



SUMMARY:—

Some recent Tests of "Fireproofed Wood."—Some Objections to Metal-protected Woodwork.—Suggested changes in the City-hall Park, New York.—Fall of a Building in Pittsburgh, Pa.—More Rumors about St. Mark's Tower.—Insecure Condition of other European Buildings.—Deaths of MM. Mesdag and Vibert, Painters.—The Growth of the Forestry Movement.—The Iron Market.—Completion of the Assouan Dam.—Result of the "Electrolier" Competition.—Competition for Artistic Advertising Signs.	49
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A SERIES of tests of wood treated with various fireproofing processes was carried out a few days ago at the Massachusetts Institute of Technology, under the direction of the new Insurance Engineering Experiment Station. An official statement of the results will probably be issued later, but the New York Times gives a remarkably intelligent account of them as observed by its reporter. In general, a temperature of thirty-five hundred degrees Fahrenheit seems to have reduced both treated and untreated wood to charcoal rapidly and easily, both of them blazing while exposed to the heat, although the treated wood ceased to blaze in a few seconds after being removed from the furnace, while untreated wood continued to flame for several minutes. In another experiment, intended to test the comparative resistance of the two kinds of wood to this temperature, it was found that it took about a minute longer to reduce the treated wood to charcoal than the untreated wood. At lower temperatures the fireproofing treatment appeared to be more effective. At eighteen hundred degrees Fahrenheit both the treated and untreated woods blazed, and were reduced to charcoal; but, when simply dropped on a red-hot iron plate, the pieces of treated wood merely charred at the point of contact, while untreated wood blazed up, and was consumed. In the final experiment, a block house was built of pieces of each kind of wood, and subjected to fire for five minutes. The treated wood burned where most exposed to the fire, but not readily, resisting for ten minutes before it fell; while the untreated blocks blazed up, and the structure fell in five minutes. In this test, different samples of fireproofed wood were used together, and it was observed that some samples resisted the fire longer than others; but the Times reporter says that some sticks simply painted with fireproof paint "withstood the flame fully as well as the woods treated to a fireproofing solution which soaked through the entire stick." In regard to the question whether the fireproofing imparts any objectionable quality to wood, Professor Norton, the Director of the Experiment Station, said that he had found the treated wood much more injurious to tools than untreated wood, both because it was harder, and on account of some chemical action of the fireproofing solution on the steel, which caused the tools to rust very quickly.

MR. GEORGE EDWARD HARDING, of New York, an architect whose extensive experience gives weight to his opinion, opposes the proposed amendment to the New York Building Law, which requires woodwork in buildings more than one hundred and fifty feet high to be covered with metal, instead of being fireproofed by chemical or other treatment applied to the wood itself. Mr. Harding says that in an office-building constructed under his supervision, in which wood

fireproofed by the so-called "electric" process was used, the furniture in one of the rooms took fire one Saturday night, and on Monday morning, when the office was opened, although all the furniture was found to have been destroyed, the fireproofed wood doors had confined the fire to the room in which it started. This is valuable evidence, and is confirmed by the opinion of the Chief of the New York Fire-Department, Mr. Croker, who thinks that the adoption of the proposed amendment would add much to the danger of fire in high buildings. Meanwhile, actual tests, like those already made at the Massachusetts Institute of Technology, can alone determine the question whether the treated or the metal-covered wood is preferable, and we venture to say that suggestions from architects on the best way of adapting the tests as closely as possible to the conditions which would be present in actual fires would be welcomed by Professor Norton and his assistants.

THE Municipal Art Society, of New York, has under consideration a scheme for improving the City Hall Park, and consolidating the municipal departments, which promises excellent results. At present, the business of the city is divided between the City Hall, which, while suitable and convenient, is very much overcrowded, the other city buildings in the Park, all of which are more or less shabby, or inconvenient, and various buildings outside, belonging to private owners, for which an aggregate rent of two hundred and ninety-five thousand dollars a year is paid, at the same time that the work of the various offices is separated in a very inconvenient manner. As two hundred and ninety-five thousand dollars a year is equivalent to the interest on more than eight millions, the scheme before the Municipal Art Society proposes, as an actual economy to the city in rent, independent of the economy in time and convenience, to consolidate the municipal business in a single building, or group of buildings, overlooking the Park, but not encroaching on it, while the present buildings on the Park, with the exception of the City Hall, would be removed, leaving the ground open. It has been shown that, apart from the City Hall, the present buildings in the Park cannot be satisfactorily remodelled without such a large expenditure that it would practically be better to pull them down and rebuild them; and, while it is not absolutely necessary to purchase land outside the Park to put them on, the advantage of clearing the space is obvious, and the buildings themselves would be, perhaps, better accommodated north of Chambers Street than south of it. By this plan, also, the plan of Mr. William Barclay Parsons, for improving the access to the Brooklyn Bridge, by providing an arched entrance under some public building on Park Row, could be carried out in the most convenient and artistic manner, as the bridge-entrance would form a principal feature in an architectural group extending around two sides of the Park, to Broadway. The cost of carrying out the scheme would not, it is thought, be much more than the eight and one-half millions, the interest of which is already paid out for rent; so that it would impose no real burden on the taxpayers. It is unnecessary to say that the architectural possibilities of such a scheme are magnificent, and every one interested in municipal art will hope that some way may be found for carrying it out.

THE inhabitants of Pittsburgh were treated the other day to a spectacle which may have lacked charm to some of them, in the fall of a building into an adjoining cellar. Excavations are in progress for the foundations of a large office-building on Sixth Street, and, according to the newspapers, some people passing by noticed that the next building, occupied by a liquor store with offices over it, was "careening" toward the new cellar. The police were notified, and the occupants of the building ordered out. Meanwhile, a crowd of three thousand people gathered, and after waiting two hours, they were rewarded for their patience by seeing the structure fall into the new cellar, amid a cloud of dust. As insurance policies do not cover loss by the fall of buildings, the owner of the collapsed property will, presumably, look to somebody for reimbursement, and the question whether the owner of the new cellar can be held liable will have much interest for the profession.

THE *Schweizerische Bauzeitung* adds some interesting details to the published accounts of the fall of the Venetian Campanile. The writer of the article, who, some fourteen years ago, ascertained that the tower leaned from the vertical, is inclined to think that the fall may have been due to a failure of the foundation. Time alone, apparently, will decide this question. In any case, the manner of its fall was most fortunate. The Church of St. Mark is less than a hundred feet away, and the Doge's Palace is only about one hundred and fifty feet, so that, if the tower had fallen directly forward, more than two-thirds of its length would have descended upon the church; if it had inclined toward the southeast, at least half its length would have fallen on the Palace, and, if it had inclined to the southward, nearly its whole length would have fallen on Sansovino's Library, which is less than twenty feet away. Instead of this, the masonry settled almost vertically downward, carrying away, according to one account, a corner of the Library, or, according to another account, a corner of the King's Palace, the former Procuratie, which is directly behind the Library. It seems, from the account in the *Schweizerische Bauzeitung*, that the Loggetta was injured, in 1511, while it was in process of construction, by the fall of stones, shaken by an earthquake from the pyramidal top of the tower, then nearly completed; and it was six months before the damage was entirely repaired.

AN epidemic of falling down seems to have attacked the old buildings in Europe; or, possibly, the fall of one very conspicuous one has attracted attention to the condition of the others. The Church of St. John and St. Paul, in Venice, has been declared to be in a dangerous condition, and portions of it may have to be taken down and rebuilt. This building is only about half as old as the Campanile, and, being much lower, is less exposed to decay, and the cause of the trouble remains to be explained. Worse than this, however, the London *Daily Mail* asserts that one of the great porticos of St. Paul's "threatens to collapse," and urges prompt measures for repairing it. Why the porticos of St. Paul's, which carry no important load, and have only stood for two hundred years, should think of "collapsing" is a mystery. We have often been told that the arches and piers which support the dome were in danger, but this might be explained in connection with the thrust of the arches under the weight of the dome, and the disintegration of a portico indicates some serious trouble, presumably with the foundations. It has been suspected that tunnelling in the neighborhood has led to settlements, and the matter will probably be taken in hand now by competent experts.

TWO great artists have died within a few days, Mesdag, at the Hague, and Vibert, in Paris. Mesdag was almost exclusively a painter of sea-pieces, and spent most of his time in his studio at Scheveningen, on the shore of the North Sea, a few miles from The Hague; but good sea-pieces are popular in Holland, and Mesdag, who was business-like enough to maintain a splendid studio in the city, where he could receive his distinguished friends, and show them his works, is said to have amassed a great fortune, which he well deserved. Vibert, who is also said to have gained a fortune by his labors, is much better known in this country than Mesdag, and his gentle satires on ecclesiastical luxury have been very popular here, not only in the original pictures, many of which are owned by Americans, but in reproductions. An element in Vibert's popularity was, undoubtedly, that his pictures were only very mildly humorous, the sarcasm in them sufficing simply to add interest to the splendid groups of cardinals and bishops, in red and purple robes and white lace, drinking out of gold goblets, or sitting in gilded chairs, which he delighted to paint; so that he avoided displeasing anybody in a class of subjects which Courbet's savage ribaldry made offensive to every one.

PERHAPS, no profession ever rose into popularity in this country so rapidly as that of forestry. There are already four regular schools of forestry here, in New York, Minnesota, North Carolina and Ohio, besides several summer schools, to which only those students are admitted who possess a good preliminary training; yet the demand for trained foresters already far exceeds the supply, and is fast increasing. It is said that, in the United States alone, more than two million

acres of private woodland are under the charge of trained foresters, in addition to the tracts belonging to the State and General Governments; and twenty skilled foresters have been called for to go to the Philippine Islands. What will be the result of the movement remains to be seen, but it is hardly possible that a system which has, in a hundred years, added immensely to the wealth of Germany should not be of even greater benefit to the United States. It is curious that one-third of the students in the Yale Summer School of Forestry are women; and, although a great many women attend summer courses rather as amateurs than with any definite object, it is very possible that the profession may, in this country, be found to suit the sex which excels in accurate and scientific observation.

THE iron market in this country shows some peculiar irregularities. While the demand for structural steel seems to be as urgent as ever, the plate-mills, which, not long ago, could not supply their customers, now find business comparatively dull. The tin-plate factories are said to find their product accumulating on their hands, and are already struggling with their workmen over a twenty-five per cent reduction in wages. Meanwhile, imports of steel and iron continue, notwithstanding the enormous duties. A wire-mill in Connecticut is said to have made contracts for eleven thousand tons of steel billets, part from the Dominion Iron and Steel Company, of Cape Breton, and the rest from Germany.

THE great dam across the Nile, at Assouan, is completed, and the next season will witness the results of the control of the Nile inundations which it is designed to give. The primary purpose of the undertaking was to enlarge the area of cultivation in the Nile Valley, as well as to permit two crops a year to be taken from ground which now only affords one; and it seems probable that both these objects will be satisfactorily attained; while it is not impossible that the great addition of moisture to the soil and air of Egypt may still more increase the rainfall, already developed by the comparatively insignificant modifications in irrigation and cultivation, so as to change the climate of the region lying between the area of ordinary inundations and the desert. The whole cost of the works, as contracted for, is only about twenty-three million dollars, or less than one-thirtieth of the direct expense of the South African War, and it may safely be predicted that Great Britain will derive a thousand times as much credit and influence from its operations at Assouan as from those in the Transvaal.

MUNICIPAL AFFAIRS gives the result of the competition of the New York Municipal Art Society for a design for an electrolier, to be placed on the "islands" which the city authorities propose to establish, to divide the traffic in the more crowded thoroughfares. The first prize, of five hundred dollars, which includes compensation for making details for execution, was awarded to Mr. Victor A. Ciani; the second prize, of one hundred dollars, to Mr. Henrik Wallin; the third prize, of fifty dollars, to Messrs. Wilkinson & McGonigle, and honorable mention to a design by Miss Edith W. Burroughs. Mr. Ciani and Miss Burroughs exhibited their designs by models; the others by drawings only.

WE think we have already mentioned the competition for artistic advertising signs, to be held in Paris in October, following the example of the one carried out a year or two ago in Belgium. The competition is open only to French citizens, and may include actual signs, or designs for them, in any medium, and of any size. A jury of thirty-three members will make the award, and very liberal prizes are offered. The first prize is six hundred dollars; there are two equal second prizes, of four hundred dollars each; four prizes of two hundred dollars each, and eight prizes of one hundred dollars each. Besides these, the prize designs are understood to remain the property of those submitting them, and may be marked with the price at which they may be purchased by any one desiring to use them. Competing designs must be delivered at the Petit Palais, Champs-Élysées, Paris, between ten in the morning and five in the evening, on any day from the sixth to the eleventh of October. Signs already in use cannot be admitted, as the object of the competition is to encourage the production of new designs.

THE AMERICAN VIGNOLA.¹—VIII.

PART I.—THE FIVE ORDERS.

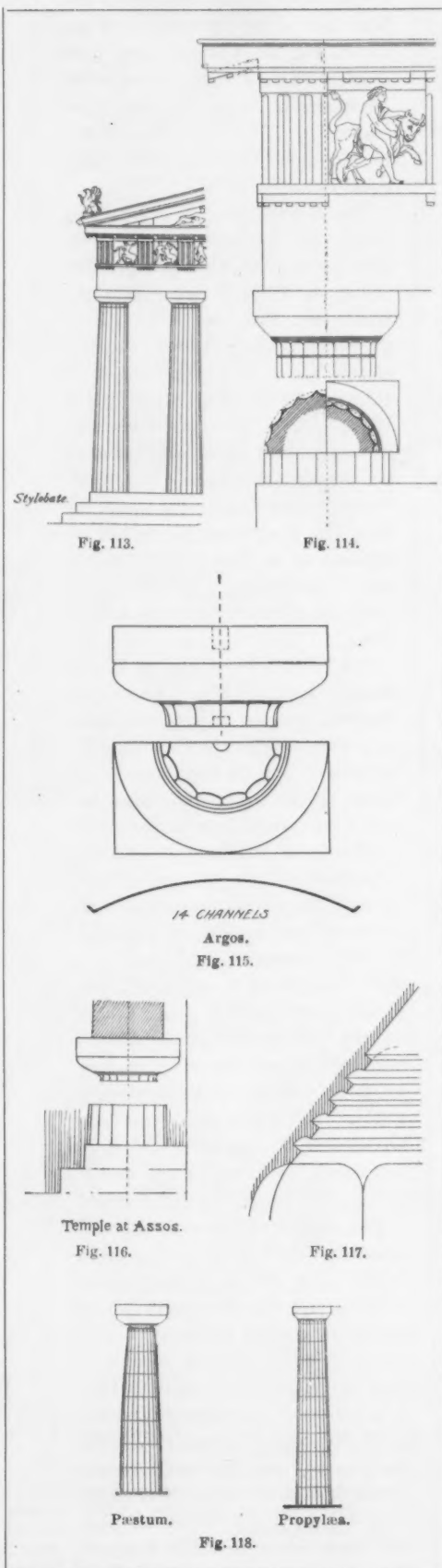
THE GREEK ORDERS.

ALTHOUGH the different examples of the Greek Doric and Ionic Orders differ considerably among themselves, both in the proportions of the Columns and in the treatment of details, the proportions of the Entablature are tolerably uniform and are, in general, the same for both Orders, the Architrave and Frieze being both about three-quarters of a Diameter in height and the Cornice about half a Diameter (119). The Entablatures, as has been said, are about two Diameters high, however tall or short the Columns may be. Their chief characteristic is the height of the Architrave and the shallowness of the Cornice. The Diminution and the Entasis of the Columns begin at the bottom of the Shaft.

THE GREEK DORIC.

The Greek Doric has no Base, the Shaft standing upon three large steps, the upper one of which is called the *Stylobate* (113). It has generally twenty Channels (114), which are generally elliptical in section, but some small Columns have only sixteen, or even, as at Argos, fourteen (115). In a number of examples an Arris comes on the axis of the Column instead of a Channel, as is seen both at Argos and at Assos (116). Instead of an Astragal, a groove, or *Sinkage*, separates the Shaft from the Necking of the Capital, and the Channels are carried past it quite up to the Fillets at the base of the Echinus (44, 116). These Fillets vary in number. They are not vertical on the face, but follow and continue the slope of the Echinus, and their upper surfaces also are bevelled (117). The Echinus itself has an elliptical or hyperbolic profile, the earlier examples being the most convex and the later ones hardly differing from a straight line. The Abacus has no mouldings.

The Architrave also is plain, and is crowned by a *Tænia*, below which is a broad *Regula* and six short *Guttæ*. In the earlier examples the face of the Architrave is set just over and in line with the upper Diameter of the Shaft, but in the later ones it overhangs, coming over the lower Diameter, and the Echinus is made steeper, as well as straighter, as has been said, as if to support it.



The Triglyphs in the Frieze are shorter and broader than in the Roman Doric, and are set flush with the Architrave below, the Metopes being set back. They are also thicker than the Roman Triglyphs, and the Channels are deeper, those at the edges cutting back at an angle of 45 degrees, the others generally at 60 degrees, and they run nearly up to the broad Fillet, or Band, that constitutes the Cap of the Triglyph. This is only as wide as the Triglyph itself, not breaking round the corners, and it is not continued between the Triglyphs, the Cap of the Metopes being narrower.

As in Vignola's Denticulated Doric, the Mutules on the Soffit of the Corona slope up, and have only eighteen Guttæ, and they occur over the Metopes as well as over the Triglyphs. The Mutules are thicker than those in the Denticulated Doric, though not so thick as in the Mutulary. The Cymatium generally consists of an elliptical Ovolo and a Fillet, the Soffit of which is bevelled. But different examples vary in almost every one of these particulars.

At the corner of a building the Triglyphs are set, not over the axis of the Column, but at the extreme end of the Frieze, two coming together and making a solid block (44, p. 53). As the Metopes do not vary in size, being nearly square, this brings the three corner columns nearer together than the others.

In the best Greek examples, the columns all slope in a little, so that the corner column, which is a little bigger than the others, has its inner face nearly vertical. The horizontal lines curve slightly, being convex up, the vertical faces incline a little, either out or in, and the mouldings are, as has been said, generally elliptical or hyperbolic in section, rather than arcs of circles.

The Columns vary in height from about five to eight Diameters, the earlier ones being the shortest, and the Entasis, or curvature in the outline of the Shaft, and the Diminution in the width of the Shaft, from bottom to top, which sometimes amounts to one-third of the Diameter, are much more pronounced in the earlier examples than in the later ones (118). This seems to show that the original of the Doric column was not a wooden post, as

¹ Continued from No. 1375, page 37.

has been thought, nor a pile of masonry, but a piece of rubble-work, probably, like the rubble walls, covered with stucco.

THE GREEK IONIC.

The general proportions of the Greek Ionic Entablature are, as has been said, about the same as in the Doric, but the Columns are more slender, varying from about seven Diameters in height to more than ten, and the Architrave, Frieze and Cornice are often made very nearly equal in height (119).

The Base is like the Attic Base, except that the Scotia is larger, constituting the principal feature, that the upper Torus is larger than the lower one, that the Fillet above the Scotia projects as far as the face of this Torus, and that there is no Plinth. As the Base is still half a Diameter high, the upper Torus and Scotia are very much larger than in the Roman Attic Base. The lower Torus is sometimes very small indeed, and is occasionally omitted altogether, as at Samos (120) and in one of the Choragic columns on the south side of the Acropolis at Athens (66).

The Shaft is fluted just as in the Roman Ionic, having twenty-four channels, and the Capital resembles in general Vignola's Capital with Balusters. But the Scrolls are much larger, measuring a full Diameter and a half from side to side, and two-thirds of a Diameter from the Architrave to the bottom of the curve. The Capital, measured from the Architrave down to the Astragal, is half a diameter high, instead of a third, the Abacus is very small, consisting generally of a single Ovolo, and the *Cushion* between the Abacus and the Echinus very wide, its lower outline being curved downward (121). The sprigs of honeysuckle, accordingly, do not cover the eggs and darts, five of which are visible between the Scrolls, instead of three.

The Architrave is sometimes plain, sometimes divided into two or three bands. The Frieze, or *Zoöphorus*, is wide, and the Bed-mould which crowns it is often countersunk into the Soffit of the Corona, so that it does not show in elevation (119). It is noticeable that though Dentils are, historically, a distinctively Ionic feature, they are omitted in many Greek examples. The Cymatium is a large Cyma Recta, and has a Fillet and Bead below it, which is sometimes undercut so as to make a little Beak Moulding.

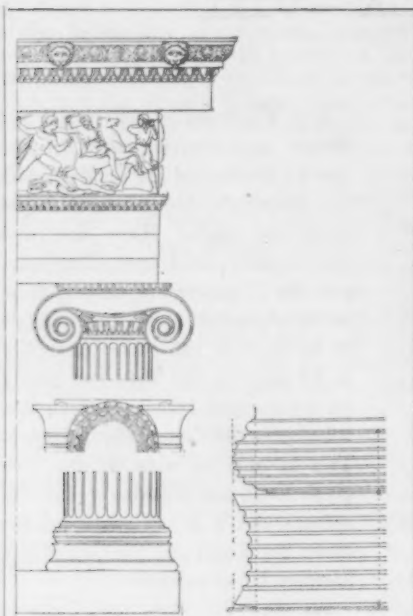


Fig. 119.

Fig. 120.

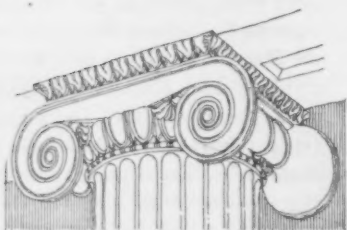


Fig. 121.

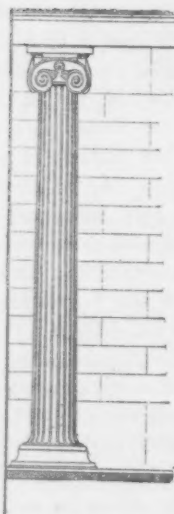


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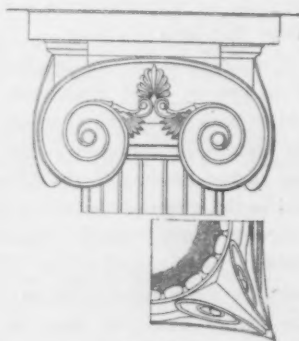


Fig. 123.

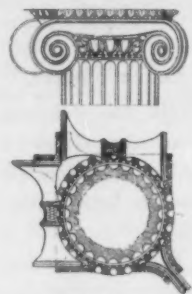


Fig. 124.

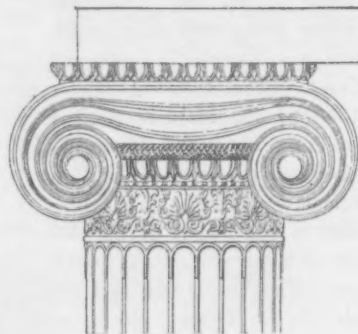


Fig. 125.



Fig. 126.

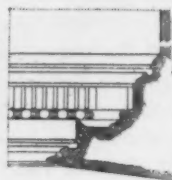


Fig. 127.



Fig. 128.

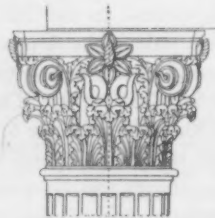


Fig. 129.

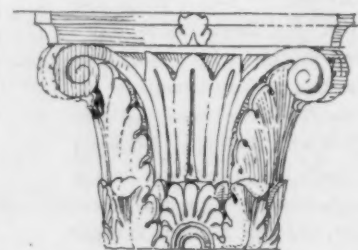


Fig. 130.

But here, as in the Greek Doric, there is a great variety in the details of different buildings.

The four faces of the Capital are sometimes made alike, with double Scrolls on each corner, as in the Roman Ionic, and these Scrolls are sometimes connected under the Abacus by a continuous curve, convex up, instead of by a horizontal line (122, 123). Sometimes a corner column shows Scrolls on the two outer faces and Balusters on the two inner ones, the double scroll on the corner projecting at 45 degrees (124). Some examples have a wide Necking, adorned with the honeysuckle ornament, below the Echinus (125, 135).

A few Corinthian Capitals are to be found in Greece, but the buildings in which they occur are in other respects Ionic, or even Doric (126).

In the later Greek Colonies in Southern Italy are found interesting varieties of all the Orders.

Their most marked peculiarity is the treatment of the dentils (127). The Triglyphs and Dentils are long and slender, and the mouldings refined in outline and sometimes separated by deep grooves, rectangular or circular, which are not to be mistaken for mouldings. The Architraves lose their importance, the Ionic Scrolls are much diminished in size, and the egg-and-dart moulding is changed into what are sometimes



From the Boulevard des Filles de Calvaire
Paris
Fig. 131.



From the Portico by Bramante
S. Ambrogio - Milan
Fig. 132.

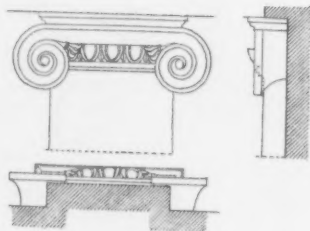


Fig. 133.

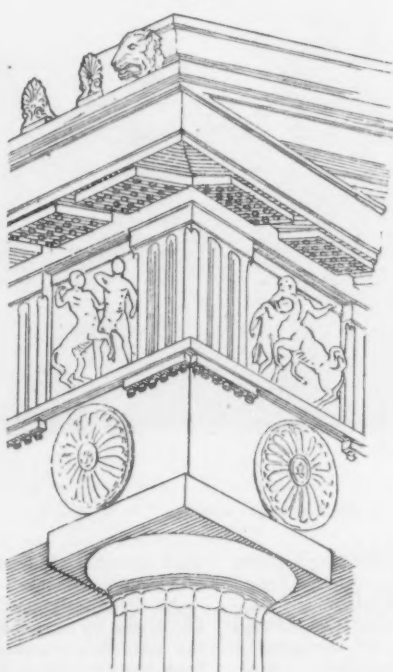


Fig. 44.

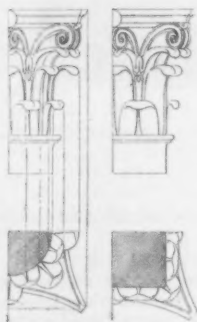


Fig. 134.

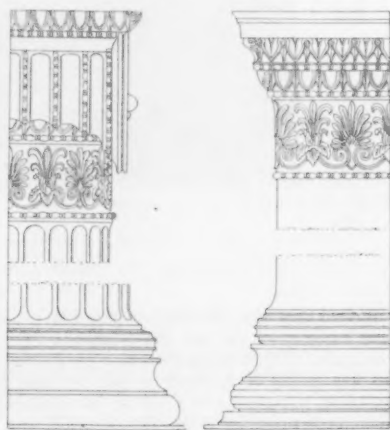


Fig. 135.

RICHELIEU.

THE authors of the various papers on city-planning, both here and abroad, *vide* the recent *Transactions of the R. I. B. A.* and the "Beautification of Washington," have all failed to mention one of the earliest and most interesting examples of a city built on a prearranged plan by a single architect.

Washington and Annapolis, in this country, and Wren's plan for rebuilding the burnt districts of London have all been given consideration; but the little town in the middle of France, built by and named after the famous Cardinal, has not even been mentioned.

Richelieu lies in the midst of a barren plain some distance from the modern railroad-station. The present approach to the city is dull, uninteresting, prosaic; but when once we stand at closer range, under the shade of the old alleys of trees surrounding the city walls,

called Filberts (128). The Corinthian Capitals receive a local development quite unlike that which was finally adopted in Rome itself, as may be witnessed at Tivoli (129), Pompeii and Herculaneum (130). Since the revival of Grecian architecture other variations have appeared in France, Germany and Italy (131, 132).

PILASTERS.

The Romans made their Pilaster Capitals resemble those of the Columns. This works well, except with the Ionic Capitals, in which the projecting Echinus presents an almost insuperable difficulty (133).

As Pilasters do not generally diminish in width at the top, their Capitals are one-fifth broader than those of the Columns. But Pilasters are often made half a sixth narrower than the Columns at the bottom, and half a sixth wider at the top, having thus a uniform Diameter of five-sixths and a half. In the Corinthian Pilaster Capital, the extra space is taken up by making the leaves a little broader, and setting them farther apart (134).

The Greeks gave their Pilasters Bases like those of the Columns, but Capitals of their own, composed of a series of mouldings (135).

W. R. WARE.

[To be continued.]

the imagination runs riot. Nothing is changed, — the old moat is still half-filled with water and the quaint towers for the Mousquetaire defenders still retain their loopholes, while the city gates, though now without their drawbridges, are charming architectural compositions.

One can fancy the interest with which the grim old Cardinal planned this toy city. The impression is of a scene in a theatre, and one would not be in the least surprised to see His Eminence drive out or D'Artagnan and his companions loitering in the archway. Every view affords a setting for the characters of Dumas.

Standing at the principal entrance, we can see, down a clear vista through the heart of the city, the corresponding gate on the opposite side. It seems but a stone's-throw away, and indeed, is but a thousand paces.

There is no thought of radial avenues, the whole city being laid

out on a simple rectangular plan. The extreme length measures about 960 paces, and the width 360, approximately. The principal street is on the main axis, with two minor streets parallel to it. These, together with three shorter transverse streets, two of which traverse the two public squares, form the arteries of the city.

The houses are all alike, except that the buildings on the street-corners are a story higher than the others. The streets are not long enough to make this arrangement look too monotonous, but are, at the same time, sufficiently long to make the public squares the centres of interest. These squares are planted with trees in the most approved Republican manner, as seen everywhere in France.

The houses, except the corner ones mentioned above, are two stories high, in the familiar Henri IV style, with stucco walls and stone quoins and high slate-roofs broken by dormers. The cornice-line is brought down lower on the buildings around the public squares, making half-dormers of the upper stories. This makes the cornice-line of the squares lower than that of the principal street.

The church and market are the most conspicuous buildings, the church being of a seventeenth-century Jesuit type, and the market, a picturesque but unpretentious structure.

The ground on which the city is built is perfectly level, with a sufficient fall to the streets to drain everything to the centre of the town.

Richelieu was founded in 1631, some ten years after the commencement of the neighboring château in the park of His Eminence the Cardinal Duc of Richelieu.

a collection, to which Lopez, the Moorish Jew, and the most celebrated merchant of antiquities of his time, contributed no small part.

In 1642, the château was finished. In 1631, the Cardinal obtained letters-patent, authorizing him to found, adjoining his château, a city to bear his own name. He agreed to institute four fairs a year and, in order to facilitate access to them, dug a canal from the Vienne.

In 1639, probably at the Cardinal's request, the Pope suppressed a neighboring *cure* and installed it here. It was served by the priests of the Mission of St. Vincent de Paul. Lemer cier built them a church and a charitable hospital.

For the civil administration of the new city, the Cardinal appointed various magistrates and officers, who were each obliged to build his own house at his own expense and, as it seems, according to Lemer cier's designs.

The city was walled, a market and auditorium constructed and, in 1633, the twenty-eight houses of the main street, fourteen on each side, were nearly completed. The Cardinal's superintendent, de Sourdis, wrote to him: "The houses of the principal street are marvellously advanced and they are the prettiest things in the world to see. It lacks only five houses to finish it."

Finally, to complete this ideal city of the Renaissance, the Cardinal decided to build an academy and obtained a charter for the establishment of a Royal College.

He had hoped to have the King visit it, but it is said that he himself was so occupied by politics that he died without having seen the completed city on which he had expended so much money and so



One of the Small Gateways: Richelieu, Indre-et-Loire, France.

It is said that the Cardinal began this princely dwelling because he was envious to surpass the Châteaux of Champigny-sur-Veude and Bonnavet in this same Province of Poitou. Whether His Eminence was guilty of jealousy or not, the fact remains that, through his political influence, the Château of Champigny, the heritage of the famous Mademoiselle de Montpensier, was demolished. He attempted to tear down the chapel as well, but was defeated in this purpose through the intervention of the Pope. The histories give this affair as preliminary to the erection of his own château and then proceed to mention the employment of 2,000 workmen upon his palace and gardens. The men were under the direction of another Cardinal, François d'Escoubleau de Sourdis.

Richelieu's architect was also the King's, Jacques Lemer cier. The problem given to him was to preserve in the magnificent buildings, of which the Cardinal had conceived the plans, the room in which His Eminence had been born,—to permit, in other words, the ministerial pride to view at pleasure the contrast between the splendor of his old age and the humbleness of his beginnings.

That this plan was detrimental to the arrangement of the interior of the château, all of its admirers have agreed, but, still, though the building was not a model of convenience, it was a veritable treasury of art. Decorated by Poussin and by Prévost, it was filled with the antiquities, which Mazzarin, then a simple abbé, purchased in Italy,

much thought. Indeed, there are on record only two visits of the Cardinal to his château.

At Richelieu's death, the château passed to his family. The last Duke was an *émigré*, and in 1793 the château was confiscated. In the Year XI, however, the Duke's name having been eradicated from the proscribed list, the château was restored to him; but he feared to return to France and sold the building to speculators, who immediately began to demolish it for the stonework. Napoleon made an attempt to purchase it for military purposes, but was unsuccessful, and, to-day, there are few farmhouses in the district which have not been repaired or constructed with the stonework of the château. The collections are scattered all over Europe.

As a city, Richelieu is a failure. It remains as it stood at the time of the Cardinal's death, with buildings unfinished and even the es-cutcheons on the completed buildings uncarved. Not a single house has been added and only the establishment of the *cure* and the building of the church have saved the city from desertion.

The Cardinal had not considered the real factors in the growth of cities; and the attempt to establish a business community at a point which was neither on a navigable river nor a great trade-route was, of course, predestined to fail.

To-day the only sounds that greet the ear in Richelieu are the noise of one's own footsteps and the splash of the water in the fountain

of the public square. The only traces of inhabitants are, here and there, white-bonneted peasant-women knitting in a courtyard or a couple of peasants drowsing in front of a café.

Thus, the little city all but deserves the name that has been given it — it is called the "Pompeii of France." W. T. PARTRIDGE.

THE NEW STYLE OF ART.

"FOR many years it has been the aim of certain architects and designers to create a new style of art that would be characteristic of the age, or, at least, different from the familiar work of the other periods. So long as this effort was conscious and pre-determined it failed, as it was bound to. Broadly viewed, man's works, like his character, are not what he would have them, but reflections of himself, his mode of living and thought. To this, in the case of architecture, is added the formative or restrictive influence of the materials at his command and the climate under which he lives.

"Coincident with these fruitless efforts toward acceptable novelty the application of iron and steel to building-construction has, in this country, changed the skyline of large cities from a uniformity of five or six storied buildings, broken only by spires and towers, to a cyclopean jaggedness in which the spires are dwarfed to insignificance; and a few years more at the present rate will restore the uniformity at the high level of twenty or twenty-five stories.

"This is to premise the axiom that true growth is natural and spontaneous; and so when least expected, when the pernicious stimulators, whose bombardment of the skies brought no rain, are wearying of their labors there comes from the Old World, as all other styles have come, a new note — the expression in a new way, of a new point-of-view. What we call it is of no consequence; succeeding generations will give it a name. Whether work of allied Arts and Crafts, l'Art Nouveau, or simply New Art, it is at its best a worthy fruit of rational methods, deriving its inspiration from nature and accepting and declaring the nature of the materials. Such was the 'Gothic' when it was born; that wonderful combination of greatness and littleness, of the architect and the stone-carver. Such has been every true style. Doubtless, those times had their conservatives who scoffed at the innovations which rolled over them into history. We have them to-day and they will not recognize a style nor a form that has not had volumes written about it, the words of whose writers are their only source of knowledge. They are the dilettanti — the critics — and their gospel is literature, but it is not art. Art is vital, it lives and works; its history and expounding are matters apart.

"We all admire the old work; we treasure and copy it, and we would not be deprived of it; but if our appreciation is broad and catholic this admiration does not preclude a healthy forward impulse.

"That impulse has arrived; it has leavened the whole body of European art and industry. The Paris Exposition of 1900 was its challenge to the world. It may be that some individual notes of that challenge were extravagant and discordant; these excesses are the reaction from the paucity of recent years, but they should not obscure the perception of the merit and elegance that characterize the better work, work which fittingly marks the dawn of the twentieth century." — *The Jewelers' Circular*.

NEWBURYPORT, MASS., July 30, 1902.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—I have read with interest your comment on originality, and the resulting correspondence in this week's issue of the *American Architect*. Apropos of this I send you an article which I wrote for advertising purposes, and which was recently published in the *Jewelers' Circular*. Being written for advertising purposes, the style of this article is not, perhaps, just what I would make it in disinterested comment; but I would not to any degree change the sentiments expressed.

I do not know that l'Art Nouveau needs defending, and I certainly would not defend some manifestations of it; but it seems to me that its relation to the accepted styles should be defined; and I do not remember having seen such definition. As a contribution to this subject, I hope this will interest you; and it may move you to a fuller exposition of the matter.

Very sincerely yours, GEORGE P. TILTON.

[MR. TILTON, whose article, "written for advertising purposes,"—and it is a pity that more advertising matter has not its character—is published above, is not the only correspondent who has taken us seriously to task on the supposition that we were having a fling at l'Art Nouveau—Heaven bless the name—whereas we were simply chiding those who make originality the prime objective of their artistic endeavor. The man who sets about his work with the single intention of being "original" will inevitably produce upon the onlooker the same effect that Dr. Holmes produced when he sat down "to write as funny as I can." A confirmation of the belief here expressed will, we believe, be found in the illustrations we reproduce this week from the pages of *Architektonische Monatshefte*, which has assumed the rôle of champion and promoter of l'Art Nouveau—after the German interpretation, be it understood. There is a good deal that is attractive in some of the manifestations of l'Art Nouveau where a designer of real ability applies its rules—if there be any such—to problems in whose solution it is proper to apply them, but we have seen woefully little evidence as yet that structural architecture affords a proper field for their application. The punching of a façade full of seventeen different kinds of openings—none properly structural—and wilfully calling them doors and windows is not the execution of an architectural design. Nor is the giving to outlines and projections the *molle* curves and surfaces which invite the rain

to keep the wall continually saturated with moisture, because there is no proper "drip" to the projecting features, good construction; nor is the substitution of soft and meaningless shades for bold shadows necessarily a proof of genius in architectural design. The whip-lash line—the distinguishing line of l'Art Nouveau—with its unequal flexions and suddenly reversing turns and twists, is a ductile, not a structural, line; it has no static value, as an architectural line should have. It is admirably in place in jewelry, in some of the minor applications of wrought metalwork, and is excusable in furniture, since every one knows that there the static form, the stability, is due to fish-bones and horse-hoofs, and it doesn't make much difference how form and material are vilified. But architecture has a greater dignity than jewelry or furniture and deserves greater respect than it usually receives at the hands of originals and the inventors of new styles. We thoroughly believe in progress, but not at the expense of precedent.—EDS. AMERICAN ARCHITECT.]



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

A COMPETITIVE DESIGN FOR THE BOSTON ATHENÆUM, BOSTON, MASS. MR. STEPHEN CODMAN, ARCHITECT, BOSTON, MASS.

PLANS AND SECTION OF THE SAME.

THE GREEK ORDERS.

SEE article "The American Vignola" elsewhere in this issue.

THE CHÂTEAU, CITY AND PARK OF RICHELIEU, INDRE-ET-LOIRE, FRANCE.

For description see article "Richelieu" elsewhere in this issue.

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

PAN-AMERICAN EXPOSITION, BUFFALO, N. Y.: DETAIL OF THE STADIUM;—THE STADIUM. MESSRS. BABB, COOK & WILLARD, ARCHITECTS.

[Additional illustrations in the International Edition.]

MOANA HOTEL, HONOLULU, H. I. MR. O. G. TRAPHAGEN, ARCHITECT, HONOLULU, H. I.

THIS frame building, containing about sixty bedrooms, is located on the beach at Waikiki, a suburb of Honolulu. The entire first floor is devoted to the offices, parlors, reading-room, billiard-room, buffet and lanais, or verandas, the dining-room and culinary department being located in a semi-detached building overlooking the ocean. The building is equipped with its own electric-lighting plant, and an electric elevator communicates with a large open roof lanai, from which a magnificent view may be had.

MAIN GATEWAY TO THE CITY AND GATEWAY TO THE PARK, RICHELIEU, INDRE-ET-LOIRE, FRANCE.

SEE article "Richelieu" elsewhere in this issue.

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INTERIOR VIEWS OF THE SAME.

THE "ORIGINALITY" OF L'ART NOUVEAU: TWO PLATES.

In connection with remarks we make elsewhere on the "New Art," we reproduce these illustrations from *Architektonische Monatshefte*.



PERHAPS THE LARGEST TREE IN THE WORLD.—What undoubtedly is the largest known tree in the world has been discovered on the Government reservation far up in the Sierras, in California. Six feet from the ground it took a line 150 feet 8 inches long to encircle the tree, making it about 51 feet in diameter.—*Exchange*.

HICKORY PINE AS A FOREST-MAKER.—In writing upon methods of conserving the water-supply of the country, in *Forestry and Irrigation*, T. P. Lukens says there are two ways of reaching the result, namely, to build storage reservoirs, and to clothe the mountains with trees and

see that they are not destroyed again. Even to build the reservoirs would be useless, unless the water-sheds tributary to them be forested, as the reservoirs would soon become filled with silt if the mountains were bare, so the only hope would be to bring back the forests. He declares that it is easy to perpetuate a forest by planting another in its place when a tree is removed. All conditions are favorable then, but after repeated fires over the length and breadth of the mountains the conditions are not favorable for tree-growth. The tree best fitted for reforestation, he says, is the hickory pine (*Pinus attenuata*), which grows on fire-swept slopes from San Bernardino to Shasta, in California, which he describes as follows: "Not many travellers ever see it, and of those that do but few would notice it except for its strange appearance which its life-store of cones give it. The tree is usually small, early bearing, found on sunny slopes of the Cascade range to the northern Sierra, and southward (rarely on the coast ranges) to the San Bernardino Mountains. Its cones grow in circles, strongly defined, narrow and pointed. They are 3 to 8 inches long, and remain on the trees unopened for an indefinite number of years. The outer scales have conical, quadrangular tubercles, terminated by a very short, triangular, firm prickle. The leaves grow three in a sheath, 3 to 7 inches long. A peculiarity of this tree is the tapering character of its cones at the base, whereby they oppose so little resistance to the growing trunk that the annual layers, instead of crowding off the cones (as in most other species), often envelop them completely. They are sometimes found in large trunks still unopened and the seed good. The cones are borne in whorls, first around the main axis of the tree only. As the tree grows and branches freely, which it will do where not crowded, then cones are borne about the limbs. I have counted as high as 500 cones on a tree 50 years old, each cone containing 124 fertile seeds, which are small, there being 20,000 to the pound. The seed has a wing 1 inch long and one-fourth inch wide. When a fire sweeps through a grove, if severe, it kills the tree. The heat melts the resin with which the cone is sealed, and the second or third day after the fire the winged seeds take flight and plant a far greater area than existed before. Thus, after each fire the forest becomes dense, crowding together for protection until at last they defy the fire, for where they grow so closely together as to occupy all the ground, they will resist fire. This persistence of cone, coupled also with the firm coherence of their scales for an indefinite length of time, is an important fact, for it ensures better propagation, if not the very existence, of the species. It is found that the seeds in these long, closed cones are always in good condition, however old the cones. They seem to declare not only that this species of tree shall be its own survivor, but also that it may extend its dominion over territory which has been cleared of trees. So we may expect that through the improvident or wanton conduct of man, while it destroys by fire the noble sugar and yellow pines of our vast forests, this cunning little provident tree, fighting now for room to stand upon and crowding close together for greater strength, shall, after long waiting and at last fire-killed, unlock its store of life germs and scatter them with sailing wings on the wind to reforest the mountains. No tree shows more greenness or symmetry of growth than the *Pinus tuberculata* when not crowded. Its desire seems to be to cover the ground, if not in numbers, then with wide-spreading branches. Trees are to be found 150 feet high, with a body 2 to 3 feet in diameter. I have never found one of them dying from old age. They thrive where other trees would not attempt to grow — on the steep, hot, rocky slopes. Their roots penetrate every little crevice to an incredible depth, opening channels for the conservation of water and mulching the surface with their foliage."

ART-STUDY IN ITALY.—His Majesty's Chargé d'Affaires at Rome has sent to the Foreign Office the law regulating entry without payment of the ordinary fee to the national museums, galleries, excavations and monuments of Italy which has been approved by the royal decree of April 13, 1902. The privilege of free entry is by the law accorded to foreigners who are (a) artists, (b) art-students and art-critics who have issued noteworthy publications, (c) professors of archaeology, history, literature and art; (d) pupils of archaeological, historical and art institutions; students in departments of literature and philosophy and in schools of practical engineering. Applications for a general permit for free entry to all museums, etc., must be sent to the Ministry of Public Instruction on stamped paper of 1 lira 20c., with an unmounted photograph of the applicant, not to exceed 5 centimetres by 8 in size. Applications for free entry to archaeological and artistic institutes in a single town must be sent on stamped paper of 60c. to one of the heads of the institutes, and if the permit is required for more than a month a photograph must be sent of the size mentioned above. The applications must be accompanied by the following documents: For persons under (a) and (c) by an academical document *visé* by the Italian diplomatic representative or Consul in the country to which the applicant belongs, or by the diplomatic representative of that country in Italy. For persons under (b) by one of the publications which they have issued. For persons under (d) by an official document showing that they stand on the books of the institutions mentioned under that heading for the year in which they apply. The document must be *visé* as in the case of documents furnished by persons under (a) and (c). As his Majesty's diplomatic representative at Rome is not always in a position to authenticate without previous inquiry documents issued by institutions in the United Kingdom, art-students, etc., are recommended to have such documents countersigned by the Italian Consular officers in this country before leaving. — *N. Y. Times*.

LUMBER TRADE MOVING SOUTHWARD.—Expert opinion is that ere long the South will become the centre of the lumber trade of the United States. Signs of the movement southward are already visible. Close observers of the situation are not surprised at the changed conditions. The pine-forests of Michigan and Wisconsin have been practically depleted, and dealers in this class of lumber have been forced

to look elsewhere for supplies. Recently large tracts of Southern timber-land have been purchased by Northern operators, and they are now arranging to develop them upon an extensive scale. The Southern forests contain several varieties of lumber well known in Northern markets, besides many beautifully marked hard woods suitable for cabinet-work and inside finishing. There are vast areas of such land in the South, and the indications are that for many years this industry will be one of the most profitable in "Dixie." Since 1890 the lumber trade has made great strides in the South. The *New York Journal of Commerce and Commercial Bulletin* has compiled a table showing that during the ten years ended in 1900 the aggregate value of products of the lumber industry increased \$128,886,602. Of this gain the thirteen Southern States furnished three-quarters. According to the same authority, the lumber business in Michigan and Wisconsin declined \$32,000,000, or more than 38 per cent.; other Western States which are extensively engaged in the lumber trade also suffered heavy loss. In some of the Northern States the business continues to expand, but the percentage of gain is not as great there as it is in the South. Not only in lumber is the South forging ahead, but also in cotton manufacture, coal, iron and other lines. This section has supplanted the Eastern States as the largest producer of coarse cotton goods in the United States, and it is predicted by many that the day is not far distant when it will also become the leading manufacturer of the finer grades of cotton goods. — *Baltimore News*.

COPPER PLATED DOORS.—It is reported that a process of covering wooden doors with sheet-metal by means of electrolysis is now being experimented with at Bridgeport, Conn. The excellent fire-resisting qualities of a wooden door covered with tinplate have long been recognized, since the metal covering prevents the wood taking fire, while the use of wood for the framing avoids any risk of the warping of the door by heat, allowing flames to pass through, as has happened with doors built wholly of iron. A tinplate-covered door has, however, a poor appearance, and is therefore suitable only for workshops and warehouses. By depositing copper or bronze electrolytically, it is hoped to provide doors suitable for buildings of all kinds. The method followed is to place the carefully finished wooden door in a hot solution of fossil-gum in linseed-oil. This completely closes the pores of the wood with an impervious varnish, so that on transferring the door to the electrolytic bath the solutions are not absorbed. On removal from the varnishing-bath, the edges of the door are bound with sheet copper fixed by cement, and the rest of the door is then covered with a conducting layer of bronze powder, after which the whole is placed in an electrolytic bath and copper deposited over the whole surface. — *Engineering*.

NEW YORK SIDEWALK VAULTS MUST BE PAID FOR.—Maurice W. Deshong, who some time ago sued the city to recover \$914, which sum he alleged the city authorities compelled him to pay "under duress and actual compulsion," has received a set-back in the Appellate Division of the Supreme Court. In an opinion handed down by Justice Ingraham lately, in which Justices Van Brunt and Hatch concur, the action of the lower court in dismissing the case is sustained. Deshong is the owner of the premises at 54 and 56 West Third Street. Some time ago he decided to rebuild. When the building was originally put up there was a vault under the sidewalk. When rebuilding, Mr. Deshong attempted to reconstruct the vault, but the city interfered, and Mr. Deshong was ordered to get a permit from the city authorities. For the permit he had to pay \$914, which he did under protest, and sued to recover the amount, claiming that inasmuch as the city had never made any charge for the original vault, they had no legal right to charge in the second instance. In his opinion, Justice Ingraham said: "It is too well settled to need citation of authorities that no person can obtain a right against the public to use a public street by prescription. There is nothing to show that the plaintiff or his predecessors in title ever acquired anything more than a mere license to maintain their vault, which was revocable by the public authorities. There is certainly no presumption that the public would be estopped from at any time resuming possession of the street or compelling the owner of the property to remove the vault." — *N. Y. Times*.

A MODERN LOG-CABIN.—On Warren's Island, off the coast of Maine, is being erected what is properly described as "a palatial log-cabin." It is composed of spruce-logs, and costs the tidy little sum of \$75,000. The entire island on which this summer palace is erected was purchased by the late William H. Folwell, of Philadelphia. Mr. Folwell died before the completion of the house. The work is now superintended by his son, William H. Folwell, Jr. Some idea of the size of the "cabin" may be gained from consideration of the fact that there are 22 sleeping-rooms on the second floor. On the ground-floor there is a fireplace of brick and granite, the mantelpiece being of marble, 12 feet in length, 3 in width and 9 inches thick, the whole piece of work weighing some 40 tons. — *N. Y. Tribune*.

THE DUKE OF NORFOLK'S CATHEDRAL.—The death of the afflicted Earl of Arundel gives a pathetic added interest to the great cathedral which the Duke of Norfolk is building at Norwich. It was originally designed, in the Duke's own phrase, as "a thankoffering to God after my most happy marriage." But when the nave was completed and opened by Bishop Headley, another purpose was associated with it. "This noble church," said the Bishop, "was the offering of the piety of one whom we pray God to bless. When he planned and offered it, it was a thankoffering for happiness. But since then God has manifested His holy will in visitation and sorrow, and the founder hopes, in this offering, for God's blessing upon those who are near and dear to him." Building is now proceeding on the chancel and choir; and the finished cathedral will be associated with the memory of the Duke's dead son. — *Westminster Gazette*.

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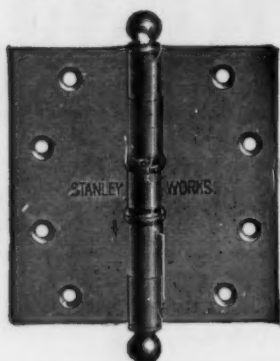
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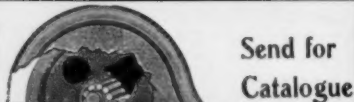
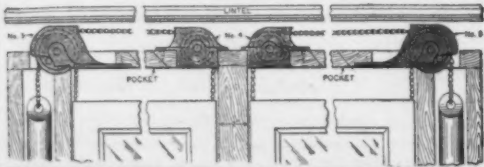
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Independence Hall, Philadelphia, Pa.		" 1729
Faneuil Hall, Boston, Mass.		" 1741

and others.

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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

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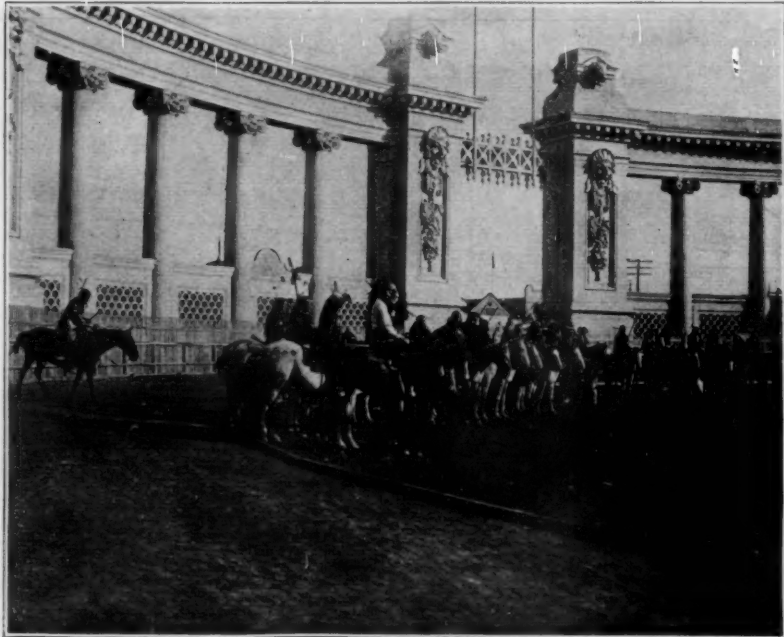
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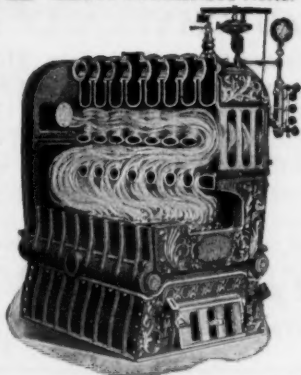
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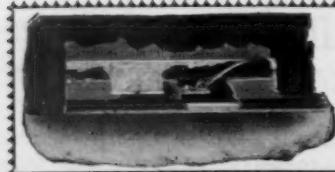
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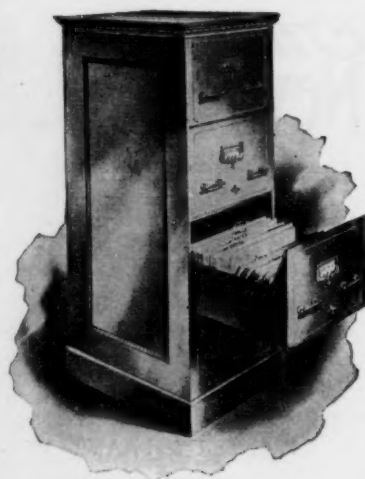
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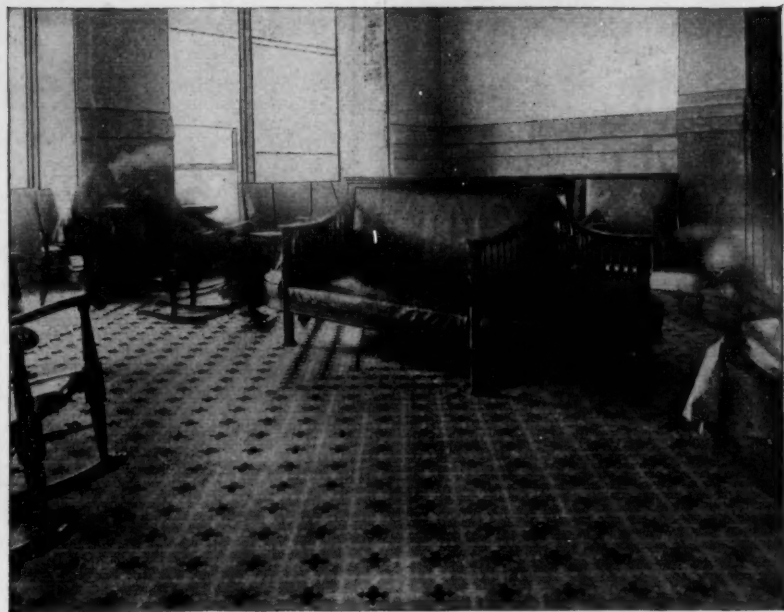
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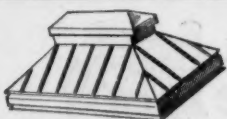
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BUILDING INTELLIGENCE.*(Advance Rumors Continued.)*

Estimates are being received by Cass Gilbert, 111 Fifth Ave., New York City, for the four-story stone court-house of Essex County to be erected on Market St. on the block between 13th Ave. and High St. The cost will be about \$900,000.

The general contract for erecting the office-building for the American Insurance Co. on the southeast corner of Park Pl. and Park St., has been awarded to V. J. Hedden & Sons, 1 Madison Ave., New York City. The building is to be 75' x 124' x 52'. Cost is about \$200,000. Cass Gilbert, 111 Fifth Ave., New York City, architect.

New Bedford, Mass.—The plans of Architect Sam'l C. Hunt for the new \$500,000 high-school building have been accepted.

New Iberia, La.—Architect W. L. Stevens, Crowley, is preparing plans for a theatre; \$28,000.

New London, Conn.—The contract for the erection of the proposed new Central school-house has been awarded to Carpenter & Williams, of Norwich, for \$58,500. Donnelly & Hazeltine, architects.

Newport News, Va.—Architect H. C. Snead has prepared plans for the main building for Hampton Roads Military Academy. Brick, terra-cotta, slate roof, Indiana stone; cost, \$40,000.

Newport, Vt.—The building to be erected here for the Newport Academy and graded school is to be three stories, 64' x 87', of New Hampshire face brick, with red sandstone trimmings, and tar and gravel roof, and will contain four class-rooms and teachers' room on first floor, two class-rooms, high-school room, two recitation-rooms and teachers' room on second floor, and boys' and girls' play rooms and the heating apparatus and toilets in the basement. The third floor will not be finished at present. Wm. M. Butterfield, Manchester, N. H., architect, and A. L. Bragg, St. Johnsbury, gen. contr.

New York, N. Y.—Plans have been filed at the Bureau of Buildings, Manhattan, for the new clubhouse of the City Club. It will be an eight-story and basement brick structure, located at 55 and 57 W. 44th St. The first floor will be used for offices and reception parlors, the second floor for a ladies' dining-room and library, the third floor for the main dining-room and the other floors for sleeping apartments for the members. There will also be a roof garden. The cost is given as \$160,000. Lord & Hewlett, architects. The City Club Realty Co., owner.

Plans have been filed for a five-story club-house to be built at 353 and 355 W. 17th St. Architect, J. H. Dunnean, 21 W. 24th St. Theo. B. Starr is the owner; estimated cost, \$50,000.

The St. Aloysius R. C. congregation is stated to have purchased a site at 132d St., west of 7th Ave., for the erection of a brick and stone church, to cost about \$100,000.

Northampton, Mass.—Rand & Skinner, Boston, has completed plans for a three and one-half story brick and stone dormitory, 60' x 120', \$50,000, for the Smith College Corporation.

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BUILDING INTELLIGENCE.*(Advance Rumors Continued.)*

Norwalk, Conn.—A new two-story silk mill, 198' x 213', will be erected here by the Norwalk Improvement Association for the occupancy of Joseph Loth & Co.

Orange, N. J.—Reports state that the Board of Education has accepted the plans of Geo. E. Poole, of Chatham, for Tremont Ave. School. Probable cost, \$30,000.

Oswego, N. Y.—The contract for the erection of a building for the Diamond Match Factory, costing \$50,000, has been awarded to Gustave Smith, of this city.

Pasadena, Cal.—It is reported that the plans of C. H. Brown, of Los Angeles, have been accepted for a city-hall to cost \$34,000.

Patterson, N. J.—An edifice to cost about \$30,000 is to be erected here for the First Holman Reformed Church, of which the Rev. Van Vlaanderen is pastor. The plot is 100' x 175' on N. Straight St. Sketches are now being submitted by local architects.

Perry, Ia.—The Council has decided to erect a \$15,000 city-hall, so report states.

Philadelphia, Pa.—Charles E. Oelschlaeger, 1502 Market St., has prepared plans for a business building to be erected for the Geo. DeB. Keim Saddlery Co. at 610-612 Market St. Total cost, \$60,000. Architects Milligan & Webber, 520 Walnut St., are reported to have won the competition for the \$100,000 Lu Lu Temple, to be built on Spring Garden St., below Broad.

A. W. Barnes, architect, of 901 Walnut St., will revise plans and specifications and invite new bids for the large apartment-house to be constructed at 22d and Ludlow Sts. It will be a six-story building, steel frame, with slag roof, steam heat, electric light and elevators. Cost is estimated at \$300,000.

J. Horace Cook is preparing plans for the new Northeast Manual Training School, to be erected at 6th St. and Lehigh Ave., at a cost of \$250,000.

Pittsburgh, Kan.—It is stated that Dieter-Wenzel, of Joplin, Mo., have received the contract to erect the Manual Training and High School in this city, for \$32,700.

Pittsburgh, Pa.—Allison & Topp have been commissioned to prepare plans for the C. K. Hill residence, which is to be of brick and terra-cotta and located on Morewood Ave.; cost, \$50,000.

The Pittsburgh Dry Goods Co. has purchased the properties at 409-411 Penn Ave. in this city for \$200,000. About April 1, 1903, they will begin the erection of a modern brick and steel block to be used as a wholesale dry goods establishment. It is stated that the new structure will be not less than eight stories, and the ground dimensions will be 60' x 420'. Neil & Howlands are preparing plans for the \$35,000 church to be built at Ellsworth and Morewood Aves. by the First Unitarian congregation.

Pittston, Pa.—Press reports state that the contract for the erection of the new opera-house on Broad St. has been awarded to the lowest bidder, Mathias Stipp, of Scranton, for \$32,000.

Portland, Ind.—Architects Kramer & Harpster, Findlay, O., have drawn plans for the First Presbyterian Church. Probable cost, \$15,000.

Portland, Me.—Frank W. Cunningham is stated to have secured the contract for erecting the city home for \$112,450.

Rochester, N. Y.—Work will shortly be begun on a new New York Central Railroad passenger station, which will cost about \$230,000. The building will be three stories in height, and will have double the capacity afforded by the present station. The train shed will also be considerably enlarged. The structure, when completed, will occupy an entire block.

San Francisco, Cal.—The Board of Education has under consideration the erection of schools to cost in the aggregate \$100,000, and has requested the Board of Public Works to employ an architect to prepare plans and superintend the construction of schools to be built during the fiscal year.

Schenectady, N. Y.—Reports state that Metz & Meyer, of Buffalo, have secured the contract to erect the Union Presbyterian Church at Park Ave. Probable cost, \$45,000.

Scranton, Pa.—Plans have been drawn for a \$200,000 brick and stone almshouse for the poor district. It will have tile roof, gas and electric fixtures, metal, stone, etc. E. H. Davis, 300 N. 21st St., Philadelphia, architect.

BUILDING INTELLIGENCE.*(Advance Rumors Continued.)*

Steubenville, O.—It is reported that the Pennsylvania Co. will erect a depot here, to cost about \$50,000. Thos. Kodd, Ch. Engr., Pittsburgh, Pa.

St. Louis, Mo.—A new union station, involving an expenditure of \$2,500,000, is proposed for this city. It is to cover two city blocks, lying between 12th and 14th Sts. and Poplar and Clark Sts. The railroads interested are the Rock Island, Burlington, Chicago and Alton, Illinois Central, and all the other roads not holding a proprietary interest in the St. Louis Terminal Association.

The Carleton Dry Goods Co., of which Murray Carleton is president, is to erect an eight-story structure on Washington Ave., cost of which will be \$500,000.

St. Paul, Minn.—Clarence H. Johnston, architect, has prepared plans for the new residence for Louis W. Hill to be erected on Summit Ave. It will be about 50' x 89', three stories, attic and basement. Work on the foundation will begin immediately. Cost complete, \$85,000.

Toledo, O.—It is reported that plans have been completed for a passenger and freight station to be erected by the Toledo Ry. & Terminal Co. on Cherry and Seneca Sts., to cost about \$200,000.

Topeka, Kan.—Report states that W. R. Brown, 433 Wabash Ave., Chicago, Ill., is preparing plans for a church for the First Baptist congregation in this city. It is to be of stone and pressed brick and will cost \$40,000.

Utica, N. Y.—The contract for erecting the public library building has been awarded to the J. W. Bishop Co., Providence, R. I., at \$162,000.

The contract for erecting a building for the Utica City National Bank is stated to have been awarded to Ambrose B. Stannard, St. James Building, New York City, for \$108,000.

Washington, D. C.—The contract for building the engine-house at Congress Heights has been awarded to Jas. M. Dunn for \$19,969.

Watch Hill, R. I.—Chapman & Frazer, Boston, are preparing plans for a two and one-half story frame dwelling for G. W. Hamilton.

Waukegan, Ill.—The Building Committee have adopted plans of Architect Geo. H. Miller, Bloomington, for the new Christian Church to cost about \$12,000. Address L. F. Watson.

Waukesha, Wis.—Plans prepared by Claude & Starck, of Madison, for the new city hospital are said to have been accepted by the city, and contracts will probably soon be let.

West Seneca, N. Y.—Reports state that a brick building, to cost \$125,000, is to be erected on site recently purchased on Ridge Road, opposite Ingram Ave., as an accident hospital in connection with the Lackawanna Steel Co.'s plant at Stony Point.

Wilkesbarre, Pa.—The contract for building Luzerne Co. court-house has been let to the Jos. Hendler Construction Co. for \$597,000.

Winchester, Mass.—The committee appointed to obtain plans and supervise construction of the proposed new high-school building has named August 18 at 5 P. M., as the limit of time for which competitive designs for the structure may be submitted. The following architects have been invited to compete: Colt & Holt, Winchester; Everett & Mead, 62 Devonshire St., Boston; H. D. Hale, 13 Exchange St., Boston; Hartwell, Richardson & Driver, 62 Devonshire St., Boston; Geo. F. Newton, Tremont Building, Boston.

Youngstown, O.—This city will erect a \$150,000 brick and stone municipal building.

APARTMENT-HOUSES.

Boston, Mass.—Columbia Road, cor. E. Cottage St., four-story bk. flats, 44' x 55' x 80'; o., G. N. Wattendorf; a., Rob't A. Watson.

Brooklyn, N. Y.—Clinton St., nr. Fulton St., twelve-story bk. & st. flats, tile roof; \$275,000; o., L. J. Horowitz, 186 Remsen St.; a., The Thompson-Starrett Co., 49 Wall St., New York City; a., F. S. Lowe.

New York, N. Y.—One Hundred and Sixteenth St., nr. Lenox Ave., six-story bk. & st. flats, 50' x 87' 11"; o. & b., Astoria Land and Construction Co., 347 Jamaica Ave., Astoria; a., Neville & Bagge.

W. Fifty-first St., Nos. 324-328, six-story bk. flat, 61' x 87' 4"; \$60,000; o., Rosenberg & Feinberg, 129 Vernon Ave., Brooklyn; a., Alfred E. Badt, 1 Union Sq. W.

Houston, Tex.—cor. Elizabeth St., six-story bk. flat, 20' x 64' 9"; \$25,000; o. & b., Polstein Bros., 120 Bible House; a., G. F. Felham, 533 Fifth Ave.

W. One Hundred and Seventy St., No. 210, six-story

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(Apartment-Houses Continued.)

bk. & st. flat, 88' x 112', plastic slate roof; \$185,000; o., Ivy Court Realty Co., 35 Wall St.; a., Wm. C. Hazlett, 1133 Broadway.

CHURCHES.

Morgantown, W. Va. — One-sty' st. church; \$30,000; o., Morgantown M. E. Church; a., F. R. Comstock, New York City.

Philadelphia, Pa. — Thirty-eighth and Ludlow Sts., bk. & st. church, 80' x 158'; \$55,000; o., Protestant Episcopal Church of the Saviour; b., A. Whitehead, 1624 Latimer St.; a., C. M. Burns.

Thirtieth and Diamond Sts., bk. & st. church; \$30,000; o., Bethlehem Evangelical Lutheran Society, Rev. Geo. C. Lons, 1932 N. 13th St.; a., C. E. Rahn.

Putnam, Conn. — One-sty' & base. bk. & st. church, 63' x 130'; \$50,000; o., St. Mary's R. C. Society; b., Eli Bellisle, Worcester.

West Boylston, Mass. — Fr. church, 50' x 88'; \$13,000; o., Congregational Society; a., Chapin & Topanlian, Worcester.

HOUSES.

Boston, Mass. — E. Cottage St., Ward 16, 2 three-sty' bk. dwells, 25' 6" x 48' 6"; \$8,000; o., G. V. Watterdorf; a., Robert A. Watson.

Fairfax St., nr. Carruth St., Ward 24, 2 1/2-sty' fr. dwell., 32' x 44', pitch roof, furnace; o., N. S. Rice; b., W. M. Rice.

Hamilton St., nr. Clarkson St., Ward 20, three-sty' fr. dwell., 25' x 40', flat roof, furnace; o. & b., Higgins & Scarr.

Hamilton St., nr. Columbia Road, Ward 20, three-sty' fr. dwell., 24' x 50', flat roof, furnace; o. & b., John Scarr; a., P. A. Tracy, 923 Dorchester Ave.

Mt. Vernon St., No. 39, Ward 23, two-sty' fr. dwell., 33' x 39'; o., Earl E. Davidson; b., Charles Duran; a., Henry Bailey Alden.

Acorn St., nr. Pond St., Ward 23, two-sty' fr. dwell., 28' x 65'; o., Lars Anderson; b., F. L. Whitecomb; a., Fox & Gale.

Crestwood Park, nr. Townsend St., 2 1/2-sty' fr. dwell., 31' x 40'; o., Jessie Todd; a., Harold W. Hathaway.

Park St., nr. Greenbriar St., Ward 20, 2 1/2-sty' fr. dwell., 26' x 47'; o. & b., H. A. Black; a., E. E. Jordan.

Sherborn St. and Bay State Road, four-sty' bk. & st. dwell., 30' x 65', comp. roof, hot water; o., Albert Stone; b., Connery & Wentworth; a., Fehmer & Page.

Fisher Ave., Roxbury, three-sty' fr. dwell., 27' x 45', comp. roof, hot air; \$5,000; o., Martin Downey; a., Sam'l Rantin & Son.

Everett Road, off Savin Hill Ave., 2 two-sty' fr. dwells, 25' x 45', pitch roof, furnace; \$10,000; o. & b., Philip La Blane.



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(Houses Continued.)

Bay State Road, No. 135, five-sty' bk. & st. dwell., 26' x 68', comp. roof, steam; \$25,000; o., Jas. M. Prendergast, 66 State St.; b., John J. Cranitch; a., James Mulcahy.

Brooklyn, N. Y. — Calton Ave., nr. Ocean Ave., 2 1/2-sty' fr. dwell., 33' x 46', shingle roof; \$7,500; o., J. D. Strahman, 1 Beekman St., New York; a., A. D. Isham, 220 Broadway, New York.

Flatbush Ave., cor. E. 28th St., three-sty' bk. store & dwell., 45' x 50', gravel roof, steam; \$12,000; o., E. R. Strong, on premises; a., B. Driesler, 13 Willoughby St.

E. Seventeenth St., nr. Avenue C, 2 1/2-sty' fr. dwell., 26' 6" x 52'; \$6,000; o., G. W. Egbert, 126 E. 19th St.; a., Benj. Driesler, 13 Willoughby St.

Rugby Road, nr. Albermarle Road, 2 1/2-sty' fr. dwell., 26' 6" x 46' 6", shingle roof, steam; \$12,000; o., Dean Alvord, 152 Marlborough Road; a., C. H. Pratt, 152 Marlborough Road.

Elmore Pl., nr. Avenue F, 2 1/2-sty' fr. dwell., 24' x 40', shingle roof; \$6,500; o., J. R. Corbin Co., 1516 Flatbush Ave.; a., B. Driesler, 13 Willoughby St.

Eighty-sixth St., nr. Fort Hamilton Ave., 2 1/2-sty' fr. dwell., 32' x 32', shingle roof, steam; \$5,500; o., Eliza Malarkay, 352 Seventy-sixth St.; a., Petit & Greene, 11 E. 33d St., New York.

Cinton Ave., nr. Gates Ave., 3 1/2-sty' bk. dwell., 36' 8" x 55' 8", steam heat; \$30,000; o., E. E. Jackson, Jr., 115 Broadway, New York; a., Babb, Cook & Willard, 3 W. 29th St., New York.

Hancock St., nr. Hamburg Ave., 20 three-sty' bk. dwells, 20' x 49'; \$90,000; o., G. Gutting, 263 Weirfield St.; a., F. Holmberg, 1153 Myrtle Ave.

Warwick St., nr. Arlington Ave., 2 1/2-sty' fr. dwell., 22' x 50', shingle roof; \$4,500; o., Catherine Rose, 43 Warwick St.; a., A. Rose, 43 Warwick St.

E. Seventeenth St., nr. Avenue V, two-sty' & attic fr. dwell., 25' x 34', shingle roof; \$4,500; o., A. E. Smith, 262 W. 22d St., N. Y.; a., A. M. Jenks, 42 S. 4th Ave., Mt. Vernon.

Winthrop St., nr. Flatbush Ave., two 2 1/2-sty' fr. dwells, 24' x 44', steam heat; \$9,000; o., T. H. Radcliffe, 793 Flatbush Ave.; a., A. D. Isham, 220 Broadway, N. Y.

E. Nineteenth St., nr. Avenue R, 2 1/2-sty' fr. dwell., 30' 6" x 30' 6"; \$4,500; o., W. R. Gell, 192 Hudson St., N. Y.; a., I. B. Ellis, 154 Montague St.

Cambridge, Mass. — Webster Ave., Plymouth and Hamlin Sts., three-sty' bk. stores & dwells, 42' x 166'; \$14,000; o. & b., Julius Finberg.

Greenwich, Conn. — 2 1/2-sty' fr. & cement dwell., 40' x 100', slate roof, steam; \$25,000; o., George F. Dominick; b., W. H. Smith Building Co.; a., Chas. A. Rich, New York City.

Hartford, Conn. — Farmington Ave., two-sty' bk. & fr. dwell., 41' x 55', pitch roof, hot water; \$15,000;

BUILDING INTELLIGENCE.

(Houses Continued.)

o., Morris Marks; b., T. F. Brabazon; a., C. O. Whitmore.

Meriden, Conn. — 2 1/2-sty' fr. dwell., 36' x 40', slate roof, furnace; \$5,000; o., F. D. Smith; a., David Bloomfield.

Minneapolis, Minn. — Pillsbury Ave. and Twenty-second St., 2 1/2-sty' bk. dwell., 40' x 45', pitch roof, hot water; \$12,000; o., C. M. Case; a., Wm. M. Kenyon.

Newport, R. I. — Two-sty' bk. & st. dwell., 40' x 45', slate roof, hot water; \$40,000; o., John Radford; a., J. D. Johnston.

New York, N. Y. — E. Thirty-ninth St., No. 33, five-sty' bk. dwell., 25' x 98'; \$60,000; o., W. Stables, 674 Columbus Ave.; a., Chas. I. Berg, 571 Fifth Ave.

W. Tenth St., Nos. 135-137, six-sty' bk. dwell.; \$25,000; o., S. N. Friedman and I. Farber, 280 Broadway; a., Bernstein & Bernstein, 111 Broadway.

Morris Park Ave., nr. Lincoln St., two-sty' fr. dwell., 20' x 38'; \$4,200; o., Edw. J. Cahill, on premises; a., W. C. Dickerson, 3d Ave. & 149th St.

Eighty-first St., nr. Park Ave., five-sty' & base. bk. & st. dwell., 20' x 67' 8", tin & copper roof; \$18,000; o., Mrs. S. J. Silberman, 133 E. 79th St.; a., Augustus N. Allen, 5th Ave. & 47th St.

Elton Ave., nr. 158th St., two-sty' & base. bk. dwell., 22' x 53'; \$8,000; o., Julius Heidermann, 3070 Third Ave.; a., Louis Falk, 2785 Third Ave.

E. Sixty-ninth St., Nos. 119-121, 2 four-sty' & base. bk. & st. dwells, 40' x 61' 11"; \$35,000; o., Leonard E. Opdycke, 41 W. 21st St.; a., Wm. S. Post, 33 E. 17th St.

E. Sixty-ninth St., No. 117, five-sty' bk. dwell., 20' x 75' 5"; \$25,000; o., Paul Tuckerman, Tuxedo, N. Y.; a., Hoppin & Koen, 244 Fifth Ave.

Pond Pl., nr. 118th St., 2 1/2-sty' fr. dwell., 21' x 51' 6", shingle roof; \$5,000; o., Oscar A. Doering, 2544 Marion Ave.; a., Franz Wolfgang, 787 E. 177th St.

Waltham, Mass. — Lexington St., 2 1/2-sty' fr. dwell., 40' x 40', cobble stone underpinning, pitch roof, steam; \$7,500; o., M. D. Clement, 916 Main St.; b., Herbert C. Gragg; a., J. P. Kingston, Worcester.

Somerville, Mass. — Cutter Ave. and Hawthorne St., two-sty' fr. dwell., 24' x 40', pitch roof, furnace; \$4,000; o., & b., T. C. Connor, 88 Orchard St.

Willow Ave., nr. Broadway, two-sty' fr. dwell., 25' x 46', pitch roof, furnace; \$4,000; o. & b., George F. Cook, 130 Josephine St.

STABLES.

Boston, Mass. — Wadsworth St., No. 42, Ward 1, 1 1/2-sty' bk. stable, 20' x 35'; o. & b., D. B. Sullivan.

Precor St., nr. Norfolk Ave., Ward 17, two-sty'

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(Stables Continued.)

fr. stable, 33' x 40'; o., J. B. Simpson; a. & b., W. J. Henderson.

Kemble St., rear No. 74, Ward 17, two-st'y fr. stable, 25' x 35'; o. & b., Gallagher & Munro.

Blue Hill Ave., nr. Walk Hill St., two-st'y fr. stable, 20' x 30'; o., C. F. Kell; b., David Campbell.

STORES.

New York, N. Y.—Eighteenth St., nr. 5th Ave. through to 17th St., eleven-st'y bk. & st. lofts & store building, 50' x 144', asphalt & gravel roof; \$250,000; o., J. C. Lvone Building & Operating Co., 81 E. 125th St. and 6 E. 42d St.; a., Buchman & Fox, 11 E. 59th St.

Greene St., nr. Houston St., seven-st'y bk. loft & store building, 41' 4" x 90' & 65', plastic slate roof; \$75,000; o., Geo. H. Pigueron, 29 W. 42d St.; a., C. F. Kruse, 103 E. 125th St.

W. Thirty-fourth St., Nos. 22-26, six-st'y bk. & st. store building, 75' x 85' 9" & 93', slag & tar roof; \$100,000; o., J. J. Astor Estate, 23 W. 26th St.; a., Boring & Tilton, 32 Broadway.

COMPETITIONS.

MARKET, ETC.

[At Houston, Tex.] Plans, specifications and detailed drawings will be received by D. D. Bryan, City Secretary, until October 6 for a combined market-house and city-hall. Cost not to exceed \$100,000. 1391

PROPOSALS.

COURT-HOUSE.

[At Lawton, Okla. Ter.] Bids will be received by the Board of County Commissioners until August 25 for erecting a court-house. SAM FRANCES, Chmn. 1390

LIBRARY.

[At Gallon, O.] Bids are wanted August 25 for erecting the Gallon Public Library. Address BUILDING COMMITTEE, PUBLIC LIBRARY. 1390

MINT.

[At Ottawa, Ont.] Bids are wanted August 23 for the construction of the Mint at Ottawa. FRED GELINAS, Sec'y Dept. of Pub. Wks. 1390

LIBRARY.

[At Boulder, Col.] It is reported that bids are wanted August 30 for erecting a library in this city, to cost about \$75,000. G. W. ROE, architect, Pueblo, Col. 1391

CAPITOL.

[At Harrisburg, Pa.] Sealed proposals for the construction of a Capitol building for the Commonwealth of Pennsylvania, at Harrisburg, Pa., will be received by the Capitol Building Commission, at Harrisburg, Pa., until twelve o'clock, noon, on the 6th day of September, 1902, and then publicly opened. Plans and specifications and blank forms of proposal may be had on application to J. M. Huston, architect, Witherspoon Building, Philadelphia, Pa. EDGAR G. HELWIG, Secretary. M. L. AYRE, Superintendent. 1391

PRINTING OFFICE BUILDING.

[At Washington, D. C.] U. S. Engineer Office, 735 N. Capitol St., Washington, D. C., July 28, 1902. Sealed proposals will be received here until noon, August 27, 1902, and then publicly opened, for furnishing metal lathing

PROPOSALS.

and furring, marble work, bronze doors and lamp standards, wrought-iron gate and steel plate floors, for new building for Government Printing Office. Information furnished on application. JOHN STEPHEN SEWELL, Capt., Engrs. 1391

Treasury Department, Office of the Supervising Architect, Washington, D. C., August 8, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 9th day of September, 1902, and then opened, for furnishing the steam heating and ventilating apparatus complete in place for the U. S. Post-office and Court-house at Elmira, New York, in accordance with drawings and specification, copies of which may be had at this office, or at the office of the Superintendent at Elmira, N. Y., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1391

QUARANTINE STATION.

[At Galveston, Tex.] Sealed proposals will be received by George R. Tabor, M. D., State health officer, at his office, in Austin, Tex., until Tuesday, the 26th day of August, 1902, for building the iron frame screw piling quarantine station at Galveston, Tex. Bids will be received for the erection of the building, including iron and all other materials complete. Bids will also be received for the iron work, complete, and also bids for all other branches of work, complete, separately. Plans and specifications can be seen at quarantine department, Austin, Tex., and at quarantine station, Galveston, Tex., and at the office of Dodson & Scott, in Waco, Tex. GEORGE R. TABOR, M. D., State Health Officer. 1391

QUAY WALL.

[At Bremerton, Wash.] Sealed proposals, endorsed "Proposals for Concrete Quay Wall," will be received at the Bureau of Yards and Docks, Navy Department, Washington, until 1 o'clock, September 6, 1902, and then there publicly opened, for constructing 600 feet, more or less, of concrete quay wall, at the Navy Yard, Bremerton, Wash. Plans and specifications will be furnished by the Bureau. MORDECAI T. ENDICOTT, Chief of Bureau. 1391

BUILDING.

[At Fort Strong.] Depot Quartermaster's Office, U. S. Army, 170 Summer St., Boston, Mass. Sealed proposals, in triplicate, will be received at this office until 11 A. M. August 28, 1902, and then opened, for constructing a fire apparatus building at Fort Strong, Boston Harbor, Mass. Blank proposals and full information furnished on application. Envelopes containing proposals to be endorsed "Proposal for Constructing Building at Fort Strong, Mass.," and addressed to A. M. PALMER, depot quartermaster. 1391

DRY DOCK.

[At Norfolk, Va.] Sealed proposals, endorsed "Proposals for Dry Dock," will be received at the Bureau of yards and docks, Navy Department, Washington, until 1 o'clock, September 13, 1902, for constructing a concrete and granite dry dock, exclusive of pumping plant and caisson, at the navy yard, Norfolk, Va. Authorized cost of entire work, \$1,200,000. Plans and specifications will be furnished by the bureau on deposit of \$100 to secure their return. MORDECAI T. ENDICOTT, Chief of Bureau. 1391

Treasury Department, Office of the Supervising Architect, Washington, D. C., August 6, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 18th day of September, 1902, and then opened, for the installation of a conduit and electric wiring system for the U. S. Post-office at Oakland, California, in accordance with the drawings and

PROPOSALS.

specification, copies of which may be obtained at this office or at the office of the Superintendent of Construction at Oakland, Cal., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1391

COURT-HOUSE.

[At Kentland, Ind.] Bids are wanted until September 2 for the construction of a \$50,000 brick and stone court-house. James F. Bruff, Kokoma, Ind., architect. 1390

Treasury Department, Office of the Supervising Architect, Washington, D. C., July 31, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 10th day of September, 1902, and then opened, for the construction, including plumbing, heating and ventilating apparatus, electric wiring and conduits of the U. S. Post-office at Anniston, Alabama, in accordance with drawings and specifications, copies of which may be had at this office or at the office of the Postmaster at Anniston, Alabama, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1390

Treasury Department, Office of the Supervising Architect, Washington, D. C., August 1st, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 22d day of August, 1902, and then opened, for furnishing and installing new boiler plant for the U. S. Marine Hospital at Cleveland, Ohio, in accordance with drawings and specifications, copies of which will be furnished at the discretion of the Supervising Architect on application at this office or at the office of the Custodian at Cleveland, Ohio. JAMES KNOX TAYLOR, Supervising Architect. 1390

Treasury Department, Office of the Supervising Architect, Washington, D. C., August 2, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 15th day of September, 1902, and then opened for furnishing the steam-heating apparatus, complete in place, for the U. S. Post-office and Court-house at Abilene, Texas, in accordance with drawings and specification, copies of which may be had at this office or at the office of the Superintendent at Abilene, Texas, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1390

Treasury Department, Office of the Supervising Architect, Washington, D. C., August 2, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 16th day of September, 1902, and then opened, for furnishing the heating apparatus, complete in place, for the U. S. Post-office at Oakland, Cal., in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Superintendent at Oakland, Cal., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1390

Treasury Department, Office of the Supervising Architect, Washington, D. C., August 2, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 11th day of September, 1902, and then opened for the installation of a conduit and wiring system for the U. S. Post-office at New Brunswick, N. J., in accordance with the drawings and specification, copies of which may be obtained at this office or at the office of the Superintendent of Construction at New Brunswick, N. J., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1390

Treasury Department, Office of the Supervising Architect, Washington, D. C., August 2, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 11th day of September, 1902, and then opened, for furnishing the heating apparatus, complete in place for the U. S. Post-office at New Brunswick, New Jersey, in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Superintendent at New

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Brunswick, N. J., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1390	mandant of the navy yard named. MORDECAI T. ENDICOTT, chief of bureau. 1390	and others now under construction at the Mountain Branch of the National Home for D. V. S., near Johnson City, Tenn. Also for a complete system of water distribution and sewerage for this Branch Home. Plans and specifications can be seen at this office, at the office of the architect, J. H. Freedlander, 244 Fifth Ave., New York City, or at the office of the Superintendent of Construction, at the site of the work. Necessary information can also be obtained and blank forms for proposals procured on application at either of the above-named places. The Home reserves the right to reject any or all bids and to waive defects. MOSES HARRIS, General Treasurer, N. H. D. V. S. Approved: M. T. McMAHON, President Board of Managers, N. H. D. V. S. 1392
Treasury Department, Office Supervising Architect, Washington, D. C., August 5, 1902. Sealed proposals will be received at this office until 2 o'clock P. M. on the 17th day of September, 1902, and then opened, for the installation of a conduit and wiring system for the U. S. Post-office and Court-house building at Abilene, Texas, in accordance with the drawings and specification, copies of which may be obtained at this office or at the office of the Superintendent of Construction at Abilene, Texas, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1390	WATER-PIPE, ETC. [At Washington, D. C.] Office of the Commissioners, D. C., Washington, D. C., July 30, 1902. Sealed proposals will be received at this office until twelve o'clock, noon, September 6, 1902, for furnishing thirty-inch, thirty-six-inch and forty-eight-inch cast-iron water-pipe and specials. HENRY B. F. MACFARLAND, JOHN BIDDLE, Commissioners, D. C. 1391	BUILDING. [At Philadelphia, Pa.] Sealed proposals, in triplicate, will be received until 11 A. M., August 28, 1902, for constructing a two and one-half story brick and steel building for boxing and packing shop, and a one-story connecting passageway to cartridge factory; also a one-story brick building for power plant. Information upon application. FRANK HEATH, Major, Ord. Dept., Commanding. 1390
STEEL WORK. [At Washington, D. C.] Sealed proposals, endorsed "Proposals for Steel Work and Fireproofing," will be received at the Bureau of Yards and Docks, Navy Department, Washington, until 1 o'clock August 23, 1902, for furnishing the steel work and fireproofing for a storehouse building, navy yard, Washington, D. C. Estimated cost, \$24,400. Plans and specifications can be seen at the Bureau or will be furnished by the com-	MESS-HALL AND KITCHEN, LAUNDRY, STOREHOUSE, ETC. [For the Mountain Branch, N. H. D. V. S.] OFFICE OF THE NATIONAL HOME FOR DISABLED VOLUNTEER SOLDIERS, Rooms 932-4 New York Life Building, 346 Broadway, New York City, August 1st, 1902. Sealed proposals will be received at this office until 12 M. Tuesday, the 2d day of September, 1902, for furnishing materials, labor, etc., for the construction of mess-hall and kitchen, laundry, storehouse, hospital morgue, and for steam and electric lighting connections from the power-house to these buildings	

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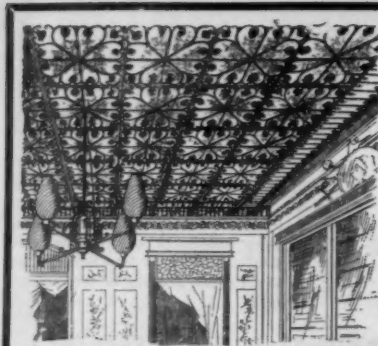
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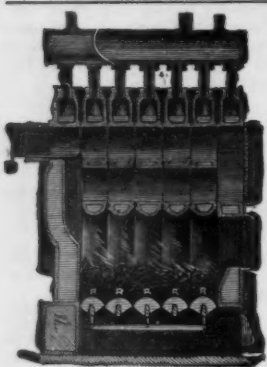
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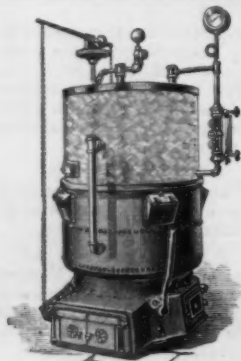
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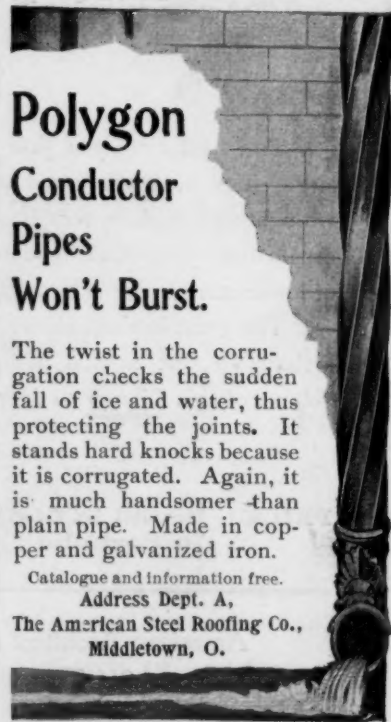
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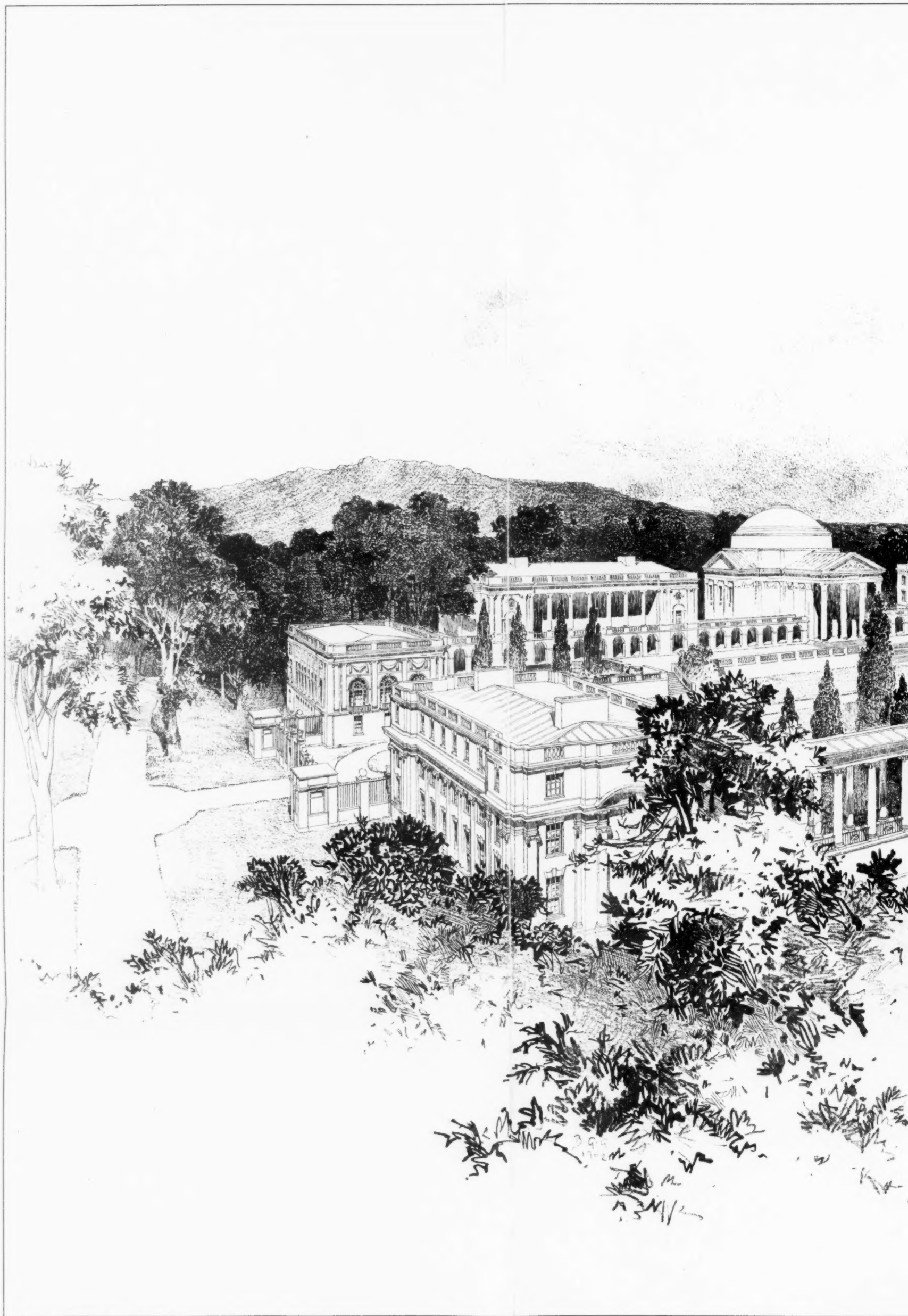
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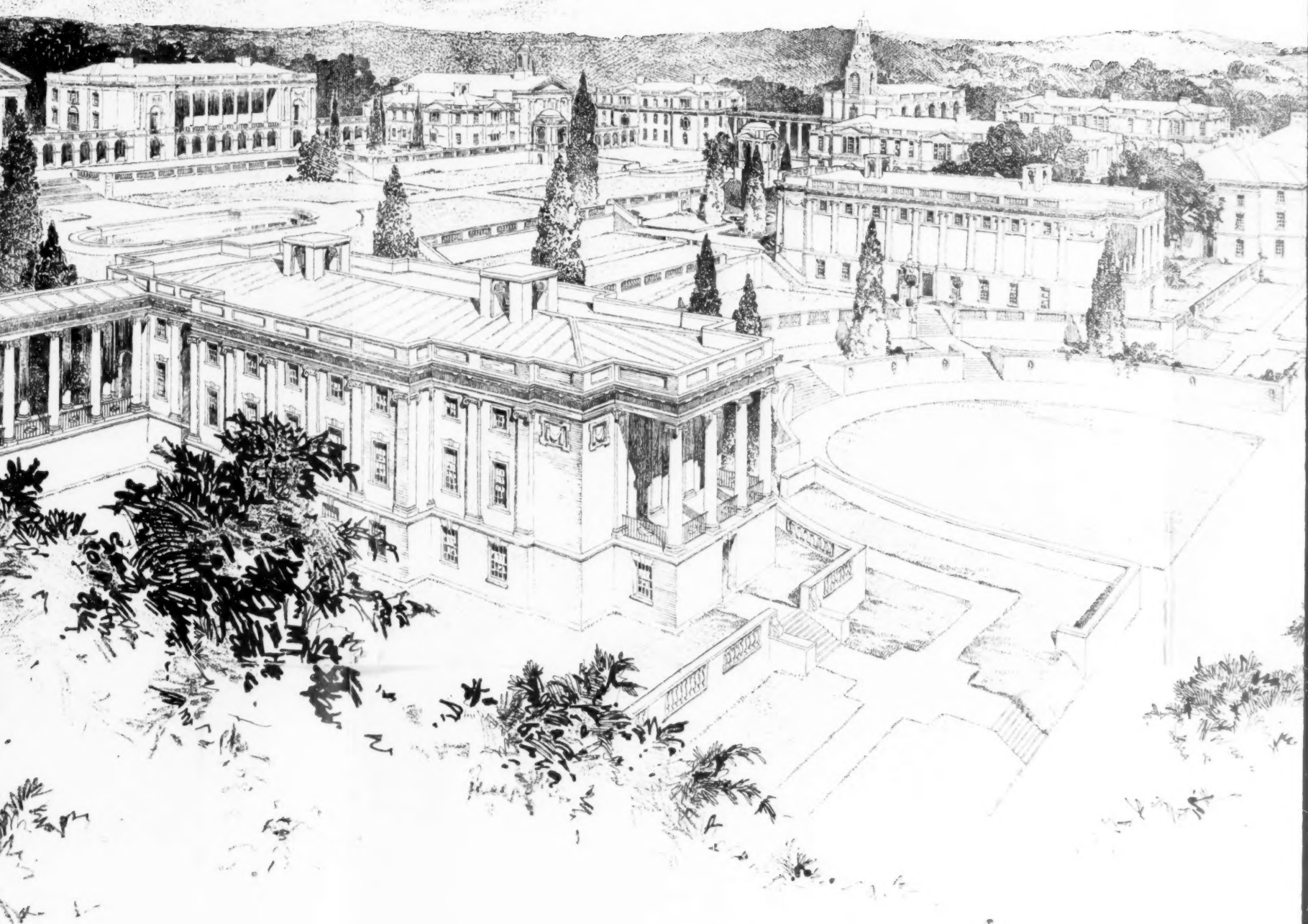
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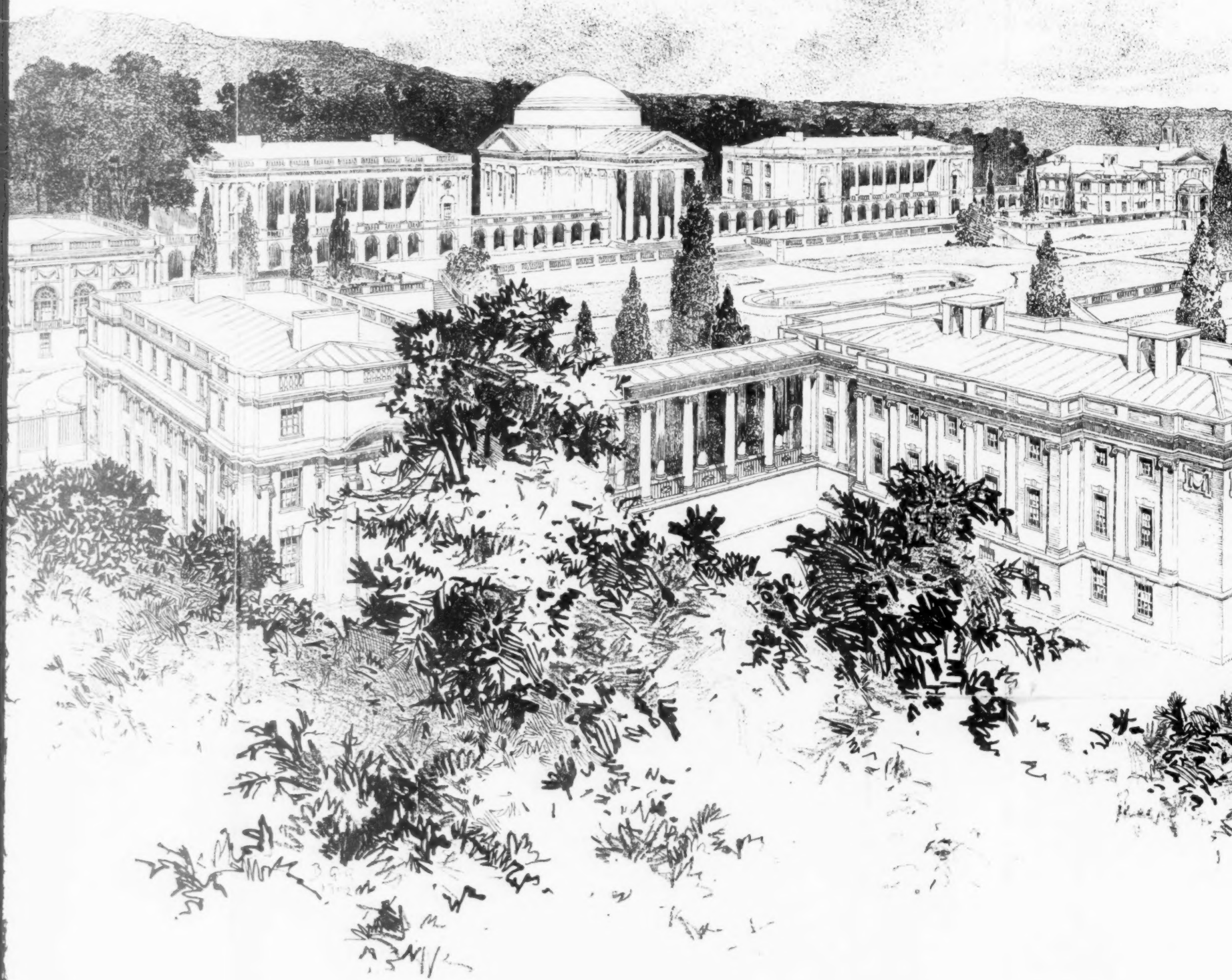


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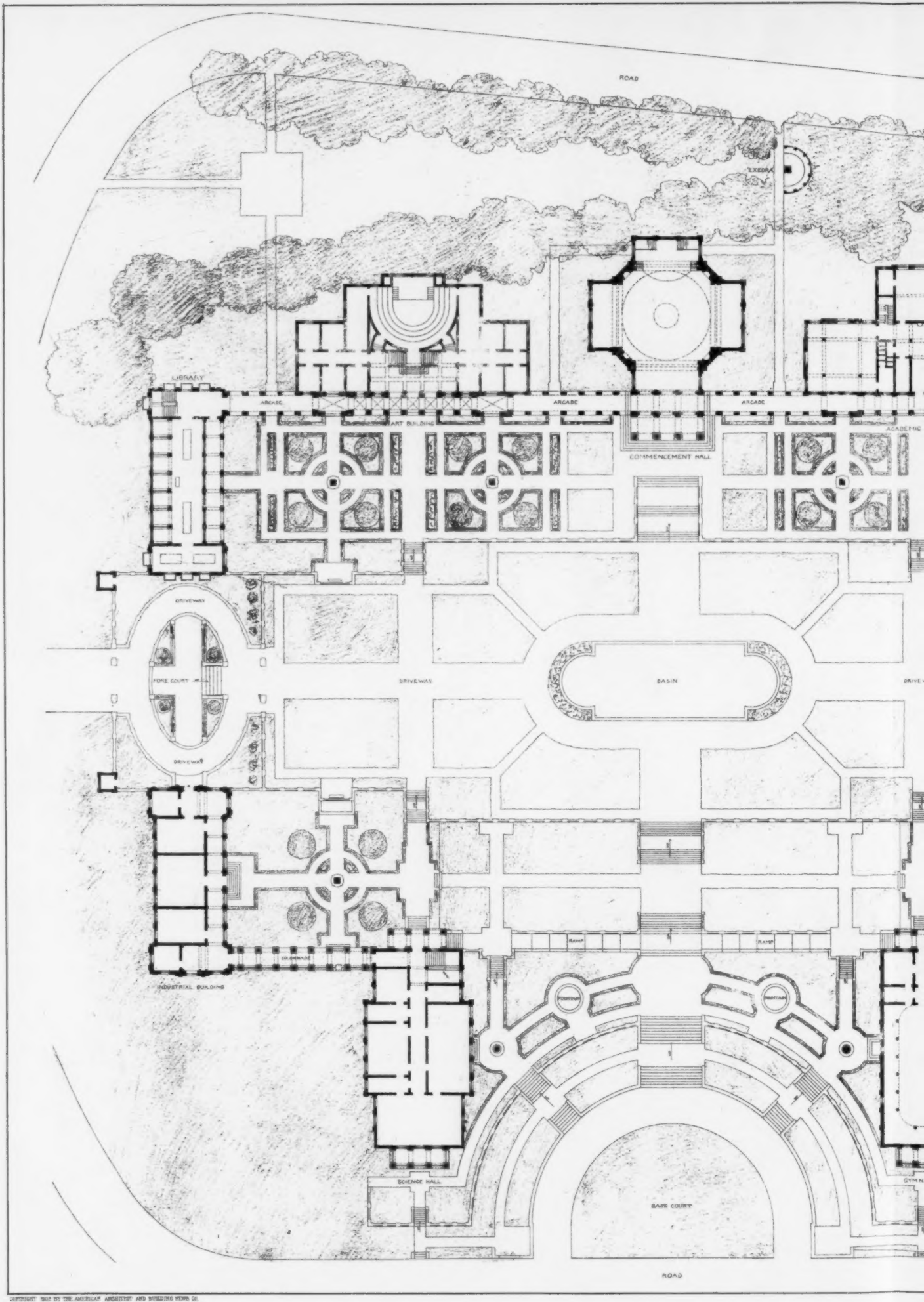


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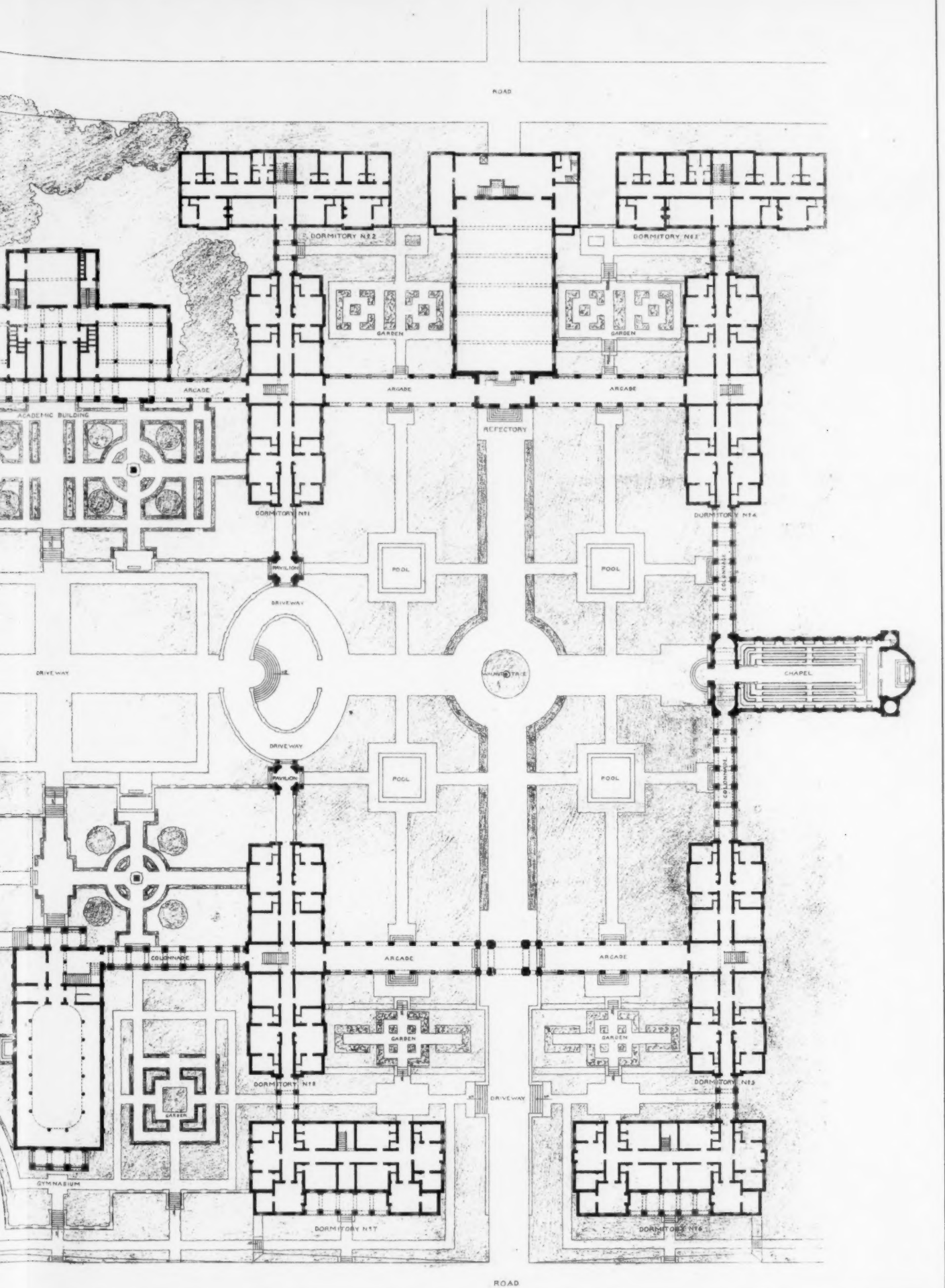
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