate roof, furnace; \$5,000; o., D. C. Postal; a, W. T. Mills, Wesley Block.

Dorchester, Mass.—*Vinson St.*, 2½-st'y fr. dwell., 25' x 46', hot air; \$5,500; o., Mrs. A. M. Vail; a & b, J. M. Vail, 517 Dudley St.

*Spencer St.*, nr. Park St., five 2½-st'y fr. dwells., 25' x 50', hot air; \$25,000; o., Alex. Hammond, 49 Appleton St., Boston.

Malden, Mass.—*Russell St.*, three-st'y fr. dwell., 29' x 48', flat roof, furnace; \$6,000; o., a & b, Walter Stevens, 33 Holmes St.

Mt. Vernon, N. Y.—2½-st'y & base. fr. dwell., 40' x 41'; \$10,000; o., Thomas W. David; a, Frank M. Wright, 503 Fifth Ave.

### OFFICE-BUILDINGS.

Brooklyn, N. Y.—*Livingston St.*, nr. Smith St., five-st'y bk. offices, 21' 10" x 45', concrete roof, steam; \$17,000; o., City of New York; a, A. W. Ross, 131 Livingston St.

### PUBLIC BUILDINGS.

New York, N. Y.—*Boston Ave.*, cor. Summit Pl., one & two-st'y bk., st. police station, 86' x 119'; \$70,000; o., City of New York; a, Horgan & Slattery, 1 Madison Ave.

### TENEMENT-HOUSES.

Brooklyn, N. Y.—*Futnam Ave.*, nr. Hamburg Ave., 6 three-st'y bk. tenements, 25' x 65', tin & gravel roofs; \$36,000; o., I. Church and G. Gough, 1472 Myrtle Ave.; a, Geo. Gough.

*Nevell St.*, nr. Nassau Ave., 3 three-st'y fr. tenements, 25' x 62'; \$15,000; o., P. McTiernan, 127 Russell St.; a, P. Tillion, 121 Mezerole St.

New York, N. Y.—*Thompson St.*, Nos. 110-112, six-st'y bk. tenement & store, 36' 11" x 60' 6"; \$30,000; o., Rosenberg & Feinberg, 60 Stanton St., Manhattan, & 129 Vernon Ave., Brooklyn; a, Sars & Smalheiser, 23 Park Row.

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(Tenement-Houses Continued.)

*Walton Ave.*, cor. 176th St., 3 three-st'y fr. tenements, 27' x 73' & 90'; \$26,000; o., J. P. O'Donnell, 1006 E. 175th St.; a, J. E. Kerby, 722 Tremont Ave.  
*Anthony Ave.*, cor. Burnside Ave., 2 three-st'y fr. tenements, 25' x 73' & 75'; \$17,000; o., J. P. O'Donnell; a, J. E. Kerby.

### MISCELLANEOUS.

New York, N. Y.—*Jerome Ave.*, nr. 183d St., two-st'y bk. engine-house, 50' x 68'; \$24,000; o., City of New York; a, Fire Department Engineer.

### COMPETITIONS.

### REMODELLING HOSPITAL.

[At Milwaukee, Wis.]  
The county clerk will receive plans and specifications until February 18, 1901, for remodelling the Milwaukee County Hospital. Bids will also be received for an addition. OTIS T. HARE, county clerk. 1309

### COURT-HOUSE.

[At Great Falls, Mont.]  
The undersigned members of the board of county commissioners of Cascade County, Montana, will receive competitive designs for a county court-house, on the 28th day of January, 1901: J. J. PATTERSON, chairman; JAMES ERICKSON, member; B. P. McNAIR, member; VINCENT FORTUNE, clerk of the board, Great Falls, Mont. 1307

### GATES, CONNECTIONS AND OUTLET SECTION.

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### PROPOSALS.

D. C. Sealed proposals will be received at this office until January 26th, 1901, for constructing gates, connections and outlet section of the Tiber Creek and New Jersey Avenue high level intercepting sewer. Specifications and blank forms of proposal may be obtained at this office. HENRY M. F. MACFARLAND, JOHN W. ROSS, LANSING H. BEACH, commissioners, D. C. 1308

### CEMENT.

[At Cincinnati, O.]  
U. S. Engineer Office, Custom-house, Cincinnati, O. Sealed proposals for furnishing Portland and natural cements will be received here until January 21, 1901. Information furnished on application. H. F. HODGES, captain, engineers. 1307

### OFFICERS' QUARTERS.

[At Jackson Barracks, La.]  
Sealed proposals, in triplicate, will be received here until January 23 for constructing set non-commissioned staff officers' quarters. Information on application. Envelopes containing proposals should be marked "Proposals for construction of Public Buildings, Jackson Barracks, La.," addressed JOHN T. MARTIN, Q. M. 1308

### ADDITION TO ARMORY.

[At Springfield, Mass.]  
Proposals for the erection of a two-story brick addition to the Springfield Armory will be received until January 30th. Work includes addition to present machine shop with new buildings to be occupied as water shop. Total cost, about \$300,000. Specifications and blank forms of contract may be obtained of Lieut. Col. Frank H. Phipps, Ordnance Dept., U. S. A. 1308

### BRIDGE WORK.

[At Chicago, Ill.]  
Proposals will be received until January 10, 1901, for substructures and superstructures for five bridges to cross the Chicago River and main drainage channel of the sanitary district. WILLIAM BOLDENWECK, president board of trustees, sanitary district of Chicago. 1307

### COURT-HOUSE.

[At Great Falls, Mont.]  
Sealed bids are wanted until January 22, 1901, for erecting a court-house. J. J. PATTERSON, chairman, board county commissioners. 1307

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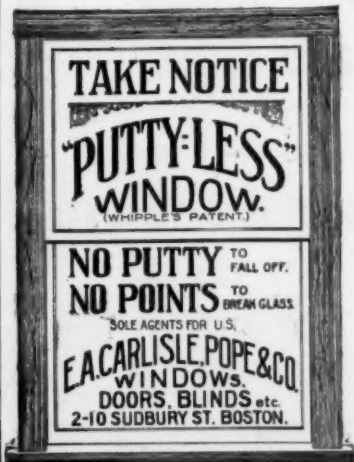
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SECTION 7. It is unprofessional to make alterations of a building designed by another architect, within ten years of its completion, without ascertaining that the owner refuses to employ the original designer, or, in event of the property having changed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

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

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

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

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

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

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

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

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

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



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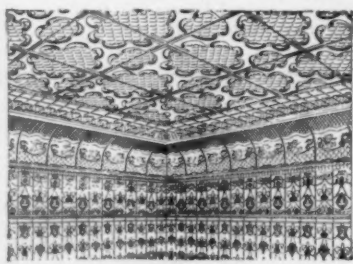
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