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Death of Edwin Lee Brown.

Edwin Lee Brown, of Chicago, died on July 21, at the age of sixty-four. Aside from such names as Wendell Phillips, George Peabody and one or two other great names that head the list of those who forgot self in working for their kind, the name of Edwin Lee Brown will stand as one who loved his fellow-man. He was born at Milo, Maine, March 4, 1827, and in 1845 he graduated from Bowdoin College in the regular course and in architecture, and, going to Boston, he commenced the practice of his adopted profession. After thirteen years of practice in Boston and New York, during which he acquired a more than local reputation, Mr. Brown removed to Chicago in 1858, and having become interested while in New York in the Hyatt lights, he abandoned his profession, and with his brother Frank, who died in 1870, founded what has become the largest vault light concern in the world, and of which Mr. Brown was president at the time of his death. The offices of the company and his home at Evanston were built from his designs, and at the latter place he was known as an architect before the great fire, though we cannot remember other works than those mentioned that remain to show his architectural skill in later years. Mr. Brown, although never holding any public office, has been intimately connected with many quasi-public organizations. He has been president of the Citizens' Association, the Illinois Humane Society, International Humane Association, one of the managers of the Chicago Library Association, and a director of the Interstate Industrial Exposition. It was as a member of the Illinois Humane Society that he became so well known. When the society was organized, in 1869, he became its first president, and until the time of his last illness was active in that work, as well as other humane enterprises. He took special pride in the work of securing the World's Columbian Exposition to Chicago, claiming to have first spoken in public upon the subject, the following resolution, offered by him and passed unanimously by the directory of the Interstate Industrial Exposition Company, on November 14, 1885, bearing out the assertion:

Resolved, That it is the sense of this meeting that a great world's fair be held in Chicago in the year 1892—the 400th anniversary of the landing of Columbus in America.

As president of the International Humane Society his work in the amelioration of human suffering was not confined to this country, but abroad, and won and held the esteem and confidence, as well as the gratitude, of the people of two continents. Many of the plans and work of humanitarian organizations were outlined by him, and while attending to the many details of his large business interests, and even amid the suffering of his late illness, his mind was active in its interest in the alleviation of suffering whenever brought to his attention.

Competition for Carnegie Library Additions.

The board of trustees of the Carnegie Library at Pittsburgh have issued a circular calling for an additional building or buildings to the Carnegie Library to cost $700,000, the gift of Andrew Carnegie. We do not like the conditions in every particular, and one point is apt to defeat the object of the competition, which, we assume, is to expend the money in the most judicious manner. That is the

absence of a guarantee of expert adjudication. Otherwise the compensation to the successful competitor is satisfactory, and that for the next six best designs is sufficient to tempt architects to compete. It is probable that all competitors will be treated fairly and the letter and spirit of the agreement will be carried out, but it is strange that those who have charge of the expenditure of so large an amount of money, and who have only credit to gain by success, should be so short-sighted as to depend upon their own judgment rather than that of professional advisers, when in a law case involving a like amount their action would be so different. The circular is given in full on another page for the benefit of those who may wish to compete, but it is not encouraging to contemplate the amount of money that will be expended in drawings by architects who will receive no compensation for their labor in any event and the chance of ultimate failure to secure a creditable building which lies at the bottom of all competitions, where expert adjudication of the highest order is not employed and whose recommendations are not rigidly carried out. It is strange that the architectural profession should be found insisting upon expert adjudication of their work in the selection from competitive drawings, when it would seem to be the owner who is more largely interested and who should be most anxious to adopt this and every other safeguard against the adoption of deceptive or pernicious designs.

Useless Government Repairing at Chicago.

According to the instructions of the supervising architect of the United States, another sum of money is to be wasted for repairs upon the postoffice at Chicago. This relic of architectural incompetency has, ever since the walls were built above the first story, cost the government thousands of dollars yearly for repairs. First, the stone used was found defective, and had to be replaced or patched; then, as soon as the foundations received their full weight, unequal settlements occurred, and the walls spread. Several hundred thousand dollars have been appropriated and expended during the past ten years in vain endeavor to stop the settlement and repair the damage which resulted. The foundations have been reinforced, the walls have been tied with rods, and the cracks that appeared through 34-inch brick walls and extended downward several stories have been filled and plastered over, but the building has become dangerous. The interior ironwork, columns, girders, etc., are apt to break and fall upon the employés, and still congress directs that repairs shall be made as usual. The settlement of the walls, of course, breaks the sewer and water-pipe connections, and last Christmas, when the basement was full of holiday mail matter, a 6-inch water main broke and flooded the entire basement. This is the actual condition of the government building in the second city of the United States. The public believe that the walls will fall outward some day, and many fear to pass the building. Of course this is hardly probable, but no one knows the exact condition of the broken mass of concrete that underlies the foundations, or how successfully they will still stand the strain of the immense weight of stone resting upon them. The supervising architect should at least warn congress of the true condition of the building, and recommend that it be demolished, and relieve himself of the responsibility that rests upon him, and the censure, though thoroughly unmerited, that would fall upon him should a fatal accident occur. The postmaster-general has already reported to congress the inadequacy of the building for postal uses. The building should be demolished, and a modern office structure replace it, built out to the street line, and planned to accommodate the different departments of government service. The present supervising architect can do this creditably if he is given the opportunity, or, if the duties of his office would not allow him to give it his personal attention, a special commission could be given to a local architect of recognized ability in office-building designing upon the supervising architect's recommendation. As it stands, people visiting the World's Fair will see in Chicago the greatest private buildings and the worst public monstrosities in the world.

Conditions for the Third Clark Medal Competition.

The third Clark medal competition, the conditions of which have been arranged by the committee in charge, gives to draftsmen an opportunity for showing their knowledge of Greek outline in delineating the Acropolis. The conditions and the problem are as follows:

The competitors are supposed, in pursuance of their studies, to have visited Athens, either in person or in the study of books, cuts and photographs. It is assumed that they have made a special study of the Acropolis, or of the remains or of the restoration of one of the structures found thereon, or of the detail of any part of the same.

The committee will receive in competition for the Clark medals, drawings or sketches, geometrical or perspective, of the Acropolis as a whole, of any part of its structures, or of any detail or details of either of these in their present condition or of restorations according to standard authorities. The selection of a subject within the limits indicated, and the method of rendering to be left entirely to each competitor, the only condition being that there shall be two sheets of drawings, each measuring 18 by 28 inches, mounted on stretchers and marked with a device, and that the work of each competitor shall be accompanied by a sealed envelope, marked on the outside with his device and enclosing his name and address.

There will be a gold, a silver and a bronze medal.

The award will be based upon the degree of actual and critical knowledge displayed in the choice of the subject selected for illustration and in the mastery of the same shown in the drawings, as well as upon skill, taste and judgment in rendering.

It is the hope of the committee that there will be a lively interest in this problem, and that it may become the first of a series of kindred subjects which will become characteristic of the competitions for the Clark medal.

Drawings will be received until noon of October 1, at the office of Dankmar Adler, Auditorium Tower, Chicago.

The committee in charge: Architect Dankmar Adler, chairman, Architects Henry Ives Cobb and Samuel A. Treat, of Chicago, Professor N. Clifford Ricker, of Champaign (Illinois) University, and Lorado Taft, the sculptor, of Chicago, have, in selecting the subject, shown that, in their opinion, the student should first learn his alphabet and demand of him evidence thereof. It is in a way an acknowledgment of a mistake in the selection of the subject of the first competition, an apartment house. But five drawings were received and these exceedingly crude in plan and certainly not remarkable in design. Last year a pedestal for a statue, classical in design, was given as a subject, and twenty-five drawings were the result, and now the committee has declared in favor of drawings from Greek subjects, the present being the first of a series. This should meet with general approbation, as the design of Mr. Robert Clark, the generous donor of the competition fund to the Chicago Architectural Sketch Club, was that it might aid in the education of draftsmen. A large number of drawings should result from the pleasing nature of the subject and the ample time given for their completion, and while the same ratio of increase from five competitors the first year to twenty-five the second year can hardly be expected, there should be at least fifty draftsmen in the United States who are willing to study the Acropolis. If draftsmen will refer to the report of the committee upon the last competition (THE INLAND ARCHITECT, November, 1890, Intermediate News Number), they will avoid many errors.

Architecture and the Allied Arts.

BY BARR FERREE, LECTURER IN THE SCHOOL OF ARCHITECTURE, UNIVERSITY OF PENNSYLVANIA.

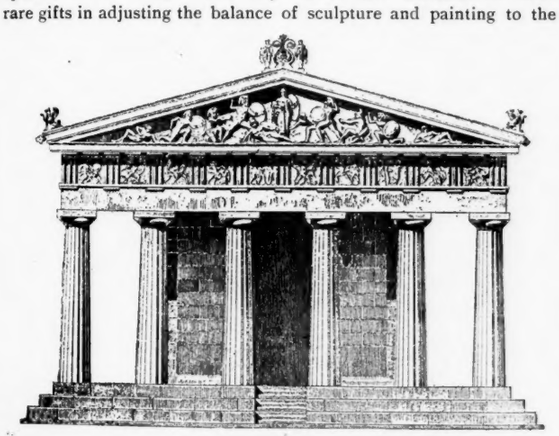
PART II.

GREEK AND ROMAN.

GREEK art being an outgrowth of that of Egypt and Assyria, it necessarily followed that painting and sculpture were as essential to the architecture as in the earlier forms. The remains of ancient Greek art unearthed by Dr. Schliemann exhibit a considerable use of colored decoration. It is of an extremely archaic form, it is true, but the traces he found show it to have been largely used. Sculptured remains are not so numerous, though statues have survived from the earliest times, and it is probable that a lack of technical knowledge and the profound reverence and fear with which the earliest attempts at statuary were regarded limited its development.

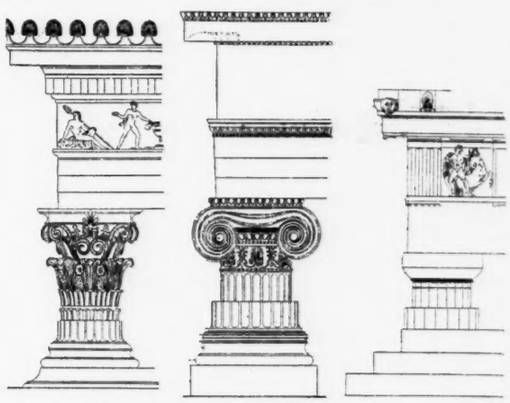
It is only recently that the general use of color in connection with architecture by the Greeks has been recognized by modern scholars. It was long supposed that they obtained their finest effects in the purity of their workmanship, the delicacy of their lines, the refinement of their sculptures, and that color held a subordinate position in their system of decoration, though it is now freely admitted that the Greeks not only used it very largely as an aid to their ornament, but that not unlikely the entire surface of their buildings, walls, columns, entablature, both without and within, were covered with an elaborate system of decoration, not less brilliant and complete than that of the Egyptian itself, though very different in subject matter and technique.

The Greeks applied the allied arts to architecture in a more finished manner than other builders of antiquity. Their architecture was more refined, more scholarly, more delicate than that of other epochs, and it is natural that they should have exercised the same rare gifts in adjusting the balance of sculpture and painting to the



TEMPLE OF ATHENA, EGINA. (Restored.)

whole edifice. Their system differed in many respects from that of the Egyptians or the Assyrians. Unlike them, they reserved sculpture exclusively for the upper part of the structure, employing it only in the pediments, the metopes of the portico and the frieze of the cella. It was, therefore, far above the eye of the spectator and called for more knowledge of perspective and foreshortening than the older builders had possessed. They made freer use of statues as distinguished from bas-reliefs and the decoration of the pediment was frequently in full relief. Sculpture is now fully developed, and, having passed through the preliminary stages in the Egyptian and Assyrian, reaches results that have never been surpassed. It is not necessary in this place to attempt a panegyric upon the glories of Greek sculpture, but it should be pointed out that many of the finest results of this wonderful art were an integral part of the architecture. The historians of sculpture are accustomed to dwell on the merits of the groups in the pediments of the Parthenon from the standpoint of their particular art. Fortunately these monuments are sufficiently impressive not to suffer from any change of location, but it was never intended that they should be viewed apart from the position for which they were designed and in which they were put. One of their chief merits is the admirable way in which they completely and perfectly filled the position they occupied. There is no distortion of attitude, no evident attempt to fill a given space, but the whole group is exquisitely proportioned to the work they have to do so as to make them an organic part of the edifice. It is this feature which renders the Greek system so intelligent and satisfactory. The Egyptians and the Assyrians covered their walls with a species of embroidery. Wherever the eye rested figures were to be seen. It was very rich, but little more artistic in idea than the modern custom of covering walls with a decorative paper. The Greeks alone, of the builders of antiquity, understood the true function of sculpture and relegated it to its proper place. They realized that when placed



CORINTHIAN ORDER. Monument of Lysicrates.
IONIC ORDER. Erechtheion.
DORIC ORDER. Parthenon.

on a level with the eye its imperfections were apparent to all. By elevating it to a considerable height they rendered defects invisible, and gave their gods an exalted position which was in keeping with their sacred office. So consistently was this idea carried out that it may be generally said that only divine persons were represented in the pediments. The metopes were reserved for the heroes and the lesser personages of Greek mythology, while the frieze was given up to the human beings, though both gods and heroes were at times included in it.

The completed Parthenon was an edifice of surpassing grandeur and beauty. The delicately tinted walls and columns, the richly ornamented capitals and entablature, every part of which was picked out in beautiful and exquisite designs, the sculptured frieze and the metopes, the wonderful groups of the pediments, possibly colored in the semblance of life, presented a structure of unparalleled richness, which was not only a rich setting to the great chryselphantine statue of the goddess Athena, but a worthy monument to the genius of Greek art. The Parthenon was the culmination of Greek architecture, and therefore illustrates in the best possible way the methods in which the allied arts were employed by the most thoroughly artistic people that ever lived. The chief lesson it teaches, apart from the perfection of the workmanship, the inspired sentiment, the refined execution, is the subordination of the various parts to the whole. Sculpture was reserved for certain portions where it filled a natural position; painting also had its peculiar function, and both aided the sublimity of the architecture by their superior beauty and delicacy of design. The painted decoration followed the lines of the building, and added much to the main elements. The traces of polychromatic ornamentation found at the present day on Greek buildings are so slight as to require the most careful examination to discover them. It is not possible therefore, to speak with accuracy of the later developments of the use of color.

GREEK PAINTED ORNAMENT.

The Doric was the most developed and the order most used by the Greeks. It did not differ materially from the system already described. Sometimes variations occur, as at Phigaleia, where a frieze was carried around above the columns. The temple of Zeus at Agragas (Girgenti) had in the upper part of the interior a series of atlantes which supported the roof. While the use of sculpture in the Doric was in accordance with well understood rules, greater freedom and variety was permissible in the other Greek styles. In the Ionic and Corinthian carved ornament held a much more important place than it did in the Doric, and it is probable that, at the same time, the use of color diminished as an adjunct. In these styles the carved

ornament was frequently of great richness, and there was no necessity for painted decoration.

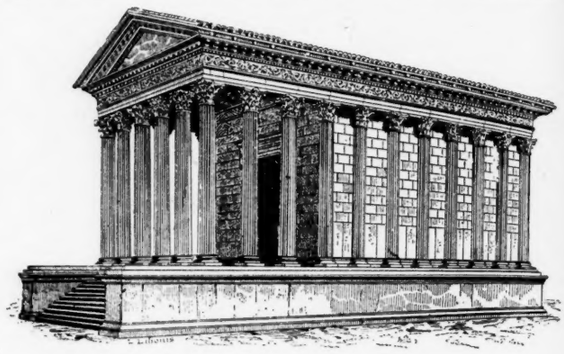
It is a significant fact that the purest Greek is the form which chiefly depended on painted decoration for its embellishment. The Doric not only made free and constant use of it, but employed forms of such exquisite delicacy and refinement that even in their present bare and naked state they are among the highest expressions of art. In this respect it is in marked contrast to the Egyptian and the Assyrian, in which the ornamentation was so intimately connected with the architecture as to render the latter quite unappreciable without the former. An Egyptian temple without its sculptured and painted accessories, has a dull and gloomy aspect, and is almost devoid of art merit. A Doric temple, on the contrary, though without its accessories, exhibits a purity and grace of form that is so complete in itself that for many years the use of a painted decoration was indignantly denied by the whole school of archæologists.

Though the Doric placed architectural sculpture in the upper parts of the buildings, the other styles permitted greater freedom. The caryatides of the porch of the Erechtheion are among the most remarkable illustrations of the application of sculpture to architecture in the whole history of art. The idea of carrying a heavy weight on the head of a human being is repulsive to the general conception of Greek art, but the builder of this exquisite little portico so thoroughly mastered the problem as to deprive it of much of its

PORCH OF THE ERECHTHEION.

unnaturalness and give it a grace of its own. The figures seem to move in solemn procession, and as the limb on which each supports its weight is varied, there is no rigidity. "The elegant forms of these statues are imprinted with a character so marked by solidity and ampleness," says Viollet-le-Duc, "that columns themselves would appear less capable of supporting." In Asia Minor there was more irregularity in the use of sculpture than in Greece. The Ionic columns of the temple of Diana at Ephesus had a lower drum of sculpture, and some apparently two. The great altar at Pergamos, one of the most remarkable monuments of antiquity, was decorated in the lower part with a gigantic sculptured frieze, 144 meters long and 2.30 meters high, depicting the battle of the gods and the giants. Above this was a row of light Ionic columns, the walls behind which were lined with a frieze in low relief. In the Mausoleum at Halicarnassus sculpture was employed on a large scale. Pliny informs us that it consisted of thirty-six columns, a pyramid of twenty-four marble steps, a chariot with four horses, and sculptures on four sides. Unfortunately, not enough remains to produce more than a conjectural restoration. The so-called Nereid monument at Xanthus had two sculptured friezes around its base, and, indeed, there is abundance of evidence that the Greeks used sculpture in their monuments in all places where they thought it desirable. Figures of giants were used to support the stages of the theaters.

It should be remarked that the Greek monuments in which sculpture is most largely used are to be found, not in Greece itself, but in Asia Minor, and to a less extent in Sicily. It is not unlikely, therefore, that the greater use that is made of it may be due not so much to an advance in taste among the Greeks themselves as to the influence of local ideas. In Asia Minor especially, situated between the two great civilizations of Egypt and Mesopotamia, the traditions of an architecture in which sculpture was extensively employed is always more or less to be noted, and in the Greek structures the inhabitants



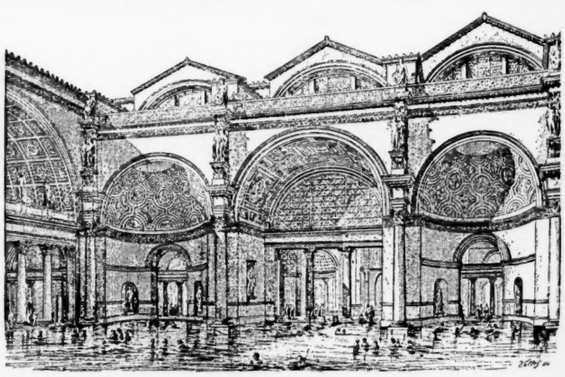
MAISON CARRÉE, NIMES.

have been simply carrying out a method to which they were thoroughly accustomed.

This is not the place to revert to the statuary of the Greeks. They carried this art to a perfection never excelled, and their temples and public places were ornamented with a vast number of statues, of gods and of men, of heroes and of the victors in the games. This form of art was distinct from architectural sculpture, and does not, therefore, call for comment. It should be added, also, that the Greeks produced wonderful works in wall painting, but as our knowledge of these is chiefly based on the testimony of the ancient writers, they cannot be considered here.

Color was freely used by the Etruscans. Their art, however, was at a comparatively early stage absorbed into the more finished Greek by the Romans. The Romans invented eclecticism in art. Their architecture had no early stages exclusively Roman, but had origin in the Etruscan on the one hand and the Greek on the other. These very diverse elements they undertook to amalgamate, and succeeded so far as to devise a style of their own, but which was wanting in the life and purity of the Greek. Roman architecture appeals chiefly to artistic tastes by its magnificence and the splendor of its accessories. The pure lines, the delicate proportions, the exquisite combination of the allied arts, such as is seen in the Greek, were here lost in a medley of riches and a diversity of accessories which bewilder the eye and confuse the senses.

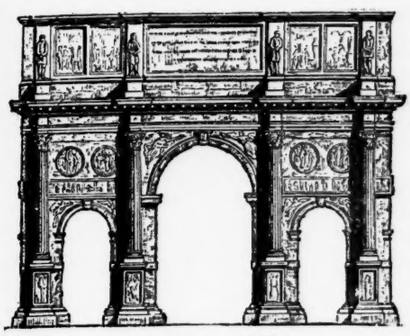
With the swift progress the Romans made in the acquisition of wealth, with the rich spoils the generals brought from all known parts of the earth, it was but natural that they should express these things in their architecture. Their temples and palaces were crowded with the fruits of foreign conquest, with sculpture and paintings, with bronzes and works in precious stones, with hangings of the costliest



BATHS OF CARACCALLA.
Restored.

materials and stuffs of the rarest hues. In time they used the accessories more independently and less intimately connected with the architecture. They did not maintain the balance between architecture and painting and sculpture, as the Greeks. Sculpture was no longer an essential part of the architecture of the temples. Pediments were frequently left bare, and the taste which had previously been directed toward producing a proper combination of all the arts was now

devoted to the production of individual pieces of work which were valued for themselves only, and not as architectural adjuncts. The Romans early lost the profound primitive reverence for the gods which confined their images to the sacred inclosures, and adorned their dwellings and places of amusement and public resort with statues of divinities. Great wealth and a fondness for luxury further aided the multiplication of statues. To such an extent was this done, so numerous were the replicas and reproductions, that it makes a broad distinction between the Greek and the Roman, the former being an architecture ornamented with groups and sculptures of a monumental character, and the latter accompanied with single statues or groups which frequently had no connection with the edifice. In the one system the final effect, the relative proportion of every part, had been carefully determined from the beginning; in the other there was no special occasion for forethought, and though every building was more or less intended to be ornamented with sculpture, these decorations were not a part of the architecture. The pedestal, which could be placed anywhere for any piece of statuary, was a constant temptation for disconnected displays which the Romans could not resist.



ARCH OF CONSTANTINE.

The Roman cities were crowded with statues and works of sculpture of all kinds. Niches, intercolumnations, baths, palaces, bridges, theaters, gateways for arches, steps, balustrades, the tops of buildings, everywhere that a statue could be put it was placed. Whatever Roman sculpture may have lacked in refinement of execution it more than made up in quantity. Scaurus, in B. C. 58, used 3,000 bronze statues in his temporary wooden theater in Rome. In B. C. 33, Agrippa decorated his waterworks with 300 marble and bronze statues and there was still room for more. The passion for collecting speedily developed into a mania, and the number of individual pieces of sculpture owned by one man frequently passed comprehension. In this promiscuous display, where statues were valued more for their number and their cost than for their actual merit, there could be no organic union between the architecture and the sculpture, and no attempt was made to unite them.

It is to be expected that a people who neglected Greek precedent in the application of sculpture to architecture, would be equally derelict in the use of painted ornamentation. For Romans, in fact, revolutionized the system of polychromy the Greeks had brought to such perfection. The color and variety of surface the Greeks obtained by the use of painted decorations, the Romans reached by the use of parti-colored stones and costly materials. Such a system would never have been successful save with a people of limitless resources, great wealth, extensive intercourse with all parts of the earth, and a general disregard for expenditure. Yet even the Romans quailed before the enormous expense of constructing a building throughout of rare and costly marble, and invented the art ot veneered architecture. While the system prevented the building from expressing the truth of its material, it permitted the construction of magnificent structures at reasonable cost.

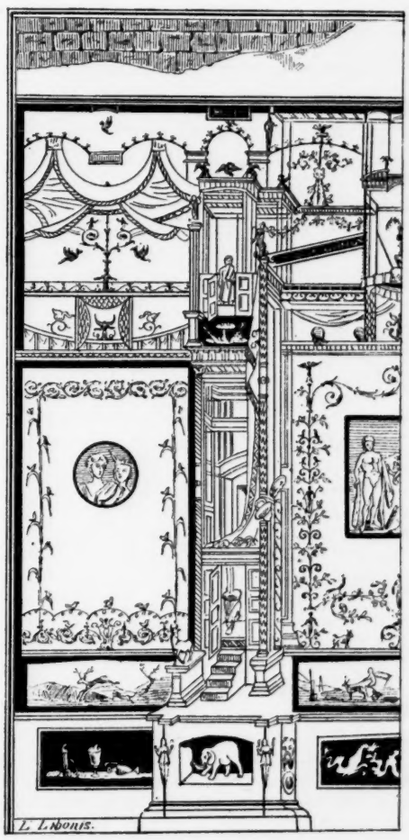
So infatuated were the Romans with this style of building, that if became one of the characteristic features of their art. Walls of rubble-work or brick, faced with thin slabs of marble or stone, form the usual Roman method. Nor was the veneering always limited to surface ornamentation, but a decoration of columns, arches and entablature was applied to the walls, with which they had no structural connection. They were ornament with architectural form.

It can readily be conceived that an architecture in which the colored decorations were used on such a system must offer many points of difference with those styles which depended on the use of paint. It marks, in fact, a new era in art, and indicates an advance in the architectural spirit which even the Greeks, with their refined tastes and delicate sensibilities, did not reach. The two systems of polychromy cannot be justly compared. Their methods and results were too different, they worked on too divergent lines, to permit any fair or equitable comparison. Each sought to give variety to the building and add to its beauty, but beyond this they have nothing in common. The Egyptian column, for example, obtains its rich effect from the colored scenes and pictures that are depicted on it; the Roman column derives its beauty from the intensity of the natural color of the marble and the brilliancy of the polish. The decoration of the one could not have been used on the other. Each was an essential part of its own style, and a column of the Egyptian method would have appeared as much out of place in a Roman edifice as one on the Roman system in an Egyptian building.

The use of colored stone as decorative features probably suggested the use of mosaic. The place of the invention of this art has not been determined, though it is probably of eastern origin. The Romans used it largely for pavements, and have left some very considerable works of this kind, and they also used it to a limited extent as a wall decoration, but they never employed it in the free and brilliant manner which was afterwards done by the Byzantine artists.

Pliny describes a mosaic at Pergamos, representing the remains of food and sweepings left on the floor, and containing, among other things, a dove drinking from a dish, and darkening the water with the shadow of its head, while other doves sun and plume themselves on the edge of the vessel. A great mosaic found in the Casa del Fauno, in Pompeii, represents the victory of Alexander over Darius in the battle of Issus. It is one of the most splendid specimens of the art that has come down from antiquity.

Notwithstanding that the Romans carried the decoration in colored stones and marbles to such a high degree of perfection, they made liberal use of paintings and painted ornamentation. The remains at Pompeii, as well as many references in the writings of Roman authors and discoveries in Rome and other cities, testify to the liberal use of this form of decoration. The discoveries at Pompeii show that it was usual to completely cover the internal walls of a Roman mansion with paintings. The character of this decoration, of scenes and figures placed within an architectural framework of great delicacy and lightness, all brilliantly colored, is too well known to call for description. It is important as showing that while the Romans affected a new art they did not neglect the possibilities of the old.

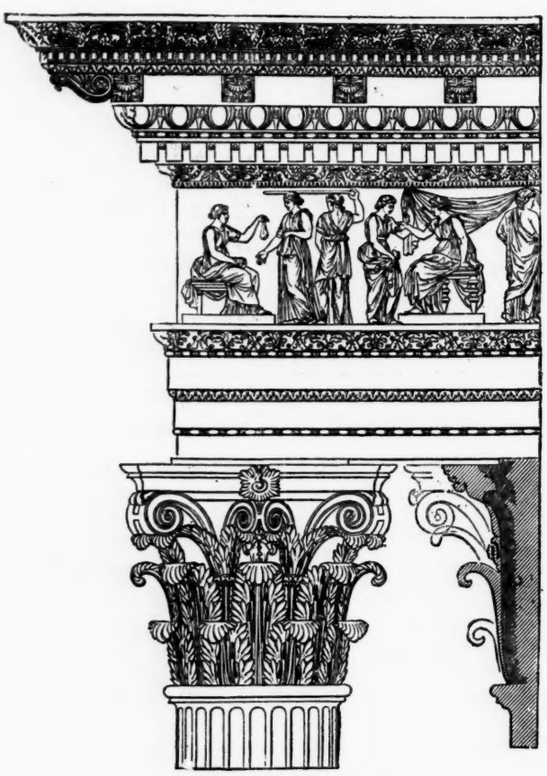


POMPEIIAN WALL PAINTING.

Sometimes the entire wall surface of a room was covered with paintings which had no regard for architectural lines and were intended to produce the effect of a park of considerable dimensions. Sometimes there are mural paintings proper, not large enough to occupy an entire wall. Several were frequently placed in line and separated from each other by pilasters; these were intended to represent scenes of country or sea viewed through a window. Others were either panel pictures actually let into the wall or were painted to resemble them. The architectural paintings found at Pompeii, of light and graceful forms, with small accessory pictures or without, and which are probably the best known of all forms of ancient

painted decoration, constitute another great group. There is no doubt but that the Romans made very large use of wall paintings, but the greater part of them have long since disappeared.

It is evident, from this hasty glance at Roman architecture, that a building in the most elaborate style of Roman art must have been a structure of unparalleled gorgeousness and magnificence. The richly colored columns, the capitals of bronze, the innumerable statues, the vessels of copper, of silver and of gold, the spoils of foreign conquest, the gathered riches of the world, presented a combination quite unlike anything seen before in the history of art. Without the crudeness and partially barbaric character of the Egyptian or the Assyrian, without the superlative refinement and finish of the Greek, it in a measure combined the merits of all. Roman art was too eclectic, it depended too much on the elements of other styles to be termed



CORINTHIAN CAPITAL AND ENTABLATURE.
Forum of Nerva, Rome.

original, yet the Roman genius for absorption and assimilation was as well illustrated in architecture as in politics. Notwithstanding its diverse origin they made their art as peculiarly their own as the Greek was Greek or the Egyptian Egyptian. They were not satisfied with limiting the decoration of a building to a frieze of statuary or a group in the pediment and a liberal application of painted designs. Their walls were apparently, if not really, of the most brilliantly colored marbles, the columns were of the rarest and richest stone, statues were placed on every available part of the façade, on the skyline and on pedestals in the arcades and elsewhere. The capitals and entablatures were as richly decorated as any portion of the structure. The pure lines of the Greek Doric were broken by a sculptured ornament and the Corinthian both in its own form and the hybrid composite exhibited a luxury of ornament that quite deprived it of its primitive structural significance. Bronze was used in the form of capitals for the columns and for statues, and the greatest artists were employed to add to the result by the skill of their pencils. The magnificence of the whole was overwhelming, and many Roman structures suffered from an overloading of decoration. But it was thoroughly in keeping with the natural instincts of the people and is a trustworthy testimony of the great national love for display and luxury.

(To be continued.)

The architectural firm of Bullard & Bullard, of Springfield, Illinois, and Tacoma, Washington, is dissolved by mutual consent, and a partnership has been effected between George W. Bullard and Albert Haywood, with offices in the Pacific National Bank Building at Tacoma.

Notes from our French Exchanges.*

THE ARCHITECTURAL GRAND PRIX.

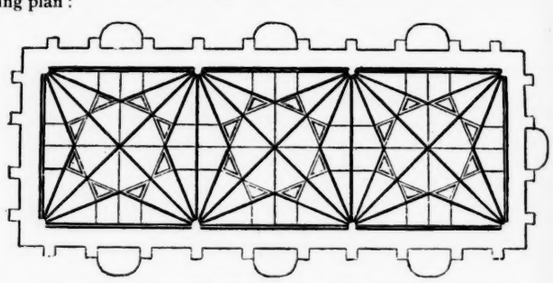
THE programme for the *grand prix* in the section of architecture this year is a most startling departure from the ordinary requirements laid down by the Institute for this competition.

As M. Cisar Daly remarks, someone seems to have had an attack of common sense, and instead of an impossible palace for the arts, the students are to expend their energies upon "a central railroad station with an immense hotel for travelers, together with all the necessary business offices for the officials of the road," in fact a combined station, hotel and office building.

Other indications there are that architectural instruction in France is taking a new departure, and that the genius of the country is to be turned to making artistic and harmonious those things which modern invention has now made necessities. A few months since, one of the principal annual prizes at the Ecole des Beaux Arts was, to the honor of the conservative element, competed for with a subject no less commonplace than a car for a passenger elevator. The successful student not only obtained the prize but also sold his design to an elevator manufacturer, while several of the authors of unsuccessful drawings were likewise negotiating for the sale of their designs. Even in the subject of architectural composition there seems to be a tendency to break away from the stereotyped forms, and a recent number of *La Semaine des Constructeurs* devotes considerable space to what it calls a new method of composition, from which article the following extracts are taken:

"M. de Baudot, in his lectures on French architecture, which he gave at the Trocadero this year, elaborated the method of composition in the past and particularly that of the middle ages, with reference to possible solutions of modern buildings with modern requirements."

After developing his theory by numerous preliminaries he enters into the consideration of the main question. This he commences by the examination of the means it could be desirable to employ in roofing over a large space, supposing that iron were to be used. As a case in point, let us consider the machinery building at the last exposition, which as an executed piece of work is of great importance and permits the most useful kind of criticism — in fact, is a great step in advance; but the problem has not even here received its most perfect development, especially from an architectural point of view. It is not sufficient to build a building of great size, but it is necessary that its visible construction should accentuate and more clearly bring out the fact of its size. With this aim in view it is desirable to avoid the repetition of trusses or beams parallel to the length of the building. But knowing that by spanning any space by transversal beams the impression of size is accentuated, the idea of so placing beams or trusses follows naturally. However, to fill up the large spaces other beams are necessary, and consequently secondary ribs have to be provided; this leads to an arrangement of roof framework that involuntarily recalls the English gothic vaulting, as shown by the following plan:



PLAN OF ROOF FRAMEWORK FOR A GREAT PUBLIC HALL.

Wishing to cover larger spaces one is obliged to increase the number of ribs, and they should always be placed so as to radiate from the points of support, placing them equi-distant from each other (which is the same principle as that of the English gothic vault). M. Baudot explains at considerable length, that he was not brought to this result by the idea of copying the vault form, but that by various modes of reasoning and investigation he was brought independently to that point.

The contraction and expansion of the metal is ingeniously arranged for, and it appears to be possible to place the roof covering directly upon the rib work, which would certainly be a most economical arrangement, and might eventually be applied to every kind of iron construction as well as to large buildings of the character under consideration. Calculations have shown that the weight of iron entering into a given roof after this system of construction is almost identical with that employed in the same space in machinery hall at the exposition, while by making the curves of the roof trusses parabolic there would be an economy. The most desirable and artistic shape, however, must be a subject for more definite and accurate study.

MOTIFS FROM ANTIQUE ARCHITECTURE IN MUSEUM DECORATION.

The idea of introducing in the decoration of certain rooms of our museums motifs from the antique architecture of the period to which the objects exhibited belong, has made considerable progress, but we now have to note another step in advance. M. Proust, a former minister of fine arts, has just explained his ideas in an interesting lecture. He frankly places himself at the head of the movement, and

*Translated and arranged by W. A. Otis, architect.

in this lecture certainly demonstrated the desirability of our museums reviving in the different rooms the decoration of each period of our history in direct connection with the objects of that epoch there exhibited. To place all sorts of different and dissimilar fragments in exactly similar rooms, with custodians always in the same uniforms, and settees, etc., all exactly of the same kind, is an arrangement that has endured long enough. The Guimet Museum had in this direction served as a school: the Greek rooms are given a Hellenic appearance; the Buddhist rooms, an Indian look, etc. Why, then, according to this principle, should not the objects of art of the thirteenth and fourteenth centuries be displayed in a room with pointed arch openings and a vaulted ceiling? Why not furnish with Louis XIV chairs, and rococo canopy the parlors where the jewel cases and bonboniers of that reign are shown to the public?

A trial of such a scheme is at least going to be made at the coming exposition by the Philanthropic Society. It is hoped to there show in its fullness the period of the Empire under Napoleon I, with its furniture, its clocks, its fireplaces, its ceilings and its classical woodwork, and we can only congratulate the administration for this innovation. After this trial it is to be hoped that our architects will not stop by only rendering homage to this imperial style of Bonaparte, but that they will find occasion to glorify our French art in some of those other periods, where it shone with so much brilliancy before its decadence.

OCEAN CANALS TO PARIS.

The project of making Paris accessible to ocean vessels by means of canals and the River Seine is again being agitated, and a commission recently appointed by the government has obtained responses favoring the scheme from all the departments on the route except the one at the mouth of the river where Havre is located. Naturally Paris as a seaport would very materially injure the prosperity of Havre, and as a result the opposition at that point was unanimous. Of one hundred and ten boards of trade in different parts of France and Algeria, seventy were favorable to the idea and forty opposed it. The promotors of the work hope soon to bring the project before the Chamber of Deputies, when the debate promises to be warm and interesting.

Mosaic Floors.

INFORMATION of importance to architects and owners of public and private buildings has been compiled by the manager of the Henry Dibblee Company, of Chicago, from observations made during long experience, augmented by a recent trip through Europe, where the conditions spoken of were closely inspected. They are as follows:

Such an evident craze having recently developed in portions of this country, and particularly in Chicago, for marble mosaic floors, and believing that no poorer floor for actual wear and practical service could be had, I have recently devoted many days' time to investigating the extent to which marble mosaics are used in Europe, as compared with English ceramic mosaics. I have endeavored to make such an investigation a fair one, and therefore conferred with some of the principal marble dealers in England and Scotland, who stated that when it came to mosaic floors they were obliged to furnish ceramic instead of marble, and that it was a very uncommon thing for them at the present time to put in marble mosaic.

The reasons given are:

1. No marble will wear as long as ceramic, and certain marbles are much softer than others, thus making the floor very uneven in time.

2. In order to level a marble mosaic floor it is rubbed or actually worn down to a level, so that when completed some pieces are very thin and some are thick, a uniformity in thickness being absolutely impossible.

3. The material in which it is laid contains a large amount of lias lime, which in a short time is affected by the atmosphere, causing cracks and seams to appear, and thus not only disfiguring the floor, but giving one the impression that the building must have settled, thereby reflecting on the architect of such building.

When informed by me of the extent to which marble mosaics were being used here, the dealers in Europe whom I visited expressed great surprise, and affirmed that a few years would do away with marble mosaics for actual and constant service here as it had there.

Examine the marble mosaic floors in the following buildings in this city (Chicago) and see how they are filled with cracks and seams, which no amount of repairing will ever remedy: Hyde Park Hotel, the Auditorium, the Rookery, Chamber of Commerce, Illinois National Bank Building, Chemical Bank Building, LaFayette Building, Metropolitan National Bank, Monon Block.

While English ceramic mosaics have not as yet been used much in this country, they are no experiment, and I submit the names of a few prominent buildings in foreign countries where these are in use:

Municipal Buildings, Glasgow—Over 100,000 superficial feet of ceramic mosaic, laid about four years; traffic to rates office incessant; in perfect order. Clothing Store, Jamaica street, Glasgow—Ceramic mosaic, laid about six years, still perfect; stone step in front of same worn through. Callander Hotel, Glasgow—Ceramic mosaic, laid eight years, still perfect; during summer months thousands of visitors; heavy luggage all carried over same. Trades House, Glassford street, Glasgow—Ceramic mosaic, laid four years, perfect; heavy traffic daily. Scottish Legal Insurance Building, Glasgow—Ceramic mosaic, perfect condition. Standard Insurance Office, Glasgow—Ceramic mosaic, perfect condition. Liberal Club, Glasgow—Ceramic mosaic, laid ten years, still perfect. McLechlen's Saloons, Glasgow, several in number—Ceramic mosaic, laid seven years, all still perfect. Presbyterian Hall, St. Vincent street, Glasgow—Ceramic mosaic, laid six years, perfect. Children's Hospital, Glasgow—Ceramic mosaic, laid six years, perfect. P. & W. McLellan, machinery warehouse, Glasgow—Ceramic mosaic, laid three years, very heavy traffic, perfect condition. Coates' Cotton Mills, Machinery Hall, Glasgow—Ceramic mosaic, perfect condition. Stockwell Church, Pollockshields, Glasgow—Ceramic mosaic, laid five years, perfect. Ross Hall, Glasgow—Ceramic mosaic throughout, perfect. Houses of Parliament, Melbourne; St. Paul's Cathedral, Melbourne; Centennial Hall, Sydney; Jubilee Hall, Weymouth; Town Hall, Sandback; New Vestry Hall, Mount street, London; The Exchange, Johannesburg; Tasmanian Bank; Joint Stock Bank, Halifax; Canada Life Insurance Offices, Toronto; Coffee Palace, Paramatta; Gas Offices, Wakefield; Business Premises, St. Andrews; Central Station, Carlisle; Royal Hotel, Blackfriars, London; South Western Bank, Wandsworth, London; Landport Bazaar; Royal Stores, Cardiff; Technical School, Dewsbury; Art and Science School, Wakefield; Grand Hotel, Hastings; Westcliffe Hotel, Birchington-on-Sea; Osborne Hotel, Bradford; King's Arms Hotel, London; Royal Hotel, Norwich; Wergs Hall, Wolverhampton; Wyrley Grove, Pelsall; Holmeside, Nutfield; Olympia Hall, West Kensington; Fitzwilliam Museum, Cambridge; Bow Church, Cheapside.

I have recently inspected personally many of these floors, and only wish our architects could see them. The only criticism ever made against ceramic mosaic is the clear solid effect in each color. This is now obviated by a process of mixing in veiny effect, various colors, so that when cut into small pieces the effect in color is soft and pleasing.

The ceramics used in mosaics are mostly vitrified, and are absolutely proof against the hardest traffic or wear. They are leveled when being laid, and cannot be rubbed down or worn as marble mosaics are leveled; thus every piece is of uniform thickness, and they are laid in English portland cement. The first cost is a trifle more than marble mosaic.

We hold ourselves ready to guarantee any English ceramic floor furnished and put in by us for twenty years, and to guarantee it against cracks or seams appearing, as in marble mosaics, and further guarantee to adjust any defects appearing for ten years without charge, except where caused by actual settlement of building, and where such fact can be demonstrated. No marble mosaic dealer will give any such guarantee.

If the statements herein are true (and I stand ready to prove them in any way described), it certainly is worth careful consideration and investigation on the part of architects and owners who are erecting or contemplating the erection of buildings either for public or private use. ANSON S. HOPKINS,

President and general manager, The Henry Dibblee Company, 266 and 268 Wabash avenue, Chicago.

June 25, 1891.

Carnegie Library Competition.

JAMES B. SCOTT, president of the board of trustees of the Carnegie Library, at Pittsburgh, has issued a circular calling for competitive drawings from architects for an additional building, or buildings. The official circular is as follows:

CARNEGIE LIBRARY, PITTSBURGH, PA., July 1, 1891.

INFORMATION FOR ARCHITECTS.

The buildings to be immediately erected in connection with the Carnegie Library of Pittsburgh will be situated at main entrance to Schenley Park, fronting on Forbes street, and will be located as shown on the topographical sketch and photographs herewith furnished.

(The designs for the various district libraries to be erected in different parts of the city in connection with Mr. Carnegie's sheme, at a cost of $300,000, do not enter into the present competition.)

The various details incident to the construction and design, such as materials used in the elevations, style of architecture, etc., will be left to the judgment of the competing architects, as the trustees desire to draw out the fullest expression of plan and design from those competing.

The building, or group of buildings, as the designer may think best, must include space for the following purposes, namely:

1. Library with stack rooms.
2. Music hall.
3. Art gallery.
4. Museum.
5. Rooms for the within named societies.
6. Rooms for classes in connection with the study of art (may be in basement).
7. Administration accommodations, and workrooms for various employés; also, proper location for heating apparatus, etc.

LIBRARY BUILDING.

The library building with stack rooms must be of sufficient size to accommodate 200,000 volumes, the accommodations to be adapted to the purpose of a first-class reference library. It must also have connected with it further provision for a circulating library of say 25,000 volumes. The plan of building must be so arranged that it can be enlarged to contain 500,000 volumes without injury to the artistic effect of the exterior, or detriment to the general plan.

MUSIC HALL.

The music hall must have a minimum seating capacity of 2,000, not including the platform, which must be large enough to accommodate a chorus of 400. The portions of the proscenium arch, usually occupied by first tier of boxes on each side, will be designed for a large divided organ, one-half of which will be on each side of arch (instead of usual first tier of boxes), the organ to be shown on the section through the hall. Part of the seating of the hall can be placed in a gallery, if thought best for the effect of the design or the general plan of the building.

ART GALLERY.

The art gallery must have a clear hanging space of not less than 600 lineal feet. The trustees would recommend that this be divided into several rooms, and the light must be a top light, unaffected by higher buildings near at hand. The art gallery must be capable of future indefinite extension without detriment to the architectural effect of the buildings.

MUSEUM.

The museum should consist of several rooms, but the trustees will not insist upon any special arrangement, the only demand being that a sufficient space be provided for a first-class museum. Part of the accommodation for this purpose might be had in the basement, which the trustees think should be elevated sufficiently to admit of proper light and ventilation.

ACADEMY OF SCIENCE AND ART.

Accommodations embracing following societies: 1. General meeting room with seating capacity of 300, so arranged that some of the following rooms can be thrown into it, increasing the seating capacity to 700 or 800. There should be accommodations for a chemical and physical laboratory in connection with above, and storage for physical apparatus. 2. Cloak room, adjoining meeting room, with an area of about 600 superficial feet.

ART SOCIETY.—Committee room containing about 225 superficial feet.

ENGINEERS' SOCIETY.—1. Library and reading room containing about 1,250 superficial feet, with storage closets. 2. Secretary's room containing about 225 superficial feet, with closet.

MICROSCOPICAL SOCIETY.—1. Meeting room containing about 800 superficial feet. 2. Laboratory containing about 225 superficial feet.

BOTANICAL SOCIETY.—Meeting room containing about 800 superficial feet.

AMATEUR PHOTOGRAPHERS' SOCIETY.—1. Meeting room containing about 800 superficial feet. 2. Darkroom containing about 180 superficial feet.

ARCHITECTS' SOCIETY.—Meeting room containing about 400 superficial feet, with closets, and, if possible, a room for models adjoining.

The areas and capacities of society rooms mentioned above are are not absolute, but suggestive. If deemed advisable, all the libraries of above societies can be placed in one room in connection with main reference library and adjacent to the rooms of the various societies. Water facilities wanted in all cases, and in accordance with the purposes of the societies and the various departments. The entire building must be fireproof throughout.

CONDITIONS.

In respect to the sum to be expended, drawings required, and compensation for the successful architect, the trustees have adopted the following:

1. For the erection of the above buildings the sum of seven hundred thousand dollars ($700,000) is appropriated, which must include premiums, commissions and every item of cost.

2. In case it may be found, after the selection of plans and the procuring of estimates for the above building, that the cost will exceed the sum mentioned, the trustees will then reject the plan so selected, without compensation to its author, and select instead another architect's plans which they may deem better suited to their requirements.

3. The required drawings shall be made and limited to a scale 1-16 inch to 1 foot, and shall consist of four elevations, two or more sections and plans showing each story, and at least a perspective from the northwest corner of the building, and at an angle of thirty and sixty degrees. No required drawings to any other scale than 1-16 inch to 1 foot will be received. The privilege is allowed of making additional plain drawings or perspectives which may be necessary to clearly illustrate any construction in the buildings. All the foregoing drawings shall be made in black lines, no shading being allowed, except line etching on the perspective of the building. The walls of the building on the plans and sections to be blackened. One human figure will be allowed on perspective to give the scale of building. Any embellished drawings or perspectives will be rejected.

4. A typewritten description of the building shall accompany each set of drawings, giving as clearly as possible such information concerning the materials

and methods of construction, decoration, etc., as cannot be shown on the drawings.

5. These drawings and specifications must be delivered at the office of James B. Scott, president of board of trustees, No. 122 Second avenue, Pittsburgh, Pennsylvania, before noon on the first day of November, 1891.

6. The competitor furnishing the designs adopted by the trustees will, if he desires, be employed to furnish the working and detail drawings and specifications and to superintend the erection of the building, for which he will receive five per cent on the cost of the building, except as noted below, said five per cent to cover all expenses connected with the services usually rendered by an architect in a first-class building, including daily supervision of the work as it progresses, and in case of his inability to give constant supervision, the architect will employ a competent representative for such purpose at his own cost.

The five per cent commission shall not include the cost of work or materials outside of the architect's designs, and which he will not be called upon to design or supervise.

7. To the competitors furnishing the six sets of drawings adjudged next in merit to the selected plans, the trustees will pay the sum of two thousand dollars ($2,000) each, it being understood that no one competitor will receive more than one premium.

8. All rejected drawings and those receiving the cash premiums will be returned to their authors within reasonable time after determination of successful competitor.

Correspondence in connection with foregoing can be addressed to James B. Scott, President Board of Trustees, Pittsburgh, Pennsylvania.

World's Columbian Exposition Instructions.

THE following circular has been issued by the Department of Publicity and Promotion. It is particularly addressed to foreign exhibitors, though applicable to all who are not already informed upon the subject. It was after considerable discussion regarding the best method not only to protect intending exhibitors but to simplify and facilitate communication by those in search of information that it was issued, and by following its directions no exhibitor will be misled or misinformed. The circular is therefore given in full.

Numerous irresponsible enterprises have sprung into existence, with a view of making capital out of the World's Columbian Exposition. By assuming names resembling, to a greater or lesser degree, the legal title of the Exposition Company, and at the same time sufficiently distinct to escape the consequences of an infringement of a title protected by the state, many of these companies, whether intentionally or not, have conveyed the impression that they are allied to, or officially recognized by, the World's Columbian Exposition. While it is undesirable to enter into the question of the merits or demerits of any of these organizations, it has nevertheless been deemed advisable that the public, and especially the foreign public, should be informed that the following corporations are the only ones whose officers are empowered, in any manner or form, to treat officially with exhibitors or others having business with or at the exposition;

The World's Columbian Commission, a national organization composed of commissioners from each of the forty-nine states and territories comprised in the United States, and eight Commissioners at Large. All representatives of the exposition to foreign countries have commissions issued by George R. Davis, the director-general, under the seal of the commission, attested by its secretary, John T. Dickinson.

The World's Columbian Exposition, a corporation organized under the laws of the State of Illinois. All contracts entered into for the construction of buildings, for concessions, privileges or other matters pertaining to revenue will be made and recognized only upon the signature of the officers of this body, to wit: President, William T. Baker; vice-president, Thomas B. Bryan; secretary and solicitor-general, Benjamin Butterworth; treasurer, A. F. Seeberger.

The Board of Lady Managers of the World's Columbian Commission is authorized by act of congress, and has for its mission the preparation of the ladies' department of the exposition for such exhibits as may be presented by women, and also to aid in the conduct of such of the world's congresses, to be held in Chicago during the exposition, as will consider questions immediately affecting the well-being of women. Its officers are: President, Mrs. Bertha Honore Palmer, of Chicago; secretary, Mrs. Susan Gale Cooke, of Tennessee. All communications with reference to the branches of the work within the jurisdiction of said board should be addressed to the president or secretary of the Board of Lady Managers of the World's Columbian Commission.

The World's Congress Auxiliary, organized for the purpose of arranging for world's congresses to be held in Chicago during the period of the exposition. Official communications on such matters should be addressed to President C. C. Bonney or Secretary Benjamin Butterworth.

The executive work of the exposition, under the direction of Director-General George R. Davis, has been divided into the following departments:

A. Agriculture, Food and Food Products, Farming Machinery and Appliances; W. I. Buchanan, chief.
B. Viticulture, Horticulture and Floriculture.*
C. Live Stock, Domestic and Wild Animals.*
D. Fish, Fisheries, Fish Products and Apparatus of Fishing; J. W. Collins, chief.
E. Mines, Mining and Metallurgy; J. W. Skiff, chief.
F. Machinery.*
G. Transportation—Railways, Vessels, Vehicles; Willard A. Smith, chief.
H. Manufactures; J. W. Allison, chief.
J. Electricity and Electrical Appliances; John P. Barrett, chief.
K. Fine Arts—Pictorial, Plastic and Decorative; Halsey C. Ives, chief.
L. Liberal Arts—Education, Engineering, Public Works, Architecture, Music and the Drama.*
M. Ethnology, Archæology, Progress of Labor and Invention—Isolated and Collective Exhibits; F. W. Putnam, chief.
N. Forestry and Forest Products.*
O. Publicity and Promotion; Moses P. Handy, chief.
P. Foreign Affairs; Walker Fearn, chief.

*Chief not yet appointed.

Other executive officers: Installation, secretary, Joseph Hirst; Traffic, manager, E. E. Jaycox; Ceremonies, secretary, E. C. Culp.

Communications relative to any of the above-named branches should be addressed to Director-General George R. Davis, or to the respective chiefs of departments. All information will be furnished gratuitously. It is, however, recommended in those countries or states where a properly organized government commission has been appointed, that all inquiries be addressed to the officials of such commission, the latter being in constant and direct communication with the officials of the World's Columbian Exposition.

St. Louis Union Depot Competition.

THE competition for the Union depot at St. Louis has been decided in favor of the plans of Architect Theo. Carl Link, of St. Louis. Eight sets of plans were submitted though ten architects were invited to compete, Messrs. S. S. Beman, of Chicago, Shepley, Rutan & Coolidge, of Boston, and Peabody & Stearns & Furber, of St. Louis, declining because of the terms offered. The first prize was awarded to T. C. Link, of St. Louis; the second prize to Grable & Weber, of St. Louis; the third prize to Van Brunt & Howe, of Kansas City. Two and one-half per cent was offered by the railway people as full commission. The other competitors were H. Wolters, of Louisville; Bruce Price, of New York; George R. Mann, of St. Louis, and James Stewart & Co., of St. Louis.

Our Illustrations.

The Michigan Trust Co. Building, Grand Rapids, Michigan; S. S. Beman, architect, Chicago.

Library and office building for Board of Public Schools, St. Louis, Missouri; Isaac S. Taylor, architect.

Perspective of Electricity Building, World's Columbian Exposition, Department of Construction, June, 1891; Van Brunt & Howe, architects, Kansas City.

Perspective and plans of Union Depot, St. Louis, Missouri; Theo. Carl Link, architect. The depot will be situated on the south side of Market street, between Eighteenth and Twentieth streets. The depot is planned to accommodate thirty trains standing side by side, the shed being about 600 by 1,000 feet. The ground floor contains a court with an area of 10,000 square feet. The frontage on Market street is 456 feet. The general hall on the main floor has a clear story of about fifty feet from floor to ceiling. The walls of main rooms will be wainscoted with enameled brick or tiling, and above this of Roman brick. Ceiling beams exposed, marble or mosaic floors. The specifications call for heating and ventilating apparatus, dynamos for electric lighting, and exhaust fans to force air from the top of the tower down. The tower will be two hundred feet high, will contain clock and four dials, and be lit with electric lights. The commission was awarded, with a prize of $10,000, to Mr. Link, in competition with eight other architects.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Residence at No. 148 Astor street, Chicago; Irving K. Pond and Allen B. Pond, architects.

Residence of E. E. Gray, Belmont avenue, near Lake Shore Drive, Chicago; George W. Maher, architect. Five full-page plates are given showing the following views: Exterior, hall, reception room, dining room, lounging room.

Special colored plate accompanying Photogravure edition — The Casino, of World's Columbian Exposition; Burling & Whitehouse, architects, Chicago; from water color by Arthur Heun. The Casino will stand out in the lake 1,000 feet from the shore and is intended to reproduce Venice on a small scale in Lake Michigan. The Casino will be built on piles and connected with the shore by a pier 80 feet wide. The base dimensions of the Casino will be 180 by 400 feet. The building will consist of nine pavilions, two stories in height, and, with the exception of the central one, 80 feet above the surface of the water. The center pavilion will be 180 feet high. There will be communication between the nine pavilions both by gondolas and bridges. Completely surrounded by water this structure, with its fleet of boats and numerous water-ways, is expected to have a decided Venetian flavor. Surrounding the central pavilion will run a gallery 56 feet wide. The pier connecting the Casino with the shore will form a broad promenade. At the west end of the pier will stand the thirteen columns designed by Sculptor St. Gaudens, to represent the thirteen original states. In front of the Casino will be a harbor for small pleasure craft. At night the harbor will be lighted by incandescent lamps sunk beneath the surface of the water on floats. The material of the Casino will be of wood and the walls will be covered with staff. A striking combination of high colorings will be effected.

New Publications.

HEATING FOR HEALTH, by Frederic Tudor, S. A. Copyrighted and published by the Westminster Publishing Company, New York.

This is a small pocket companion, neatly printed, telling all about how to heat a house for health, by a writer who is not merely a theorist, but is a practical sanitary architect and knows what he is talking about. It is a book that every tenant and house owner should have a copy of. We don't know its price, but it can't be much, as it is gotten up to circulate.

ARCHITECTURE OF THE RENAISSANCE IN ENGLAND, by J. Alfred Gotch. London: B. T. Batsford; Boston: Ticknor & Co.; Chicago: A. C. McClurg & Co. To be published in six parts, each containing twenty-one plates, of which seventeen or eighteen will be reproduced from photographs specially taken for this work, and the others from drawings by the authors; with letterpress illustrated by numerous sketches; plates 14 by 10 inches. Price, to subscribers, $8 per part net, in portfolio.

Of necessity, space limitations impose limitations of choice in the making up of such a work, and the authors in their selection of subjects have confined themselves to English work, not including buildings in Scotland, Ireland and Wales. The subjects, again, have been chosen almost wholly from domestic work, with but few cathedrals; and these, again, in nearly every instance from work erected between the years 1560 and 1630. The earlier work, embracing the first crude adaptations of renaissance to English types, had then given place to a free, vigorous handling, in which English characteristics were preserved and treated with spirit. The later renaissance work was more strictly imitative of continental models, and in the same proportion was less distinctively English. It was a period when the average educated man was expected to be versed in pretty nearly all the learning of the day, and we find that the English gentleman was frequently his own architect, sometimes with the result of building stairways that led nowhere (curious how stairways bother an amateur architect), or with rows of windows intersecting tiers of joists; sometimes with the result of a happy individuality. Probably the few able architects did a good deal at long range by way of consultation, and the owner and the builder combined the ideas at the work. Like other ages, it had its fads, and John Thorpe, who is the central figure among the architects of the period, followed the prevailing fad in symbolism by planning his own house to the form of his own initials. The authors have been forced to reproduce some well-known buildings in order that the selection might be truly representative of the

time; hence, in the first part we find such mansions as Burghley House, Hardwick Hall and Haddon Hall. But much of the work is comparatively fresh to the American student. Of these less known buildings there are in this first part Hambleton Old Hall, simple but with great attractiveness; Ragdale Old Hall, with its curious mixture of materials and styles; Apthorpe Hall, with its purity of treatment; St. John's, Warwick, as good in its way as Haddon Hall, and the picturesque Hall i' th' Wood, with its old timber and newer stone in an oddly jumbled harmony. Altogether the first part is very well edited, the phototype plates excellently reproduced from skillfully taken negatives, and the whole portfolio tastefully gotten up. The letterpress errs, if at all, on the side of brevity; a brief introduction, giving a somewhat scanty account of peculiar social conditions in the Elizabethan era that governed the modes of domestic architecture, is followed by detailed accounts of the buildings represented in the respective plates.

Synopsis of Building News.

Baltimore, Md.—Architect Charles E. Cassell: For Joseph M. Cone, a seven-story office building, size, 65 by 83 feet, stone and all improvements; to be erected on the site of the old Law Building.

Buffalo, N. Y.—Architects C. K. Porter & Son have prepared plans for the Builders' Exchange, to be erected on Pearl and Court streets. It will be a brick and stone building, seven stories high, and cost about $100,000.

Architect W. H. Archer: For the Young Men's Christian Association, North Tonawanda, New York, Association building, 132 by 93 feet, brick and stone, tin roof, galvanized iron and stone trimmings, four stories high, comprising suites of Association rooms, baths 50 by 40 feet, gymnasium, 50 by 50 by 28 feet, public hall, 40 by 60 by 20 feet, bowling alley, and four stores, iron girders and columns, mantels, sanitary plumbing, steam heating, gas and electric light, plate glass, concreting, etc.; cost $45,000. Theater building, Tonawanda, New York, 90 by 46 feet, brick and stone, tin roof, galvanized iron trimmings, four stories high, iron roof construction, columns and girders, balcony fronts, stage fittings, scenery, and seats 700; also three stores, inside finish, heating and ventilation; cost $20,000. First Presbyterian Church, Tonawanda, New York, 50 by 75 feet, brick and stone, roof trusses, circular seating, stained glass, iron ceiling, galvanized iron trimming, inside finish, steam heating, etc.; cost $15,000. E. Howard, Linwood avenue, Buffalo, New York, frame barn with modern improvements. For F. G. Gould, Dunkirk, New York, three-story frame and brick residence, shingle roof, hardwood finish, steam and hot water heating, mantels, bath room, toilet and lavatory apparatus, and inside blinds and all modern improvements, concrete basement, etc. For Fred F. Jewell, Dunkirk, New York, two-and-a-half-story residence, shingle roof, staircase and reception room, oak finish and inlaid floors, inside blinds, bath room, toilet and lavatory apparatus, mantels, hot air heating, concrete basement. For Skinner & Co., Buffalo, New York, factory building, brick and stone, 60 by 130 feet, three stories, monitor roof, tin covering, mill construction, asphalt flooring, galvanized iron cornice and trimming, plate and common glass, machinery and appliances; cost about $10,000. Business block for Charles Williams, Tonawanda, New York, 100 by 45 feet; brick and stone, tin roof, skylights, iron girders and columns, plate glass, bowling alley, four stores and suites of apartments, with baths, washbowls, washtubs and modern improvements.

Chicago, Ill.—Architects Sprague & Newell: For W. F. Kroll, a three-story and basement residence and a three-story and basement dwelling, size 62 by 70 feet, to cost $30,000. They will have fronts of pressed brick and stone, with slate roof, hardwood interior finish, steam heat, electric light and all improvements. For the Illinois Hotel Company, they are making drawings for a hotel to be erected in Chicago. It will be constructed of pressed brick and stone, have hardwood interior with marble wainscoting, tile floors, four elevators, steam heat, electric light and the best of modern improvements; the cost will be $250,000. It will contain 780 guest rooms, besides parlors, dining rooms, offices, etc. The same architects are preparing plans for a business block to be erected at Pueblo, Colorado. It will be five stories in height, 120 by 140 feet in size, have steam heat, electric light and all improvements and cost $125,000. For O. H. P. Baxter, they are working on plans for a handsome three-story and basement residence, 118 by 112 feet in size, to be erected at Pueblo. It will be constructed of rock-faced granite, have tile roof, hardwood finish throughout, marble floors, bronze stairways, electric light, hot water heating, art and stained glass, porcelain bathtubs, bowling alley, billiard room, and the best of modern improvements; it will cost $150,000. For the same, a stable of granite exterior, tile roof, hardwood finish, etc.; cost $20,000.

Architect Henry Ives Cobb has let the mason work for the Newberry Library, on Walton place, to Angus & Gindele. It will be a five-story building 300 by 69 feet in size, costing upward of $500,000.

Architect Cass Chapman: For Joseph Duplicy, at 409 to 415 Forty-sixth street, a three-story apartment house, 50 by 116 feet, to cost $40,000. The front and cornice will be of Bedford stone, the interior to have hardwood finish, furnaces and all sanitary improvements.

Architect Henry Sierks: For the Western Wheel Works, at 127 to 129 Sigel street, a five-story warehouse and factory; to have pressed brick and stone front, electric light, elevator, etc. For Julius Ahlers, a two-story residence, to be of Bedford stone front.

Architect D. S. Pentecost: For George W. Shoop, at 142 and 144 Colorado avenue, a three-story store and flat building, pressed brick and stone front, etc. For the same owner, at 147 Sacramento avenue, a two-story flat building. For Charles H. Cochran, at Prospect Park, a two-story frame residence, hardwood finish, furnace, etc.

Architect Gottfried Thiel: For Martin Anderson, a three-story flat building, of rock-faced stone front. For Otto Haak, a three-story flat building, on Robey street near Clybourn place; Tiffany pressed brick and Bedford stone. For Theodore Gribi, at Elgin, five two-story flats of pressed brick and stone fronts; cost $20,000.

Architect H. Copeland: For Brown & Lindquist, at 4458 Oakwood avenue, a four-story flat building, to have buff Bedford stone front, steam heat, etc.; cost $25,000.

Architect J. A. Wierzbieniec: For Julius Piotrowsk, on Laurel street and James avenue, a three-story store and flat building, of St. Louis pressed brick and Bedford stone, to cost $16,000. For M. Rybski, on Laurel street, a three-story store and flat building, of pressed brick and stone front; making plans.

Architects J. F. & J. P. Doerr: For John Kohnert, at 609 Thirty-first street, a three-story store and flat building, of Bedford stone front. For C. E. W. Platt, on Berkeley avenue, near Forty-fifth street, a four-story apartment house, of pressed brick and terra cotta front; steam heat and all modern improvements; cost $16,000; making plans. For R. F. Reedy, on Thirty-first and Armour avenue, a three-story store and flat building, 50 by 85 feet; cost $25,000; Bedford stone front. For Joseph Stein, on Forest avenue near Thirty-sixth street, three three-story and basement residences, to have Bedford stone fronts, furnaces, hardwood interior, etc.; cost $24,000.

Architect Theodor Lewandowski: For Albert Schacht, on Webster avenue and Bissel street, a three-story store and flat building, of pressed brick and stone; cost $14,000. For J. E. H. Hemman, on Oakdale avenue near Halsted street, a two-story flat building of blue Bedford stone front.

Architect A. Druiding: For the St. George Catholic Church, to be built at Thirty-ninth street and Wentworth avenue. Church to be built of brick with stone trimming front and pressed brick. Church to be 146 feet deep and 71 feet wide and two towers, one 160 feet high and the other 110 feet high. It will have a slate roof and will be heated with hot water. The church to be built in the early Gothic style, the church to have eight hundred seating capacity. St. George pastor's residence, to be two-story brick with stone basement; the building to be slated and heated with hot water; all modern improvements will be in the building; cost $9,000. Catholic schoolhouse in Naperville, two-story and basement building, 84 feet by 60 feet; all built of Naperville stone. The building will be erected with all modern improvements, with best system of heating and ventilating. Building to contain four large schoolrooms in first story and hall and anteroom in second story. The basement to contain playrooms and the heating and ventilating apparatus. St. Xavier Church in La Grange; frame, with the exception of a stone basement. The basement to contain three schoolrooms, and the church to have a seating capacity of three thousand. The building to be 48 feet by 93 feet 6 inches, and tower to be 94 feet 8 inches high. St. Stanislaus Church near Douglas Park; brick with stone for basement; first story to contain church auditorium with four hundred seating capacity, second to have two large schoolrooms and the pastor's residence 58 feet by 76 feet 6 inches. Pastor's residence of St. Teresa's congregation; 29 feet by 70 feet, consisting of basement and two stories with a stone front. The building to contain all modern improvements, to be ready for occupancy about November 1. SS. Peter and Paul's Church at Ellinwood, Kansas; 46 feet by 86 feet with a tower 120 feet high, built of local brick with a stone framework.

Architect W. J. Van Keuren: For Jesse A. Baldwin, at Oak Park, a two-story frame residence, with stone foundation and first story of pressed brick, hot water heating, hardwood finish, etc. For R. W. Day, at Wynette, a two-story shoe factory, 50 by 100 feet, of common brick.

Architect Clinton J. Warren: For Frank Baker, on Market street between Madison and Washington, an eight-story office building, 50 by 150 feet; cost $200,000; to be of pressed brick and terra cotta front, steel construction, have steam heat, elevators, electric light, all improvements. For James M. Reddy, on Seventy-fifth street and Dobson avenue, a four-story apartment house; to be of pressed brick and stone, and cost $20,000.

Architect John Addison: Porter Memorial Church, at 498 South Paulina street; first story of cut stone, and above of timber and plaster, with metallic shingle roof, Georgia pine finish, steam heat, etc.

Architect J. J. Egan: For John Condrich, on Washington boulevard, a three-story flat building, of Bedford stone front, steam heat, etc. Also completing drawings for St. Patrick's Catholic Church, to be erected at Cedar Rapids, Iowa; all stone, slate roof, hardwood finish, steam heat, gas fixtures, stained glass windows; it is in the Romanesque style of architecture, and shows a handsome edifice.

Architect J. A. Thain: For F. Garland, a three-story flat building, to have Bedford stone front, hardwood interior, hot water heating, etc.; cost $20,000; to be erected on Prairie avenue near Twenty-fourth street. For J. W. Cassell, five three-story and basement residences, to be erected on Sixty-first street and Ellis avenue; they will have Bedford stone fronts, hardwood finish, furnaces, etc., and cost $50,000. For A. F. Fisher, at 4517 Greenwood avenue, a handsome three-story residence of pressed brick and stone front, slate roof, have hardwood finish, hot water heating, and cost $25,000. For H. G. Bird, at 4519 Greenwood avenue, a three-story residence, of frame, with slate roof, stone basement, hot water heating, etc.; cost $18,000.

Architect Wm. Strippelman: For John T. Kelley and H. B. Brown, on Madison street near Francisco, two three-story store and flat buildings; they will have stone fronts and all improvements.

Architect L. B. Dixon: For A. M. Rothschild, corner of Michigan avenue and Thirty-seventh place, three-story residence of St. Lawrence or Georgia marble front, steam heat, etc.; plans are completed and ready for figuring.

Architect C. S. Corwin: For Dr. A. W. Harlan, a two-story residence of pressed brick, stone and frame; to have hardwood interior, steam heat, and cost $15,000; it will be built on Greenwood avenue and Forty-fourth place.

Architects Lamson & Newman: For Wm. Clancy, on Vernon avenue between Grand boulevard and Vincennes avenue, a two-story residence of Bedford stone front, hardwood interior, furnace, and all improvements; cost $11,000.

Architect George Beaumont: For D. L. Streeter, at 152 State street, rebuilding four-story store recently burned; steam heat, electric light, passenger and freight elevators, etc.

Architects Beers, Clay & Dutton: For Doggett Brothers, corner of Wabash avenue and Harmon court, a five-story building, 80 by 171 feet; cost $75,000; pressed brick and terra cotta front, steam heat, elevators, etc. For J. P. Smith, on Lexington avenue and Fifty-second street, a two-story frame residence; stone basement, hardwood finish, steam heat, electric light; cost $17,000. For J. Spencer Dickinson, at Evanston, a two-story frame residence. For J. F. Rhodes, at 1619 Prairie avenue, a three-story residence, of stone front, hardwood finish, etc.; cost $25,000. For W. W. Clay, corner of Woodlawn avenue and Fifty-first street, five three-story residences; hardwood finish, furnaces, electric light, etc.

Architects C. L. Stiles & Co.: For George M. Hord, a four-story flat building, 50 by 80 feet; cost $25,000. It will have a blue and buff Bedford stone front, steam heat, electric light, etc.; to be erected on Fifty-first street near Washington avenue.

Architects W. W. & L. J. Myers: For S. S. Fogg, on Lake avenue opposite Jackson Park, a four-story flat building, 50 by 98 feet; cost $25,000; stone and pressed brick front, copper bays, marble and tile work, steam heat, etc. For D. Sullivan, on Wentworth avenue near Thirty-first street, a three-story store and flat building, 50 by 30 feet; cost $15,000; Bedford stone front, galvanized iron bays, pine finish, etc. For Matthew Brennan, at 4018 Vincennes avenue, a two-story residence, of Bedford stone and Georgia marble front, hardwood finish, hot water heating, and all sanitary improvements.

Architect Wesley A. Arnold: Making plans for two-story foundry, to be built at Joliet; to be of stone construction with slate and gravel roof. For the Bennett estate at Evanston, six double two-story and basement frame houses; stone basements, hardwood finish, furnaces and sanitary plumbing. Also making plans for M. E. Church, to be erected on Twenty-fourth street and Millard avenue, Lawndale. It will be of granite front with round tower, have oak finish, memorial stained glass windows, furnace, bell, organ, etc. There will be accommodation for a congregation of 800 persons.

Architect J. H. Huber: For B. F. Weber, two two-story residences of frame, with granite basement, furnaces, etc.; cost $6,000 each. For Chicago & North-Western railway, at High Ridge: A waiting-room, to be of pressed brick and granite, and have platform 275 feet long.

Architects Wilson & Marble: For Jacob Kramer, four-story store and flat building, corner of Madison street and Hoyne avenue. It will have a front of 136 feet; to be of stone, have hardwood finish, steam heat, electric light, marble and tile work; cost $60,000.

Architect Alfred Smith: For T. J. Sammons, on southeast corner of Washington boulevard and Sheldon street, a three-story flat building of Tiffany pressed brick and stone. For St. Stephen's Church, on Johnson street, near Taylor, a three-story addition. Also working on drawings for Emanuel Episcopal Church, to be erected at Rockford, Illinois; to be of stone construction with slate roof, have interior of pressed brick, steam heat, stained glass windows, bell, organ, etc.; size 100 by 110 feet; to accommodate a congregation of 600. There will also be a three-story chapel with a seating capacity of 250.

Architect Fred Ahlschlager: For T. E. Lyons, at 6138 South Halsted street, a three-story store and flat building; cost $16,000; St. Louis pressed brick and Bedford stone, all improvements, electric light. For B. McCaffrey, corner of Dearborn and Forty-fourth streets. For John Mies, on Cedar street, near Wentworth avenue.

Architect J. M. Van Osdell & Co.: For John Spry, on Lake street, near Jefferson, an eight-story factory 100 by 150 feet; cost $75,000; pressed brick and terra cotta front, electric light, elevators, etc.

Architect Thomas Wing: For George Hankins, a five-story apartment house, 100 by 161 feet in size; cost $100,000; to be erected on Michigan avenue and Forty-second streets; pressed brick and stone front, steam heat, electric light, etc. For George and Al. Hankins: "Garfield Park Club," on Madison and West Fortieth streets. To contain grand stand, 60 by 300 feet in size; betting stand, stables to accommodate 700 to 800 horses, bookmakers' stand, 100 by 200 feet; the whole to cost about $150,000.

Architects Holabird & Roche: For Chicago, Milwaukee & St. Paul railway, Evanston Division, a handsome station, to be erected at Sheridan Park; to be of stone with tile roof; interior finished in Georgia pine, and have a concrete platform 300 feet long by 50 feet wide.

Architect J. C. Brompton: For Stevenson, Baker, Betz & Charles Beck, twelve three-story frame hotels, near Jackson Park; cost $18,000 each.

Architect Robert Rae: For Frank Smith, on Woodlawn avenue and Forty-sixth street, a four-story flat building, 50 by 65 feet; cost $25,000; pressed brick and stone front, hardwood finish, steam heat, elevator, electric light. For William Wilson, a two-story residence, corner of Forty-sixth street and Oakenwald avenue; cut stone front, pressed brick sides, hardwood finish, electric light, steam heat. For Fadner Brothers, at Austin, a large number of frame houses; cost

about $2,000 each. For J. C. Snashall, on Ellis avenue near Forty-sixth street, three two-story residences; to have stone fronts, hardwood finish, steam heat, electric light, slate roof; cost $7,000 each. For William Fayerweather, at Hinsdale, a two-story frame residence; to have steam heat, all improvements, and cost $6,500. For J. P. Mallette, two-story flats at Eggleston; stone front, pressed brick sides, furnaces, electric light, etc.; cost $15,000. For Eggleston, Mallette & Brownell, two-story flats at Eggleston; granite front, hardwood finish, steam heat, electric light, etc.; cost $15,000. For T. C. Chichester, at Eggleston, twenty two-story houses; to have stone fronts, hardwood interiors, furnaces and all improvements; cost $6,000 each. For the same owner, at Auburn Park, five two-story flats; to be of stone front, have hardwood finish, furnaces, electric light; cost $6,000 each.

Architects Dahlgren & Lievendahl: For H. G. McCartney, on Atlantic street near Fifty-second, four frame cottages. Also two-story flat building of pressed brick and stone, cost $9,000, at Ravenswood. A three-story residence on Rhodes avenue, to have stone front, hardwood finish, hot water heating, electric light, tower of tile and copper, etc.

Architect J. E. O. Pridmore: For A. P. Spencer, on Oakenwald avenue and Forty-third street, a four-story apartment house, 100 by 63 feet, to have two fronts of Tiffany pressed brick and Bedford stone, interior hardwood finish, marble wainscoting, floors and steps, gas ranges, fireplaces, elevator, steam heat, electric light, etc.

Architect F. B. Townsend: For F. H. Day, on Belmont avenue near the lake shore, a two-story frame residence; hardwood finish, furnace, etc.; cost $7,500.

Architects Furst & Rudolph: For Brown & Fitts, on Union street near Indiana, a five-story factory, size 80 by 150 feet; cost $50,000. To be of mill construction, have steam heat, electric light, elevator, etc. For W. J. Moxley, a five-story factory extension, 40 by 80 feet; cost $12,000. Steam heat, elevator, etc. For Samuel Brown, Jr., at Sheridan Park, a two-story residence; cost $15,000. First story of mottled brick and above of shingles, hardwood interior, steam heat, etc. Making plans.

Architect E. R. Krause: For August Richter, on Surf street near the lake, a three-story residence of stone and pressed brick front, slate roof, hot water heating, electric light, etc.; cost $30,000. For the estate of Benjamin F. Tobin, southeast corner of Cottage Grove avenue and Thirty-third street, a six-story apartment house, size 123 by 74 feet; cost $125,000. Hydraulic pressed brick, terra cotta and stone front, hardwood interior, steam heat, three electric elevators, marble and mosaic work, mackolite fireproofing, electric light, etc.

Architect Perley Hale: For M. Shutterlee, at Auburn Park, three three-story stores and flats; cost $30,000. Stone fronts, stained and plate glass, sanitary improvements.

Architects G. Bloedner & Co.: For Henry Flentry, at 128 Wells street, a four-story store and flat building, 56 by 118 feet; cost $28,000. Obsidian pressed brick with galvanized iron bays, pine finish, etc.

Architect George W. Maher: For Johnston & Perry, on East End avenue and Fifty-fifth street, two two-story residences, of Roman pressed brick and stone, hardwood finish, furnaces, etc. For Ed. A. King, at Rogers Park, a two-story frame residence, furnace, etc.; cost $5,000.

Architects Donnellan & Burrows: For Graham & Son, on southwest corner of Desplaines and Monroe streets, a five-story hotel and bank building; cost $40,000. Terra cotta, brown brick and stone, steam heat.

Architect C. A. Weary: For S. W. Roth, corner of Lake street and Columbia place, a three-story store and flat building; cost $30,000. Collinsville pressed brick and stone. For Carne & Coombes, on Desplaines street, a seven-story factory, 40 by 90 feet; cost $28,000. Pressed brick and stone, steam heat, elevators. For C. F. Crowley, on Wilcox avenue near California avenue, a three-story flat building, of pressed brick and stone; cost $8,000. For Joseph Schoenthaler, on Union Park place, a two-story flat building.

Architects Faber & Pagels: For B. B. Switzer, on Twenty-first street, corner of Homan avenue, a three-story flat building; cost $7,000. For H. Fredericks, on Huron street near Ashland avenue, a three-story flat building, of St. Louis pressed brick and stone; cost $9,000.

Architect T. N. Bell: For Christian Brethren, church at Columbia, Missouri, size 75 by 120 feet, to seat 700, and Sunday school to accommodate 300. Pressed brick and stone, stained glass windows, steam heat, electric light; cost $15,000. Also making plans for Presbyterian church at Columbia, 80 by 158 feet; cost $15,000. For Mrs Mary F. Boyer, at Champlain avenue near Forty-fifth street, a three-story flat building of stone front, hot water heating; cost $6,000. For C. H. McCormick, southwest corner of Wabash avenue and Congress street, a two-story temporary building; cost $20,000. Iron skeleton front with plate glass, electric light, steam heat, etc.

Architect J. H. Wagner: For Gormully & Jeffrey, on Franklin street near Pearson street, a six-story factory, 60 by 100 feet; cost $35,000. Pressed brick and terra cotta, steel girders and cast-iron columns, steam heat, electric light. For Mrs. White, a two-story flat building, 50 by 65 feet: cost $12,000. For Bank of Chicago, in the Portland Block, marble wainscoting, etc.; cost $10,000.

Architect J. A. Miller: For William Seymour, on State street between Cedar and Elm streets, a four-story store and flat building, 79 by 184 feet; cost $50,000. Tiffany pressed brick and stone, steam heat, electric light.

Architects Snyder & Nothnagel: For W. A. Bayor, on Wabash avenue near Fifteenth street, a five-story business block, 50 by 170 feet; cost $65,000. Pressed brick and terra cotta, elevators, electric light, steam heat. For P. O. Donnell, on Twenty-second street and Douglas boulevard, a three-story store and flat building. For C. D. Cole, on corner of Belden avenue and Larrabee street, a four-story apartment house, 100 by 60 feet; cost $80,000. Steam heat, electric light, refrigerators, gas ranges.

Architect A. F. Hussander: For R. Henderson, on Cleveland avenue, a three-story flat building, of Tiffany pressed brick and stone; cost $12,000. For W. S. Hussander, on Halsted street near Nellie avenue, a three-story store and flat building; cost $10,000.

Cincinnati, Ohio.—Reported by Lawrence Mendenhall:

Architects S. Hannaford & Sons report: For the Cincinnati *Times-Star*, an office building eight stories high. For Mr. S. F. Dana, two buildings; materials, pressed brick, stone trimmings, hardwood, gas, plumbing, furnace, grates, mantels, stained glass, etc. For the Methodist Episcopal Church, Insuminsville, city, a church edifice; materials, stone, brick, slate roof, hardwood finish, furnace, stained glass, pews, mantels, etc. Other work in hand not ready for the public.

Architect George W. Vogel reports: For Mr. Lawrence Rabe, two dwellings; materials, brick, tin roof, pine finish, blinds, gas, mantels, etc.; cost $8,000. Also a large warehouse for E. Block & Son, to be erected at Prestonville, Kentucky; cost $15,000.

Architect Henry E. Siter reports: For Mr. Charles H. Dahme, a residence; materials, pressed brick, tile roof, terra cotta, hardwood finish, furnace, hardwood floors, etc.; cost $20,000.

Architect Theodore Richter, Jr., reports: For Mr. F. W. Browne, a four-story flat; materials, pressed brick, stone, slate roof, pine finish, wood mantels, etc.; cost $15,000. Also for Henry Ratterman, Price Hill, city, a residence; materials, frame, slate roof, pine finish, blinds, furnace, etc.; cost $6,500.

Mr. F. G. Huntington is about to build a five-story factory for F. Closson, Jr., & Co., to be used for an art gallery and picture frame factory; materials, brick, iron, tin roof, elevator, steam heat, etc.; cost $10,000.

Architects G. & A. Brink report: For Mr. F. Unnewehr, 7 Dandridge street, a cigar factory; materials, brick, tin roof, cornices, freight elevators, gas, plumbing, fire escapes, etc.; cost $11,000.

Architect G. W. Drach is preparing plans for an addition to Longview Asylum; cost about $50,000. Also for the Marmet Coal Company, an office building. Both of these are under way.

Architects Crapsey & Brown have prepared plans for a house for Mr. F. S. Owings, Maysville, Kentucky; materials, pressed brick, shingle roof, blinds, plumbing, gas, stained glass, mantels, etc.; cost $5,000.

Architect S. S. Godley has prepared plans for Mrs. H. B. Lupton, Avondale, city, for a residence; materials, frame, slate roof, furnace, blinds, hardwood, stained glass, gas, plumbing, etc.; cost $4,500.

Architects Des Jardins & Hayward report the following: For Mr. W. H. Blymyer, an office building eight stories high; materials to be brick, iron, stone, with tin roof, hardwood finish, hydraulic elevator, steam heat, tiling, etc. For the same party, a six-story building; materials, pressed brick, iron, tin roof, hydraulic elevator, steam, gas, plumbing, etc. For the Dutch Reformed Church, a church and parsonage; materials, common brick, tin roof, pine finish, pews, stained glass, furnace, blinds, gas, plumbing, etc.; cost $9,000. For Mr Robert Leslie, a frame dwelling, with slate roof, hardwood, grates, mantels, plumbing, blinds, stained glass, etc.; cost $5,000. For the town of Lawrenceville, Illinois, a schoolhouse; materials, brick, slate roof, blackboards, school furniture, etc.; cost $14,000. Busy on other work.

Cleveland, Ohio.—Architect F. C. Bate: For F. A. Glidden, a two-story residence; size 35 by 55 feet, stone and frame, slate roof; cost $6,000.

Architect B. F. Van Develde: For J. O'Donnell, a two-story residence; frame, stone foundation; size 28 by 60 feet; cost $5,500. Also, for the Roman Catholic congregation, a two-story brick church; size 74 by 100, stone trimmings; cost $25,000.

Architect A. D. Kent: For John Pallister, a two-story frame residence; size 38 by 56 feet, slate roof; cost $5,300.

Architects Coburn & Barnum: For the Case School, a three-story laboratory building; size 44 by 58 feet, brick and stone; cost $25,000.

Denver, Colo.—Architect H. T. E. Wendell: For S. B. Morgan, a stone residence; size 50 by 70 feet, tile roof; cost $50,000.

Architect F. Goodnow: For Mr. Rogers, a three-story hotel; pressed brick; cost $35,000.

Architects Balcomb & Rice: For J. M. Daily, a brick residence; cost $10,000.

Detroit, Mich.—Architect G. W. Lloyd: For the Woman's Hospital and Foundlings' Home, a brick building on Forest avenue; stone trimmed, slate roof; cost $50,000. For David Whitney, Jr., repairing buildings recently burned, on Larned street.

Architects Rogers & Macfarlane: For Robert Murray, a block of three-story residences; cost $15,000. For Gen. R. A. Alger, a two-story frame summer residence at Lake St. Clair; cost $6,000.

Architects Mason & Rice: For John Cleven, a two-story brick and stone residence; cost $10,000. For Francis F. Palms, remodeling and enlarging brick residence on Jefferson avenue and Russel street.

Architect Joseph E. Mills: For the State Institution for the Criminal Insane, at Ionia, Michigan, a three-story brick building; stone trimmings; size 118 by 124 feet; cost $25,000.

Architect A. E. French: For Nathaniel J. Hubbell, two two-story brick residences on Cass avenue and Columbia street; cost $9,000.

Architects Donaldson & Meier: For the St. Elizabeth Roman Catholic Church, a two-story brick schoolhouse; cost $7,100.

Architect Edward C. Van Leyen: For F. W. Kellogg, a two-story brick residence on Kirby avenue near Woodward; cost $10,000. For C. R. Clarke, at Port Huron, Michigan, a double frame residence on Military avenue; cost $5,500.

Architects M. L. Smith & Son: Repairs for the Campan Building.

Architect E. W. Arnold: For the Ann Arbor University, a gymnasium; brick stone trimmed; cost $45,000.

Architects A. C. Varney & Co.: For Joseph W. Dailey, a four-story brick block; cost $25,000. For H. S. Robinson & Co., a three-story brick shoe factory; size 40 by 80 feet; cost $8,000.

Architects Spier & Rohns: For the Trinity German Lutheran Church Society, a frame building; cost $8,000. Also for the Gethsemane German Church, a frame building on Twenty-eighth and Rich streets; cost $8,000. For the German Lutheran Society, a frame building; cost $7,000.

Architect Harry J. Rill: For Samuel Moyer, a two-story brick double residence; cost $7,000.

Architect J. G. McLean: For the Ever Ready Dress Stay Company, Windsor, Ontario, a three-story brick manufacturing building; cost $9,000. For Dr. R. Casgrain, Windsor, Ontario, a two-story brick residence; cost $6,000.

Architects John Scott & Co.: For Charles L. Calvert, a two-story brick and stone residence on Rowena street; cost $9,000.

All buildings of any size are stopped, and have been for six weeks, on account of stonecutters' strike, but an early settlement is expected now.

Max Meadows, Va.—Architect Henry L. Curtis: For Jacob C. McGavock, alterations and additions to old residence; cost about $5,500. For the Max Meadows Iron Company, an office building and laboratory, two-story frame, shingle roof, size 37½ by 23½ feet; cost $2,000.

Milwaukee, Wis.—Architect Frederick Velguth: For George Brumder, remodeling store, four stories, brick and stone; cost $5,000.

Architect W. A. Holbrook has prepared plans for the Congregational Church Society, a brick church with stone trimmings, slate roof; cost $20,000.

Architects H. C. Koch & Co., for the Protestant Home for the Aged Society, a two-story brick and stone "home," size 120 by 42 feet; cost $35,000.

Architects Rau & Kirsch are preparing plans for the county court house at Oconto, Wisconsin.

Minneapolis, Minn.—Messrs. Peterson & Lofgren Bros. will erect a four-story apartment building, frame, on Ninth avenue; cost $20,000.

M. J. Daniels will build a residence, frame, two stories; cost $6,000.

The Minneapolis Grain & Feed Company are having plans prepared for a large warehouse; cost about $30,000.

Ogden, Utah.—Architect William W. Fife: For J. M. Langsdorf, a two-story brick and stone residence, with attic and basement, size 45 by 60 feet; cost $10,000. For John Scowcraft, a two-story brick and cut stone residence, size 40 by 55 feet; cost $12,000. For B. White, a two-story residence, brick and stone, 50 by 65 feet; cost $12,000. For James Cassin, a three-story store and office building, brick, size 22 by 75 feet; cost $9,000.

Omaha, Neb.—Architects Findlay & Shields: For the University of Omaha, have prepared plans for a two-story addition, boys' residence, size 94 by 50 feet, brick and stone trimmings; cost $12,000.

Pittsburgh, Pa.—Architect J. W. Offerman: For the Italian Church congregation, a two-story brick church, stone trimmings; cost $12,000. Also has prepared plans for Father Sheedy's congregation, a new church on Third avenue and Ferry street; Romanesque style, brick with stone trimmings; size 59 by 79 feet; cost $20,000.

Architect S. T. McClarren is preparing plans for the congregation of the Grace Lutheran Church, for a new church building; to cost $15,000.

F. McKnight will erect two two-story brick dwellings, size 22 by 50 feet, slate roof; cost $10,000.

Miss Julia Wolinske will build a two-story residence, frame, wood roof, size 24 by 30 feet; cost $6,000.

Architect J. P. Bailey is preparing plans for a schoolhouse building, to be erected at Homewood; cost $60,000.

R. M. Pyatte will build a two-story brick dwelling, size 27 by 42 feet, slate roof; cost $5,000.

Springfield, Ill.—Architect George H. Helmle: For Sisters of St. Francis, addition to St. John's Hospital, 80 by 76 feet, four stories high, brick, with stone foundation and trimmings, hot water heating, sanitary plumbing, etc.; cost $18,000. For Hickox, Pierik & Hickox, two-story brick and stone store building, 61 by 50 feet, plate glass, steel beams, pressed brick and stone front; cost $12,000. For Charles L. Ahll, two two-story frame cottages; cost $4,500; furnace heat. For E. S. Gard, frame dwelling, ten rooms, furnace heat, wood mantels, stained glass; cost $6,000. For school directors, Athens, Illinois, addition to schoolhouse, two-story, brick and stone, steam heat; cost $4,800.

St. Louis, Mo.—Architects Beinke & Wees: For Mr. Peters, a shoe factory, three stories, size 55 by 91 feet, brick and stone; cost $30,000.

Architects James Stewart & Co.: For the Pan Handle Railroad Company, Cincinnati, Ohio, a brick storage freight house, size 500 by 105 feet; cost $100,000.

Architects Eames & Young: For T. A. Meysenbury, a three-story residence, size 50 by 80 feet, brick and stone; cost $23,000. Also for E. A. De Wolfe, a two-story dwelling, at Chamberlin Park, size 40 by 65 feet, brick and granite; cost $12,000.

Architect O. J. Wilhelmi: For Fred Erhardt, a two-story store and flat building, size 50 by 65 feet, stone and brick; cost $8,500.

Architect J. Beattie: For C. C. McDonald, a two-story residence, pressed brick, stone foundation, size 40 by 33 feet; cost $6,500.

THE INLAND ARCHITECT AND NEWS RECORD.

Vol. XVII. ADVERTISERS' TRADE DEPARTMENT. No. 6

Trade Notes.

PROTECTION AGAINST FLIES.— Do you want the best screen door in the world? If so buy the Lyle screen door. Patented in the United States, Canada, England and France. Agents wanted in every town, to change over old style doors, and manufacture Lyle's improved screen door. See cut of door on another page. Address W. R. Lyle, patentee, Ripon, Wisconsin.

WORKS ON ART: Supplementary catalogue by F. Weber & Co., Philadelphia, embraces list of treatises not named in former catalogue, on architecture, fresco painting, figural and allegorical designs, engraving and lithographing, ornamental woodwork, ornamental glass, art metal work and kindred subjects, together with correction of prices. To be had on application.

THE question is often asked whether creosote preserves the color as well as the wood when used in an exterior stain. There seems to be reason to believe that it does so. Probably because the low forms of organism and fungi, which are so fruitful in causing the blackening in most paints and stains, are prevented by the addition of creosote, which is a strong germicide.

W. R. OSTRANDER & CO., 195 and 197 Fulton street, New York, the well-known manufacturers of speaking-tube hardware, electric bell supplies and other electric and pneumatic goods common to modern house construction, have just issued from the press an eighth and revised edition catalogue and price list which should be in the hands of all architects, contractors and bell hangers, as it contains the latest improved devices in these lines, all handsomely illustrated.

THE following circular letter has been addressed to the customers of the Babcock & Wilcox Company, and steam users generally:

GENTLEMEN,—Mr. L. M. Moyes, formerly agent of this company at No. 32 North Fifth street, Philadelphia, has surrendered the charge of our office and business at that point to our new agents, Messrs. W. C. Temple and Henry F. DePuy.

We request that any business which you may have to transact with our Philadelphia office be done through either of these gentleman, who will always be ready to attend to it at that place. Yours respectfully,

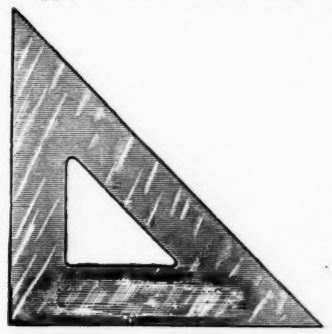
THE BABCOCK & WILCOX COMPANY.

THE H. W. JOHNS MANUFACTURING COMPANY, of New York, with headquarters' at Chicago, Philadelphia and Boston, has prepared an architect's edition containing a full fac simile exhibit of the various tints and hues with names and numbers attached, of the standard liquid asbestos paints and wood stains made by the company under the H. W. Johns patents. Of the excellence of these goods there is no occasion to speak, as every architect is fully posted in that respect. It is only necessary to say the soft rich Turkish morocco cover of this edition is in harmony with the contents.

IT is noteworthy how rapidly iron and steel is substituting wood in modern house construction. The Bostwick steel lath is a good instance of how far-reaching this change of material has gone, and a brief description of the same will serve as an illustration of the progress made in the methods of adaptation. This lath is made in sheets from 9 to 30 inches wide and 8 feet long, which are corrugated longitudinally, and between the corrugations slits, at alternate intervals, are cut and so expanded as to form loops of about an inch long that project on the exposed side of the sheet. It can readily be understood that the applied plaster passes under and through these loops thus forming a double anchorage to the mortar. The advantages of such a plaster anchorage are apparent, not the least of which, outside of the suggested fireproof qualities, are the ease and rapidity with which it may be put on and the much smaller amount of mortar required for the same space than under the wooden lath method. Then, too, it is affirmed, there is less liability of the plaster after it is put on to crack or jar off, while more than as much more work can be turned out in a day than by the old usage. How well this substitute for wooden lath is taking with the building public the just completed new plant at Niles, Ohio, by the Bostwick Steel Lath Company, with its capacity of fifteen tons daily, is in evidence as well as this large capacity is the fruitage of a patronage extending all over the union, and bidding fair to tax it to the uttermost.

THE INLAND ARCHITECT has had occasion to call attention in past months to the merits of the Gardner sash balance and would now call attention to the fact that the company is supplying an aluminum bronze ribbon, where parties wish it, and is prepared to manufacture the balance ribbon to match the different styles of hardware on the market. The company's "ad," illustrating this latest popular window anchoring device, will be found in the pages of this journal. The outlook is that it is meeting with universal favor among house-owners, who are caught with its simplicity, strength and neatness of appearance.

WE call your special attention to the advertisement of A. S. Aloe & Co., of St. Louis, among the largest and most complete architects' supply houses in the country. Their



new "Transparent Triangles and T Squares" are just the thing required by all draftsmen. The great beauty of them, is, on account of their being transparent, you can see your drawings before making your line and know exactly what you are doing; not like the old principle, of working in the dark. The "T" squares of this material have a mahogany center with the transparent edges, also enabling you to see your work clearly and distinctly. They are made with Deane's Patent Adjustable Head, so that there is no necessity of saying that the "T" square is not true, as you can adjust it to any board. Their stock of drawing papers is one of the most complete in the states. Their paper is selected for the wants of the architect and is first quality in every respect. They also carry a complete stock of drawing instruments in cases or in separate pieces, every article warranted. Aloe's New Builder's Level, it is claimed, is the best instrument of the kind made. They publish an illustrated catalogue containing about three hundred pages which will be sent on application.

SCIENCE has established the fact that the rotting of timbers is due to certain microbes that come into existence through and thrive in the nitrogenous and albuminous concomitants of all woods. That many attempts have been made to reach and do away with these timber-destroying forms of life is of common knowledge, and that, while some of them approximated the goal sought for, none were of an every-day practical value, owing chiefly to the expensiveness of the formulæ. However, it appears in these latter days the great desideratum has been reached in the discovery of a wood stain called "carbolineum avenarious," which not only effectually removes the conditions whereby these microbes are possible but estops them from generating in any timber to which it has been applied. Moreover, it is a comparatively inexpensive preparation and as easily applied as a coat of whitewash would be. It is manufactured by the Carbolineum Wood-Preserving Company, of Milwaukee, Wisconsin, and is being rapidly introduced in all the building centers, where it has found warm friends among architects and builders. The company has recently established a branch headquarters at Chicago in the Oxford building, under the management of Mr. H. Starck, and probably others will follow in other leading cities.

ARCHITECTS and owners of buildings interested in the fireproof construction of buildings will be interested in an announcement made by the Cincinnati Corrugating Company, of Piqua, Ohio. They say they are now ready to fill promptly orders for iron and steel shutters and doors, corrugated and plain, in gauges as heavy as No. 10 or 8. Corrugated materials have long been recognized as one of the best forms for the manufacture of these goods, as the corrugations not only give increased rigidity but also allow for contraction and expansion. They also cover wooden shutters and doors with flat painted sheets, either plain or with corduroy corrugations, 3-16 inches in width.

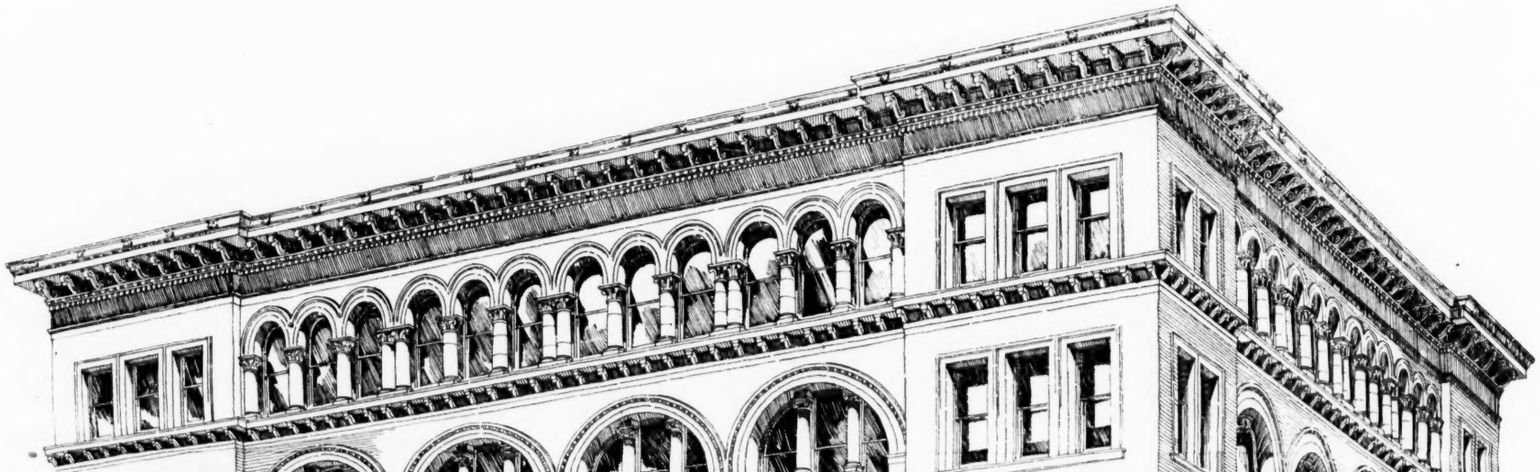
THE A. A. Griffing Company, New York, Chicago and Philadelphia, has just issued a large quarto illustrated catalogue and price list of the Bundy steam and hot water radiators, a well-known specialty of the publishers. It is handsomely bound in muslin-covered boards and contains in the neighborhood of three hundred pages of such descriptive matter concerning the apparatus named as will be appreciated by architects and steamfitters who delight in books of ready reference. It is an expensive book, in a sense, to the company, as the paper is of a high quality and the illustrations of superior artistic merit. In a word it is gotten up as a special publication for the use of architects and steamfitters, and everyone following these crafts should have their names listed with the firm in order to receive a copy.

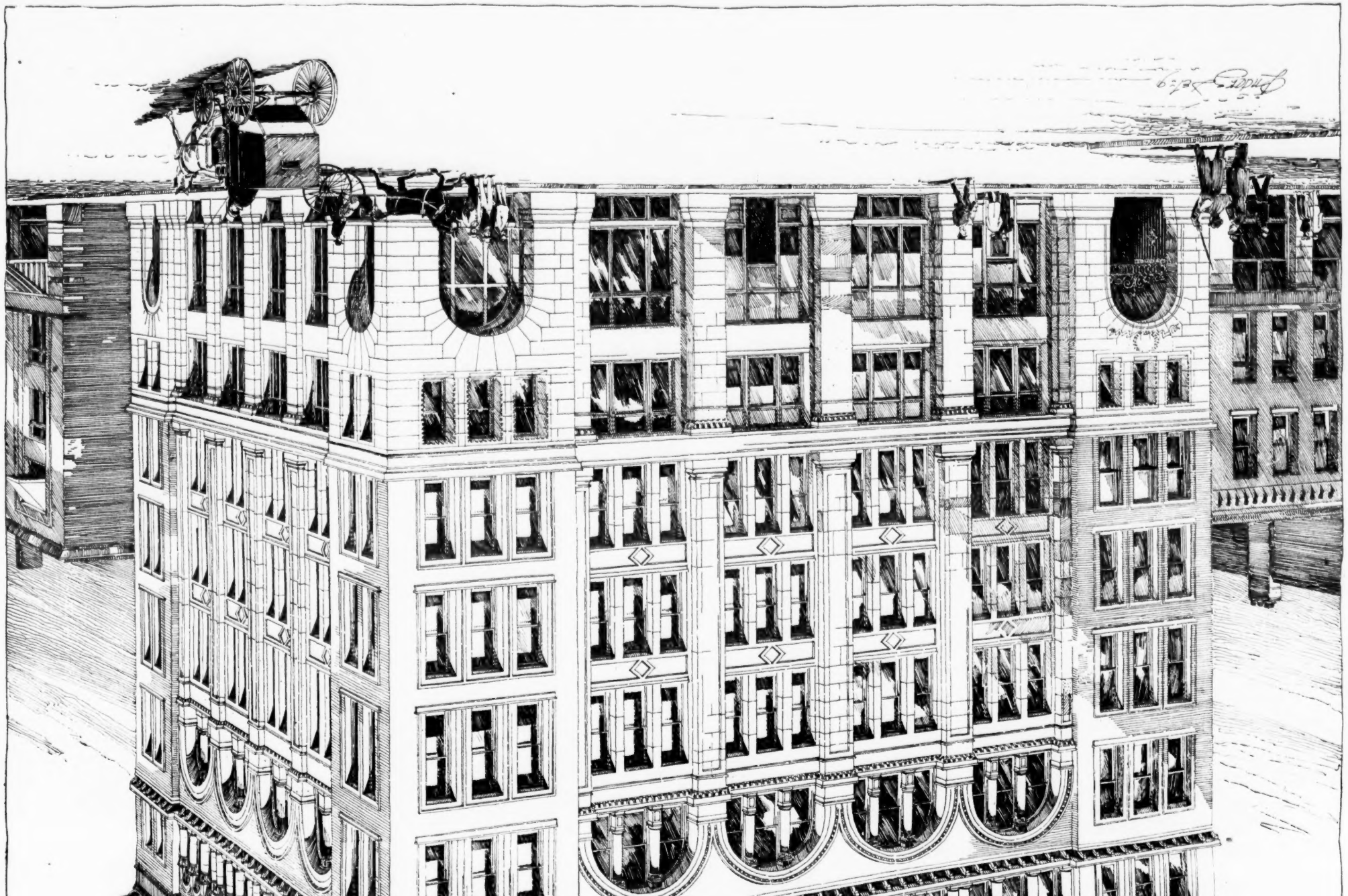
Railroad Notes.

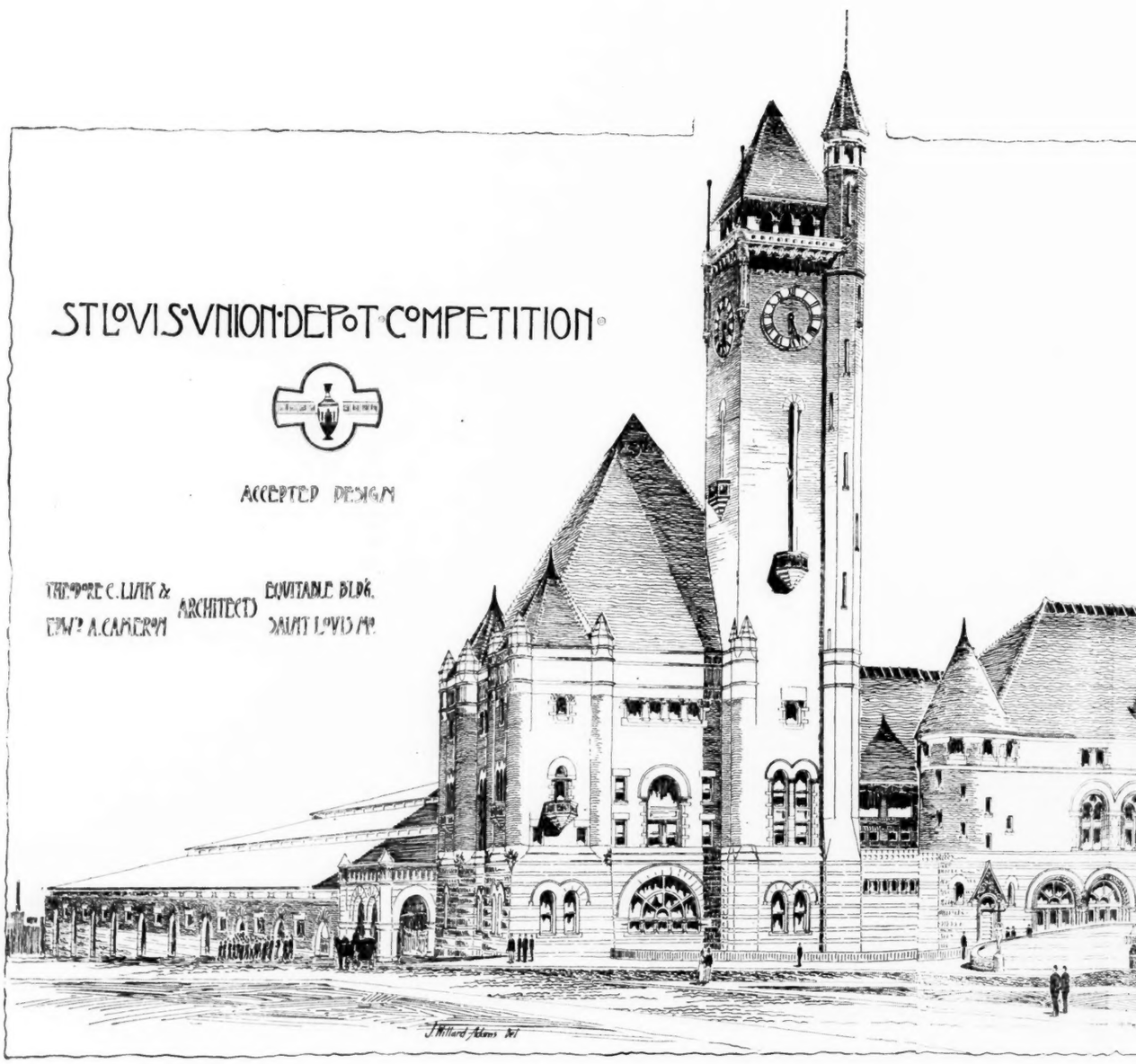
FIGURE IT OUT FOR YOURSELF.—It is not an example in arithmetic, neither is it a problem in geometry, but it is simply this, that in figuring out a route for your summer vacation, the delightfully cool summer and fishing resorts located along the line of the Wisconsin Central, among which are Fox Lake and Lake Villa, Illinois, Waukesha, Cedar Lake, Neenah, Waupaca and Ashland, Wisconsin, come vividly to view. Wisconsin has, within the last five years, become the center of attraction for more pleasure-seekers, invalids, hunters and fishermen, than any other state in the Union, and each visit increases the desire to again see the charming landscapes, breathe the balsam fragrance that is a part of the invigorating atmosphere, wander through the colonnades of stately pines, and hook the speckled beauties with a hand-made fly. Pamphlets entitled "Fox Lake" and "Summer Outings" may be obtained from Louis Eckstein, General Passenger and Ticket Agent, Wisconsin Central lines, Chicago, Illinois, or George K. Thompson, City Passenger and Ticket Agent, 205 Clark street, Chicago, Illinois.

GRAND EXCURSION TO TORONTO OF THE NATIONAL EDUCATIONAL ASSOCIATION, JULY 8 TO 15 INCLUSIVE.—The Chicago & Grand Trunk in connection with the Grand Trunk railway is recognized as the only first-class Pullman and palace dining car route to Toronto. These companies have secured one hundred Pullman palace sleeping cars to be used upon the occasion of the above excursion, which will secure to its patrons every possible comfort without crowding. Tickets will be sold at the rate of single fare for the round trip, plus $2 membership fee, July 8 to 15 inclusive, good to return until July 22; but by following instructions on the face of the ticket they will be extended to September 25. Hundreds of attractive trips can be made from Toronto at rates of single fare and less for the round trip. Apply to agents of the Chicago & Grand Trunk railway for some of this company's magnificently illustrated advertising matter giving full particulars of this grand excursion, or to W. E. Davis, General Passenger and Ticket Agent, Chicago & Grand Trunk railway, Chicago.

LIBRARY AND OFFICE BUILDING
FOR THE ST. LOUIS BOARD OF
PUBLIC SCHOOLS. ISAAC S. TAYLOR ARCH'T. ST. LOUIS, MO.



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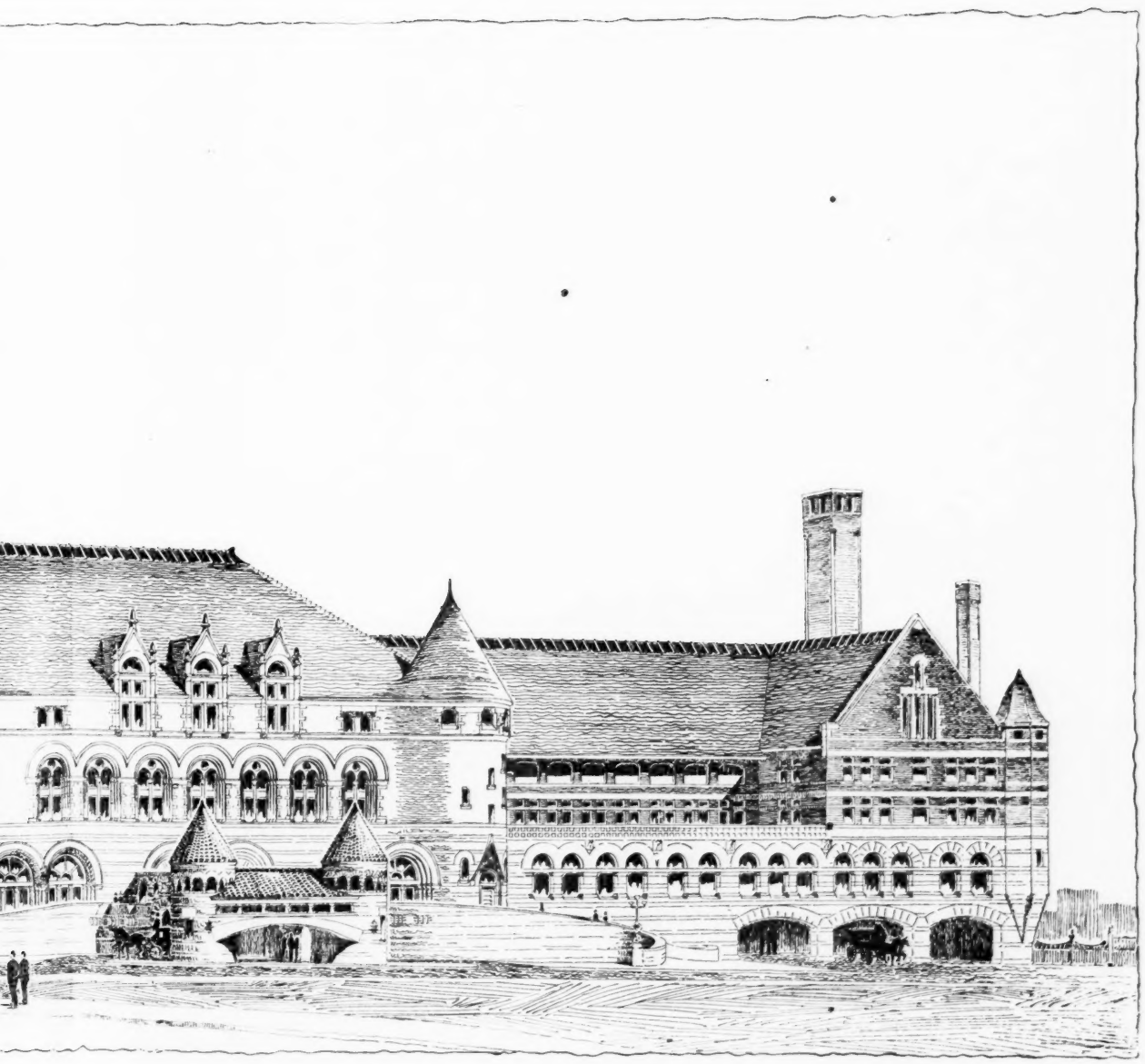

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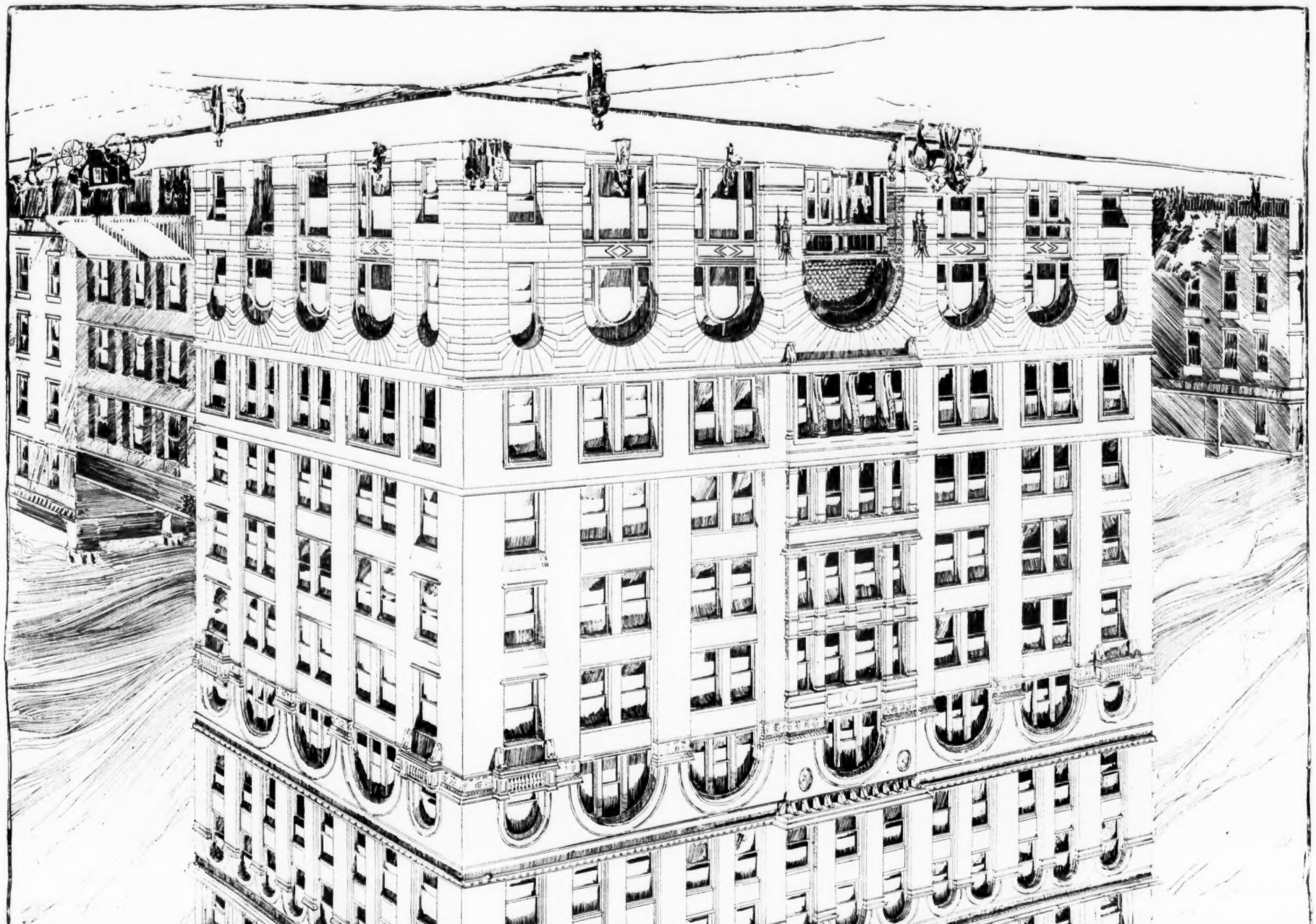
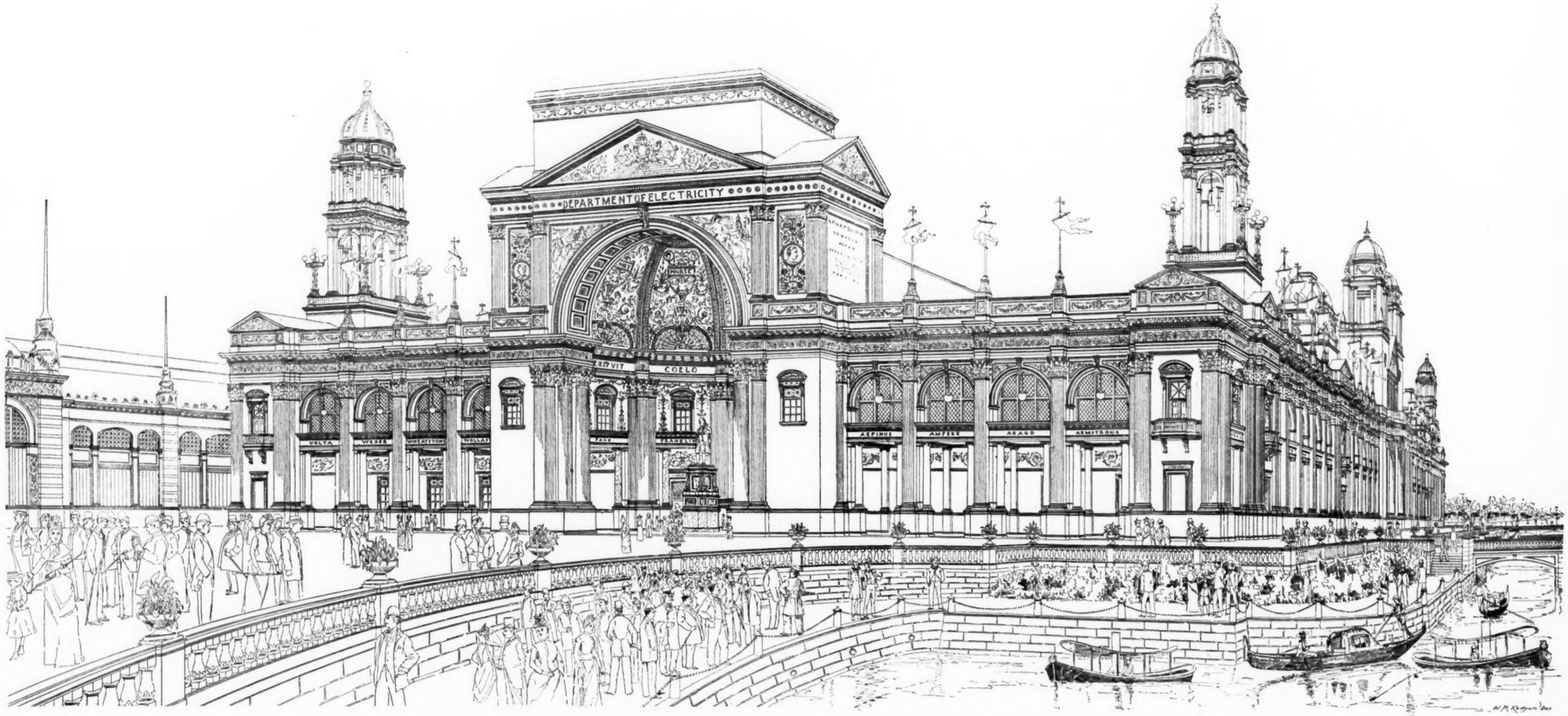
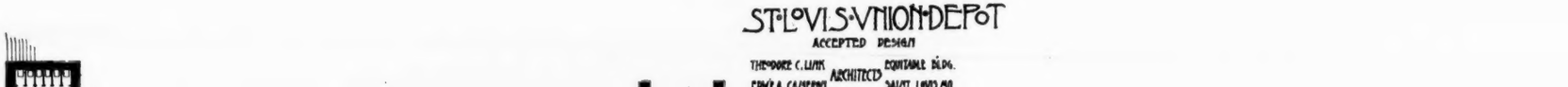




PERSPECTIVE VIEW OF ELECTRICITY BUILDING, WORLD'S COLUMBIAN EXPOSITION, DEPARTMENT OF CONSTRUCTION, JUNE, 1891.

VAN BRUNT & HOWE, ARCHITECTS, KANSAS CITY.



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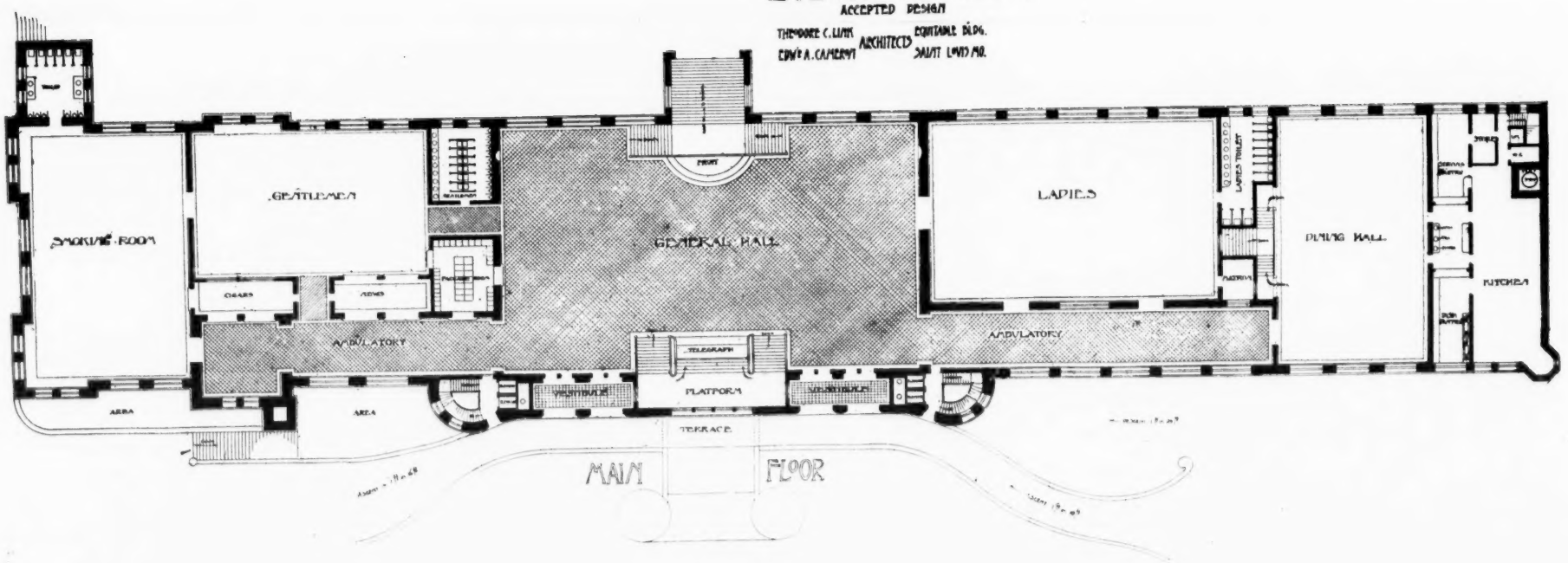

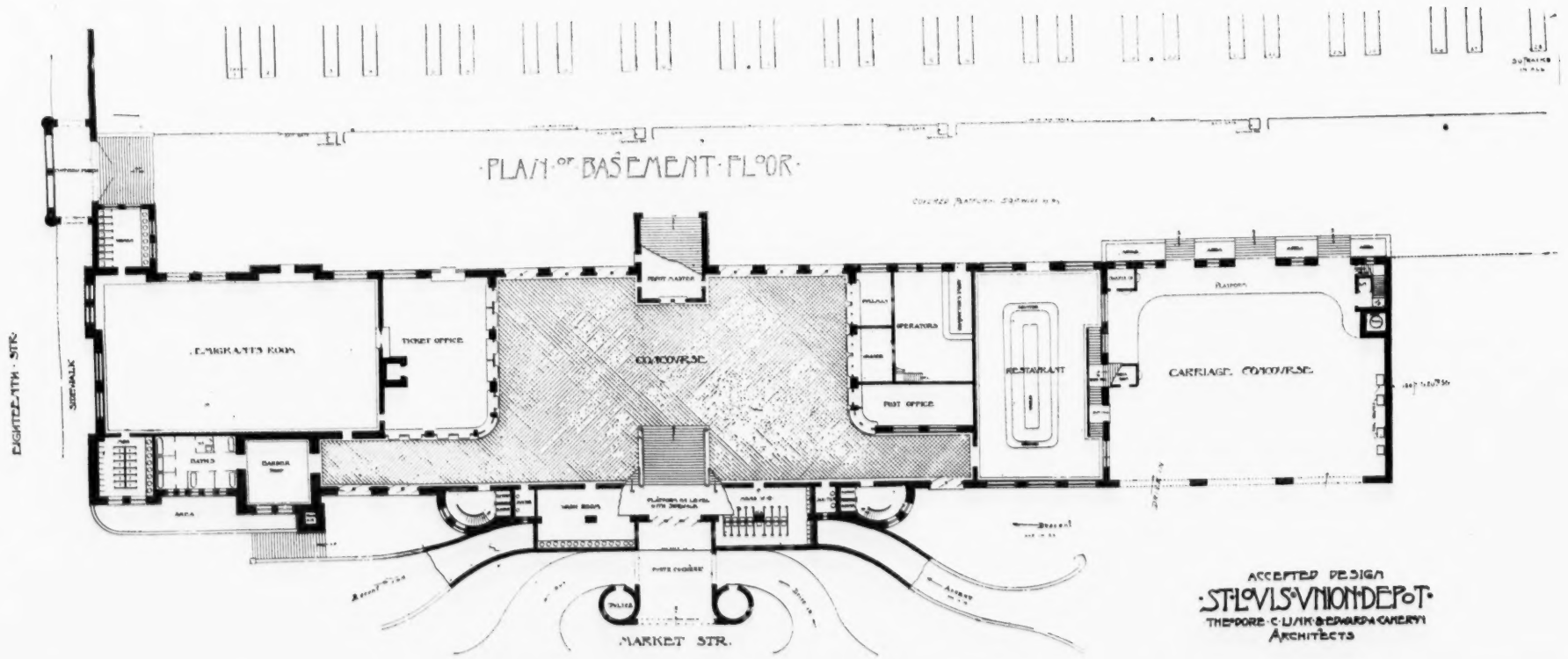

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