

# The Naval Academy, Annapolis

Ernest Flagg, Architect



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LORADO TAFT, SCULPT

MAY, 1906



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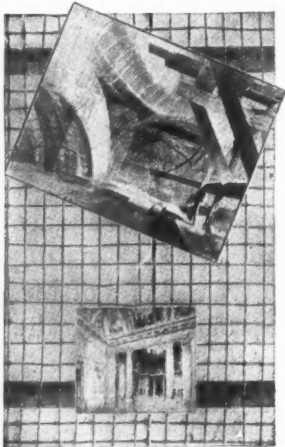
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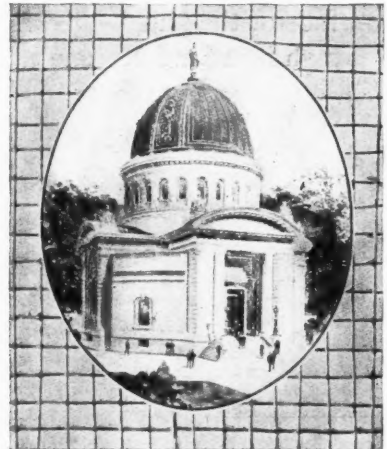
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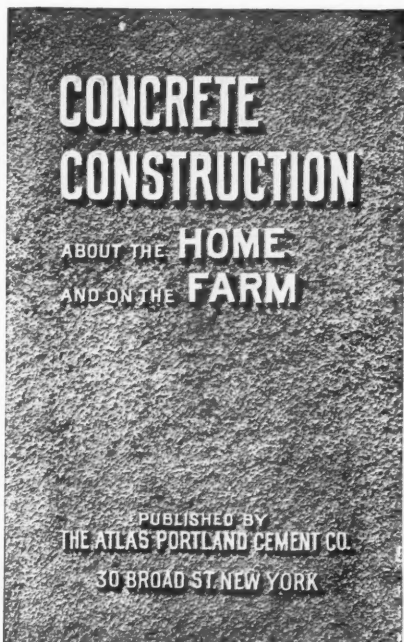
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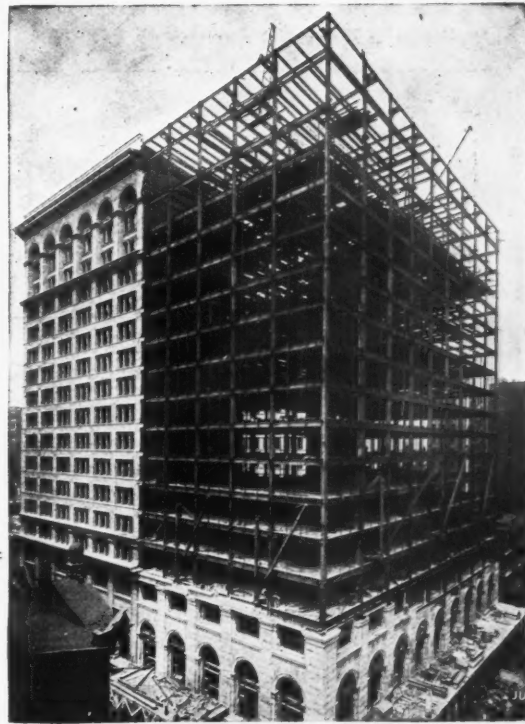
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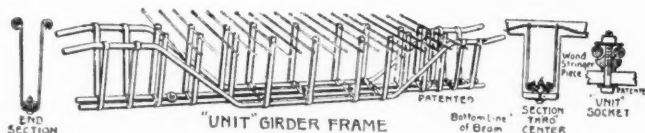
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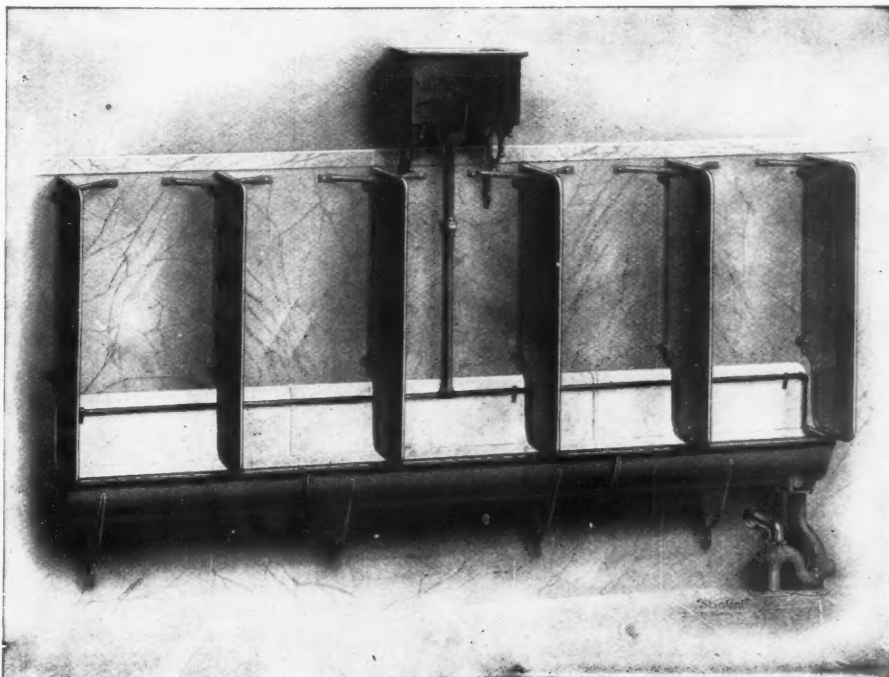
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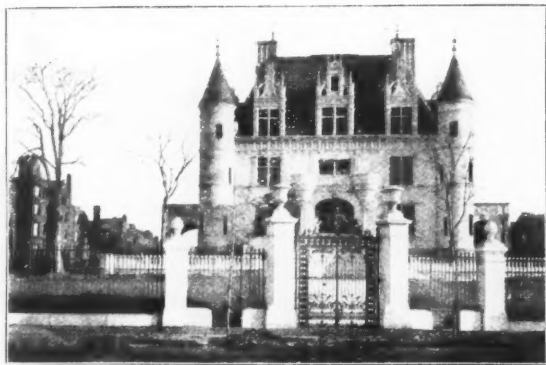
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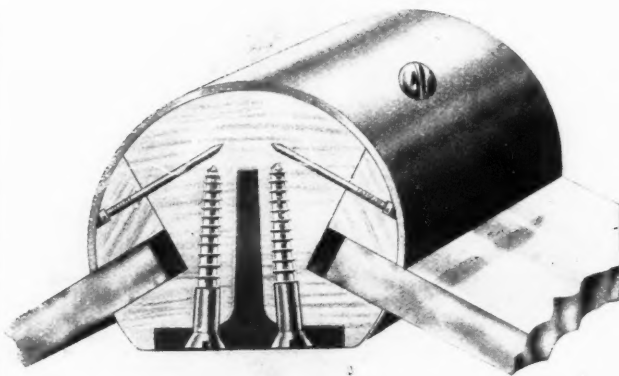
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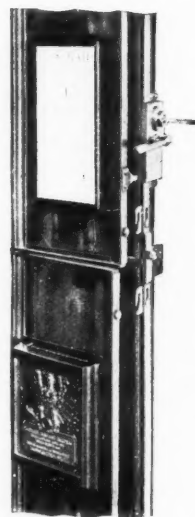
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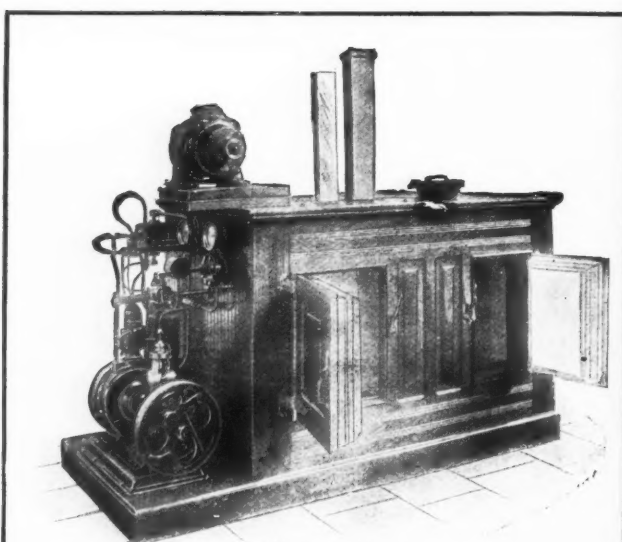
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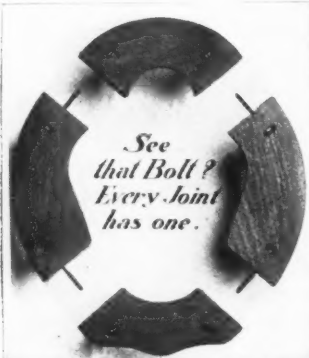
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VOL. XLVII.

MAY, 1906

NO. 4



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NEXT CONVENTION AT WASHINGTON, D. C., 1907.

#### The U. S. Naval Academy Buildings.

To one interested in the cause of good architecture much regret will attach to the action of congress with regard to the rebuilding of the U. S. Naval Academy at Annapolis. In this project it was determined to practically remove all the old buildings and to extend the site by the addition of made land. It was possible, therefore, to treat the problem as a group of new buildings on a new site. It was fortunate that at the start the commission in charge of the preparatory work had as professional adviser so competent an architect as Ernest Flagg, who was retained later to design all the buildings. This would indicate a realization by the commission of the architectural importance of the scheme. When congress determined that the buildings should be built of granite there was a feeling of gratification that the structures were to be monumental and enduring in character. The sum appropriated for the buildings, \$8,000,000, was sufficient for their erection of granite, and of the substantial character desired, had it been possible to have contracted for them at the prices for labor and material that ruled at the time the appropriation was made. Various causes delayed the commencement of buildings, such as the necessity of completing new quarters before sites could be cleared of the old structures. In this way several years passed, and some buildings contemplated had not been begun. During this time prices of labor and material had advanced fully 30 per cent. In addition to this increase in price, much larger quarters were required to adequately accommodate the large additional number of midshipmen authorized by Congress.

These conditions made evident the necessity of an extra appropriation to meet the changed situation. The architect, who was presumably the one that best knew what amount was needed to carry out the plans, estimated that \$5,500,000 more was required. The superintendent, however, decided that much less would answer, and asked for only \$2,000,000. This sum was absorbed by dredging, minor changes in buildings which afforded makeshifts only instead of adequate enlargements for the accommodation of the new midshipmen, purchase of more land and similar items. Practically nothing was left of the extra appropriation to meet the advance of 30 per cent in cost of construction. At this juncture the ingenuity of the architect was taxed with the necessity of supplying much larger capacity in buildings than was originally intended and to offset the increase in prices. Apparently there was but one way out of the trouble, and this the architect adopted; cheaper materials were used. Brick and terra cotta were substituted for granite in some of the exterior work, light reinforced concrete stood for walls of solid masonry, plaster for stone in interior finish; and carving was largely omitted. As will be seen by the illustrations in this number, the buildings of the academy form a very imposing and interesting group. It is greatly disappointing that they could not have been equally satisfactory in construction. It would have been the part of wisdom had Congress investigated the difference between

the superintendent and the architect with regard to the extra appropriation needed for increased capacity and the advance in prices. This should have been done and the funds promptly supplied to complete the buildings of granite and the best materials throughout. There is a valuable lesson in all this applicable to the rebuilding at West Point. Let us hope that it will be heeded.

**Bill for U. S. Advisory Board.**

The latest movement to secure expert advice in the protection and promotion of the civic art of the national capitol takes the form of a bill recently introduced in the House. This calls for the organization of a national advisory board on civic art consisting of five members. It provides that the members shall be nominated and appointed to office by the President of the United States with the consent of the Senate. The duties of the board are to consider the artistic merit of plans proposed for public buildings of the capitol, for monuments, fountains and the placing of mural paintings; also, for the opening, embellishment, etc., of any public space. Clauses in reference to compensation of the board are to follow. The bill is the result of the deliberations of the National Society of Fine Arts. Its objects can not be too highly commended, and it should have the hearty support of Congress. The time would seem most opportune for the presentation of this subject to the federal authorities. The press and public throughout the entire country are promoting continually new projects for civic improvement. There has been a strong and widespread development among the people of appreciation for all that tends toward greater beauty in their surroundings. As intelligent members of the community, the national legislators are interested observers of this tendency. They will readily respond to the demand for such a law as is desired to place in charge of a competent body the advancement of the civic art of the national capitol.

The President has shown repeatedly his sympathy with the movement to beautify Washington, and can be depended upon to help the proposed bill become a law. There is great present need for the advice of such a board as that proposed. The business of the nation requires buildings for the Departments of Commerce, Justice, War and the Navy, for the Geological Survey, Hall of Records and the Supreme Court. Their location and the character of their design are important. Congress has under consideration numerous statues and monuments in commemoration of distinguished persons and notable events; others have been already authorized. The park system requires careful and intelligent attention in the development of present areas and acquisition of extensions. In addition to the supervision of government property, an art commission could very properly give advice in private building to produce greater harmony and art value throughout the city. These are a few among many of the projects that should have immediate action and artistic direction. Not alone would the art values of the capitol be conserved and improved by the guidance of an advisory board; there would be more judicious and economical expenditure of public funds under their united direction than would be possible where conflicting interests ruled. With an advisory commission in charge, all branches of art would have proper consideration to the end that each

would be brought into harmony with the others and thus enhance the beauty of the whole. It is not for the present solely nor principally that such guidance is needed; a permanent body of art specialists is required to advise in the numerous art questions sure to arise continually in federal work. Such a commission is provided for in the present bill before congress, and the energy and influence of all should be exerted to secure its enactment.

**The San Francisco Calamity.**

A great disaster like that at San Francisco teaches no more important lesson than that of wise rebuilding. Engineers and architects are studying the problem with this end in view. Their reports of the effects of the earthquake and fire upon the buildings which were attacked are being made, and from them conclusions may be drawn. The modern office and commercial buildings there were much like such structures that passed through the great Baltimore fire, and the action of the flames upon them was naturally similar in both cases. From expert reports from San Francisco we find that the newer buildings of steel frame construction protected by covering of tile or concrete, and with cement or concrete floors, withstood the flames much better than first reports would indicate. The damage to them can be repaired at a moderate percentage of the first cost. An example of this is the Hayward building. This is fourteen stories high and was exposed to the fiercest fire. So well did it escape that in many of the offices the furniture was uninjured. It is estimated that the expense of repairs will not exceed 6 per cent of the original cost. The average cost of repairs to the fireproofed buildings will doubtless exceed this, but in most cases the percentages will not be high.

An instance is given of the behavior of a manufacturing building recently finished. It is of brick with wire glass in the exterior windows. It was exposed its full length to the flames from a row of wooden structures twenty feet off. The building escaped with little damage and that was to the cornice. In this case it is fair to state that the plant had its own water supply and service. Most interest in the steel frame buildings centers about the effect upon them of the severe earthquake shock. There was apparently very little damage from this cause, and it would seem impossible to devise a construction better able to withstand this peculiar action. Incidentally it is of interest that an effort was made to reduce one of these buildings by dynamite, but comparatively little damage resulted. From present indication it is probable that in rebuilding, the steel frame, protected by tile or concrete, with cement or concrete floors, or reinforced concrete floors and walls, will be the accepted type for office and commercial buildings. There is the possibility that some modification of the Burnham plan will be followed in the rebuilding, adapted to the unlooked for condition of sites being cleared at wholesale by the fire. In the plans for rebuilding, first consideration should be given to such arrangement of streets as would afford the greatest convenience in the transaction of the affairs of the municipality, and the greatest safety to life and property from destroying agencies. In any event, wide streets and open spaces should generally prevail. If the rebuilding be done in accordance with a carefully considered plan that shall combine utility with beauty, great good would come of the calamity.



## ARCHITECTURAL EDUCATION—A PROTEST

BY F. W. CHANDLER, PROFESSOR OF ARCHITECTURE, MASSACHUSETTS INSTITUTE OF TECHNOLOGY

HERE was published in the February number of THE INLAND ARCHITECT the report of the Committee on Education of the Architectural League of America. I want to protest against the method pursued in making this report. It is founded on a mechanical tabulation of the hours of instruction devoted to different subjects at the principal architectural schools of America. The conclusions are mechanically drawn from this tabulation, and it seems to be accepted as a fact that the subjects of study are easily divided into two groups: one relating to *Aesthetics*, and the other to *Construction and Mathematics*.

An analysis of architectural study made from this point of view seems to me not only worthless (speaking in an educational way), but positively harmful, because it leaves in the mind of the student the impression that Architecture, instead of being an Art based fundamentally on sound construction, is produced in the main by fine draftsmanship and by skill in decoration.

No curriculum can be dissected fairly in this mechanical manner; the subjects that compose it are too closely interwoven, and, moreover, educational subjects in the hands of capable teachers grow to have a broader meaning than the catalogues indicate, and have still wider meanings than their simple names imply, as they come to supplement each other more closely.

At all events, we at the Institute of Technology believe that no man can be a thoroughly trained practicing architect without some knowledge of engineering. We further believe that the most artistic student should have no excessive difficulty in absorbing the mathematics necessary to understand those structural necessities which are the basis of any worthy architectural design, and to fit him to confer intelligently with the engineer when the building operation needs his assistance.

I am perfectly aware that the architect can no longer be both architect and engineer, as were a few of the big men of the Italian Renaissance, but there is danger to the profession in the demand for less and less construction, as witness the growing complaints of the engineers that it is their brains that go to the building up of one of these great office structures, but that the architects get the credit. There are even instances where the tables have been turned and the engineer has employed the architect as a decorator to design a front to his steel construction.

The fact is, design and construction can not be separated. The most striking example of the results of its proper alliance was in mediaeval times, when construction and design went hand in hand from the building of the magnificent portal to the lofty nave of the French cathedral. This alliance is what gives architecture its reasonableness—the characteristic by which it should be judged. The designer who is sound in construction is an architect. It is he who is called upon to develop great schemes; he settles the constructional motive of the building, and his design is influenced by it; otherwise he is simply a decorator.

The Ecole des Beaux-Arts at Paris has never been blamed for a lack of appreciation of aesthetics, but to enter that school and to pass from its second to its first class, a greater knowledge of mathematics and construction is

required than is obtained by a graduate from our course at the Institute. We give our students, as far as time permits, this same sort of instruction. We wish we could give them more, but this, little as it is described in the catalogue, leads to our being recorded in the Report as devoting the least time to the aesthetic side of education of all the six institutions of which a study was made.

Everyone admits that the product of the Ecole des Beaux-Arts is not inartistic, in spite of the serious study of construction there enforced. I suggest that it is fair to test any other school by its products rather than by its catalogue; and that if a comparison of the products of the American schools were made, instead of the mechanical comparison employed in the Report, the conclusions would be very different. At one time the students of the Institute frequently competed in the Beaux-Arts Society's competitions, where they were judged by strangers to their school. Sometimes they took all the prizes; always they took a very large proportion of the prizes. Only the other day a preliminary competition was held by the New York Beaux-Arts Society for the Paris Prize Scholarship. Some eighty sketches were received by the Society from different members in the country. The number selected from these was limited to eight, and four of the successful men were Technology students. In the light of these results we may spare ourselves any regret for the time given by our young men to the construction upon which all architectural design is based.

How do these successes happen? They could not happen if the comparisons made in this Report were sound. Perhaps it is because at the Institute no such division is recognized as the Report referred to creates between construction and design. The pupil is taught that unless the constructive principles of his building influence its design, he is a decorator and not an architect. Perhaps success comes to our pupils because of factors in the work of the Institute which do not appear in any catalogue and which can not be reckoned by any assigned hours in a tabular view. One of these is the spirit which brings our students to the drawing room at eight o'clock in the morning and keeps them there, voluntarily and full of enthusiasm, until they are driven out at ten o'clock in the evening. No mechanical comparison takes account of this traditional enthusiasm handed on from class to class, nor of the emulation that exists among our students.

I watch with the greatest interest the efforts evinced in this Report to create and develop the perfect school. I have no wish to disparage the report of the committee. Statistics are proverbially a snare, even to the most competent and veracious committees. Criticism based on statistical comparisons has its value, provided its limitations are appreciated; it is a useful basis for discussion, nothing more. Real criticism only begins where the statistical committee reports leave off. I know that at the Institute there is vast room for improvement, but I beg to say that we are not moving backward as a School of Design. There have never been so many promising students with us as there are today. There has never been so much enthusiasm among the students, nor have we ever had work from our pupils of a higher class than that which those of today are doing.

# THE ELECTRIC LIGHTING OF BUILDINGS.

BY R. E. HEINE, ELECTRICAL ENGINEER.

## PART II

THE second important consideration which must be given to electric lighting is the specific purpose to which the light is to be applied. The lighting in the classes of buildings above mentioned may be generally divided into the following sections:

1. Offices.
2. Stores and Shops.
3. Corridors and Halls.
4. Windows and Displays.
5. Decorative.

The amount of light necessary for proper illumination can not be accurately determined by any rule, but is largely governed by the existing conditions. The height of the room, the color of walls and ceiling, the arrangement of fixtures and the general treatment of the room, including lighting fixtures, whether plain or ornamental, all have a direct bearing upon the amount of lighting required.

The following table gives an average of the number of sixteen candlepower lamps required per square foot of floor space. These figures apply only where light colored walls and plain fixtures without frosted lamps or heavy shades are used.

|                     |                                   |
|---------------------|-----------------------------------|
| Basements           | —1 lamp for every 50 square feet. |
| Halls and corridors | —1 lamp for every 80 square feet. |
| Offices             | —1 lamp for every 50 square feet. |
| Stores and shops*   | —1 lamp for every 45 square feet. |
| Banking rooms       | —1 lamp for every 35 square feet. |

General lighting should be considered only when using these figures; lights for desks, show-cases, etc., should receive special treatment.

Of all forms of electric light, the incandescent lamp is in most general use, on account of its great adaptability as regards size, form and ease of installation. The most commonly used size has a capacity of sixteen candle power, but for general lighting lamps of twenty-five and fifty candle power are finding ready adoption. For decorative and fancy purposes smaller units are used, generally of eight and four candle power each, but also as small as one candle power capacity, where effect rather than actual light is desired.

The standard form of sixteen candle power lamp has a power consumption of from forty-eight to fifty-seven watts, and it may be noted as a general condition that the lower the power consumption per candle the shorter will be the life of the average lamp. Incandescent lamps should not be allowed to burn until they fail by reason of the filament breaking, but should be removed whenever the interior begins to show signs of a dark deposit. This discoloration of the globe materially reduces the amount of light emitted, resulting in an uneconomical source of light.

The efficiency of the larger lamps, such as those of twenty-five, fifty and one hundred candle power is decidedly higher than those of smaller capacity, and a power consumption of two and two and one-half watts per candle is easily attained, whereas the standard sixteen candle power lamp requires three watts per candle at its best. For the general illumination of large rooms considerable economy can therefore be brought about by the use of

larger units, provided such does not interfere with the specific purpose of the lighting.

Frosted globes produce a more diffused light than clear globes, but at a sacrifice of light varying from 5 to 10 per cent, depending mainly upon the depth of the frosting. The average life of frosted lamps is also shorter than that of plain lamps, due to the fact that a greater amount of heat is retained within the former, this increased amount of heat causing a more rapid deterioration of the carbon filament. On account of this fact many lamps are now frosted on two-thirds of the surface only, the clear portion near the base allowing an increased degree of radiation.

The most economical results from incandescent lamps, for general lighting, can be obtained by grouping the same in fixtures containing up to two hundred and three hundred candle power, and using in connection with the same some form or system of reflectors. The fixture holding the lamps should be of ample size, avoiding the crowding of lamps within too close a space. It must be born in mind that light is emitted from the lamp in practically all directions, and every possible opportunity should be afforded to allow the rays of light to spread. For that reason a reflector of circular shape, cone or cup like in form, placed within the center of a group of lamps, will give a better distribution of light than a flat reflector placed to one side of the lamps only.

All globes and shades placed around the lamps tend to diffuse the light at the expense of actual intensity. Globes with prismatic schemes of diffusion are comparatively efficient when kept thoroughly clean, but result more generally in a loss of about 15 per cent of the light on account of the dirt settling upon them.

Portable lamps and lamps on movable brackets constitute the best form for the lighting of single desks, but wherever a greater number of desks in any one room are to be illuminated, some general form of lighting with approved reflectors should be adopted. Reflectors must be arranged to not only throw the light in the proper direction, but also to illuminate the desired surface with the proper intensity. The lighting of art glass windows or similar objects, where an absolutely uniform degree of illumination throughout is sought, should be attempted only by means of diffused light. That is, the rays of light from the lamp should not be allowed to fall directly upon the object to be illuminated, but first upon some white or equally good reflecting surface, which in turn will act as a source of light, but without causing the mottled effect to be avoided.

Show and display cases should, whenever the condition permits, be lighted from the interior. Glass shelving should be used, as economy in the cost of lighting will result therefrom. All lights must be located at points invisible to the eye looking at the display. Inasmuch as specially shaped lamps are generally used in ordinary show cases, it is difficult to compute the exact amount of light required. An allowance of one sixteen candle power lamp for every foot of the length of the show case will be sufficient to meet the average condition.

(To be continued.)

\*Highly variable.



## A REMARKABLE DWELLING.\*

BY W. L. B. JENNEY, ARCHITECT.

**I**N PASADENA, CAL., a delightful suburb of Los Angeles, and its most aristocratic residence quarter, a Chicago gentleman has very recently built for himself an exceptional habitation. He had long given much atten-

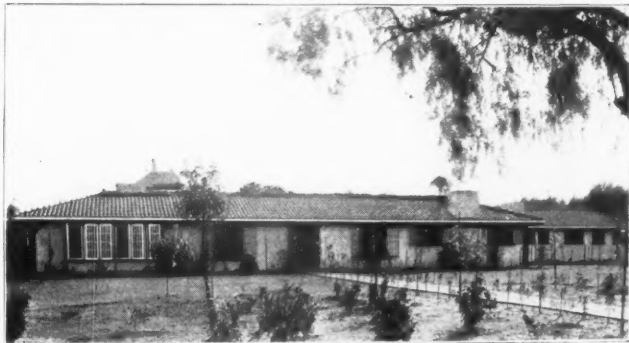


FIG. C.—NORTH EXPOSURE.

tion to primitive architecture, in which he took great interest, and feeling that he knew better than another what he and his family wanted, he decided to be his own architect, or, as he expressed it, not to employ an architect. Although he does not seem willing to admit it, he is well informed in the history of architecture, and skilled in all matters of construction, quite sufficient for the purposes of a modest dwelling.

In the preparation of certain lectures on a branch of aesthetics, he found that writers on architecture had dealt most exhaustively with the monuments and palaces, but had



THROUGH FRONT DOOR AND HALL INTO PATIO.

only a little to say about the simple habitations. The question arose, What were the habitations of the ancient Greeks?

Inasmuch as in their arts in general the Greeks excelled all others and embellished everything they touched,

\*Other views appear in the loose illustration pages.

he concluded their primitive habitations must be well worthy of a profound study, so he packed his portmanteau and took the steamer for Naples, visiting Pompeii, Sicily, Greece and Asia Minor, ending up at the plains of Troy, that he might learn what kinds of habitations the old Greeks occupied in their palmy days in the time of Phidias in the fifth century, B. C.

As our Chicago gentleman expected, he learned that the general principles of good architecture were the same everywhere, though carried out with more or less skill, according to the ability of the designer. All the require-



WEST WALK OF PATIO.

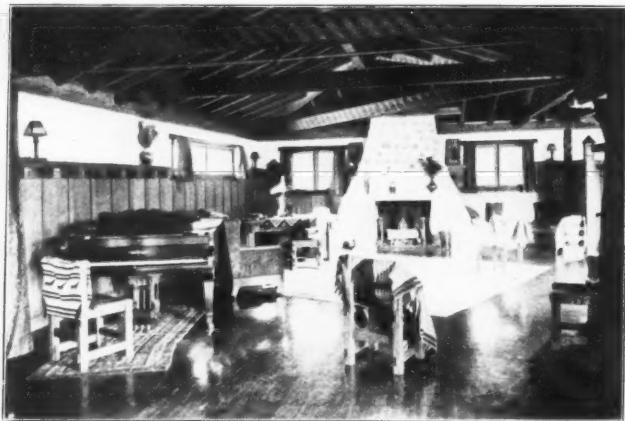
ments must be in accord with manners, customs and wants and carried out in a direct and sensible manner, in accordance with the habits and customs of the occupant. The material must be what can be readily and economically procured and adapted to the building. The proportions must be carefully considered, and always pleasing. There must be a harmony of color everywhere, not only in the building itself, but with the environment. The exigencies of the climate must be thoroughly satisfied.

In Southern California, during the winter months, there are often days of rain, cool and damp, when artificial heat is required, and when the water must be quickly taken away from the roof and from around the building. In the summer the roof must be covered with a good non-conductor that the heat of the mid-day sun may not penetrate the roof to any unpleasant extent, for the circulation of air through the building should keep the temperature sufficiently cool, and, assisted by the sea breeze that blows daily from the Pacific, should be refreshing.

The roof covering the owner selected, to satisfy these requirements, and at the same time give him the color he required to give a pleasing contrast to the warm gray of the cement walls, was a red tile made in the vicinity.

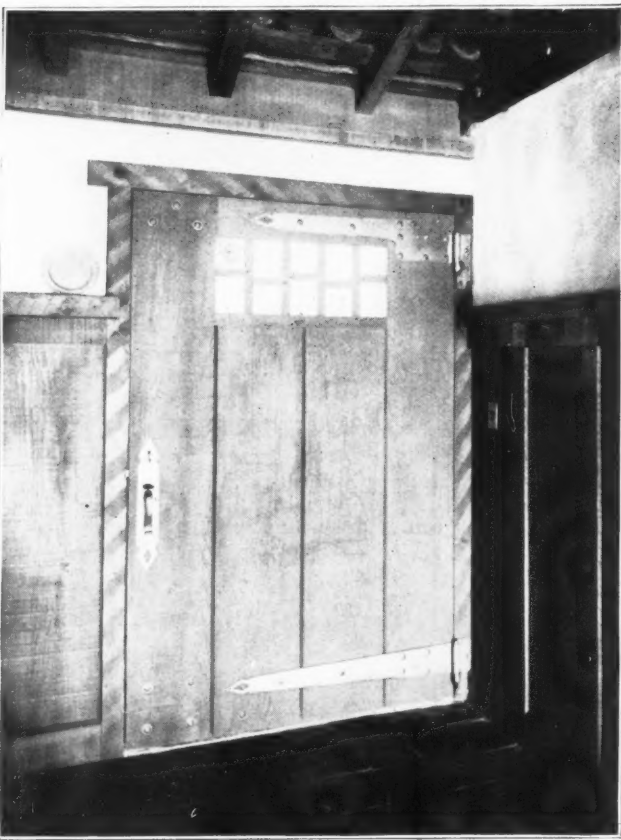
He arranged his windows so as to have plenty of light and air and sun in every room in the house.

He glazed the windows with small lights, from about five inches square to 5x11. After repeated experiments he assured himself that cullied glass, by its numerous irregu-



NORTH END OF LIVING ROOM.

larities, gave pleasing reflections, sometimes almost prismatic. As the tile roof was heavy, he designed a strong frame of Oregon pine, with trusses and purlins, all to be seen from the interior, except in bed rooms. To prevent any spreading he secured the ends at the wall plates with long steel clamps tied to the lower cord by bolts and nuts, all hammered out by hand. The tile were secured to the purlins, so that the interior effect was good. The timbers of the truss and the posts required were all of Oregon pine, left as it came from the saw, but scored by a round-faced plane, cutting a shallow oval groove about two inches



INSIDE FRONT DOOR.

wide and one-quarter inch deep diagonally across the timber at an angle of nearly forty-five degrees, giving an artistic effect.

The walls are plastered with Portland cement of a warm gray color; no float nor straight edge was used. A trowel was swept over the surface with a circular motion, causing a slight change of color quite artistic.

The trim was all put on before the plastering, which latter finishes against it. The walls were wainscoted five feet six inches high, with redwood panels about twelve inches wide, with four-inch muntins between. The redwood is left natural or stained with creosote oil. The wainscot is capped by a timber shelf some six inches wide.

For lighting, electric wires are run with outlets wherever the owner thought he might possibly find them convenient. For fixtures, he has stationary lanterns of black



WINDOW-SEAT IN LIVING ROOM.

iron and mica sheets where desirable, and drop lights with cords leading to reading and writing tables with light standards of the same style of black iron and mica shades. No danger of breakage. Oil lamps, fixtures and lanterns were designed and made for the house.

The furniture was all designed by the owner, all very simple and substantial, of pine covered with sole leather, with the cattle brands left in full view and in a desirable place. The tables are of massive Oregon pine frames, with a top of old mahogany, surrounded with an edging some four inches of Oregon pine. The mahogany is highly polished, producing a very beautiful and substantial table. The dining table, 5x10 feet, is of old mahogany, with a rough redwood timber border.

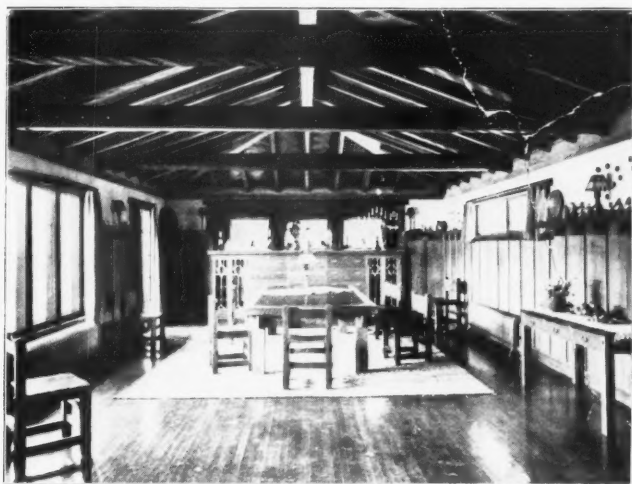
The grounds surrounding the house are as studied and carefully planned as the interior. The rose beds are roses only, that their blooming and resting may be controlled, for the tea rose, which is the rose of California, will bloom as long as it is made to grow by water and nourishment, so that these rose beds bloom after the rains, and in the dry part of summer can be rested by stopping the irrigation the length of time desired.

The owner has a novel lawn, composed of the ordinary grasses, filled with a great variety of wild flowers and poppies. These lawns are very pleasing and require



little attention other than watering. No lawn mower is permitted on the place. Against the house on all sides are planted running vines and climbing tea roses, so that in a year or two the house will be entirely covered by green and flowers, the flowers selected to harmonize with the red tile roof. As the vines grow the openings of windows and doors will be cut out. The pergola which forms the end of the court—the patio is 45x82 feet—is covered with climbers. The posts are of redwood, rough, and scored diagonally, same as the interior framing. The court and the grounds around the house are planted with the forest trees and shrubs. There are flowering hedges planted on natural lines, bordering the grounds and the walks. There is a row of fine cypress trees twice the height of house, used as a screen to shut off one side.

It is easy to see that the owner, who is directly responsible for everything in this remarkable house, is not only an artist, but full of invention, and has given much study and care to every detail. He worked at the building whenever it was practicable for him to be there, directing, even to taking the trowel and plastering himself a bit of wall until he succeeded in producing exactly what he wanted, and then left the workmen to go on with the



SOUTH HALF OF LARGE LIVING ROOM.

work. He made numerous changes at the house, moving windows and changing openings until the light suited him. He selected, or had made from his own design, all the hardware, which is very plain and very substantial.

The furniture, which is also the owner's design, is very plain, though artistic and very comfortable.

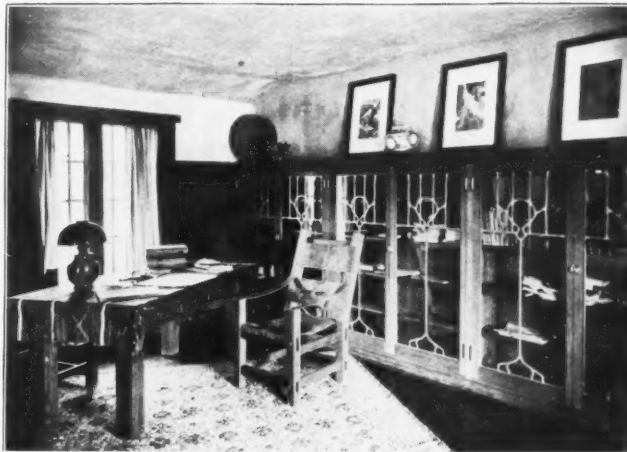
I have no doubt but were it possible to make changes now that the house is completed and occupied, the owner would change some trifling details, but any other would be entirely satisfied with the house as it is. It teaches one lesson. That a house of the greatest simplicity and substantial character can be made very artistic and pleasing without a molding or a bit of carving, or any decorative painting. It is what I imagine an ancient Greek of the best period would build for himself were he to live in Pasadena.

In a letter to the writer, Mr. Eddy, the designer of the house, expressed himself as follows:

W. L. B. Jenney,  
Los Angeles, Cal.

MY DEAR MAJOR: Generally speaking, all native built dwellings are useful and appropriate, and therefore entirely harmonious with their settings, whereas, generally

speaking, most architecturally built dwellings are neither very useful nor very appropriate, and do not harmonize with their settings. By "architecturally" built dwellings I mean dwellings built under the influence of school and tradition; dwellings—the planning, construction and details of which are more or less intentionally affected by



VIEW IN STUDY.

what other peoples in other countries, in other times, and living under entirely different conditions, have done. I recognize the fact that it is impossible for any civilized people to either ~~think~~ or do anything else naively, as, for instance, the natives of the Philippines construct their simple dwellings; for the reason that every civilized people is in constant contact and communication with other peoples and we inherit traditions which affect our lives; but it is one thing to yield more or less unconsciously to influences, past and contemporary, and it is quite another thing to deliberately study the past, and all that is strange in the present with a view to appropriating and making use of what does not rightfully go with our own surroundings and our own modes of living. The fault I have to find with the practice of architecture is, that it exhausts itself in the study of the strange and the foreign, with the avowed purpose of adopting the dead and disintegrating models of the past for the use in the present. Every architect should hang over his door the motto, "Let the dead bury



NORTH BEDROOM. AFFORDS VIEW OF MOUNTAINS.

the dead," and when he probes among the remains of Greek, Roman, Gothic or Mediæval architecture, he should hold his nose as if he were turning over the rotting bones (of great, but none the less dead, people) of a graveyard. The past can teach us a great deal, but its greatest lesson is, that every great epoch in architecture has been sufficient

unto itself. The test of great architecture has been its complete and immediate response to the needs of the hour. The greatest architecture in America today is the so-called "sky-scraper" of steel skeleton construction, which *you* originated. As compared with the plain, tall, steel building, every reproduction of Gothic, Roman or Greek architecture in this country is incongruous, inharmonious, and therefore ugly—the purer the reproduction the more inharmonious, incongruous and uglier the result; if it were



FIG. A.—A PREHISTORIC MOQUI PUEBLO.

possible to transplant the Parthenon in all its original glory to New York or Chicago, the effect would be as inharmonious and ugly and detrimental to the aesthetic development of this country as the Masonic Temple of Chicago planted on the Acropolis would have been to Greek development.

The question is frequently asked whether the house is not an example of the "Mission style." I think you will agree that it does not resemble in any degree the Mission proper—the church—but it probably does resemble the habitations—the low buildings which were usually connected with the church and which formed the three sides of the quadrangle enclosing the court yard. Most of these low buildings have disappeared. Nowadays Mission architecture means the ridiculous use of the characteristic front of the Mission church in business blocks, hotels and houses built for twentieth century people. This front, with its characteristic gable, is repeated everywhere, even to the openings for the bells, and the use of these few prominent characteristics is called the adaptation of Mission architecture to our domestic needs. This is an abuse rather than a use of the Mission "style." The Mission fathers and the people about them did not live in their churches, and they did not live behind such extraordinary facades as one now sees attached to California hotels and residences; they lived in simple dwellings connected with the church; these dwellings are not reproduced in their simplicity, their usefulness, and their harmony, but the monumental architecture—the church—is reproduced in dwellings, hotels and factories, and that is called the adaptation of the Mission style to American requirements.

However, this ridiculous misuse of the Mission facade throughout the southwest is not one whit more irrational than the precisely parallel misuse of the facade of the Greek temple throughout the East. Architects who copy the Temple of Theseus for a bank building should not hesitate to reproduce the front of Notre Dame for a department store; and why not commercialize the Gothic?

Very respectfully yours,

A. J. EDDY.

#### THE EVOLUTION OF THE EDDY HOUSE.

This is illustrated by Figures A, B and C.

Figure A is a prehistoric Moqui Pueblo. Another very good illustration is found in the admirable work of Charles F. Lummis, "Some Strange Corners of Our Country." "The Pueblo Taos" (in New Mexico). These Pueblos were built quite as much for protection against the marauding savages as for habitations. They are built in terraces, well set back from the house below, so that the roof of the lower house forms a large front yard or veranda for the upper. On this the inhabitants can collect in case of an attack, and shoot arrows and throw stones on those below. There is no connection between the houses, with rare exceptions. All connections between stories are by rude, heavy ladders, that are pulled up at night. These forts are practically impregnable against Indians armed only with bows and spears. The walls of the houses are of stone, a lime or sandstone, with a ready rectangular cleavage broken to the size required and laid up with adobe and plastered smooth on both sides. The doors and windows are placed where required, with a simple frame. All cooking is done on the outside. These houses are perfectly dry and a secure protection and satisfy in a thoroughly rational manner all the requirements of the occupants—no style of architecture could do more.

Figure B is a native house, still standing, near San Diego. Here is a decided advance toward the Eddy house. Instead of a communal house of many stories, a fort rather than a habitation. The house shown in Figure B is a single story, although stretching along, one house after



FIG. B.—A NATIVE HOUSE NEAR SAN DIEGO.

another, separated only in the interior. This is the house wherein Romona is said to have been married, and in consequence is much frequented by tourists who choose for themselves the ideal house of the short row, and weave about the place all the romance they are able to invent. The plastered walls, the rectangular openings, the tile roof and great simplicity—evidently the height of the single story is only what is desirable—and, like the Eddy house, while every comfort and convenience seems to have been satisfied, there is nothing unnecessary.

Figure C is the street front of the Eddy house. The evolution is one of progress, save sophistication. But there is not a trace of those features commonly identified with the Mission style, which was an importation and an adaptation. The Moqui Pueblo and the native house—Figure B—are developments, pure and simple, with its prototype in the prehistoric cliff dwellings—a simplification of Figure A, tucked into the side of the cliff here and there where the ground favored.



## MUNICIPAL IMPROVEMENTS.

BY ALBERT KELSEY, ARCHITECT

CHAIRMAN OF COMMITTEE OF EXPERTS OF THE ART FEDERATION OF PHILADELPHIA

## PART IX—TERMINALS, CONTINUED

INDEED, this state of affairs is so deplorable that in Columbus, Indianapolis, and other cities of the middle West, so-called interurban trolley terminals are invisibly created without construction, without cost, and without plans, their vague sites being given a tangible location by merely stringing a sign to proclaim the fact across a street at any convenient point.

This snatching of such opportunities, and this building of railway lines "on the sly" as it were, is the most damaging element in the growth and development of our cities, and is a state of affairs which is nothing short of barbarous in comparison with the way these improvements are introduced into German cities.

One of the worst tangles resulting largely from street car congestion is seen at the end of the old Brooklyn bridge. For several years past the Manhattan end has been the subject of serious study. Mr. Hornbostel prepared a design in which he combined a lofty municipal office building with a terminal at this point. Since then another design, by Messrs. Carrere & Hastings, has been prepared to relieve the "bridge jam," whereby a terminal building on one side of City Hall Park will conform with the architecture of the new Hall of Records on the north side and a circular plaza will be created.

To quote from a recent article: "The station building will have a basement below the street level, which will give ample room for the trolley loops, now the cause of so much confusion and danger in the present station. The first floor, on the ground level, without interfering with cross street lines, will provide waiting and assembly spaces for bridge passengers. It will be the chief center of distribution. The second floor will also serve in the distribution of passengers both from the Manhattan elevated railroads and those crossing the bridge. On the third floor will be the tracks and platform for the bridge trains. Being the main station floor this will be made especially accessible by wide stairways and will be well lighted and aired."

"Ultimately," the article goes on to say, "when the proposed subway loop line connecting the three East River bridges is built, it should be a simple matter to gain an entrance for its tracks through the basement of the Brooklyn bridge terminal." This scheme will probably be executed and, strange to say, it will much simplify the present arrangement by opening up a view of the great bridge tower which can now only be seen after a dim and tortuous trip through a jungle of steel posts and unsightly advertisements. The arching of streets opposite the end of the bridge will, if executed, form a worthy entrance to the great structure and will be a decidedly important embellishment to the city. No city in the world is grappling with its transportation problem so intelligently as New York is today.

At the Long Island end of the Williamsburg bridge

there is a great clearing where many trolley loops intersect. It is also a point destined to be a great terminal. Messrs. Lord & Hewlett have prepared an amazing design for its treatment. A sort of modern hanging garden of Babylon.

A vast structure covering all the loop is shown, with a terraced promenade around it, and above there is a great turf covered playground, with rows of trees and shrubbery about it, and a band stand with an amphitheater of seats around it as a focal point on this public roof garden. Thus a splendid playground, with refreshing verdure, is to be combined over a dangerous track yard, and a covered terminal is to be created in which traffic will be divided and separated in an orderly and systematic manner.

While the elevated street railway system is always to be avoided, it is pertinent to remark that in Boston a convenient station arrangement has been devised by creating them between the tracks, thus doing away with the isolated twin stations used in New York. On the other hand, Boston's new elevated railroad ruins Dewey Square and the appearance of the South Terminal on it, which, before this was built, looked like a better building than it really is. It is not until one reaches the low trussed concourse between the head house and the train shed (the latter has some merit) that one realizes what a mess has been made of a great opportunity. Both of Boston's comparatively new terminals show a decided backward tendency, as neither expresses present day requirements as well as the old Providence station expressed the demands it was built to meet over thirty years ago. By this it would seem as though we were to learn nothing from our experience with railroads, and that the trolley nuisance has come to stay. At least it seems so in many cities, but in others some foresight is being displayed, and where the subway has been adopted and the street car tracks have been removed from the surface, as along the Common in Boston, proof is given of the possibility of adding new conveniences and new improvements to already crowded communities, without adding to the congestion.

The policy of municipal ownership and operation of street railways is making rapid progress abroad, where it thus becomes much easier to build costly subways than here, where they are often private undertakings and as such place too much power in the hands of a few capitalists. Where these basement streets are owned by the city they may be used for other purposes than transportation, and all stations may be more permanently built than when built by a private company, though there is no complaint on this score in New York, where they have been admirably designed and executed; yet as a rule it is dangerous to grant such important franchises to private concerns. In the writer's judgment it would be best for the city to own the plant and for a private company to operate it.

(To be continued.)

## SANITARY ENGINEERING IN THE MODERN OFFICE BUILDING

BY J. PICKERING PUTNAM, ARCHITECT

### PART X

EXAMINED for friction, or self-scouring properties, these spiral traps showed themselves, as might be expected, far superior to the others. The thirteen-inch trap, tested by the apparatus shown in Fig. 34, discharged the twelve gallons of water from the tank in less than half the time required by the rectangular trap of Fig. 25,

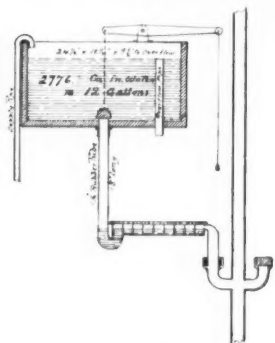


FIG. 34.

twenty-seven seconds being required for the former and fifty-five and a half seconds for the latter. Moreover, heavy substances, like small lumps of iron and lead, were retained in the rectangular traps, but were always easily and quickly whisked through the spiral traps and carried over into the waste pipe.

Now the scour exerted by the water in passing through

the reservoir chamber of the spiral traps was found to be as effective upon the walls of the chamber as upon the dip of the trap proper, because it is in the dip of a trap that heavy matters are most likely to be caught and retained, not only because the bend is most sudden at this point, but also because these matters have here to be elevated by the amount of the depth of the seal, while in the reservoir chamber they have only to be pushed along a smooth horizontal surface, gradually rising toward the end

to the slight elevation of the overflow.

When the waste outlet of a plumbing fixture is very much smaller than the area of the waste pipe connected with it, the water loses its scouring force, and greasy matters will gradually accumulate along the walls, not only of traps, but even of the straight waste pipes themselves.

Now, our spiral trap is evidently no more able to resist the fouling effect resulting from improperly constructed fixtures than would be the straight waste pipe itself. But it has this all important advantage over a vented S trap, that whereas in the latter the vent pipe opening being the first part to be clogged by greasy deposits, the whole trapping system becomes at once destroyed, and this without any warning to the user; with the former, the sediment being equally distributed over the inlet pipe and the body of the trap, this reduction of the area of the waterway can not in any way reduce the anti-siphonic character of the trap, because it simply converts it into a smaller trap, having the same relative properties and principle of action. Indeed, the sediment will tend to accumulate where the resistance to the scour is greatest, which is at the dip, and in this case the area of the trap proper will constantly diminish with relation to that of the reservoir chamber, in which event the resistance to siphonage will, if anything, tend to increase rather than diminish.

(To be continued.)

## THE PLANNING OF HOSPITALS

BY T. M. CLARK, ARCHITECT

### PART VIII

WHERE accident or other serious surgical cases are received, an operating room, usually connected, for convenience, with the entrance story of the administration building, is a necessity; and the smallest operating room, if it can not have all the accessories, should at least be surrounded by all the precautions, which are observed in the more important ones, and which will be treated of more at length hereafter. Whether the administration building should also contain a dispensary or out-patient department, depends upon conditions which can only be properly weighed by the medical direction. As a rule, perhaps, special institutions, such as cancer hospitals, eye and ear infirmaries, and children's hospitals, if situated in large towns, require that the out-patient department shall be in the administration building, or closely connected with it, so that it may have the supervision of the experienced medical men attached to the institution; but the out-patient department of large general hospitals is often more conveniently arranged in a separate building and served by its own medical staff. Whether on a large or a small scale, the out-patient department must have its general waiting room, with toilet rooms for men and women, and a sufficient number of examination rooms. From ten to twenty of these may be required for the out-patient department of an important city hospital, and they must be well lighted. Often, they are mere cells, with windows,

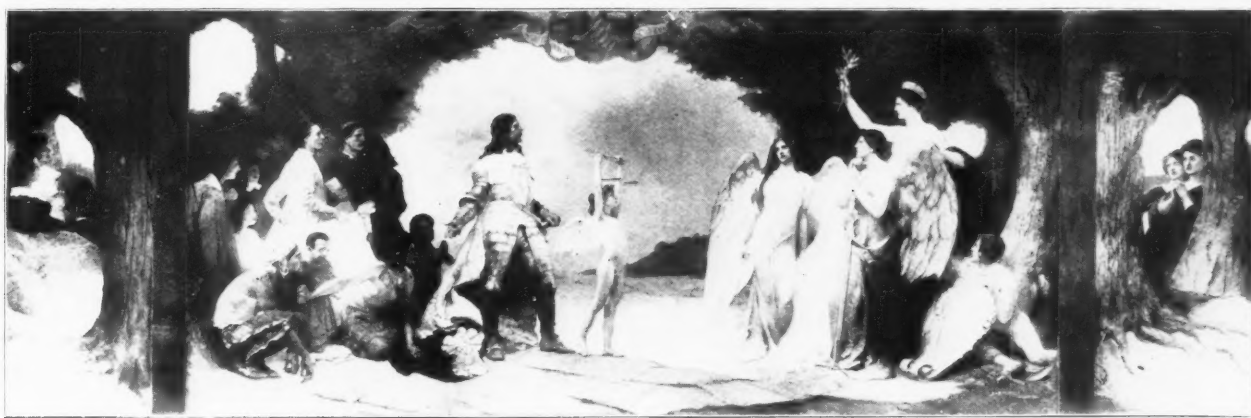
but it is desirable to provide some of them at least, with wash basins; and baths, where patients can make themselves more presentable for examination, are sometimes added to the toilet rooms attached to the waiting room. An office for the registration of patients may also be necessary, as well as a pharmacy, where prescriptions can be filled for indigent sufferers, as well as for the general uses of the hospital itself.

Where much mending has to be done, it will be found convenient to attach a workroom to the matron's office; and in large hospitals the duties of the commissariat are generally intrusted to a steward, who may have his office either in the administration building, or in the kitchen block, where that is separated from the others.

As the scale of the hospital increases, and the services of the administration department become more complex, it may be necessary to assign several of them to separate buildings, until the administration constitutes a group, rather than a single structure. The first service to be so separated is usually that devoted to the heating and ventilation of the entire establishment, as it is obviously desirable to keep the smoke from the boiler chimney and the noise and dust involved in unloading and shoveling coal at a distance from the other portions of the hospital.

(To be continued.)





"THE EDICT OF TOLERATION OF LORD BALTIMORE."  
DECORATION IN BALTIMORE COURT HOUSE.

BY EDWIN H. BLASHFIELD.

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### LAMP POST DESIGNS.\*

BY JAMES WILLIAM PATTISON,  
Secretary Municipal Art League, Chicago.

NO American city seems to desire to beautify itself with those simple and inexpensive objects which no one pays attention to when all details are artistic. If the charming lamp posts of most European cities were taken away, their loss would excite comment at once. We do not observe the badness of ours, because the condition of mediocrity is chronic, like dirt and rotten sidewalks.

In order to awaken the ambition of our people the Municipal Art League undertook to secure a mass of designs for these lamp holders, suitable for street or park use, offering three prizes for the best designs, one of \$100, one of \$75, and one of \$50. These sums were not of sufficient importance to move the intelligence of our most learned and experienced designers—and of course the most busy—but they did call out work from some very talented men and women of the younger class. Probably this is not to be regretted, because these young folks are less "hide-bound" than some of their elders. In any case, the designs are excellent, original and practical, unlike any I have seen in Europe.

The city authorities were—some of them—very interested in this movement. Were, I say, because city officials change and those who had been won over leave their places to others with whom the subject has not been considered at all. But the officials of the park boards are interested decidedly and are paying attention.

The call was for lamps with one light. To have left the specifications more elastic would have created confusion. Some of the designs have been reconsidered since the exhibition opened and the lights made two, one on either side of the post, in order to avoid shadows. Of course this change opens up new problems and creates new difficulties, but that is at least interesting and stimulating to the talent of the designers.

The first prize was given to Arthur Gunther, who is a student in the designing classes of the Art Institute. This is colored to represent brown bronze, though it could as well be done in fine cast iron. The young man is now studying the problem of placing another lamp on the opposite side of the post, which presents several new difficulties. But he has good courage.

\*These designs are published in our illustration pages. They are selected from those submitted in the Lamp Post Competition of the Municipal Art League of Chicago.

The second prize was awarded to John Lilleskau, a designer now in full tide of his life work. It is a fine example of choice renaissance.

The third prize fell to Enoch Vognild, recently a student at the Art Institute. This slender shaft with its well considered base and its air of coy maidenliness has awakened as much admiration as any in the showing. A long row of such as this would be decidedly charming on any street.

Those marked "art nouveau," by Hugh A. Price, are sufficiently remarkable; the one solid and dignified, the other slender and ornamental. The heavy, square one should have two lights, and it could have them well.

E. Pierron has two designs, both good. He has, at my request, placed a second lamp on the opposite side of his really pleasing post, and it is an improvement. The other one with a square shaft has called out much comment because so good. Rays of light shine out from J. M. Anderson's superposed globe, and the sign manual of the city of Chicago marks the well proportioned standard. Mr. William L. Welton's monumental and imposing standard is too expensive for an entire street, but for a single imposing ornament at the entrance of a park or on one of the many street triangles in the city it would be impressive. All Europe, small cities as well as great ones, has these special lamps for important places, and they are necessary to the beauty of any town. This one calls for a stone seat or a drinking fountain at its base.

W. W. Harper, of Omaha, designed the very refined lamp represented with a flight of pigeons across the sky at the top. Possibly somewhat expensive, it would do well as a special ornament.

A considerable number of the most interesting of the designs will remain on exhibition in the Club rooms, Art Institute, for some time.

### QUESTIONS.

*Referred to our readers for answer.*

**Acoustics.**—Can you furnish us with the address of any one who has practical as well as theoretical knowledge of acoustics as applied to public halls for speaking, and the correction of defective acoustic properties of public halls, churches, etc? Subscriber, Louisville, Ky.

**Theater Planning.**—Kindly advise us as to what are the best books on modern theater planning, particularly as to sighting. Subscriber, Hamilton, Ont.

## NEW PUBLICATIONS.

## IMPRESSIONS OF JAPANESE ARCHITECTURE AND THE ALLIED ARTS.

By Ralph Adams Cram, Fellow of the American Institute of Architects; Member of the Society of Arts, London; Fellow of the Royal Geographical Society. The Baker & Taylor Company, Publishers, Union Square North, New York. Price, \$2.00, net.

The work consists of ten papers. Five of these have been printed before in another form, and one is a paper read before the Boston Society of Arts and Crafts. The remaining four papers of the book have not been before published. The opening chapter is on "The Genius of Japanese Art." The author directs attention to the fact that the civilization and art of Japan are communal and involve the family and the State; the past, present and future; while all the art of Europe is individual. It is, therefore, difficult for the West to understand the art of the East. He sees a close analogy between the art of the Greek and Japanese, each developing exquisite detail that resulted in final perfection. In comparing the progress of the architecture of the West with the East he states that in the West a style lasts at most but a few centuries; in Japan is seen the advent of a style coincident with the civilization and gradually developing for twelve hundred years, ending in the flood of Western ideas. The author sees in Japanese architecture one of the great styles of the world; it is logical, ethnic and perfect in development. It must be judged as the most perfect style in wood that the world has known. Tracing the historical course of Japanese art its beginning is placed in the latter part of the sixth century. Previous to this Japan was in a comparatively barbarous condition. Then with the introduction of Buddhism from Korea there was a great awakening to action. With the new religion came architects and sculptors, and a monastery was built by Korean architects on the Chinese model. In simplicity of construction, subtlety of line and dignity of mass this architecture showed perfection of development. This group is the most precious architectural monument in Asia, as it represents the birth of civilization in Japan and is an example of the architecture of China at that period.

Near Nara is a pagoda that is the first undoubted work of an architect of Japan. It dates from 680 and is one of the most beautiful structures in the country. In place of the severe and classic masses of the Korean work it has a lightness and grace only paralleled in the medieval architecture of Europe. It was the product of but a century's development. From the year 725 there was a retrogression in architecture till the first of the ninth century. At this time there was an impulse direct from China and Japan developed a civilization unknown before. The best example of the architecture of this period is a temple near Uji. In delicacy of proportion and refinement of composition the author states that this building marks the culmination of Japanese architecture. The remains of the architecture of the first five centuries of Japanese civilization indicate the existence of a school of architecture in Japan worthy to rank with the classical, medieval and Renaissance of Europe.

Toward the close of the fourteenth century there was a decadence of architecture and an advance in decoration. Temple building commenced on new lines and Chinese influence was again dominant. The characteristic buildings of this period are the Zen temples and the palace pavilions of Kyoto. In the Zen architecture the low, long temples of the Korean style are superseded by buildings nearly square and very lofty inside. The roofs rise in steep and graceful curves. With the end of the sixteenth century came the closing of Japan to the rest of the world. Cut off from Chinese influence and meeting the demands of a great feudal system, the architecture became a riot of unparalleled decoration. From then till the opening of the ports architecture was little more than a system of decoration. Omitting the question of constructive design, the shrines of this period are marvels of exquisite art and masterly in pictorial effect. Most of the present temples date from this time. In these can be traced the coarsening of detail and loss of perfect curvature. Internally, however, many are models of solemn splendor.

In the architecture of the present, domestic work for the middle classes is largely on the old models; the upper classes have palaces of European design of questionable character, and

this latter criticism applies with greater force to the public buildings.

In reviewing the historical progress of the architecture of Japan the author finds that like other historical styles it is a consistent logical development. From this style we may learn how appropriately buildings of all kinds may be made to harmonize with their surroundings. Another study is the perfection of composition of a single building or of a group. In refinement of line and proportion they are equalled only by the architecture of Greece and medieval Europe.

There is a chapter on "Temple Gardens," one on "Domestic Interiors," and others entitled "The Minor Arts," "A Color Print of Veizan," "A Note on Japanese Sculpture" and "The Future of Japanese Art."

In this review rather free use has been made of the author's expressions with the hope of giving the reader a suggestion of the enthusiasm and appreciation of the author in the treatment of his subject. The work, consisting of a collection of papers as it does, has more or less repetition of fact, but this enhances rather than detracts from the interest owing to the author's felicity of expression, which, multiplied, gives added charm.

The book has sixty full page illustrations of great interest, covering all divisions of the subject. As a specimen of book-making it is a beautiful production and accords with the author's attractive treatment of his subject.

## AMERICAN INSTITUTE OF ARCHITECTS.

At a meeting of the board of directors the secretary of the Institute was directed to send a letter to Mr. A. B. Trowbridge, in answer to a question as to whether it is proper for an architect to have an interest in building materials or contracts, stating that it is the opinion of the board that the code of the Boston Society of Architects, Articles Nos. 2 and 3, was the proper rule for guidance and is as follows: Section 2. "A member having any ownership in any building material, device, or invention, proposed to be used on work for which he is architect, should inform his employer of the fact of such ownership." Section 3. "No member should be a party to a building contract except as 'owner.'" A letter was read in reference to modern albums of architecture by manufacturers, and illustrating such works with cuts of buildings of prominent architects. On motion it was carried that the chairman appoint a special committee to consider the subject of publishing architects' illustrations as advertisements and also to consider cognate matters and report at the next meeting of the new board.

## OUR ILLUSTRATIONS.

Clay School, St. Louis, Mo., William B. Ittner, architect.

The New England Apartment House, Kansas City, Mo., Edwards & Sunderland, architects.

Competition design, Temple Rodef Sholem, Pittsburg, Pa., Albert Kahn, architect, Detroit, Mich.

Lamp Post Designs, Competition of Municipal Art League, Chicago. The first, second and third prize designs, beside others, are shown.

Residence of A. J. Eddy, Pasadena, Cal., in illustration of article, "A Remarkable House." Two exterior and two interior views are given.

Views of residence near Pittsburg, Pa., Phillips, Rogers & Woodyatt, architects, Chicago. Two exterior and two interior views are shown.

The Edict of Toleration of Lord Baltimore, by Edwin H. Blashfield. Lord Baltimore (in armor) recommending to his people wisdom, justice and mercy.

The Harper Memorial, University of Chicago, Shepley, Ruten & Coolidge, architects. This includes the Modern Languages building, the History building and the Central Library.

U. S. Naval Academy buildings, Annapolis, Md., Ernest Flagg, architect, New York. Nine pages are given to numerous exterior views, including general and detail views of Midshipmen's building, the Armory and the Boat House and Gymnasium.

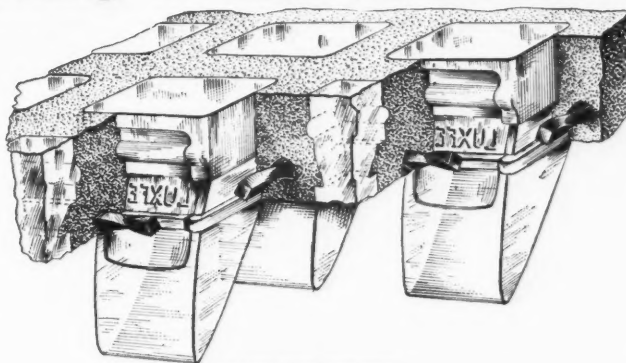


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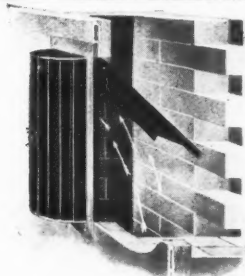
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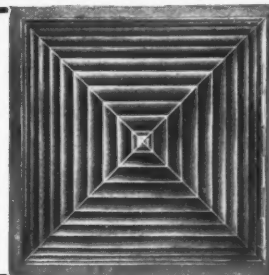


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### ASSOCIATION NOTES.

#### PHILADELPHIA CHAPTER, A. I. A.

The following action has been taken by the Philadelphia Chapter in the matter of architects' advertising: "Whereas, there exists some indefiniteness and misunderstanding on the part of certain members of the Philadelphia Chapter of the American Institute of Architects, with respect to the attitude of this Chapter toward the practice of advertising by its members; therefore be it resolved, that this Chapter considers it injurious to its interests, and also to the interests of the architectural profession for any member's name to appear in any paper, magazine, or other publication, otherwise than as a news item or as part of the general reading matter, of which advertising is not an intentional part in so far as the member, whether individually or as one of a firm, is concerned; that this Chapter considers it likewise injurious for any member to issue, print or publish either as an individual or as one of a firm, any paper, pamphlet, book or other publication for which advertisements are solicited; and that this Chapter further considers the above described acts as breaches of professional ethics, requiring the investigation of the executive committee, as prescribed in Article 11, Section 10, of the By-Laws of the Chapter. And be it further resolved, that this resolution shall be spread upon the minutes of the Chapter, and a copy sent to each and every member of the Chapter."

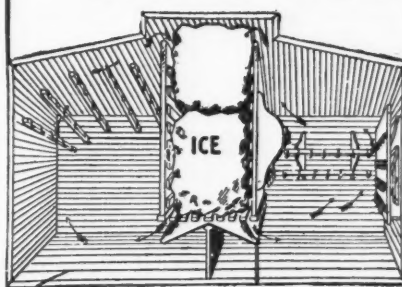
#### CHICAGO ARCHITECTURAL CLUB.

On April 21 a large number of the members, on invitation, visited the cement works at Buffington, Ind. The plant has been finished but a short time. It has large capacity and every modern appliance for the production of the highest quality of Portland cement. All the structures, including an office building of good design, are of concrete construction. The entire power is electric. The party was entertained going and coming on a special train. At the meeting of May 7 the following officers were elected: President, Alfred S. Alschuler; first vice-presi-

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dent, H. H. Mahler; second vice-president, Paul V. Hyland; secretary, J. W. Wilson; treasurer, Charles E. Brush; member executive committee and chairman of house committee, Edward J. Poulsen; member executive committee and chairman of educational committee, Vernon S. Watson. The past club year has been a remarkably successful one; thirty new members have been elected, and the finances are in very gratifying condition.

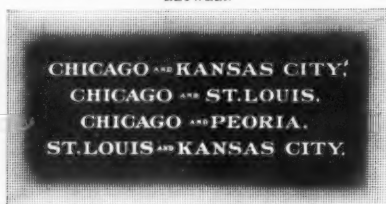
#### CHICAGO ARCHITECTS' BUSINESS ASSOCIATION.

After the usual monthly dinner at 6:30 p. m., April 24, the association took up for consideration the request of the mayor of San Francisco for architects and draftsmen. It was learned that 170 draftsmen had already applied to Mayor Dunne of Chicago for transportation to the coast city. It was the sense of the meeting that reply to the request be sent assuring the mayor of San Francisco of the hearty co-operation of the asso-

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ciation in every way it could be of practical help in sending competent draftsmen, and in aiding the rebuilding to make it the city beautiful. An interesting paper, illustrated by stereopticon views, was given by J. R. Cravath.

#### THE NATIONAL FIRE PROTECTION ASSOCIATION.

The tenth annual meeting of the National Fire Protection Association, which is to be held in Chicago May 22 to 24, promises to prove notable in the history of that active and progressive organization. In addition to the usual program including discussion and adoption of rules and specifications covering fire protection topics, the tenth anniversary is to be marked by a commemorative address on the organization, aims and purposes of the association to be delivered by Uberto C. Crosby, United States manager Royal Exchange Assurance, who is one of the founders of the association, its only honorary life member, and who has been identified with fire protection work covering a longer period than is represented by the history of the organization. An additional feature of interest in connection with the meeting will be demonstrations to be given in the new testing station of the Underwriters' Laboratories.

#### WASHINGTON (D. C.) ARCHITECTURAL CLUB.

To increase the general interest in architecture the local chapter of the A. I. A. is co-operating with this club in providing a series of popular lectures. One has been given by Prof. A. D. F. Hamlin, and another by Ralph Adams Cram. The latter's subject was "Gothic Ascendancy, Past and Present."

At the annual dinner held recently the national capital was referred to from an architectural standpoint as "the queen city of the world." The dinner was tendered as a compliment to the out-of-town judges who had completed the hanging of the exhibits for the annual exhibition of the club. The guests of honor were Mr. Donn Barber, of New York City, and Mr. E. A. Crane, of Philadelphia, Pa. Mr. Cass Gilbert, of New York City, the other out-of-town member of the committee of judges, notified the toastmaster by telegraph that he was unavoidably detained at home. A special guest of honor was Mr. Sidney

Neely of the supervising architect's office, Treasury Department, who recently returned from Peking, China, where he superintended the erection of the new legation buildings. After the discussion of an elaborate menu and the lighting of cigars President L. A. Simon, the toastmaster, gave a résumé of the success that the club has enjoyed, and enjoined the members to try and go one notch higher every year in the sphere of influence and public activity. He first called on Mr. E. A. Crane, of Philadelphia, at one time chief of the drafting division of the supervising architect's office, Treasury Department, who assured the banqueters that he was happy to be here once more among his friends. Mr. Barber declared that he counted it a high privilege to be among his fellow architects in this city, his birthplace. Mr. Barber spoke enthusiastically of the national capital. Mr. Waddy B. Wood was next introduced, and his remarks earned applause. Mr. Sidney Neely, the last speaker, gave a recital of his experiences in the erection of the new legation buildings at Peking. He was engaged in this undertaking for three years. At the suggestion of Mr. F. B. Weedon a rising vote of thanks was extended to the out-of-town exhibit judges. The guests at the banquet were: L. A. Simon, Edward A. Crane, Donn Barber, W. W. Stevens, H. S. McAllister, D. J. E. Lix, Leo J. Weissenborn, P. C. Adams, C. L. Harding, Frank Upman, W. E. Pinkham, John M. Donn, Ed W. Donn, Waddy B. Wood, B. S. Simmons, S. C. Fiske, Walter G. Peter, Nathan Wyeth, W. D. Williamson, Oscar Wenderoth, W. W. Youngs, J. H. Blohme, J. A. Tissington, A. Pitts, Robert Mayo Jr., C. J. Allen, R. E. Adams, William D. Windom, Robert Stead, Julius Wenig, I. D. Porter, E. C. Heald, George P. Hales, Charles Oldberg, L. R. Rice, Francis B. Wheaton, W. W. Davis, William L. Deming, Elliott Woods, Sidney W. Neely, George W. Stone, Charles Columbus, J. H. Coming, L. M. Leisnering, J. H. McDowell, F. J. Woodward, F. L. Molby, Frank H. Jackson, G. R. Berryman and A. H. Flournoy. The banquet committee consisted of W. W. Stevens (chairman), H. C. McAllister, D. J. Lix, W. G. Noll and Dore Wolfsteiner. The officers of the club are: L. A. Simon, president; A. L. Harris, vice-president; L. J. Weissenborn, secretary; W. W. Youngs, treasurer.

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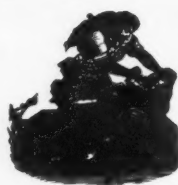
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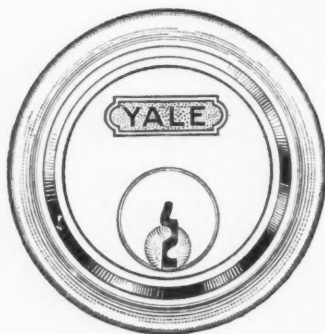


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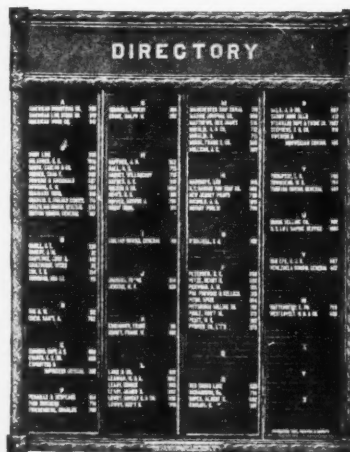
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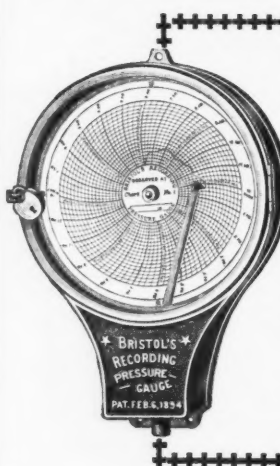
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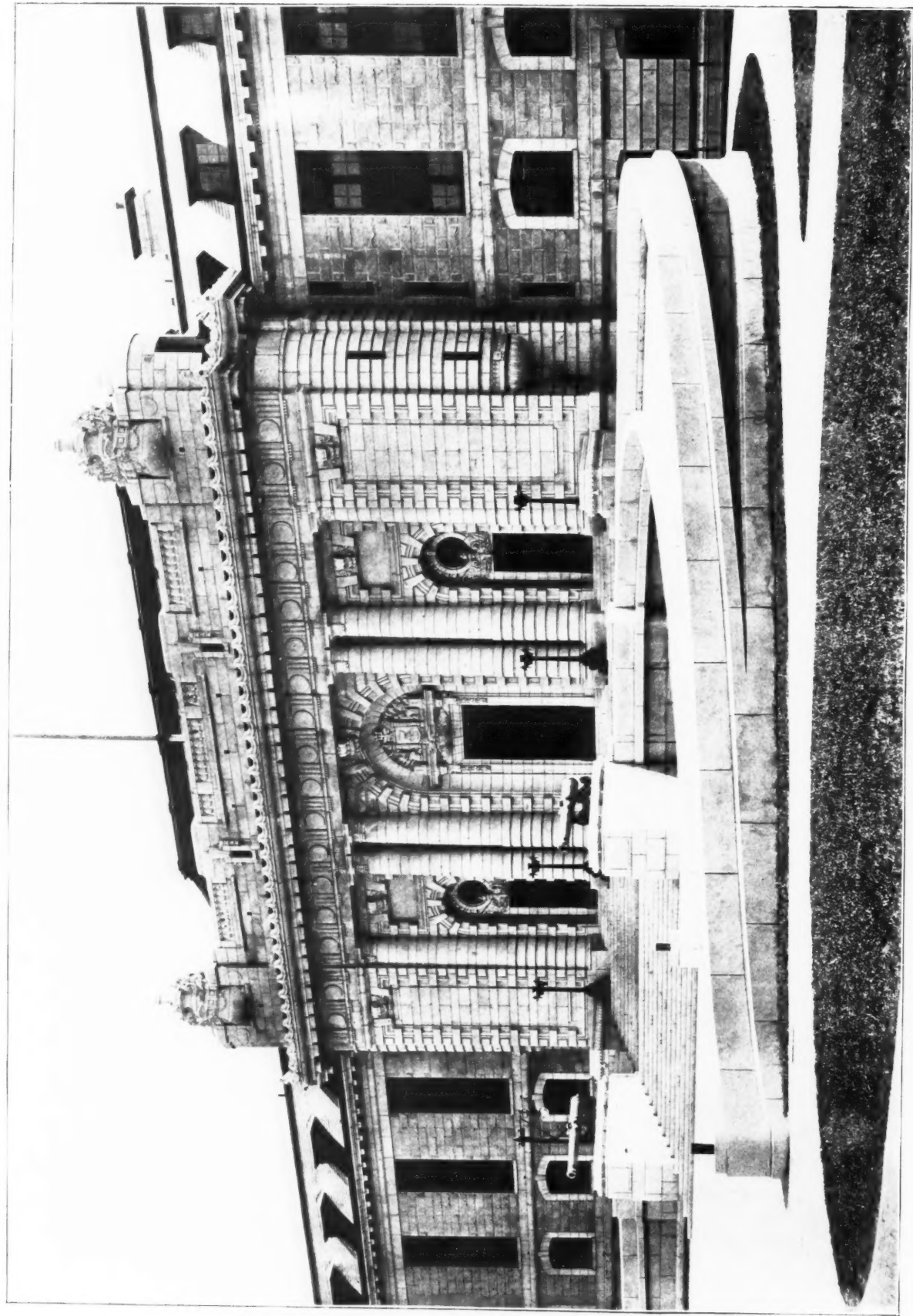
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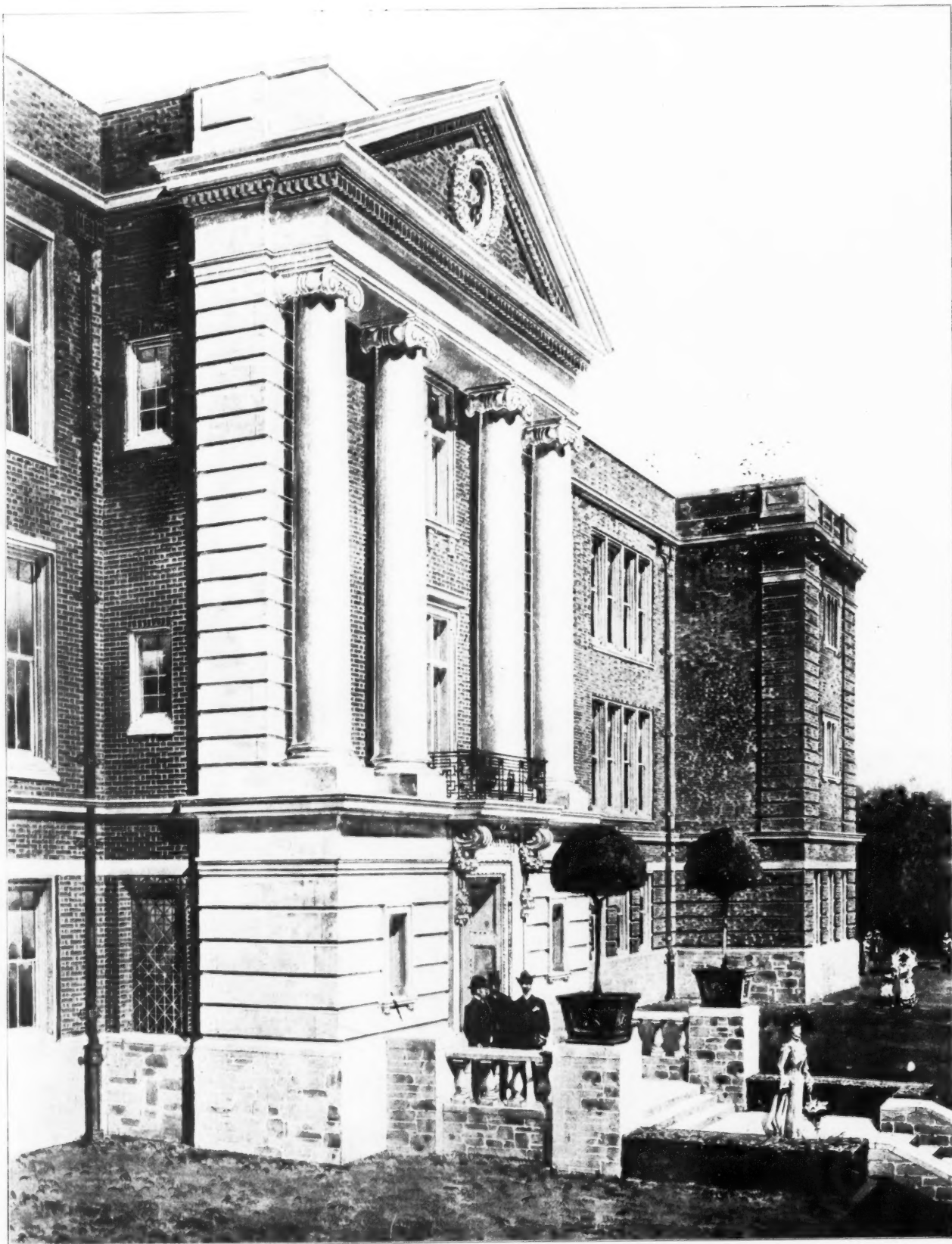
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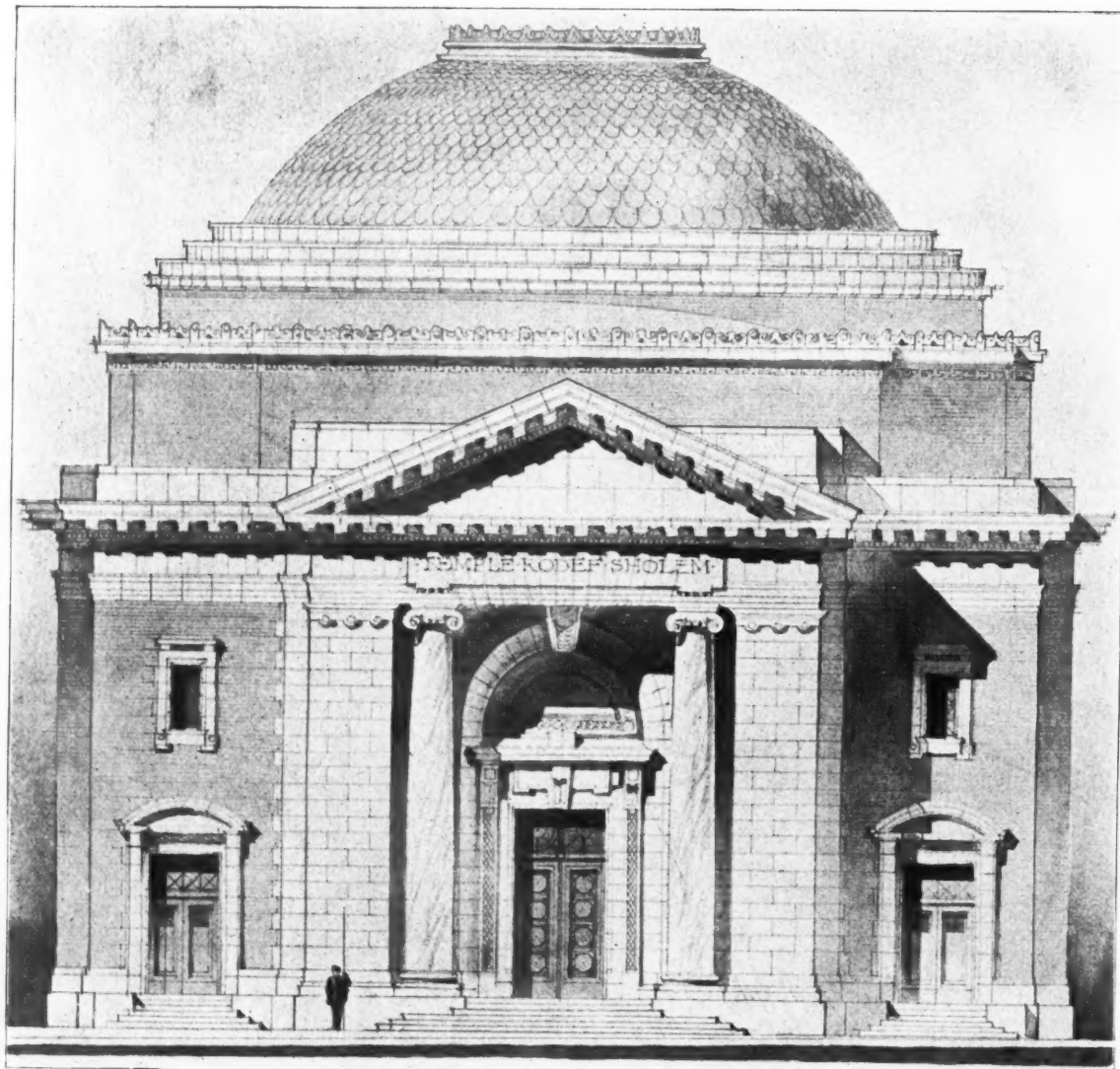
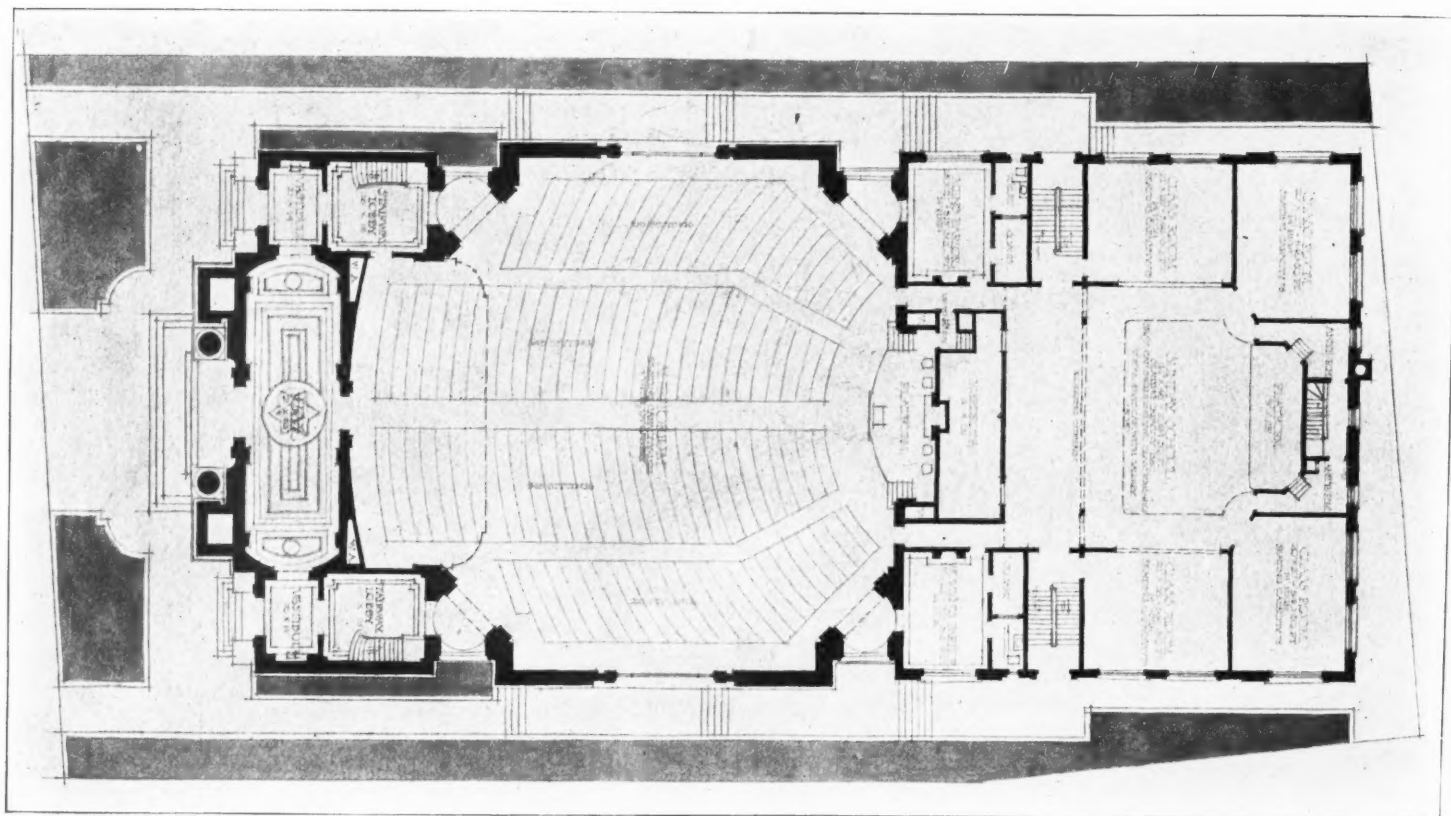


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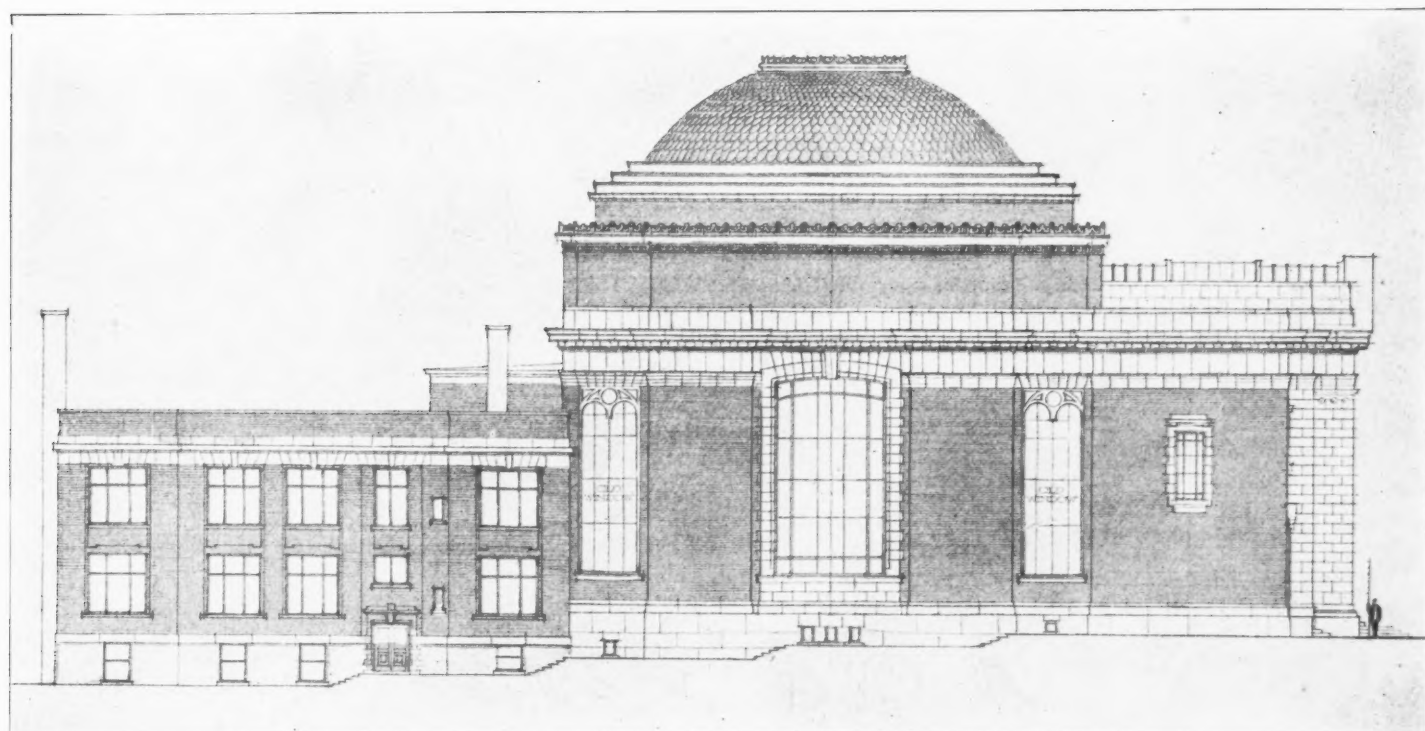
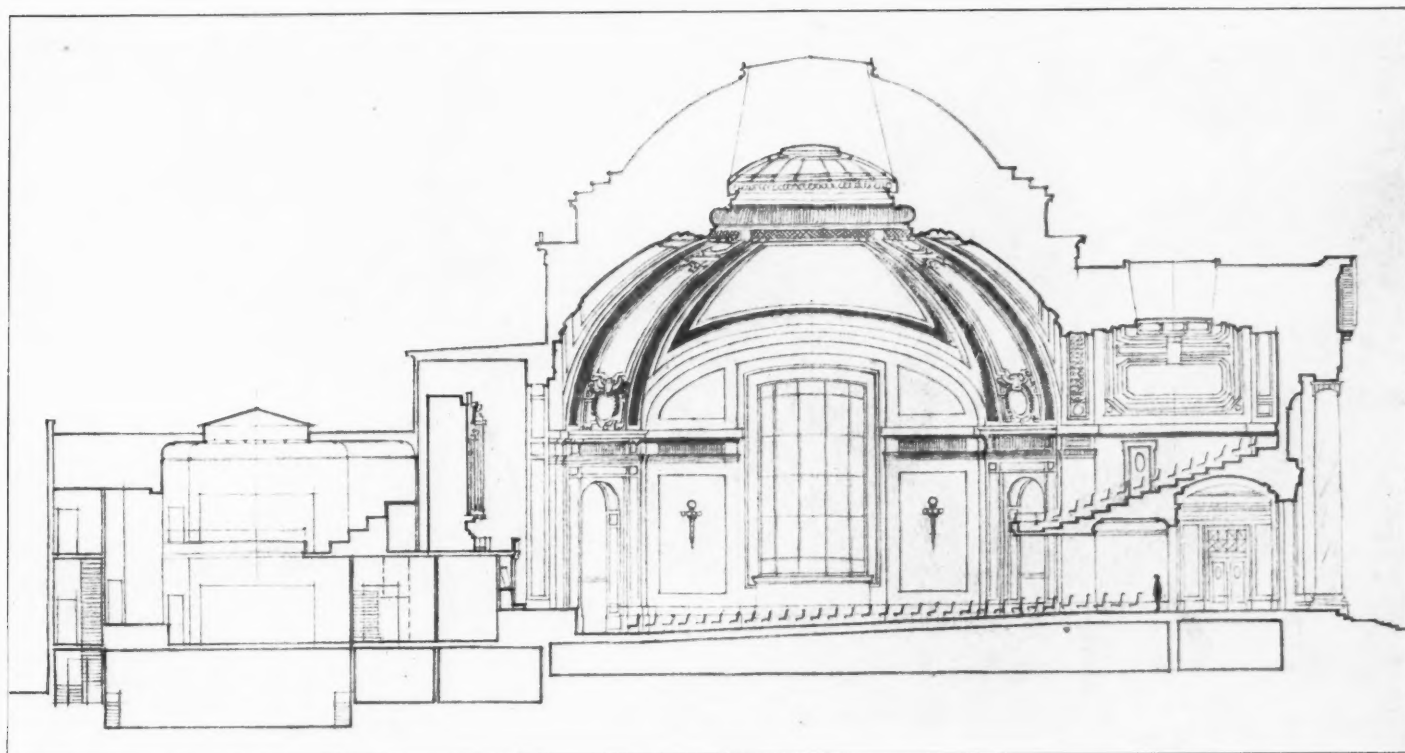
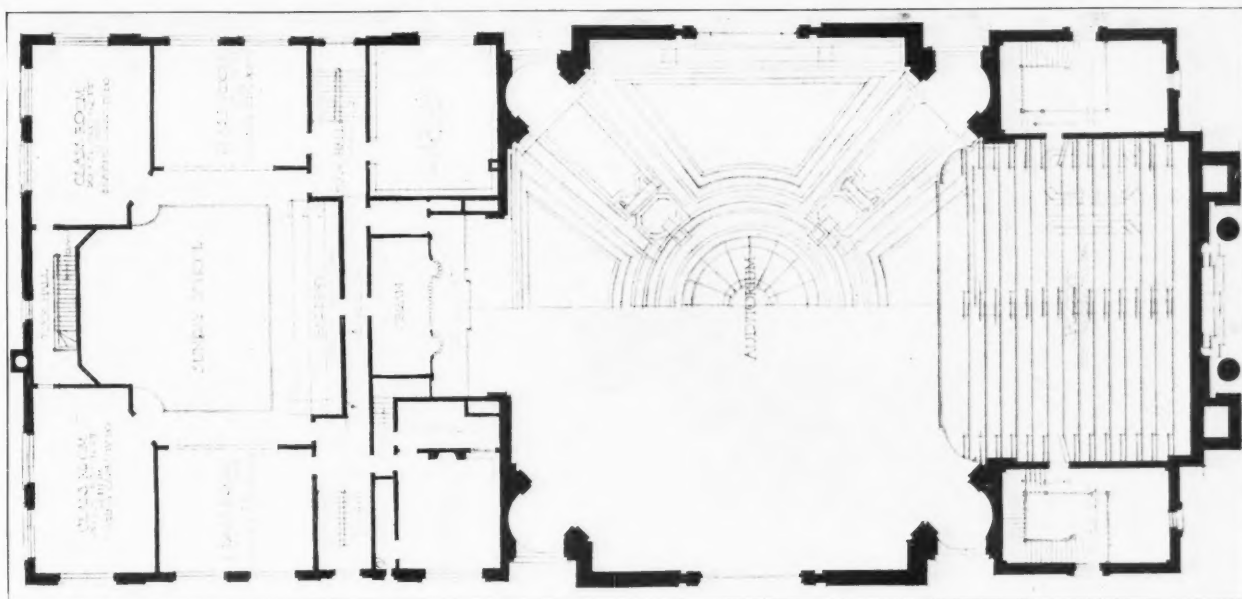
WM. B. ITTNER, ARCHITECT.





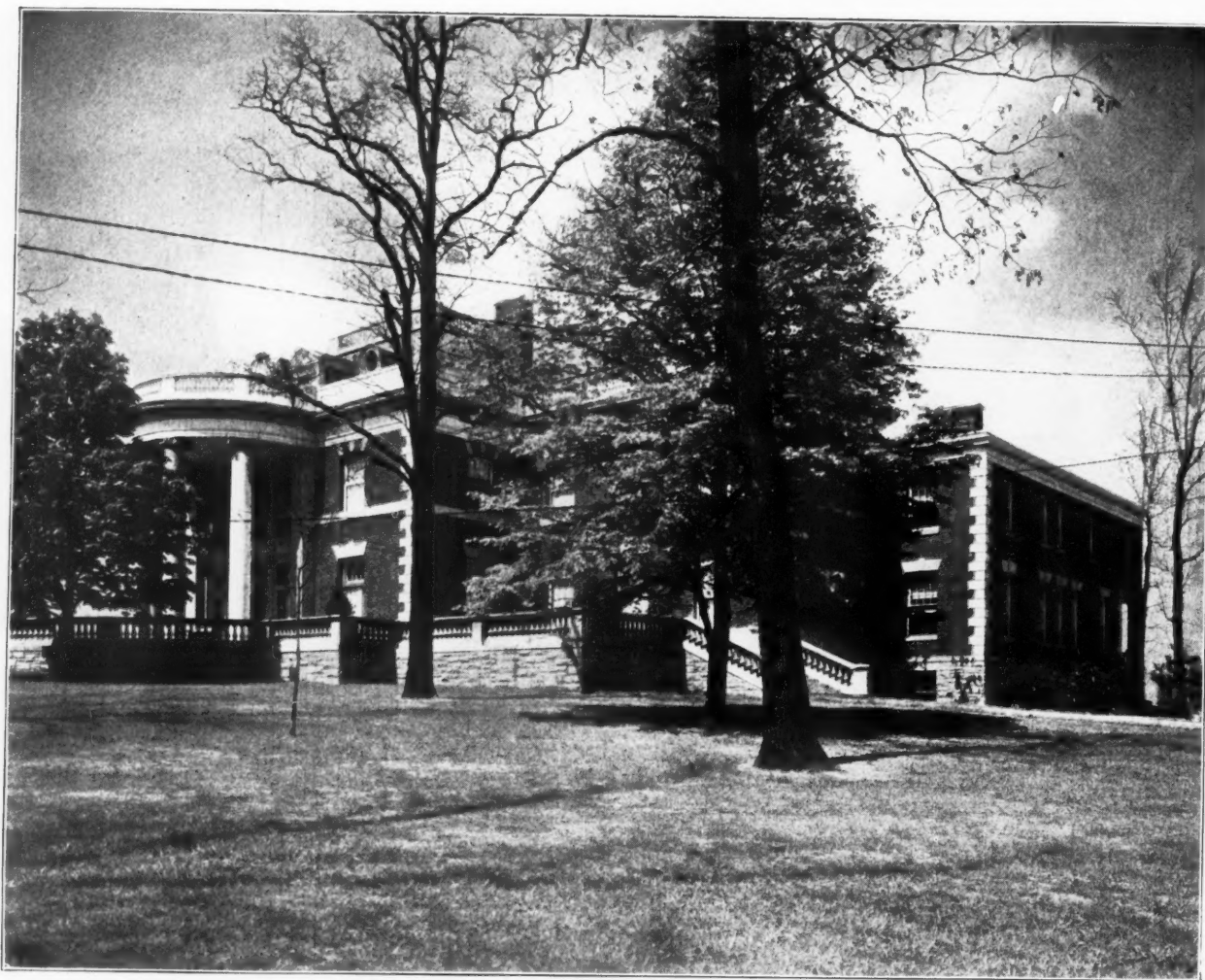


COMPETITION DESIGN, TEMPLE ROYAL  
ALBERT KAHN, ARCHITECT

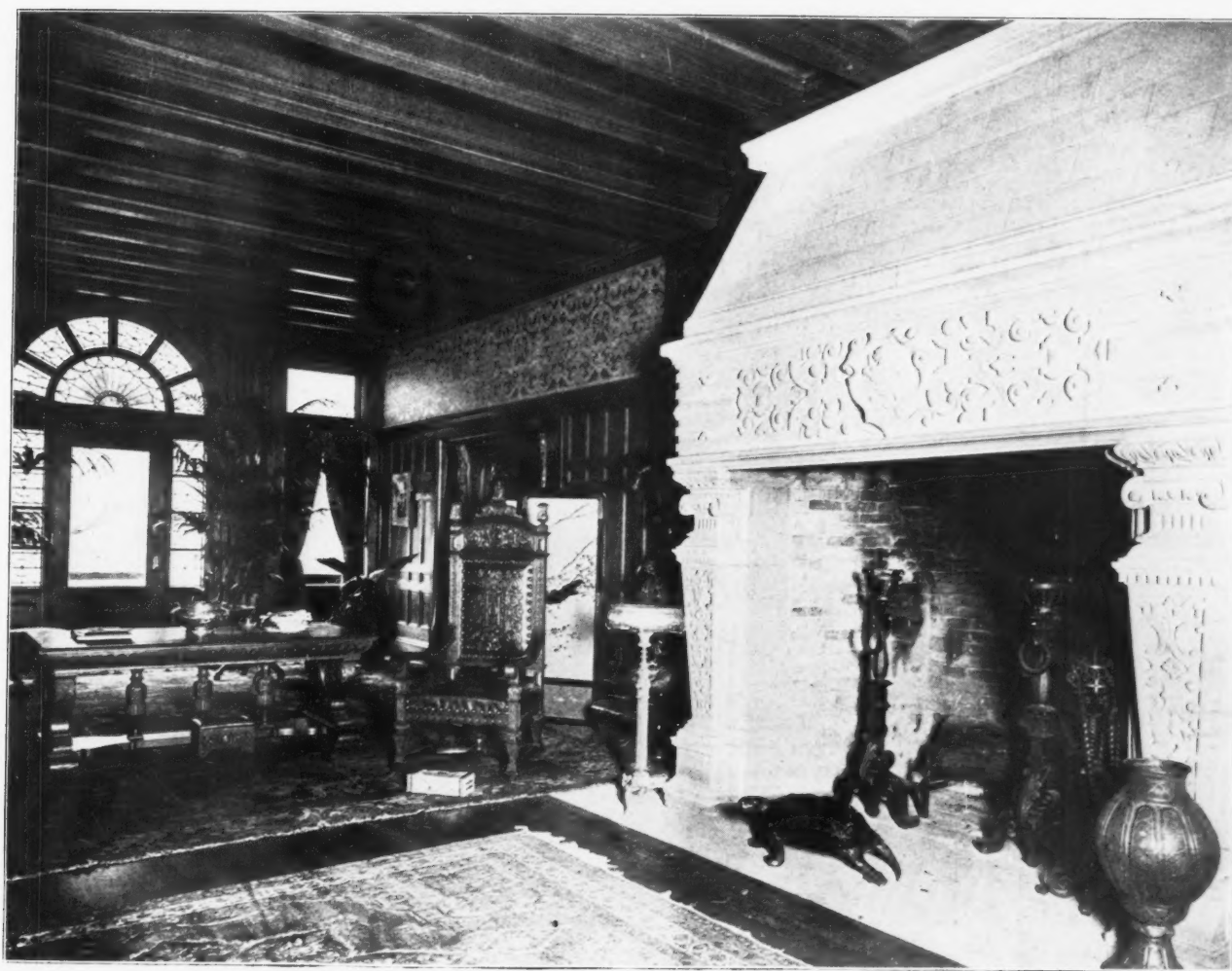
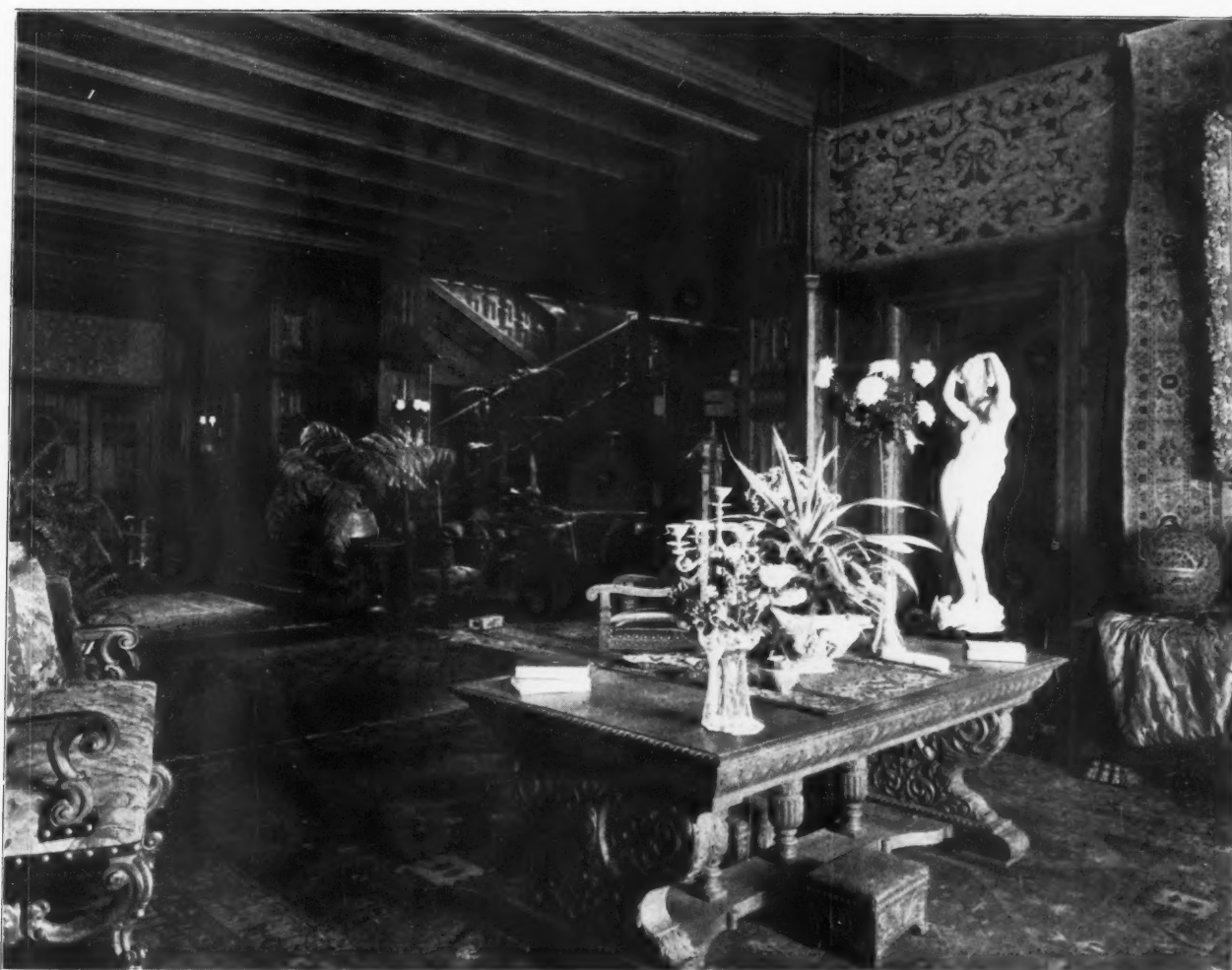


TEMPLE RODEF SOLEM, PITTSBURG, PA.  
 ARCHITECT, DETROIT, MICH.





VIEWS OF RESIDENCE M  
PHILLIPS, ROGERS & WOOLYAY



IDENCE NEAR PITTSBURG, PA.  
& WOOLYATT, ARCHITECTS, CHICAGO.

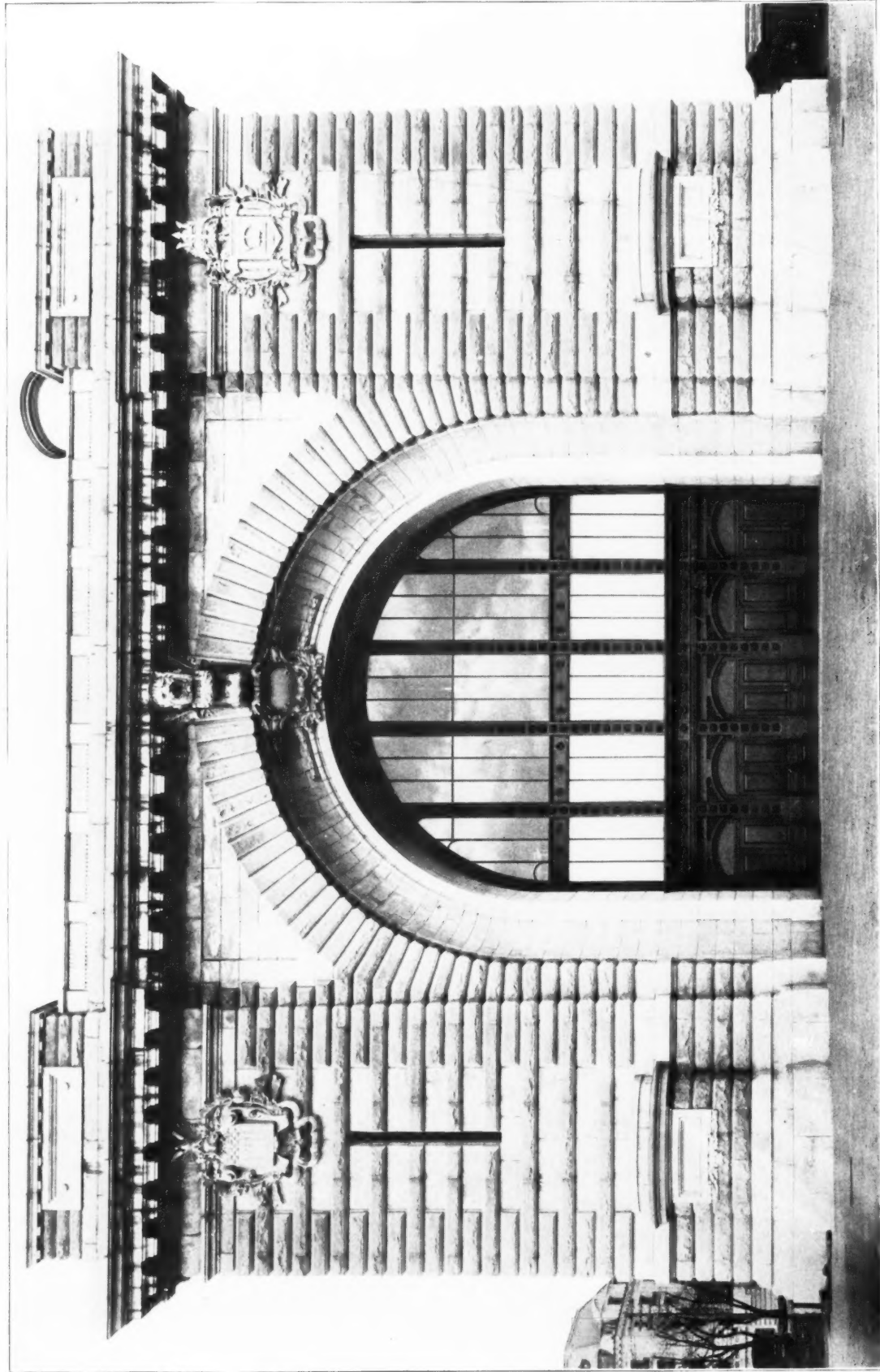




VIEW OF MIDSHIPMEN'S BUILDING, FROM CAMPUS.







ENTRANCE DETAIL, THE ARMORY.





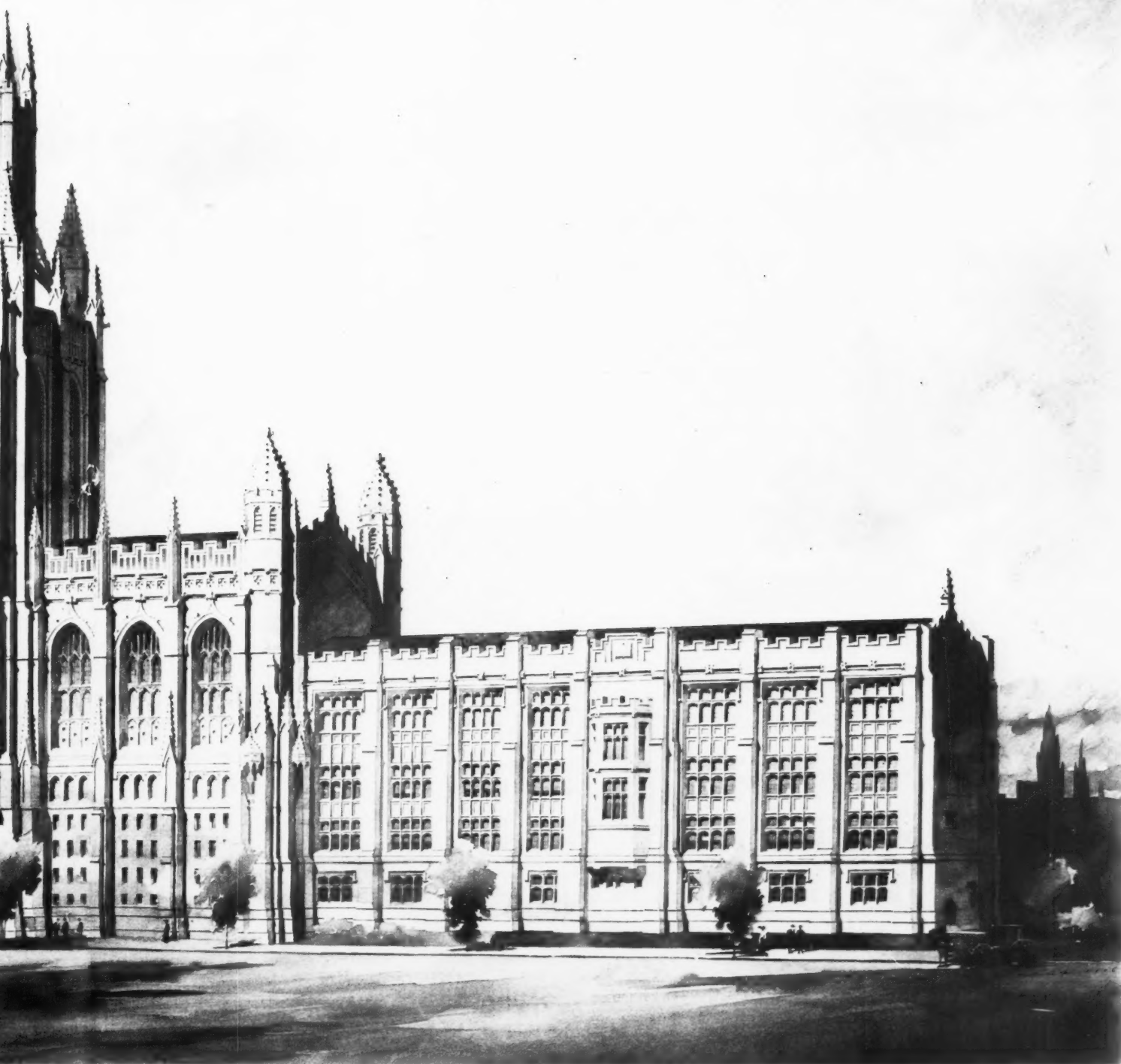


MODERN LANGUAGES BUILDING.

CENTRAL LIBRARY.

THE HARPER MEMORIAL

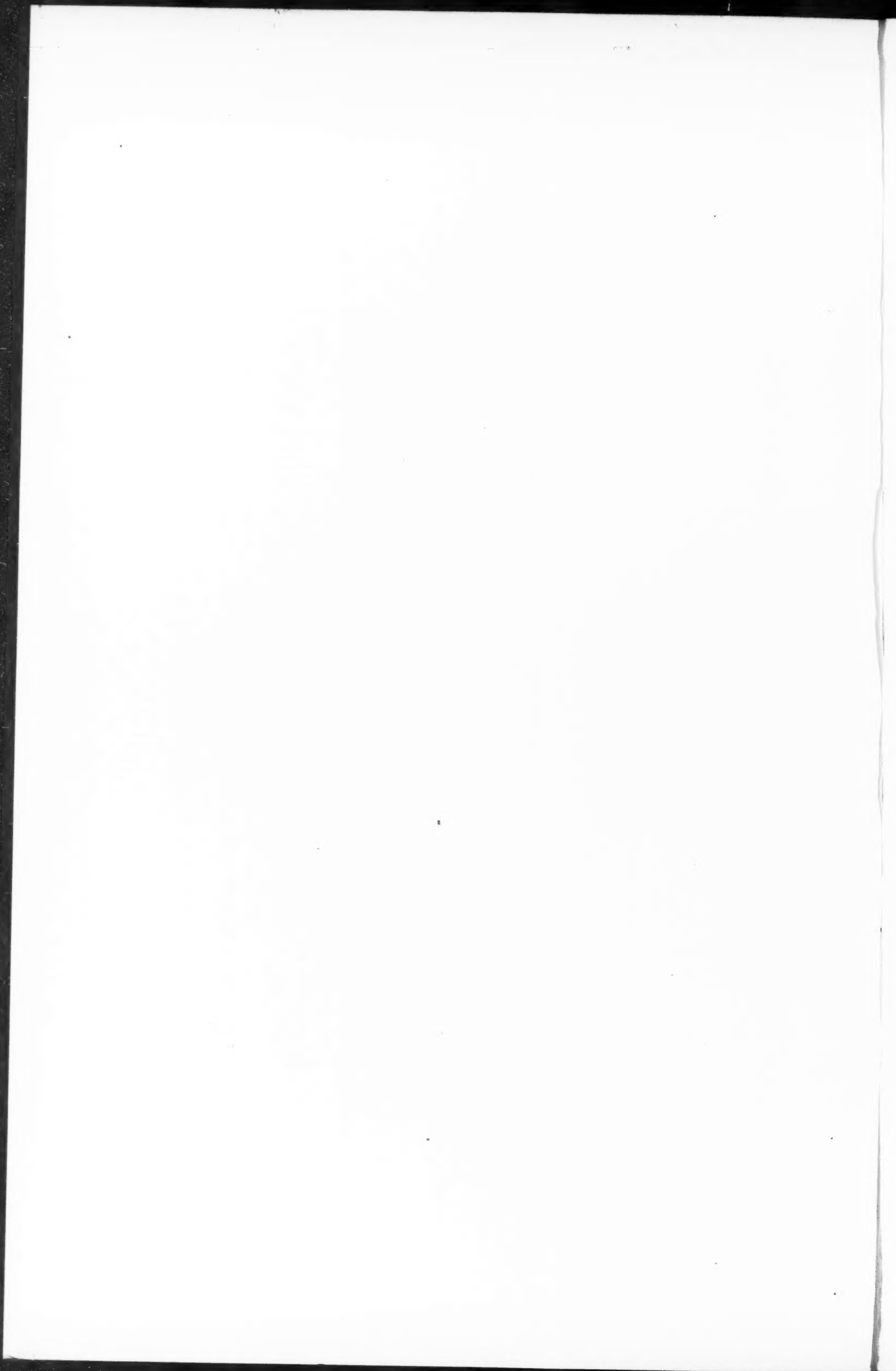
SHEPLEY, RUTAN &



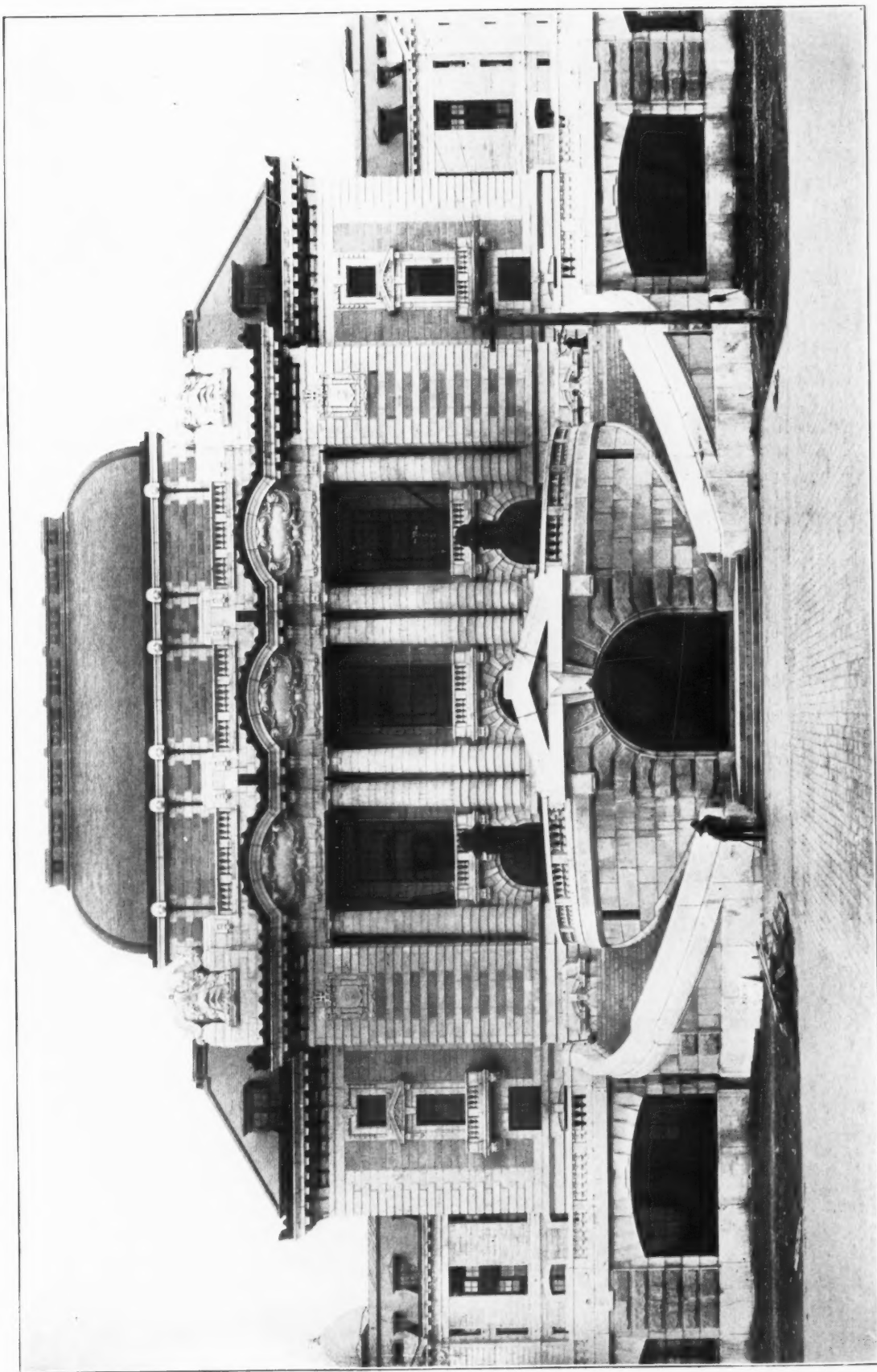
HISTORY BUILDING.

MEMORIAL, UNIVERSITY OF CHICAGO.

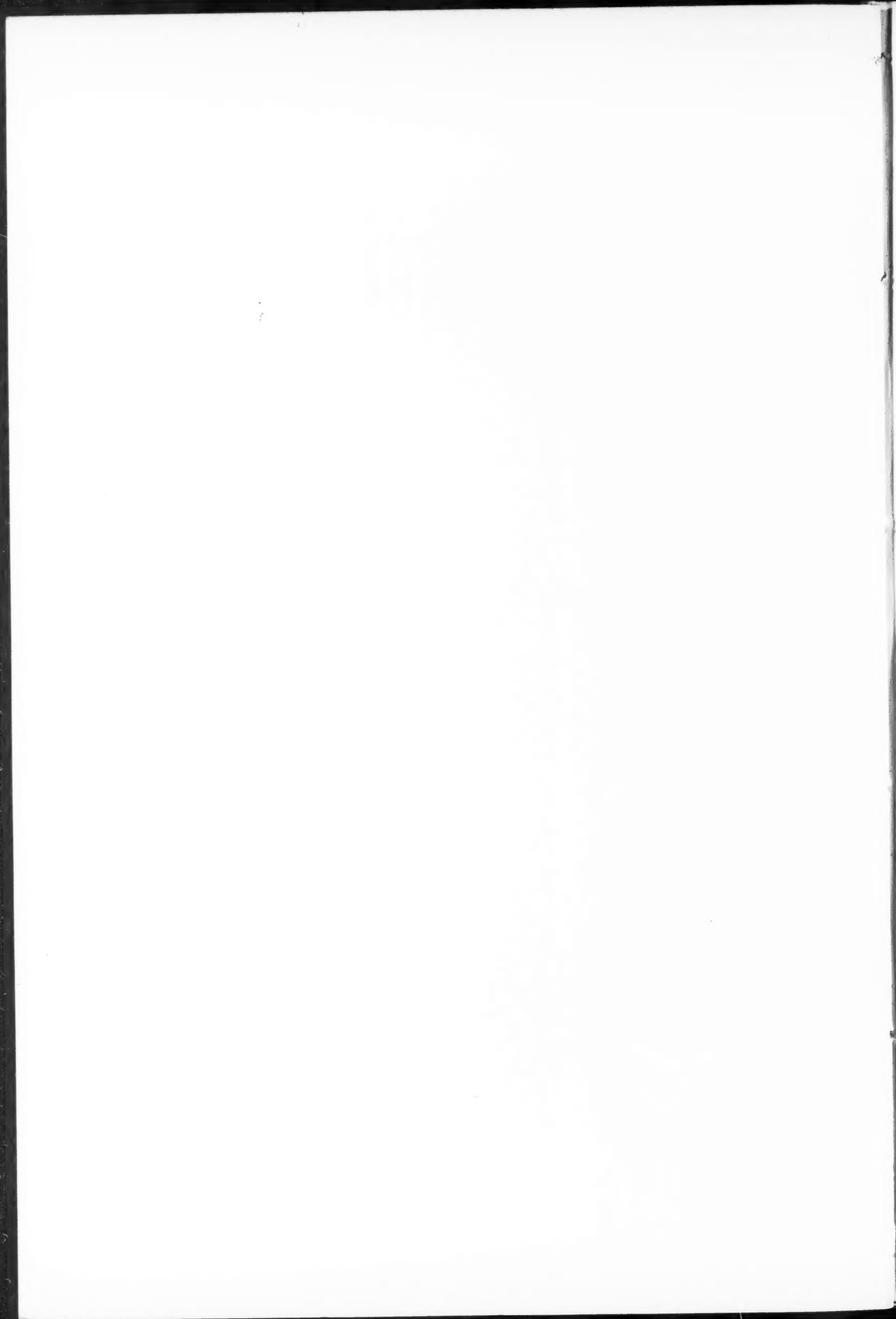
RUTAN & COOLIDGE, ARCHITECTS.

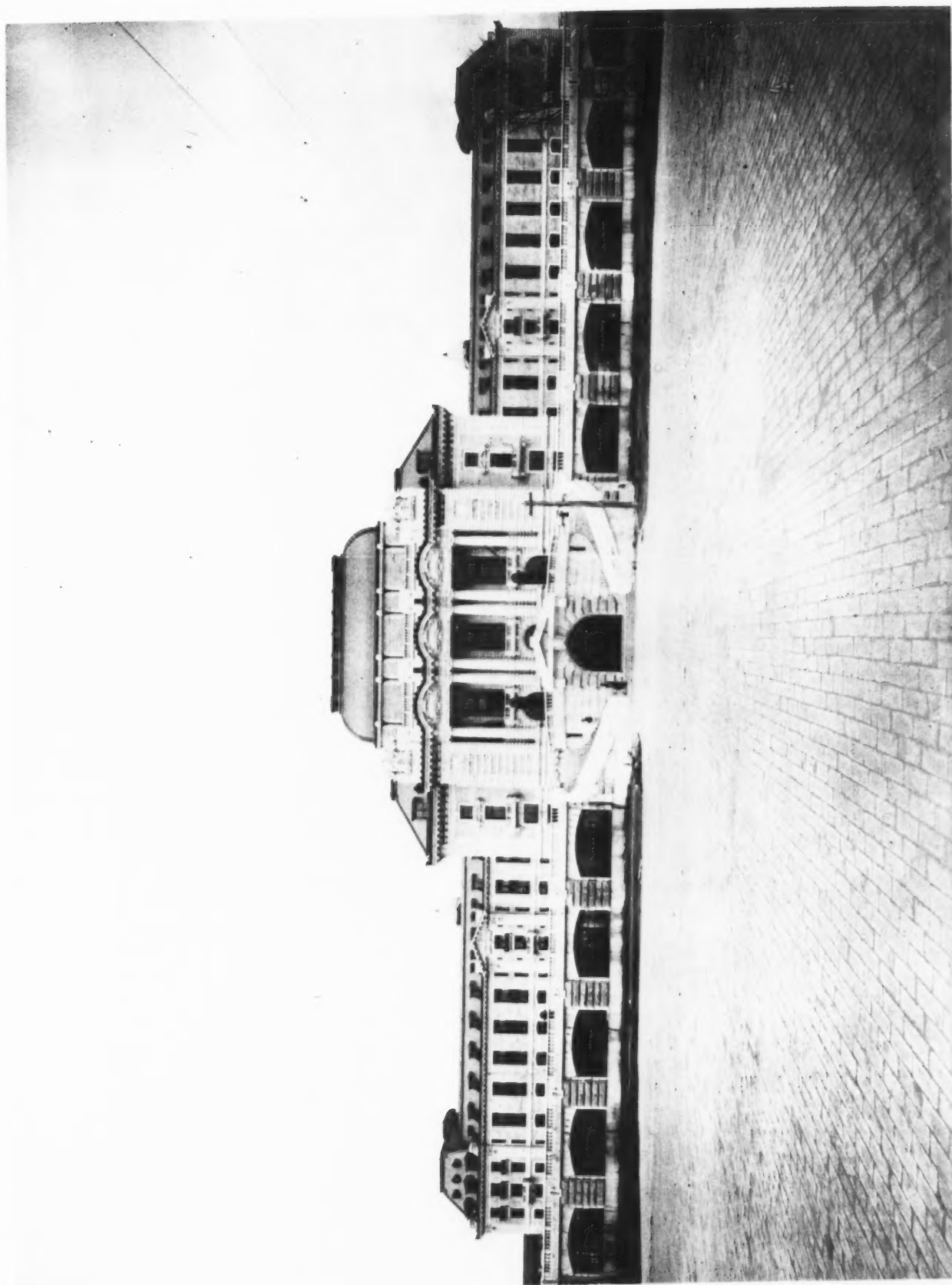






PAVILION, MIDSHIPMEN'S BUILDING, WATER FRONT,  
U. S. NAVAL ACADEMY, ANNAPOLIS, MD.  
ERNEST FLAGG, ARCHITECT, NEW YORK.





MIDSHIPMEN'S BUILDING, WATER FRONT.

U. S. NAVAL ACADEMY, ANNAPOLIS, MD.

ERNEST FLAGG, ARCHITECT, NEW YORK.



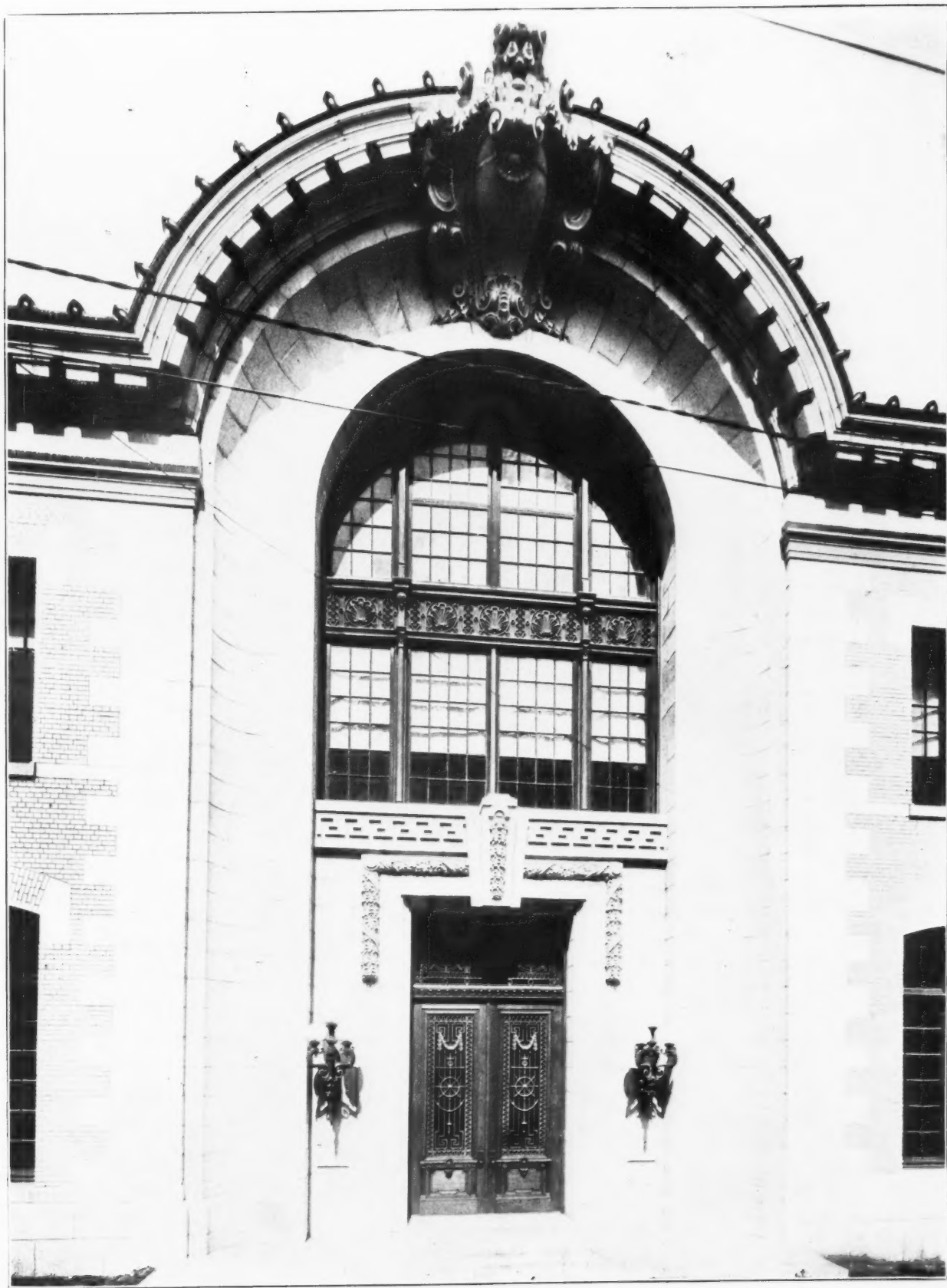


BOAT HOUSE AND GYMNASIUM.



THE ARMORY.

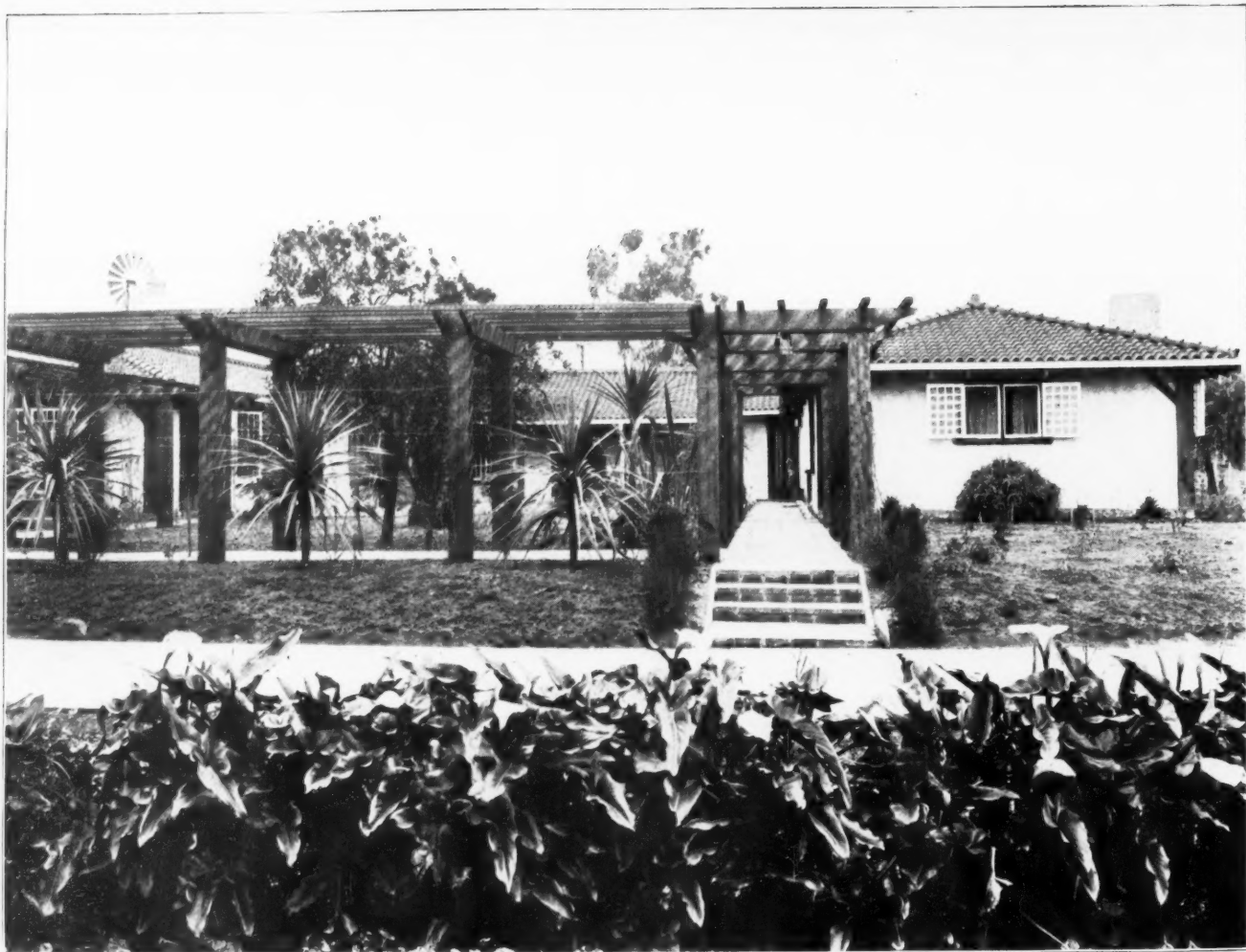
U. S. NAVAL ACADEMY  
ERNEST FLAGG, ARCHT



ENTRANCE DETAIL, BOAT HOUSE AND GYMNASIUM.

ACADEMY, ANNAPOLIS, MD.  
FLAGG, ARCHITECT, NEW YORK.





SOUTH EXPOSURE.

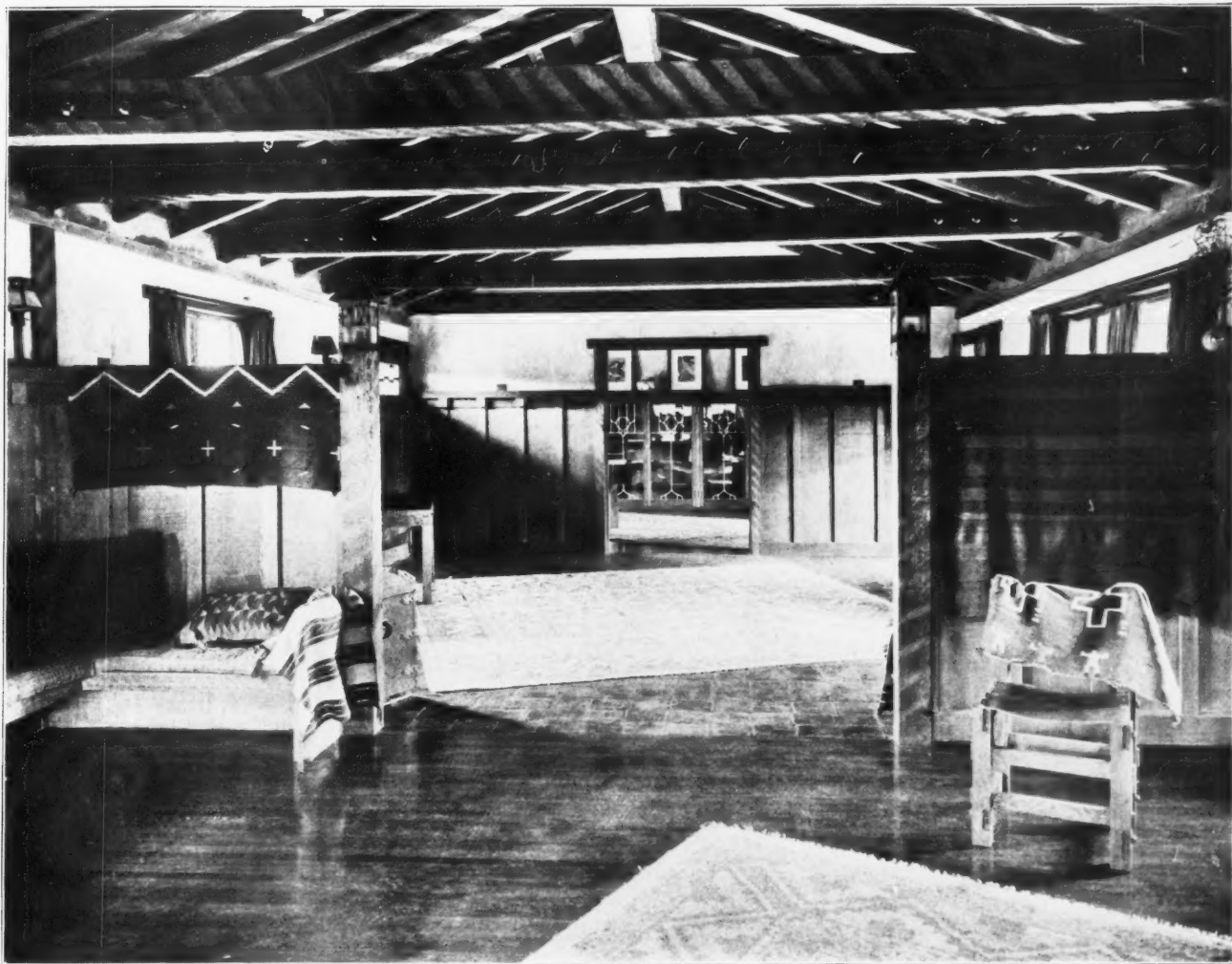


STREET FRONT.

IN ILLUSTRATION OF ARTICLE, "A REMARKABLE HOUSE."

RESIDENCE OF A. J. EDDY, P.

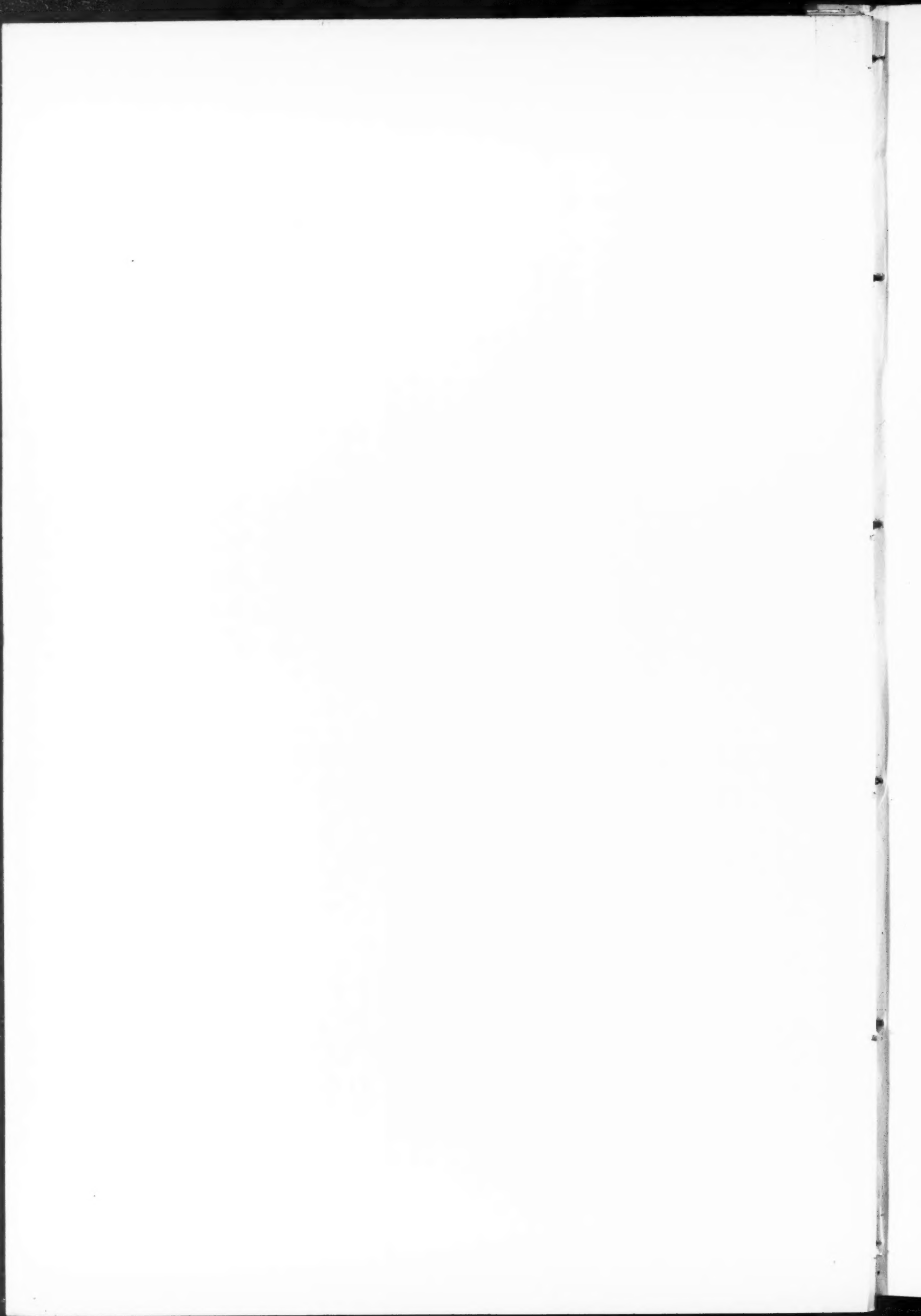




VIEW TOWARDS EAST INTO STUDY.



VIEW TOWARDS SOUTH, LIVING ROOM.





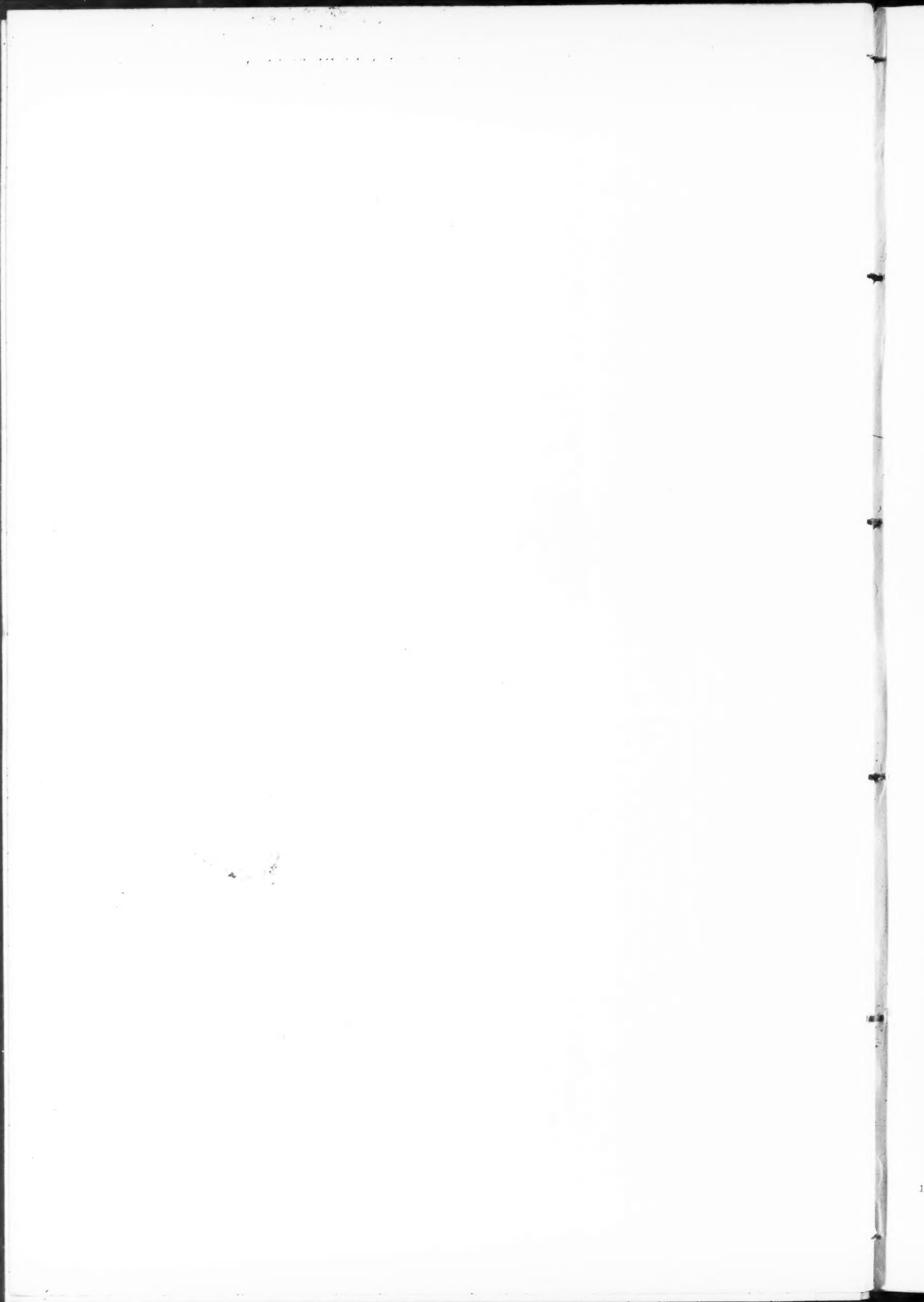
FIRST FLOOR PLAN.

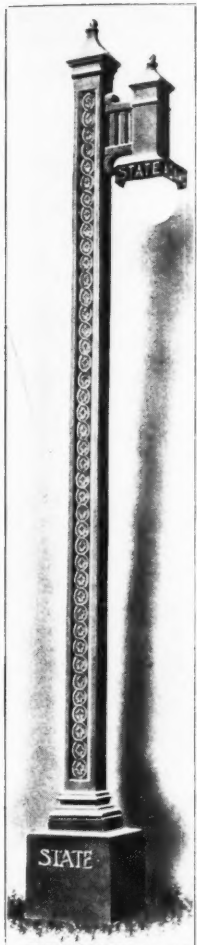


THE NEW ENGLAND APARTMENT HOUSE, KANSAS CITY, MO.

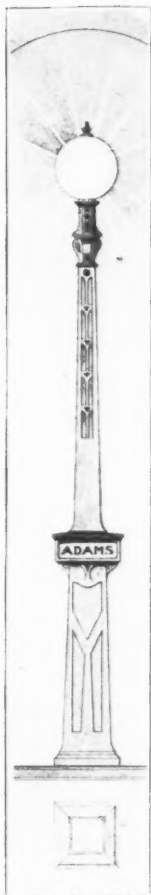
EDWARDS & SUNDERLAND, ARCHITECTS.







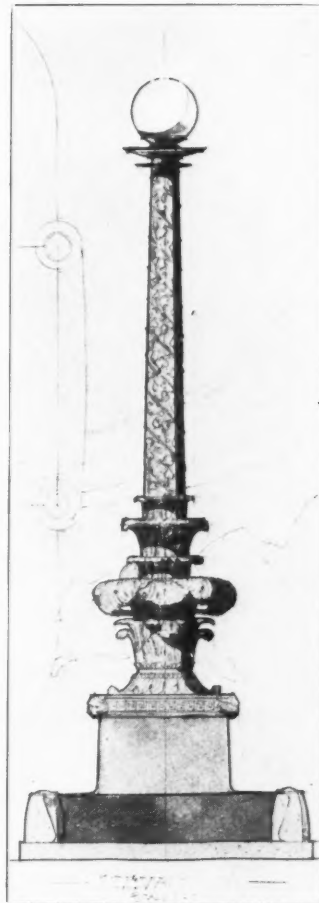
HUGH A. PRICE, DES.



J. M. ANDERSON, DES.



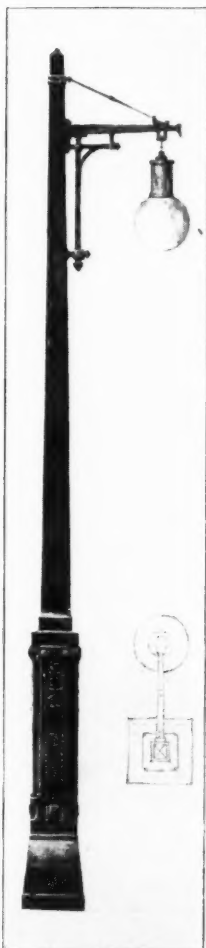
W. W. HARPER, DES.



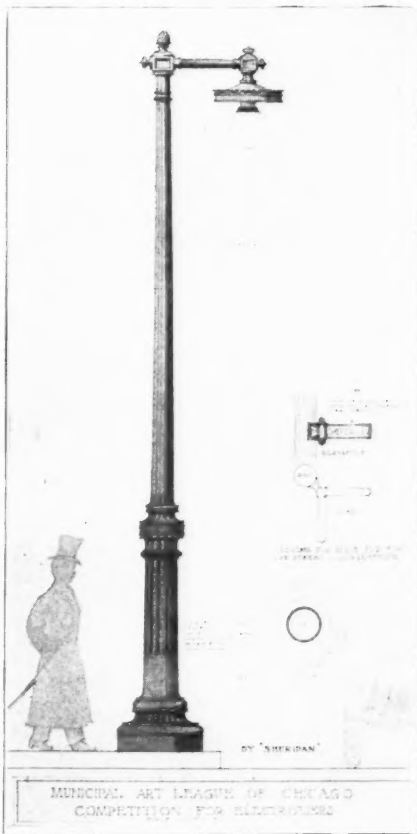
WILLIAM L. WELTON, DES.



HUGH A. PRICE, DES.



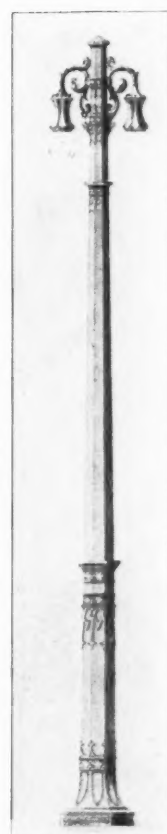
1ST PRIZE, ARTHUR GUNTHER, DES.



2D PRIZE, JOHN LILLESKAU, DES.

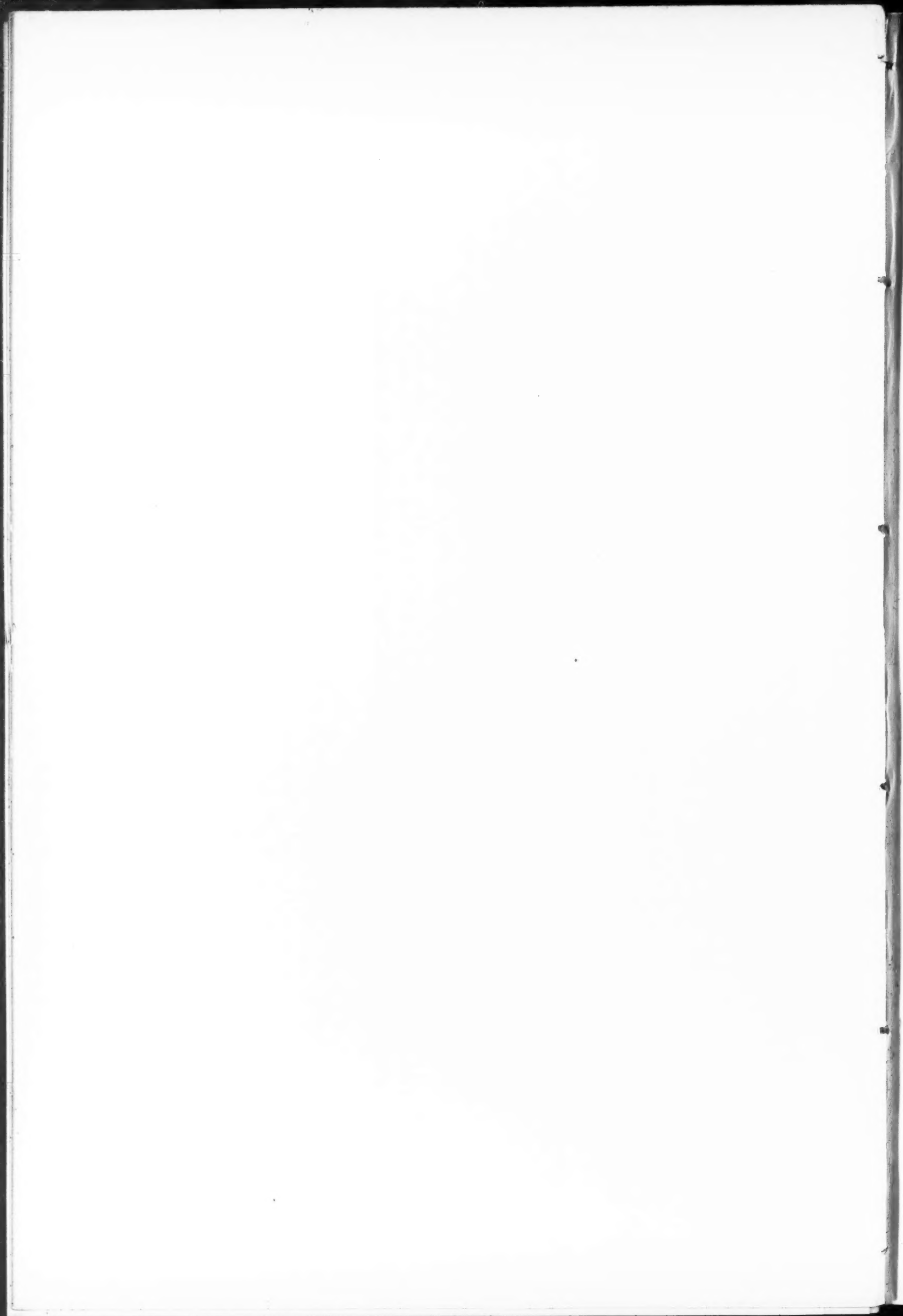


3D PRIZE, ENOCH VOENIED, LES. E. PIERRON, DES.

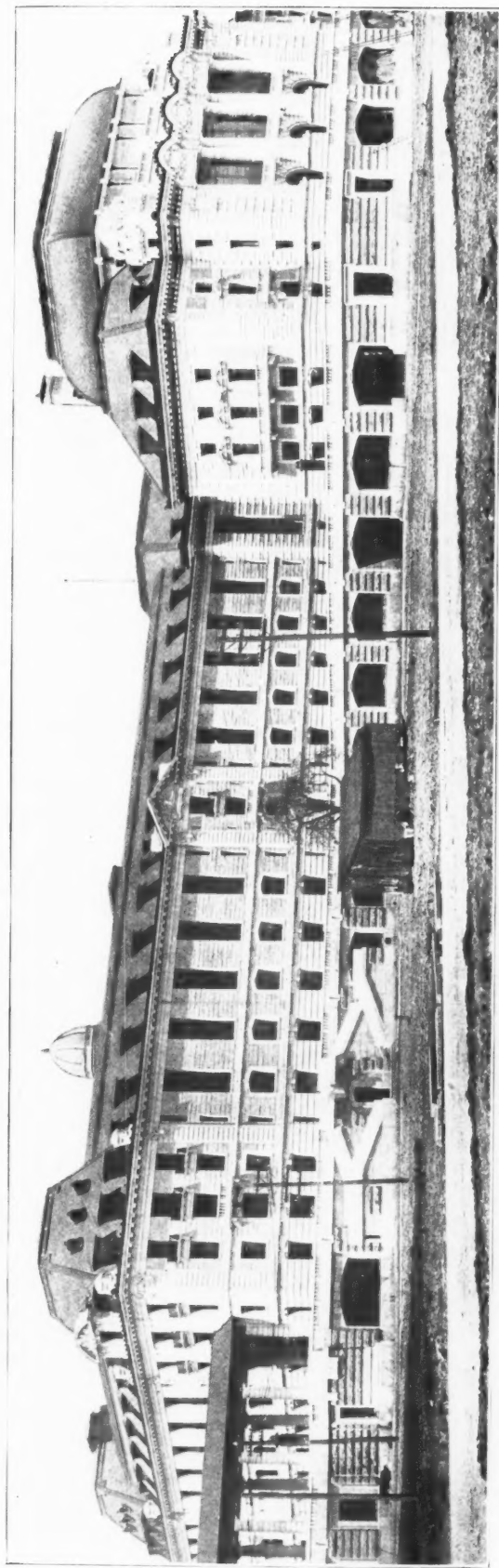


E. PIERRON, DES.

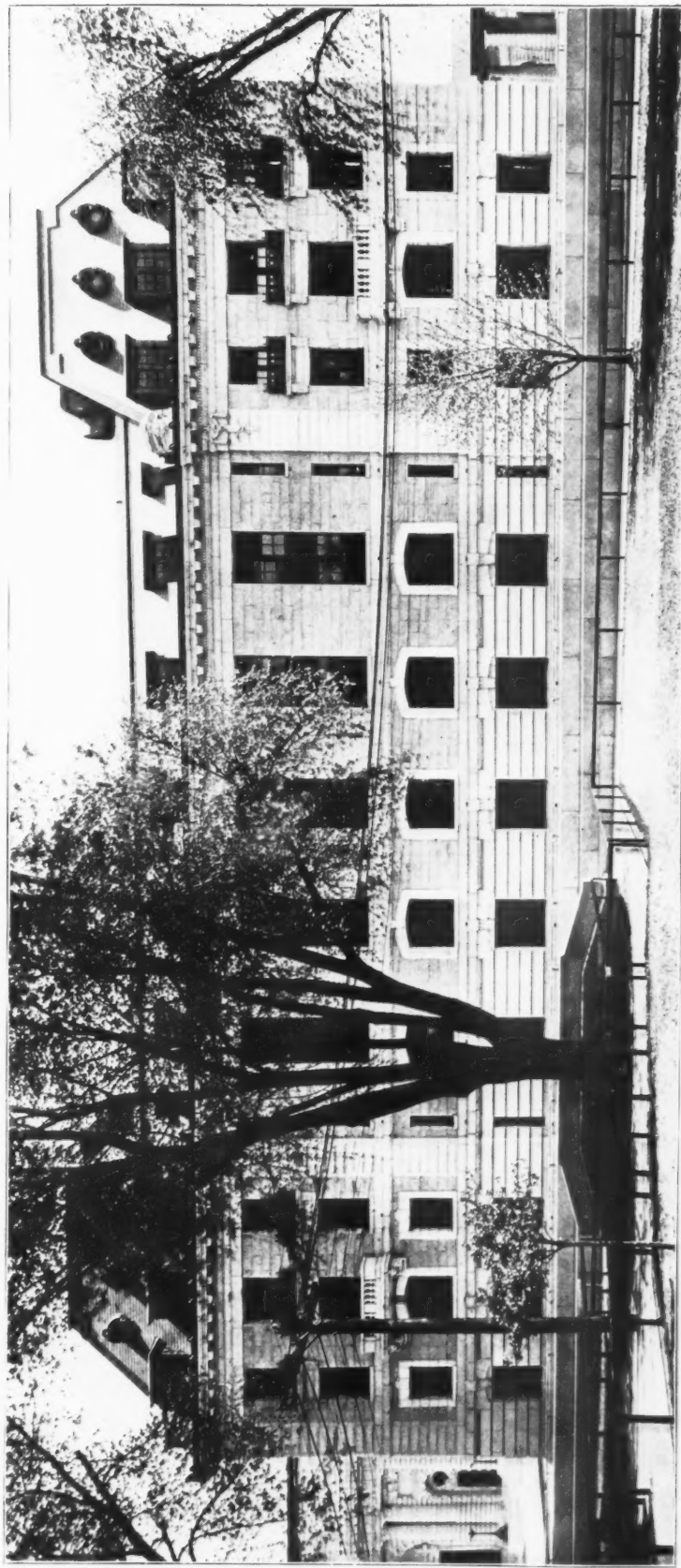
DESIGNS FOR LAMP POSTS, COMPETITION, MUNICIPAL ART LEAGUE OF CHICAGO.  
IN ILLUSTRATION OF ARTICLE IN THIS NUMBER.







PORTION, MIDSHIPMEN'S BUILDING, WATER FRONT.



PORTION, MIDSHIPMEN'S BUILDING, CAMPUS FRONT.  
U. S. NAVAL ACADEMY, ANNAPOLIS, MD.  
ERNEST FLAGG, ARCHITECT, NEW YORK.