THE AMERICAN ARCHITECT

VOLUME CIV WEDNESDAY, JULY 9, 1913 NUMBER 1959

GENERAL VIEW OF PARIS

AMERICAN CITY PLANNING—PART VI

By FRANK KOESTER, *Consulting Engineer*

BLOCK PLANS AND BUILDING REGULATIONS

ONE of the gravest faults of American cities is to be found in the interminable uniformity of the treatment of blocks. The rectangular block system so much used, offers little opportunity for variety in the block plan, and in addition, architects have made little or no attempt to introduce any variant in their treatment of the problem.

The fault is largely due, not so much to the architect as to the speculative contracting builder, who runs up block after block of houses, all absolute duplicates. The public is itself to blame for this condition, through its failure to have suitable regulations adopted.

The architect, however, should do all in his power to have the block plan suitably varied, for if the benefits are pointed out to the builder, he is likely to adopt the suggestions in his own interests.

Aside from the æsthetic effect to be obtained, one of the most difficult of the problems in connection with the design of buildings in congested or closely built up blocks, is to provide light and air for the

ART MUSEUM, DUSSELDORF

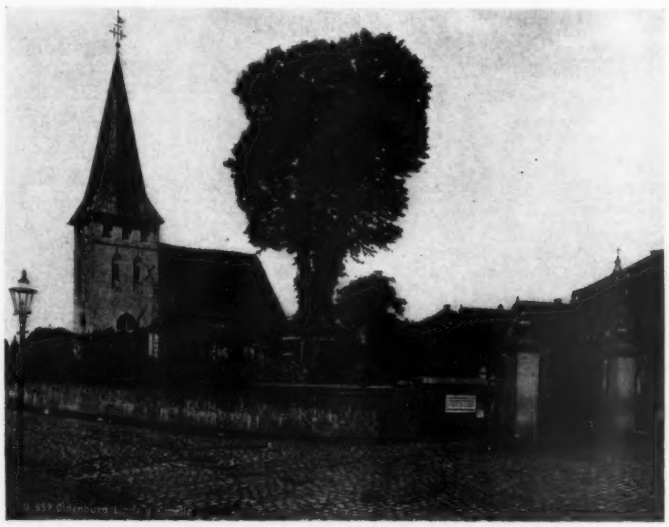
rear rooms. To obtain a suitable circulation of air is even more troublesome than to secure adequate light.

A method, adopted with much success, for securing direct circulation of air in blocks is to leave openings at the ends of the blocks, as shown in some of the accompanying illustrations, which are of blocks in English and German cities. The shaded portions represent the buildings, the black lines are the lot divisions and the white portions are gardens or open spaces.

In Plan A, the houses face all four sides of the block but there are four openings at the rear of the houses on the ends of the block. Blocks of this kind are found in cities in England, Holland and in some German cities, notably Bremen, while an occasional New York block has sometimes one or more of such openings, left however by accident.

Plan C represents a block in which the houses only face the sides of the block, there being no houses at the ends. Such blocks are required by ordinance in the cities of Mannheim and Posen, in Germany.

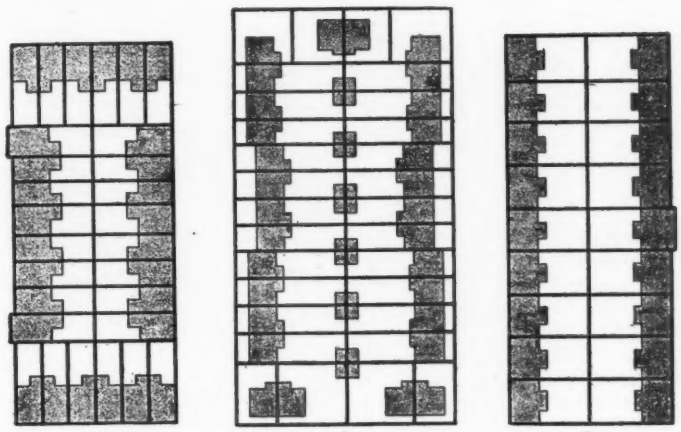
Plan B is suggested as an ideal block by the Society of Architects of Berlin. The houses on the sides of the block are set back from the building line slightly, affording space for lawns. There is a large free space at the ends of the block, thus giving ample circulation of air for the entire block. It will be seen that the block is well laid out, with offsets in the façades of the buildings, affording a variety as compared with blocks having unrelieved straight lines. A suc-



VIEW IN OLDENBERG, GERMANY
A DOMINATING TREE IS THUS OFTEN USED IN EUROPEAN CITY PLANNING AS A FOCAL POINT

cession of such blocks would undoubtedly present a most satisfactory effect.

Plans D, E and F illustrate blocks in which the buildings are arranged singly or in groups of two, three or more. Each building and group is of a different design. The whole effect is full of variety and interest, especially in the case of the blocks which are not rectangular in form. Plan D is a block in Karlsruhe, Plan E is in Zurich and Plan F is in Dresden.



(*A*) (*B*) (*C*)

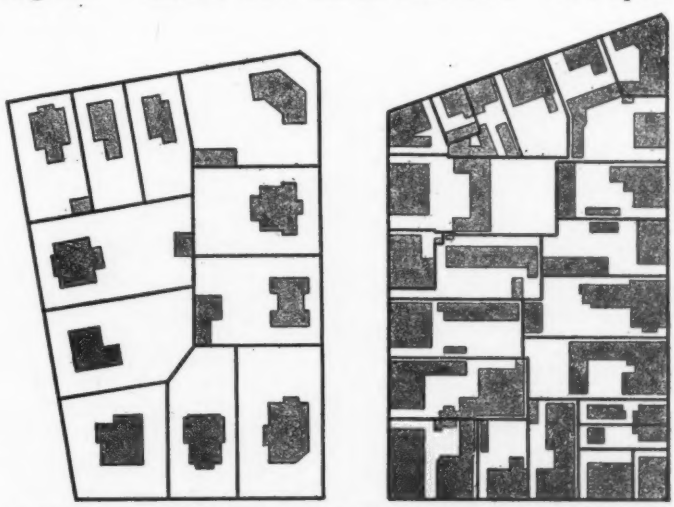
(*a*) TYPE OF HALF OPEN SYSTEM, IN ENGLAND, HOLLAND AND BELGIUM. (*b*) BLOCK WITH PARTY OPEN SIDES. (*c*) BLOCK WITH OPEN ENDS, AS FOUND IN MANNHEIM AND POSEN, GERMANY.

While the heavy lines in the plans indicate property lines, the lots are not, as is so often the case in American cities, separated by tall board fences, shutting out light and air and offering opportunities for the collection of rubbish and the growth of weeds. The separation of the lots is by iron railings or mesh netting fences. The blocks with well kept lawns and flower beds are in reality small interior parks, pleasing alike to all the residents.

Since, further, as in many German cities, the backs of the houses are treated in just as elaborate an architectural manner as the street façades, the view of the interior of a block is in every respect similar to that of a small public park, if not superior. There are thus no back yards in the American sense, with their ugliness and often squalor. In the interiors of the blocks are run narrow delivery wagon streets, a convenience very different from the alley of the western American city. As the interiors are planted with trees and have grass plots and flower beds, as just described, and as floral decorations are required by law on the window sills of the windows looking out upon such interiors, it will be realized that the block interiors of German cities have been developed to a point undreamed of in this and other countries.

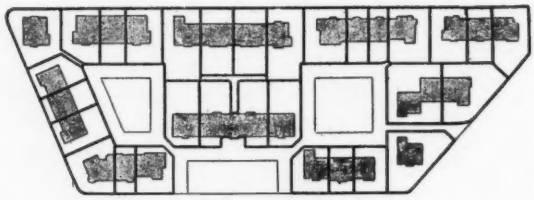
What has been suggested as to the arrangement of centers, zones, streets and blocks is largely in reference to the plan itself, but of equal importance in city planning, is the element of elevation, and the æsthetic principles of this essential are similar to those of the other elements of design; that is to say, in the elevation of buildings, the laws of harmony, variety, contrast, symmetry, balance and the like must be observed.

In earlier city planning, when churches were the highest structures, they were taken as the principal feature of the sky line. Other sections of the city and the buildings therein were scaled therewith. The spire



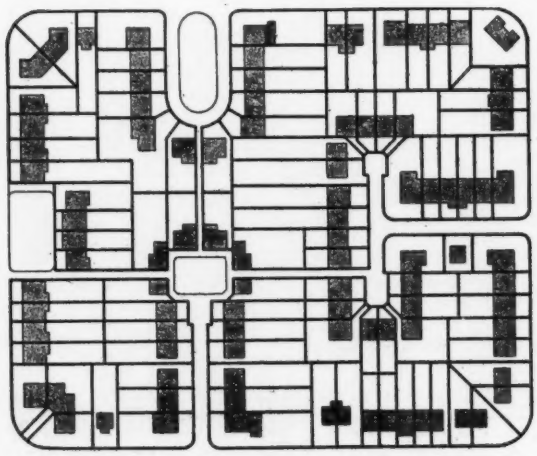
AT LEFT, OPEN SYSTEM WITH SMALL OUT BUILDINGS. *AT RIGHT*, OPEN SYSTEM WITH NARROW PASSAGEWAYS AND IRREGULAR REAR BUILDINGS, STUTTGART, GERMANY.

dominated the town and showed to the traveler from the distance, the presence of the city. Where several churches existed in a town, the spire or spires of one was made sufficiently high to dominate the others. The same principles still hold good, and are being followed in present Continental city planning. The accompanying silhouette of the skyline of Cologne is an excellent illustration of the principle, which, however, is not applicable in the United States, owing to the evolution of the skyscraper.



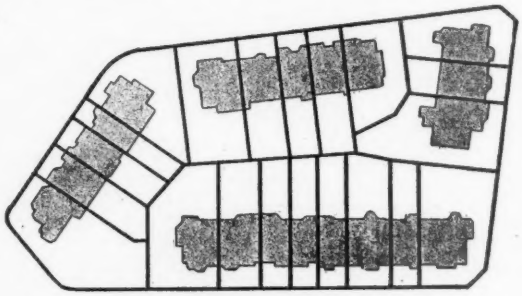
E. ZURICH

In planning streets or avenues their length and width should be determined, and having been limited on the principles already pointed out, the height of the buildings, and the skyline, should be considered. The street or avenue should be treated as a unit, and some building on it should dominate the others. There should be variety in the height of the buildings to afford balance to the principal structure, and to give the necessary contrast throughout the avenue. The main building should, ordinarily, be at one of the closures of the street, although in some cases it may be placed at some other point.



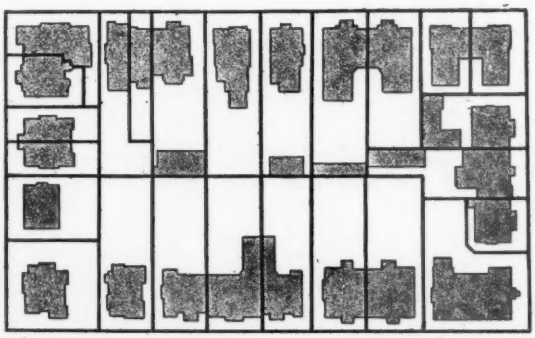
A GROUP OF BLOCKS SUITABLE FOR A GARDEN CITY, WITH AMPLE OPEN SPACE AND INTERIOR COURTS

In many cities, hard and fast rules have been laid down as to the heights of buildings. While in a general way, such rules



F. DRESDEN, GERMANY

are good and accomplish many useful purposes, if they are not applied with judgment and adapted to the circumstances, they may produce ill effects. In Paris, for example, the regulations as to the heights of buildings have had the effect of producing in many streets, a monotonous result and the skyline is unusually uninteresting. Too much blame should not be placed on the regulation however, as in some Parisian streets, under the same regulation, monotony



D. HALF-OPEN SYSTEM, KARLSRUHE

has been avoided. In New York too, where there is no regulation, endless rows of brownstone dwellings of the same height and exactly the same skyline have been erected producing veritable triumphs in monotony. It is, nevertheless, impossible to produce the best effects of variety when a procrustean regulation as to height is in effect.

Instead of an inflexible ordinance in regard to the heights of buildings, a city

EFFECTIVE ILLUMINATION BY MEANS OF AN OPEN ARC LIGHT, KAISER FREDERICK MONUMENT, CHARLOTTENBURG

should have a board of architects and engineers with authority to pass on the design of all buildings, and none should be erected without its plans having first had the approval of this Board. With ample authority, the board could accordingly refuse to issue building permits for structures not in conformity with the balance of the street and only such buildings permitted to be higher than others as would improve the æsthetic appearance of the street.

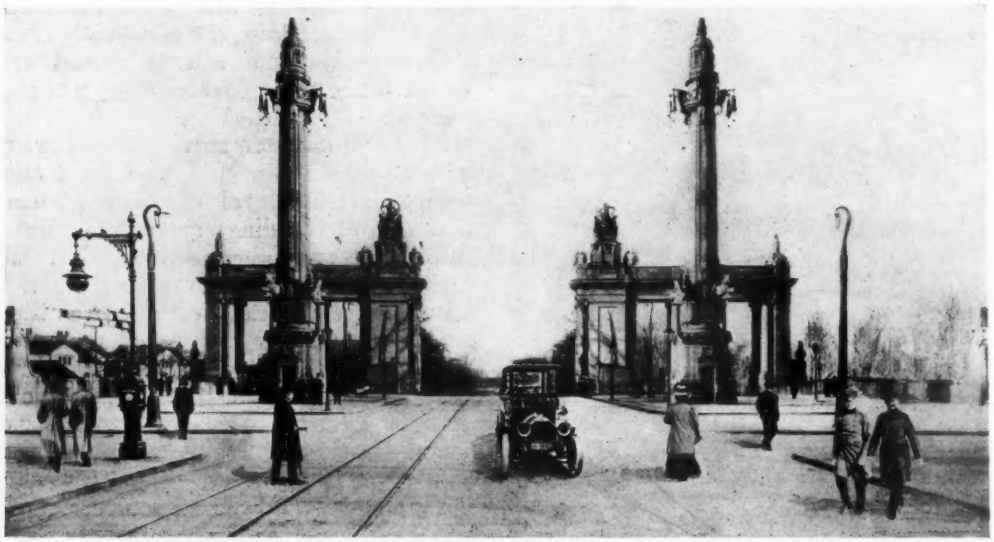
That it is absolutely necessary to have a certain variety in the heights of buildings and their façades, is evident when the effect of uniformity, such as the Royal Crescent at Bath, England, and Regent's Quadrant, London, is observed. In these examples, though the style is substantial, the façades are all similar, the cornices alike and the skyline unvaried. An effect of monotony is thus produced. Even if it had been the intention of the designers of these buildings to have them regarded as an architectural entity, and not as separate structures, a most unsuccessful result was produced, particularly as in each case the buildings, being on semi-circular streets, afforded unusual opportunities for æsthetic treatment. A street which is the segment of a circle, or which has some other form of curved plan, can be made much more pleasing than a straight street, as the façades appear to better advantage and the whole street is a unit and more picturesque. For the pedestrians, the constantly changing view absorbs the attention and enables the distance to be covered with less sense of fatigue.

Where there is no regulation of the heights of buildings, as in New York, not only the utmost architectural disorder ensues and a jungle of buildings springs up, but most unjust commercial conditions arise. Buildings adjoining a skyscraper lose a large part of their rental value, while the skyscraper itself, never proves very remunerative, the returns on the money invested varying from two per cent. to seven per cent. and averaging not more than four per cent., seldom reaching five per cent. In many cases, the skyscraper, especially when in the form of a tower structure, is put up largely for advertising purposes, so that the rental revenue derived is not the only return. The skyscrapers set a higher standard of office accommodation and thousands of firms must measure up to it that cannot

AN EFFECTIVE OPEN ARC LIGHT ILLUMINATION IN BERLIN. LAMPS ARRANGED TO SHOW THE BUILDING TO BEST ADVANTAGE

afford to do so. As they make no large profits for themselves and depreciate the value of other property, it must be apparent they are by no means a commercial blessing.

A more equitable plan than either absence of regulation or too rigid regulation would be, in addition to the flexible requirements of the board of civic engineers suggested, the imposition of a progressive tax on the height of buildings, increasing the rate for every floor to such an extent that tall buildings would bear a large additional burden of taxation.



MONUMENTAL DEMARKATION AT CHARLOTTENBURG BRIDGE
SHOWING PILLARS FOR ELECTRIC ARC LAMPS, AND FIRE ALARM SIGNAL AT LEFT

As public buildings are comparatively few in number, the only way, as has been indicated, by which the appearance of the streets can be given desired characteristics, is through the regulation of private building enterprise. Opposition to such regulation can have no foundation other than that of private interest, nad no outcome except confusion and injustice.

That such regulation is feasible is indicated by those imposed on theatres and the fireproofing regulations of buildings of certain classes. No good argument can, in fact, be advanced against these regulations.

A form of encouragement to private owners to erect new buildings on unimproved property, which proves effective abroad, is that of tax exemption for a term of years on a new building. This could be carried into effect in the United States by suitable boards of officials who would, for example, select certain unimproved lots or sections or those covered by small or old buildings, and declare that if new buildings were erected, the owners would be exempt from taxation for a period of five years from the time of the declaration. The owners would thus have an incentive to erect the new building as promptly as possible, since delay would give them a shorter term of exemption from taxation.

The same principle is already carried out in another form in many American cities, through giving free sites to factories and similar tax exemption inducements.

Perhaps the regulations most generally in effect abroad are those which limit the heights of buildings. Such limits are customarily placed sufficiently low, so that the value of the land will cause all buildings to be run up to the full limit of the regulations.

The height of buildings is generally limited in proportion to the width of the street. While the proportion differs somewhat in different cities, the regulations of Paris, which are as follows, are representative:

In streets less than twelve meters (thirty-nine feet) wide the height of buildings must not exceed the width of the street by more than six meters (nineteen and one-half feet). For every additional width of a meter in the street, a quarter of a meter (nine and seven-eighths inches) may be added to the height of the building until a limit of twenty meters (nearly sixty feet) to the eaves is reached, above which no building may be erected.

Thus, a building on a narrow street may be fifty-nine feet high, while on a wide street but sixty-six feet, a difference of only seven feet. This in reality is insufficient to afford the necessary variety between streets, since all the streets of a city should not be confined to buildings of practically the same height.

The regulation as to the height being taken to the eaves has the effect of modifying the architecture of the buildings, produc ng mansard roofs, which gain an additional story without violating the code.

In German cities the regulat on of the height of buildings is somewhat similar to those of Paris. In Berlin, the height varies from eighteen to twenty-four meters or from fifty-nine to seventy-nine feet. The minimum height to which buildings are limited varies in different cities. In Wiesbaden, Bremen and Barmen it is fifteen meters (forty-nine feet), in Hanover, fourteen and one-half meters (forty-six and one-half feet), in Düsseldorf and Breslau, thirteen meters (forty-two and two-thirds feet), in Munich, thirteen meters (thirty-nine and one-third feet), and in Kiel and Cologne eleven meters (thirty-six feet), which is the minimum on the narrowest streets. It is greater however, on wider streets.

Not only is the height of buildings regulated in German cities, but also the maximum and minimum number of stories, which depends, however, on the zone in which the building lies. In Berlin and Hamburg, the greater part of the buildings must be either four or five stories in height. Throughout the Grand Duchy of Baden, the number of stories runs from three to five stories, in the suburbs and outlying districts three being the maximum and in the business districts five. In Munich, Cologne, Düsseldorf, Halle and Breslau, all buildings must be not less than two stories in height, but in Bremen buildings of one story may be erected. In Baden, houses in the country are not permitted to be over two stories in height.

The fixing of the limitations as to the heights of buildings should be undertaken only after the most careful consideration, since real estate values are limited and the city caused to grow in an altogether different manner than if not regulated. Once such regulations are fixed, they should not be changed except for the most important reasons, for buildings once having been erected under the regulations, any change will have the effect of discrimination either against the new ones or the old ones.

The question of building regulation is being regarded with increasing interest by American cities, but the regulations applied in European cities cannot be followed very closely in this country. American cities have entirely different problems to solve and different conditions to meet.

The question of regulation should be considered by each municipality for itself, and each should have its own special code, prepared by experts, and suited to its conditions. Such regulations should be reasonably flexible and adapted to secure the greatest benefit to the city and not to retard it in its growth. This is the essence of the planning of a successful city and the welfare of its inhabitants both material and æsthetic.

THE CURRENT ARCHITECTURAL PRESS

"SOME Suggestions as to the Making of Working Drawings," by Mr. H. Van Buren Magonigle, is the leading article of *The Brickbuilder* for May. In too many offices, methods that are fondly termed "Bohemian" are really just slovenly, and the advice of Mr. Magonigle should clear the springs of inspiration and not stop their flow.

In his office, all drawings, small and large-scale and full size, are made on sheets uniform in size for each job. It would seem that a great saving in time and paper is effected by his method of making large full size drawings. A cornice, for example, is roughed out in full on manila and when completely studied is broken up, large plain surfaces and large projections reduced, and the correct dimensions figured. Such a drawing must not, of course, be condensed beyond the point of legibility and should always be accompanied by a complete drawing at small scale.

Each sheet while containing nothing that is superfluous, should be so complete and explicit that the contractor need not ask questions or even consult the specifications for the execution of the work.

The lettering that must be a part of every sheet, especially the architect's name and address, and for a large job the main title as well, are printed in the office from zinc cuts in printers' ink.

Drawings for current use on any one job are bound in a binder consisting of two maple slats with three brass thumb-screws, and kept on a rack. When the job is completed, the drawings for that job are merely transferred to an upper rack, out of the way for the present but precisely as accessible fifty years hence. This system seems to be a great improvement over the method of filing loose sheets in drawers,

(FROM *THE BRICKBUILDER*)

RITZ-CARLTON HOTEL, PHILADELPHIA, PA.
MR. HORACE TRUMBAUER AND MESSRS. WARREN & WETMORE, *ASSOCIATE ARCHITECTS*

(FROM *ARCHITECTURE*)

CORRIDOR, WOOLWORTH BUILDING, NEW YORK
MR. CASS GILBERT, *ARCHITECT*

or of rolling them up and storing them in paper tubes, and no doubt the reading of this article will lead to a change of methods in many offices.

Mr. R. Clipston Sturgis has contributed a letter to this issue explaining his practice of making professional charges. His proposition is, that of two buildings costing the same to erect, one may require twice

(FROM *THE INTERNATIONAL STUDIO*)

HAMPTWORTH LODGE, WILTSHIRE
MR. E. GUY DAWBER, *ARCHITECT*

as much attention from the architect as the other and he should therefore receive greater compensation for his services. This principle the Institute has endeavored to recognize as far as seemed practicable under existing conditions of a percentage charge by establishing a proper *minimum* charge leaving the architect and the client to determine a higher percentage for work of greater complexity.

Mr. Sturgis, it appears, makes a charge of a specific amount for a professional fee, in the nature of a salary based on the time estimated for the completion of the building. To this is added twice the amount of the draftsmen's salaries, to cover general office expenses.

The percentage method, as now generally practiced, although far from ideal, has the very desirable features of uniformity, which Mr. Sturgis' system lacks. We question the advisability of returning to the former practice of making the matter of charge for services the subject of question or negotiation.

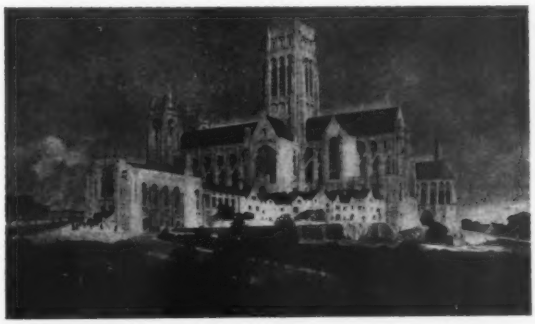
Among the illustrations in this issue are the Church of the Ascension, New York City, Ludlow & Peabody, Architects, and the Ritz-Carlton Hotel, Philadelphia, by Horace Trumbauer, associated with Warren & Wetmore. The University Club at Washington, D. C., illustrated in this number and in *The Western Architect* for June, appears to have attracted, or possibly have been brought to, the attention of publishers generally, as the same illustrations were published simultaneously by THE AMERICAN ARCHITECT, issue of June 18th.

The widely discussed Woolworth Building, Cass Gilbert, Architect, is further illustrated in the June issue of *Architecture* and attention is directed to the careful preservation of scale between interior and exterior.

The principal text is an article on "The Law of Architect, Owner and Contractor," by Hon. Clinton H. Blake, Jr., of the New York Bar. Court decisions of specific cases are cited, in an endeavor to make clear to the architect his legal status and limitations which *Architecture* believes are little understood by the profession. Readers of THE AMERICAN ARCHITECT have for years had the benefit, almost weekly, of "Recent Legal Decisions" affecting the profession.

Other illustrations and text of this number will be found listed in our usual index.

(FROM *THE ARCHITECTURAL RECORD*)



CATHEDRAL OF THE INCARNATION
BALTIMORE, MD.
MESSRS. CRAM, GOODHUE & FERGUSON, *ARCHITECTS*

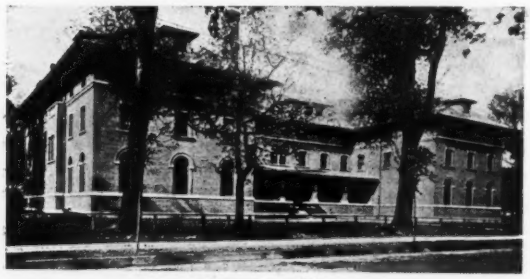
The Cathedral of the Incarnation at Baltimore, Md., Messrs. Cram, Goodhue & Ferguson, Architects, is described and illustrated in *The Architectural Record* for June. The plans, elevations and perspective sketches are of considerable interest, and lead us to hope that as the work nears completion these illustrations may be sup-

plemented by construction drawings and photographs.

The Avery Architectural Library at Columbia University, McKim, Mead & White, Architects, illustrated in THE AMERICAN ARCHITECT, November 20th, 1912, is here again illustrated, and the solution of the problem discussed by Mr. C. Matlack Price. "Notes of the Collection of the Avery Architectural Library" are written by Mr. George Leland Hunter, and several etchings from rare editions are reproduced.

Recent domestic architecture in England is illustrated in the June issue of *The International Studio* and suggests the de-

(FROM *THE WESTERN ARCHITECT*)



GIRLS' DORMITORY, UNIVERSITY OF MINN.
MR. CLARENCE H. JOHNSTON, *ARCHITECT*

lightful possibilities of the well-studied residence.

"Contemporary Art and the Carnegie Institute," are discussed by Christian Brinton and well illustrated.

The Minnesota State Prison at Stillwater, Clarence H. Johnston, Architect, which is modestly stated to have been pronounced the finest institution of its kind in the world, is rather fully illustrated and described in *The Western Architect* for June. The new Engineering and Medical groups of the University of Minnesota, Clarence H. Johnston, Architect, are also featured. The editorial article endeavors to show by specific examples that a professional fee of six per cent. is not too much and by that means repudiates current criticism of the "fat fees" paid to the State Architect, Mr. Johnston.

Other illustrations and text are of chiefly local interest, except the description of the University Club at Washington, D. C., previously mentioned.

Titles of other articles in "The Architectural Press" will be found in the index on another page in this issue.

DISCOVER LOST CITY OF THE ANDES

PROF. HIRAM BINGHAM, of Yale, announces in the *National Geographic Magazine* for June that he has had the superb good fortune to discover an entire city, 2,000 years old, a place of splendid palaces and temples and grim encircling walls, hidden away so thoroughly on the top of a well-nigh inaccessible mountain peak of the Peruvian Andes that the Spanish invaders of 400 years ago never set eyes upon it.

He calls it Machu Picchu. In his magazine article he states that, in his opinion, the city discovered by him is none other than the mythical city of Tampu Tocco, from which, according to Peruvian legend, issued a hardy tribe of warriors led by three brothers who conquered the entire region roundabout and founded the famous empire of the Incas, which, after flourishing for hundreds of years and reaching an astounding degree of civilization, was hurled into the dust by Francisco Pizarro. Whether this be so or not he does not know. But he is sure of one thing: that the ruins of Machu Picchu are surpassed in Peru by those of imperial Cuzco alone.

From burial caves the diggers took bones of men who died hundreds, perhaps thousands, of years ago, also bronze ornaments, earthenware utensils, and many other valuable things.

Inside the city the houses are crowded close together, but an extensive system of narrow streets and rock-hewn stairways make intercommunication comfortable and easy.

On entering the city, perhaps the first characteristic that strikes one is a large majority of the houses were a story and a half in height, with gable ends, and that these gable ends are marked by cylindrical blocks projecting out from the house in such a way as to suggest the idea of the

(*Continued on page 24*)

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THE ESTABLISHMENT OF A TOWN-PLANNING CHAIR

FAR-REACHING results, of deep significance to architects everywhere, are likely to ensue if a recently projected scheme to establish a chair of town planning in the University of London is successful. Especially interesting is it to note the character of the men who are fostering and are employed in the carrying forward of this movement in England, as compared with those who are most active in American city planning.

The idea is said to have originated with the Rt. Honorable John Burns, Labor Representative to Parliament. It has, however, the endorsement of such practical and influential men as Sir Aston Webb, F. R. I. B. A., architect of large public works, Sir Philip Magnus, an eminent scientist whose chief recreation is said to be tree planting, and Dr. William Collier, author, and physician to Radcliffe Infirmary, Oxford. Committees consisting of persons representing the different aspects of the question are now formulating a definite plan of action.

In America, town planning has enlisted chiefly the services of the architect, whose principal, if not only, care has generally appeared to be to provide a monumental civic center. More recently the skill of the engineer has been called upon to solve problems of transportation, water supply, street construction and sanitation. Mr. Burns, as Labor's representative, really a man of the people, must have in mind something of broader import than a half dozen acres of civic pomp with boulevards converging to its center.

What is the need of a town-planning school? Why should not the work be conducted by a corporate body of experts—an architect, a civil engineer, a landscape architect, a physician, and so on, each specially trained in his own particular field, with one of the number acting as directing chairman? The answer seems to be that, being a specialist himself, the chairman's general knowledge and authority would often be called in question, and to give him dictatorial power would be to dwarf the value of other experts' opinions.

The equipment of the graduate from a town-planning school, however, should be sufficiently broad to enable him to carry through successfully a small enterprise without the assistance of experts, or to make intelligent application of experts' recommendations to a large undertaking of which he is the director. The "master mason" has been superseded by the modern architect, who calls in expert engineering and other advice when needed. So, it seems probable, will cumbersome planning commissions eventually give place to the professional "town-planner," aided at times by special experts.

The general relations of factory, residential, business and city government districts, the layout of efficient thoroughfares, the park system, are but a few of the big problems which should be studied in a broad way. Proper housing conditions, with low rents, for the laboring classes are also properly matters for the town-planner's attention. The study of general sanitation and health conditions, street lighting and tree planting—all these and a dozen minor matters should be included in the curriculum of the student. Such subjects should be taught by practical experts, but at their head in the "chair" of town-planning should be a man, not "visionary" in the discredited sense of the word, but with the vision of a larger and broader humanity, a man of the character of Mr. George Cadbury or Mr. Joseph Rowntree.

THE PROPOSED TARIFF ON ART

THERE can be no doubt in the minds of a majority of thinking people that the proposed fifty years' provision in the new tariff bill, with reference to works of art, is an unwise measure. It is a curious and lamentable fact that Congress should insist on providing a protective tariff directed against the protest of the protected. For many years artists and artistic bodies have been insistent on "free art," and after a vigorous campaign they were successful in securing a tariff in 1909 that admitted art free whose origin could be proved to be more than twenty years old. It was hoped at the time that this bill was passed that it would not be long before even that mildly restrictive clause would be removed.

The Underwood Bill, as passed by the House, places paintings, not imported for utilitarian purposes, and sculpture which is the product of professional sculptors only on the free list without regard to age. The Senate Committee seeks by amendment to impose a 15% tariff on art "less than fifty years old." The House provision should prevail. The amount that would be collected by the proposed Senate amendment is too small for consideration.

Art should be free. It is for all, and its civilizing and elevating influence should be so apparent as to remove it from any political interference as to its unrestricted importation into this country.

DISCOVER LOST CITY OF THE ANDES

(Continued from page 22)

ends of the rafters. The wooden rafters have all disappeared, but the ring-stones to which they were tied may still be seen.

These ring-stones consist of a slab of granite, about two feet long and six inches wide by two inches thick, with a hole bored in one end, and were set into the sloping gable wall in such a way as to be flush with the surface, although the hole was readily accessible for lashing the beams of the house to the steep pitch of the gables. There were usually four of these ring-stones on each slope of the wall.

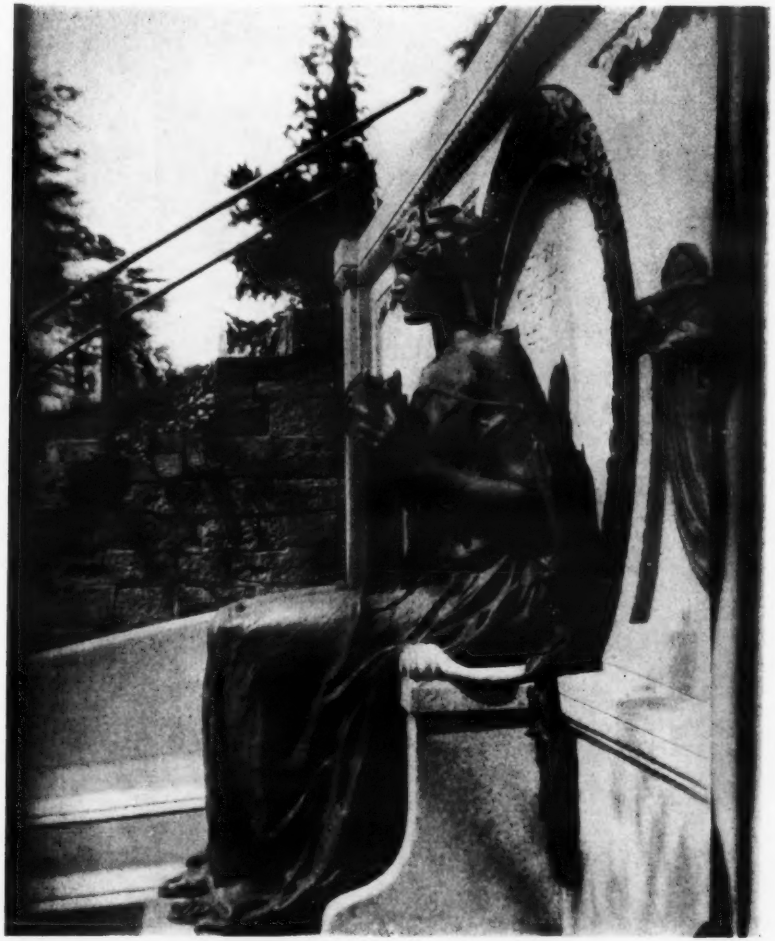
The next most conspicuous feature of Machu Picchu is the quantity of stairways, there being over 100, large and small, within the city. Some of them have more than 150 steps, while others have but three or four. In some cases each step is a single block of stone three or four feet wide. In others the entire stairway—six, eight, or ten steps, as the case might be—was cut out of a single granite boulder.—*Exchange.*

A RECENT LEGAL DECISION

ARCHITECT'S SERVICES—LIABILITY OF CORPORATION OFFICERS

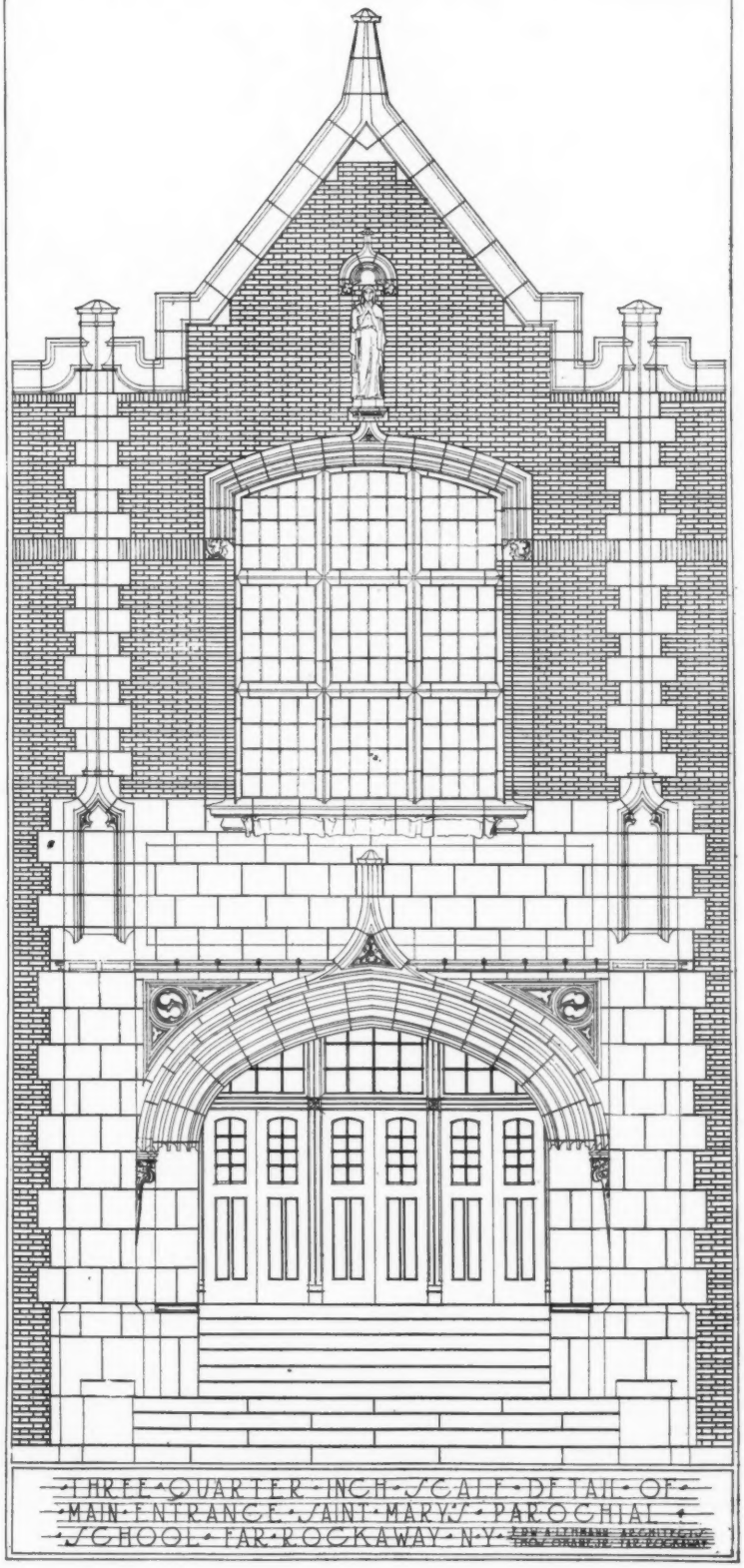
In an action for the remodelling of a theatre building for a corporation the question was whether the services were rendered at the request and direction of two individuals as managers and officers of the corporation and for it, or for themselves in their individual capacity, or without a disclosure that they were acting for the corporation. It was held that there was no evidence to show that the work was not done for the use and benefit of the corporation, or to show that its officers, in their individual capacity, either by express promise, or impliedly, promised or agreed to pay for the services, or in any manner assumed liability for payment of them.

Smith *v.* Orpheum Amusement Co., Utah Supreme Court, 125 Pac. 684.



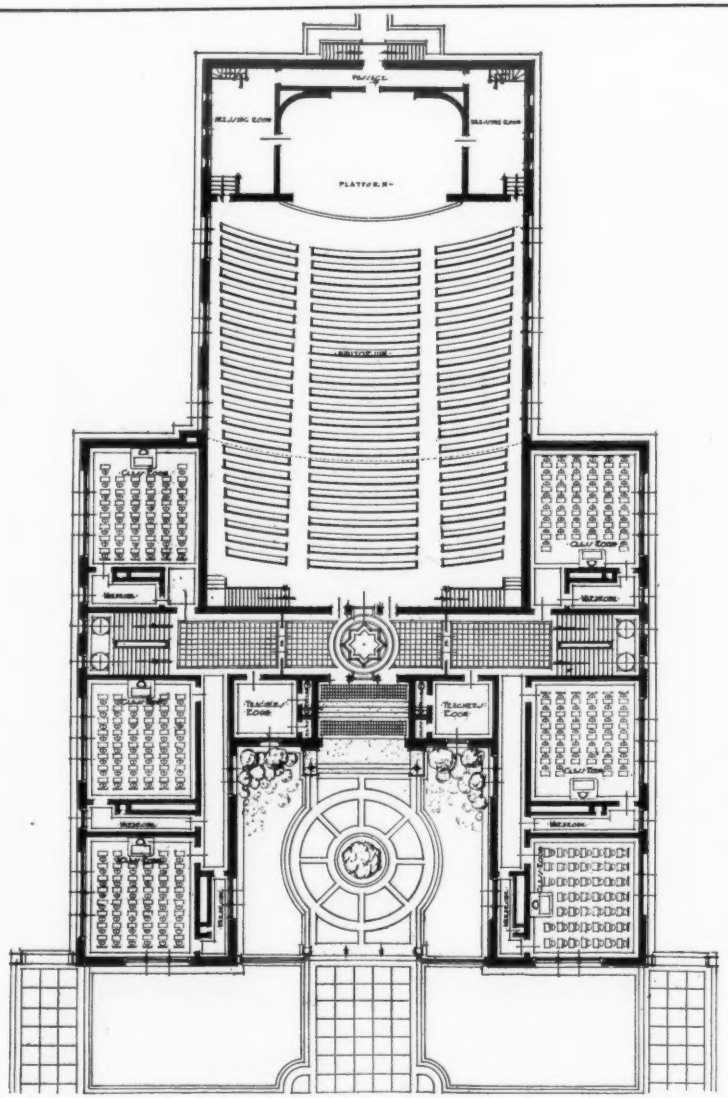
MEMORIAL TO HENRY CHARLES LEA, HISTORIAN, LAUREL HILL CEMETERY, PHILADELPHIA

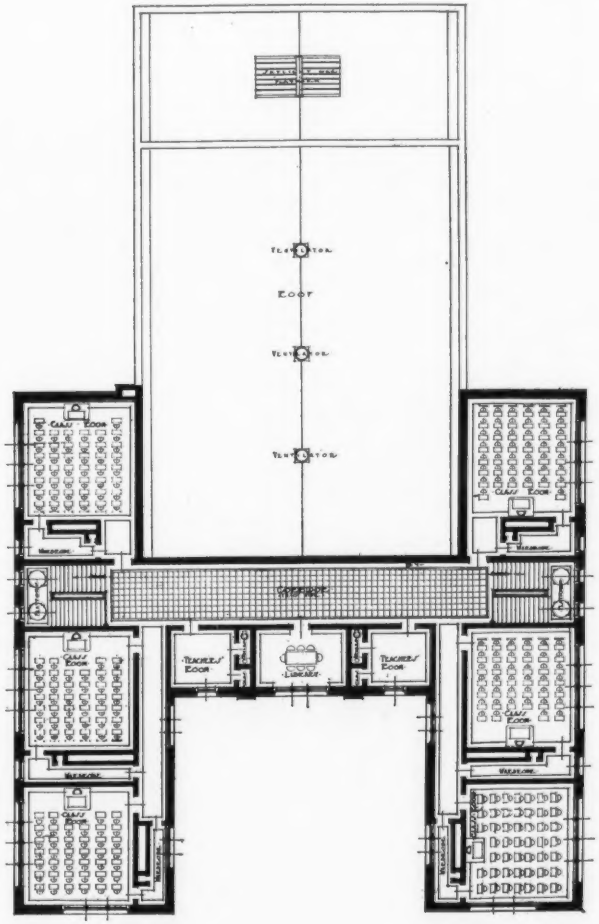
MR. A. STIRLING CALDER, *SCULPTOR*



ST. MARY'S PAROCHIAL SCHOOL, FAR ROCKAWAY, N. Y.

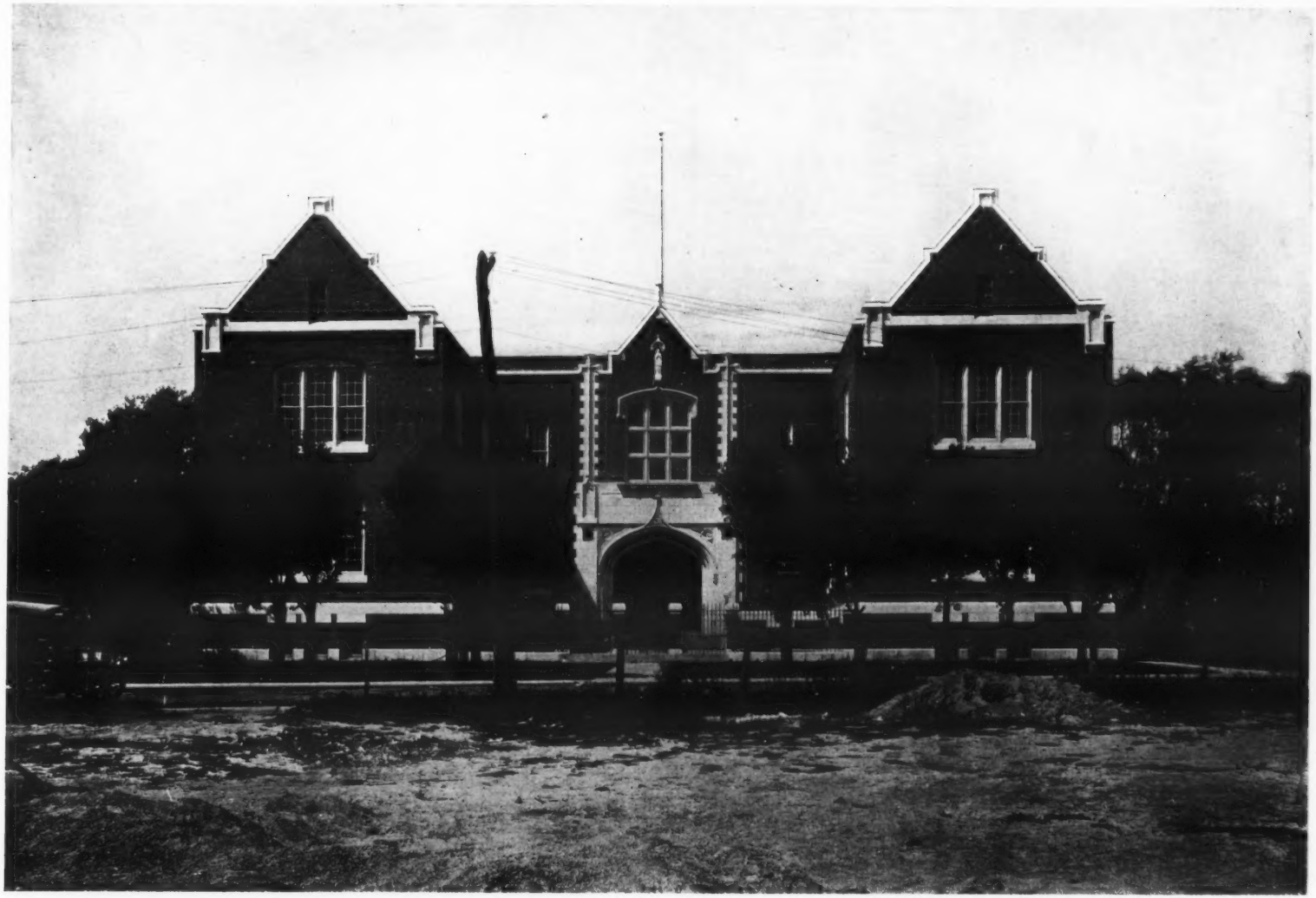
MESSRS EDWARD A. LEHMANN AND THOMAS O'KANE, JR., *ARCHITECTS*





ST. MARY'S PAROCHIAL SCHOOL
FAR ROCKAWAY, N. Y.

MESSRS. EDWARD A. LEHMANN AND THOMAS O'KANE, JR., *Architects*



ST. MARY'S PAROCHIAL SCHOOL, FAR ROCKAWAY, N. Y.

MESSRS. EDWARD A. LEHMANN AND THOMAS O'KANE, JR., *ARCHITECTS*

NATIONAL MAINE MONUMENT, C

MR. H. VAN BUREN MAGONIGLE, *ARCHITECT.*

The National Maine Monument was dedicated on Decoration Day, 1913, *as a memorial to the officers and enlisted men of the United States I of the erection of the Memorial was promoted by Mr. William Randolph Hearst, and the cost of the monument about* $175,000, *was rai Mr. H. Van Buren Magonigle, Architect, and Mr. Attilio Piccirilli, sculptor, in collaboration. The construction of the Memorial, which is*

ENT, CENTRAL PARK, NEW YORK

RCHITECT. MR. ATTILIO PICCIRILLI, *SCULPTOR*

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ited States Navy who lost their lives in the explosion and sinking in the harbor of Havana, of the battleship "Maine." Public sentiment in favor 00, was raised by popular subscription. The competition held several years ago for the selection of an architect and a sculptor was won by l, which is located at the southwestern entrance to Central Park, at 59th Street and Eighth Avenue, was begun in the Spring of 1911.

ANTE-BELLUM GROUP—PEACE, COURAGE, FORTITUDE, "CUBA LIBRA"

POST BELLUM GROUP—JUSTICE, GENIUS OF WAR, HISTORY

NATIONAL MAINE MONUMENT, CENTRAL PARK, NEW YORK

MR. H. VAN BUREN MAGONIGLE, *ARCHITECT.* MR. ATTILIO PICCIRILLI, *SCULPTOR*

OCEAN DEITY, THE ATLANTIC

OCEAN DEITY, THE PACIFIC

NATIONAL MAINE MONUMENT, CENTRAL PARK, NEW YORK

MR. H. VAN BUREN MAGONIGLE, *ARCHITECT.* MR. ATTILIO PICCIRILLI, *SCULPTOR*

CURRENT NEWS AND COMMENT

LETTERS TO ARCHITECTURAL CLUBS

The attention of officers and members of the Architectural Clubs of America is directed to the following communication from the San Francisco Architectural Club. Any clubs which have not received a copy of the letter are especially requested to communicate their address to the San Francisco Architectural Club, California:

To the Officers and Members of the Architectural Clubs of America.

Gentlemen: At the last regular meeting of our club a committee was appointed to investigate the feasibility of instituting a system of membership transfers between the various Architectural Clubs of America, and it is with this in view that we propose the following:

At the present time the clubs of the Pacific Coast transfer members in good standing. Any member, going from one city which has an Architectural Club to another, may become a member of the club in the latter city without the payment of an initiation fee upon presentation of a clearance card from the secretary of his former club.

At this time draughtsmen are continually leaving our club to study at the large universities and to work in the various offices throughout the country; and there are a great many draughtsmen now in the cities on the Pacific Coast who, if given a chance to transfer, would in all probability take up their memberships in the clubs of these cities.

The benefits to be derived from such a system of membership transfers would be:

(1) A decrease in the resignations of members who are traveling.

(2) An incentive for members on leave of absence from their own clubs to join the club in whatever city they may be working.

(3) Assistance to draughtsmen in securing employment in a strange city.

(4) Membership in Architectural Clubs would become more valuable by reason of this system.

(5) The various Architectural Clubs would be brought into closer relationship, and this might eventually result in a permanent organization of Architectural Clubs.

We would ask that you give this important matter your consideration at the earliest possible moment. Upon your approval of same we will submit our plan for your criticism. Any suggestion you might offer would be greatly appreciated.

SAN FRANCISCO ARCHITECTURAL CLUB.
Address: W. I. Garren, Transfer Committee.

ARCHITECTURAL LEAGUE OF THE PACIFIC COAST CONVENTION

The Architectural League of the Pacific Coast met in third annual convention at Portland, Oregon, June 9th, 10th and 11th. Among the subjects discussed were: the League control of the architectural exhibitions of the Coast, publication of an annual of the proceedings of the League, a catalog of the League's annual exhibition, organization of architectural courses in state universities, and the creating of associate memberships.

Professor Warren Perry of the University of California opened a discussion in which he advocated the broadening of the work of the ateliers to resemble a college course. He also proposed that some of the Beaux Arts Society student problems be worked and judged in Portland instead of being sent to San Francisco.

Immediately preceding adjournment the election of officers was announced as follows: Carl S. Gould, of Seattle, president; Myron Hunt, of Los Angeles, vice-president; J. S. Cote, of Seattle, secretary, and W. C. Hayes, of San Francisco, treasurer.

Seattle was chosen as the city for the next convention.

FLORIDA ARCHITECTS IN CONVENTION

On June 14th, the second annual convention of the Florida State Association of Architects was called to order in Jacksonville by President George O. Holmes. The most important discussion related to needed legislation relative to the practice of architecture as a profession. To this end the association will endeavor to have a law passed at the next session of the legislature requiring all applicants to give satisfactory proof of technical ability and experience.

SKYSCRAPER MEN IN CONVENTION

The Building Owners' and Managers' Association assembled in convention at Cincinnati, June 10th. Nearly five hundred delegates were present at the several sessions.

Among the subjects discussed were: "Building Codes," "Smoke Prevention," "Fireproof Partitions" and "The Income Tax."

Mr. E. M. Willoughby of Chicago, who is in charge of fourteen large buildings in that city, spoke on the advantage of central agency management as opposed to the individual management of commercial structures.

His paper aimed to show that central agency management brought better results for the owner

of the building than management by himself, as he stated that more privileges which ran into money and building expense were granted by an owner-manager than would or could be granted by a central agency. He attempted to show the value of a central agency in its knowledge of and experience in office building business at the time of the construction of new buildings, to save money and to direct in the building.

The annual election of officers resulted in the selection of J. E. Randall of Chicago as President, and Charles E. Doty, of Cleveland, as Vice-President. C. A. Patterson was re-elected as Secretary and L. L. Banks, of Chicago, was made Treasurer.

FAMOUS LONDON STREET ALTERED

By the close of the year Fleet street will be all but unrecognizable, even to its daily habitues. It is so, indeed, at the present moment, with great stretches of its south side swathed in towering scaffolding, tall buildings with their fronts torn off, and other familiar old houses empty, dust-covered and forlorn, awaiting their doom. The old street is being widened by the setting back of the frontage line of the south side an average depth of twelve feet.

It is long since the process began. Those who knew London fifteen or twenty years ago will recall the narrow neck into Ludgate Circus, and the quaint old office of Punch sitting yellow and squat near Silsbury Court. These things have long disappeared since Fleet street expanded at the east end. Then, for reasons financial and legal combined, came a halt. The north side, untroubled by problems of new frontage lines, took its old buildings in hand, and from the Circus to Fetter lane transformed itself beyond recognition by the erection of palatial office blocks, leaving only here and there a reminder of the past.

But the south side stubbornly resisted change. At intervals an old building came down, and another set back to the new frontage line took its place, giving a quaintly jagged outline to the thoroughfare. At last, some months ago, the grand assault developed, and the widening began in earnest. Stately, shining palaces, with pillared and balconied fronts, are emerging now from the scaffold poles on the sites of ancient and unpretentious houses, and probably before the year is out the regeneration of the shady side of Fleet street will be complete.

The necessities of expanding business are inexorable, but all lovers of Fleet street have watched with regret the disappearance of the quiet, cream-colored, flat-topped relic of bygone London, nestling snugly under the shadow of St. Dunstan's lofty belfry, with its broad windowed gable overlooking the church-yard. There was no more pleasant-looking house between Temple Bar and St. Paul's.

It had about it an air of old world simple dignity that inevitably sent the mind back to the days when Johnson and Boswell walked the rough pavements of Fleet street. It was almost the last remaining link on the north side with eighteenth century London, and hereafter the wanderer with a historic sense seeking to reconstruct the Fleet street of those days must search the courts and alleys behind.—*Exchange.*

STREET LIGHTING

The Department of Commerce and Labor at Washington, D. C., has issued a number of special bulletins which should be of particular value to those contemplating the adoption of ornamental street lighting. The titles are: "Lighting of Principal Streets of London, Paris, Berlin, Brussels and Vienna," and "Gas, Water, Light, Street Car and Telephone Service in Various Cities," issued September 3, 1907. In special consular reports No. 42 is an article on street lighting in Europe. A request to the Department of Commerce and Labor will secure these bulletins free of cost to any applicant.

PERSONAL

Messrs. Beuttler & Arnold, of Sioux City, Iowa, have moved their offices for the practice of architecture to 610 Security Building.

Benjamin Francis Bogaert, Architect, Saginaw, Mich., died in that city on June 20th, aged thirty-eight. Mr. Bogaert had been for a number of years prominently identified with architectural work in Saginaw and was the designer of many of its important buildings.

William O. Schuermann & Company, architects and engineers, of Pittsburgh, Pa., have opened offices in the Horton-Hamilton Building, Farrell, Pa., for an extension of their practice. These offices will be in charge of Mr. Schuermann. Manufacturers' catalogues and samples are desired.

Lockwood, Greene & Co., architects and engineers, whose principal office is located at 60 Federal Street, Boston, have removed their New York office from 320 Fifth Avenue to the Architects' Building, 101 Park Avenue. The New York representatives of this firm are Frank A. Wing and John M. Toucey.

INDUSTRIAL INFORMATION

IN this section will be found information concerning late catalogues issued by manufacturers of building materials, fixtures or equipment. Also under this head will be printed, from time to time, certain data relative to new devices or methods of construction considered to be of interest to architects. Architects are invited to make use of THE AMERICAN ARCHITECT'S *Catalogue Files and Information Department whenever they can do so to advantage. Any assistance we can render or information we can furnish in this connection will be freely given.*

"BUILDING PROGRESS"

Two articles appearing in the June issue of *Building Progress,* the house "organ" published by the National Fireproofing Company, Pittsburgh, Pa., will be found of particular interest to architects. The first by Melville McPherson, treats of the "Building Evolution at Panama," and illustrates by means of photographic reproductions the architectural development of the Canal Zone. The article is well written and contains much information concerning this interesting territory.

The second, to which attention may be directed, is entitled "Legal Hints for General Contractors," by Thomas H. Ray, of the New York City Bar. As a matter of fact, this article is of as much interest to architects as to contractors, for it treats of the performance of contracts, a matter of first importance to architects, even though they are not as a general rule parties to them.

Other contributions to this issue furnish information both by means of text and illustrations that will be found useful to architects in the handling of hollow tile in construction.

Copy of this issue of *Building Progress* may be had by application to the publishers.

"VELVET" RUBBER TILING

W. H. Salisbury & Company, 105-107 South Wabash Avenue, Chicago, are manufacturers of flexible rubber mats and tilings. Their "Velvet" flexible rubber tiling is said to possess desirable features not found in other styles of flooring, in addition to being noiseless, because soft and yielding to the feet, non-slippery and sanitary. They can furnish "Velvet" tiling in all standard colors, and are prepared to submit special designs and color schemes, if desired.

Their general catalogue "M" and special literature, describing their several articles of manufacture, will be mailed on request.

MECHANICAL VENTILATORS

The Blackman Ventilator for exhaust or low-pressure service is manufactured by Howard & Morse, 45 Fulton Street, New York City, and is described in their catalogue No. 160. This ventilator is not confined to the office of exhaustion of air, they assert, but also serves as a scientific device, when properly applied, for moving large volumes of hot air, distributing it under absolute mechanical control and independent of exterior atmospheric conditions. A record of about nine thousand successful installations is referred to as evidence of both merit and popularity.

GRANITE CRYSTALS

"Granite Crystals" is the title of a booklet issued by the Crown Point Spar Company, 663 Broadway, New York. Granite Crystals, we learn, can be used on monolithic construction for facing concrete blocks, cast stone, stucco, plastered surfaces and any other form of cement work which calls for a surface of character and distinction. It is composed of feldspar crystals, white, pink and green in shade. white quartz crystals and black mica, which combine to give an interesting variation of color, producing the effect of natural granite.

Their literature, illustrating various structures on which their product has been used will be mailed upon request.

"SANITARY POTTERY"

Sanitary Pottery for June, the "house organ" of the Trenton Potteries Company, Trenton, N. J., features the Woolworth Building in New York City. Various interesting photographs representing details of construction which have not been previously published are shown.

This company's sanitary fixtures, used throughout the building, are described in detail in their application to this greatest of modern office buildings. The article contains suggestions valuable to the practicing architect.

BRUNSWICK REFRIGERATION

The Brunswick Refrigerating Company, New Brunswick, N. J., manufacture and install complete plants for mechanical refrigeration adapted to all purposes. Brunswick refrigeration is obtained by the expansion of anhydrous ammonia through pipes placed in the rooms or tanks to be cooled. The expansion takes place either through piping placed in direct communication with the substances to be cooled, known as "Direct Expansion System," or through piping or especially designed coolers submerged in a solution of brine. In the latter case the brine is reduced to a very low temperature and circulated by means of a pump through the directly connecting piping. This is known as the "Brine Circulating System."

The principal advantages claimed for the Direct Expansion System, which is used generally in smaller units are simplicity, economy, ease of opera-

tion and compactness. This method is adapted either to plants where operation for a few hours a day only is possible or to continuous operation.

The brine circulating method is recommended in large installations where the various compartments to be cooled are widely scattered. It is claimed that Brunswick mechanical refrigeration will save in many cases 50% to 75% of the cost of refrigerating by means of melting ice.

AMERICAN SEAL PAINTS AND FINISHES

The William Connors Paint Manufacturing Company, Troy, N. Y., describes its products in a booklet entitled "American Seal Paints—Cements and Specialties." American Seal products are said to be composed of only the very best raw materials, which are subjected to every known test as to their purity, quality, etc., before they enter the process of manufacture. This precaution, with the use of improved machinery, years of practical experience and unexcelled shipping facilities, they claim, place them in an excellent position to fulfill the requirements of the trade.

Their make of architectural varnishes may be of particular interest to those who have experienced trouble with this style of finish in the past.

"CELLUVARNO"

The Sillcocks-Miller Company, of South Orange, N. J., manufacture a sanitary covering for toilet and bathroom accessories known as "Celluvarno." This is a seamless, non-porous covering of sheet "celluloid" over kiln-dried, close-grained birch wood fixture fittings. It is claimed that this covering will not crack, craze or flake, is impervious to moisture, non-absorbent, germproof and stainproof, and will not discolor with age. These advantages, the manufacturers assert, are not possessed by enamel or white paint.

The regular finish of Celluvarno is a highly polished white surface matching the porcelain bowls and the bath tubs. Coco bolo and mahogany finishes are also supplied, which faithfully reproduce the rich, glossy appearance of these woods.

The durability of Celluvarno is said to be attested by over twelve years of constant and satisfactory service.

Literature describing this product will be mailed on request.

"WHITE-BONE CHINA"—A SANITARY WARE

Thomas Maddock's Sons Company, of Trenton, N. J., have published an elaborate catalogue illustrating and describing their various makes of sanitary earthenware. Consisting, as it does, of 130 pages, with full index, the catalogue presents a most complete reference and specification book of their sanitary appliances.

This firm claims to be the oldest pottery in the United States. Its goods are covered by a guarantee which insures users freedom from trouble and annoyance caused by the introduction of unknown articles.

Among their specialties are bath-room appliances and fittings made of "white-bone china." This material is said to be one of the most beautiful of wares for its purpose and more sanitary than trimmings made of metal. The only necessary cleaning is wiping with a damp cloth, whereas the metal, even when polished, will in time tarnish, presenting a very unsightly appearance.

This catalogue will be mailed to architects on request.

BIRCH

Architects will find a vast amount of valuable information as to Birch in a pamphlet recently issued for free distribution by the Northern Hemlock & Hardwood Manufacturers' Association of Wausau, Wis. This pamphlet has been prepared by competent writers and treats of the tree, its wood, the uses of Birch and the methods that will insure best results in its finishing.

The wide range of usefulness of Birch is shown by the fact that more than sixty millions of feet are used annually for more than one hundred and fifty distinct purposes. Its toughness and density, together with the natural beauty of the wood make it particularly attractive when used for interior finish, and as considerable furniture is constructed of Birch, opportunity is afforded by its use to secure harmony of color throughout.

MODERN LATHING MATERIAL

The United States Gypsum Company, whose main offices are in Chicago, with branches in the principal cities, have recently issued a pamphlet for the purpose of setting forth the merits claimed for Sackett Plaster Board, and demonstrating by means of many illustrations the fire-resisting qualities of this material.

The makers state that this plaster board when properly applied will serve to confine any ordinary fire to the room of its inception, thus largely reducing the fire damage and also preventing loss of life.

In the belief that the test of time and practical use constitutes the only reliable guide in matters of this kind, much testimony based on actual experience has been gathered on this subject. This is in the shape of photographs of buildings, letters from architects, builders and owners, and is printed in this pamphlet, which may be had on application.

INDEX TO CURRENT ARCHITECTURAL LITERATURE

TEXT.

ILLUSTRATIONS.

Barrett Specification Roofs

Part of the Ford Plate Glass Works, Rossford, Ohio. Plant is covered with 420,000 Sq. Ft. of Barrett Specification Roofs.

The DeVore-McGormley Company, Engineers.

Last Longest—Cost Least

THE proper unit in comparing the values of roofings is the cost-per-foot-per-year-of-service.

To have a low unit cost a roofing must be—

1st. Inexpensive to build,
2d. Inexpensive to maintain, and
3d. Of great durability.

Barrett Specification Roofs are—

1st. The ***least*** expensive of all permanent roofs to build,
2d. They cost ***nothing*** to maintain, and
3d. They usually last, without repairs or leaks, ***20 years*** or over.

The net result of these three factors is a unit cost of about ¼c. per foot per year of service. This is a lower unit cost than ever attained by any other class of roofing.

Accordingly, Barrett Specification Roofs are in almost universal use on buildings such as illustrated herewith, where unit costs are intelligently studied.

Copy of the Barrett Specification with tracing ready for incorporation in your building plans sent free upon request. Address nearest office.

Special Note

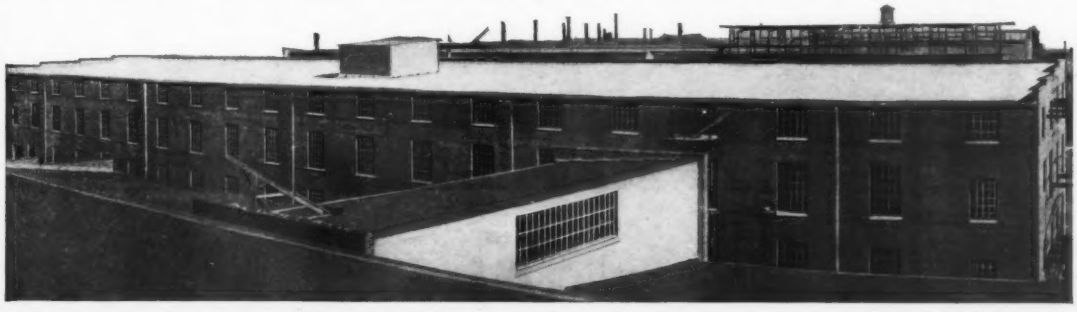
We advise incorporating in plans the full wording of the Barrett Specification, in order to avoid any misunderstanding.

If any abbreviated form is desired however the following is suggested.

ROOFING—Shall be a Barrett Specification Roof laid as directed in printed Specification, revised August 15, 1911, using the materials specified and subject to the inspection requirement.

BARRETT MANUFACTURING COMPANY

New York Chicago Philadelphia Boston St. Louis Kansas City Cleveland
Cincinnati Minneapolis Pittsburgh Seattle Corey, Ala.
THE PATERSON MFG. CO., Ltd.—Montreal Toronto Winnipeg Vancouver St. John, N. B. Halifax, N. S. Sydney, N. S.



House of M. T. Curtis, Chestnut Hill, Mass., Putnam & Cox, Architects. *The American Architect,* May 7, 1913.

House of David Fairchild, North Chevy Chase, Md., E. C. Dean and Bayard Turnbull, Associated Architects. *The American Architect,* May 14, 1913.

House at Great Neck, L. I., Aymar Embury II., Architect. *Architecture,* June, 1913.

House at Great Neck, L. I., Wilson Eyre & McIlvaine, Architects. *The American Architect,* May 14, 1913.

House for Barker Gummere, Princeton, N. J., McGoodwin & Hawley, Architects. *The American Architect,* May 14, 1913.

House, Robert Hobbs, Great Neck, L. I., Aymar Embury II., Architect. *Architecture,* June, 1913.

House, Frederick S. Jordan, Great Neck, L. I., Aymar Embury II., Architect. *Architecture,* June, 1913.

House in Litchfield, Conn., Wilson Eyre & McIlvaine, Architects. *The American Architect,* May 14, 1913.

House for H. G. Lloyd, Haverford, Pa., Wilson Eyre & McIlvaine, Architects. *The American Architect,* May 14, 1913.

House of J. H. Lynn, Langhorne, Pa., Duhring, Okie & Ziegler, Architects. *The American Architect,* May 14, 1913.

House of W. J. McMahon, New Orleans, La., Sam Stone, Jr., Architect. *The American Architect,* May 7, 1913.

House of J. N. Manning, Brookline, Mass., H. A. Perkins, Architect. *The American Architect,* May 7, 1913

House, H. H. Oltmann, Palisade, N. J., Aymar Embury II., Architect. *Architecture,* June, 1913.

House, Mrs. Margaret C. Post, Englewood, N. J., Davis, McGrath & Kiessling, Architects. *Architecture,* June, 1913.

House and Studio, Allen's Lane, Pa., Edmund B. Gilchrist, Architect. *The American Architect,* May 14, 1913.

House on Willard Road, Brookline, Mass., Benjamin Proctor, Jr., Architect. *The American Architect,* May 7, 1913.

Kitchen Close, Staunton-Woodhouse, Rowsley, England. *The American Architect,* May 14, 1913.

Leader-News Building, Cleveland, Ohio, Charles A. Platt, Architect. *The Architectural Record,* June, 1913.

Lewisohn Building, 40th to 39th Street, New York, Maynicke & Franke, Architects. *The American Architect,* May 7, 1913.

Liberty Bell, New Case for, Independence Hall, Philadelphia, Pa. *The American Architect,* May 14, 1913. John F. Harbeson, Winner.

Little Court, Charminster, Dorset, P. Morley Horder, Architect. *The International Studio,* June, 1913.

Minnesota State Prison Group, Stillwater, Minn., Clarence H. Johnson, Architect. *The Western Architect,* June, 1913.

Municipal Building, Sculpture of, A. A. Weinman, Sculptor, McKim, Mead & White, Architects. *The Architectural Record,* June, 1913.

New Post Office, Bristol, Pa., Heacock & Hokanson, Architects. *The American Architect,* May 14, 1913.

Office Building, Small, Philadelphia, Pa., Mellor & Meigs, Architects. *The Brickbuilder,* May, 1913.

Panama-Pacific International Exhibition, 1915, and Exhibition of San Francisco Architectural Club. *The American Architect,* May 21, 1913.

Palace Theatre, New York, Kirchhoff & Rose, Architects, J. J. F. Gavigan, Associate. *Architecture,* June, 1913.

"Passing of the Crescent, Umbria, Italy," from an original wood engraving in colors by W. Giles. *The International Studio,* June, 1913.

"Peacock, The." From an original wood engraving in colors by Allen W. Seaby. *The International Studio,* June, 1913.

Princeton University, Holder Hall, Day Brothers & Klauder, Architects. *The American Architect,* May 28, 1913.

Princeton University, Dormitories and Dining Halls, Day Brothers & Klauder, Architects. *The American Architect,* May 28, 1913.

Proposed House at Carlisle, P. Morsley Horder, Architect. *The International Studio,* June, 1913.

Residence of Webster Estes, Babylon, L. I., Dennison & Hirons, Architects. *The American Architect,* May 14, 1913.

Ritz-Carlton Hotel, Philadelphia, Pa., Horace Trumbauer and Warren & Wetmore, Architects. *The Brickbuilder,* May, 1913.

"September Moon." From an original wood engraving in colors by W. Giles. *The International Studio,* June, 1913.

State Training School, Red Wing, Minn., Clarence H. Johnston, Architect. *The Western Architect,* June, 1913.

Student Work, Society of Beaux-Arts Architects. *The American Architect,* May 21, 1913.

University Club of St. Paul, Minn., A. H. Stem, Architect. *The Western Architect,* June, 1913.

University Club, Washington, D. C., George Oakley Totten, Jr., Architect. *The Brickbuilder,* May, 1913. *The Western Architect,* June, 1913.

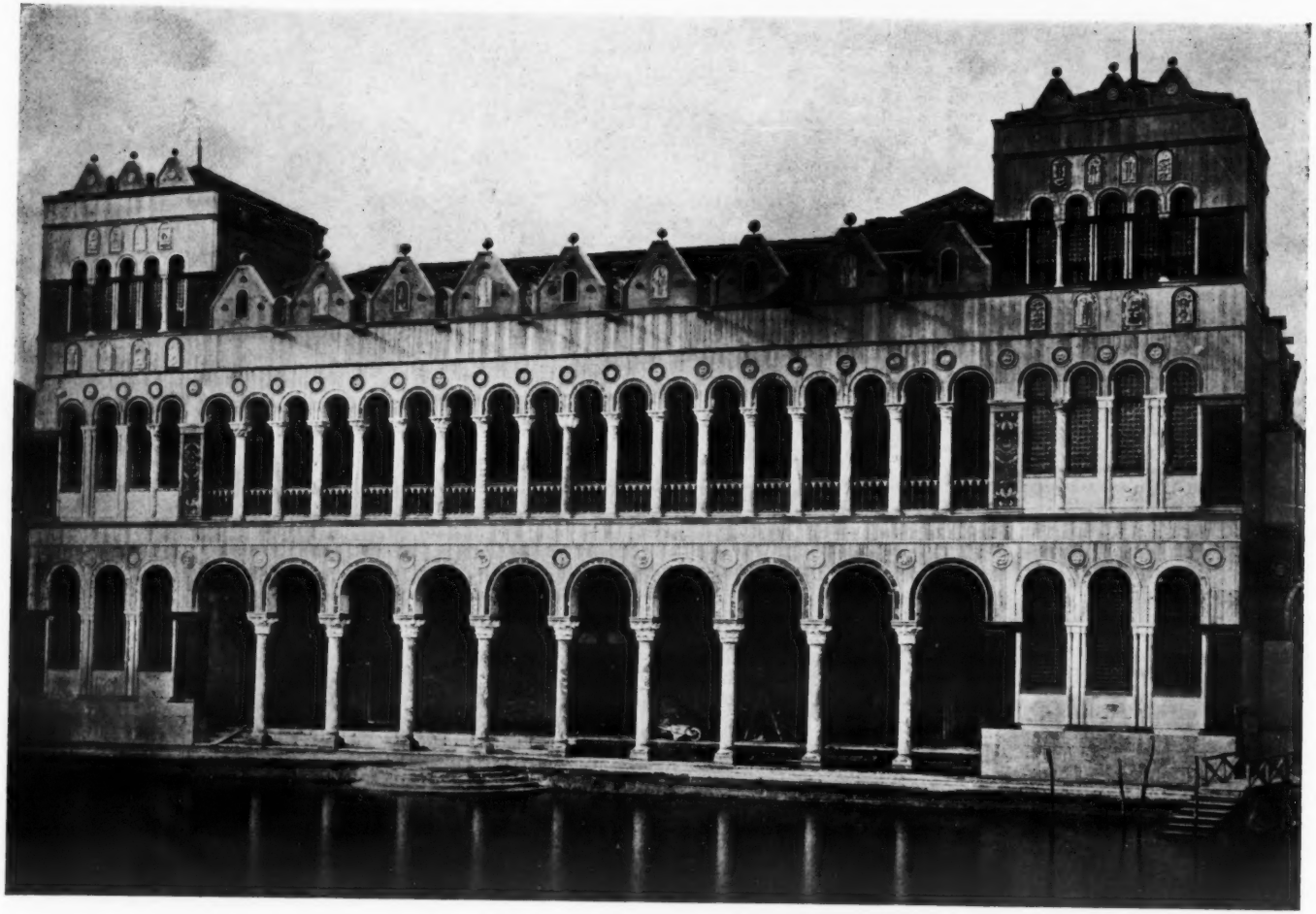
University of Minnesota, Minneapolis, Minn., Clarence H. Johnston, Architect. *The Western Architect,* June, 1913.

Warehouse for Gordon & Ferguson, St. Paul, Minn., Clarence H. Johnston, Architect. *The Western Architect,* June, 1913.

"Westover," A School for Girls, Middlebury, Conn., Theodate Pope, Architect. *Architecture,* June, 1913.

"Windmill, The." From an original wood engraving in colors by E. C. Austen Brown. *The International Studio,* June, 1913.

Woolworth Building, New York, Cass Gilbert, Architect. *Architecture,* June, 1913.



PALACE OF LUCRETIA BORGIA, VENICE