

THE AMERICAN ARCHITECT

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NUMBER 2003



ENTRANCE FRONT—FROM MODEL
HOUSE FOR JOHN R. FELL, ESQ., CAMP HILL, PA.
MESSRS. STEWARDSON & PAGE, ARCHITECTS

TWENTIETH ANNUAL EXHIBITION OF THE T-SQUARE CLUB AND PHILADELPHIA CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS

THE Twentieth Annual Exhibition of the T-Square Club and Philadelphia Chapter of the American Institute of Architects, which opened in the galleries of the Art Club of Philadelphia, Pa., on April 18th, and continued until May 10th, revived the discussion that has for a number of years engaged the attention of exhibiting architectural organizations, as to the most valuable method of presenting current architectural work.

At the dinner attending the opening of the exhibition last winter of the Architectural League of New York, Mr. F. Hopkinson Smith, in the course of his remarks, stated that as an artist with strong proclivities for architecture, he was of the opinion

that architects erred in preparing initial representation of proposed work for the inspection of clients. Mr. Smith believed that the drawings submitted were but rarely understood by the clients, who, through lack of technical knowledge, were unable to visualize the result, and to fully comprehend the scheme that the architect had outlined to them. Even some men in the architectural profession are deficient in an ability to visualize the various dimensions of a structure from the elevations and sections. Clients, except in rare instances, cannot do this, and even the rendered drawing, prepared with much artistic skill often creates an impression not realized by the completed work.

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As a means of overcoming these objections, the scale model is fast coming into favor, and these, even crudely constructed, but of careful preparation, serve perhaps better than any other means to convey a truthful impression of the projected building to the non-technical eye.

These considerations appear to have dominated the policy of the exhibition committee of the T-Square Club, in this exhibition. The resulting collection will be found of considerable interest to laymen, and of equal technical value to the professional visitor.

In soliciting examples for this exhibition, the Committee announced:—"Groups of drawings, models and cartoons, illustrating in combination the architectural, sculptural

and decorative scheme of a single work, are particularly solicited."

The members of the T-Square Club have in a large measure responded to this request, and in consequence the rendered drawing has preponderance over the photograph, a condition that has not been present in architectural displays for several years past. We are not sure but that this preponderance is, in a sense, a relief. The inference that the number of rendered drawings indicate that most of the work has not yet been undertaken does not hold good, for on inquiry it is learned that in most cases the various buildings have reached completion and are occupied, while with rare exception the buildings shown and not already erected are certain

to be built later. A number of them have already been illustrated in the architectural press, and their showing in this exhibition in the form of rendered drawings has been in compliance with the wishes of the Committee in charge, as already indicated.

The T-Square Club has ever been fortunate in the environment of their exhibitions, and in the present instance we find this excellent collection of work lodged, as usual, in an atmosphere of artistic surrounding.

The Arts Club, very widely known as a representative art organization, has a spacious gallery in the dignified and attractive clubhouse on Broad Street, and in this gallery the exhibition committee has hung with its usual good judgment, the various exhibitions.

While the exhibition this year is not as large as last, the visitor is



HOUSE AT BRYN MAWR, PA.
MESSRS. WILSON EYRE & McILVAINE, ARCHITECTS

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impressed with the very judicious care exercised by the jury of selection, and it may safely be stated that there was not an un-

ment of Philadelphia, continues to receive the thoughtful consideration of resident architects. The examples shown indicate



interesting example to be seen in the galleries of the Art Club.

The suburban house, which has perhaps had its highest development in the environ-

ment of Philadelphia, continues to receive the thoughtful consideration of resident architects. The skillful adaptation of local material, the various features of landscape

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WROUGHT IRON COAT-HOOK
MESSRS. MELLOR & MEIGS, ARCHITECTS

gardening, and those essentials of modern planning that are part of our higher domestic life, are all to be seen and noted. With few exceptions, the exhibits are confined entirely to members of the T-Square Club, the exceptions being the renderings in color by Mr. Jules Guerin of the accepted design for the Lincoln Memorial at Washington, D. C., Mr. Henry Bacon, architect; the Springfield Municipal group by Messrs. Pell & Corbett, architects, and a house at Glen Cove, L. I., Messrs. Trowbridge & Ackerman, architects.

The Year Book gives evidence of having been prepared with usual care. In addition to cataloguing and illustrating the various exhibits of greatest importance, it contains a description and illustration of the

restoration of Congress Hall in Philadelphia undertaken by the Philadelphia Chapter of the Institute. These illustrations in themselves form a very important contribution to recent architectural effort, and indicate the thoroughness with which this work was undertaken and carried to successful conclusion. The history of the restoration has been prepared by Mr. Frank Miles Day, who was chairman of the Committee of the Chapter in charge of the work.

The group of buildings, of which Congress Hall forms a part, has rightly been called America's first civic center. Its importance is not merely local, as the stirring scenes enacted within these walls during the early days of Congress have a nationwide significance. The solicitous care and artistic skill of those in charge of this work entitles them to the gratitude of every patriotic citizen.

The Walter Cope Memorial prizes awarded for this year were as follows: First prize, Thomas Ash; second prize, S. A. Love, Jr. The subject was a monumental feature at the end of South Broad Street.



ENTRANCE COURT
RESIDENCE AT PAOLI, PA.
MESSRS. EVANS & WARNER, ARCHITECTS

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PORTION OF TERRACE, RESIDENCE AT PAOLI, PA.

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EXHIBITION OF THE T-SQUARE CLUB AND PHILADELPHIA CHAPTER, A.I.A.

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HOUSE AT BRYN MAWR, PA.

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EXHIBITION OF THE T-SQUARE CLUB AND PHILADELPHIA CHAPTER, A.I.A.

SANTA MARIA

Santa Maria is the local and trade name of a tropical American wood that has recently been imported into the United States and sold as a mahogany substitute. It is obtained from a tree botanically known as *Calophyllum calaba* Jacq. of the gamboge family (*Guttiferæ*) and is closely allied to the well-known poon tree (*Calophyllum inophyllum* L.) of India, which produces a highly esteemed furniture wood. The latter frequently comes into the London and Liverpool markets. Santa Maria is variously known as palo Maria and limoncillo de cordoba in Mexico; galba, galpa, galoba, aceite de Maria, and crabwood in Trinidad and other islands of the West Indies; ocuje in Cuba; Maria or Palo de Maria in Porto Rico; and recently has been shipped into the American markets as "chivoja," or "chivoja mahogany," which is a new trade name for this wood. Chivoja probably indicates the place or origin in Mexico where the wood is now being exploited.

The wood is at present pretty thoroughly established in the foreign hardwood markets of this country as Santa Maria and it will be best to call it by this name.

Santa Maria is found in southern Mexico, throughout Central America, and in parts of Colombia and Venezuela, where it reaches its southern limits of distribution and grades into another species known locally as jacariuba (*Calophyllum brasiliense* Camb.), a very important Brazilian tree.* Santa Maria occurs also in all the islands of the West Indies, but it finds its best development in southern Mexico, where the soil is moist and the climate humid. This does not mean that Santa Maria is confined principally to the lowlands, for it often grows at altitudes of from 2,000 to 3,500 feet. The tree is now being exploited chiefly in southern Mexico and two distinct

*Jacariuba grows from 90 to 120 feet in height with a trunk sometimes 9 feet in diameter. The wood is of a reddish-brown, soft, rather light, fine-grained, and takes a good polish. It is used for building, naval construction, and cabinetwork, and after the forests of Brazil become opened up, the wood of this tree will be utilized extensively as a mahogany substitute.

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grades of the wood are obtained. The kind that is produced on the highlands is considerably harder and heavier and has much better figure than that which is cut in the moist lowlands. In the latter situations the trees grow very rapidly and produce soft, spongy, and straight-grained wood. This variation in the quality of the wood, which is dependent so largely upon the soil and elevation, has been observed in connection with the study of the distribution of true mahogany and *prima vera*.

Santa Maria is a lofty tree, often attaining the height of 150 feet and a diameter of five or more. The trunk is usually clear of branches and knots for more than half the total height of the tree and is as straight as a ship's mast. It is fairly cylindrical and does not develop such enormous buttresses as in the case of true mahogany and Spanish cedar. Almost no timber is wasted in the form of high stumps. Like the majority of tropical trees, it is an evergreen and reputed to be one of the handsomest trees in the West Indies, where it is

often planted for shade. It makes fine hedges and windbreaks, because of its rapid and vigorous growth. The seeds of Santa Maria yield a commercial aromatic oil; the latter is used for burning in lamps.

The wood of Santa Maria is hard, fairly heavy (about forty-six pounds per cubic foot), strong, tough, more or less coarse-grained, bears exposure to atmospheric moisture, and lasts almost indefinitely under water. It is a light brown wood slightly tinged with red or yellow, but it soon fades to a brownish color, if it is exposed to the air and light. The wood takes an excellent polish which it retains if properly treated and varnished. Although Santa Maria is cross-grained it works very easily, and it does not splinter or check during seasoning. The alternating streaks of lighter and darker shades on the radial or quarter-sawed surface add considerable figure which renders the wood suitable for fancy furniture and interior finish.

Santa Maria is slightly coarser-grained

(Continued on page 240)



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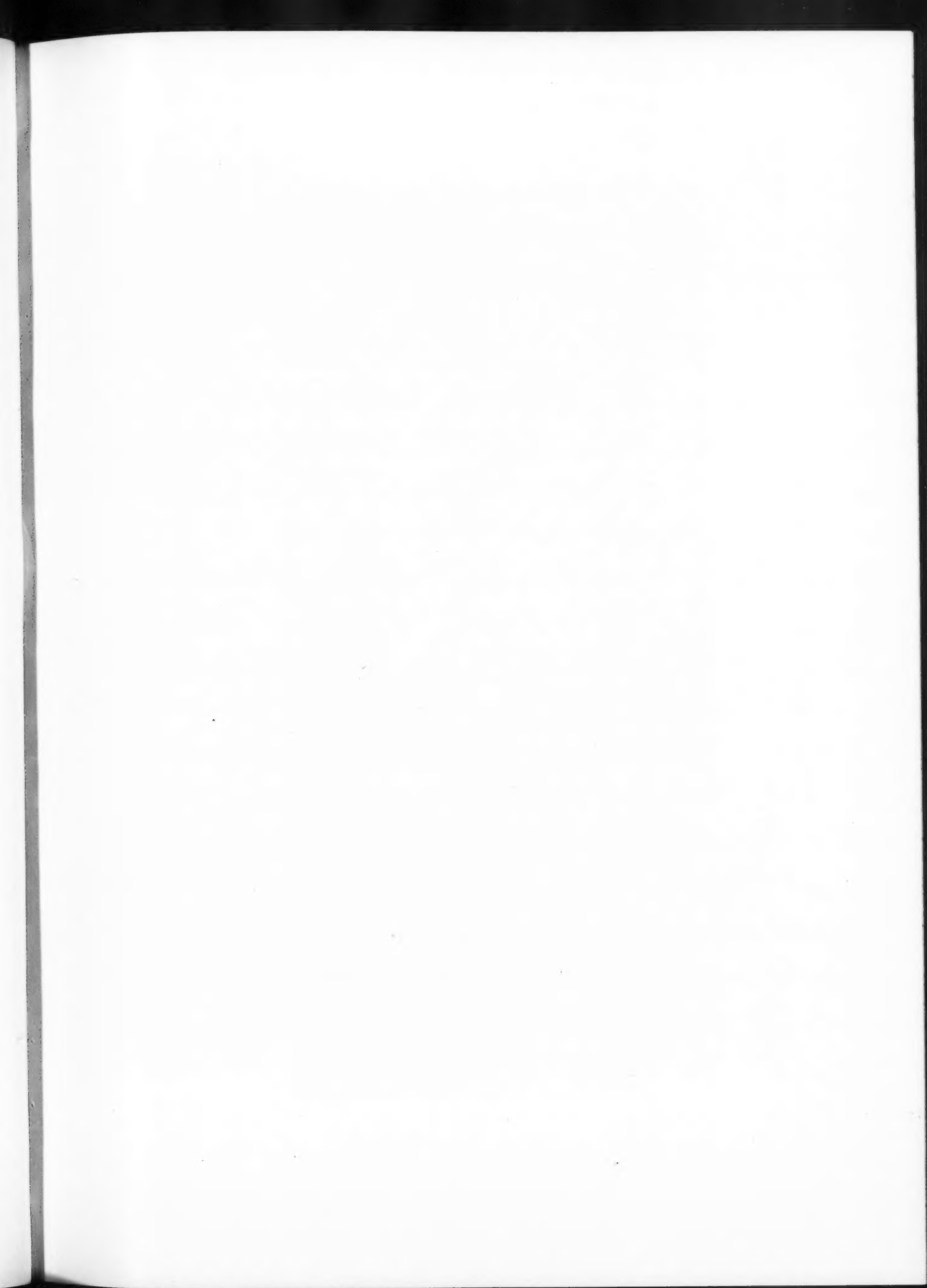
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TERRACE, HOUSE [ON LLANFAIR ROAD, ARDMORE, PA.

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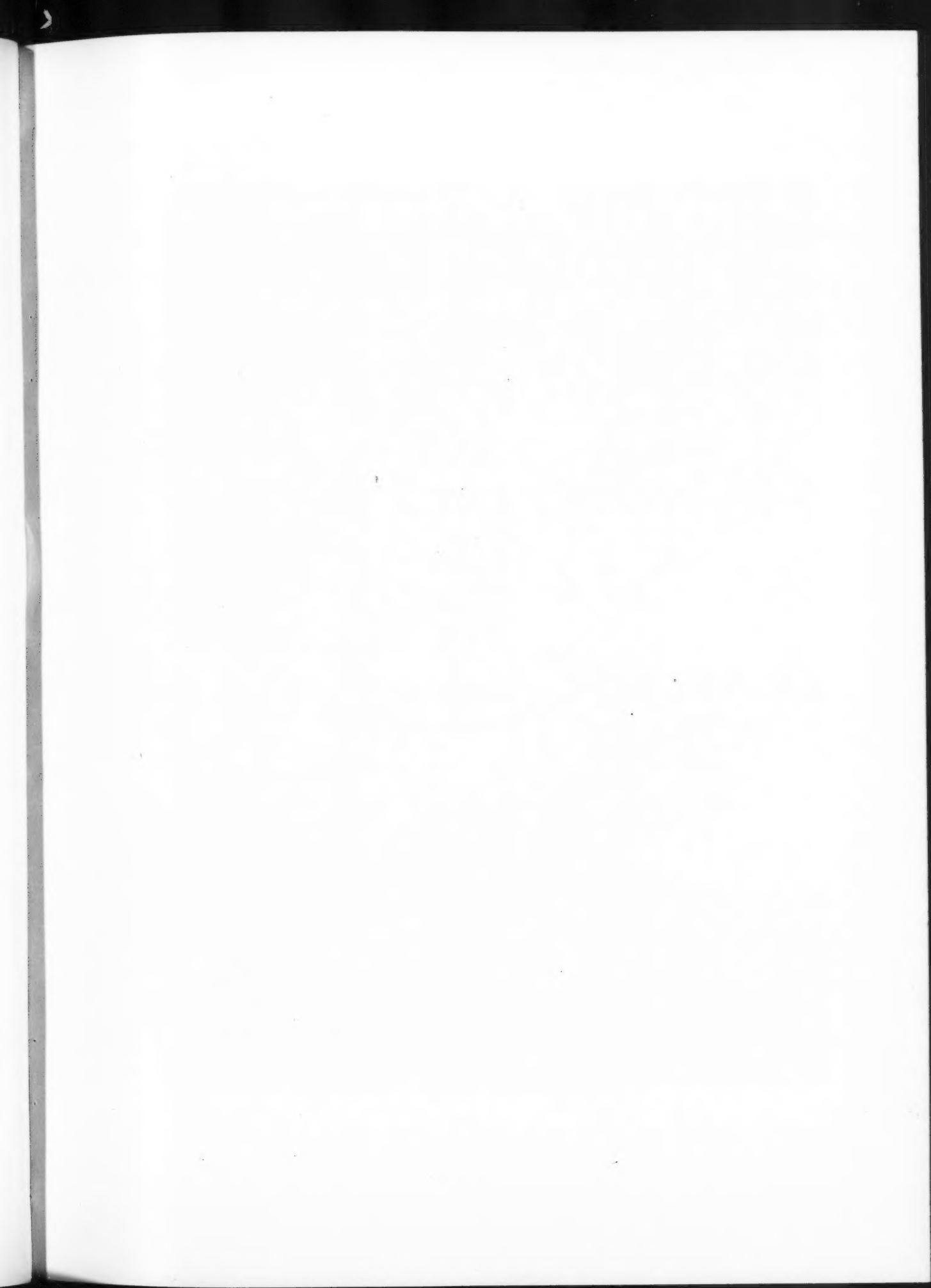


GARDEN FRONT—FROM MODEL

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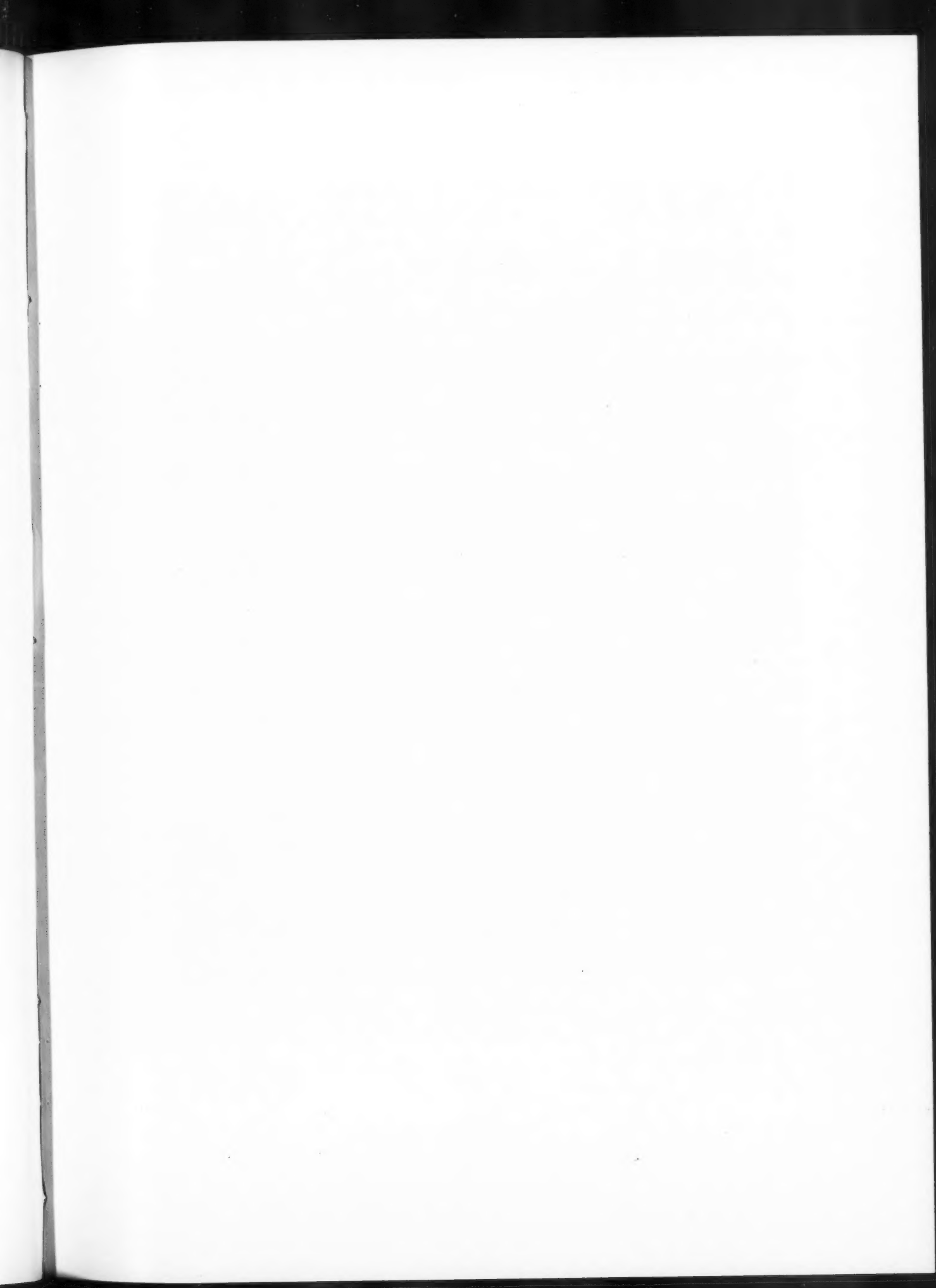


GARDEN TERRACE

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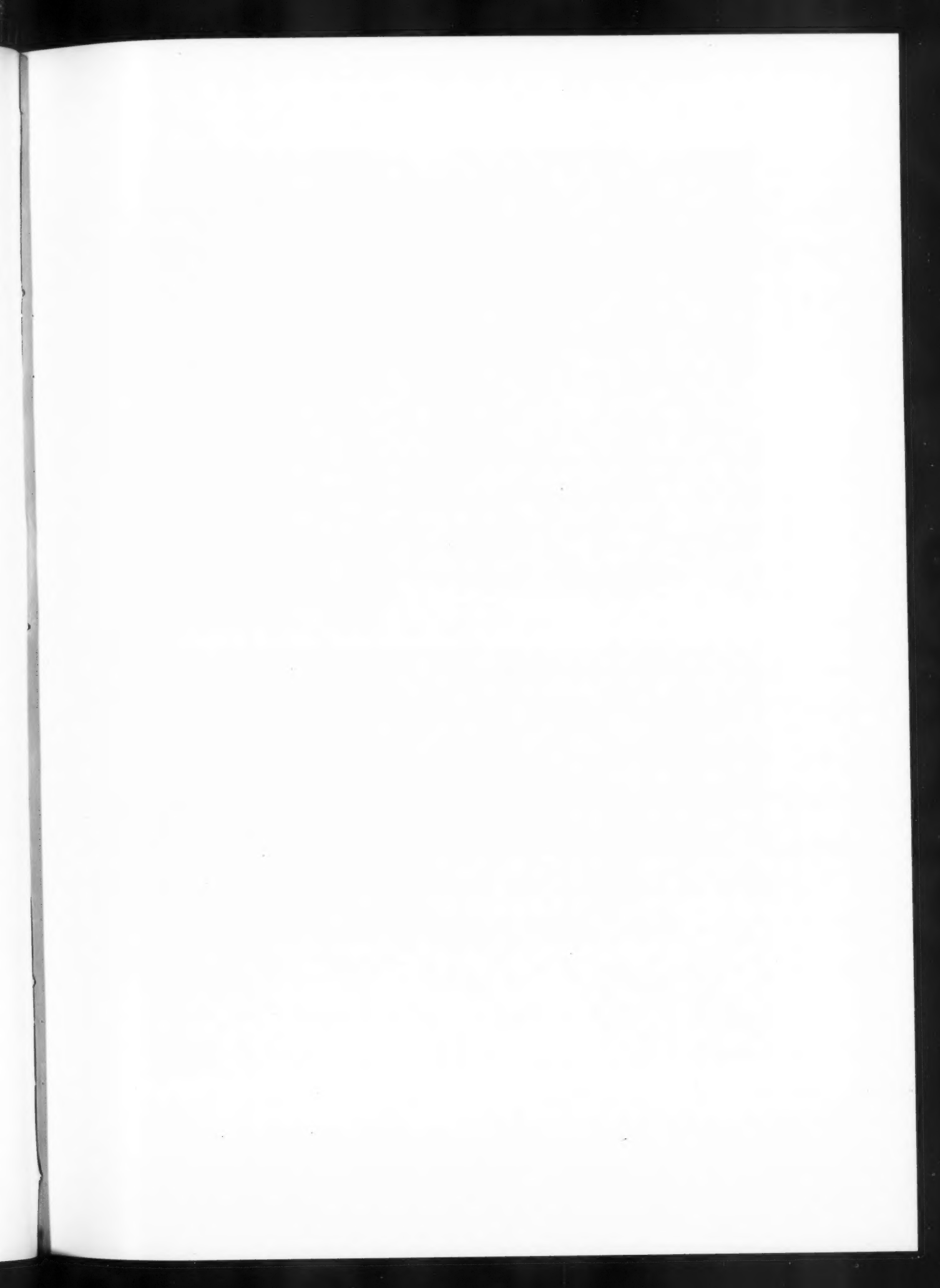


DETAILS OF HALL AND STAIRWAY

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STAIR HALL

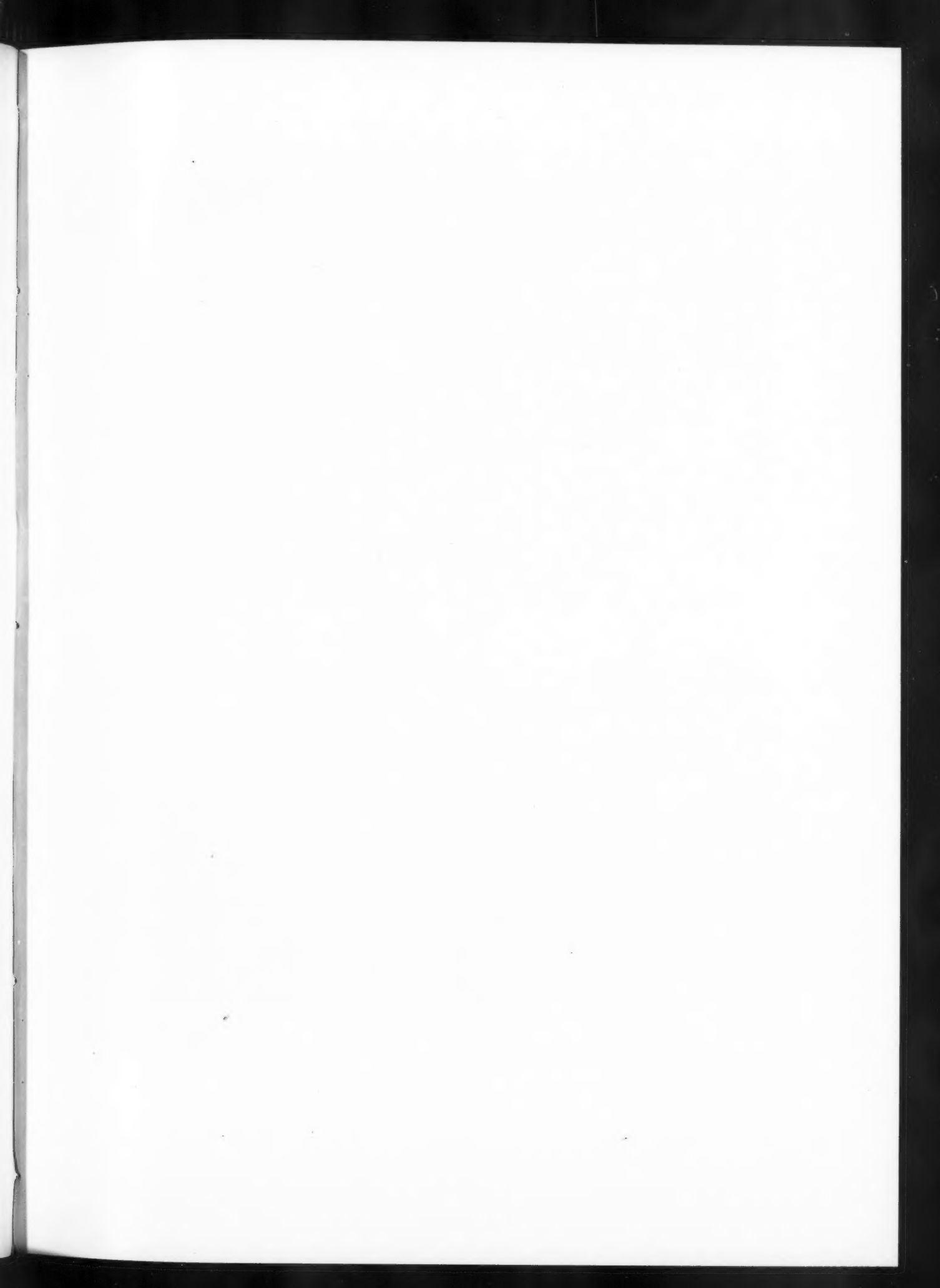


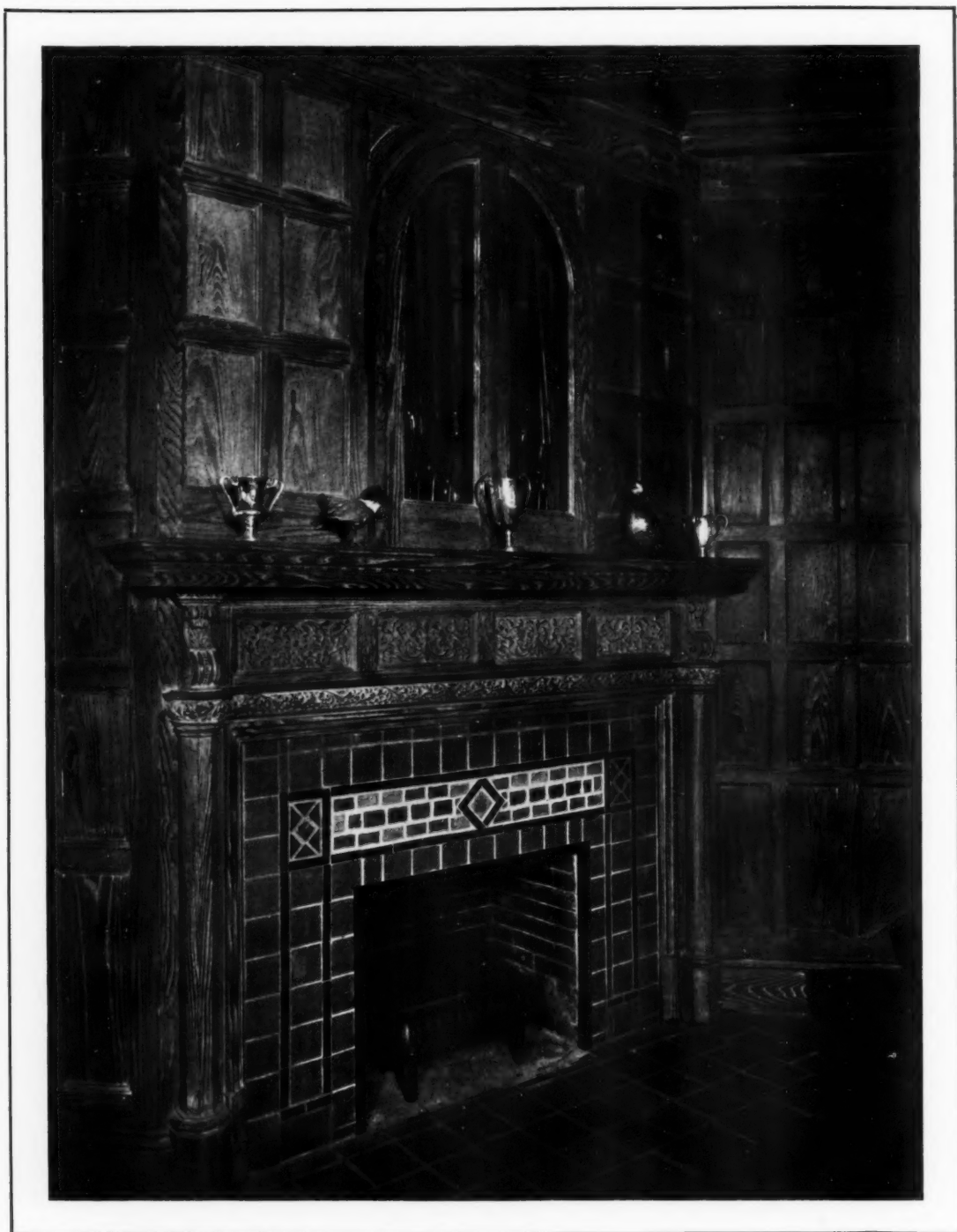
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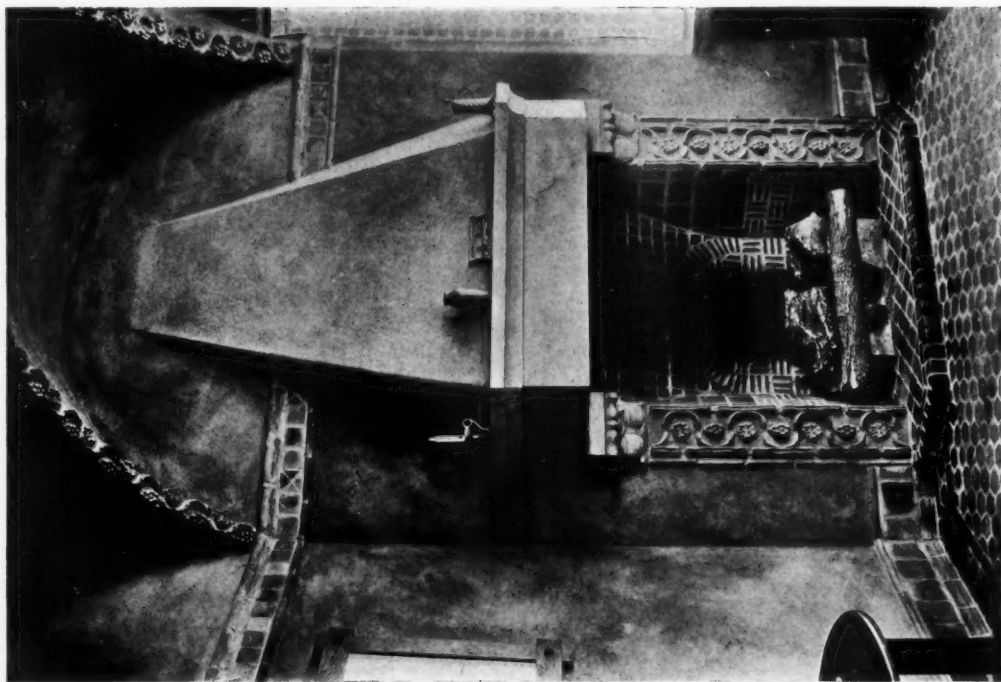
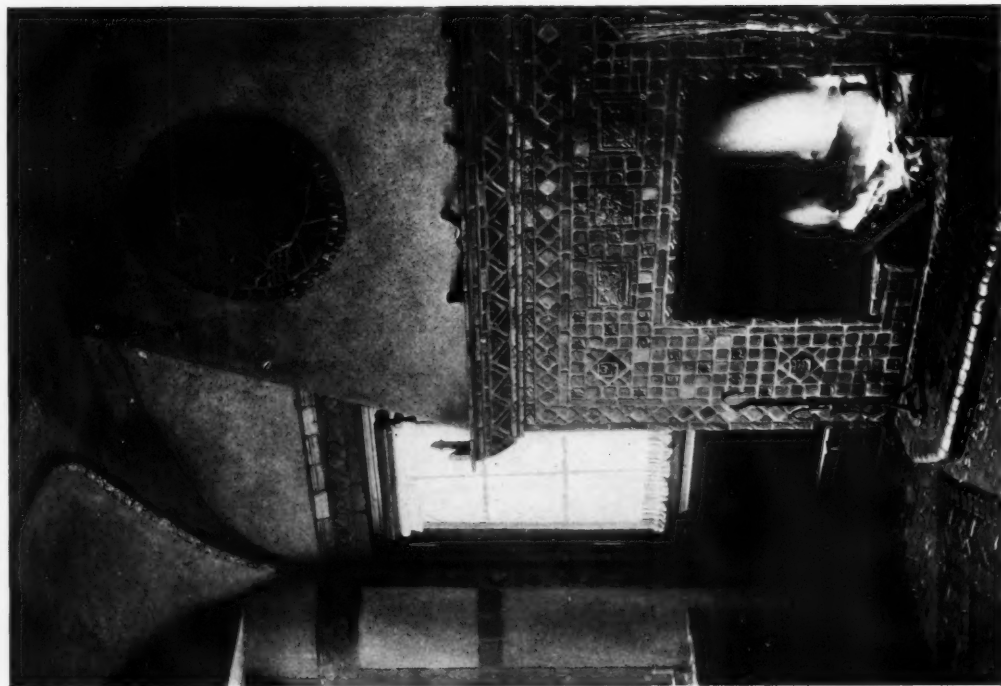
HALL MANTEL

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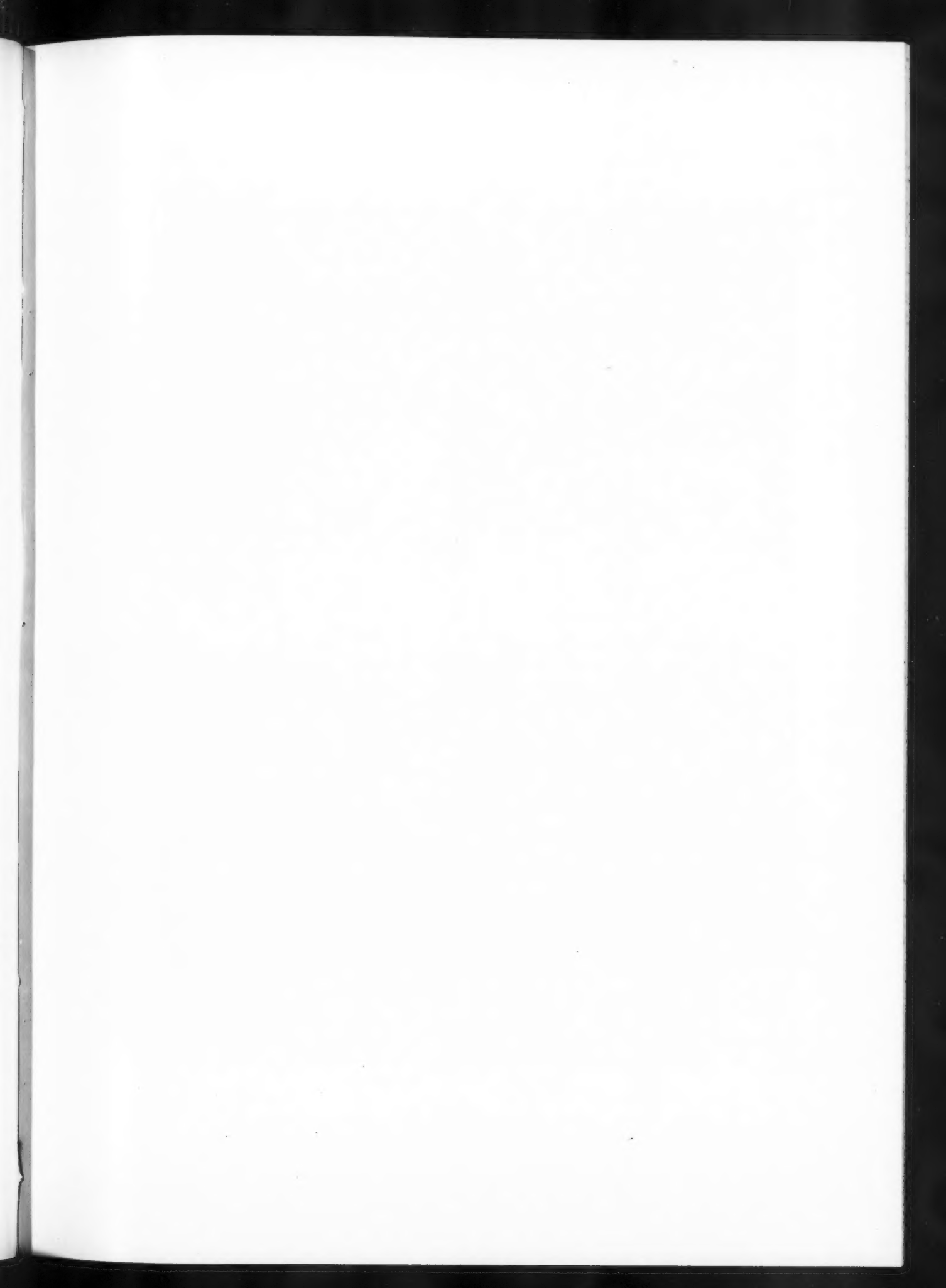




MANTELS IN HOUSE AT MOORESTOWN, N. J.

MR. J. FLETCHER STREET, ARCHITECT

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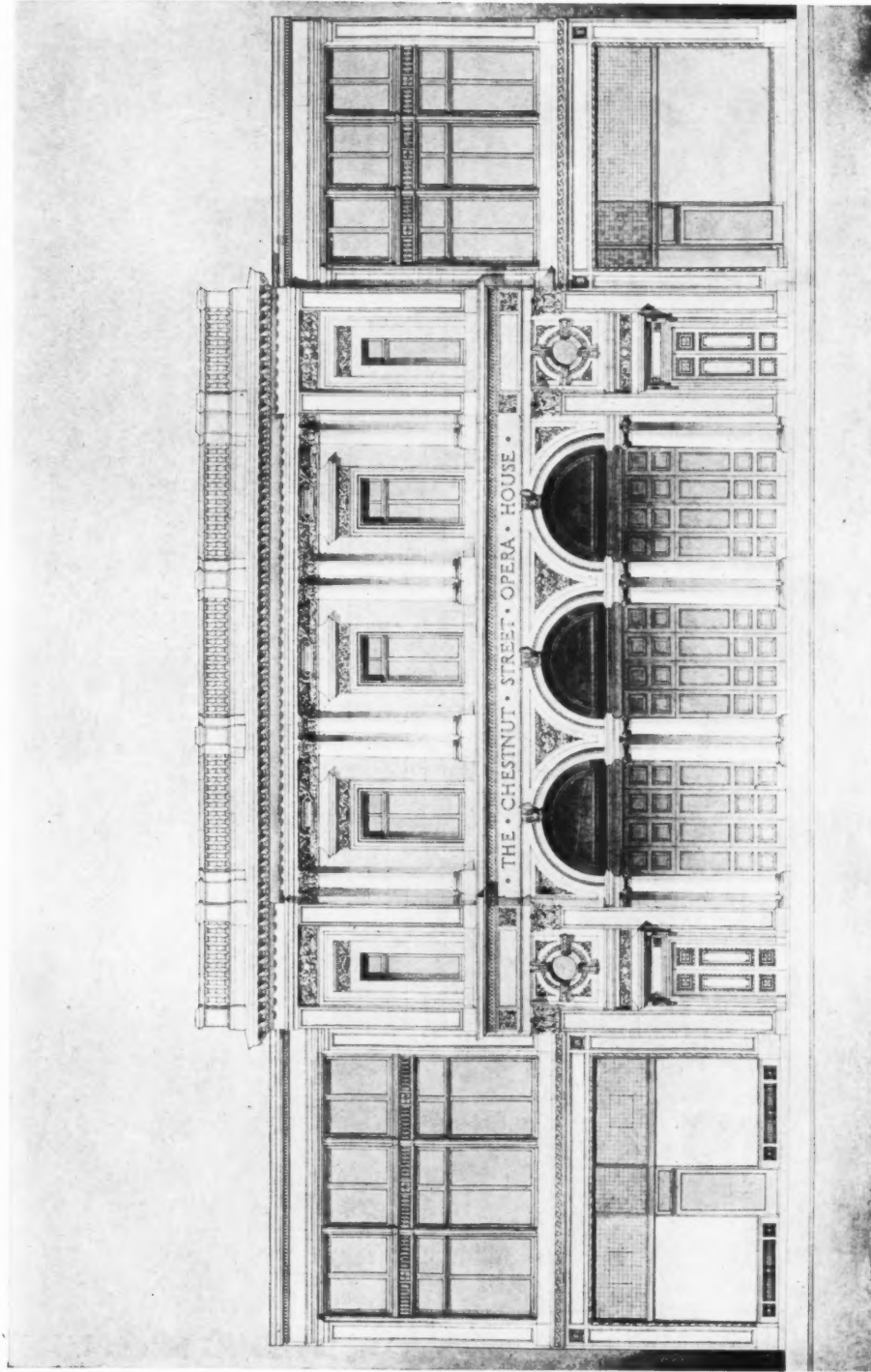




PENN MUTUAL LIFE INSURANCE BUILDING, SIXTH AND WALNUT STREETS
PHILADELPHIA, PA.

MR. EDGAR V. SEELER, ARCHITECT

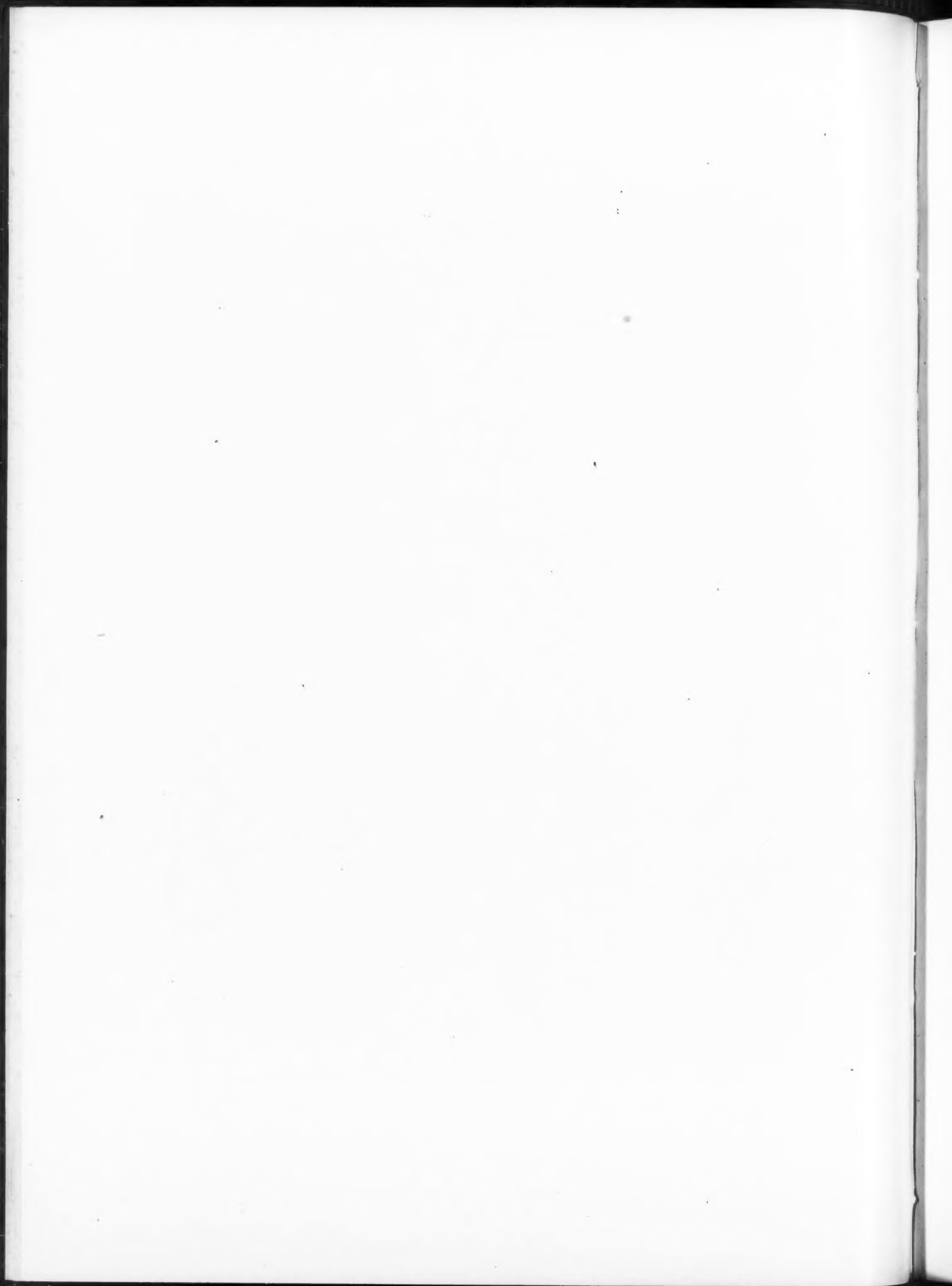
EXHIBITION OF THE T-SQUARE CLUB AND PHILADELPHIA CHAPTER, A.I.A.



FACADE OF THE CHESTNUT STREET OPERA HOUSE, PHILADELPHIA, PA.

MESRS. BISSELL, SINKLER & TILDEN, ARCHITECTS

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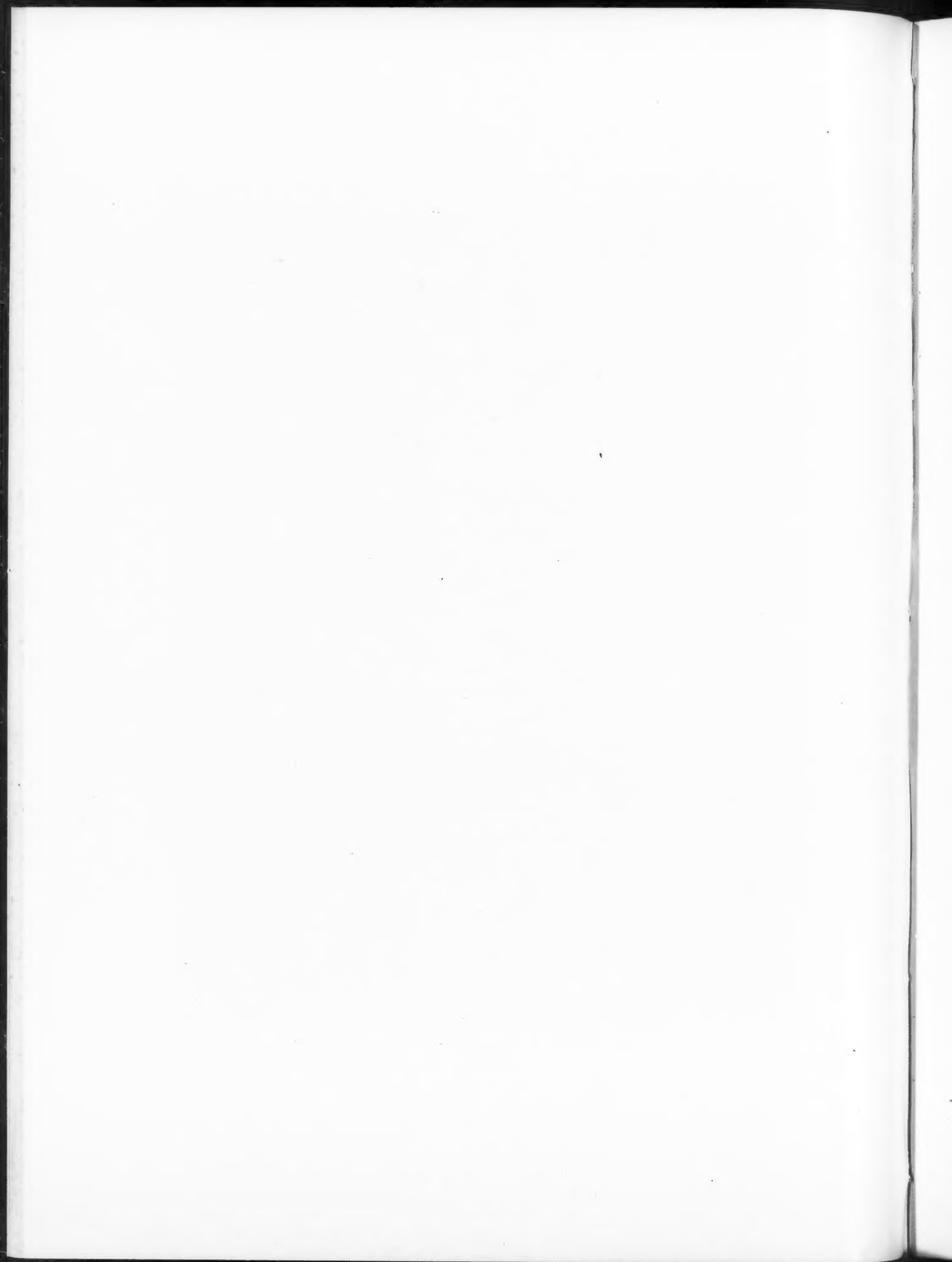


DETAIL OF FACADE

CHESTNUT STREET OPERA HOUSE, PHILADELPHIA, PA.

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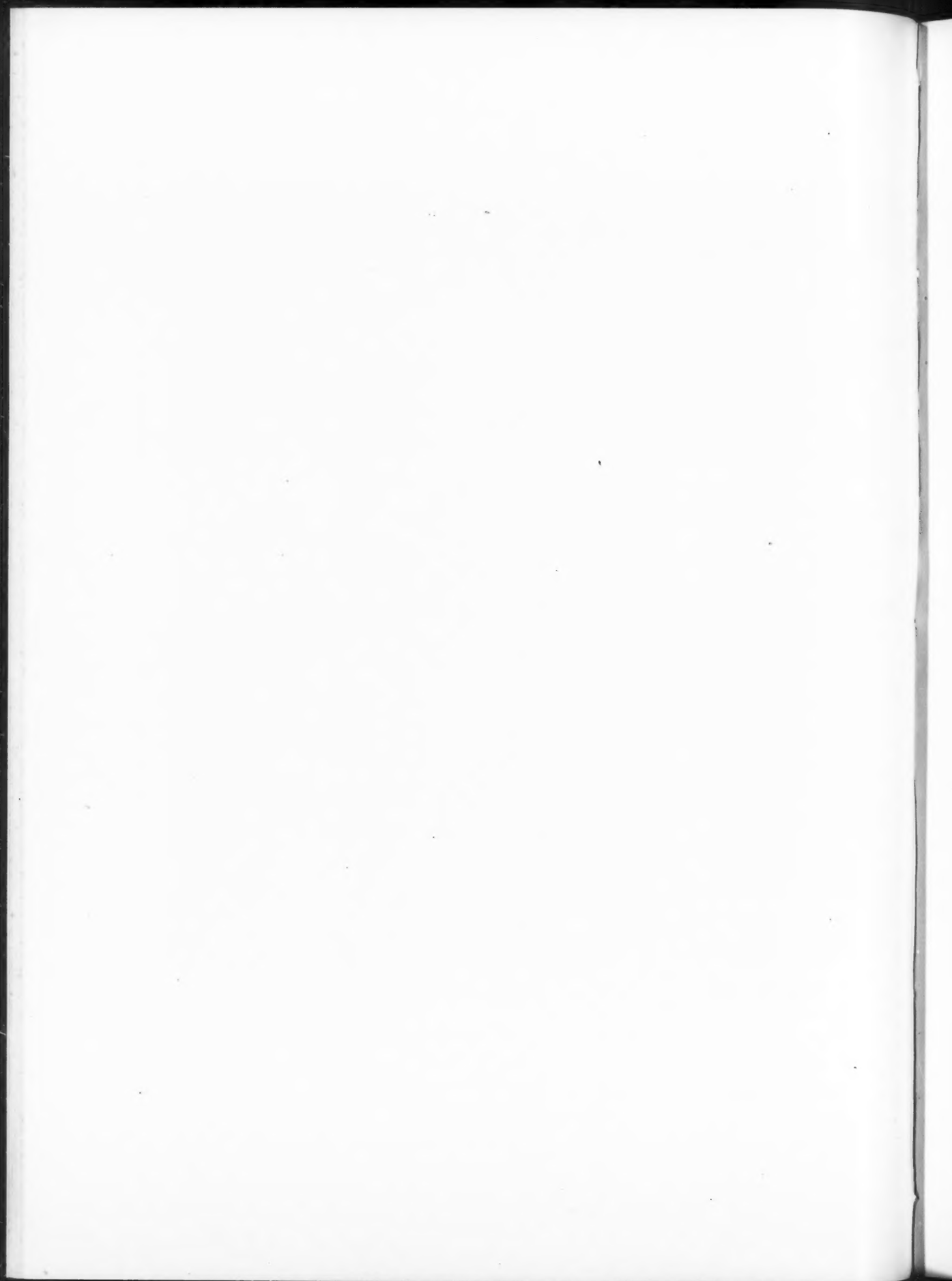


DETAIL OF MAIN ENTRANCE

FIRE ASSOCIATION BUILDING, FOURTH AND WALNUT STREETS, PHILADELPHIA, PA.

MR. EDGAR V. SEELER, ARCHITECT

EXHIBITION OF THE T-SQUARE CLUB AND PHILADELPHIA CHAPTER, A.I.A.



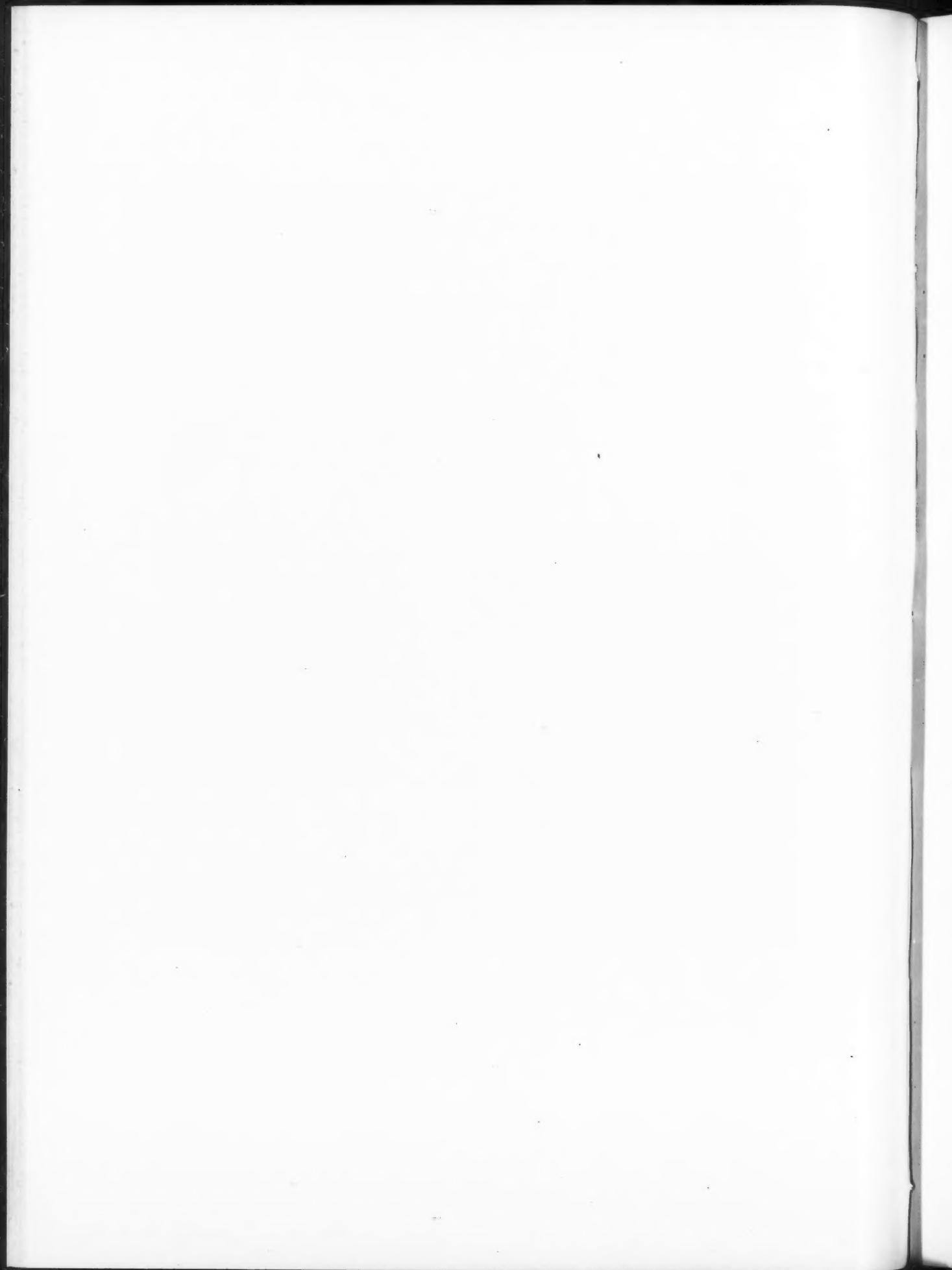


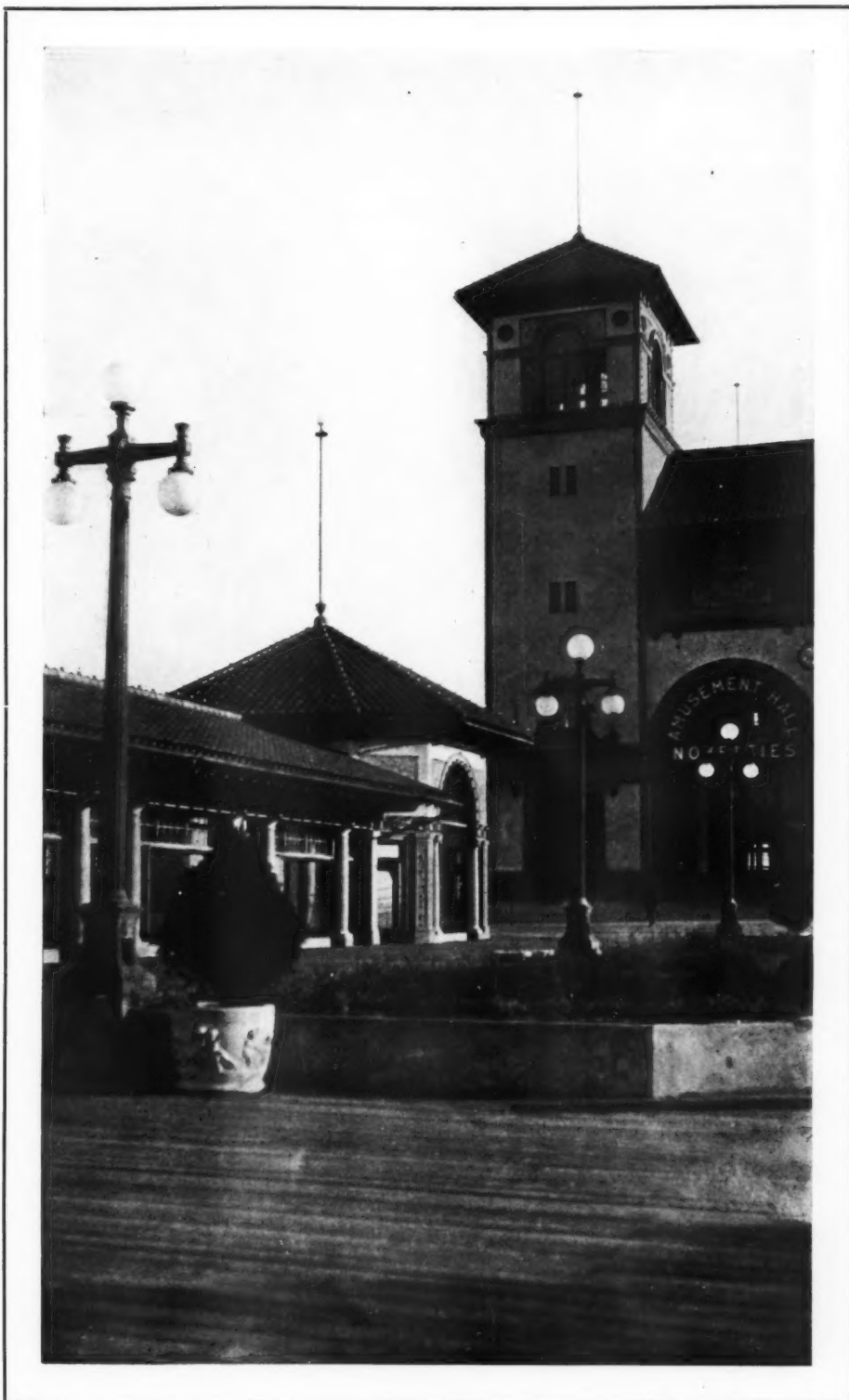
INTERIOR VIEW OF MAIN OFFICE

FIRE ASSOCIATION BUILDING, FOURTH AND WALNUT STREETS, PHILADELPHIA, PA.

MR. EDGAR V. SEELER, ARCHITECT

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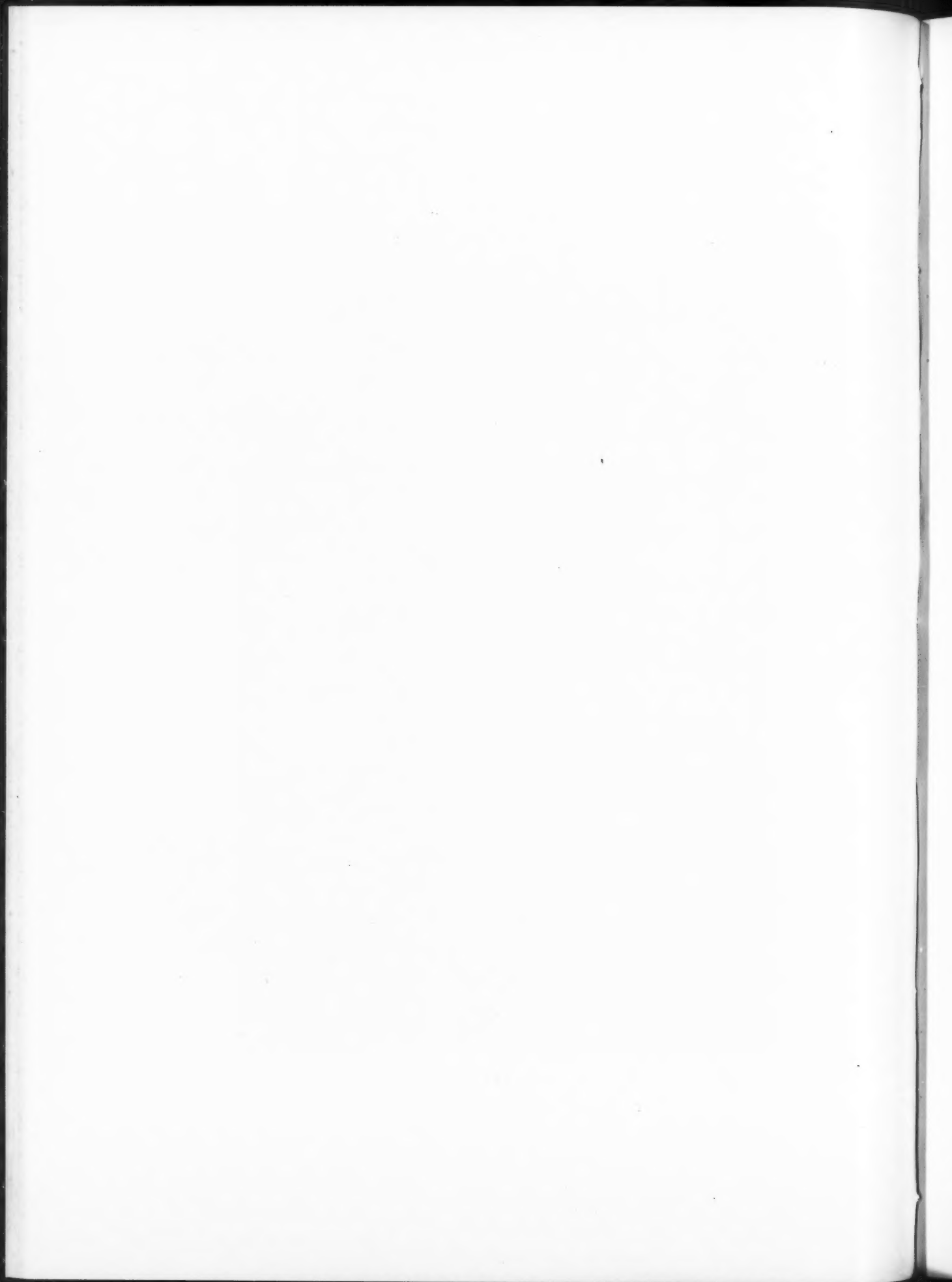


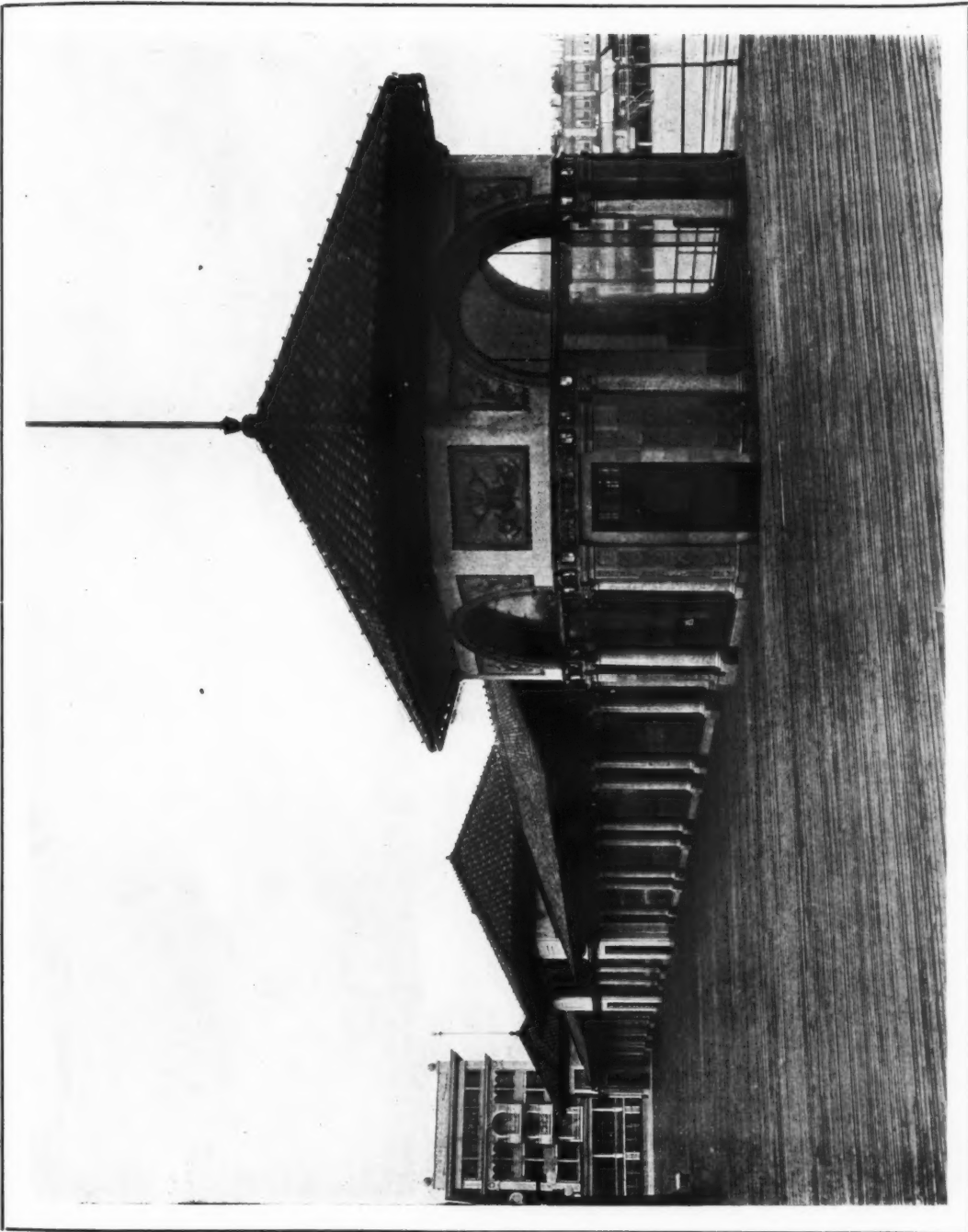
TOWER AND PAVILION

GARDEN PIER, ATLANTIC CITY, N. J.

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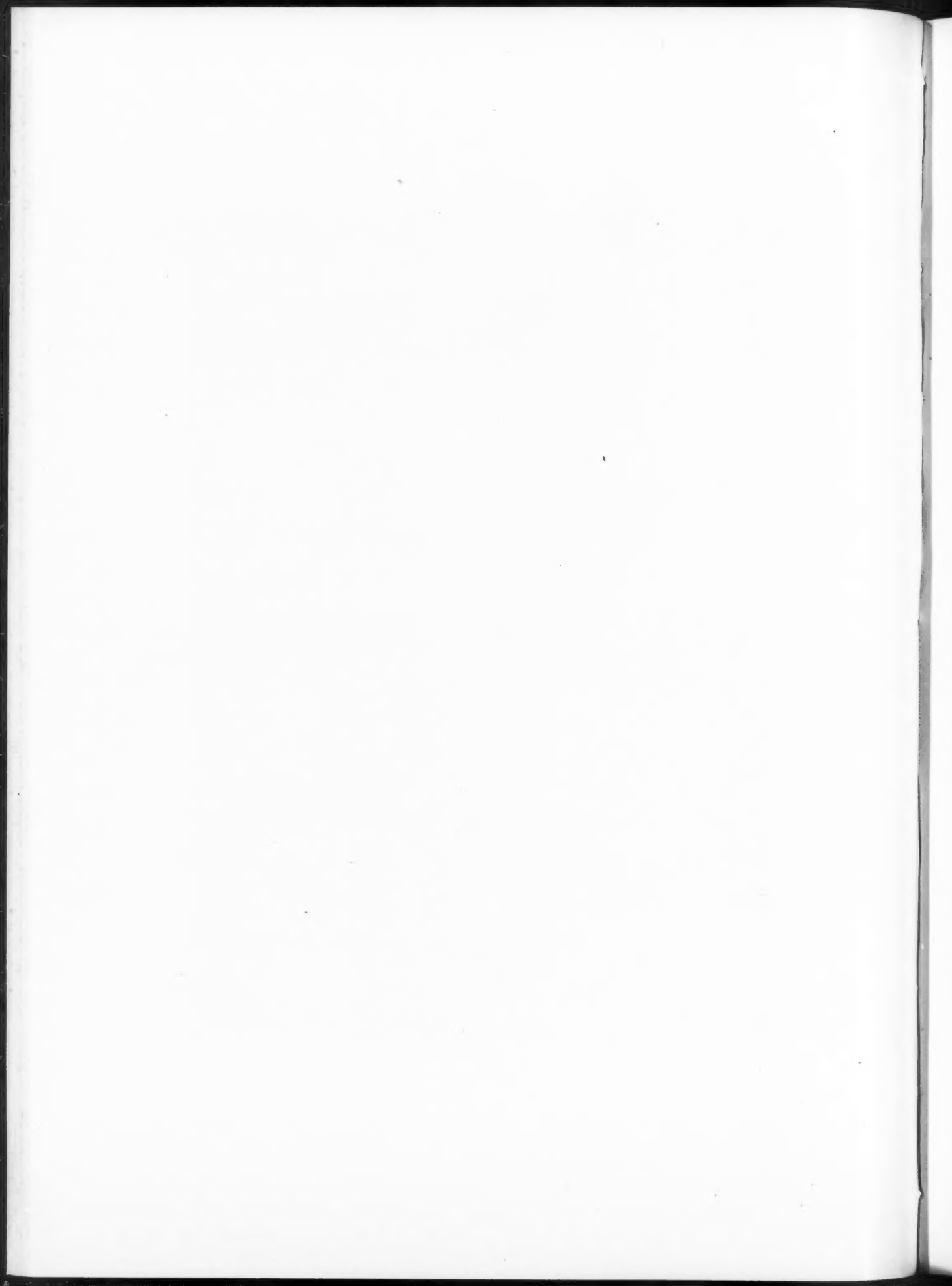


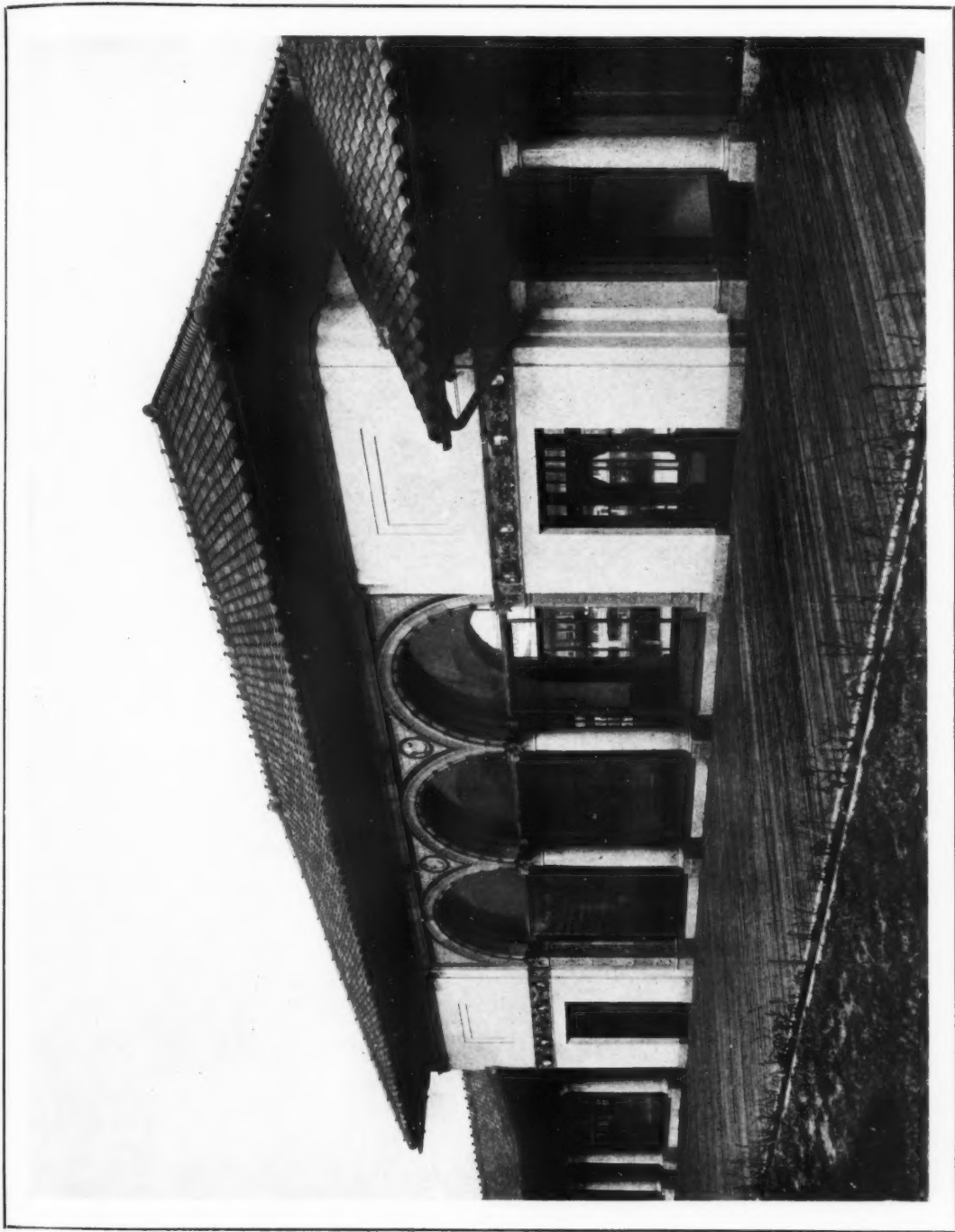
STORES FACING GARDEN

GARDEN PIER, ATLANTIC CITY, N. J.

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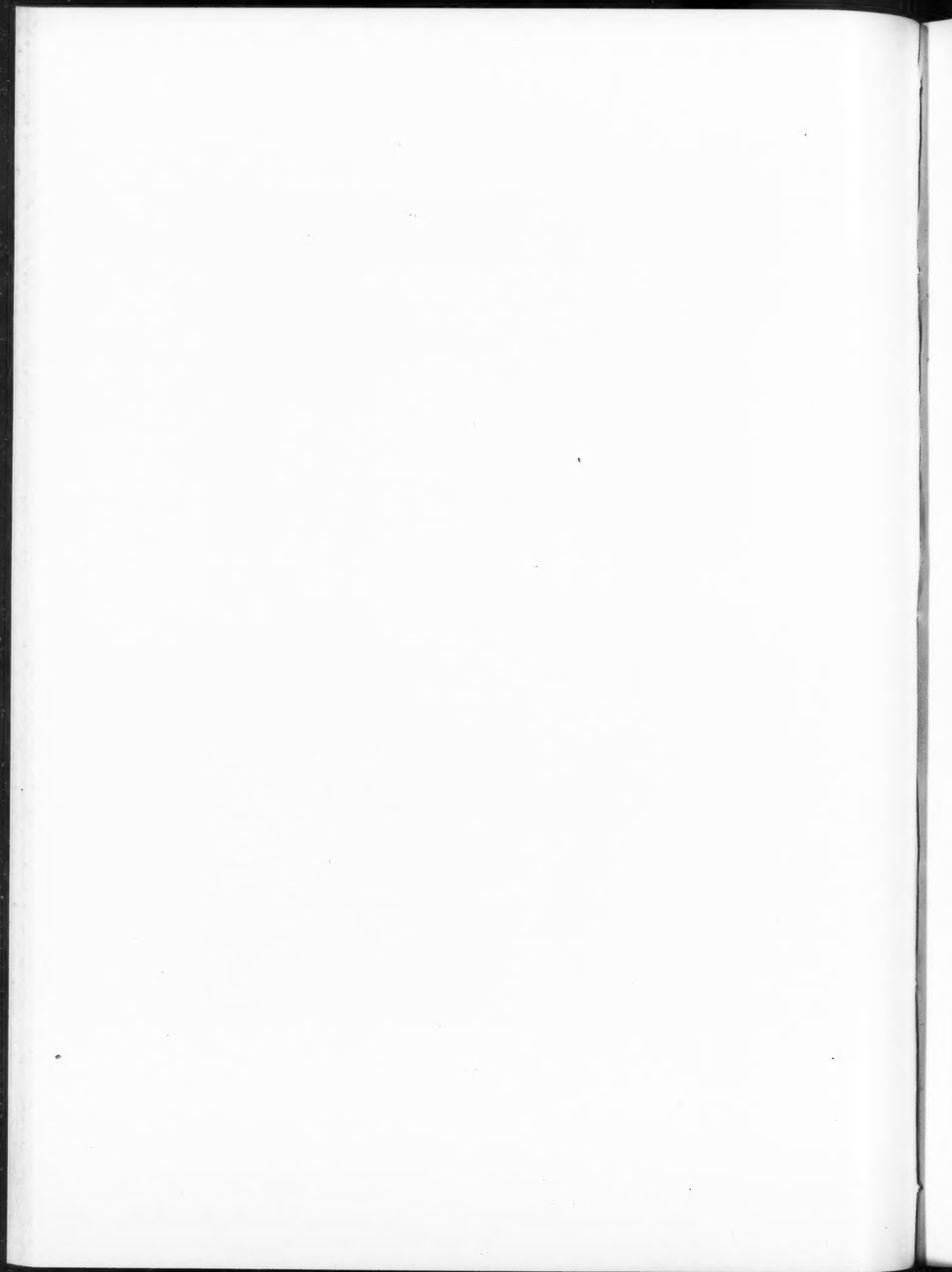


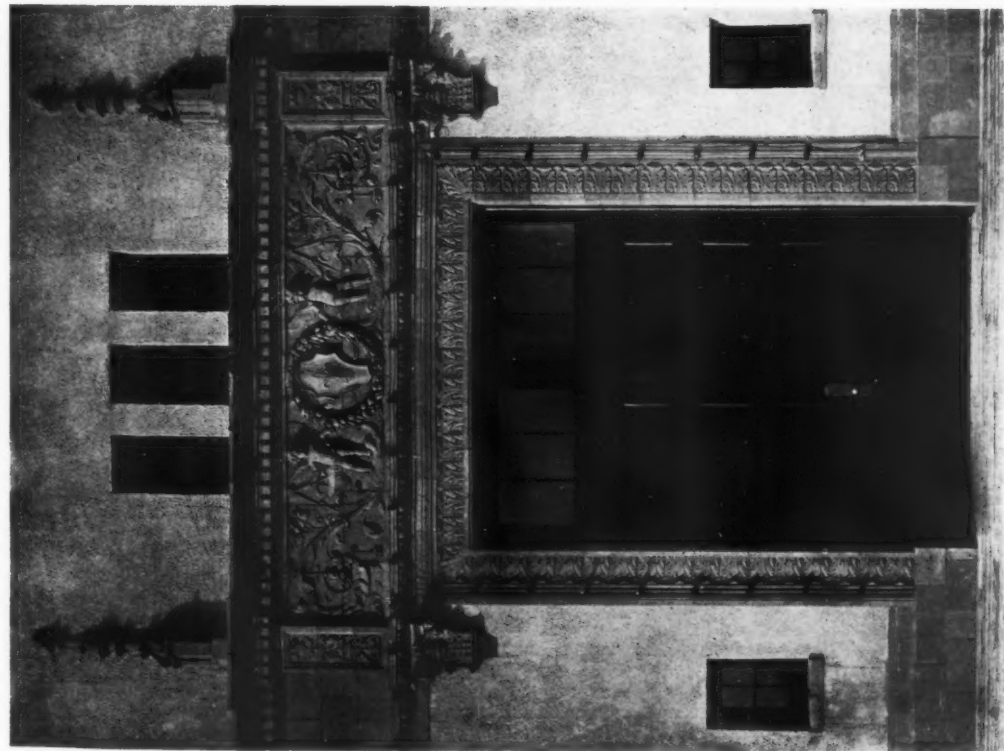
CENTRAL PAVILION, STORES FACING GARDEN

GARDEN PIER, ATLANTIC CITY, N. J.

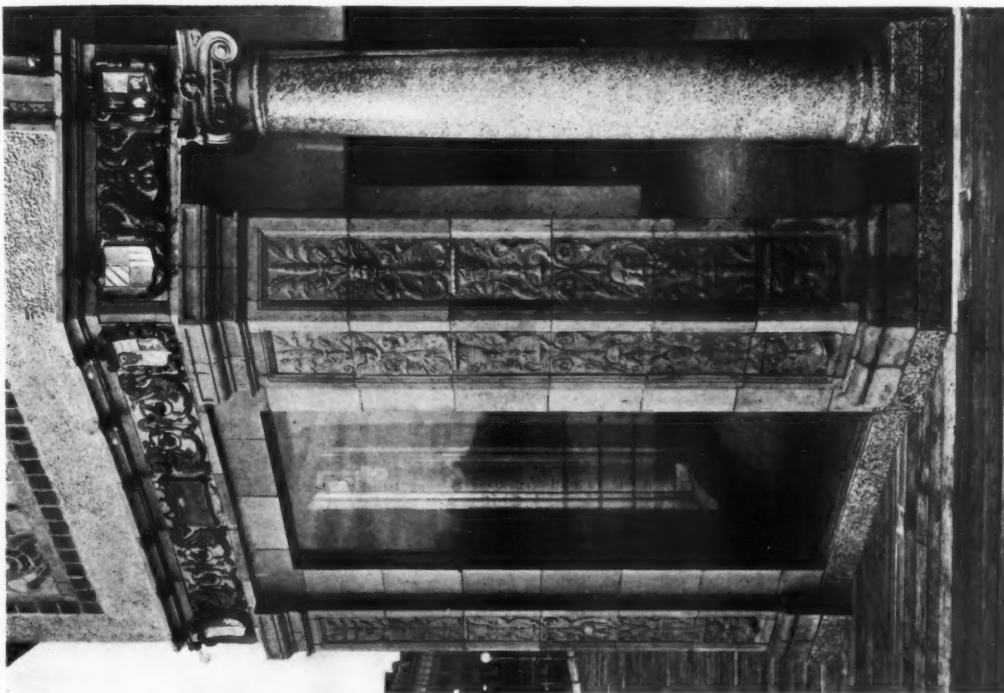
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EXHIBITION OF THE T-SQUARE CLUB AND PHILADELPHIA CHAPTER, A.I.A.





STAGE ENTRANCE

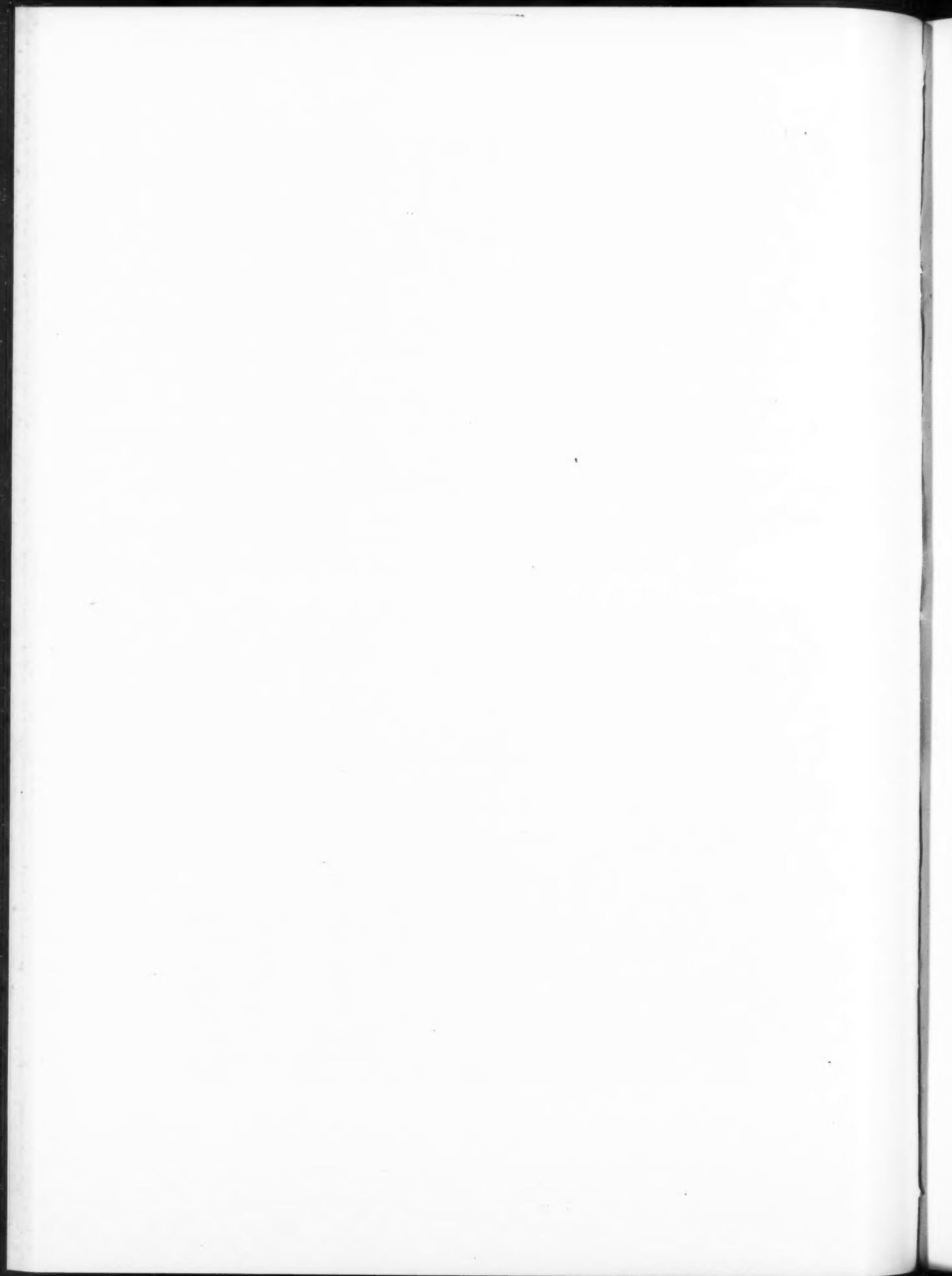


DETAIL OF OCTAGONAL PAVILION

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THE "HOME RULE" PRINCIPLE IN BUILDING LAW

It would seem that the people of New York State, through their Legislature, ran great risk of finding themselves participating in a retrograde movement, if the State housing law is finally repealed, as is now threatened, unless a similar measure, containing perhaps some slight modifications to meet any valid objections, is enacted later. The present law had been in existence only a short time when a hue and cry was raised protesting against the alleged infringement of property rights by the sovereign power of the State. So vociferous were the protests from second-class cities that the Legislature suspended the operation of the law and it is suggested that next year the statute will be repealed.

Its opponents contend—not that the provisions are more stringent than experience has shown desirable for the maintenance of safe and healthful conditions—but that its requirements, if enforced, would practically amount to a confiscation of small and irregular sites, many of which were acquired by their present owners with the intention of "improving" them

under the less drastic provisions of local building codes. They are therefore urgent in their demands for "home rule" in housing laws, which in the case of speculative builders frequently amounts to self-rule. For in local politics there is usually a leading figure in the construction field, and with his trusty cohorts of mechanic and workmen-voters he proves a formidable opponent to the enactment or enforcement by local authorities of any legislation that threatens his profits. Thus, it is not surprising that there is a wide demand for local, as opposed to State, control of housing conditions.

Briefly, the claim is made that local communities have the inalienable right to conduct their own affairs, free from the meddlesome interest of the State. Such a plea might have been valid in mediæval times when each town and hamlet was an isolated unit, but today it is not true that the welfare of a community is of local concern only. Communication is so general throughout the State that the social and commercial interests of each community are linked with those of many others. The life and property of the individual are no longer safeguarded by one town or municipality. They are frequently moved from one locality to another, and it would seem that they should be accorded a full, reasonable, measure of protection in each community. Such protection can be assured only through the sovereign control of the State.

The functions of the State are broadening and, in spite of powerful opposition, the present tendency to subordinate the interests of the individual to the welfare of the community is likely to increase. Years ago, the State of New York in recognition of a responsibility, enacted a tenement house law which, with later amendments, is now generally acknowledged to be highly beneficial although its provisions were at first vigorously opposed by the owners and builders of a type of tenements notorious as breeders of disease and vice. If human life in a tenement house is a matter for concern on the part of the State, surely it is no less so in other buildings. In all cities and towns throughout this or other States the necessities of light, ventilation and safe construction for the welfare

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of life and safeguarding of property, are identical in buildings of similar nature and location. A public auditorium for 500 persons in any community should be built to insure safety, according to certain minimum requirements, and these can be imposed with uniformity only by the State. So, too, dwelling houses must afford a minimum degree of safety and healthfulness if the State, through its citizens, is not to suffer.

Ignorance and indifference of people in small communities is often responsible for unsafe and unsanitary structures which, even if satisfactory to an unenlightened local population, must be used at some time by persons from other parts of the State who, under a strict policy of "home rule" can have no voice in enforcing even the most reasonable minimum requirements. Although State authorities do not always represent the most advanced thought, and are by no means free from corrupt influ-

ences, they can usually be depended upon to reflect in their legislation some measure of intelligent regard for the general welfare.

It is undoubtedly true that the operation of the present New York State housing law would work a degree of hardship to some individual property holders. But since statutes are usually not enacted until the need for them is made obvious by abuses, it is inevitable that more or less hardship follows in the wake of every passage of law.

Considered broadly, or from any viewpoint except a selfish one, it appears extremely unfortunate that the State should now falter in the effort to assure its citizens a reasonable minimum degree of health and safety, in every part thereof, through the enactment and enforcement of a general housing law. Certainly, in the scales of social justice, temporary inconveniences and limited individual hardships will not balance the ultimate health, safety and welfare of the State.



COTTAGE ON ESTATE OF MR. WILLIAM M. COATES, BERWYN, PA.
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EXHIBITION OF THE T-SQUARE CLUB AND PHILADELPHIA CHAPTER, A.I.A.

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ENTRANCE, HOUSE ON LLANFAIR ROAD, ARDMORE, PA.

MR. HORACE WELLS SELLERS, ARCHITECT

EXHIBITION OF THE T-SQUARE CLUB AND PHILADELPHIA CHAPTER, A.I.A.

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ENTRANCE FRONT, HOUSE AT DARK HARBOUR, ME.

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EXHIBITION OF THE T-SQUARE CLUB AND PHILADELPHIA CHAPTER, A.I.A.

SANTA MARIA

(Continued from page 235)

than true mahogany, and it does not show any annual rings of growth which are so characteristic in the woods of the temperate zone. The pores are usually open, elliptical, fairly conspicuous under the hand lens on a smooth transverse surface, and are arranged singly or in more or less irregular rows which are almost never parallel with the pith rays, but usually extend in a diagonal direction. With the aid of a magnifier on a smooth transverse surface it is possible to see irregular, interrupted tangential lines (at right angles to the pith rays) of soft tissue composed of wood-parenchyma fibers. These lines constitute a character that is common to a great many woods of the gamboge family, and by means of these, Santa Maria can always be readily distinguished from true mahogany and many of its substitutes. The pith rays which are composed of from one to two rows of cells are rather inconspicuous even under the hand lens.

The wood of Santa Maria is used locally

for construction work, shipbuilding, heavy, machine work, posts, felloes of wheels, furniture, interior finish, and largely for shingles. The grades of this wood obtained from the lowlands are straight-grained and can be easily split into shingles which are said to outlast those of any other West Indian wood used for this purpose. All grades of Santa Maria are esteemed very highly for carpentry work throughout tropical America. The trunks of large trees are used for making canoes or dugouts which last equally as long and are as serviceable as those made from true mahogany, cedar, or juanacaste (*Enterolobium cyclocarpum* Griseb.). Santa Maria has been imported into this country and also into England for more than a decade, and it is used now largely for the manufacture of furniture. It has been used in the English dockyards for planks and beams for which purpose it has served as well as true mahogany. It is used rather extensively for a great variety of purposes in Havana, Cuba, where it is sold for \$160 per thousand board feet.

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THE QUESTION OF THE CORNICE

Mr. Charles Cressey, one of the speakers who addressed the recent meeting of the Architectural Association of San Diego, Cal., discussed the use and abuse of cornices as applied to the design of tall buildings as follows:

"Though instances do occur where practical shade and shelter are secured from the use of the classical cornice, it is doubtful whether this aspect has much to do with its general adoption on high buildings. Is there, in fact, a single practical advantage which can be urged in favor of the spreading cornice usually found crowning a skyscraper? On the other hand, there can be no doubt that its practical disadvantages are numerous. What, for instance, would be more unsatisfactory structurally, than the eccentric loads and complicated framing connected with the support of a heavy overhanging mass, which at its best does nothing, is of dubious effect artistically, and which places purely optional weight where it decreases rather than increases

the general stability of the building? That this matter of undesirable load is recognized, is obvious from the use of painted shams, "just like stone," upon buildings where cost has evidently not been the serious question. I would here disclaim any antipathy to the use of metal in the abstract, if it can be presented in honest and seemly guise. Surely, stone detail is an insult to a material capable of good results on its own merits.

"Whatever may be the material of the cornice it is always more or less of a troublesome feature, particularly on limited frontages. There must be few architects who have not, at one time or another, cursed politely, perhaps, the fact that they dare not overhang a neighbor's land. Is not every city full of examples of stunted ends and painful expedients to 'stop' the cornice which no ingenuity can make 'return'? True, many buildings would have less pleasant wall surface next the boundary lines were it not for the insistent demand of the cornice terminating above."



HOUSE ON SCHOOL LANE, GERMANTOWN, PA.

MR. CHARLES BARTON KEEN, ARCHITECT

EXHIBITION OF THE T-SQUARE CLUB AND PHILADELPHIA CHAPTER, A.I.A.

ENGINEERING AND MECHANICAL DEPARTMENT

A UNIQUE FOUNDATION ENGINEERING FEAT

The old adage, "Time is money," is nowhere more keenly realized than in the erection of commercial buildings for investment purposes in New York City. Where real estate is valued at several hundred dollars a square foot, the postponement of income on the investment is a very serious matter and becomes an incentive to utmost rapidity in construction. A twenty-story loft building now being erected on the site formerly occupied by the Hotel Victoria, 27th Street and Fifth



BEFORE THE OLD STRUCTURE WAS VACATED, FOUNDATIONS WERE BEING PREPARED FOR A LOFT BUILDING ON THE SAME SITE

Avenue, for which Messrs. Schwarz & Gross are the architects, and Mr. Laurence A. Ball, engineer, is of special interest on account of the method resorted to for saving time in placing the foundations. Early in March of the present year, before the hotel was vacated, the foundations for

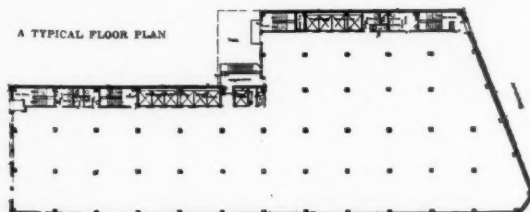
the new building were being started and before the old eight-story brick structure was demolished more than half of the new foundation work was completed.

The operation is described in the *Real Estate Record and Builders' Guide* from which a part of the following is quoted:

The placing of these foundations simultaneously with the wrecking of the building it is expected to save at least two months of time to the owners, and makes possible the completion of the new building by January 1st, 1915, in time for the rental season.

The problem was one which involved difficulties of serious and various character. The new building will rest on 680 steel and reinforced piles. These piles are grouped in sixty-three piers, each one composed of from nine to fourteen piles, sunk to a maximum depth of fifty feet below curb level,

A TYPICAL FLOOR PLAN



LOFT BUILDING, 27TH STREET AND FIFTH AVE., NEW YORK
MESSRS. SCHWARZ & GROSS, ARCHITECTS

and capped with a slab of reinforced concrete. The piles being used are heavy steel cylinders, with walls three-eighths inch thick and an inside diameter of twelve inches. These cylinders are driven to bedrock by means of a 3,000-pound hammer. When the piles reach bedrock they are blown clear of sand, mud and loose rock by means of a compressed air blast under a pressure of 150 pounds to the square inch. The mud and water displaced by this terrific blast is said to sometimes rise to a height of 150 feet and rock weighing as much as fifty pounds has been blown from a distance of forty feet below the surface. After the cylinders are cleaned out and the

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bed-rock exposed, their tops are cut off at exactly the same level. An oxy-acetylene torch is used in this operation and the work is accomplished with dispatch. Each steel shell is next filled with concrete reinforced with five two-inch round rods running the entire length of the pile.



A 3,000-POUND STEAM HAMMER DRIVES THE STEEL SHELLS THROUGH ALL OBSTRUCTIONS TO HARD BED ROCK

Every rod is capable of sustaining a weight of six tons, and the completed pile has a safe working strength of 100 tons, but is loaded to only eighty tons.

When the concrete is poured into the shell to within about fourteen inches of the top, a heavy cast-iron cap with a square head is placed on each pier and through a hole is poured cement grout, forming a binder between the cap and the reinforced steel shell. Upon the finished piles a bed of reinforced concrete from two to four feet in depth is laid as a base for the steel grillage.

Chief among the numerous difficulties involved in the present operation was the fact that the piles had to be placed while the greater part of the old building was standing. To do this it was found neces-

sary to cut away the floors in the first and second floors directly over the locations of the proposed piers. The driving hammer is slung by chains from the beams of the third floor. Another problem encountered was water. In excavating for the new piers a branch of the underground stream which flows diagonally across the city was encountered. The tapping of this stream practically flooded the working space under the old hotel and made it necessary for the contractors to dig a sump pit and install pumps to carry away the water. The pumps, with a total capacity of 500 gallons per minute, were kept in constant operation day and night for two weeks, and the water level reduced



THE PILES ARE MAINTAINED IN A VERTICAL POSITION BY MEANS OF WEDGES APPLIED NEAR THE GROUND LEVEL

twelve feet. The old building had been built on wood piles, but the constant change of the level of the underground stream had rotted away the tops of these piles and it was found to be resting solely on earth, packed almost as hard as concrete.

Another feature of the work that required careful thought was the condition of the bottom encountered. Instead of locating

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bedrock at a uniform level, this rock was found to shelve in an unusual manner. In one part of the site it was found to be less than five feet below the old cellar level, while in the nearest pier to this place, or about a distance of twenty feet, the contractors were obliged to sink piles forty-five feet before bedrock was found. This condition made much drilling and



AFTER THE TOPS ARE CUT TO A COMMON LEVEL BY THE OXY-ACETYLENE TORCH, THE PILES ARE REINFORCED WITH TWO-INCH STEEL RODS AND FILLED WITH CONCRETE

blasting necessary, which was a delicate operation considering that the old building above was in process of demolition.

All the power used, both steam, electricity and compressed air, is being generated by the old power plant for years used to serve the hotel.

The work of driving the piles for this foundation was started March 9th, and the entire foundation will be completed and ready for steel grillage by May 10th. A force of 150 men, in day and night shifts, have been employed from the time the work was started. An open pit foundation would have taken at least four months to install, so it is easily seen that much valuable time has been saved.

The new building will occupy practically the entire plot, with an area of 20,000 square feet, with a frontage of sixty-two feet on Fifth Avenue, 254 feet on 27th Street, and 106 feet on Broadway. This unbroken floor area makes it an exceptional one for display and salesroom purposes. The building is designed with a minimum of columns on the Fifth Avenue and Broadway sides, giving a clear floor space forty by forty feet. The façades will be built of granite at the base and matt-glazed terra cotta above.

Eleven high speed electric elevators will be installed and the car doors and all hatchways will be provided with the latest safety devices for control and the prevention of accidents. In the 27th Street front a driveway sixty feet wide is being provided so as to allow for the speedy handling of freight and to reduce sidewalk obstruction. Four elevators will connect this driveway with the cellar, in which will be installed the latest package chutes and freight handling devices.

The first floor will be arranged for stores, and an entrance and arcade nineteen feet wide is being provided, extending from Broadway through to Fifth Avenue. The entrance hall and arcade will be finished in marbles and mosaics. Fireproof stairways, four of which are entirely enclosed, and smokeproof, and one outside stair reached from two different points of the building, with steel window frames, sash and trim and a sprinkler system, will complete the fire prevention equipment.

A RECENT LEGAL DECISION

AGREEMENT TO ARBITRATE

A building contract contained a provision that, in case of the failure of the parties to agree "in relation to matters of payment, allowance, or loss," the disputes should be referred to three arbitrators selected by the parties and the committee. It was held, in an action for payment for extra work, that the reference to arbitration was thus made a condition precedent to the commencement of a suit to settle the questions agreed to be arbitrated.

Anderson v. Odd Fellows Hall Assn., New Jersey Supreme Court, 86 Atl. 367.

CURRENT NEWS AND COMMENT

FOR UNIFORM DESIGN IN PUBLIC BUILDINGS

The Public Building Commission that has had under consideration the preparation of a plan for the standardization of public buildings wherever erected in the United States has, it is stated, about completed its labors and will shortly present its report.

The following officials and members of the Congress compose the Commission: Secretary McAdoo, Attorney-General McReynolds, Postmaster General Burleson, Senators Sutherland and Swanson, and Representatives Clark and Foster.

HOUSING LAW FOR SECOND CLASS CITIES SUSPENDED IN THE STATE OF NEW YORK

The bill suspending the operation of the New York State housing law for second-class cities until February 1st, 1915, has been signed by Governor Glynn who, at the same time, it is stated, signed the bill which creates a commission to investigate building conditions in cities of the second class, and to report a new bill establishing regulations.

The suspended law has almost since its passage been vigorously attacked by second-class cities. It is expected that before the expiration of the period of suspension, a new bill will have been prepared that will overcome the objections to the present measure.

SPANISH TYPE OF ARCHITECTURE FOR ST. AUGUSTINE, FLA.

As a result of the recent disastrous fire and the efforts of the Chamber of Commerce of St. Augustine, Fla., to plan a civic centre, the public-spirited citizens have been requested to adopt Spanish and Moorish motives of design in future buildings of all types. The proposed styles are thought to be in keeping with the earlier structures, now extant, and to follow in a sense the traditions of this, one of the oldest of our American cities.

A CORRECTION

In illustrating the work of students of the Society of Beaux-Arts Architects, issue of April 22d, it was incorrectly stated that John H. Tilton, Jr., was a student of Columbia University. Mr. Tilton is of the school of architecture of Cornell University, Ithaca, N. Y.

PUBLIC STATUES AT THE NATIONAL CAPITAL

Washington, already famed for the number of statues that have been erected in its streets and public parks, is soon, it is stated, to receive a number of notable additions.

The statue to General U. S. Grant, after a prolonged dispute as to its site, will be dedicated in the early fall, while that of Commodore John Barry is ready for unveiling.

SOCIÉTÉ DES ARCHITECTES DIPLOMES PAR LE GOUVERNEMENT PRESENTS MEDALS TO CORNELL UNIVERSITY

It is reported that the above society has presented to the architectural school of Cornell University, Ithaca, N. Y., one gold and one silver medal, as prizes for excellence in student work.

ECHO OF THE PORTLAND, ORE., PUBLIC AUDITORIUM COMPETITION

It is stated in Portland papers that architects Freedlander & Seymour, who were the successful competitors in the Portland, Ore., public auditorium competition, have been informed that they will be required to prepare a new set of plans, that will bring the cost of the building within the sum of \$450.00 set down in the program. It is claimed by the City Council, which body has the matter in hand, that estimates based on the plans prepared from those that were awarded the prize by the jury indicate that the building as designed would cost considerably more than the amount stipulated.

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COMPETITIONS

Throop College of Technology, Pasadena, Cal., announces a competition with cash prizes for a scheme of development for "Four Corners" of a city plan.

Drawings are to be delivered at the College not later than September 1st, 1914. The jury is to be composed of three members chosen from the Southern California Chapter of the Institute.

Three prizes will be awarded: the first of \$200, the second of \$100, and the third of \$50, and honorable mention may be made as determined by the jury.

Inquiries for further information should be addressed in writing to "Four Corners Competition," Throop College of Technology, Pasadena, Cal. The answers will be in writing and will be forwarded, with the questions, to all known competitors who register for this purpose.

PERSONAL

Mr. Carl Ludwig Otto announces that he is the successor of the firm of Davis & Otto, architects, formerly of 130 Fulton Street, New York City. On and after May 1st, he will continue the practice of architecture at 45 Broadway, New York City.

ANNUAL OF THE SCHOOL OF ARCHITECTURE, COLUMBIA UNIVERSITY

The Annual for 1913 of the school of architecture of Columbia University has been received. As a record of meritorious achievement this work is of unusual interest.

Mr. Austin W. Lord, director of the school, dwells in a foreword on the co-operation that exists between the staff and the students of the school of architecture, and points with pardonable pride to the work shown in this annual as proof that co-operation so very cordial leads to the highest efficiency and the most satisfactory results.

Careful inspection of the work illustrated indicates the progress that is being made by our universities in education in archi-

tecture, and would seem to further prove that educational methods now in practice are strongly conducive to the development of latent talent.

The frontispiece to the annual is a portrait of Mr. John Russell Pope, a former graduate of the school, and a note appended states that this annual is inscribed to Mr. Pope "in recognition of his services to the school and the profession which his works adorn."

BOOK NOTE

STEEL BRIDGE DESIGNING. By Melville B. Wells, C.E., Associate Professor of Bridge and Structural Engineering, Armour Institute of Technology. Cloth, 260 pages, six by nine inches, text illustrated, and further supplemented by twenty-six plates of line drawings folded in back of book. Chicago: The Myron C. Clark Publishing Co. London: E. & F. N. Spon, Ltd., 1913. Price, \$2.50.

This treatise is intended for use as a text-book in the classes of engineering colleges, and also as a reference book in the drafting rooms of colleges and bridge offices.

The introductory chapters on "Engineers' Work and Contracts", "Bridge Manufacture", and "Rivets" give a general view of the subject and a study of them before visiting bridge manufacturing plants should assist students in understanding what they see on such visits. In the chapters on designing, the aim, as stated in the preface, has been to avoid unnecessary repetition, and to explain the different features of the work fully and concisely.

Although engineering colleges keep on file blue prints of modern bridge design, they are too often inconvenient to handle and care for, and are not always readily accessible, with the result that students often fail to refer to drawings of well-designed structures when to do so would be of great benefit. For these reasons a large number of shop and general drawings, representing American practice in bridge designing have been reproduced for this volume and so arranged that they may be readily referred to.

INDUSTRIAL INFORMATION

AKME DESIGNS

The Condron Company, structural engineers, with offices in the Monadnock Block, Chicago, Ill., have recently issued Bulletins No. 3 and No. 4. No. 3 is entitled "Akme Designs as Used in the Ford Motor Company Service and Assembling Buildings." It contains illustrations and descriptive matter pertaining to eleven buildings built for that company, in which the Akme System of Construction was employed.

Bulletin No. 4 is entitled "Akme Designs as Used in Warehouses and Factories." This booklet illustrates and describes sixteen buildings of reinforced concrete construction, built on Akme designs. The buildings shown in these booklets represent modern practice using reinforced concrete flat slab construction, and indicate the adaptability of this type of construction to buildings of the character illustrated.

A great deal of the information given will doubtless be of interest and value to architects and structural engineers, as it is detailed in character and applicable to other buildings of similar requirements.

CONCRETE IN SEA WATER

"Aberthaw Tests on Concrete in Sea Water," is the title of a pamphlet of some thirty-six pages, published by the Aberthaw Construction Company, of Boston, Mass., being the report of an investigation made by that company and Herbert L. Sherman, chemist, at the United States Navy Yard, Charleston, Mass., to determine the effect—both mechanical and chemical, of the action of sea water, at varying temperatures, upon concrete piers of varying compositions.

This work seems to contain much of interest to both architects and engineers employing concrete in construction along our sea coasts. The matter is presented in exceptionally lucid form. The various samples with tabulations of their proportions of cement, sand, stone, and water, are listed, accompanied by reports of their

condition one year and five years after immersion. A photograph of each pile taken approximately five years after its immersion in the sea water, adds to the interest and value of the presentation. With the rise and fall of the tide these various piles have been alternately immersed in water and exposed to air, in freezing weather as well as during the heat of summer. Some twenty-four specimens are photographed, and while, as is stated, no final conclusions can yet be drawn from these tests—for only after a long period of years can it be determined whether any of the specimens will prove permanent—it seems worthy of note that some seven samples show little or no effect from their five years immersion.

Those desiring further details, or a copy of the pamphlet, are referred to the company making the tests.

INTER-PHONES

The inter-communicating telephone has become in large organizations a necessary part of efficient business management, and the perfection to which these systems have been evolved is shown in a series of specifications for inter-phones and private telephone systems, issued by the Western Electric Company, 463 West Street, New York City. These specifications, it is stated, have been prepared for architects' use, and will be forwarded on application.

SAFETY WINDOWS

A folder issued by The Safety Window Co., 42d Street and Vanderbilt Avenue, New York City, directs attention to the number of fatal accidents that have occurred throughout the country by reason of the necessity in most cases for window cleaners working on the sill of windows, where they are exposed to danger of death by falling.

The safety windows made and installed by this company are, it is stated, so constructed as to be cleanable from within, thus eliminating all liability of accident. The window sash or frame, the makers state, are not changed in any way, and when

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the improved form is installed the window operates in such a manner that the outer side of the glass is accessible without the necessity of surmounting the sill.

Pamphlet will be sent on request.

SAFETY TREADS

The American Mason Safety Tread Co., main office, Lowell, Mass., with branch offices in principal cities, have recently issued a new catalogue illustrating and describing the Mason Safety Tread, and showing its wide adaptability to the various locations where a safe and sure footing is essential. The makers state that these treads not only fulfill every requirement for which they are manufactured, but are so constructed that the work of repair and replacement may be done at a minimum of expense, and in a manner that completely restores the tread to its original efficiency.

A new style of safety tread and cork composition mat, especially designed for use in revolving doorways, is illustrated for the first time in this catalogue.

REFRIGERATING MACHINERY

The catalogue of the Henry Vogt Machine Company, Inc., Louisville, Ky., illustrates the extensive plant and equipment of this company. It presents diagrams and illustrations of ice and refrigerating machines and their parts, and reproduces photographs of a number of important buildings in which these refrigerating plants have been installed.

The makers state that the simplicity of the system, the non-technical character of the labor necessary to superintend it, and its high rate of efficiency, makes these refrigerating plants worthy the consideration of architects.

This pamphlet will be forwarded on application.

DOWN DRAFT FURNACES

The Hawley Down Draft Furnace Company of Easton, Pa., has recently issued a new catalogue descriptive of the furnaces built by them, in which is incorporated a

system of down draft, which, it is stated, they originated. It is further stated, that for more than twenty-three years they have been exclusive manufacturers of the Hawley furnace, and that it can be used with any standard make of boiler. Believing that the furnace is the vital part of the heating plant, this company have confined their efforts to the production of a heating apparatus designed to combine every feature of efficiency with honesty in manufacture.

The pamphlet referred to describes the Hawley apparatus, illustrates the various types of boilers to which it has been adapted, and contains facsimile reproductions of commendatory letters from a large number of users. It will be sent to all parties interested on application.

ROYAL VENTILATORS

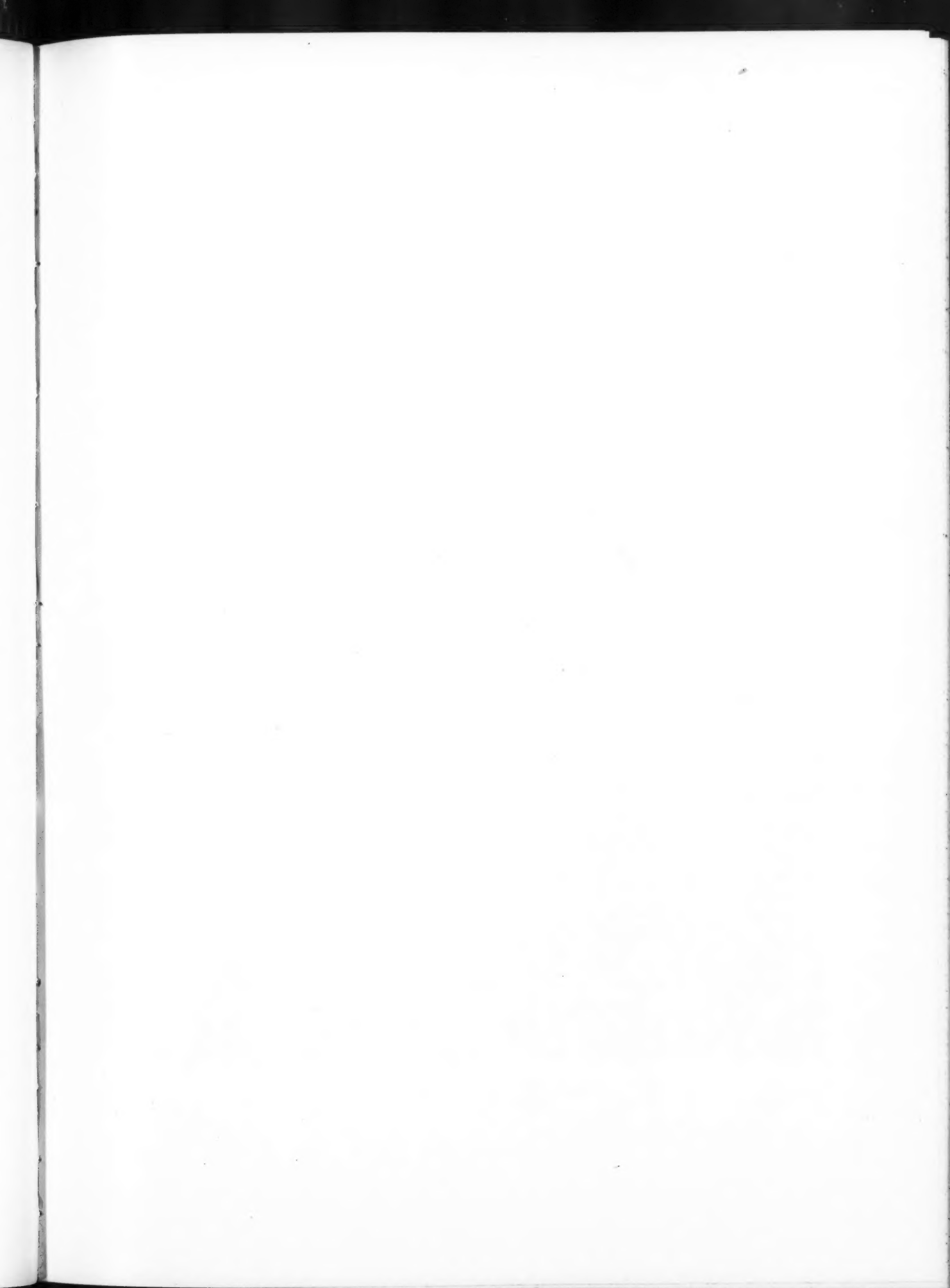
The Royal Ventilator Company, 415 Locust Street, Philadelphia, Pa., are manufacturers of a line of ventilators for which they claim the merits of efficiency, strength and durability. The various types are shown in a recently issued pamphlet, including the "Double Cone Ventilator," and ventilators equipped with glass tops designed to admit a maximum amount of daylight where ventilators are installed.

Catalogue may be had upon request.

CONCEALED ILLUMINATION

A portfolio issued by the National X-Ray Reflector Company, 236 West Jackson Boulevard, Chicago, Ill., is a most comprehensive and instructive exposition of the methods employed by modern manufacturers to place architects in possession of information that will materially facilitate specifications and installation.

This portfolio is substantially bound in boards, size twelve by fifteen inches, contains twenty-four plates of details, printed on heavy cardboard, and a pamphlet of forty-five pages that gives planning and specifications in detail for different forms of interior lighting. It is stated that these portfolios were designed primarily for the architectural profession. A letter addressed to the company, as noted above, or at 6 East 39th Street, New York City, will secure information as to how this material may be obtained.



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DETAIL, CHATEAU OF BLOIS