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THE modern system of fireproof construction was put to a severe test this week, in the conflagration on Broadway, which destroyed the building occupied by the clothing house of Rogers, Peet & Co., and damaged the Home Life Insurance Company's building, immediately adjoining it on the south, besides doing some little injury to the Postal Telegraph Building, next beyond. The fire started in the basement of the Rogers-Peet Building, probably among the wooden packing-boxes stored there, and the structure and its contents were soon burning. The flames played about the eighteen-story insurance building, and soon made their way through the upper windows, setting fire to the desks and furniture, and affecting in a similar way, but to a much smaller degree, the Postal Telegraph Building beyond. After several hours of this exposure, a marble balcony on the front of the insurance building, outside the thirteenth floor, broke away and fell into the street. For a time it was feared that other portions of the upper stories might fall, but nothing of the kind seems to have occurred, and only a thorough investigation will show whether the injury to the structure is more than superficial. The Home Life Building, which was one of the early examples of steel-frame architecture, was peculiar, in that there was no metal in the front wall, this being a screen of masonry, anchored to the iron cage behind it. There seems to be no indication that the frame, which was protected with terra cotta, suffered any injury, and if the front, as seems probable, was only superficially damaged, the owners of the building may congratulate themselves on their good fortune. As to the Postal Telegraph Building, all accounts agree that no damage was done beyond the breaking of some windows, and the blistering of paint. Although the fire has given occasion for a good deal of talk in the newspapers about the dangers of high buildings, it is obvious, on the least reflection, that the Home Life Building, by its height and its incombustible construction, served to defend the region behind and beyond it against what might have been a disastrous conflagration. It suffered, to a certain extent, in performing this service, just as every building, no matter how strongly constructed, which has large glass windows, and rooms with wooden furniture, must suffer from a conflagration close by, but the escape of the Postal Telegraph Building shows that, whatever other objections there may be to lining narrow streets with twenty-story buildings, the danger from fire in them, where they are not exposed to roasting from outside, is extremely small.

THOSE architects who think that it is desirable to be employed by the City of New York will find instruction in the architectural history of the new City Prison. Some months ago, it was decided to remove the old Tombs prison, and build a new one, and Messrs. Withers & Dickson were appointed architects of the new building. Mr. Withers had been for many years architect to the Board of Charities and Correction, and designed and carried out the Jefferson Market

Court-house and Jail, one of the most successful buildings of the sort in the country; so that it was to be presumed that the new Tombs would be skilfully designed and built. The architects were appointed in April, 1896. The next year the adoption of the consolidation charter, and the new election, brought a new set of politicians into power, and Mr. F. J. Lantry was appointed Commissioner of Correction. Soon after his appointment, Mr. Lantry found time to devote a little attention to the architects of the new prison, and asked them to resign, to make room for professional men "more in sympathy with the administration." Messrs. Withers & Dickson felt that they had quite enough sympathy with the administration to be able to perform their duties honestly and efficiently, and declined to resign. Although Messrs. Withers & Dickson had made sketch-plans for the cells, a Mr. Cook, of Hartford, who seems to be a specialist in jail ironwork, had been employed, in November, 1897, before Commissioner Lantry's selection, to design the cells. How much work Mr. Cook did in accordance with this commission does not appear, but Mr. Lantry, on coming into office, asked him, as well as the principal architects, to resign. He, like them, declined; but, after some months of worrying, he was forced out, and Messrs. Horgan & Slattery, who seem to have felt the requisite degree of sympathy with the administration, were employed in his place to design the cells. Whether the new architects of the cells conferred with the architects of the building, as would seem to be desirable, we are not informed, but, some time later, the latter received notice from Commissioner Brady, of the Department of Buildings, that their plans were defective, in that the girders shown did not provide sufficient support for the cell-work which Messrs. Horgan & Slattery proposed to put into the structure. Mr. Lantry, although, as it would appear, much astonished and grieved at this discovery, felt, after consultation with Corporation Counsel Whalen, that his duty required him to have work on the new structure stopped, and to supersede Messrs. Withers & Dickson as architects, appointing Messrs. Horgan & Slattery in their place as general architects of the building.

WHILE the mutual "sympathy" of Messrs. Lantry, Whalen, Brady, Horgan and Slattery can probably be explained on ethnological grounds, no very clear reason seems to have been given for allowing it to supersede the obligations of the city toward Messrs. Withers & Dickson. The latter, who are experienced in designing cells, as well as the other portions of a prison, say that, in their original scheme, they included a system of cells, and calculated the weights which it would impose on the girders, and proportioned the girders to the load. It turned out, later, that the former Commissioner, who appointed them, did not intend to have them design the cell-work, proposing to put this in the hands of a specialist; but, supposing Messrs. Withers & Dickson to have known this, their merit would be all the greater, in having taken the trouble to ascertain and provide for the loads due to the cell-work, by their own calculations, in the absence of data from the designer of the cells. When the first specialist, Mr. Cook, was appointed, he seems either to have accepted as sufficient the supports which Messrs. Withers & Dickson had provided, or to have neglected to ascertain from them what the supports were. The latter supposition, applied to an expert cell-planner, would be most improbable, and the circumstances indicate that Messrs. Withers & Dickson, and, apparently, Mr. Cook, had done all that could have been expected of them until Commissioner Lantry's entrance on the scene. The Commissioner, as an excuse for his early attempt to get the architects to resign, on account of their lack of "sympathy" with the new administration, says that he found Mr. Cook and Messrs. Withers & Dickson doing the same work, and thought that the best way to correct this superfluity of service was to turn them all out. Independent of the propriety of this method of remedying a state of things which was certainly not due to any fault of Messrs. Withers & Dickson, the Commissioner, in giving this explanation to the *Times* reporter, apparently forgot that, as soon as he had induced Mr. Cook to resign, he appointed Messrs. Horgan & Slattery in his place, thus bringing about again the very condition of professional superfluity which he had been trying to cure. After the appointment of the "sympathetic" architects to design the cells, it would seem to have been their obvious duty to consult with Messrs. Withers & Dickson, and ascertain what sort of

foundation was provided for their work; and, if they discovered that the girders shown were not strong enough to hold the weights that they intended to put on them, the responsibility was unquestionably theirs to hasten, at the earliest possible moment, to Messrs. Withers & Dickson, and advise with them as to such corrections as could still be made, or such additional supports as could be put in; and if it proved too late to provide such additional supports without extra expense, the City, which, by its delay in appointing its cell-designers, had caused this extra expense, was solely responsible for it. Instead of the consultation with Messrs. Withers & Dickson which professional duty, as well as decent courtesy, demanded, the new cell-designers seem to have gone on independently to plan a system of cells without reference to the architects of the building, and their plans for the cells were filed at the Department of Buildings without even being submitted to the official Consulting Architect, Mr. George B. Post, who, having examined and approved the plans for the building, might have noticed the incompatibility between them and the new scheme. Then, after the independent cell-plan had been filed, and Commissioner Brady had compared it with the plans for the building, filed and approved long before, instead of notifying Messrs. Horgan & Slattery of a violation of the law in imposing too heavy a load on the girders of the existing building, he summoned the architects of the latter for violation of the statute in not making their girders strong enough to support a cell-system designed by some one else, after the girders were in place! Commissioner Brady has had an excellent reputation in the profession, and he must have been misled in some way into such a curious perversion of his authority, but it is incredible that a court would sustain the view that an architect who, in good faith, with adequate knowledge and skill, and believing himself to be properly authorized, had designed a system of cells, and proper supports for them, should suffer deprivation of employment, or any other damage or accountability whatever, because such supports proved inadequate to sustain a different system, designed by another person, not employed by him or for his benefit.

SOME interesting experiments have been made by Mr. A. C. Hobart, Fellow in Civil Engineering of the University of Illinois, on the effect of freezing on cement-mortar. The phenomena incident to the freezing of freshly-mixed cement-mortar have already been investigated with tolerable thoroughness, and Mr. Hobart, therefore, devoted himself mainly to the study of such mortars, frozen only after setting had begun. In order to secure uniform conditions, he obtained the use of a room in a cold-storage warehouse, where a constant temperature was maintained of about twenty degrees Fahr., and the briquettes of cement, of various kinds, were removed to this room after a definite period had been allowed for setting in the rooms of the Engineering Laboratory. The cements experimented with were all of sorts not much used in the East, the natural brands being Clark's Utica, Louisville Black Diamond, Louisville Star, and Akron; while only two Portland cements were used, Saylor's and Dufosse's. With all these, freezing immediately after moulding caused loss of strength, and, where frozen in contact with water, total disintegration; but where the briquettes were allowed to set before freezing the result was very different. In the case of the natural cements, where the briquettes were allowed to set for six hours, or, in some cases, less, and then frozen, it was found that the strength, instead of being diminished, was greatly increased, such briquettes, after careful thawing, resisting a greater tension than similar briquettes of the same age which had not been frozen. Mortars made with two parts sand to one of cement were more favorably affected than the one-to-one or the neat mortars, the Louisville Black Diamond briquettes, mixed two of sand to one of cement, allowed to set for two or three hours only, showing, after freezing, and subsequent thawing, a resistance about three times as great as that of similar briquettes, made at the same time, and tested at the same time, but not frozen meanwhile. It is curious that the same mortar, if allowed to set for several days before freezing, gained much less by the process, but even after fourteen days' setting freezing added something to the strength. With Portland cements there was no gain by freezing in any case, and, generally, a considerable loss, but the loss in strength was less when frozen after twenty-four hours' setting than after six hours, and mortars made with a considerable proportion of sand lost, proportionally, much less than neat cement. The conclusions which Mr. Hobart draws from the experiments are, that cement-mortars, made

either with natural or Portland cement, if frozen in the presence of water, are likely to be disintegrated and destroyed; but that, if extraneous moisture is kept away from them, natural-cement mortars, if allowed to set from three to six hours, are improved by subsequent freezing; while mortars of Portland cement, under such circumstances, lose strength, particularly when mixed with a large excess of sand. Moreover, while mortars of natural cement usually suffer a slight surface disintegration by freezing, although the total resistance of the briquette is greatly increased, briquettes of Portland-cement mortar show no change on the surface, although their strength may be almost entirely destroyed.

THE importance and value of these experiments is obvious and we hope that some other investigator, equally careful and expert, may continue the tests, applying them to the Rosendale cements, and the brands of Portland in common use in the Eastern States. The Akron and Louisville cements are quick-setting, more so, it appears, than the Portland cements used, while the Rosendale cements used on the Atlantic coast are, as a rule, much slower-setting than the Portlands. This circumstance may have an important bearing on the result, in the case of Eastern cements, and an indication of the probability of this is to be found in the fact, shown by analysis of Mr. Hobart's tables, that the gain in strength by freezing, with the natural cements, was, to a certain extent, proportional to the slowness of the setting, the addition of sand, which acts to retard setting, also increasing the favorable effect of freezing; and with the Portland cements, the addition of sand greatly lessened the unfavorable effect of freezing, while, where three parts sand were used to one of cement, freezing in several cases actually added to the strength. Apparently, no theory has yet been proposed which will explain this phenomenon satisfactorily. It has been suggested that the heat of chemical combination in the quick-setting cements might prevent freezing until crystallization was well advanced, and that the subsequent freezing might serve to contract and consolidate the mass, and, as the mortars, in Mr. Hobart's tests, were mixed with the smallest practicable amount of water, so as to leave as little as possible uncombined moisture after crystallization was complete, there may be something in this view; but it does not explain the circumstance that the sandy and slow-setting mortars were most favorably affected, and it opens a new question, as to the effect of varying quantities of water in cement-mortars likely to be exposed to frost, which some experimenter might with advantage investigate. Another condition of actual practice, which should be scientifically inquired into, is the influence of cold stones or bricks on cement-mortars used in laying them. Every architect has seen mortar, even in mild winter days, freeze instantly to the surface of stones or bricks which are still cold from the frost of the preceding night, and this freezing cannot but be prejudicial to the masonry, not only on account of the injury to the fresh mortar, but through the prevention of adhesion between the mortar and the brick or stone, due to the film of ice which forms on the stone on the application of the mortar. It is a common experience to see masonry laid under such circumstances come to pieces as if no cement had been used, the stones or bricks leaving their places clean, although the mortar may be tolerably hard. Many architects, for this reason, independent of any considerations as to the injury of the cement by freezing, require the stones or bricks for masonry in winter work to be heated, by steam or otherwise, before laying, and the effect is, to them, satisfactory.

THE Architectural League of New York announces three competitions, the prizes in the first being gold and silver medals; in the second a single prize, of fifty dollars, being offered, and in the third a bronze medal, and prize of twenty-five dollars, if the design placed first is, in the opinion of the Committee, suitable for use. The first competition is for designs for a group of temporary structures, for the purpose of reviewing an army returning from foreign service, and is open to all residents of the United States under the age of thirty; the second is open to all residents of the United States, and is for a design for a medal, to be awarded to soldiers in commemoration of the battle of Santiago; and the third, limited to members of the League, is for a design for a poster for the League Exhibition of 1899. Drawings or models must be delivered at the rooms of the League, No. 215 West Fifty-seventh Street, New York, on or before January 16, 1899, and copies of the conditions governing the competitions may be had at the same address.

THE EVOLUTION OF DECORATIVE MOTIVES.¹—VII.

THE PALMETTE AND ANTHEMION.—I.



Fig. 104. Greek carved Stele-head: Athens, 4th Century B. C.

THE artistic genius of the ancient Greeks left to posterity no bequest more precious than the decorated pottery of the sixth, fifth and fourth centuries B. C. Made of common clay, adorned with pictures and ornaments in black or on a black background, these Greek vases owe their value in no respect to costly material or sumptuous enrichments, but solely to their artistic excellence. Their variety is no less extraordinary than their beauty of outline and decoration: among all the scores of thousands of known examples there are no two precisely alike. This is the more remarkable when we observe with how limited an alphabet of ornament-motives the Hellenic artists produced so endless a variety of ornament. Their design is like poetry expressed in the simplest language, so pure and true in its art that it needs no flourish of rhetoric or studied ingenuity of language to give it character and effect. A few simple elements—the anthemion, fret, rosette, spiral, wave and vine—constitute the alphabet of Greek vase-decoration. Out of these few elements was composed the whole marvellous world of decorative patterns that figure on these vases; and among them all the anthemion appears as the richest, the most beautiful and the most Protean in its almost infinite variations of form, detail and combination. Derived from the Assyrian palmette and ultimately traceable through Phœnicia and Cyprus to Egyptian lotus origins, as we shall presently see, the real value and flexibility of the motive were first discovered by the Greeks, in whose hands it began to assume those graces of curve and combination and movement which made it in time the most perfect and most characteristic of Greek ornament forms. They painted it on their vases and on the terra-cotta mouldings and finishings of their early temples and shrines; perfected it further in painted embellishments on their marble architecture; carved it with marvellous delicacy of modelling upon the neckings of columns and on the cymatiums of cornices of Ionic temples; and on their stele-caps in the fourth century developed it into one of the most splendid of all independent ornaments (Fig. 104).



Fig. 106. Assyrian Palmette; Detail from royal Mantel in a Relief from Nineveh (Layard).

So full of vitality was the Greek anthemion that it survived the decay of Greek civilization to blossom forth anew in Roman decoration; passed into Byzantine ornament, where it mingled curiously with the acanthus; outlived the Dark Ages, took on new life and new forms in Romanesque art, by which it was spread over Western Europe, persisted through the Middle Ages, and again renewed its youth in the neo-classic of the Renaissance. So it has come down to us, who use it as one of the commonplaces of decorative design.

The chronicles of the anthemion thus traverse the whole field of historic ornament. They record the development of the second of those two decorative ideas which we have seen to be inherent in the lotus—that, namely, of a bunch or bouquet of diverging lines springing from a common centre or nucleus.² This idea is so obviously suggested by the diverging petals of the conventional lotus that one would expect its development to precede that of the trident motive, which, as we have seen, did not become prominent until a long series of variations of the lotus had tended to suppress the petals and emphasize the three leaves or blades of the calyx. But in the history of ornament the seemingly obvious thing is almost always the last to be discovered, and centuries have sometimes elapsed between one step and the next in a development which seems to us a matter of course. The lotus had figured in Egyptian art for perhaps 2,000 years before the palmette—the earliest embodiment of the bouquet motive outside of the lotus itself—appeared as an independent motive in ornament, and it was the Assyrians and not the Egyptians who used it as such. Yet the palmette was an Egyptian form, compounded of a lotus-trident and a half-rosette, and had long been in use as an amulet in jewelry and in sepulchral paintings (Figs. 80, 95* and 105) in Egypt before its first appearance in Assyrian art. But the lotus-palmette never in Egyptian hands became an ornament *as such*; it never figured as



Fig. 107. Palmette and Pomegranate Pattern: Assyrian Ivory (British Museum).

a conventional decorative motive in bands and borders as did the lotus; it never entered into the general body of architectural or industrial ornament. It was the Assyrians who first recognized its value as a motive of decoration and applied it, no longer as an amulet or picture of an amulet, but as a conventional pattern, to tile-facings, carvings in low-relief on alabaster slabs, engravings on ivory, and other forms of art, some nine or ten centuries B. C. Thenceforward it figured continuously in Assyrian ornament (Figs. 106, 107). In friezes and bands it was made to alternate with the lotus, lotus-bud, pine-cone, and "pomegranate" (as in Fig. 107). It became the chief element in the mystic Sacred Tree (Fig. 108), and in pictures of royal personages it was represented as a conspicuous ornament of the embroidered mantle. Figure 106 is taken from such a representation. It possessed undoubtedly a certain symbolic and sacred significance; but it was more than a symbol, it was an ornament, and filled a place in Assyrian decoration as important as that of the Assyrian lotus (Fig. 109). This dominance of the decorative over the symbolic idea in Assyrian ornament is furthermore seen in the way in which the Assyrians modified the Egyptian lotus, curving its petals, enriching it with an extra calyx, edging every leaf with a fillet or double line, changing the form of the bud, and linking buds and blossoms together by looped bands clasped together under each flower and bud. It is this same decorative spirit which converted the amulet-palmette into the palmette-motive of ornament, and initiated one of the lines of development out of which finally grew the anthemion.



Fig. 108. Detail from Assyrian Sacred Tree (after Ward, "Historic Ornament").

If we compare the palmette of Figure 106 with the lotus of Figure 109, we remark in both a group of outwardly curved, radiating elements springing from a calyx or nucleus resting upon or nestling between two volutes. It would seem the most natural thing in the world to produce a palmette by curling the two outer sepals of the lotus into volutes and rounding the points of the remaining petals, and

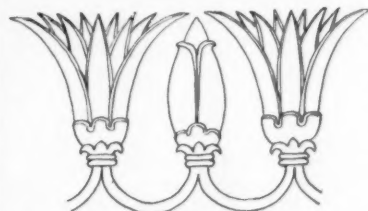


Fig. 109. Assyrian Lotus-and-bud Pattern, from Alabaster Threshold.

the Assyrian and Phœnician examples in Figure 110, taken by themselves, would lend color to the theory that the palmette had been thus evolved. But such is not the case. The palmette was unquestionably introduced into Mesopotamia from Egypt as a recognized amulet form in jewelry, and we encounter its Egyptian form in various modifications and variants all through the Mediterranean countries and islands contemporaneously with Assyrian art (Fig. 111). Now the Egyptian palmette is not a simple lotus, but a lotus and a half-rosette united—the lotus of the Karnak stele (see Fig. 59*) with its voluted sepals and no petals, and a half-rosette, symbolic, perhaps, of the rising sun. In Figure 105 (from a tomb) the origin of the volutes has been forgotten, and they rise out of a complete lotus. The palmette thus composed was a stiff and formal thing, the leaves of the rosette ill-fitting the convex curve of the volutes below. Phœnician commerce carried the Egyptian palmette-amulet and counterfeits of it, in gold, silver and enamel, to all the Mediterranean shores; and military expeditions from Egypt against the Assyrians, the Hittites and other Asiatic peoples further disseminated similar objects. With the lotus the palmette entered into the arts of Cyprus, of Melos and Rhodes, of Phœnicia and Assyria. In Cyprus it became a distinctively architectural feature, especially as a finial or stele capital (Fig. 111b), often reproducing the complete lotus under the volutes, and giving to the leaves of the rosette a curvature fitting that of the volutes under them. A very Cypriot form of the palmette is also met with in certain Assyrian ivory plaques or ornaments finished at the end with this motive (Fig. 111a). A curious feature here is the curling of the volutes up behind themselves, as if to reappear in the nucleus of the demi-rosette. Here the filleting of the edges and fluting of the rosette again demonstrate the decorative instinct of the Assyrian, adapting the details of the ornament to the material.

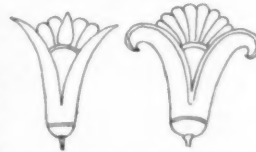


Fig. 110. Asiatic Lotus-palmettes: the complete lotus under the volutes, a Assyrian; b Phœnician.

On the Melian vases of the eighth and seventh centuries B. C. the

¹ Continued from No. 1176, page 13.

² See Figure 42, No. 1167 of the *American Architect*.

³ See No. 1176 of the *American Architect*.

* No. 1170 of the *American Architect*.

palmette takes on a new development, and thenceforward plays an important part in the decorative scheme of all Greek pottery. The most striking feature of the Melian palmette is the importance given to the volutes, which are not only of enormous size but closely coiled in two or more complete concentric curves. This is a distinctly new departure in the development of the ornament, and must be attributed to the decorative instinct of the Melian artist, although the great "recurved sepals" of the Cypriote vases may have influenced



Fig. 111. Lotus-palmettes: a Assyrian (Ivory); b Cypriote (Bronze); c Melian (Painted Pottery).

or suggested this enlargement of the volutes. Whatever the reason, the fact is noticeable and important that here we have some of the earliest examples of that fondness for elaborately coiled concentric spirals which later becomes so marked in Greek decoration. There is nothing like these huge volutes (Fig. 111c and Fig. 90 in No. 1176 of the *American Architect*) in any of the Egyptian or Asiatic palmettes. The Melian decorator, working freehand with a full brush, seems to have taken a peculiar delight in winding up these close-coiled spirals, and there is a free swing and sweep to his curves and to the palmette-leaves so boldly dashed in, which seems like an earnest of the better things to come in the Greek vases of the fine period. The palmette—whatever the occult solar significance of the decoration he painted—became in his hands a free ornament, to be used wherever the space and design offered opportunity for twin volutes; it appears as a germ of the anthemion. A. D. F. HAMLIN.

[To be continued.]

SOME LITTLE-KNOWN AMERICAN ORNAMENTAL STONES.¹



Notre Dame de l'Épine, France. From *La Construction Moderne*.

It is now, I think, very generally conceded that the great development of art among certain ancient peoples was due to the ready availability of such materials as lent themselves most readily to art and architectural expression. Otherwise stated, the kind of art which developed most favorably in any region was controlled by the character of available material. It is impossible, for instance, to conceive of the wonderful development of sculpture characteristic of the early Greeks and Romans as having developed in a region so

lacking in inspiration and so barren of materials as is the Mississippi Valley of our own country. This is especially true among those forms of art which find their best expression in stone, since the great weight of the material rendered its transportation in the early days a matter of practical impossibility, excepting in regions favorable to trans-shipment by water. Since the invention of the steam-car, this last-named difficulty has been largely overcome, and it is scarcely too much to say that to-day the earth is ransacked throughout almost its entire length and breadth for material not merely for the smaller works of art but as well for the larger and grander forms of architecture. In ages past difficulties in the way of transportation and hardness of material were in part overcome by the cheapness of skilled labor. The high prices now put upon skilled labor, and enforced by labor-unions, have, in our country, very largely counteracted the cheapening of methods of transportation through the introduction of steam-power. Indeed, owing to the cheapness of foreign labor as compared with that of the United States, the Italian materials will to-day compete on equal terms in our Eastern markets with those of the United States; and were it not that modern ingenuity has called into play a score of mechanical devices whereby the labor of one man is multiplied many fold, it would be impossible for any but the very wealthiest of our people to indulge their taste in any but the most commonplace of art-objects made from domestic materials so obdurate as stone.

Among none of the nations of the world is stone to-day so universally used for general structural purposes as in America. No one can but be surprised, and I think agreeably surprised, in comparing the structures—private residences and business blocks, municipal and Governmental buildings—of this country with those of foreign nations. There is a richness and appearance of solidity (sometimes, it is true, quite delusive) and a variety among the buildings of our American cities which stand in strong and pleasing contrast with the weather-marked and otherwise shabby stucco structures of the Eastern Continent.

Gifted with a variety of materials such as has fallen to the lot of no other nation, and with a multiplicity of railroads and waterways, we are enabled to transport these materials throughout the entire length and breadth of our continent at rates which would have seemed incredible even a half-century ago.

The rapid development of art and architectural instinct which has taken place during the last quarter of a century in this country has been gratified very largely through an importation of materials from the Old World. For many years this condition of affairs must continue to exist—in fact, so far as relates to certain forms of art, must always exist. We have, however, within the limits of the United States (and you will remember that I am speaking now wholly with reference to stone) many varieties of materials which are fully equal, if not superior, to those which are brought from abroad, and which, whether equal or superior, are in many cases so entirely different as to merit attention for this reason alone. Many of these materials have been known for years, but the great cost of working, together with the limited demand, has prevented their being seriously considered. It is with these thoughts in my mind, which, I fear, I have somewhat crudely set forth, that I have prepared for this occasion the paper which bears the title, "A Consideration of some little-known American Ornamental Stones." Inasmuch as ocular demonstration in such cases is vastly superior to any amount of detailed oral description, I have brought from our national collections a series of some of the more striking specimens, and will now proceed to call them to your attention. I may say at the outset that scarcely one of these stones is to be found at present upon the market. This for the reason that there has as yet been no such demand as would make their working profitable. That there is no such demand, I believe now to be due to the fact that the public do not realize their possibilities.

Among the stones of greatest interest from an historical standpoint is the so-called Oriental Alabaster; a carbonate of lime found in the rifts and caves of the Eocene limestone of the Nile Valley. This is comparable in every way with the cave deposits of our Eastern United States. The general character of this stone is well represented in the specimen I hold in my hand. Its color, translucency and banding are comparable to the translucency and banding of the nail on the human hand. This feature has given it the name Onyx, from the Latin *oniscus*, a nail. The same name is also applied to calcareous rocks of quite similar nature but a product of hot-spring action, such as are familiar to you under the name of Mexican Onyx. This stone, owing to the characteristics I have mentioned, was a great favorite among the Egyptians and was used for the manufacture of amphoræ, urns and various domestic utensils, as well as for interior decoration, even as far back as two thousand years before the Christian era. A stone in every way similar was used by the Greeks and Romans, and is still utilized by the people of to-day both for interior decoration and the similar works of art. As I have already stated, material of this nature is abundant throughout limestone caverns of the United States. Thus far all attempts to utilize it upon a commercial scale have proved unsatisfactory. This is due, as I believe, wholly to an erroneous idea as to the character of the material and a lack of appreciation of its possibilities. The rock is almost universally removed from its bed by blasting, whereby it becomes more or less shattered, is then taken to the stone-yards to be cut up into slabs, as a log is sawn into boards. The material is then polished, with the expectation that it will be

¹ A paper by Prof. G. P. Merrill, of the United States National Museum, read at the Thirty-second Annual Convention of the American Institute of Architects.

used for sheathing purposes and the tops of furniture. I need scarcely say that the results are invariably unsatisfactory. Walls thus sheathed are anything but beautiful, and, moreover, the stone is of such a nature that surfaces of large size, free from flaws, are very rarely obtainable. The stone needs first to be removed from the bed with the greatest care, to prevent the development of incipient fractures, and, when so removed, each block needs to be considered by itself with reference to its adaptability for a turned column, vase or polished slab, or to whatever use it may be best suited. The blocks before you will suggest at once the possibilities in these various directions. One other item I may add which has prevented the successful introduction of this stone into our market is the fact that the quarryer fails to realize the uncertain and irregular character of the product, and unscrupulous promoters have insisted upon the floating of more stock than it is possible for such property to bear. It is at best a minor industry and one which, perhaps, must be carried on as much for love as in the hope of pecuniary gain.

Of the same nature as this — excepting, as I have stated, that it is a product of hot-spring action, and, further, that it is impregnated with a considerable percentage of metallic oxides, which give it more intense colors — are the so-called onyx marbles of our Western States and Mexico. These, of a green, reddish and yellowish color, are so well known to you that I will not dwell upon them in detail. I wish only to call your attention to their translucency when in thin sections and to suggest the possibility of their use, in place of highly-colored glass, in windows. In times past stones of this nature have been put to this use, and may to-day be seen in some of the foreign cathedrals. I will also call your attention to a slab of oxidized material. This I selected from the dump where it was thrown by the quarryers, who assured me that it was not onyx and that it was worthless. I will leave its value for you to decide, feeling sure that you will agree with me. It is simply the ordinary green onyx in which the percolating waters have so far oxidized the ferrous carbonate as to render the stone opaque and change the colors from green to various shades of red and brown. I have called this variety *tapestry onyx*, on account of its fancied resemblance to ancient tapestry.

Another stone which was a favorite with the ancient Egyptians, and with the Romans as well, was the so-called antique porphyry (*rosso antico*), a small sample of which I hold in my hand. You will perceive that it consists of a dense reddish base thickly studded with small pinkish crystals of feldspar. The stone is of very uniform grain and, I need scarcely say, of beautiful color. Since the days of the Romans there have been, so far as I am aware, no attempts to work it on a commercial basis, though some large blocks of the stone were exhibited by an English company at the World's Fair in Chicago, in 1893. I have to show you now a small sample of a stone quite similar in nature, from one of our Western States, which was selected from a collection brought in by a member of the United States Geological Survey. This particular stone is probably to-day practically inaccessible, but I have others here of a very similar nature, which I feel confident can be had in any desirable quantity should there be any demand for the same. I would call particular attention to the beautiful porphyry breccia from the Franconia region in New Hampshire, a deep, dense, dull-red variety, variegated with spots of a brighter hue and sometimes crystalline particles of feldspar. Hard, and almost as indestructible as glass, it is equally well adapted for exterior and interior work, and it is difficult to conceive of a more beautiful stone for turned columns or polished pilasters.

Of somewhat the same general nature, but differing slightly in color and in texture, are these samples from the old lava flows in Eastern Massachusetts. Varying from brilliant red through brown and various shades of gray to nearly black, sometimes mottled with yellow, finely and evenly porphyritic, and sometimes brecciated, they give a variety of color and structural features which can leave little to be desired. I feel that I cannot say too much in praise of this material. No two samples are exactly alike, and, however much the stone may be used, it can never become commonplace or vulgar, and, with proper selection, it will be possible to make such objects as the owner may be sure can never be exactly duplicated. I will pass these samples around for inspection, and at the same time will show a nearly black white-spotted rock of the same nature from Fond du Lac County, in Wisconsin, and a white black-spotted variety from near Charlotte, North Carolina.

Another igneous rock also used by the ancient Romans was the so-called *marmor Lacedæmonia viride*, or green antique porphyry, a porphyritic diorite from Southern Greece. So far as I am aware, the exact equivalent of this stone has never been found in America, but I submit herewith a pebble picked up in the drift of Eastern Massachusetts which will convey to you some idea of what we may expect to find when systematic search shall be made.

In the Church of Our Saviour in Moscow the interior walls are sheathed to a height of perhaps four feet with a deep, dark-gray, almost black, gabbro-like rock, variegated with most beautiful purplish iridescent spots. Above this, to the height of perhaps six feet, the walls are sheathed with a chocolate-red quartzite. The rock is so dense and close that its exact mineral nature could be made out only with difficulty, but the effect, to my eye at least, was superb; and with this in mind I bring to your attention a block of quite similar quartzite from deposits near Courtland, in Nicollet County, Minnesota. It certainly merits a better use than that of the manufacture of paving-stones, to which it is now exclusively applied.

While engaged in survey work in Montana some years ago my attention was directed to some peculiar joined blocks of what appeared to be indurated volcanic mud, in which the action of the weather had produced a most unique and interesting banding. I brought with me some of the blocks to Washington, and on cutting them found them of such beauty that I endeavored to induce a stone dealer in New York to interest himself in them sufficiently to put the material upon the market. The attempt failed, but not, I believe, because the stone was lacking in beauty or adaptability for some forms of work. I show you here a few selected samples; others may be found in the National collections. As I have stated, the rock is evidently an indurated volcanic mud.

In this connection, I might well call your attention to another indurated mud or clay, from Pipestone County in Minnesota. This is the so-called catlinite, formerly used by the Sioux Indians for the manufacture of ceremonial pipes, but now utilized for the manufacture of pipes and various small ornaments for sale to the tourists. It is to be had in slabs of only very moderate dimensions, but its color is such as seems to me to render it worthy of more serious consideration than it has yet received.

The two samples of marble from Burnet and Austin, Texas, shown here in the form of four-inch cubes, are of color and veination quite unlike anything now upon our markets, and, though probably somewhat difficult to work, present many desirable qualities.

The so-called verd-antique marbles, such as are familiar to you all and so frequently used for interior decoration, are abundant in various parts of the United States, but the cost of working is such that the present supply is brought almost wholly from Italy. I will not detain you by going into a detailed description of these rocks, merely calling your attention to a few thin slices of the purer varieties of these stones which I have prepared in order to show their translucency and suggest their utilization for other purposes than that of polished slabs and turned columns. The slab in my hand I picked from the dump-piles of the old chrome iron mines near the State line between Pennsylvania and Maryland. During the time that these mines were in operation many tons of this material were thrown out in the form of small irregular blocks. It was of interest to the mineralogist and was widely scattered in the form of small specimens throughout the cabinets of the world. So far as I am aware, no attempt has been made to put it to any practical use. When in thick masses it is not a stone of extraordinary beauty, but when cut sufficiently thin to allow the light to pass through, I think you will acknowledge it is worthy of your consideration. Two other samples of material of the same nature but varying in color and of very different size are submitted for your inspection.

There remain but two rocks to which I will call your attention at the present time. The first of these is a granitic rock from Madison County, Virginia. I have never seen this rock in place, but, from its character, I judge it can be had only in blocks of very moderate dimensions. Its colors — a light-green ground mass, interspersed with light-pink feldspars — are such as to make it of interest and perhaps of use.

The next sample is a slab of a very common type of rock, such as is thrown to the dump by the hundreds of tons in many of our mica and feldspar mines. It is what is commonly known as pegmatite, a graphic granite. It is a well-known rock and found in all our mineralogical and geological collections, and has occasionally been utilized in the manufacture of small objects of art. In plain surfaces it works as readily and safely as ordinary granite, and I can but think it might be utilized to advantage in many forms of interior decoration.

Two samples of rose quartz, the one from Maine and the other from Connecticut, are also worthy of attention. At present such are used only in the manufacture of abrasives and of paints or as an adulterant in soaps. The tints, unfortunately, are not lasting when exposed to the weather, but are sufficiently permanent for interior work.

It may be asked what good I can expect to accomplish in calling attention to materials which are not now upon the market and for which there can, in some instance, be no regular and constant source of supply. My reply is that, while in certain lines of business materials have been put upon the market and a demand created, I am satisfied that in the present case the demand must come first. So soon as it is apparent that there is anything like a satisfactory demand, I feel sure that quarryers and dealers will find means of meeting the same. It may be chimerical, but I hope to see the time when it will be possible to find in the hands of the dealers a varied assortment of these rarer and now little-used materials, which may be inspected in the rough by the architect, artist and the artisan, and devoted to such ends as the inherent qualities of each piece may render it best suited. It is at least a consummation devoutly to be wished for.

A REMBRANDT PAINTING INJURED.—During the course of the recent Rembrandt exhibition at Amsterdam the magnificent picture known as "Esther, Haman, and Ahasuerus," belonging to King Charles of Roumania, was seriously injured. A nail had been left in the wall upon which it was hung, and ultimately pierced one of King Ahasuerus's eyes. An attempt will be made to repair the damage as carefully as possible, but the experts declare that, whatever be done to the picture, the repair will be clearly noticeable in a few years. Meantime, the royal owner has been awarded 5,000 guilders, as compensation for the injury to his property. — *N. Y. Evening Post.*

SOME FAMOUS ENGLISH ARTISTS ON COMPETITION.



The Bud.

furthermore, believes it to be a disease which can be remedied. This disease and injury to humanity, also, he thinks is no trifling matter, but a grievous deduction from the happiness of man; for he knows that the all-pervading art of which I have been speaking, and to the possibility of which the Commercialist is blind, is the expression of pleasure in the labor of production; and that, since all persons who are not mere burdens on the community must produce, in some form or another, it follows that under our present system most honest men must lead unhappy lives, since their work, which is the most important part of their lives, is devoid of pleasure." — William Morris.

"The habit of calculating, of weighing everything to the uttermost farthing, and of resting all things on the standard of money value, must have a narrowing and cramping effect upon the mind, and render it incapable of the appreciation of art, of large and generous conduct, and humane views." — Walter Crane.

RUSKIN early called attention to the absolute hostility of modern commercialism to art. He saw beauty and the love and passion for beautiful things dying out of modern life. He saw Nature herself made hideous by dingy factories and poisonous smoke, and millions of poor people condemned to pass a wretched, brutalizing existence in these living tombs. He saw the interminable rows of dirty box-like houses, galvanized-iron shops, the monotonous streets, the grimy railroad-stations with their shrieking engines rushing like demons over the wilderness of ugliness, and, worse than all, he heard the attempt made by self-styled "Political Economists" to justify this sort of thing. He heard them teach that the one end of man is the acquisition of riches at the expense of everything else that stood in its way, whether in ethics or in art. He saw all this, and his refined sense of truth and justice rebelled against the system which permitted it. He became a Socialist and produced what he called "a political economy of art" and formulated his ideas in the terse expression which heads this article.

Walter Crane, the famous English artist and Socialist, says: "Every young student to whom the need of getting a livelihood comes home soon feels under the necessity of doing work consciously with intent to sell — that is, of doing less than his best — uninspired commercial work done to order to supply demands of trade, those very demands being often artificial, like the art they call into being. If he has cherished dreams of great and sincere work, he must put them away from him unless he can face starvation. Perhaps, in the end, he goes into some commercial mill of production, or sells his soul to the dealer, the modern high-priest of Pallas and Athene. Then he finds that the practice of serving Mammon has so hardened into habit as to make him forget the dreams and aspirations of his youth, and the so-called successful artist sinks into the cheerful and prosperous type of cynic, of which our modern society appears to produce such abundant specimens.

"The choice presented to the modern artist is really pretty much narrowed to that of being either the flatterer and servant of the rich or a trade hack."

In a lecture on "Art" delivered recently in Boston, Henry Holiday, another representative English artist, said: "Let us inquire into the cause of the almost total absence of art in our present life. It is admitted on all hands. It is a matter of constant discussion. There are many clever and some noble works of art produced still; that is to say, there are still men, who, having from a genuine impulse made art their profession, produce works which possess beauty and sometimes noble thought, but outside these isolated cases, where is the art of our daily life? Whence arises that deadly uniformity, that depressing, all-prevailing dinginess which fills our life so far as its external conditions are concerned? If we walk through our older or more recent streets, with some scattered exceptions, we look in vain for a glimpse of anything that can charm the eye or refresh the mind.

"Interminable rows of identical houses, all cut down to one common type, or a babel of discordant incongruous styles.

"Now look at dress. Here surely there will be more freedom. Cannot the individual assert his personality here? Let us see. Here is a row of cars coming down town full of well-to-do citizens going to their daily avocations; and what is it we see? All dressed exactly alike. They must, then, certainly have found a type of dress

"GOVERNMENT and co-operation are in all things the laws of life; anarchy and competition the laws of death." — Ruskin.

"The Commercialist sees that in the great mass of civilized human labor there is no pretence to art, and thinks that this is natural, inevitable, and, on the whole, desirable. The Socialist, on the contrary, sees in this obvious lack of art a disease peculiar to modern civilization and hurtful to humanity; and,

so beautiful, so perfect, that they have voluntarily surrendered their individuality as a tribute to perfection. Is it so? These black cut-away coats, these black boots, these cylindrical tubes of trousers, these black top hats — are these the ideals for which all individuality is to be sacrificed? I have heard critics of Socialism deprecate its orderly organization with the remark that, under such a routine, people would be like sheep. What are these like? Black sheep, it would seem. Gloom and the total absence of individuality are the characteristics of our system."

When William Morris laments the decay of art under the spirit of modern commercialism he refers to popular art, the art of the artist workman, and not the individual successes of the exceptional painter, architect or sculptor. According to him, it was the artist workman who built and adorned the great cathedrals of Europe, covering them with lovely "mouldings and traceries, and foliated capitals, portraits and quaint fancies, quips and jests, as well as dreams of beauty in wood, metal and stone, to be the wonder and admiration of our time." This was the work of the free-associated workman, and in this element of mediæval life Morris saw the only conditions under which art can flourish, a freedom which involves education, leisure, and free access to the instruments of production.

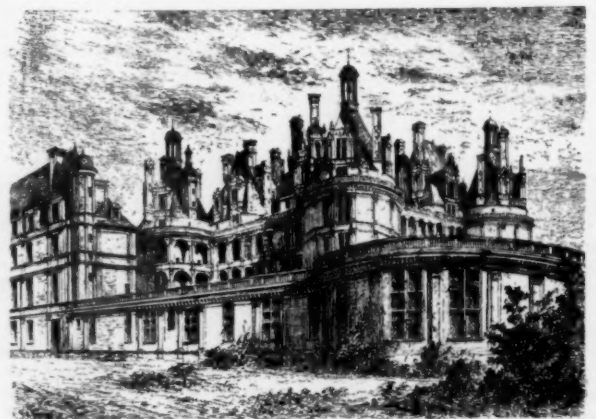
"To-day," says William Clarke, "the average worker is a machine minder, the all but soulless agent of an anonymous joint stock company or syndicate, performing day after day, and year after year, the same piece of monotonous, mechanical drudgery, liable any day to be elbowed out of the field by new inventions, unable to work unless a body of capitalists can make for themselves a profit out of his work, and living, as a general rule, amid noisome, sordid and hideous surroundings." Morris believed that the existing society is gradually, but with increasing momentum, disintegrating through its own rottenness. He saw, with Ruskin, that "anarchy and competition are the laws of death."

But it must be borne in mind that there are two kinds of competition, one objective, a seeking to obtain for oneself some object desired equally by others, but without adding to the world's wealth, and the other subjective, aiming at the development and happiness of the individual without injury to others, through the creation of something useful and synonymous with the word "emulation," which implies healthful and vigorous ambition. Both kinds may be operative at the same time in the same individual, as when one architect competes professionally with another.

The first kind of competition is destructive, and the second constructive, competition, and the failure to distinguish between them is the cause of much needless discussion among sociologists, and of much of the opposition to those who describe the present debasing strife as the "competitive" system of industry, implying that the element of competition is the sole evil to be combated. The opponents of Socialism are thus misled into thinking that all forms of competition, both good and bad, are to be destroyed by the new system, and the human race thereby enervated and degenerated.

This seems to be the spectre which alarmed Mr. Kidd in his "Social Evolution," and led him to his astonishing conclusions.

Now it so happens that the most prominent and dangerous characteristic of the present industrial scramble is not the fostering of a healthful competition, but rather its very destruction by monopoly and special privilege, under which the greatest commercial success is possible only with those who may be able to deprive all others of the possibility of competing with them at any point. Socialism alone aims at restoring to all that equality of opportunity which will enable them to fairly compete for honors in the service of mankind.



The Blossom.

Strictly speaking, the word "aspiration" should be used to express the highest, or purely subjective, form of emulation, just as the word "emulation" expresses a higher form of competition. But the average man does not distinguish accurately between these words, and "competition" is used in its higher sense by those who oppose, and in its lower by those who advocate, its abolition.

Accordingly Socialism might be defined as the substitution of constructive for destructive competition.

Nationalism is that form of Socialism which recognizes the justice and expediency of making effort rather than aptitude the basis of material reward. It recognizes that the productive machinery of to-day would enormously increase the annual wealth production, if scientifically handled, and that, properly organized, it could supply all the people with every reasonable comfort with the work of two and a quarter hours a day for each person, so that an unequal distribution of its annual product among the workers would be altogether unnecessary. As to the form of recompense other than the merely material ones which might be applied to the encouragement of the highest order of intelligence and ability, the very fact of the community of interest of all citizens would evidently suffice to ensure the most effective form of such recompense being selected.

It recognizes, too, that, in a republic especially, Society is, as a whole, generally responsible for such laws and institutions as it finds pernicious, inasmuch as the vote of the majority has, directly or indirectly, been instrumental in creating them, and that hence Society as a whole, and not special individuals, should bear the burden of any change for the better which may be desired. As soon as the justice and expediency of this principle is generally recognized the transition to the Socialist ideal will proceed much more rapidly, because those who have, under the laws enacted by the permission of Society who elected the legislators, obtained possession of the machinery of production, will gladly coöperate with the rest in transferring it to the collectivity when it is ready for it, seeing that they will not be expected personally to suffer the cost of the change, but will share fully in its advantages. It is the fear of injustice felt by these who to-day seem to possess almost unlimited power of resistance to this reform, which is largely responsible for its slow progress.

Thus the burden of any improvement in the building-laws of a city, for example, which is for the benefit of all the citizens alike, should be borne by the city as a whole, and not by private owners of property affected, who should be justly compensated for any personal injury such changes may involve. It is the fear of an unjust loss on the part of these owners which gives rise to the usual opposition following any proposition to improve these laws.

J. P. P.

BOOKS AND PAPERS

IF anything could convince a reader of the unnaturalness, so to speak, of mechanics' lien laws¹, it would be such a book as this excellent little treatise, in which the endless difficulties which beset the interpretation of statutes at variance with the natural doctrine of equal rights for all citizens before the law are well set forth. Of course, we do not say that lien laws, in the present state of society, may not be necessary, but their explicit purpose is to give to a certain class of persons special privileges in regard to the collection of debts due them, and it is not surprising that other people whose natural rights are encroached upon in the pursuance of such special privileges resist them at every turn. As the weapons which they must use in defending themselves consist mainly in legal precedents and arguments, and as the force of the lien statutes, which have no common-law foundation, rests entirely in the strict interpretation of the words in which they are expressed, it is not surprising that a work intended to set forth the exact interpretation which the courts have put upon the law, and the arguments and precedents on which the definition of each point is based, bristles with technicalities; but these present no great difficulty to the intelligent reader, while they give to it a precision and succinctness which would be lacking if the subject had been treated in a more "popular" manner, and which are nowhere more necessary than in a book on such matters. In the introductory chapter a great deal of extremely useful information is given as to the exemptions from the operation of the lien laws, the mode of waiver of lien, and the rights of parties having various interests in the property affected; while the remainder of the work is devoted to the discussion of the present Massachusetts statute, and a review of the decisions relating to each section. As a matter of course, a clause, for example, which speaks of labor performed "in the erection, alteration or repair of a building or structure" must be defined by decision as to what constitutes "labor"; a "building"; a "structure"; and the "erection, alteration or repair" of an object so defined. It is interesting to architects to know that superintendence is held in Massachusetts to be labor, although work in drawing plans and writing specifications is not; but the important question, whether the labor of brutes, as, for instance, that of horses engaged in excavation, is included under the statute, has never been decided. So, moving a building is held not to be erecting, altering or repairing it, and no lien can be enforced therefor; and labor in putting in furnaces and ranges, mantels, and so on, is not protected by the law unless the object has become part of the real-estate. When anything becomes a part of the real-estate with which it is connected is a question which has exercised the intellects of lawyers and judges for centuries already, and will probably exercise them for centuries to come. It should be said, however, that it is not the fault of the judges and lawyers that

the administration of the lien laws is attended with so many difficulties. A good lawyer really finds his principal employment in preventing the litigation into which the stupidity and obstinacy of his clients would plunge them; and the way to get statutes which will not furnish sustenance for the legal profession is to employ good lawyers to draw them up. Meanwhile, the builders, architects, owners, trustees, mortgagees, mechanics and others, to whom the lien laws are an important matter, could not do better than keep this little book near at hand, and read it through occasionally to refresh their memories. For many of them, it will be the means of avoiding losses, and saving costly litigation, while, if litigation should be necessary, it will furnish the means of shortening and simplifying it.



ST. LOUIS CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS.

THE St. Louis Chapter of the American Institute of Architects held its regular meeting and banquet at the Mercantile Club, Tuesday evening.

This organization has formulated a proposed law for the purpose of licensing all architects in the State of Missouri. This law will be similar in effect to the one now in operation in the State of Illinois, which is producing most excellent results.

This law is intended to limit the art of building to those who are especially trained for the practice of the profession, and with the ultimate object towards accomplishing the best results economically and practically, and to guard against endangering the lives of men through faulty construction.

This law will come before the State Legislature for passage next January, and as the same is parallel in purpose to the law demanding the licensing of all practitioners of law and the various branches of medicine, therefore it is believed that the same will meet with the unqualified approval of our State Legislature.

The law will not hinder any one from continuing his profession who is now practising architecture. In the future, however, all those intending to practise will be obliged to pass the required examinations before the State Examining Board.

Mr. Wm. H. Bryan, M. E., delivered a lecture before the Chapter on the subject of the "Best Modern Systems of Electric-lighting, Steam-heating and Elevator Appliances," which was followed by a general discussion by the architects.

Professor Johnson, of Washington University, described the results of his recent timber tests on columns and girders as applied to the "Loring System of Skeleton Construction."

After a general discussion of the subject, and after dispensing with the usual order of business, the meeting adjourned.

LOUIS MULLGARDT, Secretary.

SKETCH-CLUB OF NEW YORK.

THE December meeting of the Sketch-Club of New York, held in the new Club-rooms, at 19 West 24th Street, on the evening of the 3d, was attended by a large number of members and their friends.

The rooms have been newly decorated and arranged to meet the needs of the various classes.

The Entertainment Committee had labored hard to make the evening a success and the House Committee had provided ample refreshment.

Messrs. Carrère & Hastings, McKim, Mead & White, Prof. Wm. R. Ware, and Clarence True, have become patrons of the Club by subscribing \$50.

Mr. Nesbit has kindly offered to erect a mantel in the Club sitting-room, the design of this mantel to be the subject of a competition among the members.

Mr. Francis L. Ellingwood has presented to the Club a plaster-cast of the Apollo Belvedere.

A vote of thanks was extended to each of these two gentlemen.

Twenty-five new members have been received.

After the business-meeting there was entertainment until a late hour.

N. HAUSMAN, Recording Secretary.

PHILADELPHIA, PA., December 6, 1898.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—In this week's issue of your magazine, under news of the T-Square Club, Mr. Horace C. Mann was given credit for winning the competition for St. Paul's Church at Overbrook; the name should have read Frederick M. Mann. Will you kindly make this correction of my mistake? GEO. B. PAGE, Secretary pro tem.

COBBLER'S-WAX A PRESERVATIVE FROM RUST.—The *Deutsche Fürber Zeitung* recommends that iron reservoirs should be preserved from rust by cleaning off the paint and rust with a steel-wire brush. The surface is then to be heated by a soldering lamp, bit by bit, and cobbler's-wax rubbed into the heated parts. The wax enters the pores and protects the iron.—*Exchange*.

¹"The Law of Mechanics' Liens upon Real Estate in Massachusetts." By Henry T. Lummas, LL. B., of the Essex Bar. Boston: Little, Brown & Co. 1898.

ILLUSTRATIONS

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

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This plate is copied from the *British Architect*.

TWO FRENCH WONDERS.

[Additional Illustrations in the International Edition.]

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DAME OWEN'S STATUE, IN THE HALL, DAME OWEN'S SCHOOL, ISLINGTON, ENG.

NOTES AND CLIPPINGS

CONGRESS AND THE METRIC SYSTEM. — One of the measures to come before the approaching session of Congress in which all the leading scientific and technical men of the United States are deeply interested is the Hurley Bill, which was pending at the last session. This bill provides for the adoption of the metric system of weights and measures, and the compulsory use of the system after July 1, 1900, in all Government transactions, except the completion of the survey of public lands, and recognizes the metric units as the legal standards of weights and measures in the United States after that date. This bill was introduced in the Fifty-fourth Congress and failed of passage by only three votes, so that a very good chance of its passage at the coming session is anticipated. A new importance is now added to the measure by the recent development of the foreign trade in this country, and the prospect of having distant colonies which not only will use American products but will act as distributing points for exports to other countries. The metric system being now adopted by nearly all the civilized nations of the world except Great Britain and America, the necessities of foreign trade call for its use by these two countries, and should one adopt the system the other would be compelled to follow its example. Not only in trade but also in all mechanical work does the metric system facilitate operations, and even in the event of the loss of the international standards we have sufficient data to construct new standards that would be perfect reproductions of the originals. — *N. Y. Evening Post*.

THE MAISONNEUVE MONUMENT, MONTREAL. — The best monument in Montreal, one of the best on the American Continent, is the Maisonneuve Monument, in the Place d'Armes. It is the work of Philippe Hébert of Montreal. This masterpiece is well worth the journey to Canada to see. Maisonneuve was the founder of the city of Montreal. The place was granted to the Sulpicians from Paris, and at first was known as Ville Marie. The pioneers waged daily war against the Iroquois, and on the very spot where the monument stands Maisonneuve performed a remarkable exploit of arms against the savages. Among his company of settlers was a hardy scout named Crosse, certain Jesuit Fathers and a noble woman named Jeanne Mance, who ministered to the Indian captives and whose name became a synonym for self-sacrificing benefactions. In the four subsidiary figures of bronze which M. Hébert has placed at the four corners of the base he has recorded imperishably the heroic deeds of the old French scout, the Catholic missionaries and the brave woman, as well as the virile traits of the aborigines, typified by a splendid specimen of the Iroquois braves. The crouching figure of Jeanne Mance, who is depicted in the act of binding up the wounds of an Indian boy, is a veritable revelation of beauty. In another way the figure of Crosse, the scout, is an unequalled type of the hardy and indomitable woodsman, or *coureur de bois*, who stoops to conceal himself behind the shrubbery, as, with his rifle ready in one hand, he holds back his too-eager dog with the other. These two figures are unspeakably fine — the one all tenderness, benignancy and charm; the other breathing martial nerve, resolution and fire. No one but a modern artist of French blood could have modelled these figures. One's admiration for the Gallic race revives at sight of such fine work, and the chief figure, the portrait-statue which crowns the monument, might be cited as the embodiment of many of the qualities that have made the race great — its keen intelligence, alert, fearless and dashing; its initiative, its imaginativeness and its romanticism. — *W. H. D. in the Boston Transcript*.

REMOVAL OF THE PONTE VECCHIO. — The projected removal of the famous Ponte Vecchio, or Old Bridge of Florence, the only one now left of any importance with its mediæval houses lining either side of it, is creating a great stir in the artistic world, both in Italy and the rest of Europe. A committee has been formed for the "Protection of Old Florence," which includes among its members the most illustrious Florentine names, and a circular has been sent out to all parts of Europe soliciting signatures against this act of vandalism, which is the greater inasmuch as it is contemplated to substitute for this historical monument a modern suspension-bridge. The original Ponte Vecchio was constructed of wood in 1080, but was swept away by a flood in 1177 and rebuilt of stone. Again it was carried away by the great inundation of 1333, when Taddeo Gaddi, the painter and architect, rebuilt it as it stands at the present day. — *London Chronicle*.

A LABOR-UNION VICTORY. — Judge C. P. Holmes, of the District Court, has decided against Hughes, the non-union printer, who brought suit for damages against the Des Moines Typographical Union for preventing him from earning a living by his trade. Hughes refused to join the Union in a strike some years ago, and was expelled. Later it was decided to take all the non-strikers back. Hughes held a non-union position at that time, and, being told that he could come in at any time, put off joining until two years afterwards. The Union then demanded that he pay a fine of \$25 before being reinstated, but this he refused to pay. The Union then had him barred from all the printing-offices in the city, whereupon he brought suit. Judge Holmes holds that Hughes cannot recover, because all the Union men did was to refuse to work beside him, which they have a right to do. — *Correspondence Chicago Times-Herald*.

DUST TO DUST. — Among Canon Gore's stock of stories, which have the English cathedrals for a background, is one of two country girls who, evidently enjoying a holiday from fresh domestic service in the city, were observed by an attendant pacing fearfully the aisles of St. Paul's. Under the magnificent dome one of them paused to gaze in wonder about her. Curious to see in what words her manifest impression would find utterance, the attendant stole nearer. It seemed that her limited vocabulary was inadequate. Not so her companion. "Ain't it just grand!" cried she. The spellbound one remained silent for a moment longer. Then, as if breaking the chains of some strange enchantment, she turned upon her friend. "Yes," she said, slowly and timidly, "but, oh dear! Sarah, would n't it take just forever to sweep this place out!" — *Exchange*.

COMMEMORATING THE FRIENDSHIP OF THE MOHEGANS. — On Saturday, November 12, a monument was unveiled on the site of the old fort of Uncas at Mohegan, overlooking the river Thames, erected by the Connecticut Society of Colonial Dames, in memory of the bravery of Lieut. Thomas Leffingwell in paddling a canoe from the English fort at Saybrook, laden with beef and corn, to relieve the Mohegans in the fort, who were besieged by their enemies, the Narragansetts. It also commemorates the friendship between the English Colonists and the Indian sachem, a friendship which continued in later generations; and Mohegan warriors fought alongside with the Colonial forces in King Philip's War and in the French and Indian wars, and finally in the Revolution they aided the Americans in their struggle for liberty. — *Hartford Courant*.

THE TOMBS OF NOTED ARCHITECTS. — Last year Signor Franceschini, the Italian archaeologist, discovered in the Church of Santa Croce, in Florence, the tomb of Lorenzo Ghiberti, the designer of the famous Baptistery Gates, which Michael Angelo styled "the Gates of Paradise." This year his zealous labors have been rewarded by the identification, in the Convent Church of St. Ambrose, of six illustrious graves, containing the mortal remains of Mino of Fiesole; Verrocchio, the master of Leonardo; Simone Pollainolo, Andrea Sansovino, Granacci and Leonardo Tasso. — *N. Y. Tribune*.

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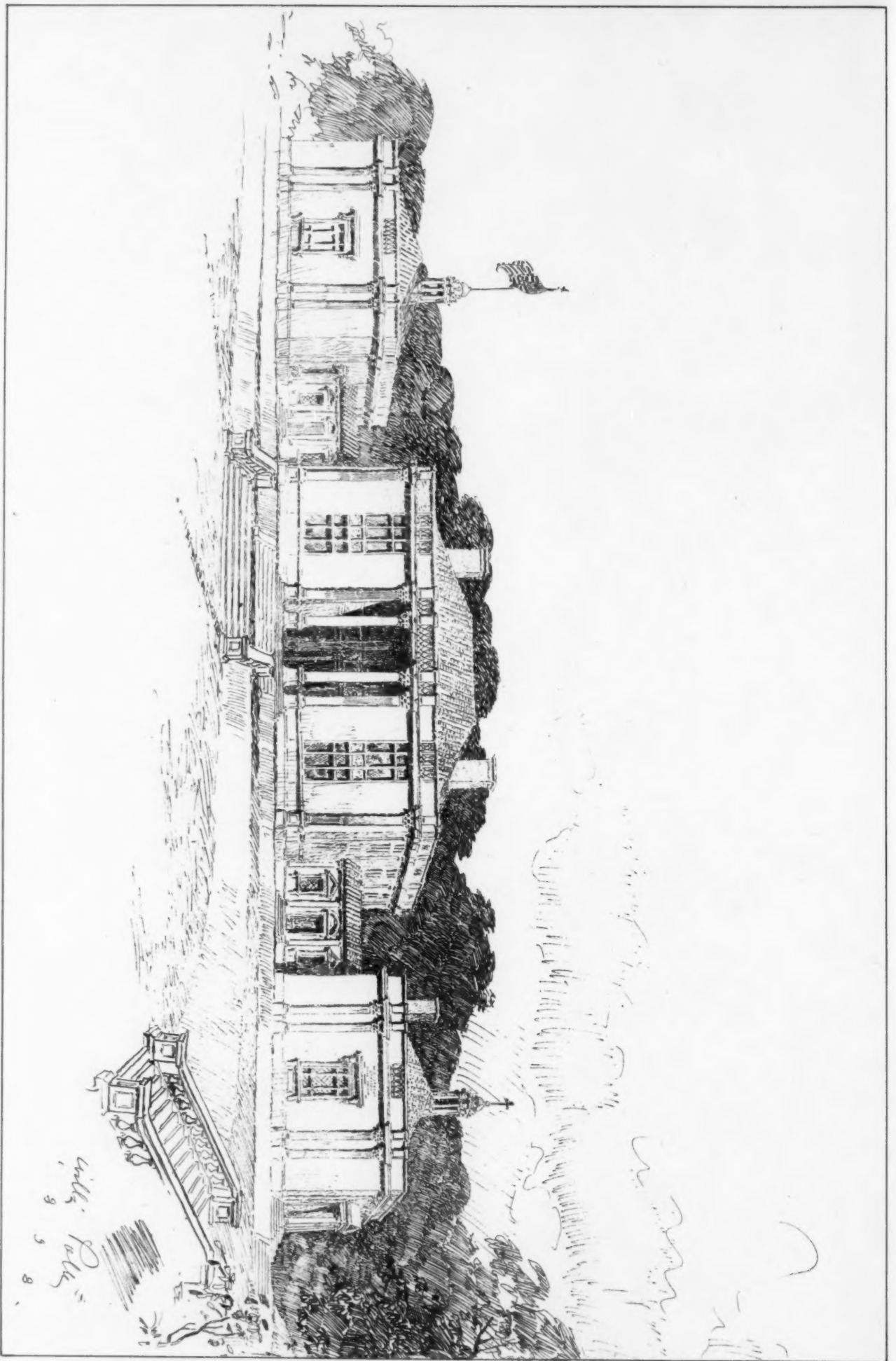


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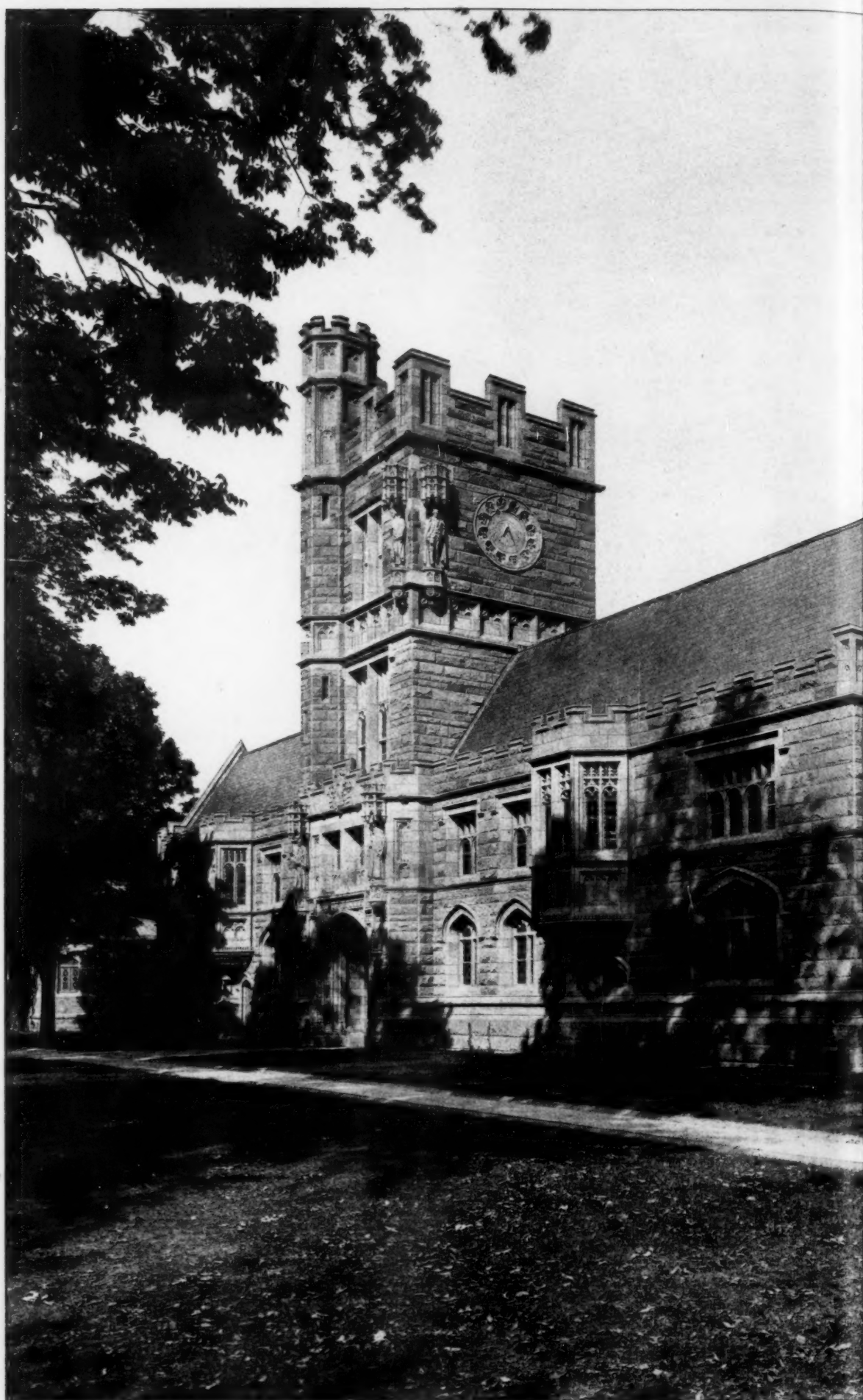
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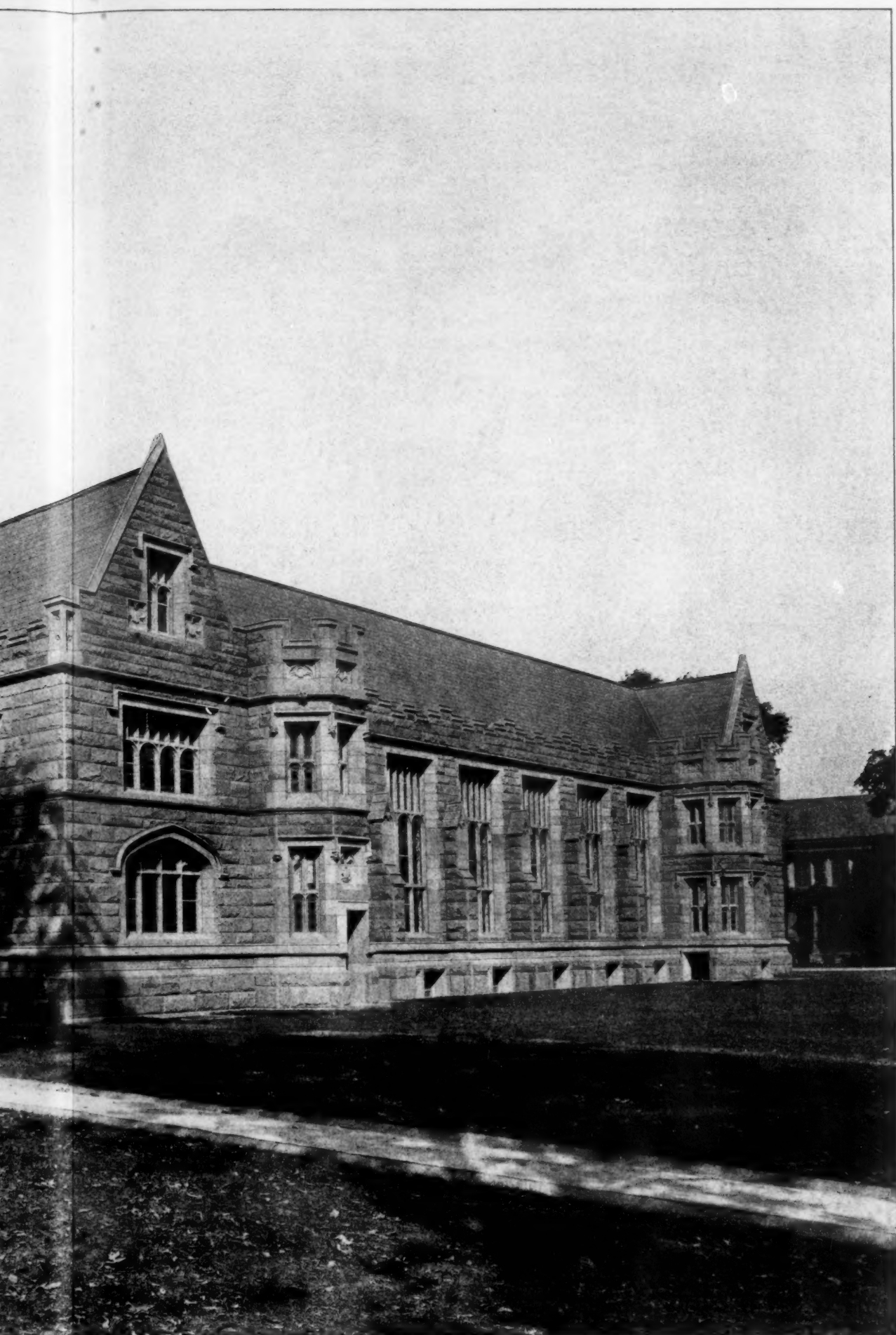
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