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Entered at the Postoffice at Chicago as second-class matter, June 1, 1905.

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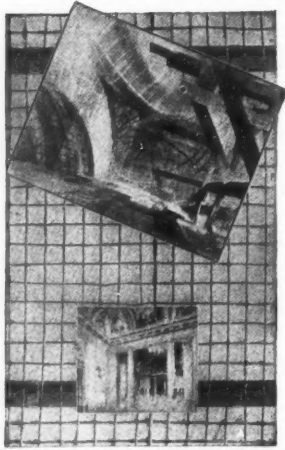
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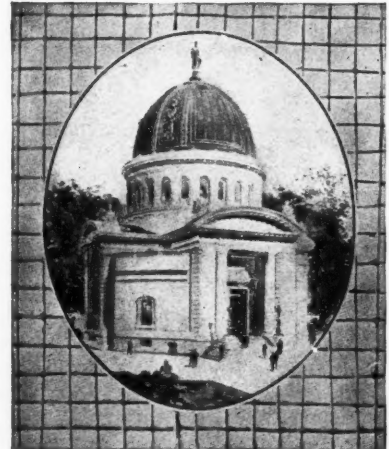
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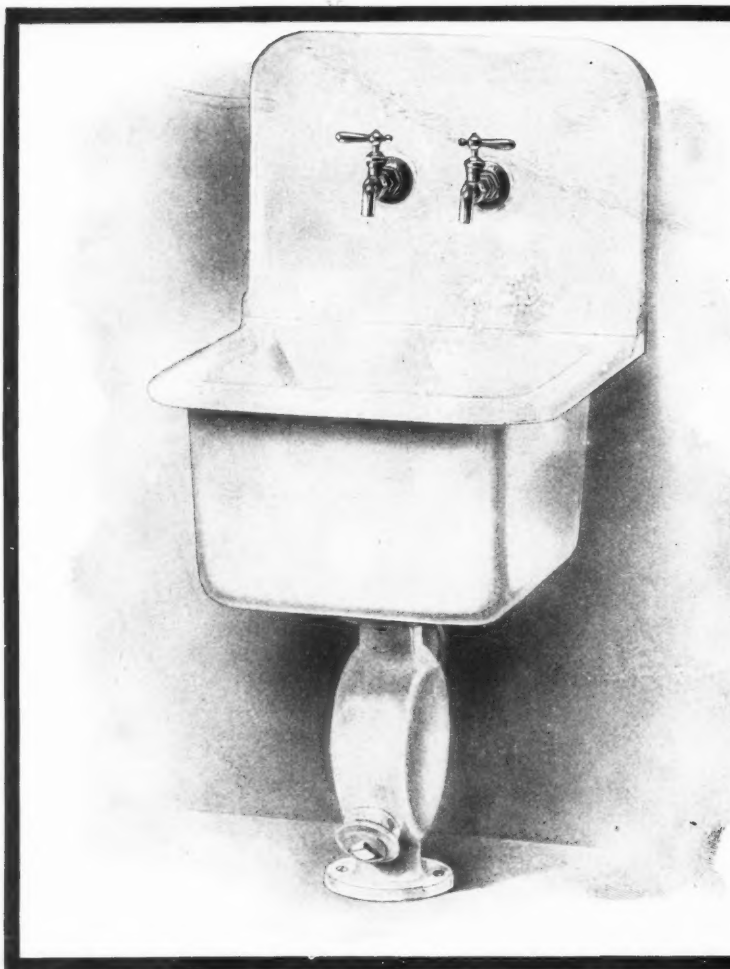
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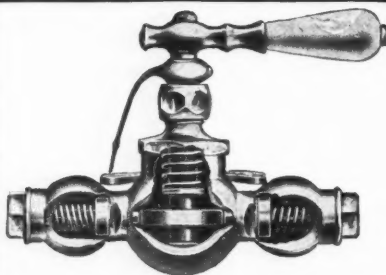
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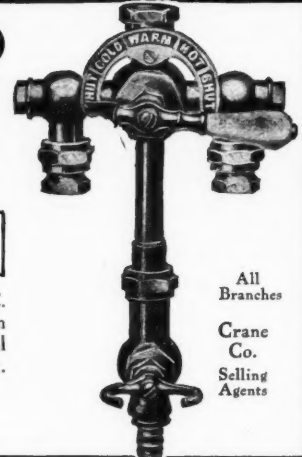
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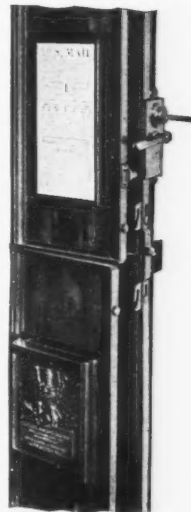
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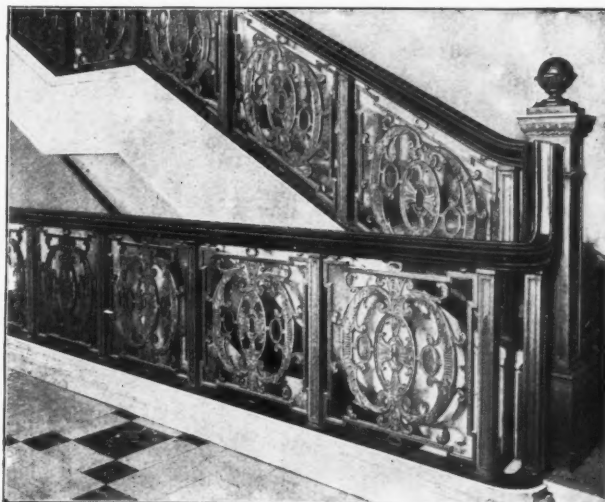
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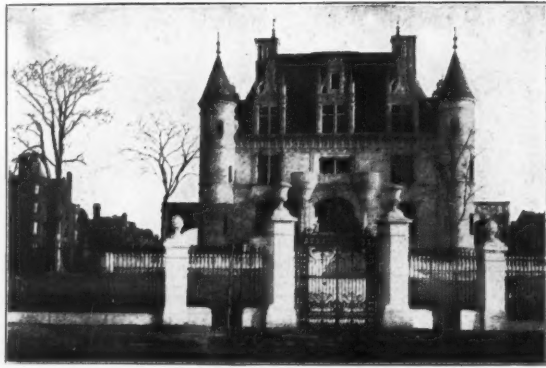
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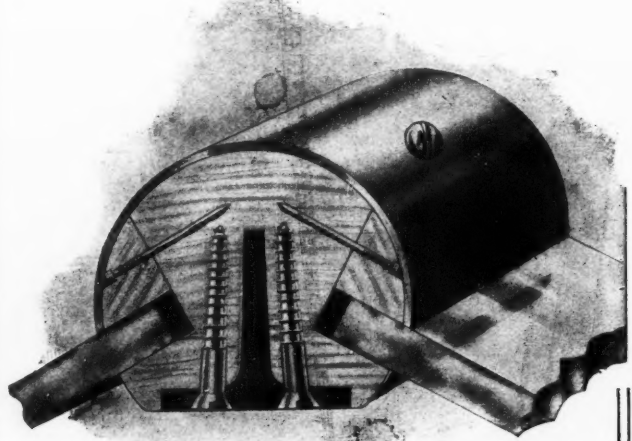
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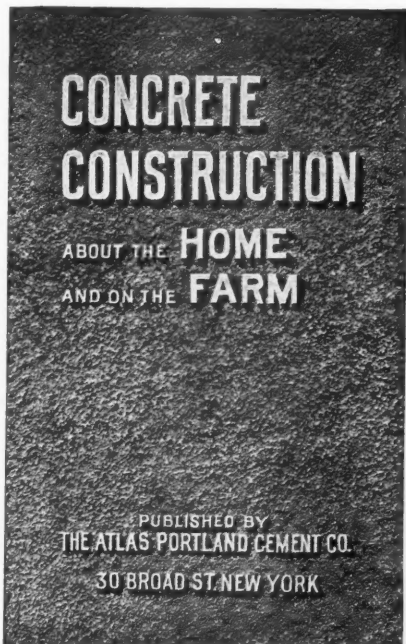
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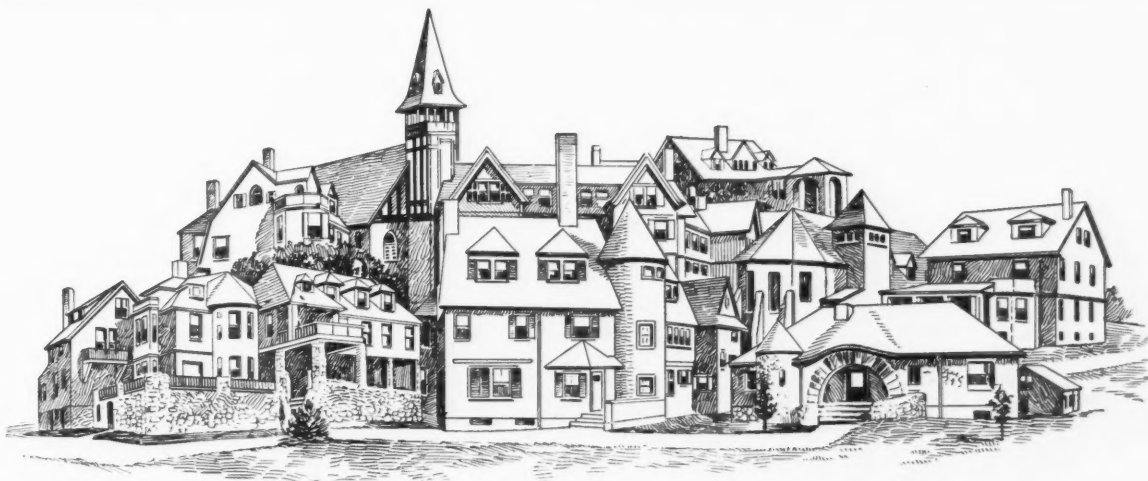
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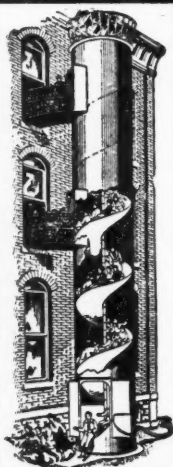
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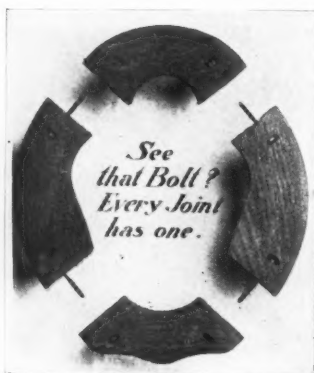
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VOL. XLVII

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No. 6



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The Inland Architect Voting Contest.

An unexpected interest was shown in the contest initiated towards the close of 1905 by THE INLAND ARCHITECT. Expression was invited on the best building, architecturally, finished in 1905. In the replies received there was a decided leaning towards those buildings best known through publication and local acquaintance. This resulted in the representation of an area that included the extreme east and west. The building that stood highest was the Minnesota Capitol, Cass Gilbert, architect. Next in favor was the Art Gallery for J. Pierpont Morgan, McKim, Mead & White, architects; another building by the same architects that stood well was the Tiffany store. The Albright Art Gallery, Buffalo, was preferred by others. Full publication of the Minnesota Capitol was made in THE INLAND ARCHITECT for June, 1905. The other buildings most favored in this contest are published in the present number, and afford an interesting comparison.

English Comment on American Construction.

As we go to press the International Congress of Architects, to meet in London July 16-21 under the patronage of King Edward, must be assembling, and, doubtless, will attract all American architects who are within reach of it. An especially interesting program has been prepared. The day has passed when British architects relied on Fergusson's History for information about architecture in this country, and American architects are welcomed at such gatherings as this, especially if they can talk. At a recent meeting of the R. I. B. A. the main topic of discussion was American constructive methods. Certain members being disposed to unfavorable comment on the tendency to hasty and reckless building, quite too common in both countries, the president admonished them that rapidity did not necessarily involve haste or recklessness, and added his approval to American methods of expediting work without sacrificing its quality. By way of contrast another member referred to a building in London which had been in progress eight years and was still unfinished. The San Francisco earthquake and fire have given very remarkable evidence of the stability of the American skyscraper under a trial which was not foreseen at the time of its construction.

Architects, Clients and Plumbing Laws.

In our editorial of November, 1905, we called the attention of our readers to Mr. Putnam's plea in our columns for simpler plumbing, especially as far as relates to a repeal of the requirements for the back venting of traps, and suggested that either some sound argument supporting the present complication be presented, or that those having charge of the specifications for plumbing construction take some action in behalf of their clients, the public, in reducing this extraordinary burden now imposed upon them, seemingly without justification. In the present and last numbers we print another strong appeal by Mr. Putnam for simplification, this time in the matter of omitting the expensive "Main-House" trap or "Intercepting" trap. Here again the position of our author seems impregnable and his indictment of the present system is not only powerful but novel and most interesting, and we believe our readers will find it well worth their while to study these articles carefully. Not the least interesting feature of these articles is the calculation of the pecuniary loss to the public in installing this unnecessary item of the intercepting trap. If, for purposes of rough estimate, we may consider that the item of plumbing in the average building amounts to from five to ten per cent of the whole cost of construction, and that a simplification in all the ways proposed by Mr. Putnam would cut this item in halves, we obtain some idea of the enormous waste we are sustaining every year in the building work of the country. When we reflect that this waste in money is endured without the slightest offsetting advantage in safety, but rather with greatly increased danger, and with no benefit whatever excepting to a few manufacturers and dealers in pipes, we realize that a very grave responsibility lies with those who have the ultimate control over these matters, the archi-

fects and engineers, and we feel it incumbent upon us to earnestly repeat our suggestion that the architects, both personally and through their various organizations, exert most strongly their influence in bringing about a reform, and in urging the authorities to appoint expert commissions as soon as possible to make a thorough investigation of this matter in some such manner as we have proposed.

Municipal Building Ordinances.

An ever present and most important subject for the consideration of municipalities is the revision of the building laws. It is a field in which the influence of architects largely dominates. In the city of Cleveland the formation of the building code is practically in the hands of one architect, John Eisenmann, building code commissioner, and so well has this been found to operate in practice that the Mayor is quoted as stating that a commission of experts should always be composed of one member. No city has undertaken the revision of the building laws with the thoroughness of Cleveland. The history of this movement affords much of practical suggestion to other municipalities. In the code passed by the general assembly of Ohio in 1902 was a section that granted to each municipality the right to establish its own building laws. With this status fixed, Cleveland started in earnest to secure a model building code. A preliminary working force was established, consisting of a building code commission of three experts and a special legal representative. The codes of the building departments of the principal cities throughout the world were gathered. These were found so conflicting that none could be adopted as a model, though all furnished valuable suggestions.

Recommendations of Special Committees.

The various associations of Cleveland concerned in building have contributed their knowledge and acted as advisers on the code. After considerable preliminary work had been accomplished the council appointed a special building code committee to co-operate with the commission. These bodies jointly decided upon recommendations in which the council acquiesced. These provided in general (1) for the creation of a building department and its administration; (2) regulations for building construction and inspection; (3) occupancy of public property by buildings, etc.; (4) fire protection, escapes and limits; (5) elevators; (6) building sanitation; (7) electricity; (8) boilers and smoke. The first five of these divisions have been enacted into law. All are very complete and comprehensive, and follow as nearly as possible the sequence of building construction. A provision in the administrative division governing permits is of especial interest. This specifies the required drawings and specifications, and provides for their careful examination by inspectors before they are O. K.'d and permit issued. This procedure, it is demonstrated, prevents much trouble that might come from incomplete plans and avoids temptation to violations of the laws.

Administration of the Code.

It was found desirable some time ago to discontinue the Cleveland building code commission and to place the codification of the code in charge of Mr. Eisenmann as building code commissioner at an adequate salary. Regarding the administration of the code, there is an agreement of opinion that the rules governing the construction and maintenance of buildings as well as the mechanical appliances

on building sites should be controlled by a building department with an executive head, vested with power to issue and control permits pertaining to these regulations. It is further agreed that the building department should consist of the following divisions: Building Inspection, in charge of the inspector; Building Sanitation, in charge of a chief sanitary inspector; Electricity, in charge of the city electrician; Boilers and Smoke Abatement, in charge of an inspector; and preferably an additional division of Building Superintendence to have charge of the construction and repair of municipal buildings. While Cincinnati and some other cities criticize the length of the Cleveland code, due to the incorporation of so much of detail, in practice these laws are found to greatly simplify and facilitate the work of the officials and their aids. Happily, the formation and execution of the code are free from political influence. It is a high and merited tribute to the Cleveland code that it has been adopted by twenty-nine cities thus far as the basis for their own building laws.

Stanford White, Architect.

In a firm of architects that has gained through the fitness and beauty of its creations the renown that has crowned the work of McKim, Mead & White, it is of little value to attempt to point out the especial share of the individual members in the various buildings produced. Doubtless, in all important work of the firm there has been joint consultation, study and criticism that influenced the development of plan and design. It is not to be doubted that in some considerable degree the high character of the imposing array of buildings executed by McKim, Mead & White was due to Stanford White. In his death the profession has lost a brilliant member and one whose influence upon the country's architecture will be lasting. It has been our pleasure to receive a number of tributes to the worth of Stanford White as an architect and artist from those who have been intimately acquainted with his professional career and who are qualified to speak.

Tributes to Stanford White.

John M. Carrere writes: "Stanford White in my judgment was a great artist, and as an architect, when working in the directions which appealed the most strongly to him, has produced some of the very best things that this country possesses. Whether as a draughtsman under him over twenty-five years ago or in my professional relations since, I have always been an admirer of the man as an artist, full of enthusiasm and sincerity, untiring in his work and spontaneous to a degree. The example set to the younger men in the profession by these three architects, McKim, Mead and White, working side by side harmoniously and with perfect loyalty to each other for over thirty years, has been of untold value and in itself an inspiration. Personally, I consider that I have lost a good friend and that the profession has lost one of the ablest architects that America has ever had, in certain directions the very ablest."

Louis C. Tiffany sends this tribute: "By the death of Stanford White we have lost one of the most brilliant artistic natures of the century. The standard of excellence which he attained will ever serve as a criterion to the architectural world." Words of appreciation have come also from Augustus Saint Gaudens, Augustus Lukeman and others. These all place the name of Stanford White high in the roll of American architects.

SAN FRANCISCO

BY F. W. FITZPATRICK, ARCHITECT.

NOTES AFTER A THOROUGH INVESTIGATION OF THE RESULTS OF THE SAN FRANCISCO DISASTER.

THE story of San Francisco's appalling disaster has been told and retold most graphically in the daily press, the periodicals; the suffering of the people, the heroism of a few fire-fighters, the wise military rule, all those details have been given us artistically and impressively—though no man can fully appreciate the extent the



CALL BUILDING. SHOWING DAMAGE TO STONework. TERRA COTTA DOME UNINJURED.

thoroughness of the destruction, the disorganization of everything, affected by that disaster who has not visited and spent many days in the stricken city. Building experts and fuglemen for various systems of construction have rushed into print with glowing accounts of how their particular material "saved" the little that was left of the once proud city, their "reports" differing but little from the first excited dispatches in the daily press that stated that thousands of people had been killed and that the big "fire-proof" buildings were either toppled over or melting down like wax.

It behooves us, now that the first horror, the excitement, is over and it becomes a question of repairing the damage done, to dispassionately examine into the behavior of the different materials and modes of construction and learn something from the very forceful lessons such a conflagration must necessarily give us.

In such a study, to be thorough, it behooves us to go back a little while and see how San Francisco was built.

She was subject to earthquake shocks, very subject to them, and had every reason to expect one or many of far greater severity than the average. These little trembles had for effect that brickwork set in poor mortar and improperly tied and bonded, little 4-inch chimneys and

veneering and such, was frequently thrown down so that people got into the notion that wood was the only quake-proof material to use in building. And so they used it until the city became a veritable lumber yard, and the new danger was introduced, the fire hazard. Finally, the building laws that always have been and are now a hodge-podge, compelled people within a very limited district to use brick or stone enclosing walls, though the framing, the internals of far too high buildings could still be of wood. The insurance companies, innocently or foolishly, aided and abetted the growth of this fire hazard by writing insurance at an exceedingly low rate on San Francisco, because of that city's especially fine fire department! Less than twenty years ago the first very tall building was built, using a steel frame. People generally, the building authorities, tried to discourage this mode of construction because of its great danger in case of earthquake; they expected the tall steel frame to topple over at the first shake. There was so much fuss made over the matter that the architects and engineers have done really very fine work in those steel frames; they are braced and trussed and tied so that though there was vibration and some action in the great quake, not one of them was materially affected, and what people had deemed the greatest risk was virtually the only thing that went through the experience more or less intact. In those big buildings, however, the foundation and the steel framing were generally the only two things in which extra precautions were taken. The stone work, the brick work, the fireproofing, everything else about them, was no better done or more firmly tied, and, in fact, not nearly as well so as is common in the East, where quake is a very remote contingency. Nor was anything done, any extra precautions taken in those big buildings with one or two exceptions, to prevent the spread of fire in their contents, their finish, floors, etc., to the complete destruction of everything damageable by fire and even great injury to really fireproof details. They were "fireproof," those buildings, only in that the steel work was more or less protected by tile or concrete, and the floors themselves and the partitions were



MILLS BUILDING. STONework BADLY SPALLED. EIGHT UPPER STORIES OF BRICK AND TERRA COTTA INTACT.

either tile, concrete or some patent plaster. That one detail constituted a fireproof building and was expected by some mysterious or occult agencies to impart immunity to however burnable materials that were used in the rest of the structure. And none of that fireproofing, even, was done in accordance with our very best Eastern standards of construction.

Such was the city and its state of unpreparedness when quake and fire, and dynamite in unskilled hands, sought to effect its utter and complete ruin. The surprise is not that the fire was so great, but that it stopped where it did and was as lenient with the big buildings as it proved to be. It was an all-searching fire, long continued, insistent, meeting comparatively little opposition and thorough in its work, though it was not at any time as fierce a flame or developed as high temperatures as the Baltimore fire that was accompanied with a hurricane wind.

To this absence of high temperatures in the big buildings is largely due the fact that there was as little damage effected as we have to note rather than to any special care and provision in their construction. Then, too, as in Baltimore, the fire was freaky. It would lap around and linger about one corner of a building and perhaps lightly pass

to them that could possibly be done, while some remained more intact than others by reason of a little more care in construction or by accidents of fire, but the wooden buildings, save in perhaps two or three instances of marvelous and mysterious escape, left little to tell the tale, a chimney here and there or perhaps a front or a party wall and a few iron beams twisted into corkscrew shape and a mass of debris encumbering the street are all that mark the site of some of the costliest and nearly all the "ordinary" buildings of the proudest city of our country.

To the building expert, the one who *knows* the real significance of the term "fireproof construction," and who has preached it for years and been looked upon as a crank, a calamity-howler, there was much to observe, theories vindicated, lessons illustrated and all that sort of thing in San Francisco, but nothing new developed nor anything brought forth that would tend to change one's ideas of how things ought to be, though to the average architect who looks upon the matter of fireproof construction as something unattainable, mysterious, occult, the lesson of that awful fire ought to be particularly impressive, a revelation, an indice of what ought to be done and what ought not, far more potent than has been all of our preaching in these many years!

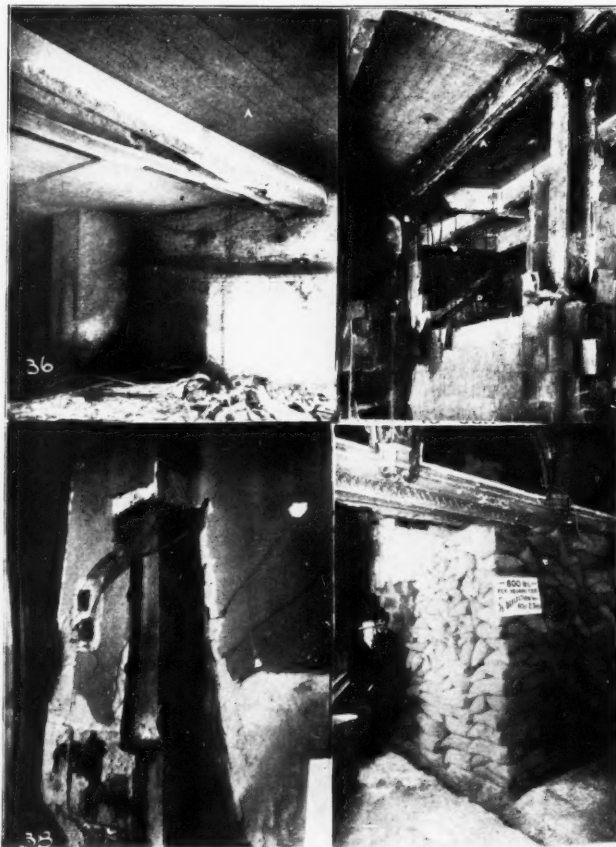
The steel frame and the foundation were well done in the big building, as high eulogium can not be given to any other detail. The curtain walls, supported from story to story, were hardly ever properly and completely bonded and seldom tied at all adequately to the steel frame, the result was that the quake cracked many of these walls and shook some out of place; granite and stone and marble were used all too frequently externally, and wherever fire struck them, appalling and irreparable damage ensued.



WEST GATE APARTMENTS. STONEWORK DEMOLIALIZED.
ENAMELED BRICK UNMARRED.

over the others, where as great damage could have been effected; indeed, what little breeze there was accompanying the fire and the currents created by it were so erratic that here and there even a wooden building is but partially consumed or perhaps but little affected, while telegraph poles still stand and occasionally a wood or cloth sign still remains intact, while all about it is utterly destroyed or damaged beyond salvation.

In nearly twelve square miles of territory, seven hundred blocks, there are perhaps fifty buildings standing, in more or less damaged condition. The Appraisers' warehouse and the Mint were old-time structures, mostly iron and brick, and were undoubtedly saved by the efforts of the employees, who remained "steadfast at their posts" and used wet blankets, gunny sacks, anything at hand to extinguish the blazes caused by falling embers or flames lapping through broken windows; similarly, man power had much to do in saving the postoffice, though that was of the newer and probably the best construction in the city; most of the big steel frame buildings had all the damage done



36 SCIENCE BLDG. CONCRETE SLABS, A. INTACT, BUT CONCRETE BEAMS WITH REINFORCEMENTS EXPOSED.
AT RIGHT—ARONSON BLDG. TILE COLUMN PROTECTION INSUFFICIENT.
38 HOTEL ALEXANDER. WIRE LATH AND PLASTER COVERING IMPERFECT PROTECTION.
39 TEST OF 7 FOOT 2 INCH SPAN, 5 INCH SEGMENT TILE ARCH IN FLOOD BLDG. LOADED 800 POUNDS PER SQ. FT. DEFLECTION 1 1/2 INCH AFTER TWO DAYS.

Brickwork was seldom damaged as far as the brick was concerned, but lack of bond and tying and the use of lime mortar demonstrated that such was not the best practice, though the damage to the brickwork of the tall buildings was remarkably slight, all things considered; terra cotta, where well made, of equal thickness throughout all exposed parts, and with a sufficiency of web and stoutly tied in place, showed itself by a long distance vastly superior to all else for external decorative features; where earthquakes are so frequent it seemed like folly to lay a 2-inch tile protection around an important steel column, merely clipping with galvanized iron at the corners and making these tiles part and parcel of the partition and set up often in lime mortar; the partitions were in many cases of but 3-inch tile set either on top of the wooden floor or on top of the concrete filling and wood strips, and were bisected in every direction with wooden lintels, wooden jambs, sills, etc., so that it is really a wonder that anything was left of them; the floors were generally of side-construction, particularly thin tile and of little depth, and all this tile work was of dense tile, the quality of the material, the mode of burning it, the pattern and way of applying it not at all up to the standard of our best Eastern work. Yet this was all the architects demanded, it was what the market seemed to exact, and all that the manufacturers produced. Their competitors, the two concrete systems most in vogue in San Francisco, were held up to about the same standard only, so that in most cases columns were fireproofed with a wrapping of expanded metal or wire lath, plastered over with a little cement, or in a majority of cases the ordinary wall finish; partitions were generally of wire lath and plaster, the floors of as thin slabs and as weak a concrete as would pass muster, though as luck would have it most of these floors were in turn protected with a suspended metal and plaster ceiling. If all the work had been absolutely well done, what an illustration of adequate structural fireproofing could have been given! As for other than the mere fireproofing of the structural parts, not one of those buildings was fireproof in design, save in one or two of the details. Not one of the tall ones had their elevator shafts and stairs enclosed so as to confine fire to any one story; only one had metallic doors and trim; all had wooden floors in their offices; not one had wired glass or other protection to its windows; and fire was communicated to the interiors of buildings through their windows in 99 cases out of 100.

In all this devastation there is enough left, particularly in and about the big steel frame buildings, to fully demonstrate the efficacy of all we have clamored for in times past. No one building was absolutely perfect, nor was any one building absolutely saved from damage (albeit the New Chronicle and the Kohl suffered certainly less than 5 per cent of their cost), yet so many details, found separately, did their work so well that it must be perfectly patent to the most obtuse that if those details were assembled in any one structure that structure must necessarily be fireproof and undamageable in *all* its parts. The question is, appalling as that lesson was, is even it forceful enough to get our architects out of the ruts that they cling to so tenaciously, principally the wooden rut?

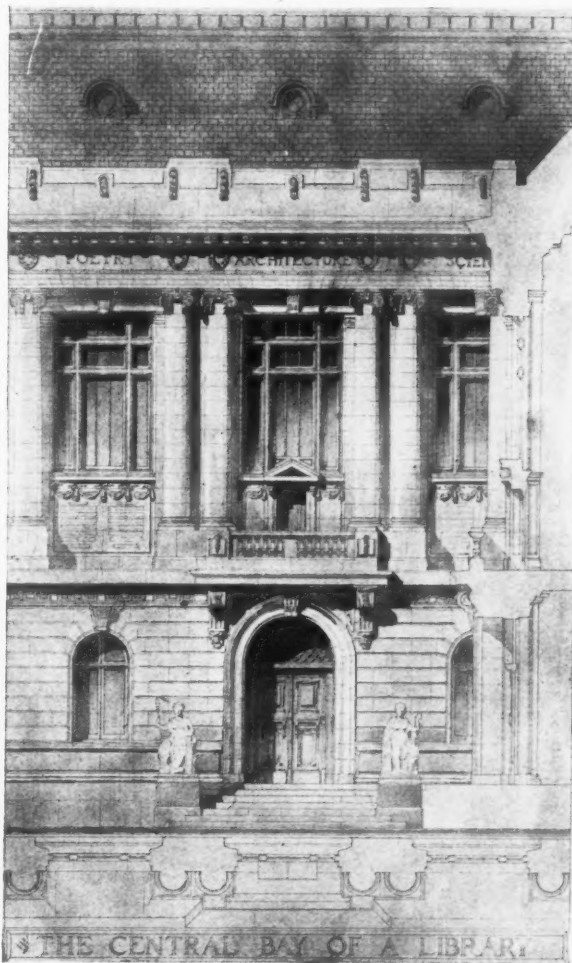
For any city the standard of perfection remains the same, though for San Francisco extraordinary pains should be taken to tie and to bond everything superlatively well against the very present possibility of the recurrence of as severe a quake.

THE TRAINING OF THE ARCHITECT.

ARCHITECTURAL design is sometimes thought to be one of the arts of picture making. To the designer the presentation of the design pictorially is but incidental.

The term designer is synonymous with the term architect used in its best sense. A designer can not be competent without a knowledge of all the processes attendant upon the translation of his conceptions into material form. His creative ideas must necessarily be in terms of material.

The training of the designer, therefore, involves much more than training in draughtsmanship. It is the training of the fully equipped architect. The architect must primarily be a man of broad general education and of trained power of independent thought. For he must, above all, be



PLACED FIRST, SOCIETY OF BEAUX ARTS ARCHITECTS. WASHINGTON UNIVERSITY, ST. LOUIS, MO. E. C. CHRISTOPHER.

able to understand the character and needs of the civilization which surrounds him—since this is the theme he is destined to express in terms of architecture. He must have a sound knowledge of the physical sciences and mathematics, in order that he may design safely and economically; he must have a knowledge of the history of architectural development, in order that he may understand the function of architectural motives; and he must have a trained sense of the beautiful, in order that his works may satisfy the demands of cultivated taste and develop a love of beauty and refinement in those who do not possess it.

Such a conception of the character and scope of the training required by the prospective architect underlies the scheme of the course in architecture at Washington University.—*Introduction to a portfolio of designs.*

BUFFALO NOTES.

BY CHARLES E. ILLSLEY, A. M., C. E., ARCHITECT.

WHEN the Twentieth Century reached Buffalo and opened up for business it found Niagara Falls, the eighth wonder of the world, heretofore thought to have no use except to be looked at, hitched to Industry's car and set to work. Solomon's remark about the lack of novelty

finished and will repay a visit. It is but a short walk from the City Hall. The design is unusually happy, combining in a high degree simplicity, unity, beauty, dignity and appropriateness. A square, tapering marble shaft rises to a height of perhaps seventy feet from a well proportioned



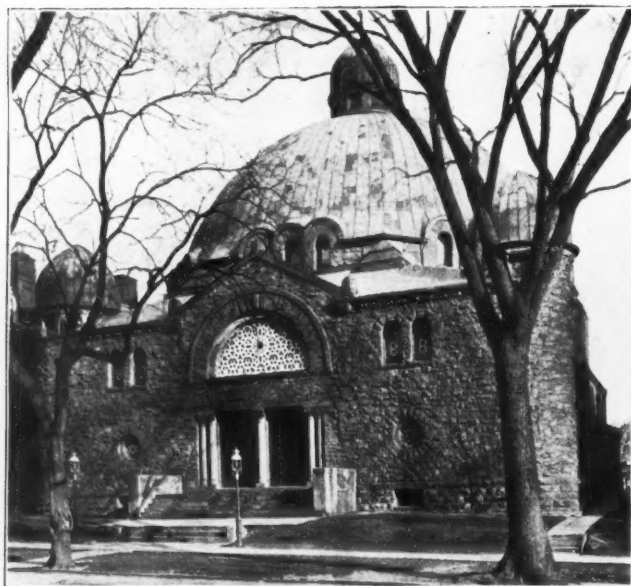
ONE OF THE SIGHTS OF BUFFALO: THE ALBRIGHT ART GALLERY. GREEN & WICKS, ARCHITECTS.
Voted in the Inland Architect contest, one of the best buildings, architecturally, finished in 1905.

under the sun was at last refuted, and the labor army had enrolled a recruit, not with one pair of hands, but a million, all pledged never to strike for more pay or shorter hours.

So Buffalo is now called the Electric City. But her citizens are not as entirely serene over the situation as had been expected. They had a notion that so long as the four Niagara electric companies were not dependent on Mr. George F. Baer for coal and got their water free, they would be willing to supply electric light and power on about the same terms; and this they are not doing. So Buffalo's mayor has been saying things about the electric

square die, with four sunk panels for gilt inscriptions, below which are decorative features of fountain basins and dolphin heads rising above a stepped dais, with massive buttresses at the four corners, on which rest four great marble lions dormant. The effect of the entire combination is excellent. It presents new attractions at every new point of view.

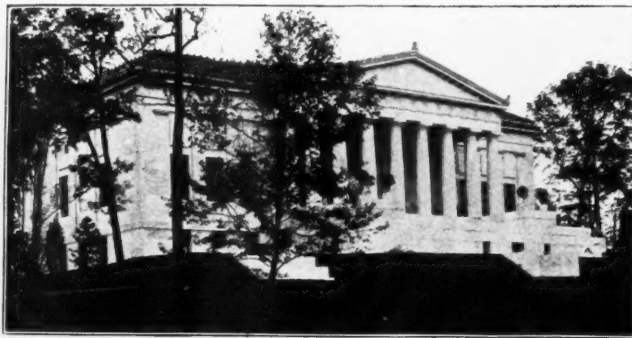
This city is fortunate in its Society for Beautifying Buffalo, of which Mr. J. H. Coxhead, architect, formerly of Minneapolis, is the founder and moving spirit. A city is always in peril when a public monument is contemplated (witness many eye-sores which traveled Americans can name), and as effects do not result without cause, it is fair to presume that in this very successful McKinley monument one can recognize the good taste and wise direction of the Society for Beautifying Buffalo. This notable result should encourage the formation of similar benign associations by local architects in other cities.



A FINE BROWN STONE JEWISH TEMPLE BY EDWARD A. KENT, ARCHITECT.

companies and they have been replying with emphatic rejoinders, etc.

The McKinley monument on Niagara Square, designed by Carrere and Hastings of New York, is now nearly



BUFFALO HISTORICAL SOCIETY'S BUILDING. GEORGE CARV, ARCHITECT.
ANOTHER GOOD SPECIMEN OF CLASSIC DESIGN.

One of the sights of Buffalo to both architects and artists is the Albright Art Gallery. The exterior is a severely simple but classically correct bit of Greek architecture, which looks slightly out of place on the comparatively flat landscape of Delaware Park, but in its arrangement, construction, lighting, etc., seems admirably adapted

for its purpose, which is to contain and display works of art without diverting funds or attention by unnecessary ornamentation of the building itself.

The Buffalo Historical Society's building, Mr. George Cary, architect, on a slight eminence a few hundred yards from the Art Gallery, is another good specimen of classic design. It is admirably arranged and lighted, and the lofty rotunda, with its black marble columns and its color effects, is unique and impressive.

On Delaware avenue, near North street, is a fine brown stone Jewish Temple by Edward A. Kent, architect. A low octagonal stone cupola rises from a rectangular base with spacious narthex, covered with a low coppered dome and lantern. The front openings have excellent geometric tracery. The lighting is mainly by ample side windows.

This is a good example of modern Jewish ecclesiastical design. Our esteemed Jewish co-citizens dwell and traffic in the same kind of stores and houses with Gentiles, but they now draw the line in their places of worship—these must have no trace of gothic or classic, Protestant or Catholic in their architecture. So the Byzantine style is in favor and this Buffalo temple would look quite at home in Constantinople, except for the absence of minarets. Business here is too strenuous to allow its interruption three times a day by a muezzin's call to prayer.

But minarets are more Turkish than Byzantine. St. Sophia acquired them only when converted from a Christian temple into a Turkish mosque. So Mr. Kent has made no mistake in their omission.

The most picturesque church exterior in Buffalo is the First Presbyterian on the Circle. The "See Buffalo" automobiles make a point of passing this edifice in their tours. The material is brown stone and the style Richardsonian Romanesque. A lofty and impressive square tower, practically unpierced below its handsome belfry, rises high into the blue empyrean for the ostensible purpose of lifting a yellow rooster to an elevation whence he can overlook all other city roosters.

The precise reason why so many Protestant churches are topped off with this bird has never been explained. The only religious service he is credited with was calling



FIRST PRESBYTERIAN CHURCH. THE MOST PICTURESQUE CHURCH EXTERIOR IN BUFFALO.

forgetful Peter to repentance and tears. But the one church which especially claims Peter as its head crowns its spires and gables with the cross, while Mohammedans cap theirs with the crescent. Protestant Christians alone seem to have selected chanticleer for their ecclesiastical aegis.

THE PLANNING OF HOSPITALS.

BY T. M. CLARK, ARCHITECT.

PART X.

THICK glass can not be cut to a smooth edge, and does not adhere well to waterproof cements, so that crevices may sometimes be found at this point, which are extremely objectionable, as they collect the washings from the glass, and can not themselves be washed out. On the whole, perhaps the best operating-room floor is a close mosaic of encaustic tiles, set in Portland cement, on a solid foundation, which can be trusted not to crack. A white, hexagonal tile of this sort is to be had, less than an inch in diameter, which gives a good floor, less slippery than one made of larger tiles, or of glass; and terrazzo flooring, of marble chips and cement, if well laid, is inexpensive and good. Flooring of this sort, as well as that made of small tiles in cement, should be covered, as soon as it is laid, with wet sawdust or sand, to a considerable depth, and kept moist by sprinkling the sand or sawdust, for at least a week, in order to prevent it from cracking by the drying of the cement before crystallization is complete.

In the finishing of the room it is hardly necessary to say that moldings on or about doors and windows should

be carefully avoided, and even the corners of the openings should be rounded. In many operating-rooms, and even in the wards of some hospitals, the window ledge, inside, is rounded or sloped at a steep angle, so that no dust can collect on it. Doors are often made of strips glued together, or framed flush, so as to present a perfectly smooth surface on both sides. If made of ordinary wood, such doors are likely to open seams or cracks, sooner or later, which harbor dust, and it is better to make them of California redwood, which does not shrink laterally, or to cover them with sheets of metal.

The purpose of the scrupulous avoidance of dust in operating rooms is not, perhaps, so well understood outside of the medical profession as it might be; and a few words of explanation may be of service to architects, who, with a clearer idea of what is needed, will often be able, out of the resources which their professional knowledge affords, to suggest improvements in the construction and fitting of such rooms which would hardly occur to a medical man.

All architects have probably cut their fingers frequently in childhood, and will remember that, on rare

occasions, the two sides of the cut, on being pressed together, would almost immediately adhere, and heal, by what our grandmother's medical advisers used to call "first intention." In the vast majority of cases, however, the cut would, in an hour or two, become red and inflamed. Then the kind grandmother would tie a rag around the injured member, and, after some days, during which the cut was sore and exuded a whitish liquid, it would begin to fill up with "granulations" of pink skin, and heal, leaving a permanent scar. The difference between the unusual phenomenon of healing in a few hours, by "first intention," without pain or inflammation, and what was then considered the normal course of inflammation, fever, suppuration and final granulation, is now known to be due solely to dust. The fortunate youth whose wound did not happen to catch one of the spores of which the air is full, and which swarm on ordinary clothing and other articles, experienced a cure by "first intention"; while, in the other cases, one or more spores, falling upon the exposed tissues, immediately germinated, setting up a mild form of blood-poisoning, with its accompanying "traumatic fever," which had to run its course before cure began. In the operations of modern surgery, in which the interior organs are unhesitatingly exposed, any infection by the germs of blood-poisoning is surely fatal, and unless healing takes place by "first intention" the patient dies. It may be imagined that where a single germ, out of the myriads which are mixed with ordinary dust, falling into the wound made by a serious operation, is likely to cause the death of the patient, surgeons adopt every precaution against such dangerous particles that they can think of. Not only is the operating room continually scrubbed with soap and water, sometimes with the addition of a small portion of corrosive sublimate as a germicide, but the operating and instrument tables, which are generally of iron, or iron and glass, are similarly purified before every operation. The surgeons themselves, after careful washing with soap and water, followed by corrosive sublimate solution, which is, in most hospitals, always at hand, dress themselves in clean white suits, sterilized by superheated steam, put on sterilized rubber gloves, lest any germ should be lurking under their finger nails, and, accompanied by nurses, also covered from head to foot with sterilized white clothes, take from sterilized sealed packages their instruments, also sterilized before packing, and perform the operation required as quickly as possible, the wound being immediately protected by sterilized dressings and bandages. In this way, and only in this way, can the most serious, but most beneficent, operations of modern surgery be performed; and a speck of dust floating out from a molding, or an inaccessible corner, may defeat the whole. Knowing this, architects more skilled than medical men in recognizing the possibilities, either for good or evil, of structural forms, may be of great use to surgeons. The writer has seen, in a beautiful operating room, most expensively fitted up, a lamp, with a shade, suspended over the middle of the operating table. Reaching up and touching the upper surface of the shade, the fingers came away black with dust. There were probably septicaemia germs enough on the lamp shade to kill all the surgical patients in the city, if they should happen to be shaken or blown off at the right moment, yet the accomplished medical men in charge of the hospital, never having had

their attention called to the dust-collecting properties of lamp shades, had, apparently, not thought of looking for them. Most architects, however, would notice such a questionable arrangement at once, and, in recent operating rooms, the lamps are not hung over the operating table, but are placed high up in the corners of the room, with reflectors, so adjusted as to throw the light upon the table. Usually four lamps are thus placed, so as to give a more concentrated light, as well as to prevent the surgeon's hand from casting a dark shadow over his work. This is by no means a perfect solution of the difficulty, as dust collecting on the lamps in the corners can not easily be removed, and may be blown about the room by a current of air from a door or window; and it would be better to place the lamps entirely outside the room, throwing their reflected rays through panes of glass set flush with the walls.

City hospitals usually have several operating rooms, so that there may be no delay in attending to patients, but the principles of lighting and arrangement are the same in all cases, except that large hospitals often have one room arranged in the form of a small theater, with seats arranged in semicircular or horseshoe plan, and rising at a very steep angle, so that students and medical men, on certain days, can witness the operations. Ordinarily cases of special professional interest are reserved for these public days, and the operating tables, with the patients, are often brought in from another room, and, as soon as the critical part of the operation is over, removed again, for dressing and bandaging, to make room for another case.

As an adjunct to operating rooms, etherizing rooms are necessary, to the number of two or three for each operating room in a busy hospital. The etherizing rooms are small, quiet apartments, where the patients can be put under the influence of anaesthetics before being brought into the operating room. It is common, in modern surgery, to spare the patient the distressing suffocation incident to the inhalation of ether, by administering first nitrous oxide gas, following this with the more powerful anaesthetic; and, as the apparatus required is somewhat bulky, it is desirable that each house surgeon should have a small room set apart for his own use, where he can have his gas-holders, etherizing masks, bandages and other appliances arranged to suit himself. Instruments, however, which no possible germ of corruption must be suffered to reach, are usually kept under glass in a special instrument room, in wrappers, just as they come from the sterilizing room; and the sterilizing room itself, with its copper or iron receivers, heated by steam under pressure, should not be far off. In modern hospitals recovery rooms are usually provided, in number determined by the size and purpose of the establishment, in which patients can lie quiet after being operated upon, until the shock of the operation, and the effect of the anaesthetics, have somewhat passed away; and, in a large hospital, a pathological laboratory should also be near at hand where the pathologist of the institution may, in case of need, determine the character of a tumor, or of a piece of diseased tissue, while the operation of removing it is actually going on.

Most hospitals are also now supplied with x-ray apparatus for studying fractures and other lesions before operating upon them, but, as the x-ray room does not need external light, it is usually arranged in some convenient part of the basement of the administration building.

(To be continued.)

PARKS AND GARDENS OF SOUTHERN CALIFORNIA

BY W. L. B. JENNEY, ARCHITECT

WEST LAKE PARK, LOS ANGELES

DURING the month of June a group of tourists had gathered after dinner under the pergola of the Maryland Hotel of Pasadena. The Maryland had, by keeping open during the summer, taught the tourists that, contrary to general opinion, the summer months in southern California were the pleasantest of the year and already, in spite of the old prejudice, the house was fairly well patronized.

Among this group there are two old friends, known to their intimates as Dr. Byer and his friend, Jack, the Landscape Architect, who have traveled over much of the



WEST LAKE PARK. A GENTLE DEPRESSION SLOPING FROM THE STREET

world together; visited the parks and villas of Europe; the tea gardens of Japan and the parks of the Eastern States, and were here by appointment at the Maryland, having come down from San Francisco.

In London, some five years ago, three ladies of New York established tea rooms in the midst of the fashionable shopping quarter which soon became frequented by tourists, not only for the popular four-o'clock tea, but also for a meeting place, from which they would start sight-seeing or arrange, over their tea or light lunch, what they would do or where they would go.

A few weeks ago on a bright, warm day in the latter days of May, when strolling along the main business avenue of Pasadena, opposite the Maryland Hotel, the attention of the two friends was attracted to the word "Tea

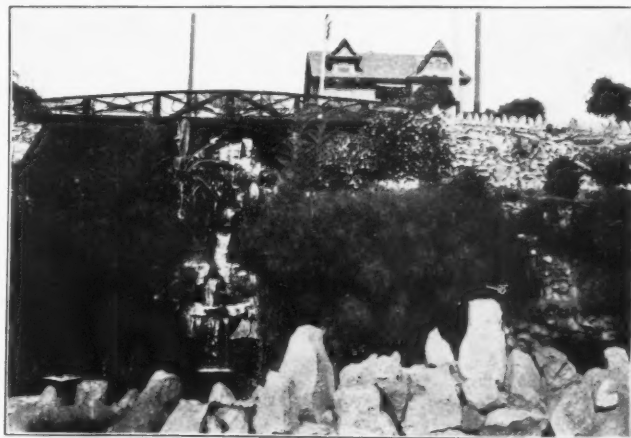


THE PARK SIMPLY EDGING ITS LAWN BY THE SIDEWALK

Rooms" in gold letters on the plate glass window of a Woman's Exchange. This called to mind at once the American Tea Rooms of London where they had passed many a pleasant hour in company with fellow travelers, so they went in and, as expected, found many beautiful

things of woman's work with cakes, etc. There were several small tables. Seating themselves at one, a very pleasing young lady asked if they would like a cup of tea. On assenting, it was served immediately with some delicious cake. The tea and surroundings were so satisfactory that we became frequenters and recommended the place to others, and soon, like the tea rooms in London, the New York Tea Rooms of Pasadena became fashionable, from which many an excursion was planned. On a beautiful day in June a party of five agreed to go to Los Angeles on the Pacific electric cars, at the door, the next day for a visit to West Lake Park in Los Angeles, and to take lunch on the way in the fine grill room of the Alexandria Hotel. The next morning proved clear and bright, which contributes so much to such a trip, warm but not hot, the usual summer day in southern California.

Leaving Pasadena on the electric trolley, we almost immediately passed between the main buildings of the Green Hotel to a pretty little park and garden and then on past the well known Raymond Hotel, perched on the summit of a hill of some height by the side of the car track, from which can be seen the San Gabriel Valley, the



A NATURAL LITTLE ARROYO RUNS FROM ABOVE DOWN INTO A POOL

Pacific Ocean and the Catalina Island. The gardens of the hotel slope down to the railroad and the whole hillside is a pretty park filled with fine trees and plants, and beyond are the mountains with white topped Old Baldy on the right.

Across the railroad track from the Raymond are some very fine places, on one of which is perched a small chateau among the live-oaks, much like those seen in Germany and the Tyrol of modern date, and just below is a beautiful place surrounded by small orchards, citrus and deciduous, and a eucalyptus grove for fire wood. This tree grows sufficiently in six or eight years to cut for fire wood and springs up at once from the stump, and as one requires so little wood during the year in this warm climate, a small grove properly attended to, by watering in dry weather, cultivating, etc., will supply a considerable family continuously. On the other side of the house is the garden, with a broad drive coming around the foot of the hill and gently mounting to the house. It is bordered by a California fan palm, alternating with the century plant, that grows here almost as well as in Mexico.

(To be continued.)

SANITARY ENGINEERING IN THE MODERN OFFICE BUILDING

BY J. PICKERING PUTNAM, ARCHITECT

PART XII

ATTACHED to dust, bacteria get transmitted with the greatest facility from place to place, and hence the significance of their presence in dust."

Other diseases than those above cited may also be distributed through the air by germs, and it is now believed that typhoid fever may be so spread by dust, the germs having been discovered in it. A typhoid fever at Athens a few years ago was supposed on good evidence to have been so spread, and epidemics of typhoid in other places have recently been traced to the same cause the dejecta of sufferers from the disease having been thrown in places where it became dried and afterwards distributed by the wind.

"That the bacillus of consumption," says Frankland, "should have been very frequently found in dust by different investigators is hardly surprising when it is realized that the sputum of phthisical persons may contain the tubercle germ in large numbers, and that until recently no efforts have been made in this country to suppress that highly objectionable and most reprehensible practice of indiscriminate expectoration. Considering that the certified deaths from phthisis in 1901 in England and Wales only, reached the enormous total of 42,408, and bearing in mind the hardy character of the bacillus tuberculosis when present in sputum, it having been found alive in the latter even when kept in a dry condition after ten months, it is not too much to demand that vigorous measures should be taken by the legislature to cope with what is now regarded as one of the most fruitful means of spreading consumption."

Boards of Health and other authorities both here and abroad have stated that tuberculosis sputum is the main agent for the conveyance of the virus of tuberculosis in the air from man to man, and that indiscriminate expectoration should therefore be suppressed by the most vigorous measures.

Many high authorities have made elaborate studies of the distribution of disease germs of different kinds by air currents. Dr. E. Concornotti, for instance, found that out of forty-six experiments in which the character of the bacteria found was tested by inoculation into animals, thirty-two yielded organisms which were pathogenic.

These authorities have found that the narrower and more crowded the streets of cities the greater the number and the more dangerous the character of the bacteria present in the air. They have found that a tuberculous invalid may discharge a billion tubercle bacilli in the space of twenty-four hours.

Schäffer has shown that leprosy bacilli may be disseminated in immense numbers by the coughing of leprosy patients.

Messrs. Valenti and Terri-Lelli found similar results in their systematic study of the bacterial contents of the air in the city of Modena. In their report they state that the narrower and more crowded the streets the greater was the number of bacteria present in the air, and the more frequently did they meet with varieties associated with septic disease.

It is unnecessary for our purpose to quote further authorities. So many careful investigations along this important line have been recently made both here and abroad by eminent scientists, all reaching the same conclusion as to the fact of dangerous pathogenic germs being spread by air currents and as to their connection with dust, that it seems evident that their elimination or the reduction as far as possible of their numbers, and of the dust which carries them, becomes of the utmost hygienic importance. We believe that especially in times of epidemics the air of the streets is laden with the germs of the specific disease connected with the pestilence.

If, now, we could erect in front of our windows, at such times, screens in the form of filters of such a construction that no particle of air could enter the house without first coming in direct contact with some part of the moistened surface of the filter, and if the filter could be provided with a germicide in its mesh maintained constantly active, it is certain, not only that the inmates of these houses would be shielded from the diseases conveyed by germs so long as they remained within the protection of the filters, but also that the germs themselves in the locality would gradually be diminished in number until, if the traps were numerous enough, all might ultimately be destroyed.

There is no way known of setting up such screens as I have described in front of our windows. But there is a means of accomplishing the air filtration without their use, and it is the province of the science of sanitary engineering to turn the wonderful discoveries of the bacteriologists and patient investigators into the nature and habit of the smallest of all known living things to man's benefit, and make the most effective use of the knowledge they have given us. They have shown us that the sewers and house drains form vast filters and that they are equipped with a most marvelously effective germ arrester and germicide in their damp inner walls and in the water which they convey. It only remains to us to put these germicides to their fullest operation in order to accomplish the most important results in sanitation.

Before describing the simple method by which I propose to utilize this filtering capacity of the sewers and house drains, it is necessary for me to describe in a few words the manner in which the sewers have been proved to perform this great service of destroying the pathogenic germs which come from the outer air in contact with their wet walls.

Our scientific benefactors have shown for us, first, that germs, being small particles of vegetable matter, can not spontaneously rise from water or wet surfaces upon which they have once fallen or been driven by currents of air; second, that the pathogenic germs are probably unable to survive long in sewage; and, third, that as a consequence of the first two phenomena, all germs which once gain access to the sewers from the outer air are soon imprisoned and the pathogenic ones probably destroyed.

(To be continued.)

MUNICIPAL IMPROVEMENTS.

BY ALBERT KELSEY, ARCHITECT.

CHAIRMAN OF COMMITTEE OF EXPERTS OF THE ART FEDERATION OF PHILADELPHIA.

PART XI

IN THE meantime, during a period of stagnation and graft in Philadelphia, real estate reformers in Europe, Canada, New Zealand and Australia have solved many problems of the most exhaustive utilization of just such property, and are now giving their attention to the abolition of what they call "the land monopoly," meaning the private ownership of property which has been enhanced in value by adjacent public improvements. But in the United States our attention is called to existing conditions in this the most American of cities by the following from the *North American* of April 11, 1906:



THE OLD PONT ROYAL, PARIS

"We must now destroy the wharf monopoly as we have defeated and overthrown the other forms of crookedness.

"Some of the particulars are remarkable.

"On the Schuylkill river front, for example, there are thirteen bulkheads, all belonging to the city. Of these the Baltimore and Ohio Railroad Company leases and holds seven, for which it pays a total rental of but \$400 a year. To keep one bulkhead in repair costs the city government \$180 a year; the railroad company pays \$50 a year for the use of it.

"The other six bulkheads pay a total rental of \$2,750

a year, or \$458 for each bulkhead, corresponding to a bulkhead which the railroad company gets for \$50."

But this is a trifling matter, scandalous though the conditions be, in comparison with the conditions upon the other river.

"On the Delaware river front the railroad companies (chiefly the Pennsylvania Railroad Company) own the greater portion of the wharfage from Richmond, on the north, to Girard Point, on the south; and they control nine of the twenty-odd bulkheads belonging to the city.

"Eight of the remaining city wharves are controlled by corporations or individuals; and all the properties thus leased produce a rental far below their real value.

"The city owns twenty-five wharf spaces not used for municipal purposes. Of these, seventeen are rented, eight by the Pennsylvania Railroad Company, one by the Reading Railroad Company and the others by private concerns. For these, also, the charges made by the city are much below the real value.

"In some cases, notably at Fairmount avenue and at Callowhill street, where a city pier lies between two railroad piers, or a railroad pier and a private pier, the railroad or private pier, following a bend in the river, has been so extended as to make the property of the city wholly or nearly worthless. The railroad pier has been extended straight forward beyond the curve, so that its end overlaps the front of the city pier, almost covering it.

"These are but illustrations of a total fact which includes many similar and wholly objectionable details.

"The truth, succinctly stated, is that the way of the commerce of Philadelphia to the water-channels connecting the city with the sea has been almost completely barred by the transportation companies which have helped to poison our politics, which discriminate against Philadelphia in freight and passenger rates, and which have succeeded in putting into a fourth or fifth place a town which once was the principal seaport on the Atlantic Coast."

From it, it would appear that to neglect street ends terminating on the harbor, is to abolish municipal docks, public landing places and views of the water, since they often are no more than their continuations.

With us railways take precedence over highways, which to a certain extent explains why in such towns as Buffalo, Detroit and Cleveland, or Philadelphia, Pittsburg and St. Louis, the street circulation between the docks and the business centers remain so devious. Moreover it is an undeniable fact that transportation companies are often in a conspiracy to throttle street traffic, like any other form of competition. They have the power to place, and do place, the development of certain parts of the city's plan absolutely at their mercy, thus retarding the cutting of necessary diagonal avenues and the widening of over-crowded streets.

True, Market street in Philadelphia is a broad avenue leading straight to Front street, but only to one point on it, while for miles up and down the Delaware there is no direct communication with the heart of the city.

(To be continued.)

THE ELECTRIC LIGHTING OF BUILDINGS.

BY R. E. HEINE, ELECTRICAL ENGINEER.

PART IV. THE NERNST LAMP.

WITH the introduction of the Nernst lamp a comparatively new form of light was brought before the public, this light differing widely in its characteristics from the arc and incandescent lamp, although belonging to the latter type as far as classification is concerned.

The source of light in the Nernst lamp, or "glower," is a porcelain-like filament, composed of the oxides of rare earths, properly combined with suitable binding materials. Under the influence of an electric current this glower is brought to a white heat, and remains at such while the current is kept flowing, no oxidation or disintegration resulting therefrom in the open air. Before the glower will emit light, however, it must be brought to a certain high temperature in order to render the glower a conductor of electricity. Therefore all Nernst lamps require a separate starting mechanism and heating device in addition to the regulating mechanism.

The standard or commercial form of Nernst lamps is designed to operate in a vertical position so that the source of light will be brought immediately beneath the body of the lamp, but special forms of lamps can be built so that the lamp may be operated at any desired angle, or in any position.

The Nernst lamp shows a decidedly higher economy in power consumption than the incandescent lamp, considering the wattage per candle power only, and inasmuch as the Nernst lamp is rarely used in units of less than 100 candle power, this feature is quite appreciable where the cost of electric current is high. But there are several other factors which, up to the present time, have not been eliminated from this type of lamp, that partially offset this saving of current.

The commercial form of the Nernst lamp can be used on alternating current systems only, and shows its greatest economy on high frequency circuits. Modern practice shows a decided tendency toward low frequency, which places the Nernst lamp at some disadvantage. The first cost of the Nernst lamp is very high, as compared to other types of lamps, also the cost of maintenance, the chief item of expense being the renewal of the glowers, whose average life is less than that of the incandescent lamp.

It requires from 60 to 90 seconds for the lamp to light up after the current is turned on, which time is consumed in heating the glower so as to render the same a conductor. In locations where frequent turning on and off of the light is necessitated, the Nernst lamp would not be desirable. The light emitted by the glower is a perfect white light, and requires diffusion, due to the fact that it is generated within a very small space. The glowers are surrounded by a ground glass globe, which not only serves as a diffuser, but also protects the glower and prevents inflammable materials from coming in contact with the same.

The most economical results from Nernst lamps can be derived by using them in places where large units of light are required and in connection with 220-volt circuits on large central systems, where a close regulation of pressure is maintained. The efficiency is slightly higher on

220-volt systems than on 110-volt, and is also impaired by fluctuations in voltage.

The standard lamps are made from one to six-glower capacity, each glower having a nominal rating of fifty candle-power. The power consumption varies from 80 to 100 watts per glower, or about 1.8 watts per candle-power. (Incandescent lamp, 3.1 watts per candle.)

There is no doubt but that the field of the Nernst lamp is a wide one, and that economical and efficient results can be obtained from the same, but it should be stated that at the present time this lamp has not reached a stage of development where it can be considered as a rival of the incandescent lamp. Its greatest success has been attained on large central systems and for purposes of general illumination.

CONCLUSIONS.

It is impossible to compare the various forms of electric light without considering the specific conditions, circumstances and purposes. In point of quality of light the Nernst lamp leads all others, with the incandescent lamp a close second. Comparing the power consumption per candle-power, the arc lamp shows a slightly higher efficiency than the Nernst lamp, and the latter is about 75 per cent better than the incandescent. But the lower efficiency of the incandescent lamp is more than offset by its low cost of first installation, cost of maintenance and flexibility of system. The last named point gives the incandescent lamp an advantage, which has served to place it in the position among the sources of light which it occupies at the present day.

OUR ILLUSTRATIONS.

University Club, New York; McKim, Mead & White, architects.

The Gorham store building, New York; McKim, Mead & White, architects.

Dormitory for Heidelberg University, Tiffin, Ohio; Patton & Miller, architects, Chicago.

Art gallery for J. Pierpont Morgan, New York; McKim, Mead & White, architects. Second choice in THE INLAND ARCHITECT voting contest regarding the best building, architecturally, finished in 1905.

Two two-flat buildings, Cincinnati, Ohio; William Bausmith, architect. Exterior and plans.

New City Hall, Cleveland, Ohio; J. Milton Dyer, architect. Elevation, section and plans are shown.

High school, Madison, Wis.; Cass Gilbert, architect, New York. Courtesy of Brooklyn Chapter, A. I. A.

Residence for D. D. Martin, Buffalo, N. Y.; Frank Lloyd Wright, architect. Three exterior views are shown.

Prison Ship Martyrs Monument, Brooklyn. McKim, Mead & White, architects. Courtesy of Brooklyn Chapter, A. I. A.

Madison Square Presbyterian church, New York, N. Y.; McKim, Mead & White, architects. Two exterior views are given.

Competition, Traveling Scholarship, 1906, Architectural League of America. Successful design by Chester B. Price, St. Louis; first mention design by Norman Vorse, Washington.

The Tiffany store building, New York; McKim, Mead & White, architects. Voted one of the best buildings, architecturally, erected in 1905 in the voting contest of THE INLAND ARCHITECT.

Summer residence for R. W. Sears, Grays Lake, Ill.; Nimmons & Fellows, architects, Chicago. The following views are given: Residence exterior; view in living room; view in dining room; stable; gardener's cottage; boat house.

First five premiated designs, Carnegie Foundation Competition for the Peace Palace, The Hague. First prize design by L. Cordonnier, of Lille; the second by A. Marcel of Paris; the third by F. Wendt of Charlottenburg; the fourth by O. Wagner

of Vienna; the fifth by Messrs. Howard Greenley and Hubert S. Olin of New York. The comment of the jury of award is of interest and is here given.

First Prize.—This design is an attractive one. Its author has considered that, inasmuch as The Hague has been chosen as the permanent seat of the court of arbitration, the building should in style follow the local traditions of XVI century architecture. These considerations have finally prevailed with the majority of the jury. This design somewhat emphasizes the distinction between the library and the court of arbitration, which is indicated by the program, connecting them only by a corridor. But it has failed to give a sufficient unity of character to the two different portions of the structure.

Second.—In this design it is only the plan that has at all commended itself. Its general arrangement is very good and is eminently that of a building standing in a park; the large rooms are well lighted by side windows, and in the rear part the library rooms are admirably disposed around a garden, forming a kind of cloister. But both in the plan and in the elevation the lines of the composition noticeably depart from the noble simplicity which should characterize a building devoted to the serious and dignified purposes of the Peace Palace, without at the same time evincing any special originality of treatment.

Third.—This design meets the requirements of the program in a simple and straightforward way, though an undesirable amount of space is given to vestibules and corridors. The exterior, though it exhibits a suitable dignity of character, is somewhat stiff and monotonous.

Fourth.—In the written memorandum, which accompanies this design, the author explains that a Palace of Peace, being something new, seems to him to require novel methods of artistic treatment. The result is interesting and is not without originality, and though the plan has obvious defects, it meets fairly well the chief requirements of the program.

Fifth.—The exterior is greatly to be praised both for simplicity and for suitability of character. But the round ends of the principal facade injure this effect, and the room of the administrative council on one side and a series of smaller rooms on the other are lighted only from beneath colonnades. The plan is well studied and is distinguished from most of the others by a notable economy of space.

ASSOCIATION NOTES.

CHICAGO ARCHITECTS' BUSINESS ASSOCIATION.

The last meeting of the season was held on June 26. After the usual dinner the reports of committees were presented. The committee on projections beyond the lot line reported that an agreement practically had been reached with the committee on the same subject from the Illinois Chapter. The committee was continued for the summer with power to act. The report of the committee on public action was a review of the work accomplished during the year. Many subjects of importance had received consideration, but more time was required to complete the work in hand. The committee on high water pressure for the business district had discussed the subject with other associations interested, and a proposition had been decided upon to submit the city council. The year has shown quite an increase in the membership and a flourishing condition of the finances. President Wheelock was in the chair and George Beaumont was secretary pro tem.

CHICAGO ARCHITECTURAL CLUB.

Many members and ladies on invitation attended the Fourth of July celebration at Thornton. A private train was at the dis-

posal of the party. A lunch in "Architects' Grove," athletic events and the ball game were heartily enjoyed. The history of the club and its immediate predecessor, the Chicago Architectural Sketch Club, has just reached completion. The record is complete from the organization of the club in the office of THE INLAND ARCHITECT, February 26, 1885, to May 1, 1906. The utmost care has been given to the work to omit nothing of value and interest, and secure accuracy throughout. For this history the club is indebted to the faithfulness and intelligence of Edward O. Nelson, president '05-'06, by whom it was edited and compiled.

SOUTHERN CALIFORNIA SOCIETY OF ENGINEERS AND ARCHITECTS.

Seventy members assembled in one of the banquet rooms at Levy's last month and listened to interesting addresses by C. E. Grunsky, who at one time was city engineer of San Francisco, and L. C. Hill, an engineer engaged in the government dam work at Roosevelt, Ariz. Papers on technical subjects were read by several of the members. The progress of work on the Panama canal supplied one of the chief topics for description and discussion. President J. B. Lippincott acted as toastmaster.

CINCINNATI CHAPTER, A. I. A.

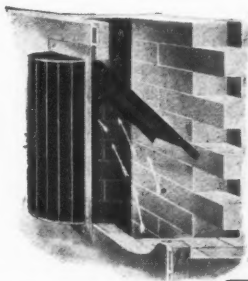
Many members of the chapter gathered last month at the Zoological Garden for a social session, dispensing with all business cares and formalities. The architects and their assistants, together with several associate members, enjoyed a banquet. Gustave W. Drach, president, was master of ceremonies. It was the first open-air meeting of the chapter this season, and was a success.

THE PORTLAND (ORE.) ARCHITECTURAL CLUB.

The Portland Architectural Club held a meeting recently in the Portland Association Club rooms, at which the by-laws of the organization were adopted. The following committees were appointed: House—Graham Fuller, chairman; H. C. Raymond, C. H. Kable. Scholarship—F. D. Webber, chairman; E. S. Lawrence, Martin Schacht. Educational—F. J. J. Berndt, chairman; J. G. Wilson, H. E. Plummer, E. Kroner. The charter was open for signatures and several names were added to the membership. A committee consisting of W. F. Topey, J. G. Wilson and Emil Schacht was appointed to solicit members among the craft and the allied trades. The purpose of this club is to foster the fraternal spirit among the architects and draftsmen of this city, and also to furnish a means of mutual study and improvement along lines of design and construction. Eventually it is planned to apply for membership in the Architectural League of America and thus have this club placed on its circuit for architectural exhibitions.

ARCHITECTURAL CLUB, UNIVERSITY OF ILLINOIS.

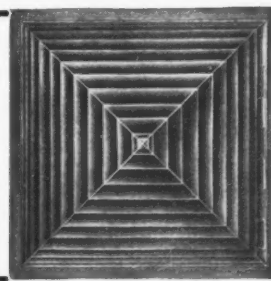
A very unique and attractive annual has been issued by the class of 1906. It is in the form of a portfolio containing ten plates. These are copperplate photogravure reproductions in colors of designs by the architectural class. The cover, a very elaborate piece of illumination, is by Nell D. Brooker. The plates are entitled as follows: Mosaic from S. Marks by E. G. Oldefest; A Living Room, Interior by Charles C. Rich; Sketch for a Living Room by L. E. Wilkinson; Design for a Dining Room by Harry F. Robinson; Detail of Entrance Bay to a Dormitory by Earl N. Dugan; Class Memorial, a Sun Dial, by Jos. McCoy; Study for a Church Window by Edgar Stanley; Study for a Mosaic Panel by M. W. Schober; Study for a Church Window by Charles C. Rich. In addition Prof. Newton A. Wells has contributed two dainty etchings. This portfolio further illustrates the progressive spirit that animates the architectural department of the University of Illinois.



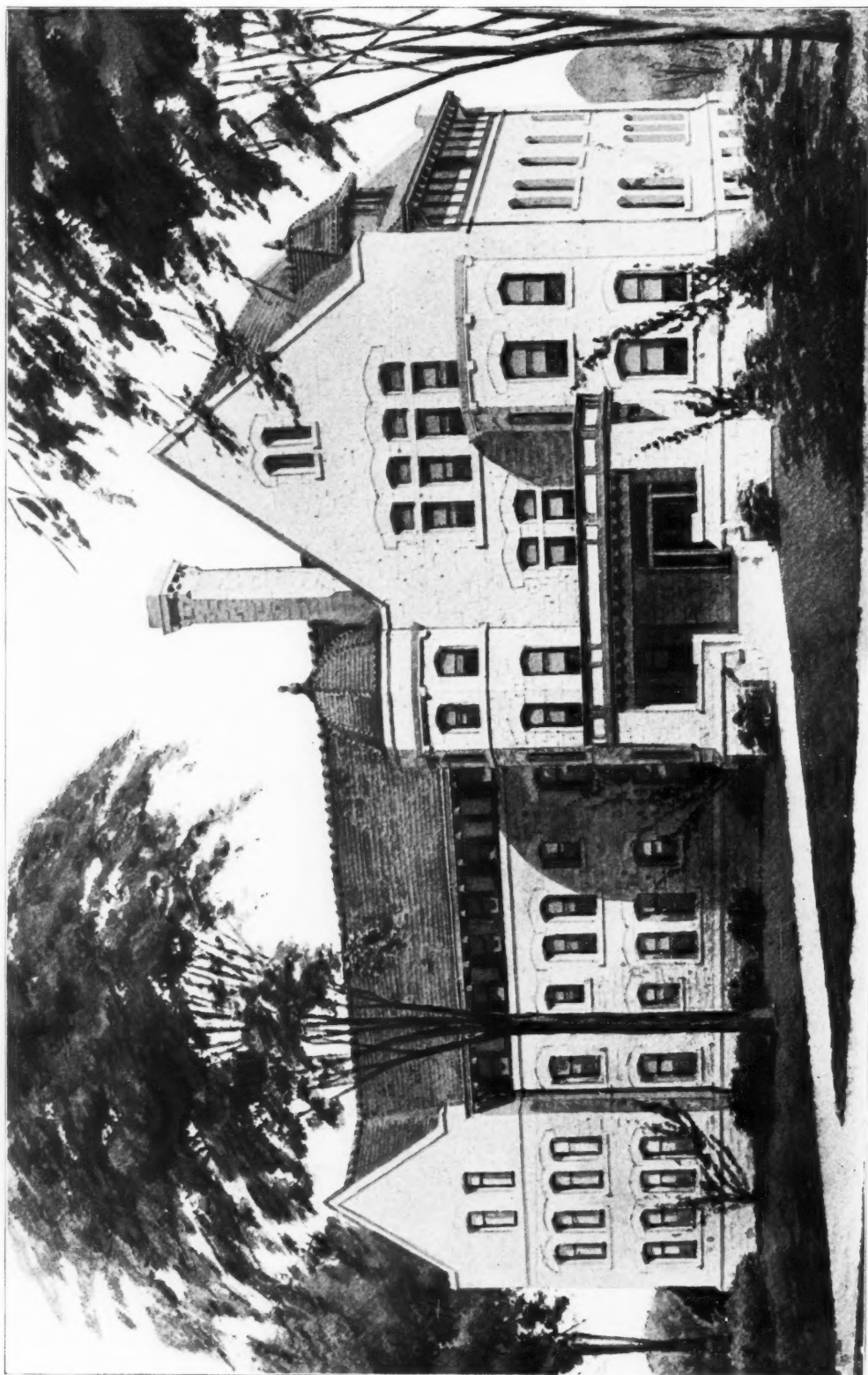
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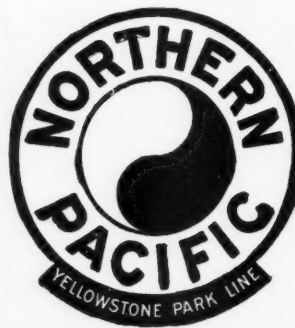
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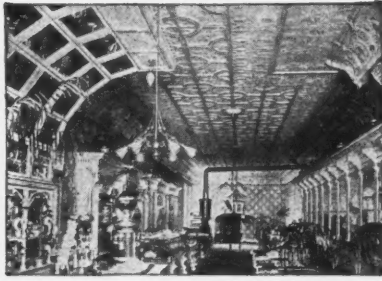
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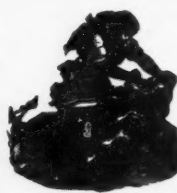
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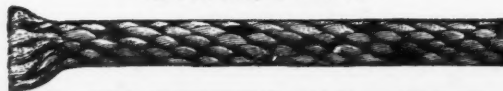


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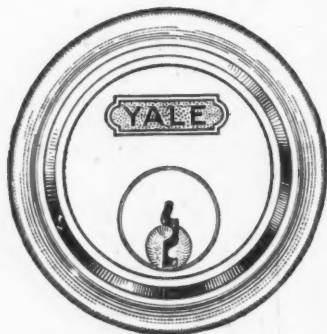
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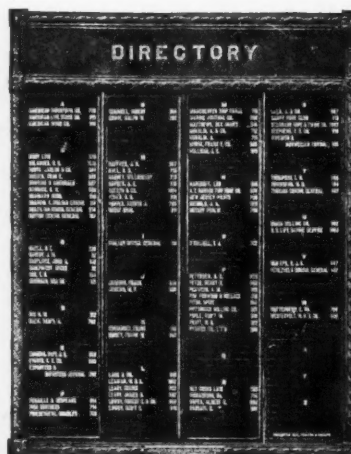
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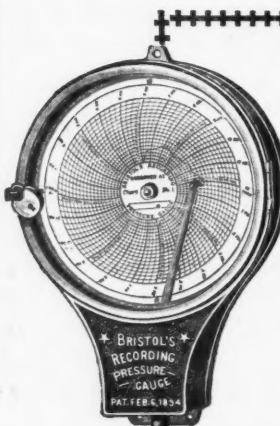
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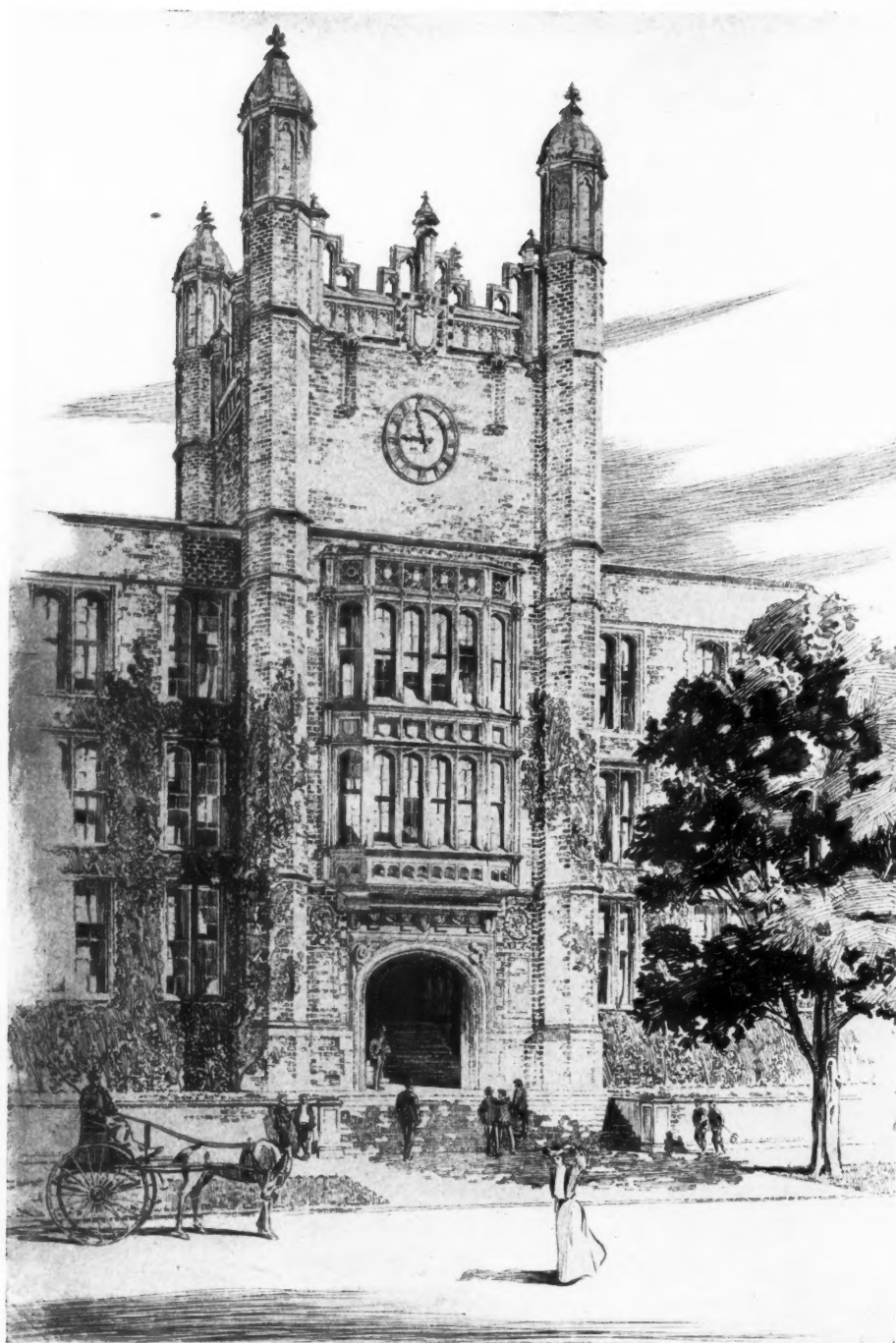
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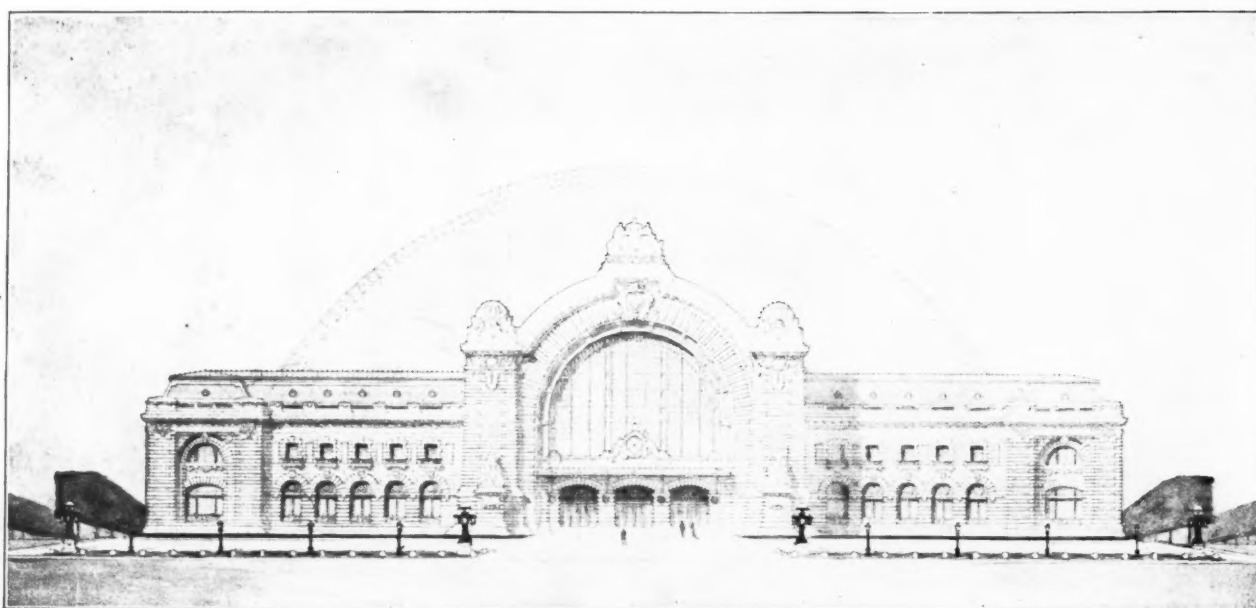
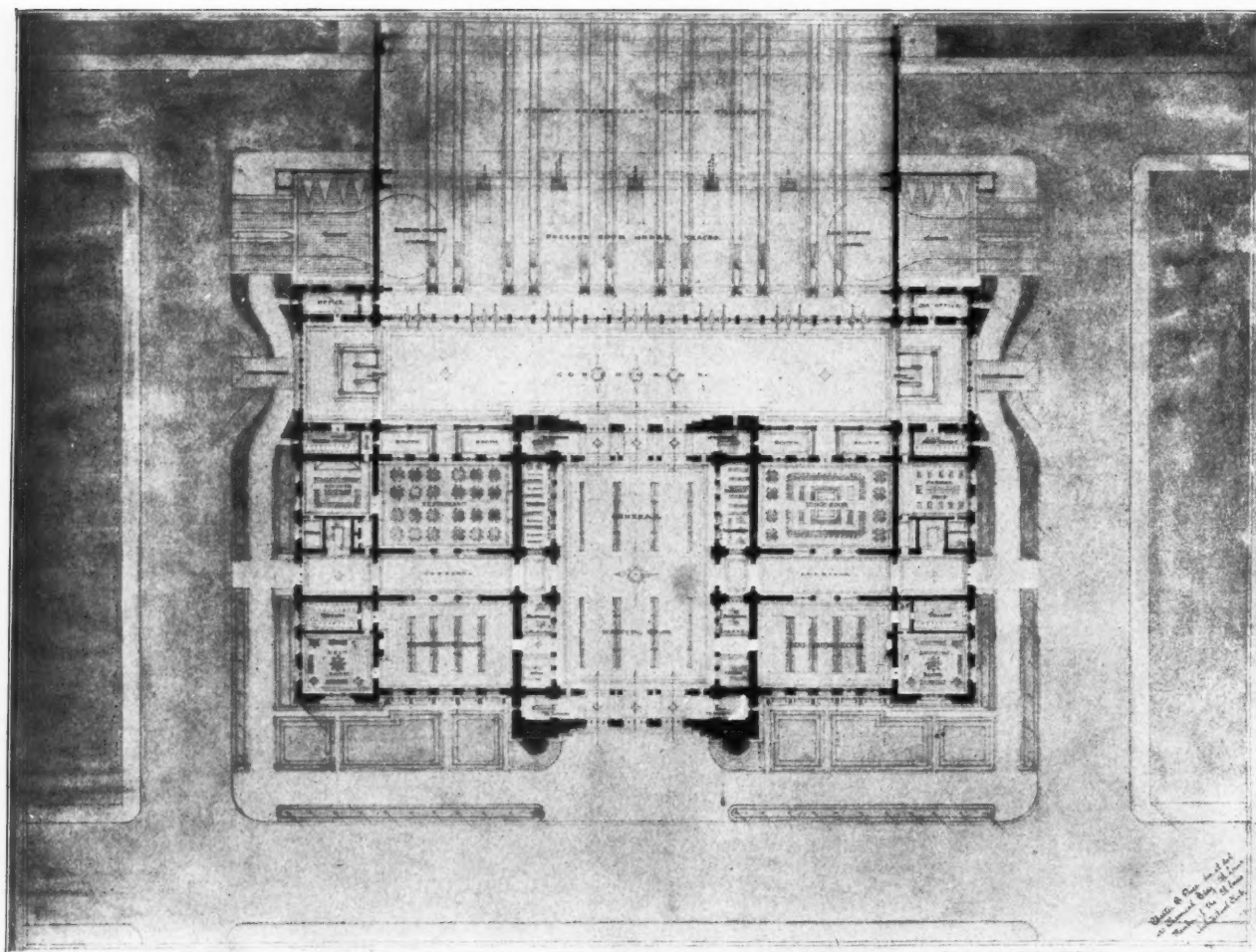
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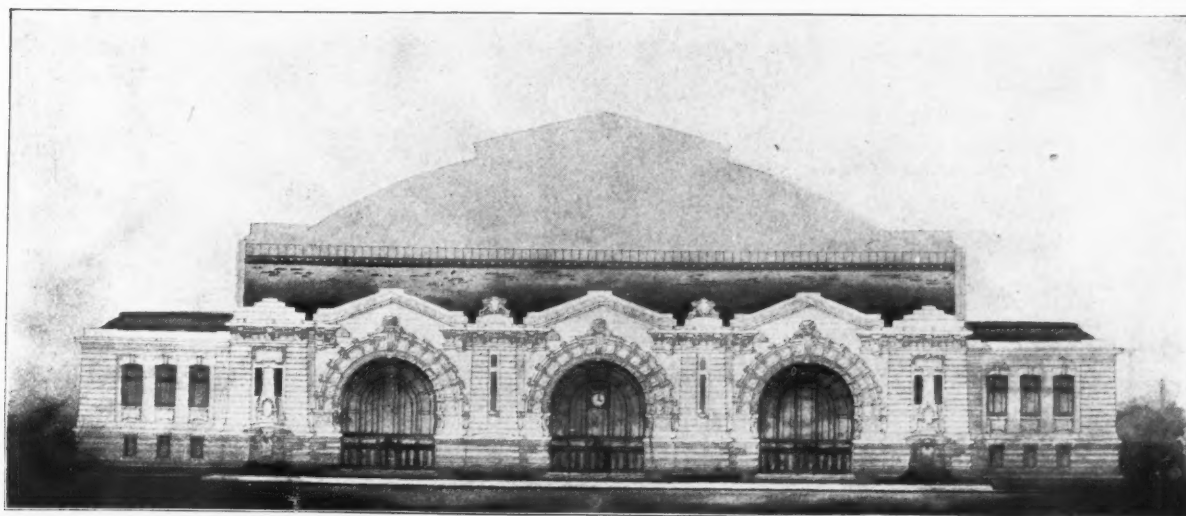
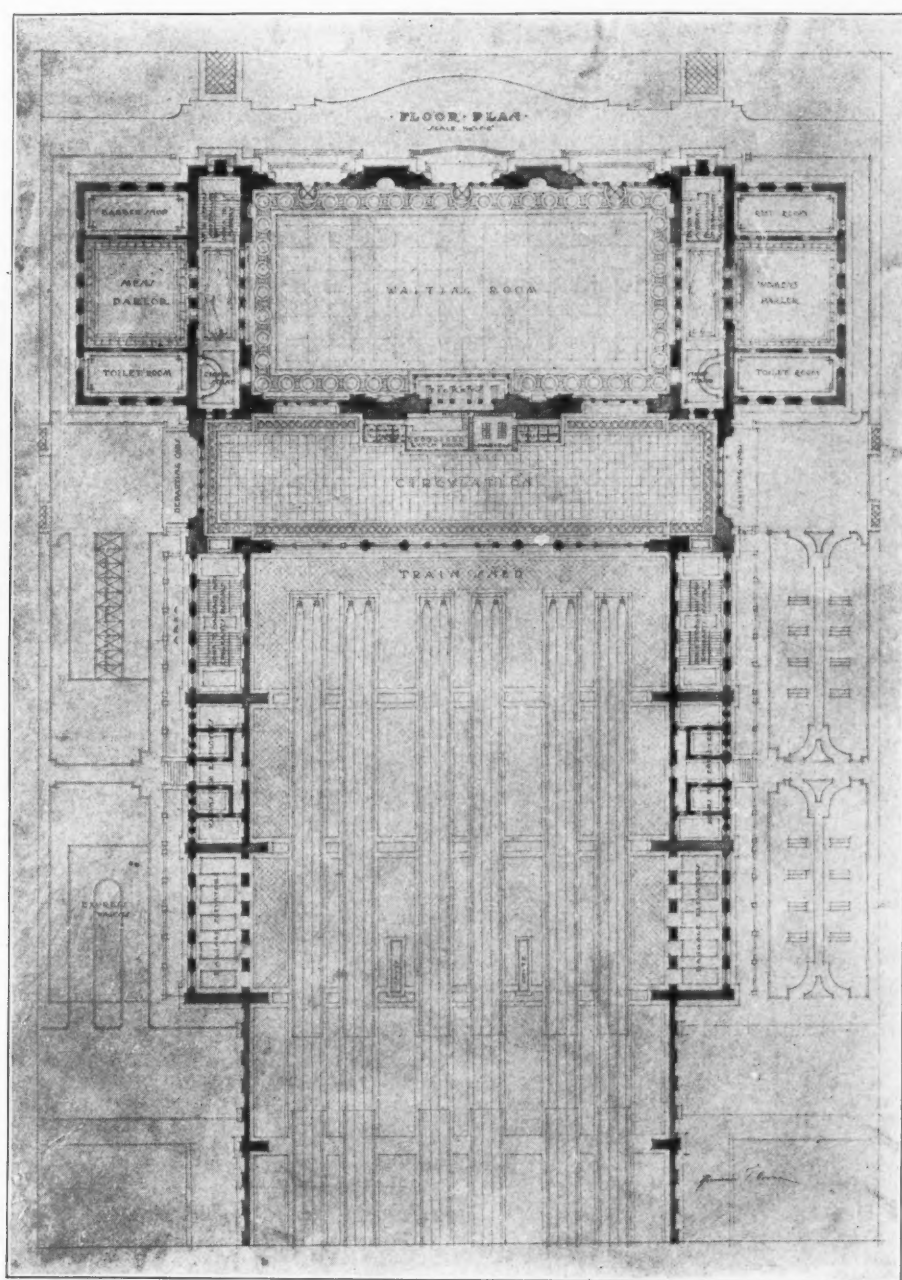


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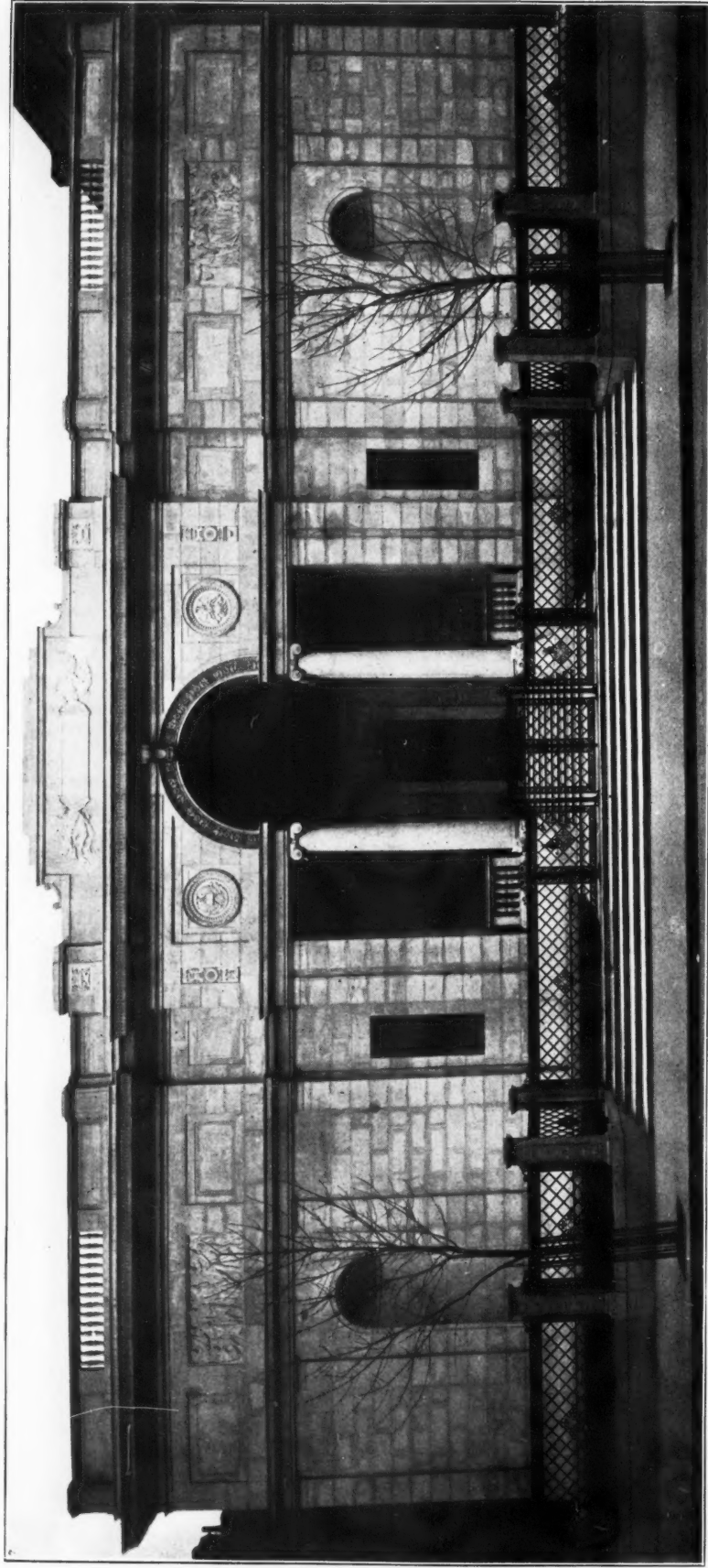
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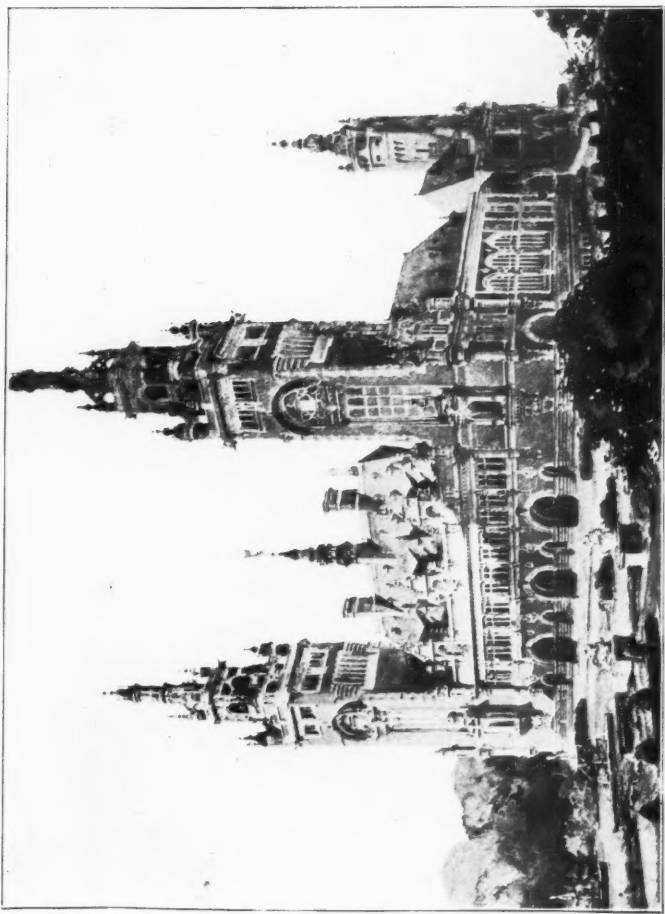
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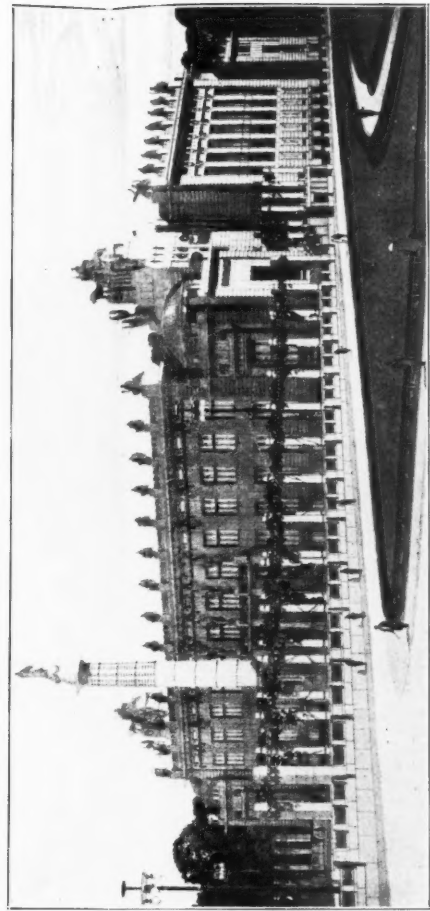


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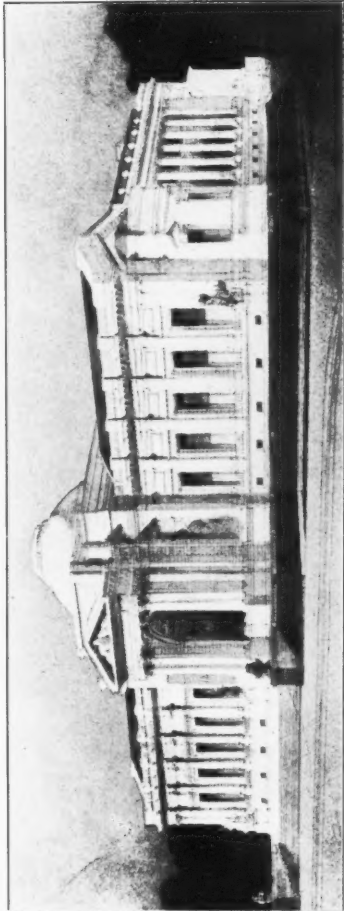
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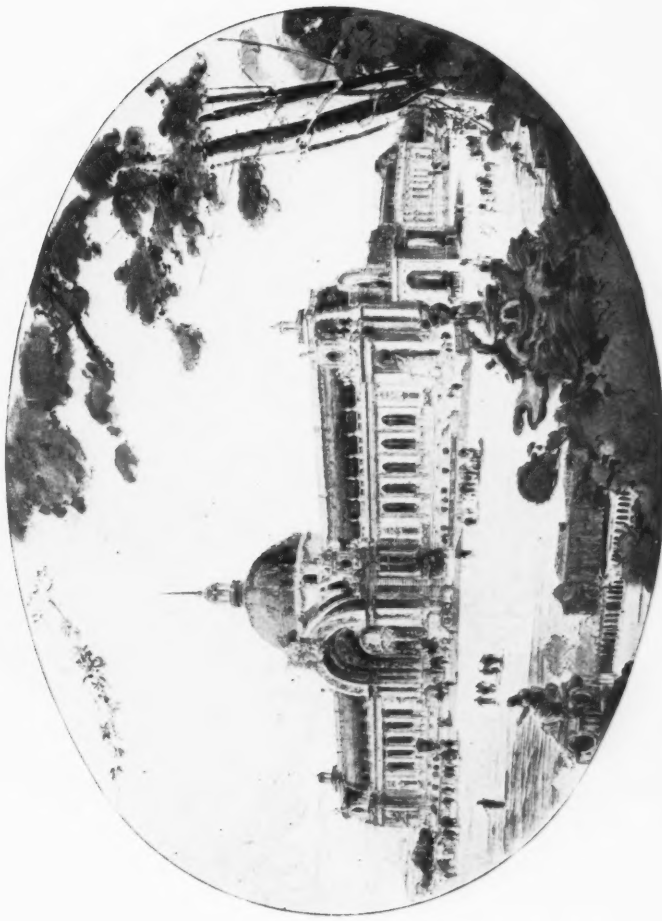
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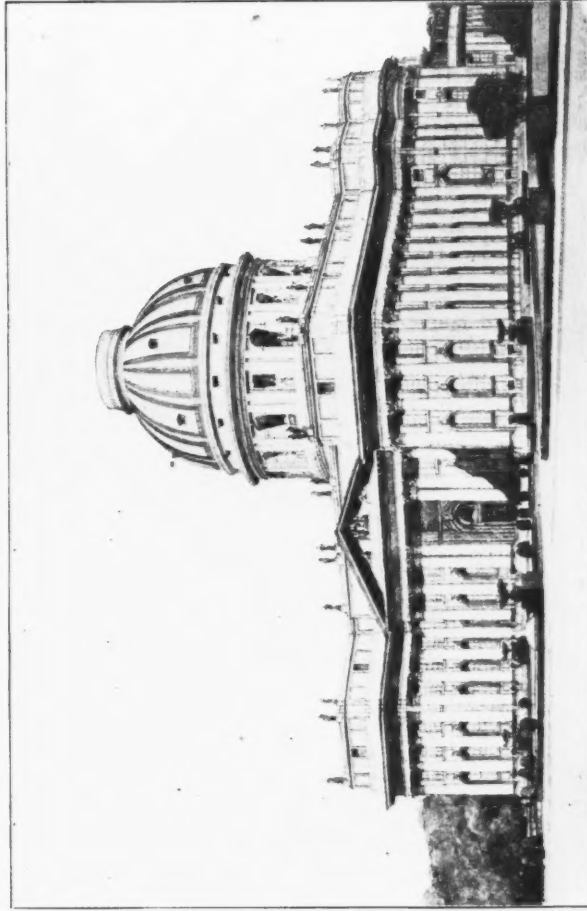
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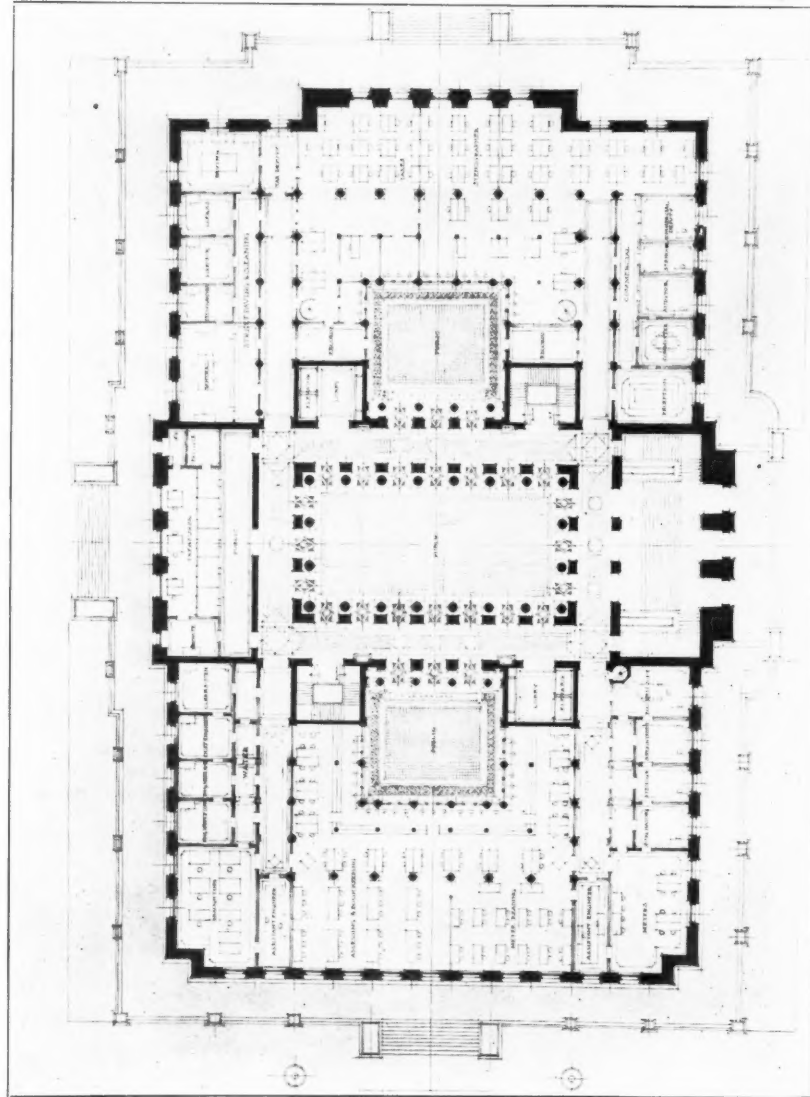
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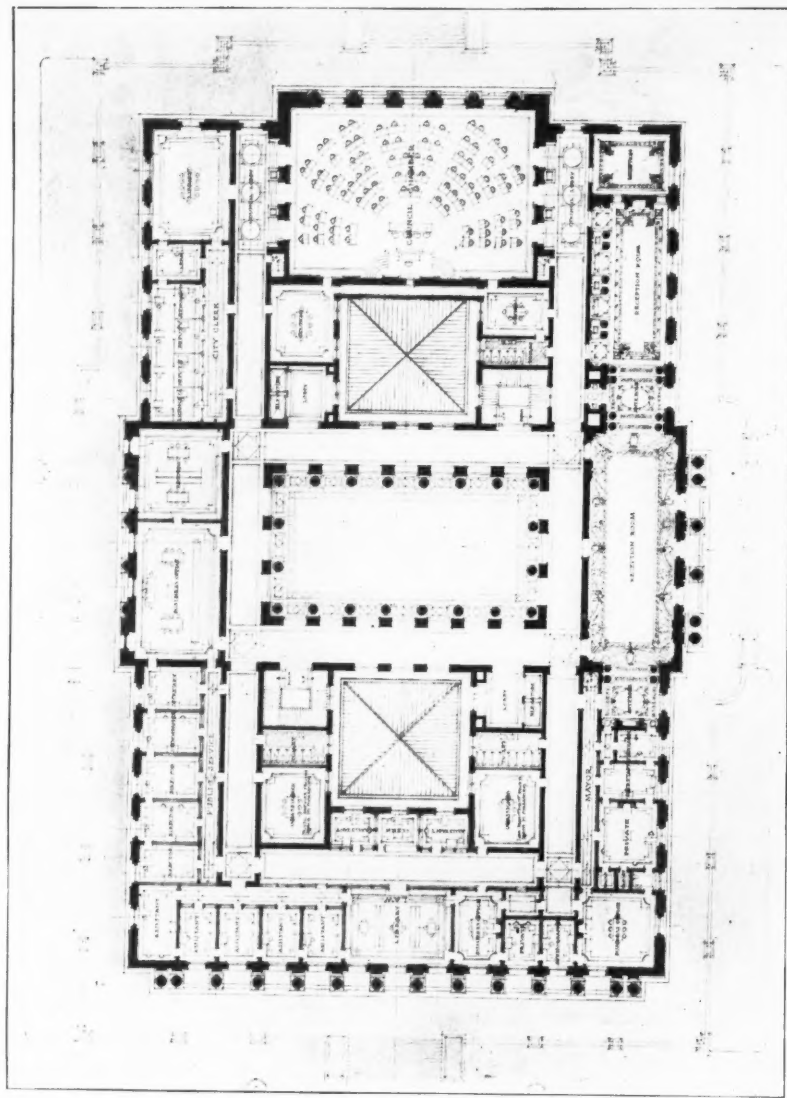
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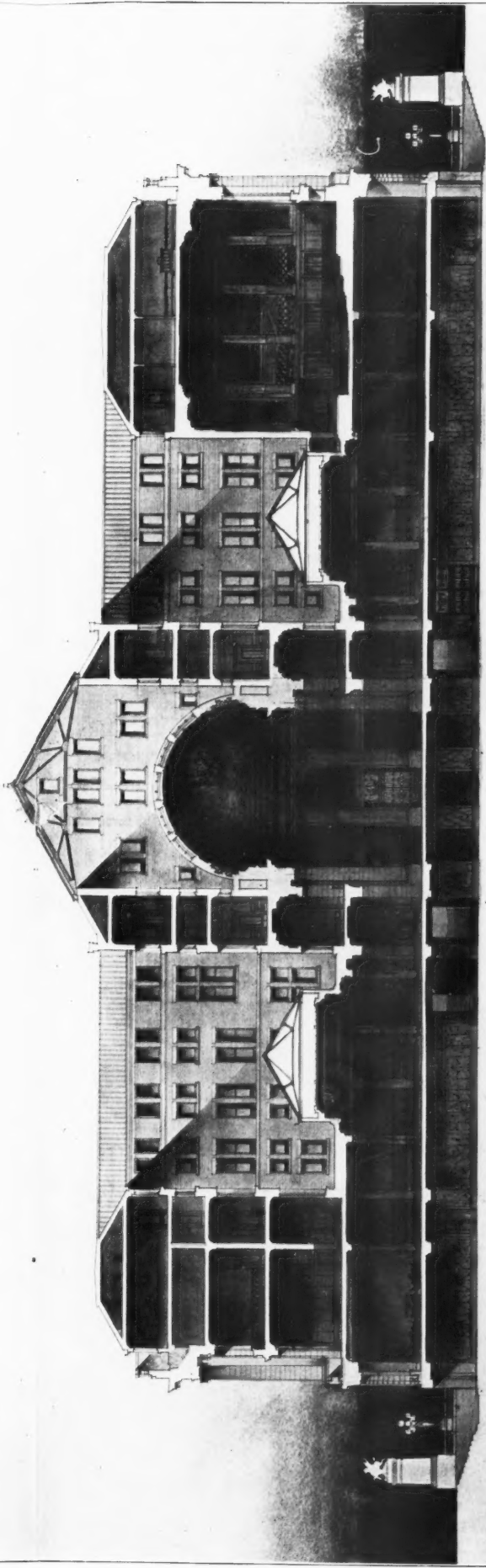
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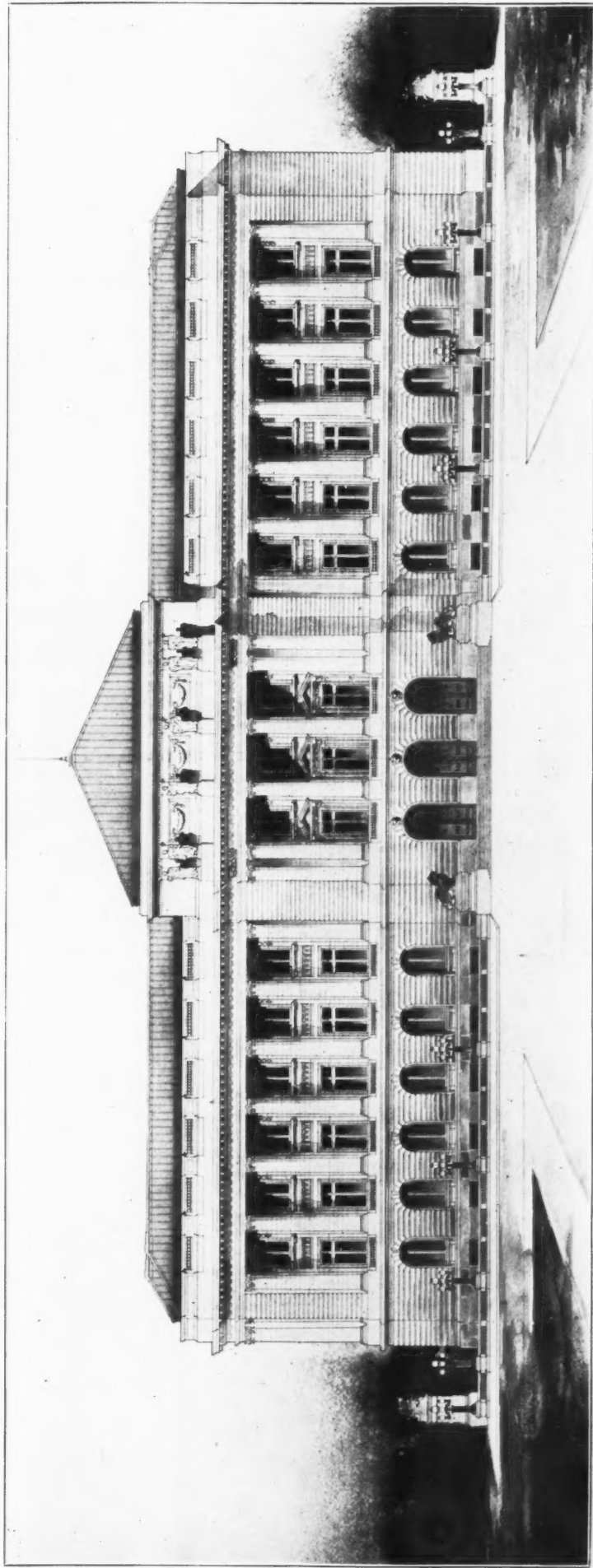
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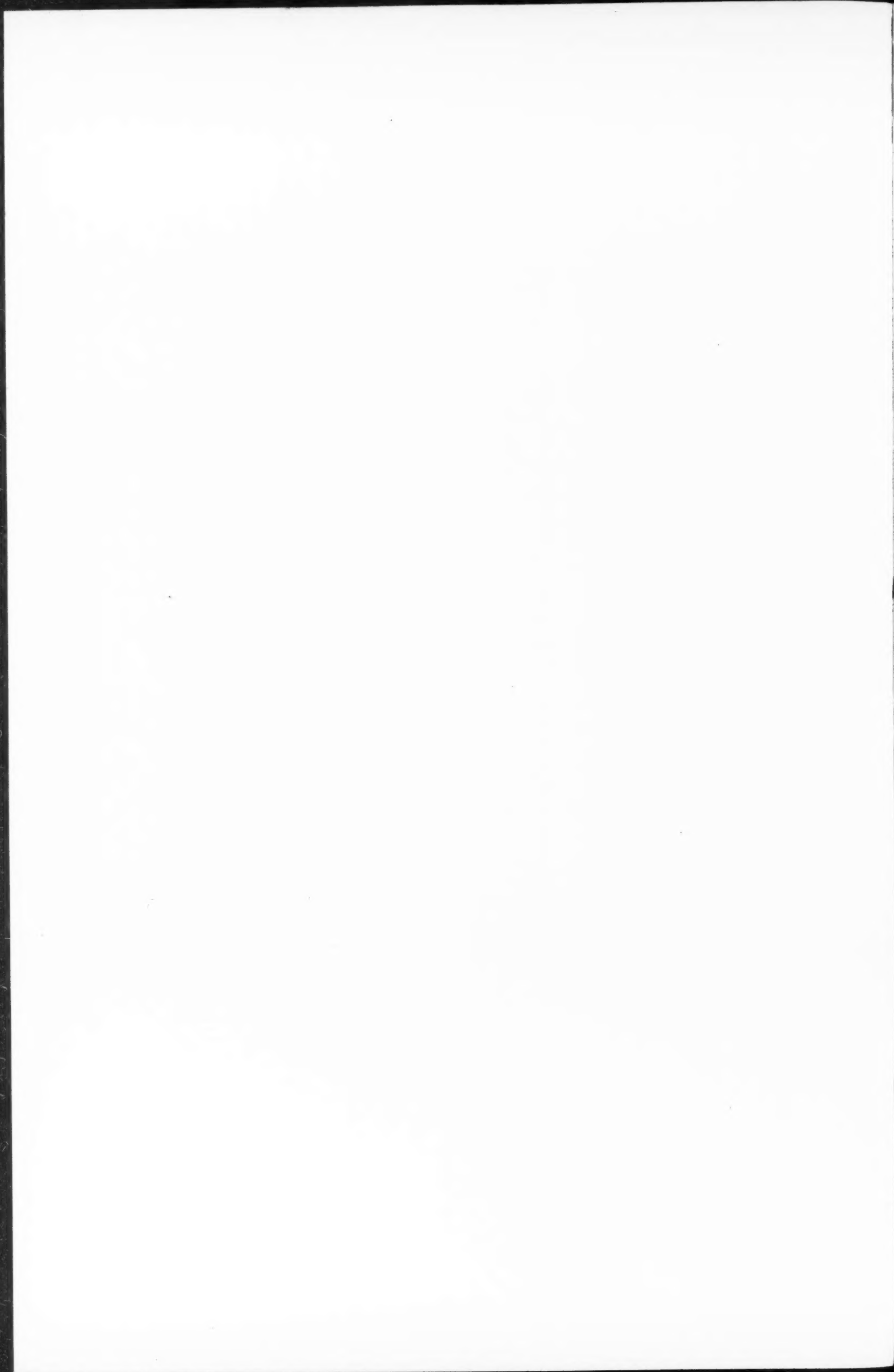
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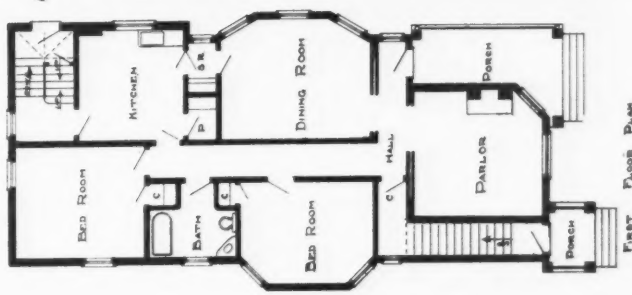
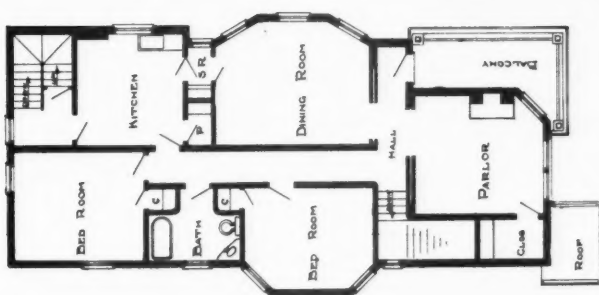


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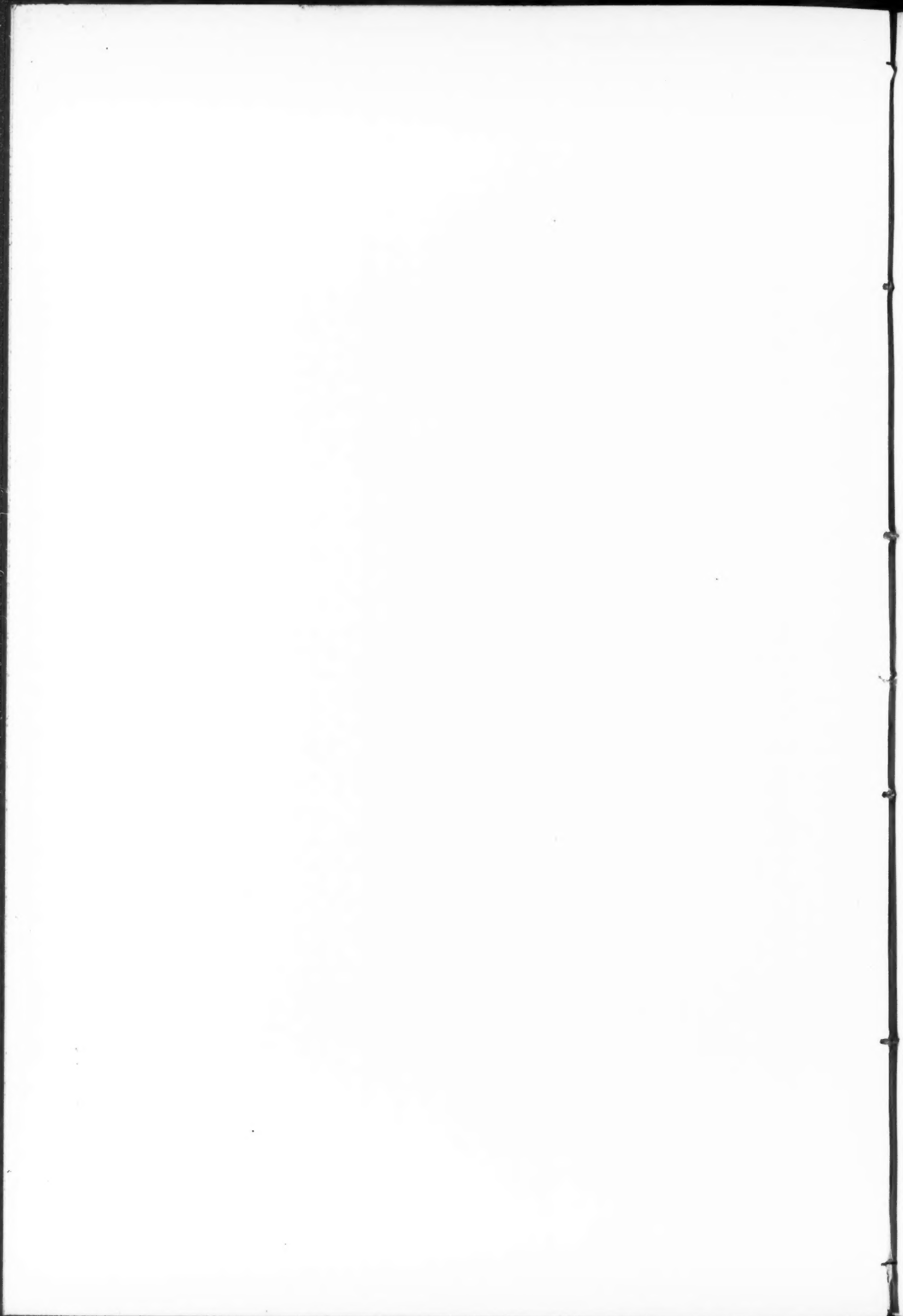


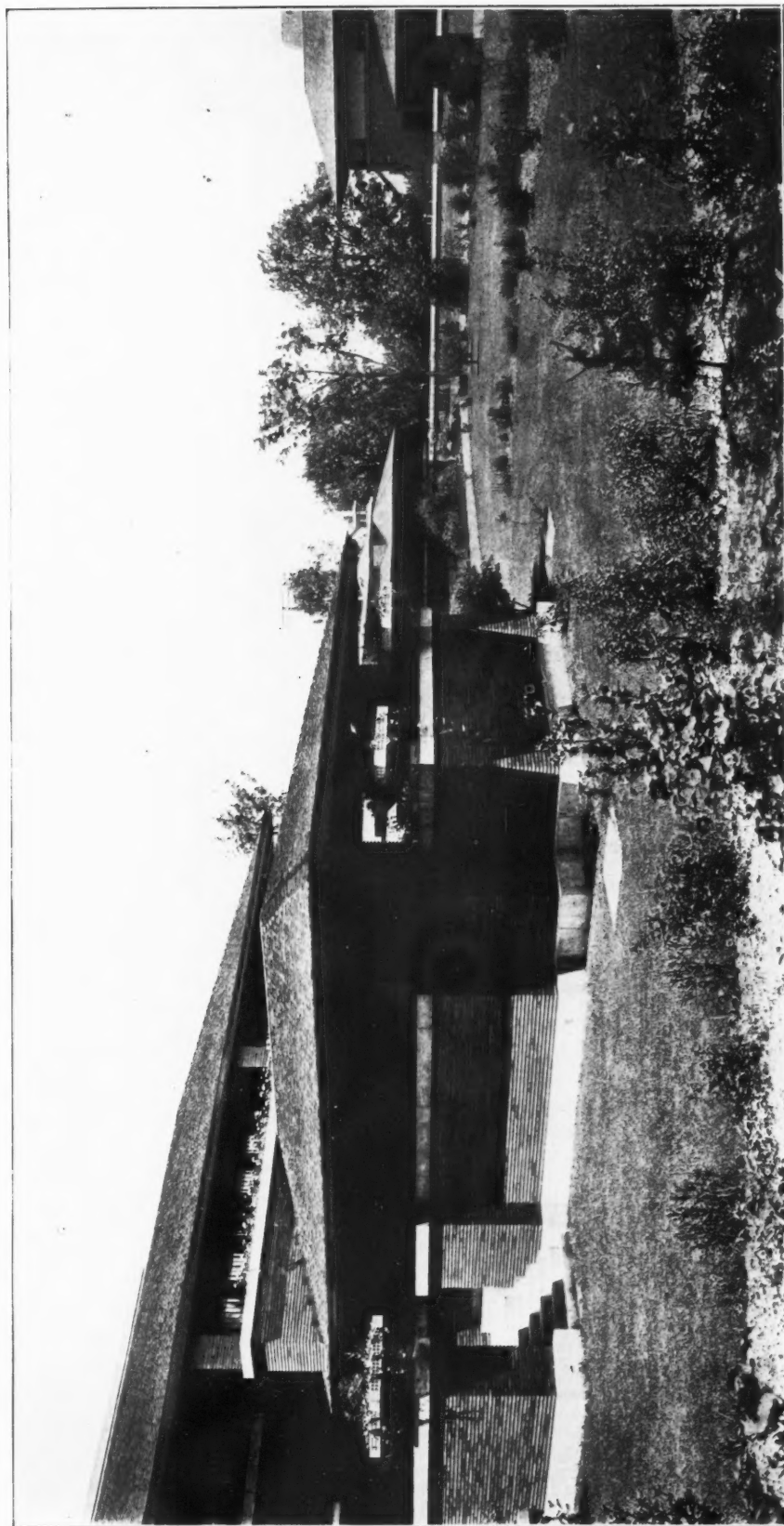
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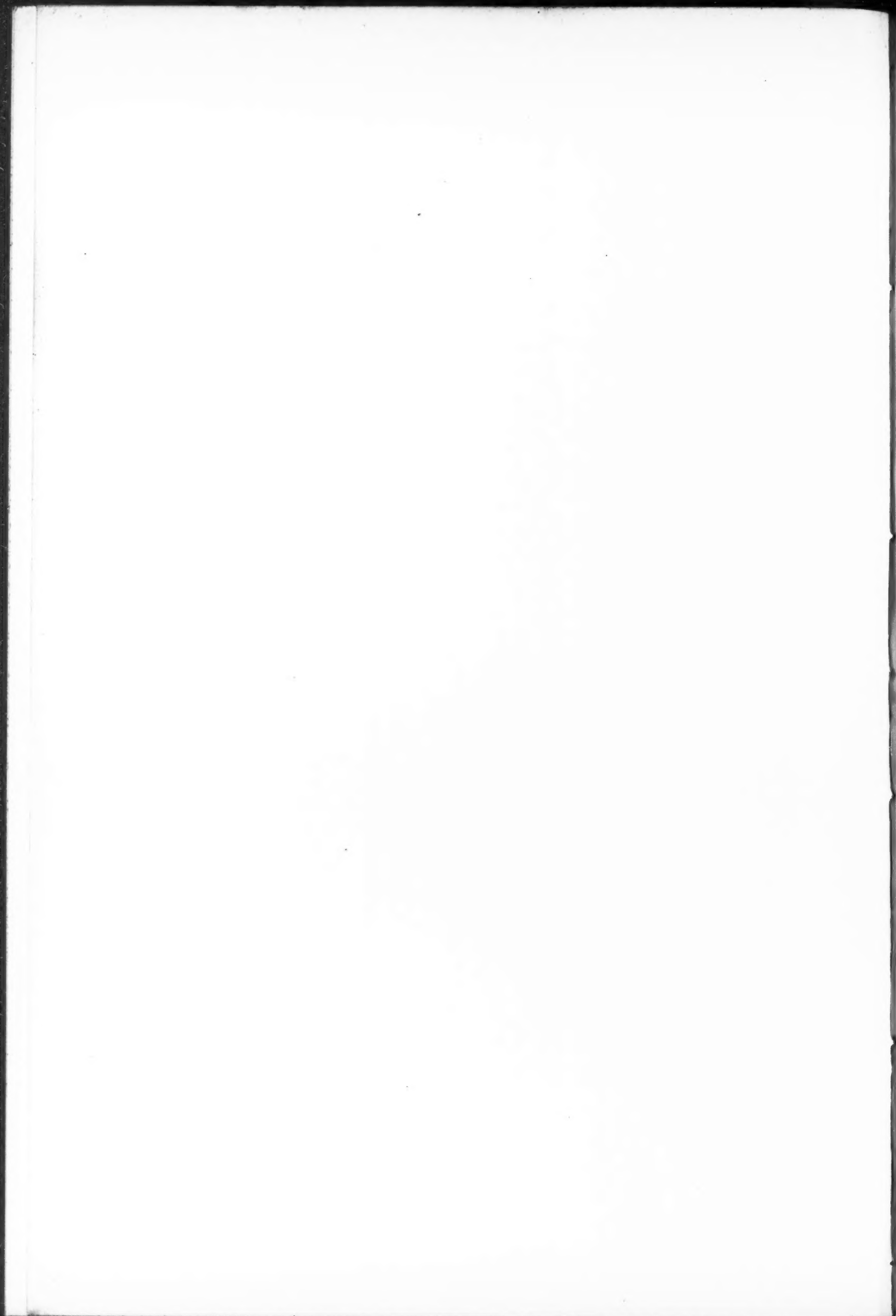


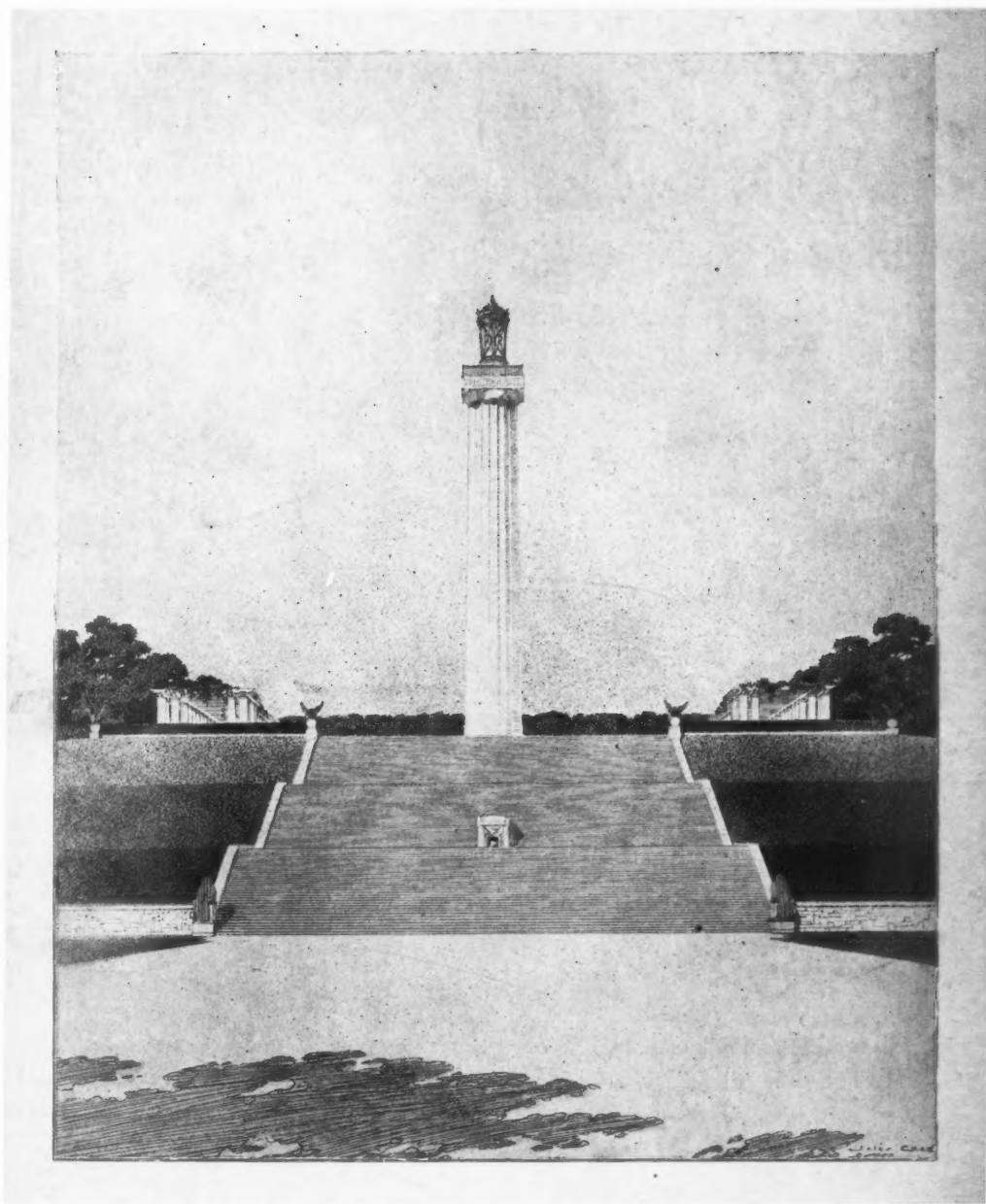
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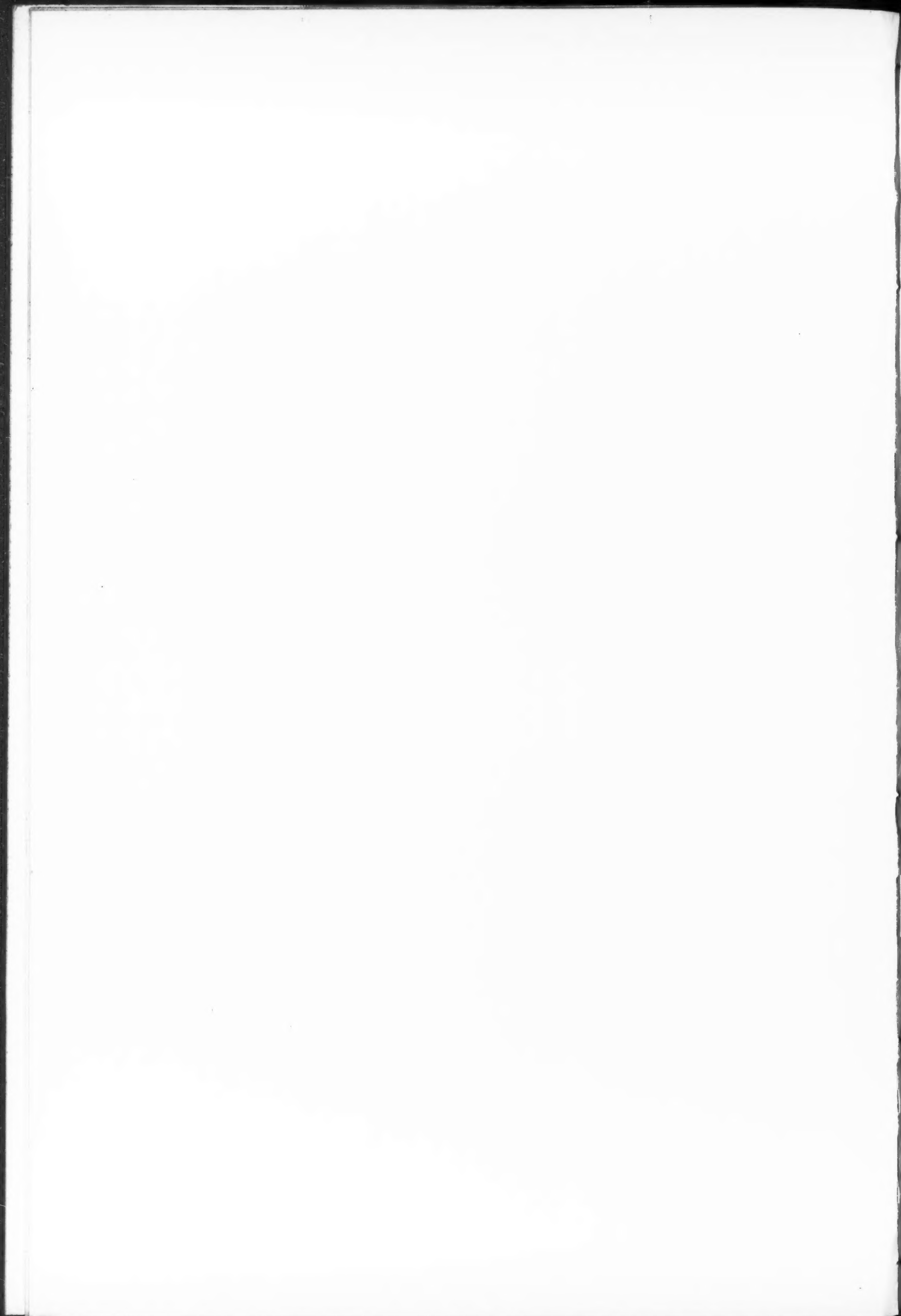
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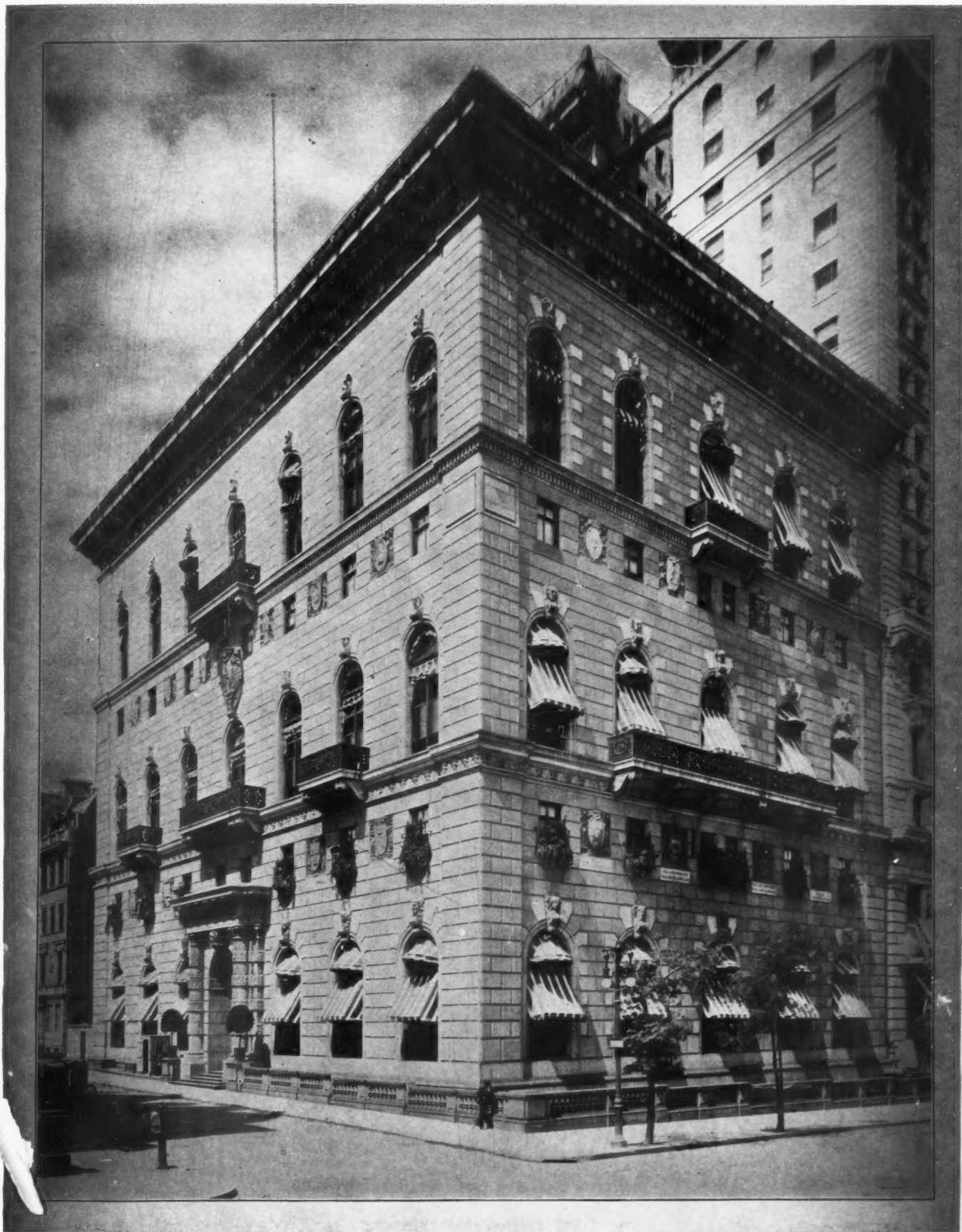




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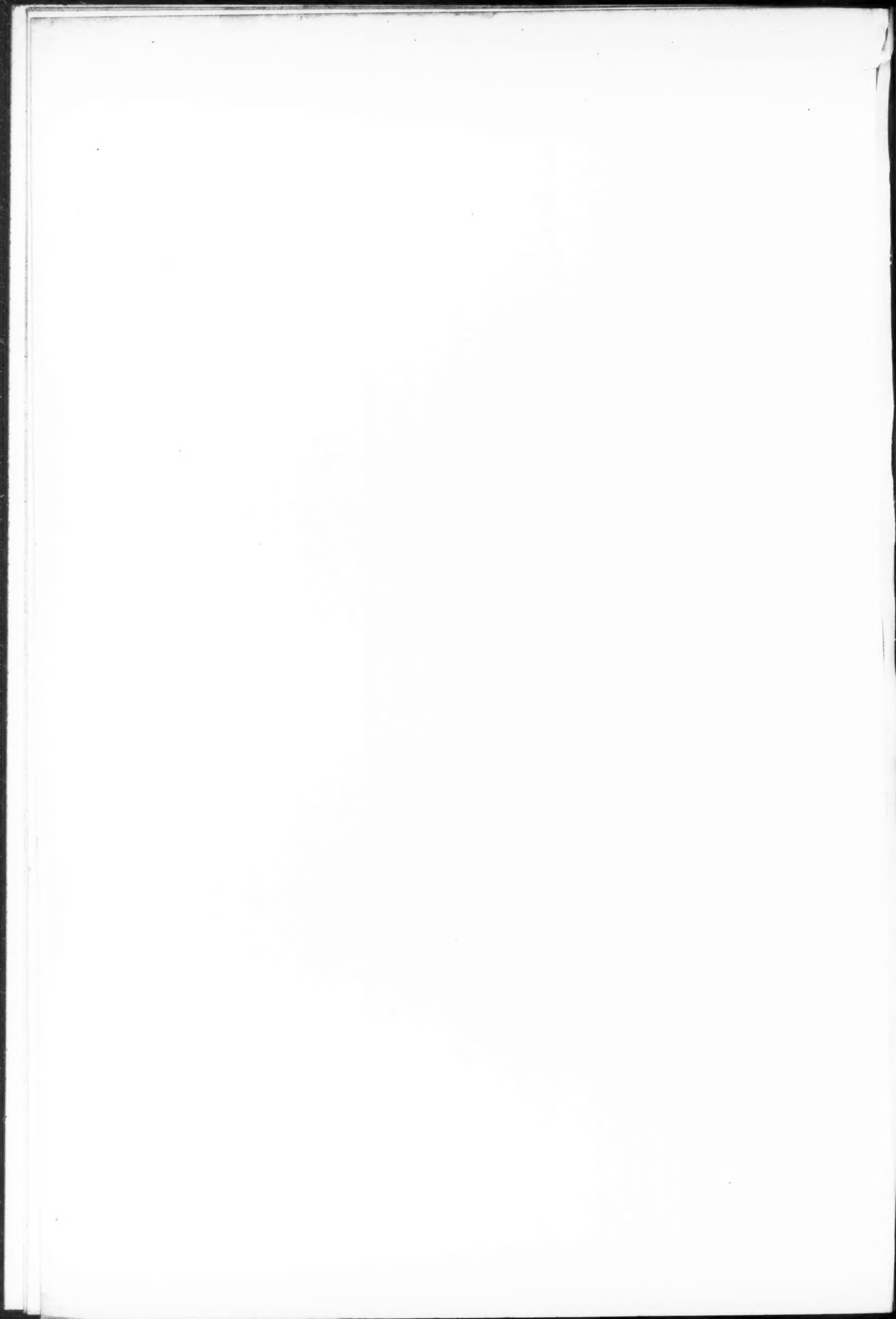
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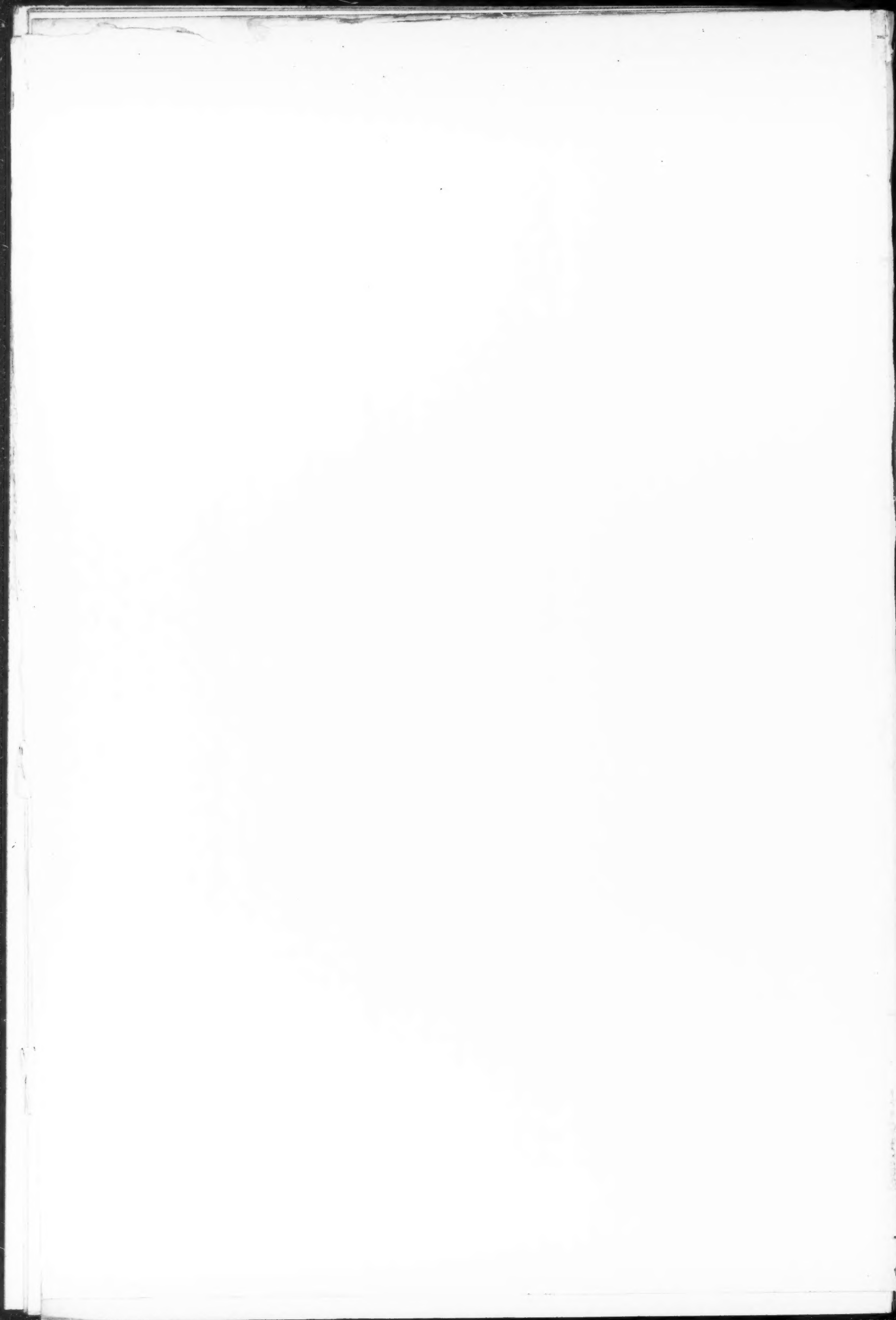
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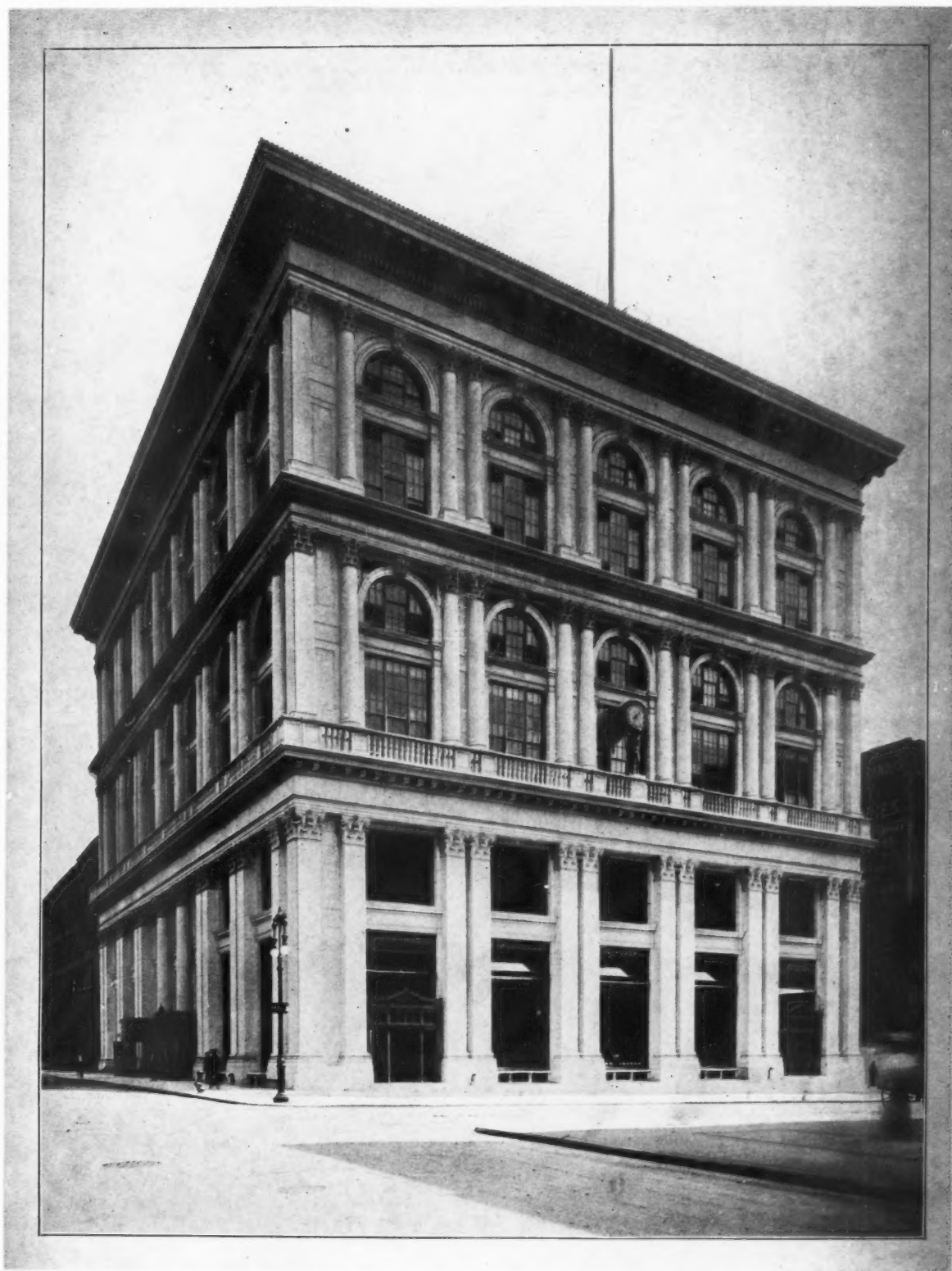




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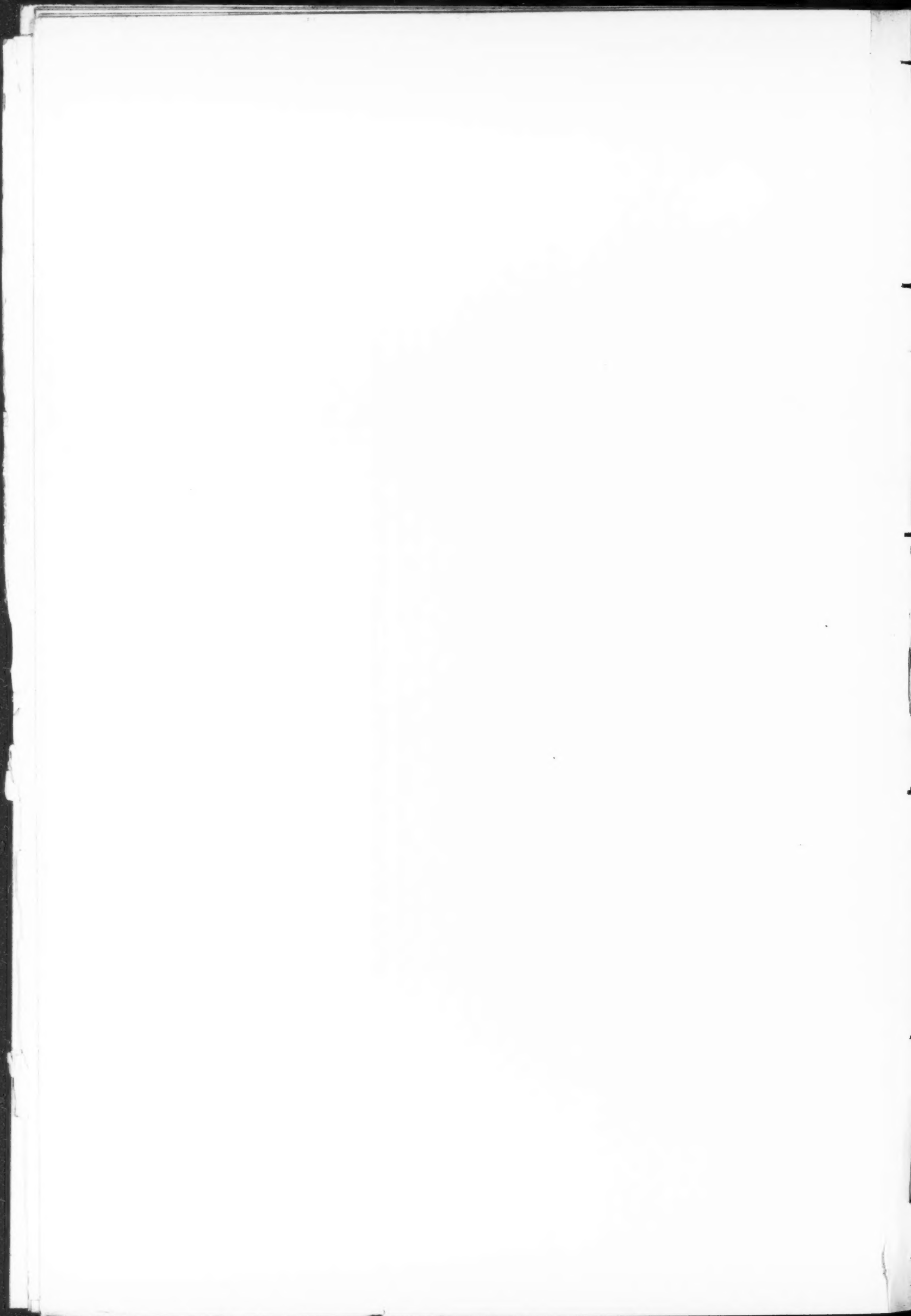
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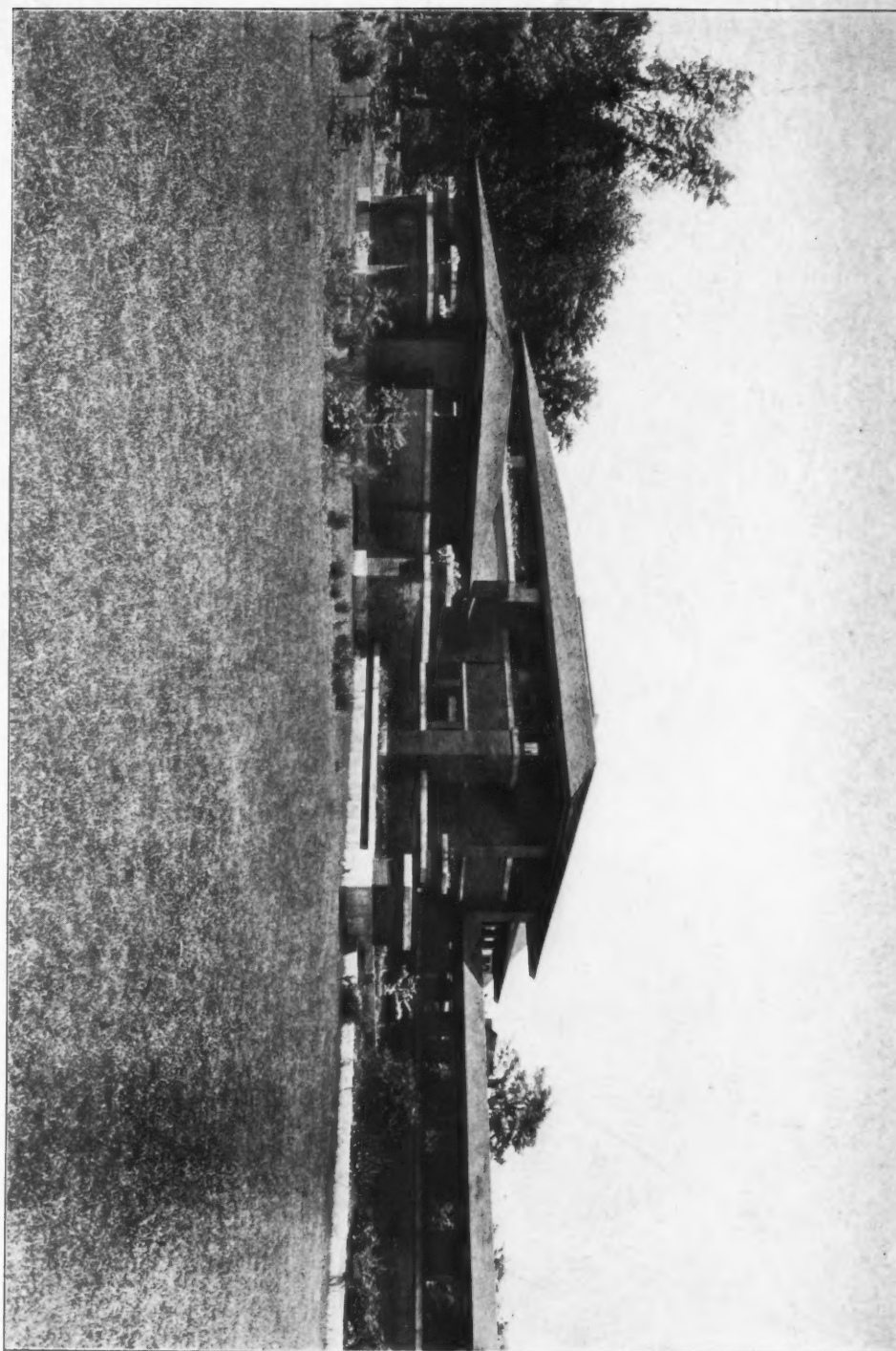




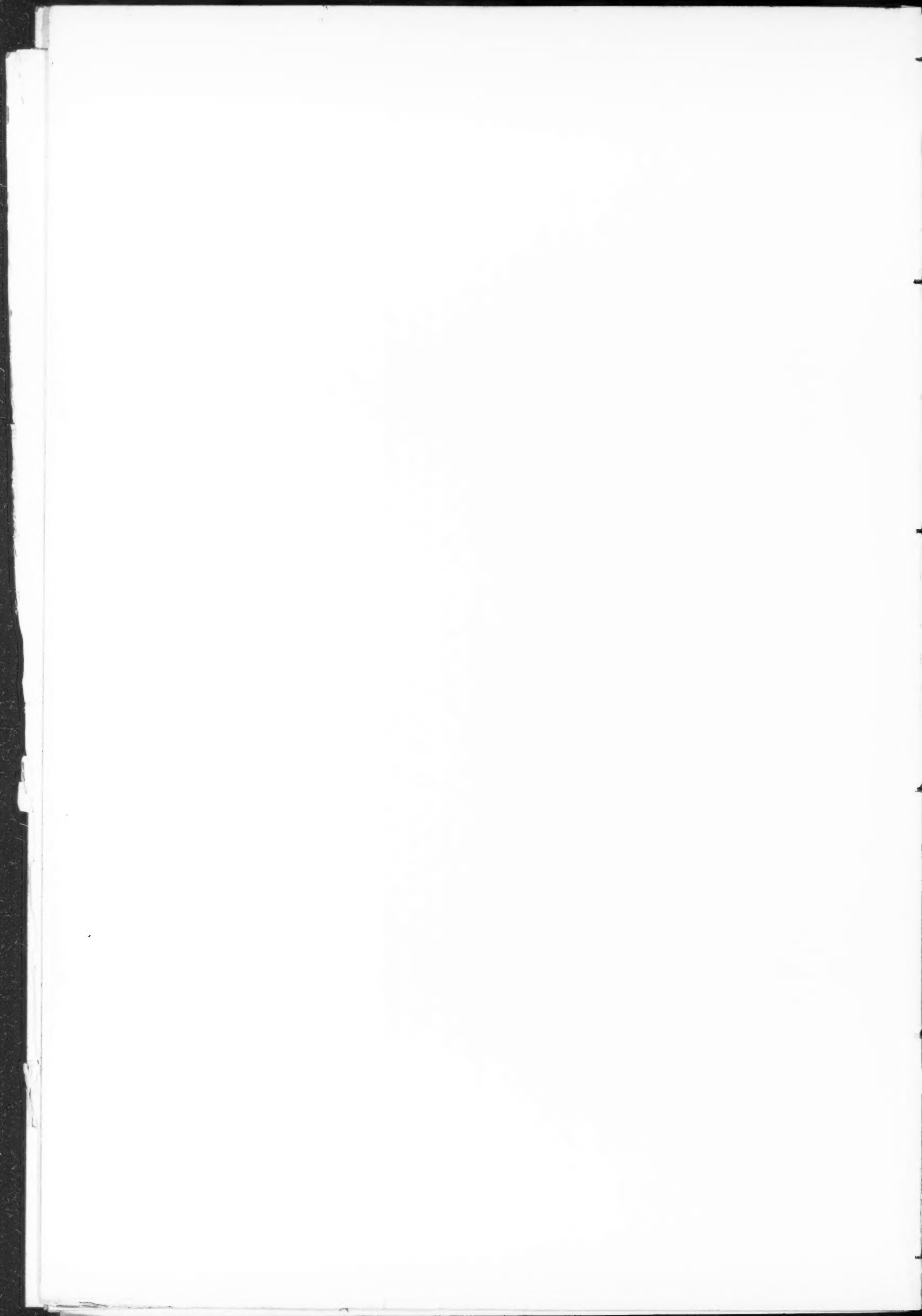
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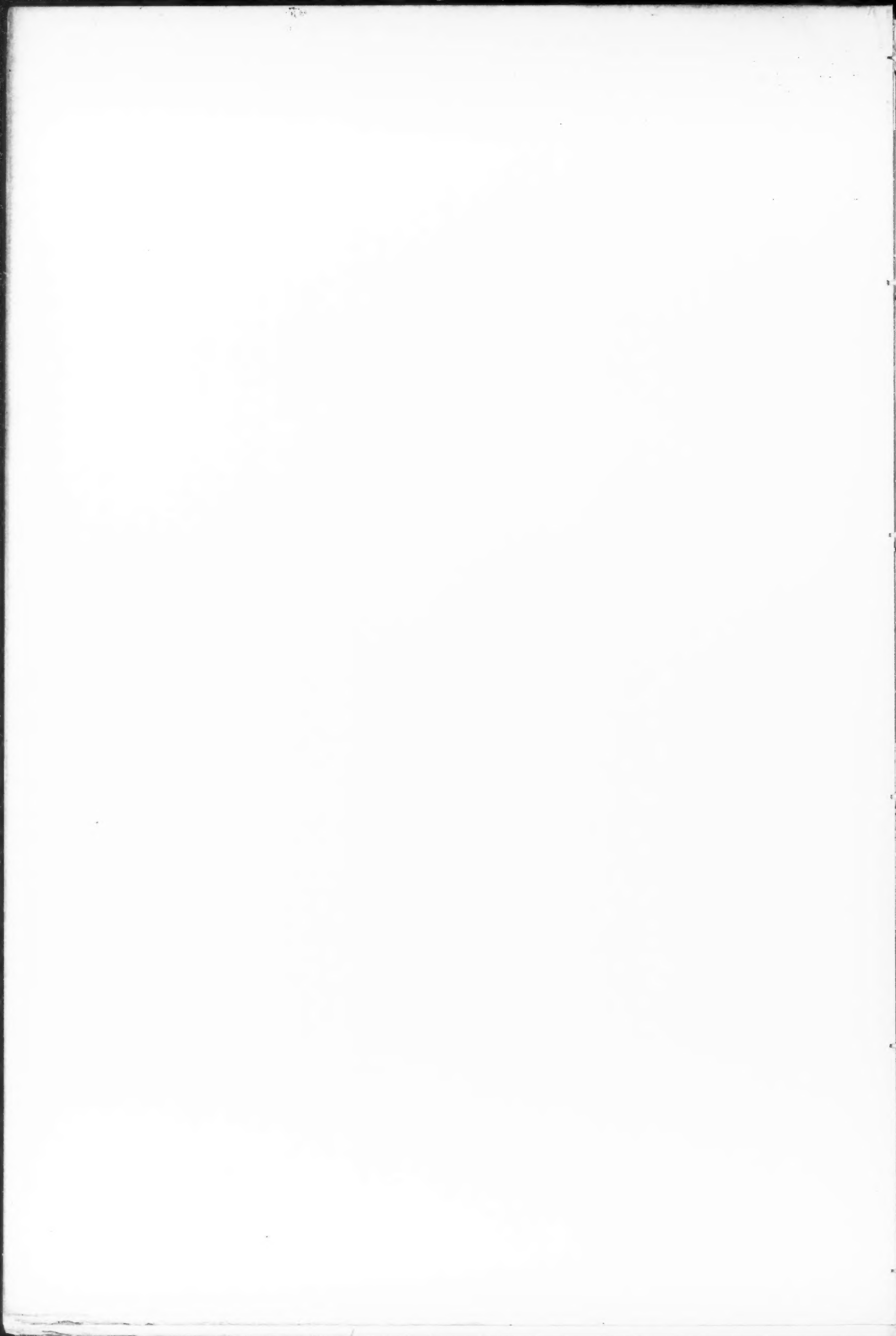


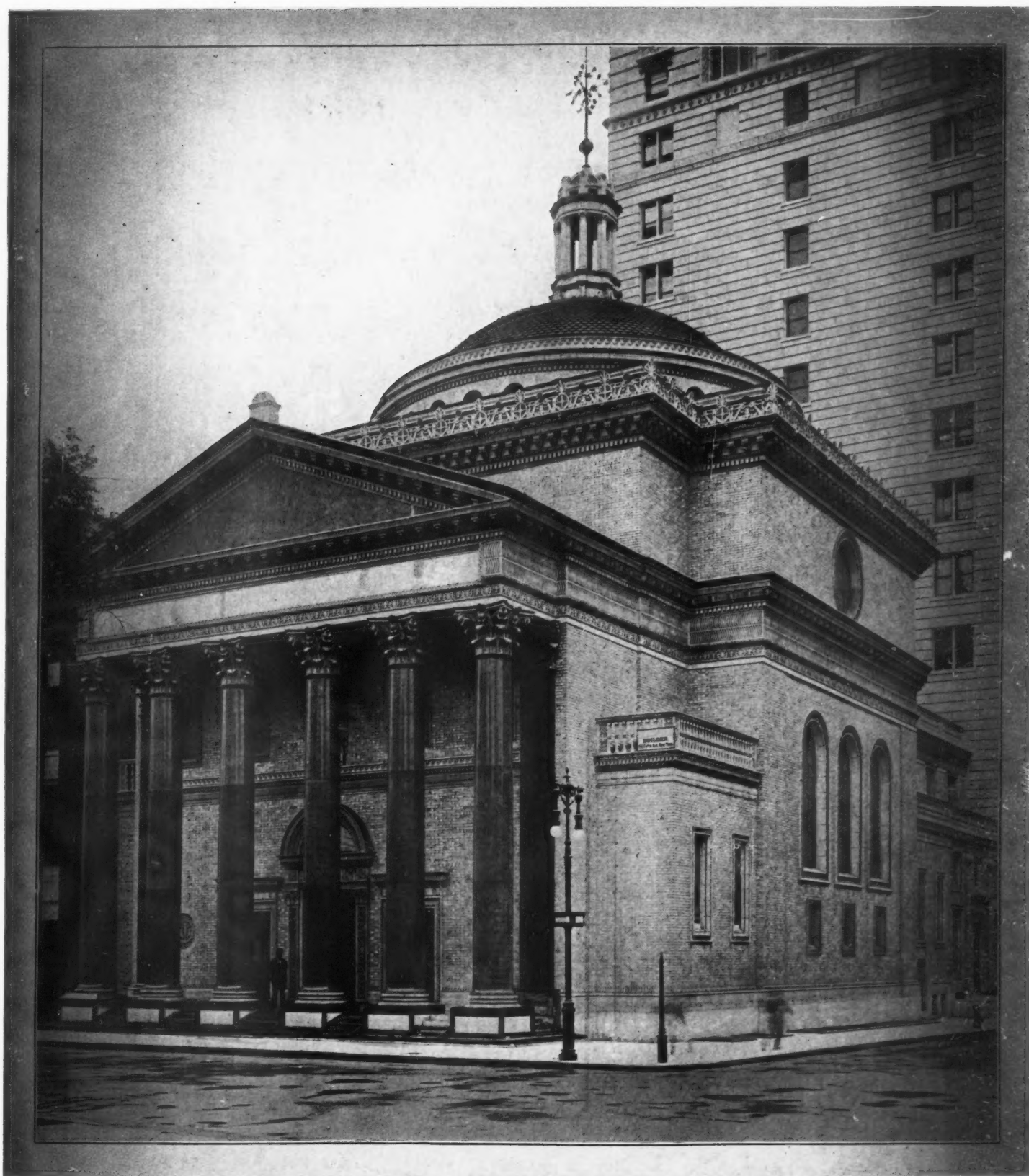
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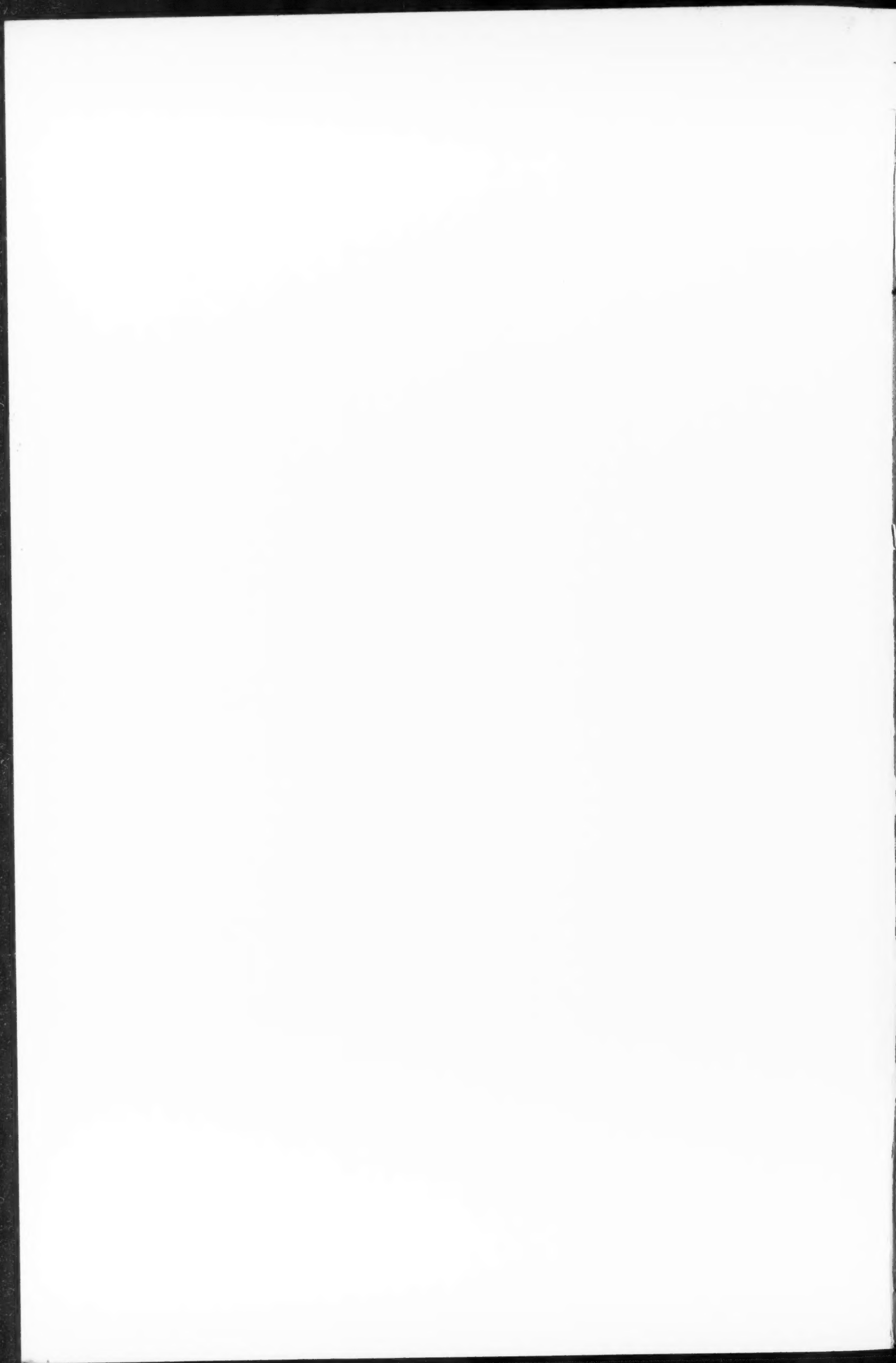
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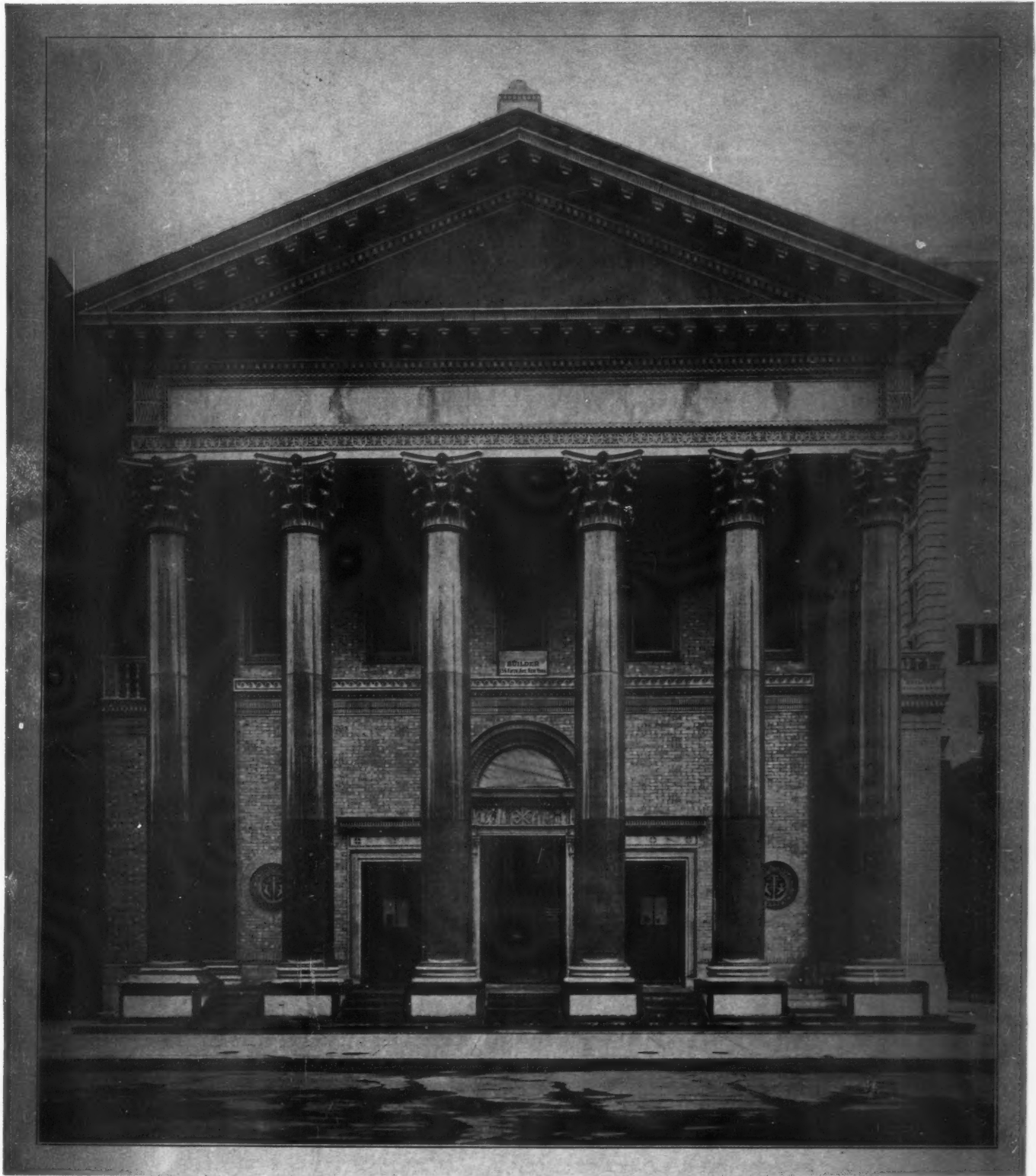




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