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A PLAN has been quietly discussed for a year or two among persons interested, for improving the Charles River basin, in Boston, in the same way that the Alster basin has been improved in Hamburg, and the upper reaches of the Thames, near London. At present, the Charles River basin, at low tide, presents a narrow and muddy channel, bordered on each side by an expanse of foul mud, visibly receiving accretions from the drains of the neighboring houses, the mouths of which appear in the sea-wall. In summer, the effluvia from the decomposing mud pervades the entire neighborhood, to such an extent as to blacken silver in houses at some distance from the water; and, even in winter, the low-tide aspect of the basin is anything but attractive. To those who compare the low-tide with the high-tide effect the advantage of perpetuating the latter in some way occurs very naturally, and schemes for building a dam across the river have been put forward at intervals for many years. Until lately, an insuperable objection to any plan of the sort was found in the fact that the Charles River was officially held to be a navigable stream, which could not legally be obstructed; but a recent order of the War Department, permitting a bridge without a draw to be constructed across the channel below the basin, virtually abrogates all rights to navigation which would prevent the construction of a dam, and there seems to be no reason now why the basin should not be utilized purely for the health and recreation of the public. The first step in the process of conversion from its present condition would be to construct a dam, high enough to retain the water at a level not far below average high tides. Upon the banks of the permanent basin thus formed would soon be built, by private enterprise, boating and bathing establishments, where the people of the city could practise rowing and swimming in such manner as they liked, and under far more favorable conditions than is now possible; and the shores would, presumably, be laid out and planted, so as to afford an agreeable promenade on each side of the river. It is quite possible that a service of steam or electric launches might be found popular and profitable. Thousands of people use the little "Mouettes Genevoises," on the Lake of Geneva, to save themselves the trouble of walking across a bridge; and lines of boats, for example, centring at the Charlesgate, and plying to Cambridge, Watertown and Newton in one direction, through the Fens to Huntington Avenue and Longwood in another, and, possibly, to the North End and the Union Station in

another, touching at intermediate stations, would be very convenient. Apart from this, however, the basin would afford an admirable opportunity for pleasure-rowing. The upper portion of the Charles, at Riverside, is literally crowded with boats and canoes on summer evenings, and the proposed basin, surrounded, as it is, by a dense population, is, perhaps, more conveniently situated for such recreation than any other water-park in the world.

THE recent decision of the New York Court of Appeals, declaring the statute requiring stone for public work to be cut within the State to be unconstitutional and void, has already had important consequences. An action was recently brought against the Commissioners of the new East River bridge, to restrain them from wasting the public money by means of a contract drawn up in accordance with the so-called "labor-law," and requiring that contractors should give preference in employment to citizens of the State of New York; should not allow any workman to labor more than eight hours a day, except in special emergencies, and should pay not less than the "prevailing rate" of wages for similar work in the locality. The case was brought on demurrer to the Appellate Division of the Supreme Court, which has decided, following the doctrine of the Court of Appeals, that all the provisions of the contract referred to are illegal and unconstitutional, and that the contract is so far void; and, to the claim that no sufficient ground was shown in the complaint, the Court replied that the "necessary result" of the stipulations referred to would be to waste the public funds, and that the complaint was, therefore, sufficient.

PURSUANT to an Act of the last Congress, empowering the President to appoint a Commission to prepare plans for the future development of the city of Washington, Messrs. Frederic Law Olmsted, of Brookline, Mass., and Daniel H. Burnham, of Chicago, have been selected, and have been authorized to nominate a third person, to act as the remaining member of the Commission. The new Commissioners are not authorized to carry out any of their recommendations, but are simply employed to lay out a comprehensive scheme, covering the city and suburbs, in accordance with which future improvements are to be made. No one can deny that such a step as this is necessary, to put an end to the vague scattering of important public buildings in secluded localities, and the erection of cheap restaurants and laundries along the most splendid avenues in the world, which is so rapidly degrading Washington, and two men more competent to plan such a scheme as is required could not, probably, have been found in the country. Mr. Olmsted is already familiar with Washington and its possibilities, as the architect of the park system of the city, and Mr. Burnham, as architect-in-chief of the Chicago Exposition, stands, probably, at the head of his profession as a master of effective and dignified grouping of buildings. The new Commissioners have already held a meeting in Washington, and it is apparently their intention to have a well-matured plan ready for presentation to the next Congress, in December.

THE New York unions, instead of arranging their usual spring campaign against the builders and the public, are quarrelling vigorously among themselves. It appears that there are in the city two organizations of carpenters: one "affiliated" with the Building Trades' Council, and the other with the Board of Delegates. The public probably imagines these two bodies to be identical, or at least, to be on terms of the most intimate fraternity wherever the annoyance of the public is concerned; but it appears that this is very far from being the case. One of the carpenters' organizations, known as the "Brotherhood," recently ordered strikes on two school-houses in Brooklyn, because some carpenters were employed there who belonged, not to the Brotherhood, but to the "United Carpenters." This brotherly conduct on the part of the first organization displeased the members of the other, who promptly called a meeting to consider plans of retaliation upon their erring mates. What form this retaliation will take does not yet appear, but builders, who know the violence of fraternal quarrels, fear that the brethren may reason together until, like the Kilkenny cats, both organizations have disappeared, leaving the city without any union carpenters at all. It may be

observed that this would give an opportunity for the non-union carpenter, who has long been condemned in New York to idleness and poverty, and, indeed, it is quite likely that the fight between the brotherhoods may, at an early stage, turn to his advantage. Usually, in such cases, the members of the warring factions look with more favor on neutrals than on each other, and it would not be very surprising to see gangs of independent non-union mechanics working unmolested in the midst of the combatants, simply because neither faction wished to disturb them, for fear of giving an opportunity to the other.

THE New York *Evening Post* makes a very sensible suggestion in regard to the advertising-sign nuisance. Speaking of the demolition of the old Stewart mansion, on the corner of Fifth Avenue and Thirty-fourth Street, which has been made the occasion for the display of an immense multitude of signs and posters, it proposes that the public authorities should require a revenue stamp to be affixed to every posted bill, as is now the law in France. The French regulation does not seem to check reasonable advertising, while it must do a good deal to shut off the most undesirable sort, at the same time that it brings in a considerable revenue. Happily, the abuse of advertising has not reached in this country anything like the pitch that it has in England, where, particularly in London, the omnibuses are so covered with flaming signs and posters that it is next to impossible for a stranger to distinguish the card showing the destination of one approaching him, amid the larger and more brilliant advertisements of gin, beer, soap and tobacco by which it is surrounded. The asphalt sidewalks, also, which in this country are still supposed to be sacred to the pedestrian public, are in London utilized for the display of newspaper bulletins, which are pasted by thousands on them every morning and evening, to the annoyance of the passers-by, who, if they are of the better-bred class, turn out of their way to avoid walking over them, while they attract groups of the unpleasant-looking loungers who, in London, are always ready to gather where the circulation is checked, and pockets may be conveniently picked. While it is likely to be a long time before public opinion in this country would tolerate the effrontery of English advertisers, there is no harm in providing for the future, and a stamp-tax on all posters, proportioned to their size, would do something, even now, to relieve the heavy burden now imposed on citizens, while it would form a wholesome means of control for the future.

A BILL has been introduced into Parliament to authorize the formation of a corporation to supply gas to a large number of towns in the industrial region of England, at a maximum cost to the consumer which is not to exceed four pence per thousand feet, or three pence per thousand feet to customers who take not less than sixteen million feet a year. The gas to be supplied is a poor quality of water-gas, known as Mond gas, having no illuminating value, and only one-fourth the value of coal-gas as a fuel; but even in this case it is difficult to see how its sale can be made profitable. It is said that the sulphate of ammonia derived from washing the gas will pay the cost of the coal consumed, but it is found that, even in London, with its enormous area of compact building, the mere distribution of coal-gas to consumers costs, roughly, a shilling per thousand feet, or three times the sum for which the new company proposes to furnish the gas, and distribute it through a region comparatively thinly settled. If the company, like that operating in Boston, made coke, as well as sulphate of ammonia, it is possible that the value of this might offset a portion of the expenses; but it proposes to use only the refuse "slack" of the coal-mines, which would be of little or no value for making coke.

COMMENTING on the proposition of the new company, the *Builder* gives some interesting information in regard to the London gas-supply. The cost of producing the London illuminating gas, which is none too good, according to American standards, is, approximately, one shilling per one thousand feet, the cost of distribution being one shilling more, making a total of two shillings, or forty-eight cents, to which must be added, presumably, interest on the cost of the plant, and a certain sum for depreciation. It appears that at least half of all the gas produced in London is used for generating power or heat, instead of light. A non-luminous gas would evidently be just as useful for such purposes as the illuminating gas, and the problem of producing and distributing such gas, as a means of

saving the extra cost of illuminating gas, is a serious one. Whether the Mond system will solve it remains to be seen, but the intelligent public will, we imagine, view with some apprehension the prospect of an attempt to distribute an intensely poisonous gas through populous cities by means of the cheapest pipes that can be laid. Gas-pipes are made and laid far more carefully here than in England, but, even here, more than one-fourth the gas that they convey leaks out of them before it reaches its destination, and the temptation to cut the cost of the distributing system down to the lowest possible point, and make up for leakage by forcing through it great quantities of a gas which costs the company nothing, without caring what became of the leakage, would be very strong.

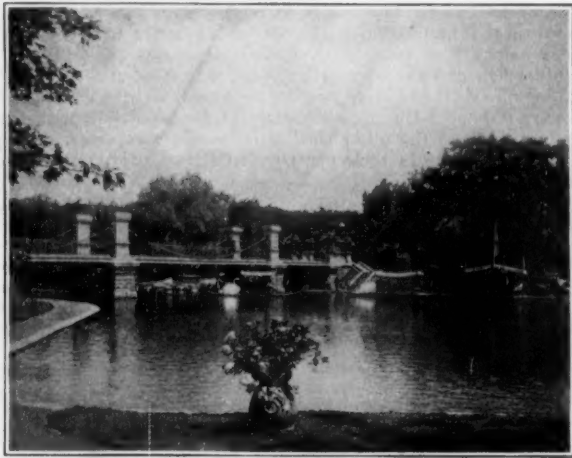
AT a time when plans are being discussed for building railways in Canada by the labor of gangs of Boer prisoners, "deported" from South Africa for the crime of having objected to the forcible extension of the "egis of British liberty" over them, and when thousands of Philippine Islanders are being shot for showing similar discourtesy to the American variety of liberty, it is refreshing to find the French still faithful to the maxims of individual freedom which they were the first to formulate and defend. Several months ago, a strike broke out at the coal-mines of Monceau-les-Mines. Some of the men refused to strike, and kept at work, and, lately, the strikers, imitating the example of the English and Americans in such matters, undertook to frighten and annoy those who remained at work. The local officials, instead of idly looking on, or openly encouraging the strikers, as has more than once occurred in this country, bethought themselves of the sacred "principles of the Revolution," and applied for assistance in carrying out these principles. The next morning, the people of the town found the entrances to the mines, and the approaches to them, guarded by a considerable body of *gens-d'armes*, while a squad of cavalry patrolled the neighborhood, to look out for disturbers of the peace. The men who wished to work, thus encouraged, went to the mines in large numbers, while the strikers and their wives yelled and hooted from a distance. At the close of the day's work, the troops again formed at the mine-shaft, and, with fixed bayonets, stood in a double line down the village street. The "yellows," as the French strikers call men who work when the labor tyrants have commanded idleness, walked to their homes between the double file of soldiers, the cavalymen accompanying to the doors of their houses those who lived beyond the line of troops. Although the strikers, or, more particularly, their female friends, yelled vigorously, there was no attempt at disturbance, and, apparently, there will be none.

AMERICANS will take pride in the announcement that Mr. Edwin A. Abbey has been commissioned by King Edward the Seventh to paint the coronation scene in Westminster Abbey, according to the custom at English coronations. The reason for choosing an American for this work is said to be that Mr. Abbey is "without a rival" in England as a painter of historical subjects. Considering that the British Government, with its National Gallery, its British Museum, its South Kensington Museum and the public schools of drawing and painting which it maintains at various places in the kingdom, probably spends more money in teaching and illustrating art than all the other governments in the world put together, it is rather significant that it should have to employ an American to paint coronation-pieces for its own kings; but the subject of the collapse of British art under official patronage is too large to be treated here. Meanwhile, Mr. Abbey will, no doubt, paint a picture satisfactory to his patron, and, what is of more importance to us, American artists will derive from his employment an encouragement which they greatly need.

THE eleven-story building, near the Tuileries garden, which has attracted the attention of so many visitors to Paris during the past year, is, as we learn from *La Construction Moderne*, remarkable on account of the extensive use in it of concrete with metal skeleton. The building is intended for the storage of Court records, and not only are all the walls and partitions of masonry, but all floors, ceilings, stairs, and even the racks and shelves for the files of papers, are of concrete with metal skeleton. The racks and shelves are painted white, with a silicious paint, which gives brightness to the interior without adding combustible material.

AMERICAN PARK BRIDGES.¹

IN recent years there has been much said and written in reference to the cheap and unstable character of American engineering works. In many cases, no doubt, this criticism is deserved, but, at the same time, this country contains a large amount of engineering work that compares very favorably with some work in other parts of the world. In the matter of ornamental park-bridges the



Public Garden, Boston, Mass.

engineer has opportunity to display more or less artistic taste, and create, not only useful works, but architectural ornaments as well. Several of the large American cities, such as New York, Boston, Chicago and Detroit, contain a number of bridges in their parks that illustrate, to a very high degree, the æsthetic tastes of American engineers. A few of these bridges have already been illustrated from time to time in American engineering papers, but this material has not been collected so as to give the student or critic a fair idea of the extent of ornamental bridge-work in this country. With this in view, the writer has collected pictures of a few bridges of this nature and presents them herewith, with the hope that these may dispel, to some extent at least, the idea, common not only in this country but also in Europe, that American engineering, and particularly bridge-engineering, is of a cheap and ugly character.

Artistic critics tell us that the character of the people is very largely shown by the style of their artistic constructions. This applies not only to the construction of their houses, the beautifying of their streets and cities, the laying-out of parks and boulevards, the building of monuments, etc., but also to the construction of engineering works.

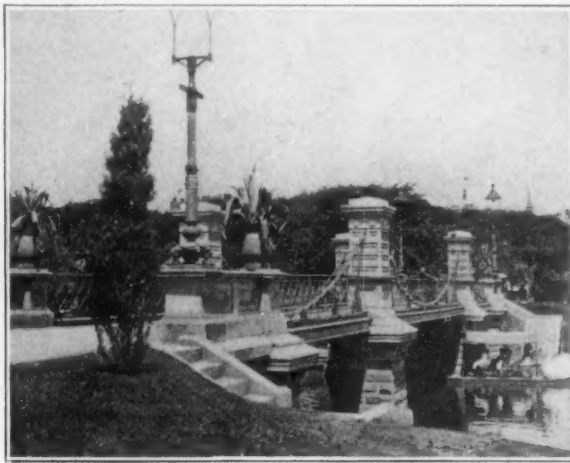
The bridges illustrated in this article reflect credit equally on the American architect and the engineer. It is gradually becoming generally appreciated that money spent in the vicinity of large cities in beautifying the landscape and adding ornamental features to the district in the end is often money gained, inasmuch as the building of such structures appreciates the value of the surrounding property.

In the city of Boston there has been a large number of very beautiful bridges constructed in the last few years. Among these may be mentioned Stony Brook Bridge, in the Fenways, built in 1891. As may be seen in the accompanying plates, it consists of five stone arches of 10-foot span each, three of these being over the water-way and two over the foot-paths on either side. The bridge is 85 feet wide between the parapets, and the arches are supported by piers. There is, at each end, a flight of steps from the walk next to the driveway to the walks passing under the bridge, which latter connect with the walks along the main water-way. The face-work of the masonry is of speckled brick, with trimmings of Milford granite. On each staircase there is a drinking-fountain.

Another very ornamental bridge, perhaps as much, or more, familiar to the New England people than almost any other, is the little suspension-bridge in the Boston Public Garden, two views of which accompany this article. It is difficult to say whether the bridge itself or its beautiful surroundings are the more attractive to the visitor. The graceful curves of the suspension-cables passing over the stone towers, designed with a considerable amount of ornament, together with the stairways at either end, and electric lights, make the whole one of the most, if not the very most, attractive features of the whole garden. In the summer time it is, of course, surrounded with a great variety of plants and flowers, and then the bridge is perhaps seen and appreciated by more people than almost any other work of a similar nature in the Boston district. As will be seen from the pictures, the lake over which the bridge is built is a favorite resort for pleasure-seekers, the seats along the water-edge beneath the overhanging trees forming shady retreats for pedestrians in the hot days of summer.

Another stone bridge recently completed is that on the bridle-path, built also in 1893 from the plans of Shepley, Rutan & Coolidge. This bridge supports the bridle-path across the water-way and

the walks on either side of the latter. The centre arch is elliptical in form, with a span of 30 feet and a rise of 9½ feet in the centre. The side arches which span the walks are semi-circular and 15 feet in diameter each. The face-work is of seam-face granite, with a belt of red granite about three feet below the top of the parapet. It has also a red granite coping and soffits, and the arches are built with speckled brick. The cost of this bridge complete was about



Public Garden, Boston, Mass.

\$32,000. It is 28 feet wide outside of parapets, and 100 feet long from end to end.

Another beautiful structure in Franklin Park, Boston, is that built to carry the parkway over the traffic-road, leading from Forest Hills Street to the entrance to Forest Hills Cemetery. This bridge is 125 feet in length and the main span is a segmental arch of 45 feet. As will be seen from the illustration, a stair-way connects the walk over the bridge with a walk along the traffic-road beneath. The slopes of the bank are supported by retaining-walls on the lines of the traffic-road. Crossing the parkway over the bridge the masonry piers for a gateway have been built. This gateway has three openings: one each to the drive, the road, and the walk. The piers at the side gateway are connected with the parapets on the bridge, so that the whole forms one structure. At one side of the gateway there is a recess with a drinking-fountain and seats. The total cost of this structure was about \$51,000.

As a general thing, a combination of two kinds of construction, such as steel and stone, is offensive to the artistic taste. In the case, however, of the park-bridge recently designed by the author of this paper for the park at Madison, New Jersey, it will appear that a pleasing effect has been produced. This bridge spans two tracks of railroad and has a width of 50 feet. The walk itself is 10 feet in width, and, as will be seen from the illustration, there is a set of steps leading up to the bridge at either end, built of stone and concrete. It was the object of the engineer in this case to produce the effect of a thin steel arch surmounted by a plate-iron railing. To secure this, a thin fascia, about nine inches wide at the crown, increasing to two feet at the springing line, was built on the lower side of the arch. The iron girders are capped with an ornamental cast coping, and each of the stone piers is mounted by an ornamental



Forest Park, St. Louis, Mo.

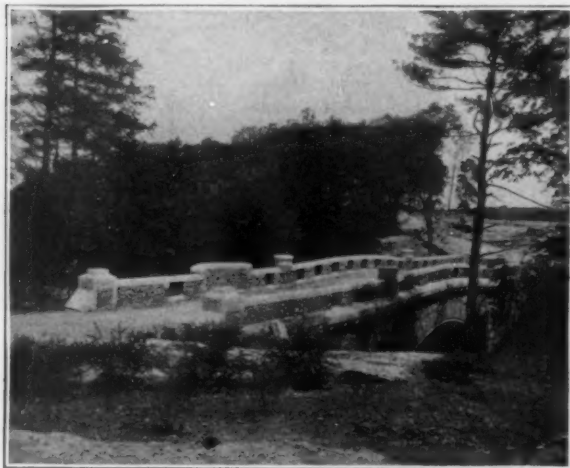
electric-lamp post. The whole is surrounded with shrubs and flowers, and altogether presents a very artistic appearance.

As a general thing, the form selected for ornamental bridges is either the arch or the suspension type. In wooded surroundings, for short spans, a rustic bridge corresponds well with nature, and produces a satisfactory effect. A very interesting and unusual example

¹ See also the full-page illustrations.

of rustic construction has recently been built in the National Zoological Park at Washington. It is a log arch of 75 feet span and 30 feet in width. The total cost, including the macadam roadway and foot-walk, was about \$3,000.

In the same park there is another small bridge of very unusual construction, made entirely of natural boulders. It was completed in 1895, and, as will be seen from the photograph, it has a span of



only a few feet. The width is 6 feet. It was intended in the construction of this last work that the side should present as rough and natural an appearance as possible. At the same time the joints where one stone bears against another were carefully dressed to an even bearing, the outside faces remaining in their natural condition. The engineer for both the last two bridges was Mr. Glenn Brown, of Washington, to whom I am indebted for the illustrations.

Lincoln Park, in Chicago, contains one example at least of an architectural ornament in the form of a stone bridge across the pond. It is approached at either side by stone steps, the side wall of which is a continuation of the parapet walls surrounding the pond. This bridge was apparently built more as a park ornament than for actual use, though it fulfils both conditions.

Bellefield Bridge, Pittsburgh, Pa., is located near the entrance to Schenley Park, and consists of a single segmental stone-arch of 150 feet span, and 36 feet rise, with abutments and wing-walls. It is 341 feet long and 85 feet wide from out to out, and carries a 59-foot roadway, and two 10-foot walks, over a ravine 70 feet deep. The bridge was completed in 1898 at a cost of \$112,200. Mr. Henry B. Rusts was engineer, and Neeld & Foley, of Pittsburgh, the builders.

Forest Park, St. Louis, has a very interesting concrete bridge of the Melan type, having a span of 60 feet and a width of 33 feet. The ornamental balustrade is what is locally known as granitoid and composed of crushed granite and Portland-cement. The entire cost of the bridge complete was \$5,600.

There is also in Forest Park a stone-arch bridge built to carry a water-pipe across the river. The length of the roadway is 106 feet and the extreme outside width is 10 feet, 8 inches. It was built in 1896 at a cost of \$10,500.

There is a steel-arch wagon-bridge just beyond the pipe-bridge which must not be confused with the latter. In ordinarily low water



Farlow Park, Newton, Mass.

the stream is comparatively dry, but during freshets it rises and often covers the pipe-bridge completely, excepting on the line of the middle part of the iron railing.

Lake Park, Milwaukee, contains a number of bridges, a few of which are illustrated here:—

One is an iron-and-steel foot-bridge completed in 1892, spanning

the north ravine, and is 110 feet in length and 12 feet in width, costing altogether \$3,000.

Another is the brick-arch bridge that spans the north ravine in Lake Park, completed also in 1892. It has a span of 35 feet, and cost about \$6,000.

Still another is a small rustic foot-bridge located in among the trees and crossing the foot-path down in the bottom of a small ravine. This last is extremely well suited to the surroundings, and looks, indeed, very much as if nature might have placed it there.

Between the two Sister Islands, Niagara, and crossing the rapid water, there is an unusual kind of small suspension-bridge, shown in the accompanying illustration. From the two wire cables the floor is suspended, and the whole is stiffened with wooden trusses. The location affords the sight-seer a good opportunity to view the Rapids. Niagara is famous throughout the world for its long-span bridges, but few think of the other smaller structures that show, perhaps, more artistic taste in their construction than the larger and more massive ones.

In Farlow Park, in Newton, Mass., there is a very pretty little rustic structure across the artificial pond, erected by the city apparently as an ornament. The whole span is not over 20 feet, and yet, covered as it is in summer time with vines, and conforming so well with the landscape in its construction, it is a very pleasing addition to the ornamentation of the park. The city of Newton is one of the most fashionable suburban-residence quarters of Boston, and contains a number of highly ornamental bridges and other park features.

Detroit has gone to a greater extreme, perhaps, than almost any other American city in the building of park-bridges. There are



Capitol Park, Hartford, Conn.

twenty or more, at least, in Bellevue and Clark Parks, a few of which are illustrated here. They are of all sorts of outlines, and built of different materials. An old rustic bridge over Loop Canal, in Bellevue Park, connecting Central Avenue with Casino Way, was replaced in 1892 by a more ornamental steel-arch bridge.

Palmer Park contains a large number of small ornamental rustic bridges, some of which are so completely buried in the landscape that they appear as a part of it.

Generally speaking, these rustic bridges can be built for about \$1.00 per square foot of floor-surface, while iron or steel bridges cost three or four times that much.

Capitol Park, in Hartford, contains one of the most beautiful architectural ornaments that we have. This memorial bridge was designed by Mr. George Keller, of Hartford, and built at the entrance to the Capitol grounds. The arch forms, perhaps, a more prominent feature than does the bridge itself. The accompanying illustration shows very clearly the construction, with the Capitol building in the background. The roadway in this case passes directly under the arch, and the side-walks curve around outside of the two stone piers. The whole is covered and surrounded in summer with ivy and other climbing vines, and, located as it is at the entrance of this beautiful park, it forms a very striking feature of the landscape.

It can not, of course, be expected to put up ornamental structures in any of the rural districts, or to any great extent for the use of railroads. The opportunity in the line of ornamental bridge-construction lies chiefly in and around our large cities and park systems,

and it is greatly to be hoped that, as old wooden bridges decay and are removed, our progressive American people will see their opportunity to replace these with suitable ones of iron and stone, made not simply to carry loads, but to be prominent architectural ornaments.

H. G. TYRRELL.

L'ÉCOLE NATIONALE ET SPÉCIALE DES BEAUX-ARTS, PARIS. SECTION D'ARCHITECTURE. — I.

WE so frequently have to answer questions relating to the character and details of the instruction in architecture given at the École des Beaux-Arts, Paris, that it will be a relief hereafter to refer the questioner to the following very excellent and comprehensive account by Mr. Arthur Cates published in the *Journal of the Royal Institute of British Architects*. The fact that English architects rather disdain the French school and its methods makes of all the more value such commendation as Mr. Cates sees fit to give them.

THE great academic system to which France is so deeply indebted for the foremost position which she has for nearly four centuries taken in Literature, Science and Art was inaugurated in the reign of Louis XIII. The "French Academy" was instituted in 1635 under Cardinal Richelieu. The "Academy of Painting and Sculpture" in 1648, in the Regency under Cardinal Mazarin. The "Academy of France" at Rome was founded in 1666 by Louis XIV, on the advice of Colbert, and, first housed in the Palazzo Capranica, was removed about 1736 to the Palazzo Mancini, and was, in 1803, finally settled in the Villa Médicis. In 1671 the same monarch, influenced by his enlightened minister, established the "Academy of Architecture," which was reorganized in 1775.

At the Revolution these Royal Academies were suppressed by a decree of the National Convention of 8th August, 1793, but in 1795 the National Institute of Science and Art was founded by a decree of the Republic, and the *Ecole des Arts* for painting and sculpture was established; but in 1816 Louis XVIII re-established these bodies, and after various changes the *Institut de France* now consists of five bodies, viz, the *Académie Française*, the *Académie des Inscriptions et Belles-Lettres*, the *Académie des Sciences*, the *Académie des Beaux-Arts*, and the *Académie des Sciences Morales et Politiques*.

On the suppression of the Academy of Architecture in 1793, individual efforts were made to establish a school — an *atelier* was conducted by David Le Roy, A. L. T. Vaudoyer and P. L. Baltard, by whom the tradition of the Academy was kept alive between 1793 and 1816. The *Ecole d'Architecture* was established on the ground floor of the Institut, and, combined with the *Ecole des Arts* for painting and sculpture, formed the *Ecole des Beaux-Arts*.

In 1608 Marguerite de Valois, first queen of Henri IV, La Reine Margot of the "Heptameron" and the "Mémoires," as a pious act towards the close of her gay and chequered life, founded, in the gardens of the palace she had recently built in the Rue de Seine, the *Couvent des Petits Augustins*, of which the chapel still exists, appropriated as the Renaissance Museum of the École, while the sacristy is devoted to the glory of Michael Angelo. On the suppression of the monastic orders and religious houses, the National Assembly, in 1790, appropriated the ancient *Couvent des Petits Augustins* to receive the monuments and objects of art collected by Alexandre Lenoir (1762–1839) from churches and religious houses, and saved by his care from destruction by the iconoclastic fury which then raged against all things connected with the Church and nobility; the collection thus formed became the celebrated *Musée des Monuments Français*.¹

At the restoration, Louis XVIII, on 24th April, 1816, decreed that the monuments collected by Alexandre Lenoir should be returned to the churches and edifices whence they had been taken, and on 18th December the buildings which had been occupied by the museum of Lenoir were appropriated to the *Ecole Royale et spéciale des Beaux-Arts*.

The designs for the new buildings for the École were entrusted to François Debret (1783–1850); the first stone was laid 3d May, 1820. In 1834 Debret was replaced by his brother-in-law and former pupil, Felix L. J. Duban (1797–1870), who had been an inspector of the works under him. Duban remodelled the whole scheme, which had not far advanced, and was actually the architect of the Palais des Beaux-Arts as it now stands, from the entrance in the Rue Bonaparte where the colossal busts of Poussin and Puget guard the portal, to the elegant and dignified façade on the Quai Malaquais, which added charm to that quarter of the city, and was completed in 1862.²

The École des Beaux-Arts lodged in this splendid building is supported by the Government,³ and the instruction given to those so fortunate as to obtain admission is entirely gratuitous. The limit of age is between fifteen and thirty, and besides French subjects a restricted number of foreigners are admitted to the school: among them students come from England, America, Italy, Switzerland, Belgium, Austria, Roumania and even Persia.

The Administrative Staff of the École, under a director appointed for five years by the President of the Republic, consists of a secre-

tary, an inspector, a keeper and assistant-keeper of the library records museum and collections, a librarian and two sub-librarians, with thirty-nine clerks, officials and attendants.

The Teaching Staff consists of twenty-eight professors for the École, and eleven professors for the *ateliers*, and is under the superior Council of the École, formed of twenty members, viz: The Director of Beaux-Arts, the Director and Secretary of the École, two painters, sculptors and architects, one engraver, and five other persons — these twelve members being selected outside the École, and appointed by the Minister of Fine Arts; also five selected Professors of the École — viz, of painting, sculpture, architecture, science and history.

The Juries for painting, sculpture and architecture consist of thirty members each, the permanent members being the member of the corresponding Section of the Académie des Beaux-Arts of the Institut de France, the professors of the École and artists recognized by the Council as teachers. The permanent members must not exceed two-thirds of the total number.

Admission to the École is only obtained by success in competition at the half-yearly Entrance Examinations.

For the admission of painters the tests are — first, a drawing from the antique, or from life, in twelve hours. Those who pass this test satisfactorily proceed to the further examination; these may number 80 of the candidates, with at the most 40 supplementary (foreigners) who have to execute — 1. An anatomical (osteological) drawing *en loge* in two hours. 2. A perspective drawing in four hours. 3. Modelling a fragment of a figure from the antique in nine hours. 4. An elementary study of architecture *en loge* in six hours. 5. An oral or written examination in general history.

For sculptors, the preliminary test is a figure modelled after the antique, or from life, in twelve hours. The further examination of the 27 candidates selected, with 15 supplementary (foreigners), is — 1. An anatomical (osteological) drawing *en loge* in two hours. 2. A drawing of a fragment of a figure in nine hours. 3. An elementary study of architecture *en loge* in six hours. 4. An oral or written examination in general history.

The architect, being a student of science, and a constructor, as well as an artist, has to undergo a more severe and comprehensive entrance examination, and a much wider course of instruction than the painter or sculptor. Of the courses of lectures, no fewer than twelve are special to the architect; full details of all are given farther on.

At each half-yearly entrance examination for admission to the section of architecture there may be from 400 to 500 candidates, of whom 60 only are admitted; 15 of them may be foreigners, making 90 French subjects and 30 foreigners admitted yearly to this section — 120 in all.

The great prestige of the École, the severity and thoroughness of the entrance examination, and the large number of students who desire admission has a widespread effect throughout France in creating a high standard of preliminary education in art, and raising the general standard of education.

This is particularly so as regards the architect. The architect "novice" differs much from the painter or sculptor "novice." He is generally older, smarter and better dressed; older, because the architect, having to submit to serious examination in mathematics, physics, history, etc., has invariably completed a thorough school education before entering the École, and has generally passed through a preliminary training of one or two years in an external *atelier*; the whole of the students admitted in 1900 were pupils of one or other of nineteen *ateliers*, in which the young architect graduates from the "Nouveau" up to the "Diplômé." And he is smarter and better dressed, because his family is generally in easy circumstances, since the desire to become an architect rarely occurs to the son of a village tradesman, while aspiring painter and sculptor novices, led on by the inspiration of color and form, continually reach the École from remote hamlets, rich only in their devotion to art.

The great principle of the system is that of competition. Progress in the school can only be obtained by success in the competitions, and advancement from the second to the first class is only granted to those who have gained in perhaps three years' continual work, a certain number of marks in defined competitions.

The work for these competitions, except the preliminary sketches of design, which are required to be performed *en loge*, may be executed either in one of the three *ateliers* attached to the Architectural Section of the school, or in an external *atelier*. Each *atelier* of the École will accommodate fifty students, and admission to it is only gained by the consent of the Professor "Patron" of that *atelier*, who may find of the applicant "*dignus est entrare*." The student may attach himself to an external *atelier*,⁴ and in either, having gone through the usual mysteries of initiation, he will be able, on payment of a moderate entrance-fee and a modest monthly contribution towards the necessary expenses, to enjoy the advantage of the direction and criticism given by the "Patron," and the advice of the older students; since the actual instruction lies chiefly in the hands of his fellow-pupils, many of whom, *Anciens* working up for the Grand Prix or the Diplôme, will be men of comparatively mature age, while the spirit of rivalry existing between the students in the

¹ Lenoir Alexandre: "Notice Historique des Monuments des Arts réunis au dépôt national," Paris, 1793; "Musée des Monuments Français," Paris, 1804.

² Daily, César: "Funérailles de Félix Duban. Discours prononcés sur sa tombe." 80. Paris, 1871. — Beulé, E.: "Eloge de Félix Duban. Notice sur sa vie et ses ouvrages." Académie des Beaux-Arts, 9 novembre 1872; *Revue Générale de l'Architecture*, vol. xxix, 1872, pp. 206–217.

³ The Budget for the current year is 420,260 francs, say £16,900, and 100,000 francs, £4,000, towards providing additional accommodation.

⁴ An external *atelier* may be considered a commonwealth of architectural art, constituted by the aggregation of enthusiastic students, brought together by admiration for the genius or personality of the "Patron," mutual personal friendships, opportunities of vacancies, and other reasons, and forming a self-governing community, under the influence, control and guidance of the "Patron." The working professional office of the "Patron" is generally quite distinct from the *atelier*, the students in which, as such, have nothing to do with the preparation of the drawings for his private work.

ateliers and between the *ateliers* themselves tends to develop and encourage the best elements in the art of design; and in the École itself everything which would encourage the seeking for the beautiful is amassed around the student, and creates with the very air he breathes a noble enthusiasm to excel in his art.

The complete course of the École up to obtaining the diploma may occupy eight years, but only one student in each year can obtain the Grand Prix de Rome.

The great inducement for skilled and experienced men to continue for the best early years of their lives in academic study is the hope of attaining the great honor of the Grand Prix de Rome, and certainty of obtaining Government patronage as a reward for their successes. Dispensation from two years' military service, granted to those who gain certain distinctions, is a further encouragement for emulation in study. Yet, even with these substantial inducements to continue their studies to comparatively so late a period of life, no little account must be taken of the natural enthusiasm and devotion to their art which, combined with the spirit of rivalry, induces those who have attained distinction in the earlier stages to devote themselves to the attempt to gain the highest point, and, failing that, to so distinguish themselves as to secure that official Government patronage only granted to the successful in the struggle.

The École Nationale et Spéciale des Beaux-Arts gives instruction in the Arts of Drawing, Painting, Sculpture, Architecture, Engraving, Medalling and Gem Engraving. It comprises:—

1. Courses of lectures on the different branches of art.
2. The "École" proper, in which, after admission by competition in an Entrance Examination, the student can enjoy practical instruction, take part in competitions, and obtain rewards and diplomas.
3. *Ateliers*, or studios for practical instruction, in which also prizes can be obtained.
4. Collections of casts—copies of the works of the great masters—the Envois de Rome—certain of the prize-drawings—and objects of art for instruction.
5. A magnificent art-library.

The instruction given is gratuitous, the whole establishment being maintained by the Government, and the school is open to both sexes.

The limit of age for students is not less than fifteen years, nor more than thirty years.

Eighteen courses of lectures are given:—

1. General History. 2. Anatomy. 3. Perspective for Painters and Architects (28 lectures). 4. Mathematics and Mechanism (36 lectures). 5. Descriptive Geometry (40 lectures). 6. Physics, Chemistry and Geology. 7. Stereotomy (25 lectures) and Surveying (6 lectures). 8. Construction: Theory (20 lectures); Practice (30 lectures). 9. Building Legislation and Practice (28 lectures). 10. The Theory of Architecture (35 lectures). 11. The Literature of Architecture. 12. History and Archaeology. 13. The History of Art. 14. The History of Architecture (25 lectures). 15. The History of Medieval and Renaissance Architecture in France. 16. Ornament. 17. Decorative Design. 18. Practical Sculpture.

Of these, twelve at the least are specially appropriated for architects.

The Section of Architecture is divided into two classes—Second and First. For admission the following regulations are in force:—

The Competitive Examinations for admission to the Second Class are held twice a year—in the autumn and in the spring.

Candidates for these examinations must enrol themselves in due form, with evidence of age, station and capability, and if foreigners, with a letter of introduction from their Minister.

The applicants generally number between 400 or 500 at each period, and of these only 60 can be selected—120 in each year.

Candidates have to pass through six separate examinations or tests, viz:—

1. *Drawing*: An architectural composition of a given subject, to be executed *en loge* in one sitting of twelve hours.¹

This subject is set by a commission of two members of each of the four categories of the jury (Académie des Beaux-Arts; Professors of the École; permanent members; temporary members), and is adjudicated upon by the acting Jury of Architecture.

2. *Drawing from the Cast*: A set head or ornament, to be executed in eight hours.

3. *Modelling*: A set ornament in bas-relief from a cast, to be executed in eight hours.

The subjects in drawing and modelling are set by a Commission of the Professors of Drawing, Modelling and Ornament, and one member of each category of the jury as above. They are adjudicated upon by a mixed jury of the Professors of Drawing, Modelling and Ornament, and ten painters, ten sculptors, and ten architects drawn by lot from the acting juries.

Candidates not obtaining a certain minimum of marks in each successive division—1, 2, 3—are at once eliminated, and at this stage the list of 120 names who have obtained the highest number of marks is made up—ninety being French candidates, and thirty foreigners. These represent double the number of candidates who can be admitted. The tests to further thin out this list then continue:—

4. *Mathematics*: Calculations done *en loge*—one subject being logarithms—and an examination in arithmetic, algebra and geometry, in accordance with a detailed programme.

5. *Descriptive Geometry*: A study applied to the projection of an architectural subject to be executed *en loge* in eight hours; a general examination in Descriptive Geometry, in accordance with a detailed programme.

¹ In April, 1900, 458 candidates entered on this first stage: of these 143 were eliminated by the jury, leaving 315 to proceed, and to be thinned out in like manner at successive stages.

These divisions are adjudicated upon by the Professor of Mathematics. Candidates who do not obtain a certain minimum of marks in either of these (4 and 5) are eliminated.

6. *History*: An oral examination and written composition on General History, in accordance with a detailed programme—the East, Greece and Rome, under 3, 6 and 8 heads respectively; and Modern History, under eighteen heads, chiefly relating to France. This is adjudicated upon by the Professor of General History.

The list of candidates to be admitted is then made up, the marks awarded being multiplied by the prescribed coefficients for each division, and the successful candidates being classed in order of merit. The forty-five French candidates who have obtained the highest number of marks, and not more than fifteen of the foreign candidates, are now admitted to the second class, taking place in their order after the existing members.

THE SECOND CLASS.

The lists of students are drawn up in order, regulated by the number of *valeurs*, or marks, obtained in the competitions, and for new students in order of merit fixed by the entrance examination. The instruction given is provided by

- I. Competitions (*concours*) in architecture—divided into analytic exercises (studies of detail) and composition.
- II. Competitions (*concours*) on the subjects of scientific instruction.
- III. The study of ornament.
- IV. The study of figure drawing, and the modelling of ornament and of the figure.

I. Competitions in Architecture.

In each year these consist of

1. Six competitions on analytic elements (details of the Orders) or studies of composition of detail to a large scale.
2. Six competitions, of composition or design—the designs comprise sketch, plan, section and elevation on a given subject.

The sketches for each are made *en loge*, each in a single sitting of twelve hours.

The design may be worked out in the *atelier* of the École, or in an external *atelier*, in two months.

Students can only be admitted to No. 2 after having obtained two mentions in No. 1.

The works are submitted to a jury composed of the special professors and of the Jury of Architecture, who can award to (1) second mention, and to (2) first and second mention.

There are two exercises each year in connection with the lectures on the History of Architecture: these are directed by the Professor of the History of Architecture, and consist of studies of details of architecture of different periods, to be executed in six days; and to these third-class medals and mention can be awarded.

II. Competitions on Subjects of Scientific Instruction

are held twice a year, and consist:—

1. For *Mathematics and Mechanics*: in problems worked out *en loge*, and in an examination on the subjects of the lectures, and are adjudicated upon by the Professor.
2. For *Descriptive Geometry*: in a certain number of diagrams, of which one at least is made *en loge*, and an examination thereon and on the subjects of the lectures.
3. For *Stereotomy and Surveying*: in a certain number of diagrams made during the course, in one made *en loge* in eight hours on a special problem of stereotomy, and an examination thereon and on the subjects of the lectures.
4. For *Perspective*: in a certain number of sketches and drawings from nature; in diagrams, one of which at least must have been made *en loge*; and an examination thereon and on the subjects of the lectures.

2, 3, 4 are each adjudged on the sketches and diagrams and the reports of the special professors, by a mixed jury, constituted by the Professors of Descriptive Geometry, Stereotomy, Perspective and Construction, and an equal number of members drawn by lot from the acting Jury of Architecture; this jury can award special medal (third class) and first mentions.

5. For *Construction*: in exercises performed *en loge* during the course, an oral examination at the conclusion of the theoretical part of the course, and special examinations in the studio. In the execution of a scheme of general construction, which lasts three months and is followed by an oral examination thereon.

Before taking part in this division the student must have a mention in each of mathematics, descriptive geometry and stereotomy, and those only who have passed the oral examination in theory are admitted to take part in the scheme of general construction.

The decision on the scheme of general construction is given on the drawings and the report of the professors by a jury composed of the Jury of Architecture and of the Professors of Construction, Descriptive Geometry and of Stereotomy, who can award first, second, and third medals and mentions.

III. Study of Ornament.

The exercises, which are of dimensions fixed by the professors, are executed in twelve hours.

IV. Simultaneous Study of Drawing and Modelling.

1. Figure drawing from the cast.
2. Modelling ornaments—one the figure from the cast.

The exercises on each of these subjects are directed by a special Professor of Drawing and Sculpture, are of such dimensions as he may

determine, are each to be executed in twelve hours, and are submitted to a mixed jury of the three Professors of the Simultaneous Study of the Three Arts, of the Professor of Decorative Composition, and of ten painters, ten sculptors, and ten architects, drawn by lot from the acting juries, who can award third-class medals and mentions.

In order to pass from the second class to the first class the student must have obtained

1. In Architecture six *valeurs*, that is, two in the competitions of analytic elements, and four in the competitions for composition, of which two at least must be on given subjects.
2. In Mathematics, in Descriptive Geometry or Stereotomy, in Construction, in Perspective, a medal or a mention.
3. In Ornament, Figure Drawing, Ornament or Figure Modelling, studies of the History of Architecture, a medal or a mention.

A fairly successful student, giving up his whole time to the work, would probably occupy three years in gaining the required number of marks (*valeurs*) to obtain admission to the first class.

THE FIRST CLASS.

The competitions open to the pupils of the first class are:—

- I. Competitions in Architecture.
- II. A competition in Ornament and Decoration.
- III. A competition relating to the lectures on the History of Architecture.

The Competitions in Architecture consist each year of—1. Six on given subjects. 2. Six on sketches of design.

All the sketches are executed *en loge*, and each is completed in a single sitting of twelve hours.

For 1. First-class medals, first second-class medals, second second-class medals, and first mentions can be awarded, but the number of second second-class medals may not exceed five at each competition.

For 2. First second-class medals, and first and second mentions are awarded.

There are also in each year other competitions:—

1. For the "Rougevin" prizes of 600 and 400 francs, awarded at the conclusion of a competition of Ornament and Decoration, executed *en loge* in seven days. For these first-class medals, first second-class medals, and first mentions are awarded.
2. For the "Godebœuf" prize of 740 francs, awarded by the acting Jury of Architecture on the result of a competition of a study of a special architectural work in ironwork, leadwork, marble, etc., worked out complete for execution, with details and profiles, the drawings being executed in the *ateliers* in fifteen days, after sketches made *en loge* in twelve hours. For these first-class medals, first second-class medals, and first mentions are awarded.
3. Two relating to the lectures on the History of Architecture. These consist of compositions reproducing a definite style of architecture, of which the programme is fixed by the Professor of the History of Architecture. The sketches for these designs are made *en loge*, and the drawings are completed in ten days. For these, first second-class medals and first mentions are awarded.

[To be continued.]



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

AMERICAN PARK BRIDGES: HIGHLAND PARK AND SCHENLEY PARK, PITTSBURGH, PA.; RITTENHOUSE LANE, PHILADELPHIA, PA.; SISTERS' ISLAND, NIAGARA, N. Y.

AMERICAN PARK BRIDGES: BRIDLE-PATH AND STONY BROOK, BOSTON, MASS.; ROGER WILLIAMS PARK, PROVIDENCE, R. I.; LAKE PARK, MILWAUKEE, WIS.; BELLE ISLE PARK, DETROIT, MICH.

SEE article elsewhere in this issue.

HOUSES FOR THOMAS F. WHITE, ESQ., CEDARHURST, LONG ISLAND, N. Y. MESSRS. MCILVAINE & TUCKER, ARCHITECTS, NEW YORK, N. Y.

"CORNWALL HILL": HOUSE OF JAMES HEWLETT CORNWALL, ESQ., PATTERSON, N. Y. MR. GEORGE MARTIN HUSS, ARCHITECT, NEW YORK, N. Y.

THIS house has been recently erected as a home for the owners, Mr. and Mrs. James Hewlett Cornwall. Built upon a hill-top it is exposed to prevailing winds, but this past winter no inconvenience has been experienced by the family living there. Six and eight inch timbers were used in the framing of the walls, while the entire surface of the outside sheathing is covered with Cabot's quilt. In several instances lately the use of this quilt has been instrumental in adding very materially to the comfort of dwellers in houses exposed to searching winds.

The interior finish used was: sycamore for the parlor; red birch in dining and sitting rooms; white-wood stained in library; quartered oak in main hall and stairs; cypress in the bath-room, and white-wood for the remainder of the house. All the floors are double and deafened. A novel effect in staining the white-wood in a second-floor room was obtained by first using a brilliant red; after drying, this was partly sand-papered off, then a translucent, darkish green was used and the finished effect shows traces of the red through the green in unexpected places where the grain of the wood is emphasized, and thus forms an agreeable wood finish. The house commands extensive views, north and northeast, and is in the midst of a 300-acre farm devoted to grazing for dairy purposes.

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

METALWORK,—XXIV: RAILING AT NO. 275 MADISON AVE., NEW YORK, N. Y.

[Additional illustrations in the International Edition.]

AMERICAN PARK BRIDGES: LINCOLN PARK, CHICAGO, ILL.; MADISON, N. J.

AMERICAN PARK BRIDGES: NATIONAL ZOOLOGICAL PARK, WASHINGTON, D. C. DESIGNED BY MR. GLENN BROWN, ARCHITECT, WASHINGTON, D. C.

HOUSE ON EAST 50TH ST., NEW YORK, N. Y. MR. HENRY RUTGERS MARSHALL, ARCHITECT, NEW YORK, N. Y.

DINING-ROOM AND PARLOR IN SAME HOUSE.

HOUSE OF MR. THONE, NO. 32 EAST 50TH ST., NEW YORK, N. Y. MESSRS. JAMES & LEO, ARCHITECTS, NEW YORK, N. Y.

ENTRANCE PORCH: NO. 34 EAST 50TH ST., NEW YORK, N. Y.



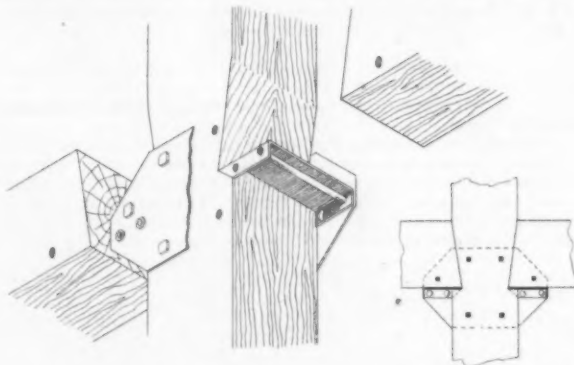
[The editors cannot pay attention to demands of correspondents who forget to give their names and addresses as guaranty of good faith; nor do they hold themselves responsible for opinions expressed by their correspondents.]

A POST-CAP FOR A CONTINUOUS COLUMN.

INDIANAPOLIS, IND.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—The connection of the posts and girders is one of the important features in mill-construction, as it should be rigid and solid. How to build a structure to offer the greatest resistance to the effects of a fire is one of the chief ends of all who undertake this class of construction. Under the old method of building, when a



girder is burned through by fire, or gives way from other cause, it generally pulls down the whole tier of columns and this often results in the collapse of the entire structure, when probably, but for this, the fire might have been confined to one part of the building.

The post-cap illustrated here was designed to secure the best possible connection which would offer the greatest resistance to the effects of a fire. Its principle feature is that it allows the wood post to run through two or more stories, or, in case the post is built-up of sections, to run continuously from the basement to the roof.

The cap is made of four pieces of mild steel, two of which are side

plates and two are brackets. The posts are notched out to form a shoulder in proportion to the load on the girder. Each girder has a sufficient bearing upon the bracket in proportion to its load and its ultimate compression strength. The side-plates are held to the posts and girders by lag-screws, while the brackets are bolted between the side-plates, the outer bolt forming a solid bearing for the bracket. The whole structure is as rigid as it possibly can be made.

Should the girder give way from the effects of a fire or from other cause, it would act as a lever, with the outer bolt under the bracket as its fulcrum and would tear away from the lag-screws which hold it, without disturbing the rest of the structure, leaving the posts and the other girders as erect and as rigid as they were before. Therefore, with the posts running through two or more stories, the intermediate floors may drop out entirely without disturbing the structure above, and the post would have to be broken off by some great lateral blow before the structure would collapse.

Our inability to obtain a post-cap that would fill the demands that we considered essential in first-class mill-construction drove us to design one as described above, which we used four years ago in a large building we were constructing at that time. These caps are to-day in perfect condition and have fully proved their great value, and we have used caps of this design wherever we had occasion to do so.

S. H. BRUBAKER & CO.



PAVILLON DE HANOVRE, PARIS.—The Boulevard des Italiens is about to lose one of its few remaining ancient landmarks. The Pavillon de Hanovre is to be pulled down. An American life-insurance company has marked the edifice for its prey, and will erect in its stead a seven-storied modern monstrosity—fustian splendor without and electric surprise fittings within—of the type with which a rival American company has replaced the home of the ever-to-be-regretted old Café Riche at the opposite extremity of the boulevard. The building which shelters the Café Anglais, started for the benefit of the "fashionable" who flocked across the Channel after the Restoration, still awaits the destroyer; when it is gone there will survive almost nothing of the past from the Chaussée d'Antin to the Rue de Richelieu. It was a De Richelieu, he of Fontenoy, and of Voltaire's fulsome panegyrics, who built the Pavillon de Hanovre, of which the two-storied façade forms the extreme southwestern corner of the Boulevard des Italiens. The Marshal's official address continued to be the Hôtel d'Antin, hard by; the pavilion erected at the extremity of the magnificent gardens which surrounded his property served him as *petit maison*. It was the scene of his gallant adventures and of supper-parties, which raised some scandal even in the tolerant days of Louis XV. The building owed its name to a popular gibe at its owner, who was no favorite with the mob, since it was rumored that the King of Prussia had purchased his magnanimity after the disastrous campaigns of 1756 and 1757. The Marshal had sundry barefaced exactions in Hanover on his conscience, and they were commemorated in the designation given by the populace to the building he was supposed to have erected with a part of the plunder, and in which he was destined to die at the very fair age, for an impenitent rake, of ninety-two. A rather checkered destiny awaited the Pavillon de Hanovre, at any rate for a time. It fell into the hands of public entertainers, and for a while it was the Moulin Rouge of the epoch. The first public ball-room opened after the Reign of Terror, it was the scene of the famous *Bal des Victimes*, all the dancers at which had been put into mourning by the guillotine. A little later a brother of Juliet, the comedian, took over the premises and started in the gardens the first open-air café-concert. The vogue of Frascati's brought about the eclipse of this establishment. Henceforth the history of the Pavillon de Hanovre was to be humdrum. Staid men of business invaded the edifice, and its frivolous traditions were soon forgotten. For more than half a century past it had been the home of a well-known firm of silversmiths, who are now to make way, as has been said, for an insurance-company. — *Pall-Mall Gazette*.

WATER-WASTE IN BOSTON.—Boston, like New York, suffers from an inordinate waste of water, and the waste is increasing in deplorable proportion to the increase in the population. During 1900, water to the amount of 115½ gallons was used daily for each inhabitant, as compared with 111 gallons in 1899 and 103 in 1898. A reasonable allowance for each inhabitant is 80 gallons daily. With a continuance of the present annual rate of increase in population and in water used, the entire sources of supply now in contemplation will be taxed nearly to their utmost by 1910, and this, although the average citizen of the city had supposed that, with the enormous Clinton reservoir still to be drawn upon, the time when the system would be outgrown had been put forward almost indefinitely. This belief in an almost boundless supply is regarded as partly explaining the waste, but much of it is thought to be due to hidden leaks. Waste from the practice of people permitting the water to run in winter to prevent freezing, and in summer to keep it cool for drinking purposes, was noted in the old days, and does not explain the present increase. To stop it, the compulsory use of meters is under consideration. — *N. Y. Evening Post*.

AUTOMATIC SCULPTURE.—In his report on the trade of Southern Italy Mr. Neville-Rolfe, the British consul, has an extremely interesting article on automatic sculpture. Signor Buontempi, he says, has devised and patented a machine by which a marble reproduction can be made automatically by erosion. The machine can be driven by any kind of motive-power, and consists of a horizontal rod having at one end a blunt wooden traveller and at the other a steel gouge, both working vertically. The wooden traveller is made to follow closely the lines

of the model, while the gouge at the other end makes vertical grooves down the marble. In the case of copying a marble head, for example, the outline of the face begins to show itself the very first time the gouge goes over the marble. It cuts the marble as if it were cheese, the first time with a large, steel tool, and subsequently with finer instruments until the detail is finished with a gouge no bigger than a bodkin. Mr. Neville Rolfe speaks of the enormous speed with which the work is accomplished. The object is finished with the machine to within one sixteenth of an inch of the size of the model, and then the artist adds expression and individuality to the work. The machine can do as much in three hours as can be done by one man in three days and any intelligent workman can work the machine. For scroll-work on architraves and cornices it acts like a charm; and it will carve stone more easily than marble. — *Boston Transcript*.

A WATER-METER DECISION.—The growing use of water-meters and the common practice of private water-companies and of cities in requiring householders to pay a minimum monthly or yearly rate, regardless of the fact that the meter may not show that value of water used, lends interest to a recent court decision on this subject in Wisconsin. A consumer in Manitowoc, in that State, who had refused to pay for more than the actual water used, sued the water-company for damages, and sought a court order to compel the restoration of the suspended service. He won in both his contentions, the court holding that the franchise privilege given the company to charge a minimum rate had no weight in the affair. Only the fact that consumers had failed to keep a record of the water consumed saves the company from a batch of suits to recover. — *N. Y. Evening Post*.

BEACH-GRASS.—The fact that millions of dollars are sacrificed annually in this country to the action of the sands along the coast and on the banks of some rivers like the Columbia lends peculiar interest to an article in the March number of the *New England Magazine*, in which an account is given of experiments with beach-grass and other similar plants, designed to check the constant encroachments of the sand-area. The wind and the waves drive the sand over fertile tracts and render them useless, and in some localities, as on Cape Cod, beach-grass is being systematically planted to hold the sand together and keep it from drifting. Hundreds of acres have been set out with this grass and with various shrubs and trees, among the latter being the Scotch broom, the tamarisk, the silver poplar, and the Scotch, Austrian, and seaside pine. It costs from \$60 to \$85 an acre to plant the beach-grass, the transference of growing plants from other localities having proved better than sowing seed. The writer in the *New England* says, however: "A nursery has been established, in which thousands of young shrubs and trees are brought to a proper age and condition for transplanting among the beach-grasses. In the earlier years of the work this nursery was of much value, but of late the practice prevails of sowing seeds of trees, particularly pine-trees, among the beach-grass." The grass makes a network amid the sand, and sometimes its roots reach from 30 to 60 feet below the surface. — *Providence Journal*.

LUMBER VANISHING IN MICHIGAN.—Michigan's decline as a lumber State furnishes a strong argument for the application of intelligence in forestry. This decline is strikingly shown by the figures of the product of 1900. In the Saginaw River district there were produced in 1882 1,011,000,000 feet of pine lumber, while last year the pine output dropped to 129,921,408 feet. The decrease in some of the other lumber districts of the lower peninsula is not less pronounced. In upper Michigan, also, the pine supplies are being rapidly diminished, but there is a vast quantity of hemlock and hardwood timber yet available in both peninsulas. The high-water mark in the production of lumber in Michigan was reached in 1888, the output in that year being 3,292,189,914 feet, since which there has been a gradual decline. There was produced in 1900, 41,000,000 feet more lumber than in 1899, and the output that year exceeded that of 1898 by about 210,000,000 feet. The increased production last year was chiefly due to the conditions which obtained in the lumber-market and the general prosperity in 1899, which stimulated active operations in the woods in the winter and in the sawing later on. — *N. Y. Evening Post*.

PEAT-WOOD IN AUSTRIA.—The growing use of peat-wood in Austria is discussed in a report from Carl Bailey Hurst, Consul-General at Vienna. He says that machines have already been constructed by means of which this valuable product can be mined with facility, and peat has been put to a variety of industrial uses. Progress in Austria in the employment of peat is shown in the manufacture of a patent artificial wood—so-called peat-wood. This artificial wood is especially distinguished by the property that in moist soil it hardens steadily, owing to the formation of calcareous hydrosilicate of alumina. It is perfectly adapted as a material for street-paving, being absolutely free from dust, noiseless, and exceedingly durable. Natural-wood blocks, on the other hand, do not sufficiently resist atmospheric influences, and soon warp. Peat-wood is also excellently suited for railroad sleepers. Screws, rivets and nails become as firmly fastened therein as in the best of oak. Wood sleepers rot in damp soil, while moisture only renders the peat-wood harder. — *Exchange*.

THE USES OF PEAT.—From time to time mention is made of the various applications that can be made of peat, but few realize the variety of uses to which this substance is put. It is used for pavements, papermaking, buildings, ornamental work, tanning leather, deodorizers, disinfectants, and fertilizers. The peat-ash abounds in carbonate, sulphurite, and phosphate of lime. By being mixed with coal-dust it forms excellent fuel, while it can be combined with other substances in making gunpowder, fireworks and gas. In making the fine candles for the Catholic churches of Germany, the paraffin used is obtained from peat. Some of its by-products are carbonate of ammonia, soda, vinegar, naphtha, paraffin, camphene oil, tar, sulphate of ammonia, acetate-of-lime, volatile oils, fixed oils, pyroxylic spirits, hydro-carbon oils, and aniline colors. — *Boston Transcript*.

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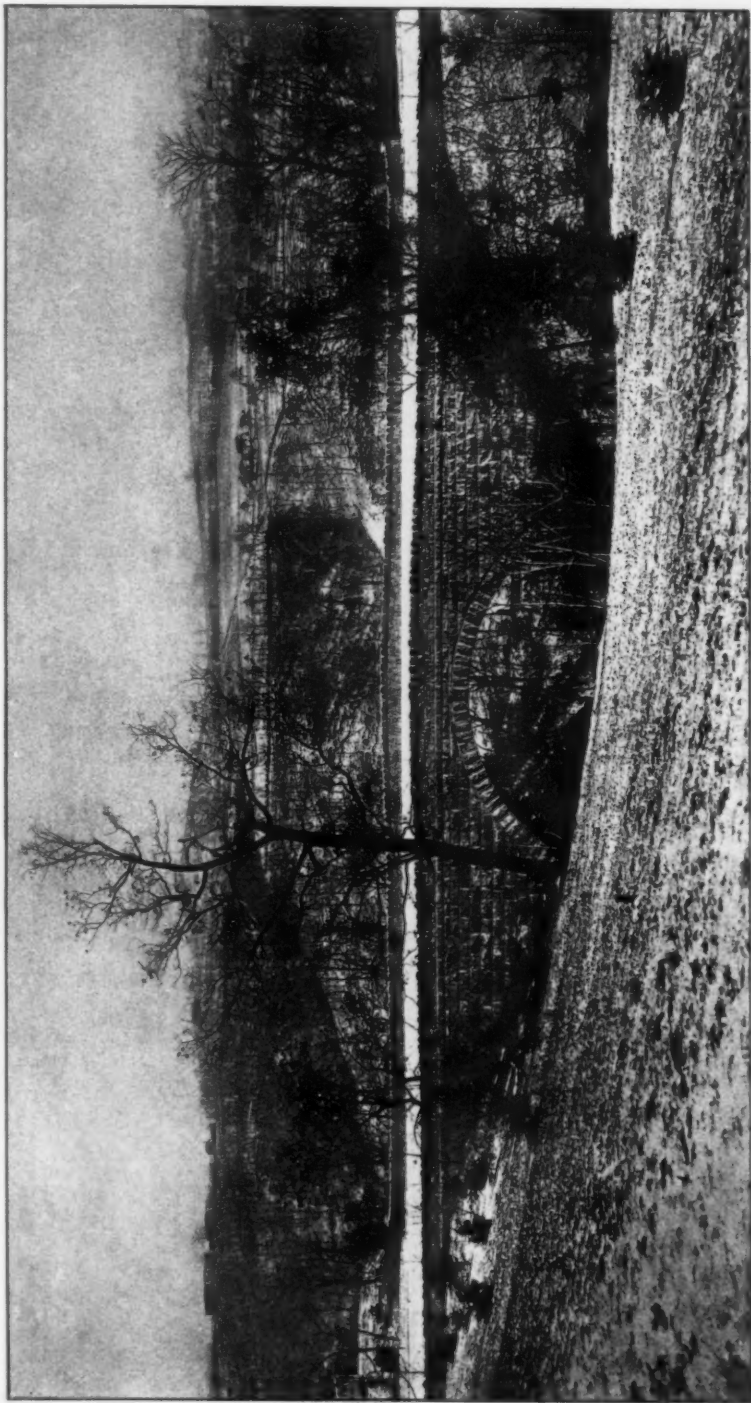
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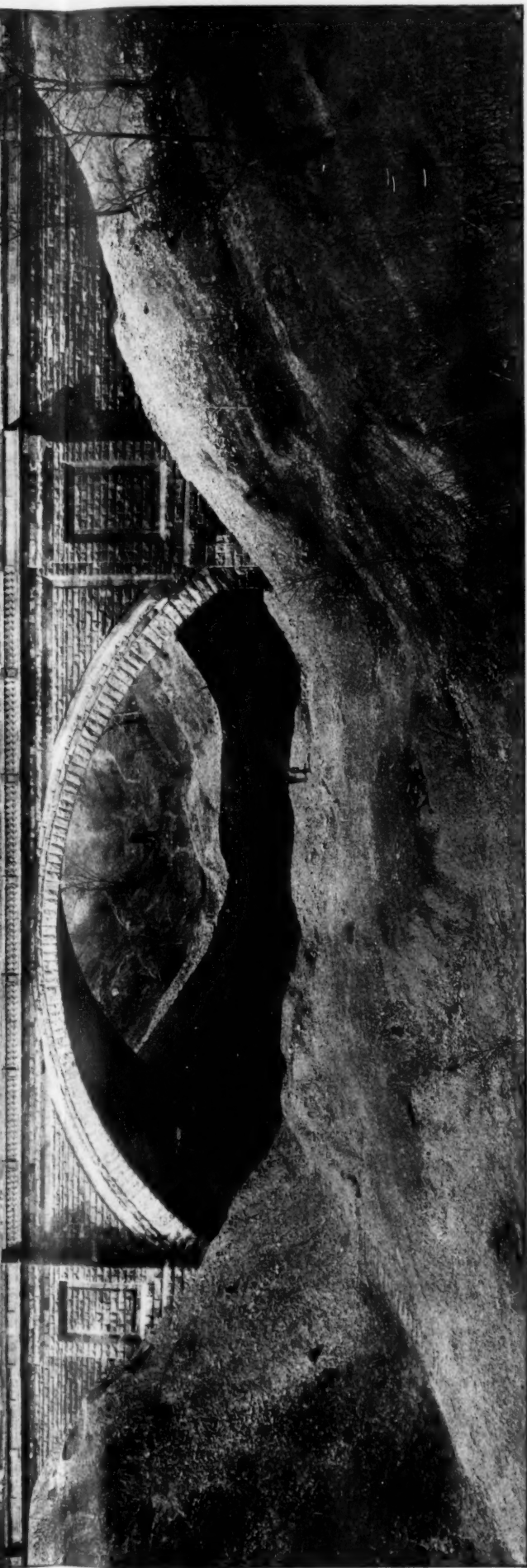
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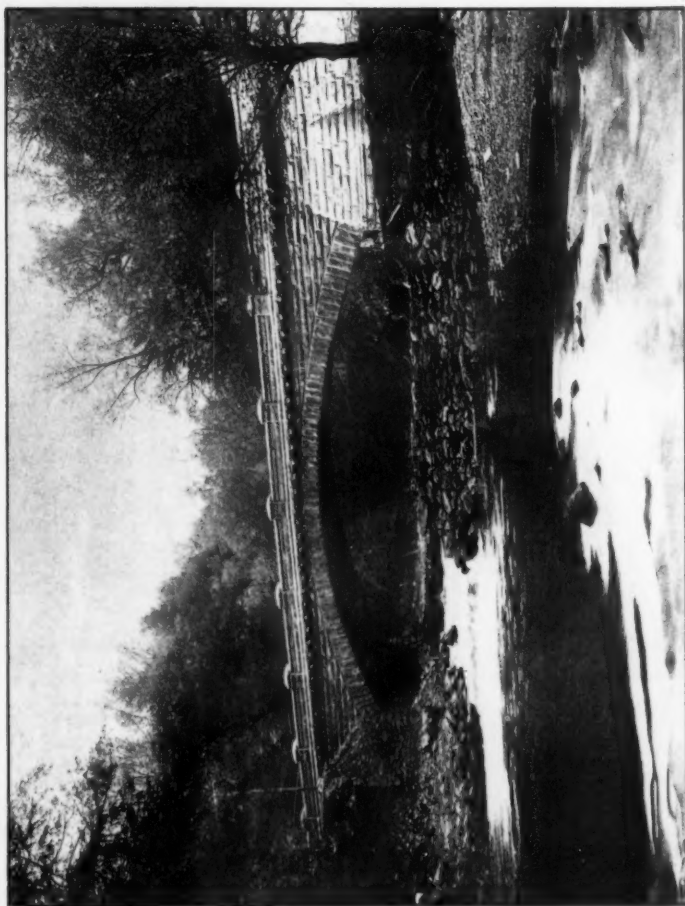


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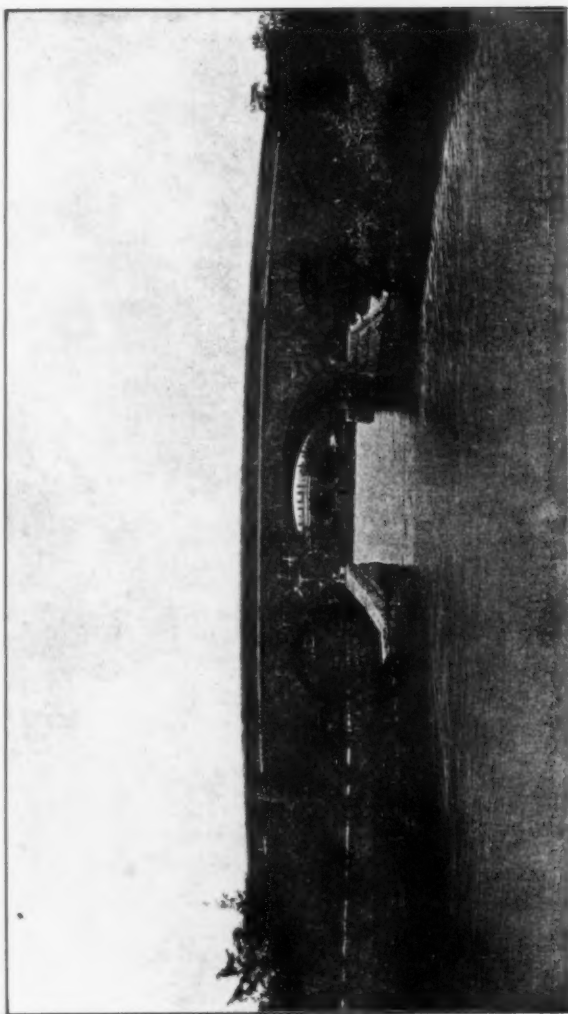
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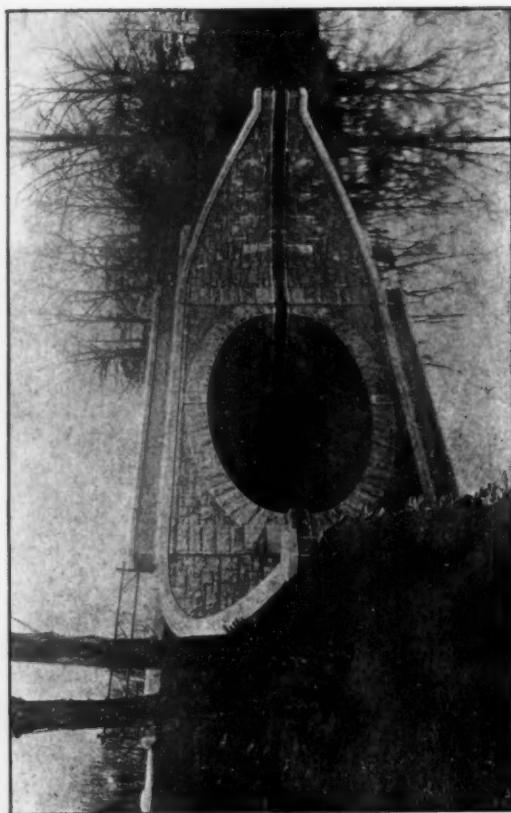
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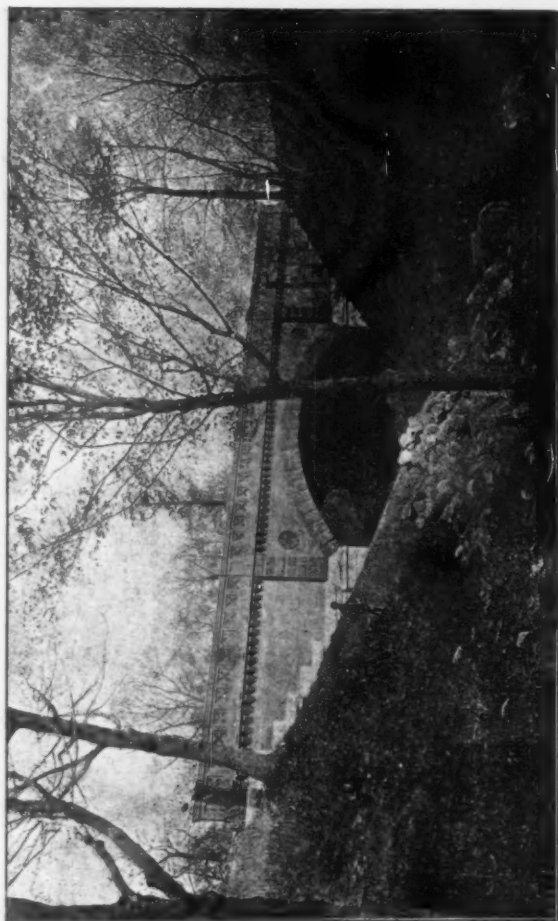
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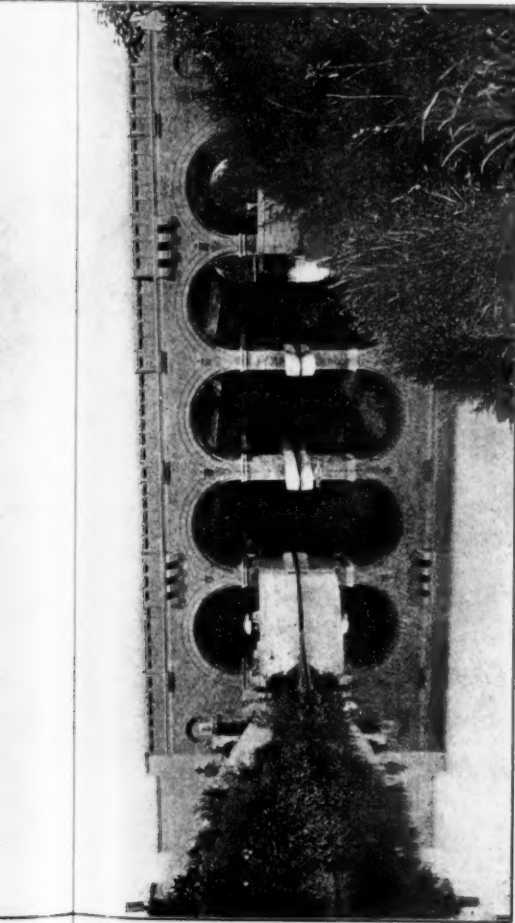


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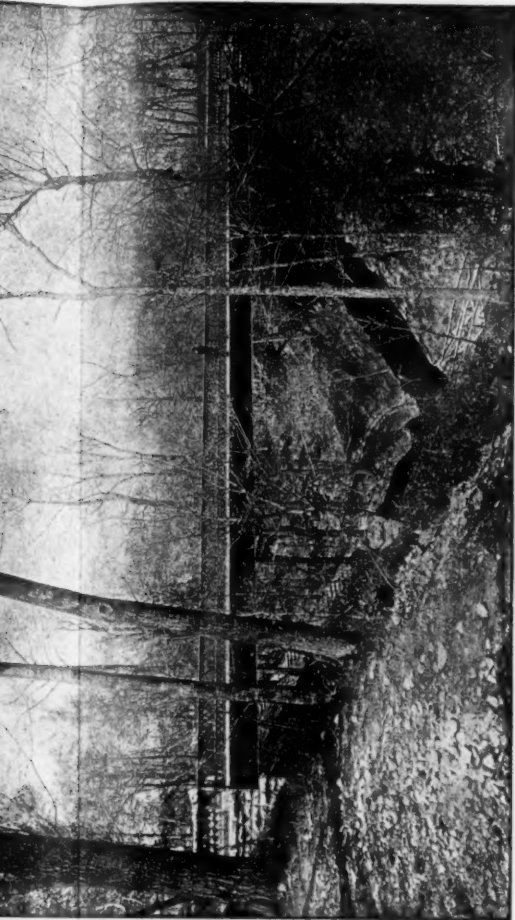


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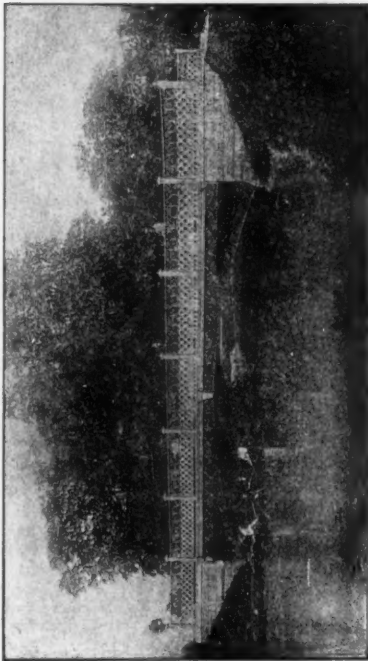




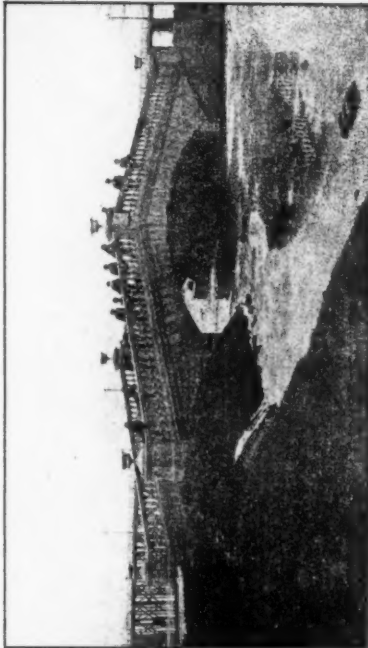
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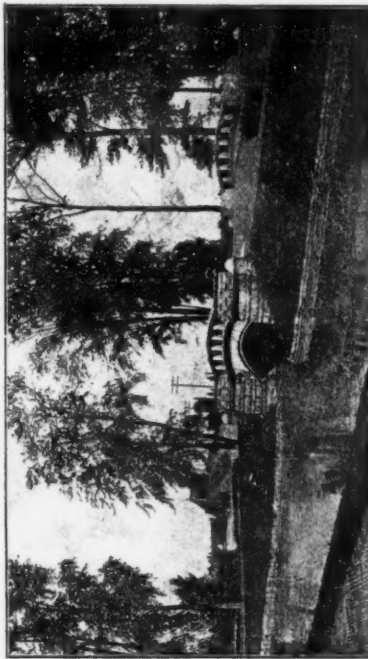
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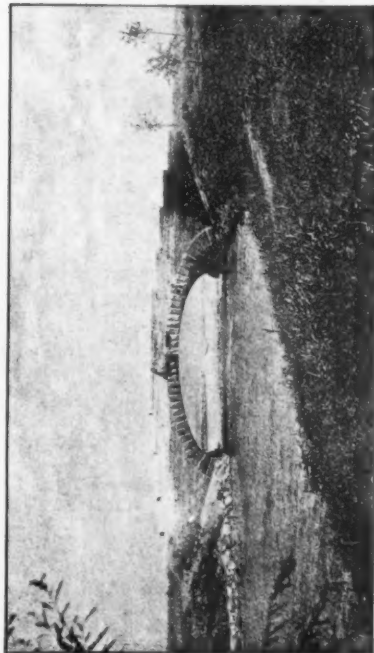
Iron bridge No. 2, over Loop Canal, connecting River Bank road with Casino way, Belle Isle Park, Detroit.



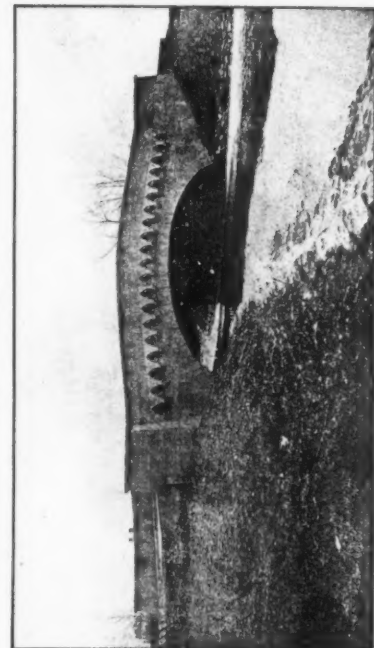
Stone bridge No. 1, over North Inlet to Loop Canal, on Pleasure place, Belle Isle Park, Detroit.



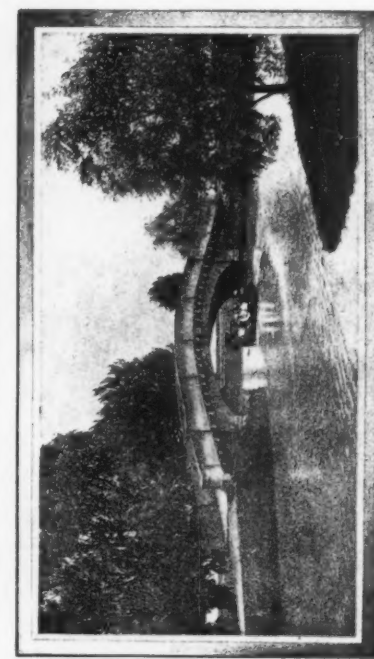
Stone bridge No. 3, on Muse Road, over Marsh run, Belle Isle Park, Detroit.



Stone bridge No. 16, over South Inlet to Lake Muskegon, on Lakeside Drive Belle Isle Park, Detroit.



Stone bridge No. 8, over Loop Canal, at south-west corner of Belle Isle Park, Detroit.



Stone foot bridge No. 9, over outlet to Lake Takoma, Belle Isle Park, Detroit.

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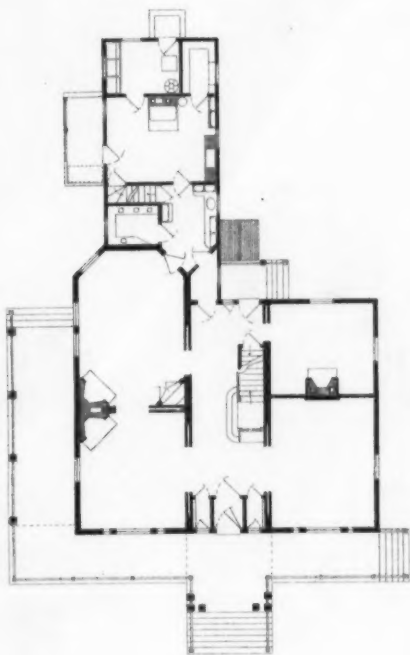
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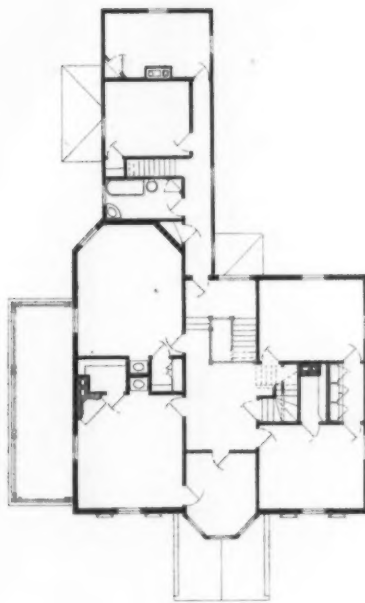


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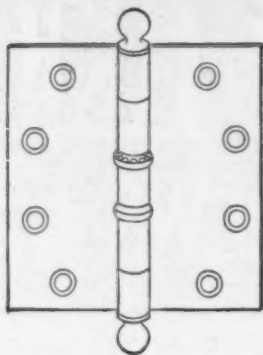
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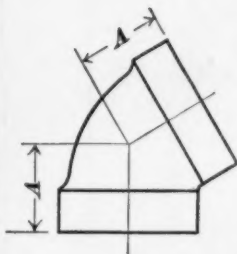
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Thiele, E.....[Portland Cement].
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Williams, John.....[Wrought Metal].
Yale & Towne.....[Hardware (Art)].
ROCHESTER.
Cutler Mfg. Co.....[Mail Chutes].
SYRACUSE.
Dunning, W. D.....[Mixer].
TROY.
Globe Ventilator Co.....[Ventilators].
Troy Laundry Machinery Co.....[Washing Ma-
chines].

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Berger Mfg. Co., The.....[Metal Ceilings].
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Ohio Marble and Wood Co., The.....[Marbles Col-
ored].
Cleveland.
Glidden Varnish Co., The.....[Varnish].
Osborn, J. M. & L. A.....[Roofing Tin].
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Brass].
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Columbus Brick & Terra-Cotta Co., The.....[Pressed Brick].
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Kearney & Mattison Co.....[Magnesia Covering].
Philadelphia.
Electric Storage Battery Co.....[Chloride-
Accumulator].
French & Co., Samuel H.....[Mortar Colors].
Harrison Brothers & Co.....[Preservative Paints].
International Sprinkler Co.....[Automatic
Sprinklers].
Loomis Filters Improved System.....[Filters].
Merchant & Co.....[Tin Roofing].
Morse, Williams & Co.....[Shutters].
Taylor Co., N. & G.....[Tin].
Thorn, J. S. Co.....[Sheet Metal].
Pittsburgh.
Scaife, Wm B. & Sons.....[Filters].
Scranton.
International Correspondence Schools, The.....[Architecture].
York.
Vapor Steam Heating Co.....[Heating Apparatus].
VERMONT.
Burlington.
Burlington Venetian Blind Co.....[Venetian
and Sliding Blinds].

VII

PUBLISHED NOV. 24

VII

PART SEVEN

"The...Georgian Period"

WHILE this Part was passing through the press, the acquisition of unexpected material induced us to increase materially the number of plates and the illustrations in the text-matter; consequently, it contains more matter than is usually included in an odd-numbered Part.

Our effort is to make each Part better than its predecessors, and we feel that this time, too, we have succeeded.

Part VII contains 24 pages of text, illustrated by some 50 cuts, and 32 full-page plates. [Part V (odd-numbered) contained 16 pages of text and 22 full-page plates.]

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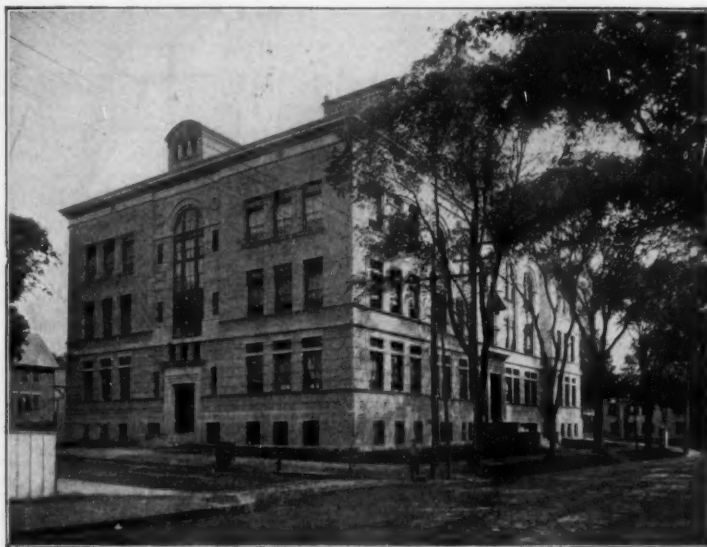
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Part VIII, in press, will in the main be devoted to the Georgian Architecture of England itself.



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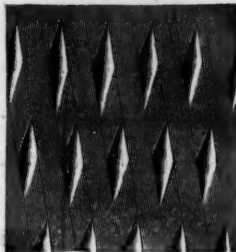
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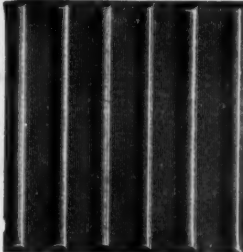
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(Advance Rumors Continued.)

receive the income from \$700,000 by the will of the late Thomas Thompson, of New York. It is probable that the first money received will be used in the establishment of a public hospital.

Buffalo, N. Y.—The plans for the Illinois building at the Pan-American Exposition, submitted by Professors J. W. White and Seth J. Temple of the University of Illinois College of Architecture have been accepted; cost, \$20,000.

Burlington, Ia.—It is stated that a polytechnic school is to be erected here at a cost of \$150,000 if the trustees of the Burlington Institute are successful in raising the funds.

Cambridge, Mass.—Two wings will be added to Harvard Law School Building. One will contain a stock-room for 300,000 volumes. The other will have a reading-room on the top floor, with lecture-rooms and rooms for the professors on the two lower floors.

Catskill, N. Y.—Andrew Carnegie has offered to erect a \$20,000 building provided the village, which owns a site, will guarantee \$2,000 annually for its support.

Cleveland, O.—The Euclid Ave. Congregational Church Society will erect a stone chapel and make extensive alterations in the church at Euclid and Logan Aves. Cost of the improvements will be about \$60,000.

The plans for the erection of a fourteen-story skyscraper at the corner of Euclid Ave. and Erie St., have been completed by Captain Schofield. The work of tearing down the buildings which now occupy the property will begin April 1.

Columbia, Mo.—Five new buildings will be erected for the University of Missouri. The first will be the dairy and live-stock building, which will cost \$40,000 and will be erected on the college farm and experiment station grounds. The next will be the medical building, costing \$40,000. The third will be a woman's dormitory to cost \$35,000. Following the dormitory a horticultural building to cost \$40,000 and an engineering laboratory which will cost \$40,000 will be erected.

Crawfordsville, Ind.—Andrew Carnegie has offered this city \$25,000 for the erection of a library building providing that a suitable site and \$2,500 annually for the library's support be furnished by the city.

Derry, N. H.—By the will of the late Benjamin Adams, \$10,000 is bequeathed to this town for a building to be known as the Benjamin Adams Memorial Building, to contain a public hall, rooms for the public library, and the town offices.

Des Moines, Ia.—Plans have been prepared by Frost & Granger, "The Temple," Chicago, Ill., for a \$100,000 dormitory for the Chicago & Northwestern R. R. to be erected here.

The Knights of Pythias of the State of Iowa propose erecting a State home to cost \$100,000.

Detroit, Mich.—The designs of Louis Kamper have been accepted for the Michigan Building for the Pan-American Exposition; appropriation, \$10,000.

Burton Van Denbergh will build a sixteen-family apartment-building, corner John R. and Montcalm Sts.; estimated cost, \$33,000.

Spieler & Rohns have prepared plans for an apartment-house of 12 flats to be built for Frederick Saunders on the northeast corner of Brush and Wilkins Sts.; estimated cost, \$50,000.

N. Wardrop is preparing plans for a \$6,000 residence for Dr. Houghton; also plans for a \$13,000 apartment-building.

Evansville, Ind.—The Louisville & Nashville R. R. Co. have had plans prepared for a new passenger station on Fulton Ave. and Water St.; probable cost, \$200,000.

Exeter, N. H.—The trustees of Phillips Exeter Academy have decided to build a three-story addition to Lawrence House, providing dormitories for 28 of the younger boys.

Fort Wayne, Ind.—Plans are being prepared for a fine residence for the Bishop of the Catholic diocese here; cost, \$25,000.

Hazleton, Pa.—Plans have been drawn by Henry H. King, 1213 Filbert St., Philadelphia, for a four-story brick and iron store and office building to be erected here for S. G. Seager, to cost about \$60,000.

Huntsville, Ala.—Buildings to cost \$300,000 will be built here, it is said, for the Rowe Knitting Mills.

Janesville, Wis.—Andrew Carnegie offers \$30,000 for the erection of a public library building. There is also available a bequest of \$10,000.

Kalamazoo, Mich.—Charles Willard has donated \$40,000 for a Y. M. C. A. Building.

Kansas City, Mo.—W. F. Schrage, Shiedley Bldg., has prepared plans for a \$60,000 brick office-building to be erected for J. A. Rose, at 812 814 Grand Ave.

Plans have been drawn by Louis Curtiss, 1106 Baltimore Ave., for the \$200,000 theatre, to be built at 11th St. and Baltimore Ave., by Col. Willis Wood of St. Joseph, to replace the Coates Opera-house, which was recently destroyed by fire.

Lexington, Ky.—President James K. Patterson, of Kentucky State College, has announced that in his will he has set aside \$50,000 for a college library, a memorial to his deceased son.

Malden, Mass.—H. D. Yerxa has had plans drawn for a three-story structure, 35' x 80', on Pleasant St., adjoining present Masonic block. Proposed building will cost about \$30,000 and will accommodate U. S. Post-office, stores, offices and apartments.

Memphis, Tenn.—Architects Wilson & Marshall, 218 La Salle St., Chicago, Ill., are preparing plans for a residence to be built for W. R. Harris. It will be three-story and basement, of brick and stone, and will cost \$35,000.

Minneapolis, Minn.—The American Mining Investment Co. will erect a thirteen-story office-building, to cost about \$2,000,000.

Missoula, Mont.—It is reported that the Northern Pacific will erect a \$40,000 stone depot here. A. H. Stem, of St. Paul, architect.

Montclair, N. J.—A ten-story brick and granite printing-house is to be built for Harry C. Hallen-

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

beck on Pearl and Park Sts.; cost, \$400,000. Architect, W. Wheeler Smith.

Moscow, Conn.—It is stated that the All Hallows Catholic Society has accepted plans for a \$25,000 church.

Newark, N. J.—Hurd & Sutton, Prudential Bldg., are preparing plans for a twelve-story office-building to be erected at 828-830 Broad St.; cost, \$400,000.

New Haven, Conn.—Ground will be broken in a few days for two new buildings for Yale University, one the clinical building of the Yale medical school, near the Connecticut State Hospital, to cost \$100,000, and the other the \$50,000 additional wing to Kent Hall.

New York, N. Y.—John W. Gates of the United States Steel corporation, and his friends, intend to erect a \$2,000,000 hotel on 5th Ave. and 52d St. It will be all of marble, eighteen stories high, and will rival anything of the kind in New York in magnificence.

A five-story hospital, costing \$70,000, will be erected at Amsterdam Ave. and 136th St., for the Hebrew Benevolent & Orphan Society. Plans by Bruu & Hauser, 1125 Broadway.

The Teachers' College of Columbia University has received a gift of \$100,000 from a New York man and his wife. Their names are withheld for the present. Under the conditions of the gift, the entire amount is to be expended in the erection and equipment of a free school in the neighborhood of the college.

Money has been given by a philanthropic gentleman, of this city, for the purpose of erecting a new maternity hospital, to be known as the Manhattan Maternity Hospital and Dispensary. The building is to be a miniature model of hospital construction, and is to be located on the East Side.

Frank J. Kilpatrick is to erect an eighteen-story apartment-house, to cost \$2,000,000, on the corner of 52d St. and 5th Ave.

The French Benevolent Society will erect a seven-story hospital building at 452-456 W. 34th St., to cost \$400,000.

Plans have been filed by Cass Gilbert & John Du Fals, architects, 111 Fifth Ave., for the Union Club's new building to be erected on 5th Ave. and 51st St., to cost about \$450,000.

The brownstone dwelling-house of Charles T. Yerkes, on the corner of 5th Ave. and 68th St. is to be improved by a three-story extension of brownstone and brick. The cost of the improvement has been estimated by the architect, H. S. Cobb, at \$75,000.

Norman, Okla. Ter.—The Governor has appropriated \$90,000 for new buildings at the Territorial University.

Omaha, Neb.—Report states that P. J. Creeden has prepared plans for a \$75,000 addition to the Creighton University.

Paterson, N. J.—A new play-house will be erected in the rear of the site of the present Columbia Theatre, which will be torn down.

Perth Amboy, N. J.—A bill is before the legislature designed to permit this city to appropriate \$2,000 annually to support a library. This follows the offer of Andrew Carnegie, who will give the city \$20,000 for a library if \$2,000 is appropriated annually for its support.

Pittsburgh, Pa.—The E. S. Reid Co. will build a four-story brick family hotel on Highland Ave. It will cost \$45,000.

Architect Thomas H. Scott has awarded a contract to Geo. J. Holler for the erection of a 12 room brick and stone residence on Bayard St. for John S. Scully, cashier of the Diamond National Bank, at a cost of \$20,000.

Reading, Mass.—A brick and stone factory building, 60' x 350', will be erected at a cost of \$40,000 by the Reading Rubber Co. in addition to their present plant.

Rochester, N. Y.—The Governor is stated to have signed a bill appropriating \$300,000 for a high school.

Salt Lake City, Utah.—The Presbyterian Society will erect a \$100,000 building.

San Francisco, Cal.—Plans are being prepared for a hotel eleven stories high, to be erected on Powell and Geary Sts.; cost, \$1,250,000.

Seattle, Wash.—The Green Lake School District will erect a \$25,000 school-house. Plans prepared by James Stephen, architect.

Sheboygan, Wis.—Andrew Carnegie offers \$25,000 for a library building, under the customary conditions.

Somerville, Mass.—The first Malta Temple in America is soon to be erected in Gilman Sq., at an estimated cost of \$50,000. It will be of brick with stone trimmings, four stories in height, and will be thoroughly equipped and modern in every respect.

Spokane, Wash.—There has been \$15,000 raised toward the erection of a new church for the Main Ave. Catholic congregation. A building to cost \$50,000 is projected. A number of plans have been submitted.

Sunapee, N. H.—A system of water-works is to be put into the town; cost, \$25,000.

Toledo, O.—Plans have been drawn by Becker & Hitchcock, 429 Gardner Bldg., for a four-story flat to be erected on 14th and Empire Sts., for A. E. Macomber & Co.; cost, about \$50,000.

Wachter, Hudson & Co., 701 "The Nasby," have made plans for a \$75,000 brick building to be erected by O. S. Ashley on Jefferson and Michigan Sts. It will be three stories high.

Warren, R. I.—The proposed extension by the Parker Mills Co. will be two stories high, and cost about \$75,000.

Winston, N. C.—A plan is on foot to build a \$100,000 cotton-mill at this place. Garland E. Webb and others are the promoters.

Wyandotte, Mich.—It is stated that the Pennsylvania Sole Mfg. Co. will erect an extensive plant on ground recently purchased here. The buildings will be of brick, iron and stone, covering about 70 acres. One section, covering 20 acres, will be erected at once, costing about \$2,000,000. Eventually, the plant will represent an expenditure of \$9,000,000.

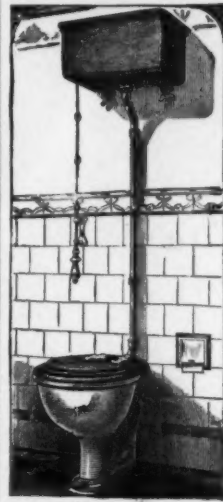
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Boston, Mass.—Washington St., cor. Newcomb St., one-story bk. addition to church, slate roof, steam; \$15,000; o., Church of the Ascension; a., W. H. Kibham, 3 Hamilton Pl.

CHURCHES.

Boston, Mass.—Carroll Pl., Ward 6, two-story bk. synagogue, 30' x 89', steam; \$25,000; o., Congregation Schavi Jerusalem; a., F. A. Norcross; b., David Milton.

HOUSES.

Andover, Mass.—2½-story fr. dwell., 60' x 60', shingle roof, hot water; \$20,000; o., M. F. D'Arcy; a., Aldrich & Briscoe, 27 State St.

Boston, Mass.—Albion Pl., No. 12, Ward 4, three-story fr. dwell., 22' x 60', stoves; \$5,000; o., Est. P. O'Riordan; a. & b., John Hayes.

Hewins St., nr. Columbia Road, Ward 20, two-story fr. dwell., 26' x 43', furnace; \$5,000; o., a. & b., L. A. Belyen, 3 Page Ave., Dorchester.

Bernard St., No. 39, Ward 20, 2½-story fr. dwell., hot water; \$6,500; o., Mary H. Hannah; a. & b., Rob't J. Yeo, 33 Bernard St.

Glenway St., No. 121, Ward 20, two-story fr. dwell., 33' x 45', hot water; \$5,000; o., Wm. Gill, 142 Glenway St.; a., L. McCarron.

Washington St., Nos. 79-83, Ward 5, 3 three-story bk. dwells., 24' x 78', stoves; \$25,000; o. & a., Est. P. O'Riordan; b., Edw. Brock.

Columbia Road, Ward 16, three-story fr. dwell., 27' x 61', furnace; \$5,000; o., a. & b., Boyd & Berry, 8 Grant St., Dorchester.

Harrison St., nr. Harold St., Ward 21, three-story fr. dwell., 23' x 50', furnace; \$5,500; o., a. & b., Boyd & Berry, 8 Grant St., Dorchester.

Chicago, Ill.—Forrestville Ave., Nos. 4846-48, 6 two-story bk. dwells., 23' x 85'; \$42,000; o., John Bernitter; a., Carl Almqvist.

Prairie Ave., Nos. 2903-5, 2 three-story bk. Colonial dwells., 21' x 90'; \$30,000; o., Mrs. Mary W. Keith; a., Carl Almqvist.

Prairie Ave., No. 3743, two-story bk. & st. dwell., 20' x 70'; \$15,000; a., Frost & Granger.

Dedham, Mass.—Court St., 2½-story fr. dwell., 38' x 44', hot air; \$6,000; o., E. L. Bendaklin, School St.; a., Frank W. Locket, 101 Harvard St.

Detroit, Mich.—Second St., cor. Vienna St., three-story bk. & st. dwell., 40' x 80', steam; \$20,000; a., Williams Bros., 25 Whitney Opera Building.

Dorchester, Mass.—Barry St., 2 three-story fr. dwells., 21' x 54', comp. roof, hot air; \$11,000; o., Wm. Hennessey; a., J. A. Cruikshank, 1 Carlos St., Dorchester.

Claybourne St., nr. Boyden St., two-story fr. dwell., 28' x 46', hot air; \$5,000; o., G. W. Palmer, 432 Seaver St.; a., D. McKay.

Newton, Mass.—Hard St., Ward 6, two-story dwell., 56' x 62', steam; \$16,000; o., Geo. L. Forristall, Newton Highlands; a., Prescott & Sidebottom, Boston.

Somerville, Mass.—Wilton St., nr. Sycamore St., two-story fr. dwell., gambrel roof, furnace; \$5,000; o., a. & b., W. W. Graham and J. W. Howard, 12 Fiske Ave.

STABLES.

Boston, Mass.—Lansdowne St., Brookline, two-story bk. stable, 98' x 32'; o., Francis Peabody, Jr., and others.

Rutherford Ave., nr. Baldwin St., Ward 4, two-story fr. stable & shed, 65' x 210'; \$5,000; o., H. P. Hood & Sons Corp.; a., Thos. M. James.

STORES.

Boston, Mass.—Tremont St., cor. Cottage Pl., Ward 2, one-story fr. store-building, 60' x 72', stoves; \$6,500; o., P. T. Sullivan; a. & b., Chas. Logue.

WAREHOUSES.

Boston, Mass.—Clyde St., Ward 2, seven-story bk. warehouse, 140' x 220'; \$300,000; o., a. & b., B. & A. R. R.

COMPETITIONS.

JAIL.

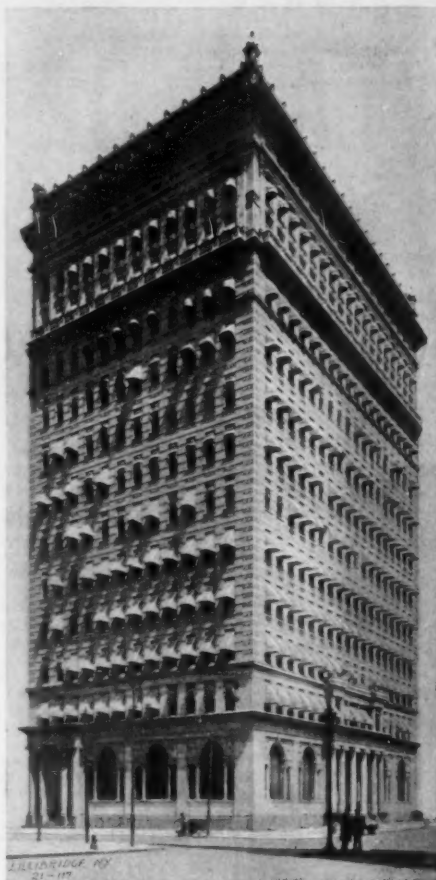
[At Eureka, Ill.]

Plans and specifications will be received by the County Supervisors until April 16 for a jail and sheriff's residence. 1319

LIBRARY.

[At Mankato, Minn.]

Competitive designs will be received until April 30 for the proposed Carnegie library building. They shall provide for a building to cost complete with heating plant \$32,000. 1319



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LIBRARY.

[At Houston, Tex.]
Designs will be received by the Trustees of the Houston Lyceum and Carnegie Library Association of Houston, Texas, until 12 o'clock, noon, of the 1st day of May, 1901, for the Carnegie Library Building, to cost not to exceed \$45,000. For prospectus, address H. H. DICKSON, Chairman Building Committee, Houston, Texas. 1321

PROPOSALS.

CONSTRUCTION, HEATING AND LIGHTING.

[At Columbus, O.]
It is stated that bids are wanted April 10 for a ten-story fireproof office-building, including steam heating, electric lighting, two elevators, etc., to cost about \$150,000. MIMMONS & FELLOWS, architects, 1733 Marquette Bldg., Chicago, Ill. 1318

Treasury Department, Office of the Supervising Architect, Washington, D. C., March 21, 1901. Sealed proposals will be received at this office until 2 o'clock P. M., on the 25th day of April, 1901, and then opened, for the installation of an electric wiring system for the outbuildings of the U. S. Bureau of Engraving and Printing, Washington, D. C., in accordance with the drawings and specification, copies of which may be obtained at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1319

Treasury Department, Office of the Supervising Architect, Washington, D. C., March 25, 1901. Sealed proposals will be received at this office until 2 o'clock P. M., on the 27th day of April, 1901, and then opened, for furnishing the heating apparatus complete in place for the south outbuilding and stable at the U. S. Bureau of Engraving and Printing, Washington, D. C., in accordance with the drawings and specification, copies of which may be had at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1319

POWER-HOUSE.

[At Boston, Mass.]
Office of Bureau of Yards and Docks, Navy Dept., Washington. Proposals will be received here until April 13 for constructing a brick and steel building at the Navy Yard, Boston, Mass. MORDECAI T. ENDICOTT, chief of bureau. 1319

PROPOSALS.

STATION.

[At Savannah, Ga.]
Bids are wanted April 15 for a union passenger station and train-shed. T. S. TUTWILER, engr. of the Savannah Union Station Co. 1319

COURT-HOUSE.

[At Butler, Mo.]
Bids are wanted April 16 for a three-story stone fireproof court-house, to cost \$50,000. S. T. BROADBENDS, co. clk.; Geo. E. McDonald, archt., Kansas City, Mo. 1319

IRON WORK.

[At White River, Ark.]
U. S. Engineer Office, Little Rock, Ark. Sealed proposals for furnishing iron work for lock and dam, Upper White River, Ark., will be received here until April 11, 1901. ROBERT MCGREGOR, captain, engineers. 1319

CONSTRUCTION, ETC.

[At Fort Terry, N. Y.]
Fort Terry, N. Y. Sealed proposals for constructing, plumbing and gas-piping brick hospital stewards' quarters, Fort Terry, N. Y., will be received here until April 15, 1901. GEORGE A. NUGENT, quartermaster. 1319

BUILDING.

[At Key West, Fla.]
Sealed proposals will be received at the bureau of yards and docks, Navy Department, Washington, until April 27, 1901, for constructing a two-story fireproof brick and steel building about 60' x 160', at the naval station, Key West, Fla. MORDECAI T. ENDICOTT, chief of bureau. 1320

STEEL STACKS, ETC.

[At Washington, D. C.]
Department of the Interior, United States Patent Office, Washington, D. C. Sealed proposals will be received at this office until April 22, 1901, for fitting up the scientific library of the U. S. patent office with steel stacks and book elevators. C. H. DUELL, commissioner. 1320

BRIDGE.

[At Springfield, Mass.]
Bids will be received until May 1, 1901, for the erection of a bridge having two 150-foot spans, 20-foot roadway and two 5-foot walks. Estimated to cost \$20,000. COLLINS & NORTON, engineers. 1321

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PROPOSALS.

CONSTRUCTION OF SEWERS.

[At Dedham, Mass.]
Sealed proposals will be received by the Sewer Commissioners of Dedham, Mass., for the construction of about 11½ miles of pipe sewers in five sections. Forms of specifications, proposals and contracts can be had at the office of the Sewer Commissioners, at Dedham, Mass., and all plans can be seen at such office. E. WORTHINGTON, engineer. 1318

IRONWORK.

[At Little Rock, Ark.]
U. S. Engineer Office, Little Rock, Ark. Sealed proposals for furnishing ironwork for lock and dam, Upper White River, Ark., will be received here until April 11, 1901. Information furnished on application. ROBERT MCGREGOR, capt. engr. 1318

Treasury Department, Office Supervising Architect, Washington, D. C., March 14, 1901. Sealed proposals will be received at this office until 2 o'clock P. M., on the 5th day of April, 1901, and then opened, for the new high pressure boiler plant and the necessary rearrangement of the piping in the sub-basement of the U. S. Post-office and Court-house at Baltimore, Md., in accordance with drawings and specification, copies of which may be obtained at this office or at the office of the Custodian of the building in Baltimore, Md., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1319

LIBRARY BUILDING.

[At New York, N. Y.]
Sealed bids will be received by the Park Board, at its offices, Arsenal Building, 64th St. and 5th Ave., Central Park, New York City, until April 11th, 1901. For contract No. 3 for the New York Public Library, Astor, Lenox and Tilden foundations, at 5th Ave., 40th and 42d Sts., in the Borough of Manhattan, City of New York, for the complete erection of the building, as described in the specifications and shown on the plans embraced in contract No. 3. Specifications and plans can be seen at the office of the Department Arsenal, Central Park. 1318

BARRACK.

[At Fort Strong, Mass.]
Depot Quartermaster's Office, 170 Summer St., Boston, Mass. Sealed proposals will be received at this office until April 8, 1901, for constructing at Fort Strong, Long Island, Mass., one barrack. W. H. MILLER, depot quartermaster, Boston, Mass. 1318

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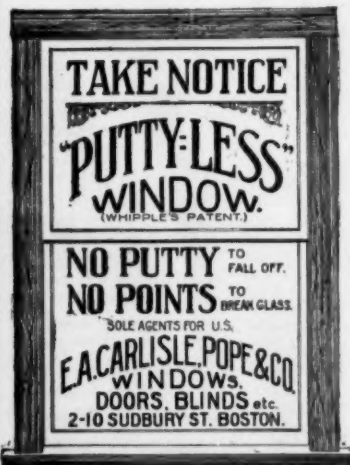
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SECTION 1. No Member should enter into partnership, in any form or degree, with any builder, contractor, or manufacturer.

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

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

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

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

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

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

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

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

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

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

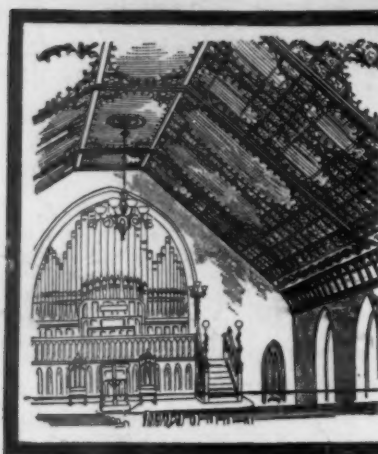
SECTION 12. The American Institute of Architects' "schedule of charges" represents minimum rates for full, faithful and competent service. It is the duty of every architect to charge higher rates whenever the demand for his services will justify the increase, rather than to accept work to which he cannot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

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

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

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

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



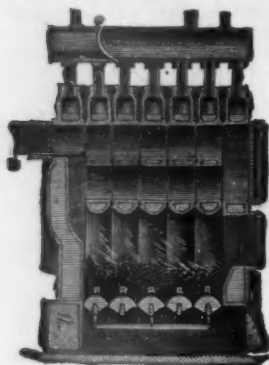
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