

THE INLAND ARCHITECT AND NEWS RECORD

Vol. XXXV.

APRIL, 1900.

No. 3



A Monthly Journal Devoted to

ARCHITECTURE,
CONSTRUCTION, DECORATION AND FURNISHING
IN THE WEST.

PUBLISHED BY THE INLAND PUBLISHING CO.,
609-610 MANHATTAN BUILDING, CHICAGO, ILL.

L. MULLER, Jr., Manager. ROBERT CRAIK McLEAN, Editor.

SPECIAL CONTRIBUTORS:

DANKMAR ADLER,	D. H. BURNHAM,	W. L. B. JENNEY,
HENRY VAN BRUNT,	P. B. WIGHT,	IRVING K. POND,
LOUIS H. SULLIVAN,	ALLEN B. POND,	J. R. WILLETT,
WILLIAM S. MACHARG.	C. E. ILLSLEY.	F. W. FITZPATRICK.

TERMS: Regular number, \$5 a year; Photogravure edition, \$10 a year. Single copies, Regular number, 50c.; Photogravure edition (including 7 photogravures), \$1. Advance payment required.

The columns and illustration pages of THE INLAND ARCHITECT are open to all alike, merit and availability only determining what shall be published. Contributions appropriate to its pages are always desired.

AMERICAN INSTITUTE OF ARCHITECTS.

OFFICERS FOR 1900:

PRESIDENT	*ROBERT S. PEABODY, Boston, Mass.
SECRETARY AND TREASURER	*GLENN BROWN, Washington, D. C.
FIRST VICE-PRESIDENT	*FRANK MILES DAY, Philadelphia, Pa.
SECOND VICE-PRESIDENT	WILLIAM S. EAMES, St. Louis, Mo.
AUDITOR FOR TWO YEARS	S. A. TREAT, Chicago, Ill.
AUDITOR FOR ONE YEAR	E. H. KENDALL, New York, N. Y.

BOARD OF DIRECTORS:

For three years.—Henry Van Brunt, Kansas City, Mo.; James B. Hill, Washington, D. C.; Normand S. Patton, Chicago, Ill.

For two years.—Arthur G. Everett, Boston, Mass.; George B. Post, New York City; Alfred Stone, Providence, R. I.

For one year.—Robert W. Gibson, New York City; Levi T. Scofield, Cleveland, Ohio; W. M. Poindexter, Washington, D. C.

*Executive Committee.

STANDING COMMITTEES FOR 1900:

Judiciary Committee.—Wm. S. Eames, St. Louis, Mo.; James G. Hill, Washington, D. C.; Alfred Stone, Providence, R. I.

House and Library Committee.—Robert Stead, Washington, D. C.; Glenn Brown, Washington, D. C.; Frank Miles Day, Philadelphia, Pa.

Committee on Foreign Correspondence.—Glenn Brown, Washington, D. C.; John M. Carrère, New York city; R. W. Gibson, New York city.

Legislative Committee on Government Architecture.—George B. Post, chairman. Committee—Bruce Price, New York city; John M. Carrère, New York city; James G. Hill, Washington; Alfred Stone, Providence. Alternates—Edward H. Kendall, New York city; H. J. Hardenbergh, New York city; Robert Stead, Washington.

THE ARCHITECTURAL LEAGUE OF AMERICA.

OFFICERS FOR 1899-1900.

PRESIDENT	ALBERT KELSEY, Philadelphia, Pa.
FIRST VICE-PRESIDENT	WILLIAM B. ITTNER, St. Louis, Mo.
SECOND VICE-PRESIDENT	J. W. CASE, Detroit, Mich.
SECRETARY	HENRY W. TOMLINSON, Chicago, Ill.
TREASURER	HERBERT R. BRIGGS, Cleveland, Ohio.

Next Convention at Chicago, June 7, 8 and 9, 1900.

Pernicious Building Bill Before Congress.

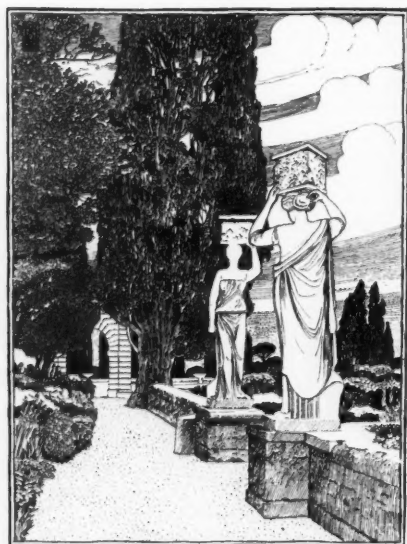
The congressional committee upon public buildings and grounds has reported and through its chairman introduced in the house a bill for the acquisition of a site for a municipal building for Washington. This committee in the past has usually been composed of men of high attainments and with not only some knowledge of architectural requirements but of the ethics of the profession as well. According to this bill the present committee is open both to the influence of the lobbyist and the other influences that so often sway legislation, but has not yet realized the standard which even the Government has already set in its dealings with the profession. The committee proposes the purchase of a square that will cost at least half a million and to erect thereon a building that will cost not less than two and one-half millions. It proposes to buy property in an already thickly built and highly rated locality. It proposes to ask six architects to compete, and to the successful architect will be given three per cent and to the five unsuccessful ones \$500 each. It then proposes to place the work "in charge of an officer of the Government specially qualified for the duty, to be appointed by the commissioners, who shall receive for his additional services an increase of forty per cent in his salary," etc. The whole scheme smacks of the greatest piece of jobbery and favoritism that Washington has seen since the reign of "Boss" Shepard. The bill is the smoothest, most innocent-looking document that has entered the house since the days of the credit mobilier—and it will probably pass, because the legislator will not examine it and by voting for it will gain votes that will in turn aid his schemes. But let us look at the result. By purchasing a square in the indicated locality the work which commenced with the Carnegie library will receive another advancement. Then will follow the long list of buildings that will be required in the near future and, built in the same locality, the ground will cost upward of twenty-seven millions of dollars. This is the financial side of this bill, which, in view of the large amount of unoccupied ground available in Washington, shows how little this committee cares for the financial interests of the country. Then the most specious but no less direct attack upon the standing of the profession contained in the remainder of this most objectionable document, for not only does it propose to pay one-half the sum for services which has been established among creditable practitioners as usual and proper, but the architect is to act "under the office of construction hereinafter provided for." And the initials of his name is Bernard Green, for he and only he is the "officer of the Government especially qualified" who is referred to in the bill. We dislike to object to so beneficial a scheme on Mr. Green's account, but we object still more to seeing the leading architects in the United States reduced to the capacity of draftsmen in all matters governmental and placed under the control of Mr. Green, who would soon if he does not now imagine that architects are only made to do as he directs, at any percentage that he chooses to give them. The plan which we and many of the leading dailies of the country have advocated in regard to the grouping of buildings in Washington should be adopted.

CHICAGO ARCHITECTURAL CLUB EXHIBITION OF 1900.

BY ROBERT CRAIK MCLEAN.

DETAIL OF CAPITAL.
FRANK L. WRIGHT.

THIS year the Chicago Architectural Club has combined its most complete exhibition of illustrated architecture with a sociological exhibit, or one department of sociology, which shows how the other half ought to live, as well as by photographic illustrations of how they do live. Chapters and books could be written upon this phase of the largest exhibition yet held under the auspices of the Chicago Architectural Club, which occupied the entire south galleries of the Art Institute the last half of the month of March. The dominant feature that impressed the visitor in inspecting the exhibition as a whole was that it was more rich in pictorial art and in the use of color, aside from the mere coloring of perspective drawings, than any exhibition that has preceded it. There were upon the walls perfect gems of color in which one forgot that there was probably never such an effect of light and shade, such an atmosphere seen in the latitude in which the house was built, but how one wishes they could see it. The exceptionally fine things from a designing standpoint are so numerous that it would take a week of inspection and a jury's table of values to determine which were most worthy of special comment. Probably the most attractive residence design was that of the Farson House, by George W. Maher, of Chicago; the most unique the model of the Chicago Bank, carved in wood, from Jenney & Mundie's design, and the most extensive the designs submitted in the Phoebe Hurst Competition, showing the range and scope of that great project. Then there were the decorative panels for an Indiana courthouse done by Arthur Thomas, of New York, in which the coloring and arrangement of the figures were much better than the drawing. There was breadth and economic value in Robert C. Spencer's

SKETCH FROM PHOTO.
BY BIRCH B. LONG.

farm houses, as there was classical knowledge shown in Edwin D. Weary's capitals, and from these in turn the eye is attracted by the rich coloring of Stephen M. Wirts' Paris Sketches and others of the Paris colony.

By this it can be seen that the cursory visitor saw beauty in line and color everywhere and was deeply impressed with the fact that the draftsman of fifteen years ago was more or less of a mechanic, while today he is no less

mechanical in his knowledge, but his appreciation of the beauty of a line has led him to seeing the relation of color and of form, and that the higher the art instinct was developed the better the design was apt to be. Thus Frank L. Wright and Louis Millet have designed and, collaborating with others, have constructed two fireplace fronts. Both are full of beauty, and while perhaps it is the harmony of color as well as form that attracts, the latter must surely be credited in a large degree to Miss Ostertag and to Giannini.

In commending this seeming departure from old lines—the draftsman becoming a color artist and working for his salvation with color artists, both of brush and material—it is because it indicates a decided advancement. He is no longer a mysterious being who draws with a T-square and a pair of dividers and from

these products makes houses with the aid of a contractor. He tells stories of possibilities in landscape surroundings, of decorative effects in the hallway or the covering of a chair, and he has begun to talk in a language that the public not only understand, but, what is more to the purpose, that they like and can appreciate. Thus it happened that the public and the artists spent many hours in these galleries during the time of the exhibition, and the architects, with the exception of a baker's dozen, were conspicuously absent at the opening reception.

There is but a bit of color and a column or two to note Birch

ENTRANCE.
BY FRANCIS M. WHITEHOUSE.

Long's suggestion for the improvement of a small park with a rest shelter, but it will look like that when it is completed, or it ought to, if Chicago can supply the atmosphere. Then there are some great drawings that in their light and breadth and feeling rival even such water-colors as that bit of sunlight and Spanish architecture that Mr. O'Connor has made into a thing of beauty and artists envy for its complete artistic value. The drawing of the interior of St. Paul's, by Harry Pennel, is rich in color and great in its expression and breadth of handling, and there are others.

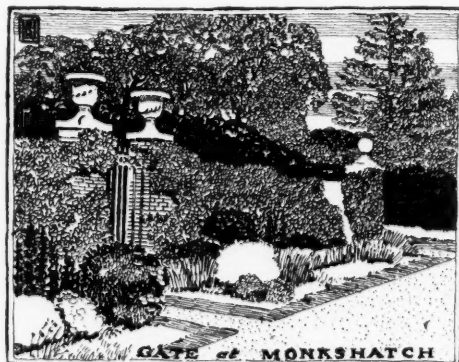
Most notable of these and aside from their exceptional rendering most generally interesting to draftsmen were the twenty odd drawings by T. Raffles Davidson, of London. Ever since the process methods of illustration became available and made it possible for architectural journals to freely reproduce drawings, those of Mr. Davidson have been conspicuous in the English architectural periodicals.

The decorative work and portrait busts by Max Mauch, of Chicago, were fine examples of skilled modeling that indicated a conception of architectural requirements.

The marine architecture of last year has given place to that other branch of the profession landscape architecture and James L.

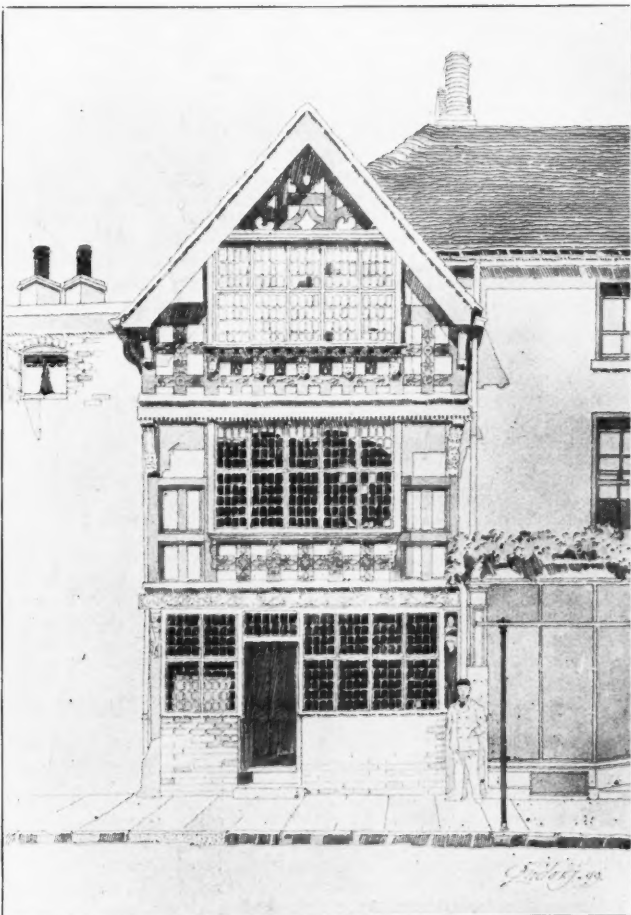
Greenleaf (fitting name for a landscape architect), of New York, exhibited a number of studies of considerable merit.

These are some of the impressions received, splashed in at random, and perhaps impressionism is the correct thing after all, as it is not possible to "paint the lily." But the whole picture is full of the thought of the enthusiasm of the Chicago Architec-

SKETCH FROM PHOTO.
BY BIRCH B. LONG.

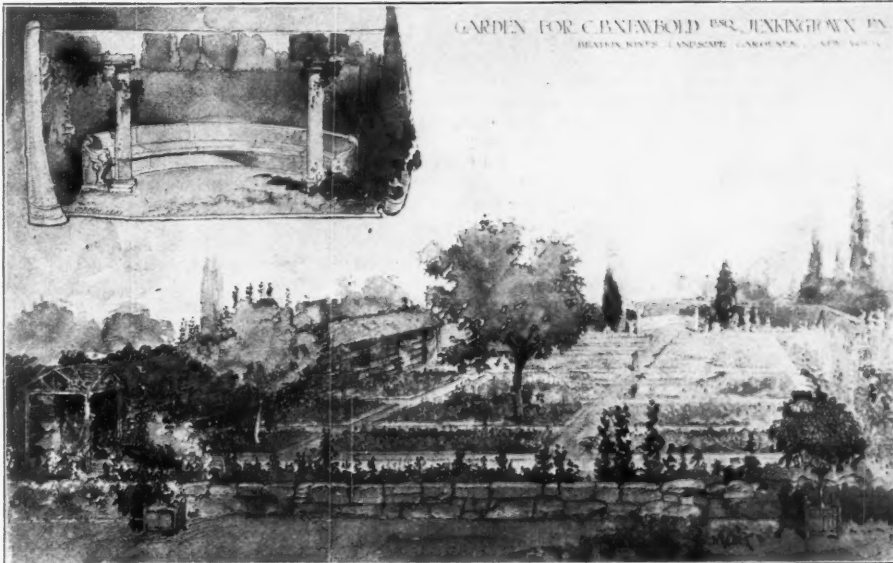
tural Club and the grinding perseverance of those individual members who have from year to year worked for the perfection and success of the annual exhibition of which this is easily the best.

The record of this, bare facts, and still giving play to the imagination in summing up the labor as well as the thought and earnestness of purpose, is found in the catalogue, a pamphlet which, in its entirety, its compilation, the selection of matter and even the exceptional typography of its fifty-six pages, shows labor and still more labor. While almost every member of the club was called in to aid in its success it is to Dwight H. Perkins, its editor, that the greatest meed of praise is due. As champion of his idea that advertising should be entirely eliminated from the pages of the catalogues of architectural exhibitions, his labor was as arduous as it was creditable. Standing almost alone in regard to this latter proposition, for it was largely to the catalogue that the clubs of the country have been in the habit of looking for the money to pay exhibition expenses, it took a firm belief in the correctness of his judgment and the feasibility of his plan to aid him in preaching his doctrine and as a result winning others to his way of thinking and carrying out the project of an advertisingless catalogue that would still contribute the necessary funds. His triumph was



SKETCH.
BY OSCAR ENDERS.

greater than even he dared to hope. Patrons were found who appreciated the courtesy of the club and its great objects and contributed even more than they would had they been approached by an advertising solicitor for the annual advertisement. The result



DESIGN FOR GARDEN.
BY BEATRIX JONES.

is that the theory that those whose contributions in the shape of advertisements were actuated by a spirit of friendship for and interest in the success of the club rather than by a wish to advertise their wares, has been conclusively demonstrated to be correct. The introductory article, "The Hour of Opportunity," by James F. Gookins, is full of thought and suggestion regarding the future growth of Chicago and the artistic possibilities in the line of private and municipal improvement. It gives a special value to the catalogue, as it is written by an artist as well as an economic student who has studied the problem in all its phases since the organization of the first artists' society in Chicago and whose judgment is conservative and practical as it is far reaching in its trend.

FURNITURE. *

BY JOSEPH TWYMAN.

THERE is a wide gauge of difference between the furniture of five thousand years ago and now, expressed in the houses of the Egyptians and ours of today. Then a professed view of the brevity of life made of the house something of the wayside inn; now the allness of life—the reality of life—makes of the house an accountable abiding-place; then the riches and grandeur were confined to rulers and a select few—hardly accounted a personal ownership—but more a representation of power and rank; now in the face of diffused wealth and aggregated capital in the hands of the many the house and its furniture have an individuality characteristic of the more even diffusion of wealth and the luxuries. Then might be seen the comparative indifference, and now the intense interest—both natural outgrowths of the peculiar conditions.

Generally from then to now our wisdom in the use of material for furniture has not grown with the so-called improvements or facilities for production; generally our ideas of correct decorations of household furniture have not improved. We have, in fact, failed to take advantage of many special points of excellence found in the furniture of thousands of years ago, particularly in the use of material in consonance with its nature, in the application of decorative forms to construction, and in the expression of the movable nature of furniture as therein differing from architectural construction. Then again, our sofas and chairs and bedsteads are made ugly by the introduction of springs and upholstering, both injurious to the sense of sight and hurtful to health.

For all these things we must not blame the shopkeeper; we can hardly blame the public; we will not blame the makers. The shopkeeper buys such things as he can most readily sell; the public buys the things it thinks it likes; the maker builds what the shopkeeper wants for his public. In other words, this is the chair that Smith made; this is the man who kept a store, who bought the chair and eleven more just like the chair that Smith made; this is the husband, lately wed, who went to purchase a folding-bed, who sat in the chair and then he said he liked the chair that Smith made; this is the wife who heard him say he liked the chair, so the following day, as soon as she could she got away and bought the chair that Smith made. This is the neighbor who came to call, and wasn't a judge of chairs at all; but to please the wife she gave it praise, and the other eleven went different ways; and so, to the merchant's great amaze, he sold the chairs that Smith made. Now comes the melancholy part of the

*Paper read before the Chicago Architectural Club, February 18, 1900, illustrated by examples of furniture.

tale. There was Jones and Robinson and Brown, who, too, made chairs, in another town. Their chairs were better, but, sad to tell, the better-made chairs he did not sell; and the shopkeeper calls on Jones and Brown, and looks at the chairs and turns them down for some more of the chairs that Smith made.

Gentlemen, we have to have shopkeepers, men who take vast pains to collect wonderful varieties of wares for us to choose from, and we have to have clerks, many of them poor, plodding, patient people; and, to complete the play, we have to have a public—a nice, pleasant, trusting and generous public. Now there is one more actor to come on the stage—the maker. We have to have makers of all these things we think we want. We can not, in the complex conditions of affairs today, we can not, I say, make all the things we think we want—clothes, pictures and pastry, tables, chairs and jewelry. Besides, we have differing inclinations. So I say we must not, can not and will not blame either maker, seller or user for many existing errors. But if trade evils do not soon cease you must be prepared to stand convicted of neglect of duty. We shall blame you, for you should know; many of you, I am sure, do know; and those of you who do not know show by your presence here that you wish to know, and I praise you for that. If I thought I could do anything to help you to know I would talk to you every month at any time, if I could in any way help you to do your work. And what is this work, this duty? You should be the teachers of this nice, pleasant, trusting and generous public; you should counsel them to select simple, plain, well-made furniture. A plain table with its four straight legs, made by hand, of good lumber, put together with good glue—do you know glue can be bought for 12½ cents a pound, and glue can be bought for \$2 a pound? Do you know that dry-kilned lumber is not seasoned lumber?—but I was saying, a plain straight-leg table at \$20, made by hand, is worth more than your elegant cabriolet and carved one, made by machinery, with its molded and shaped top, for \$50. Do you know a book-case like a packing-box, with shelves placed therein, hand-made, is a better investment than your shaped-up and twisted-up factory one at twice the price? If you do not know it, it is time you did, and it is time that you, who are looked upon by this public as its advisers, insist on a new era of furniture and furnishing.

I can not let this moment pass without a remark about what seems to me can only be named the brutal carving-machine. In this creature we seem to have reached the lowest depths of depravity in factory work. If our honored friends, Ruskin and Morris, had ever seen this exhibition of fraud and imposition, I am sure it would have hastened their lamentable departure from the scenes of their lovable usefulness. The carving-machine has not added one spark of joy to the maker of furniture nor the user. It is an insult to your sense of sweetness and beauty and truth; it is filling our houses with false pride—I may say immorality; for it gives to us first a sham, then an encouragement of the senses not compatible with our lives as they should be, the simple and sweet and true. It brings to the clean mind the pomp and falsity of courts and the luxurious tendencies of the idle classes, whose habits have caused the downfall of every nation that indulged in the feather pillow and spring bed.

But I am afraid you will begin to think I am telling you too little of furniture and too much of ethics. My subject is too large—too full of temptations—but I will try to say something of furniture when we can turn to our examples. With the exception of a few pieces in the museums, we depend largely on written descriptions and paintings or sculptures for information concerning the furniture of the earliest known times. Tables and chairs of silver and gold and steel, and some with large display of ivory in the feet or legs or as inlays and carving, are more common examples than those of wood, these first-named materials having more enduring qualities. But we are enabled to learn of the great strength and durability of the Assyrian and Egyptian furniture enough to satisfy us they were masters in this branch of handicraft as well as in others. The absence of machinery enabled them to give to us a conception of their art instinct which we of today can not do for yet another posterity, and I am convinced that scientific treatments so-called which largely refer to machinery, whether in medicine or manufactures, have the tendency to destroy individuality and the development of truth in art and love of the work.

More than painting and sculpture, architecture and furniture are most closely allied to the peoples of different times, for they in the past did build with strong national characteristics and furnish these buildings very much in accord, the differences and evolution of form only growing out of a natural transplanting of the real makers of the work in point. I mean by this, as an instance, that the conquest of Constantinople by the Turks mixed the Eastern and Roman styles into what is known as Byzantine, considered to be a corruption of the early classic Greek; and as the importance of this Eastern metropolis grew, those of the wealthy classes who settled there imported the workmen from the seat of this superfinished civilization—Rome—to begin again a new experience of luxury and extravagance which they could not realize had been the cause of the downfall of the once powerful Rome. And we, none of us, are willing to learn the lesson that there is but one ending to a period of feather pillows and spring seats and cushioned arms. It may be nearly right that some may have tables of gold, others of mahogany, and others of pine. I say it may be nearly right, or at least it may do little harm to him of the table of gold, but your feather-pillow and spring-bed people are harmed, and he of the pine-wood table, or the wood-seat chair, is to be the leader of the races. "A rich man is

poorer without altruism than a poor man is with altruism." Will you blame the merchant for this? He makes the softly cushioned chair to please his public—think of it! Springs in the back, in the seat and on the arms! What can it do for us except to injure and make weaklings? Gentlemen, advise your clients to use hair cushions or mattresses—movable, that they may be easily cleaned—and no springs, if they must soften the wood-seat chair. The rush-seat chair and the "cane bottom," too, have wholesomeness and cleanliness in their very appearance. Advise them to use such.

During the period of the Middle Ages, admittedly about a thousand years, we are still confined to old illuminated manuscripts and missals for general enlightenment. A few particular pieces exist, around which we are able to build with satisfaction, but as we come to the Gothic period at its best we note a splendid impetus to furniture-making, and we are better informed and it would almost seem that only in this style has there been an actual and perfect art or completeness. The Church with its resources was enabled, as in its tapestries, to get the best in furniture. There was a revelation of the unity of things which has never been excelled. The best buildings in Europe are Gothic, the most wonderful patterns of fabrics are Gothic; and the Gothic furniture, fitting as it does into the same laws of construction, taking honestly its carvings and embellishments in lovely rhythm with the traceries of stone, seems like a gentle murmuring and blending and echoing of some grand refrain, repeated with here and there delicate variation, only to swell out again and again into the larger and lovelier theme.

And so we see it the foundation of the Renaissance, which gave us in its turn the best furniture, as it gave us the best literature—at least so far as we English-speaking people must be able to admit—for in the sixteenth century the fresh, sturdy vigor seemed to take hold in England, as I am in hopes it is about to do with us; fostering an originality and strength which has placed an historic eminence on the furnished mansions still standing in all parts of the islands. And although they passed through the travail of changes, reaching to Sheraton and Chippendale and Adam, and although there has been much good work done during the nineteenth century, just at its close I can not help looking back at much of it as unreasonable and unsatisfying as compared with the grandly inspired work of the Flemish artists on English soil during the sixteenth and seventeenth centuries.

I am sure you do not need me to teach you how to make tables and chairs; you all know as well as I do, and may be better. It is the underlying principles you need to learn; that of honesty of construction, the nature of material, the decorative properties; that is the use of ornament, so as not to conceal construction, and the avoidance of "architectural furniture"—you know what that means—furniture built with columns and pilasters and cornices and fringes and even a roof! There are forms more fitting, and you will, I am sure, so advise your clients.

Here Mr. Twyman explained his ideas more fully, calling up one piece of furniture after another and exhibiting the beauty of the construction of each to a most interested and enthusiastic audience.

NEW WESTINGHOUSE OFFICE BUILDING.

It was in 1894 that the Westinghouse Electric & Manufacturing Company removed from the city of Pittsburg to the site of its present works at East Pittsburg, thirteen miles distant from the city. A large tract of land was acquired at East Pittsburg, upon which new works were erected on a large scale, and were equipped with the latest machinery and labor-saving appliances.

Last year the works again proved unequal to the expanding demand for Westinghouse electrical apparatus, more especially as the size of individual machines had increased, until generators of 5,000-horse-power have become frequent, and in some instances have reached to 8,000-horse-power. Recent additions to the works already completed, and those now in course of erection, will bring the floor space to half a million square feet, equal to 11½ acres.

About a year ago it was determined to erect the permanent offices. The architectural features and the general arrangement have been under the supervision of Mr. George Westinghouse, than whom no one is better qualified to provide for the present and future requirements of this immense enterprise, as through his untiring energy and keen foresight the company has secured a position second to none in the electrical field.

The building just completed is conveniently situated for access from the East Pittsburg station, on the main line of the Pennsylvania Railroad Company. The dimensions are 250 feet with a depth of 50 feet, with seven stories. The façade and architectural features are designed in pressed brick. The material used is Vampert brick of a buff color, specially made to harmonize with the Beaver Valley stone facings, the walls being carried up five feet above the ground with rock-faced stone. The entire building is fireproof, rows of steel columns being carried longitudinally through the center. The floors and partitions are of terra-cotta, the former being built with arches, above which are mud sills bedded in concrete. The mosaic and wood floorings rest upon the beams and sills. The roof, as will be seen in the illustration, has a very high pitch, and is constructed entirely of steel trusses with iron purlins, to which the slate is fastened with copper nails.

The visitor to the new Westinghouse offices will find the very latest adaptations of the architect and the engineer in the heating, lighting and ventilating arrangements, and also in the

pneumatic dispatch and telephonic systems. The total number of employes at the company's works at East Pittsburg is close upon 5,500, requiring several special trains, each of twelve cars, for their conveyance to and from the works.



NEW OFFICE BUILDING OF WESTINGHOUSE ELECTRIC AND MFG. CO.

A covered way leads from the railway station to the new offices, which have three entrances on Cable street. The entrance hall and the upper hallways are tastefully decorated with white Sicilian marble, the walls and ceiling being paneled, and the floors are of mosaic and tile.

Freight cars from the Pennsylvania Railroad main lines are brought direct into the works for delivering foundry castings and other material, and for loading the finished electrical apparatus.

A novel feature has been introduced by devoting the entire end of the building, abutting upon Braddock avenue, to fireproof vaults. Twenty-four feet from the outer wall a fireproof brick wall is carried upward from the foundation to the roof, forming fireproof vaults upon the several floors, each having an area of 1,200 square feet. Entrance to these six vaults is through two sets of double fireproof iron doors on each floor. The vaults are for the safe custody of the valuable plans and blue prints of electrical machinery, the general books and records of the company, and for the large collection of negatives, photographs and electrotypes.

Upon the second floor, near the elevator, is a handsome reception room for visitors, comfortably furnished, and to the right a door opens upon the suite of rooms devoted to the managers and their assistants, including rooms for the president, vice-president, acting vice-president, the manager of works and for the clerical staff of this department. To the left of the entrance lobby are the general business offices, those of the sales manager and sales department and of the domestic and foreign correspondence departments.

The arrangement of the third floor is similar to that of the second. The suite of offices to the right are occupied by the Westinghouse Company's publishing department, and the purchasing agent and his staff. To the left from the hallway are the accounting offices, those of the auditor and his staff, the paymaster, the assistant treasurer and the offices of the legal department and of the cost department.

The entire fourth floor is occupied by the mechanical engineering department and by the draftsmen. These, as seen in the illustration, are numerous, and the general effect is familiar to all



VIEW IN DRAFTING ROOM.

draftsmen who have been employed in large offices before the introduction of the stall system. The electrical engineers are housed on the fifth floor.

Upon the sixth floor are two dining-rooms handsomely wain-

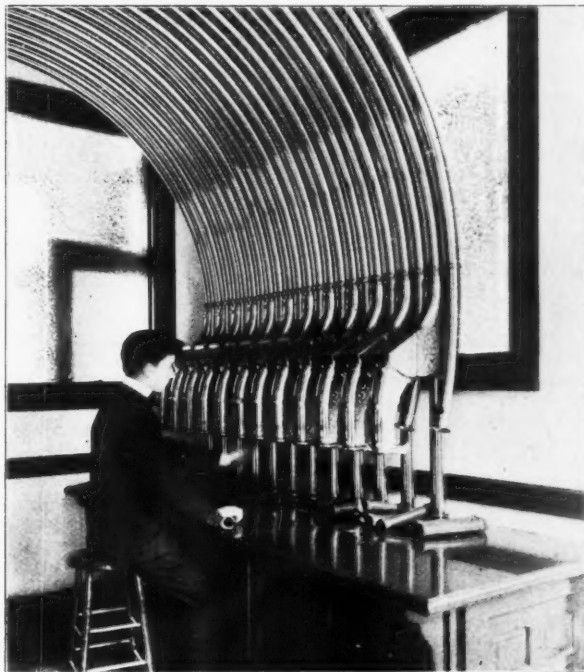
scoted with mahogany. Adjoining them is an ample kitchen and butler's pantry. One of the rooms of this floor forms the "Central" for the telephonic system and another serves as a dining-room for the female stenographers.

The ventilation of the building has had great care. Upon the sixth floor under the roof is a large horizontal ventilating shaft running from end to end of the building, flues connecting each room with the main shaft. An electric motor operates a fan in the center of the main shaft, which during the winter expels the vitiated air, driving it above the roof. Fresh air is admitted into the offices by a part of the heating system, passing through shafts in the wall behind radiators, which heat the air as it is admitted.

The building is amply lighted throughout by electricity, the current being obtained from the central power house of the company.

The heating of the building is by direct radiation, using steam from two 50-horse-power tubular boilers installed upon the ground floor. From the boiler the steam is conveyed to the top of the building by mains which extend horizontally above the sixth floor. When leaving the main the steam passes through a valve, reducing the pressure from fifteen pounds to one pound, and is then carried by risers to the radiators on each floor. An idea of the extensive nature of this heating system may be gathered from the fact that there are nearly fifty radiators on each floor, having 8,000 feet of radiating surface. Thermostatic valves automatically govern the temperature. When a certain amount of steam is admitted, the heat expands the joints, closing the valves and cutting off the steam, and when the temperature falls, the valves reopen admitting a further supply of heat. A vacuum-pump removes the condensed water from the radiators and pipes, and an electrically driven pump passes it to the boilers.

The two passenger elevators were supplied by the Crane Elevator Company. They have a traveling distance of seventy-two



THE PNEUMATIC TUBE SYSTEM.

feet from the ground to the sixth floor, each one being rated to carry 1,500 pounds four hundred feet a minute. They are operated upon the electro-hydraulic system, the mechanical plant being upon the ground floor. The hydraulic apparatus includes two large water-tanks, one of them containing water under pressure. Two Westinghouse type "C" motors operate pumps which force the water from the low-pressure to the high-pressure tank. As soon as the pressure is reduced to 100 pounds by using the elevators, a weight falls which automatically closes the switches and the electric motors commence to drive the pumps until the pressure in the tank is raised to 140 pounds, when the switches open automatically and the motors stop. As the water leaves the high-pressure tank it returns to the other one, and is thus used over and over again. To control the stoppage of the elevators when reaching the two extremes of their journey, there is a Crane cut-off valve, so that should the operator inadvertently fail to move the lever, the car slows down and stops automatically. Also a further protection is provided by a Crane safety clamp for stopping the elevator in case of accident to the hoisting cables.

Upon the sixth floor is the central telephone station, from which wires are carried to every room in the building, as well as to the various departments of the works, and from this point connection is made with the local and long-distance telephones.

Probably the most novel feature of the recent improvements made in the East Pittsburg establishment of the Westinghouse

Electric & Manufacturing Company is the system of pneumatic tubes, whereby all works departments and all the offices are connected through a central exchange station.

The central station of the pneumatic system is upon the second floor, and contains twelve sending and receiving tubes, furnishing service to all floors of the office building and to the important points in the works. The tubes are of 2½ inches brass, the longest line being 3,500 feet, the circuit of which can be made in from forty to forty-five seconds, or at a speed of about a mile a minute. The pressure or vacuum maintained is about twenty-four ounces, which is capable of handling a carrier and load equal to eight pounds at the speed mentioned above.

DISCOURAGING OUTLOOK FOR MUNICIPAL IMPROVEMENT.

PIGEONHOLED in the desks of the Municipal Art Association are several sets of elaborate plans which call for the beautifying in various ways of New York city. In them parks and streets have been filled with many devices which make them a pleasure to the eye while not harming their usefulness. There are also designs, or rather suggestions, of municipal buildings, beautiful without and within, for these impractical artists believe that a city might as well build things which have artistic value as well as things that to the end of their day remain things and nothing more. These artists and architects, says the New York correspondent for the *Boston Transcript*, went even so far as to hold meetings and discuss the feasibility of carrying out their plans or plans similar to them, and they ran the risk of the usual insult by going down to the mayor's office to talk with him about the subject. He listened to them and then carelessly dismissed them as vain and harmless cranks and dreamers.

Perhaps in some future day, when the present generations will have passed away, New York may become "publicly" beautiful; but that time has not yet come, nor does the city run much risk of ever having to spend any money for things which have no use except to give pleasure and comfort to the eye. It was only yesterday that the efforts being made to give New York buildings in some degree worthy of its size and importance met with another discouraging setback at the hands of the art critics of Tammany Hall. Mayor Van Wyck and his colleagues, acting under the advice of a firm of architects which gets all the city work when Tammany is in power, rejected the plans made for the new municipal building by Architect John R. Thomas, on the ground that they would be too costly, and at any rate, "New York didn't have no use to spend money on a lot of jimcracks such as the Strong administration wanted to saddle on it."

When the Strong administration decided to erect a building in which the various city departments could be housed it was thought worth while to have plans drawn for one which would not only serve its utilitarian purpose but also would be artistic. Except in its legislative and judicial branches the government of the city is homeless, and for years has been compelled to hire offices in buildings in different parts of the city, for the most part in the neighborhood of City Hall Park. The question of erecting a building for the offices of the various departments had for years been one of the things which were sure to come up every winter, and once a bill was passed in the legislature calling for the erection of a building on the site of the present city hall, and plans were chosen after a long competition in which many of the best architects of the country took part. But that scheme fell through chiefly because of the unwillingness of the people to part with the city hall, and after four or five years the successful architects received the prizes which had been offered in the competition, and the matter was dropped for good.

This original scheme had called for a huge building which would house the whole city government, and would cost, according to the first estimates, about \$25,000,000. The present building, however, will house only the more important of the administrative departments and will not encroach upon City Hall Park. The original appropriation for this was \$2,100,000, which was to pay for the exterior, and the exact amount to be spent on the interior was left to the future. Architect Thomas' plans for the latter called for the expenditure of \$2,500,000 more, and experts who had examined them said that the money would be well spent, for the designs were artistic and calculated to give the city a building that would be worth while.

Mayor Van Wyck was not satisfied with this, although it had been approved by the Municipal Art Association, and he turned the plans over to his own firm of architects, of whom nothing is known except that they have been doing all of the odd jobs of the city since Tammany came into power. They reported that the work could be done for a million less, and showed how the plans should be changed in order to bring about that end. Those who have seen them say that they are about as bad as they possibly can be, and that Mr. Thomas' indignation has firmer ground on which to base itself than mere hurt pride and the prospect of diminished fees.

Of course, politics is at the bottom of the business, for Tammany in the first place wants to discredit all that was done by the Strong administration, and in the second place it wants, by hook or crook, to displace the present contractor and to place in his stead some one that belongs to it. But, whatever the cause, the result is to be deplored by all who are anxious to see New York in its public buildings equal others of smaller size and importance. It is possible, of course, that the case may not be so bad as those

who are directly interested would make it out, but the chances are that if once the politicians of Tammany get their hands on the building what might have been worthy of the city will turn out to be a mere botch; nor are we at all sure that the cost will be less than the original plans called for.

It has ever been a standing reproach of New York that it contains no municipal building in any way representative of the city's wealth and importance. Of private buildings, especially among those which have been erected within the last two or three years, there are many which have strong claims to artistic merit, although there are more that are little less than eyesores; but of public buildings there is but one at which a stranger would cast a second glance. The City Hall is reckoned one of the best buildings of its kind in this country, and justly so; but even while admitting its beauty one can not help but see that however fit it was for its purpose when it was built, the city has long since outgrown it and it ought to be turned to some other use. Yet, when that building is named the list has been exhausted. Once the dreary old Tombs Prison had interest because it was a good specimen of Egyptian architecture, and had the merit of the unusual. But that has been torn down to give way to a huge pile of stone which, though it may be a much better jail from a sanitary and humane point of view, is as ugly as it well could be. The Criminal Courts building is somewhat better, but it is commonplace; and every one knows what a monstrosity the Tweed Courthouse is.

In Madison square, however, there is one building erecting which promises well, and as it is out of the power of the city administration to alter it, there is no reason why the original plans should not be carried to completion. It is the new marble structure in which the Appellate Branch of the Supreme Court will sit. It is over two years since the plans were completed, and although the work has not advanced very far, one can see that it will be an ornament to the city. In this case, except for the formal work of appropriating the money, the city government has had no chance to spoil it, for its supervision has been wholly in the hands of the court.

Under the present charter New York is in a better position to have good work done than it ever was before, because all things which even remotely touch on the artistic must first be submitted for approval to the Municipal Art Commission, which is supposed to have an absolute veto power. In most cases this power holds good, but unfortunately whenever it is worth while politically to overthrow it the politicians seem able to do so. Such was the case of the notorious Heine Memorial fountain which was unveiled in Bronx borough last July. After having been rejected by Düsseldorf and one or two other German towns, it was bought by the Germans of this city to be placed in one of the parks. The first spot chosen for it was the Plaza at Fifty-ninth street and Fifth avenue, the most desirable site in the city, and one which has had to bear assaults from every society that had a hero to celebrate since it came into existence. At that time there was a Municipal Art Commission which was to work in conjunction with the Park Commission, but its powers were merely advisory, and it could do nothing in the way of vetoing any attempt to foist on the city poor stuff masquerading under the name of art. That commission reported adversely on the fountain, but its report did not carry much weight as the would-be donors cried "jealousy," and said that it was impossible to judge of such a piece of sculpture from photographs and models. Then testimony was secured from foreign critics, who said that the fountain was bad, and that the real reason why it had been rejected by Düsseldorf was not the unwillingness to honor Heine, due to the anti-Jew feeling which was then very high in Germany, but it was the poorness of the work.

The fight was waged bitterly by both sides until the opponents secured the passage of a bill by the legislature which gave to the Art Commission power to refuse the fountain in the name of the city; a bill, by the way, which was so faulty that it could not have stood in any court. For a time nothing was heard of the fountain, except now and then a dispatch from some city in the interior would tell of its having been offered there and declined with thanks. When the new charter was made, special care was taken to make the powers of the Art Commission as broad as possible, and thus insure the city not only against bad statuary, but inartistic buildings which it might erect. Despite this, as soon as the Democratic Administration got into power it found some way of gratifying its German friends, and the fountain was finally set in a place which, though now inconspicuous, will some time be one of the most desirable sites in the city, for it is at the beginning of the new concourse which will be one of the finest driveways in the country.

This is merely a sample of some of the things with which those men who wish to make this city beautiful have to contend. Perhaps other places which are working along this line have similar experiences, but to those who see all that is being done here, it seems that the crass stupidity on the one hand and political trickery on the other is worse in New York than in any city of the country. Even Chicago seems to use more intelligence in the use and adornments of her parks and boulevards than New York, and when that is said nothing is left to the imagination. What with botched buildings, steam railroads in Central Park, merry-go-rounds in the most delightfully rustic part of Bronx Park, and a constantly increasing stock of impossible statuary, the task of making New York beautiful seems well-nigh hopeless.

Boutet de Monvel found artistic inspiration in New York's skyscraping buildings, and intimated that at some future day he

would make use of them in some pictures he intended to paint. Mr. William Archer was amiable enough to say that he found the elevated railway very artistic. Perhaps some one from the other side will appear some day who will approve of our postoffice and courthouse, and even find comfort in our new jail. Gathering all these kindly opinions together it may ultimately be possible to secure sufficient evidence to make out a good case in favor of the present beauty of New York. If so, perhaps standards will change, and all people will come to be as amiably complaisant as the well-bred foreigners. At any rate, with the present state of progress, that is the only method by which New York can become "the city beautiful" for many generations to come.

TENEMENT HOUSE PLAN EXHIBITION.

THE following is the announcement of the award of prizes in the competition for model tenements, authorized by the Tenement House Committee of the Charity Organization Society, of New York. The Jury of Award consisted of Mr. I. N. Phelps Stokes, chairman; Dr. E. R. L. Gould, president of the City and Suburban Homes Company; Mr. W. Bayard Cutting, president of the Improved Dwelling Association; Mrs. Roland C. Lincoln, of Boston, who has for many years managed improved tenements; Mr. W. R. Mead, of the firm of Messrs. McKim, Mead & White, architects, and Miss Lillian D. Wald, of the Nurses' Settlement. After much deliberation they made their decision as set forth in the following communication:

The Jury appointed by the Tenement House Committee to judge the plans submitted by architects in the competition organized by your committee, beg leave to report that they have been most highly gratified at the large number of excellent plans submitted. In their opinion no previous competition has ever presented so many varied and valuable suggestions for structural improvement and comfortable living in tenement houses. The results of such careful and intelligent study by so many architects can not fail to be helpful in the solution of the whole tenement problem, which is one of fundamental importance in great and growing cities.

With so many excellent plans before them the Jury have had a really embarrassing task. They have, however, with almost entire unanimity, agreed to "commend" the following plans in the different classes:

Class 1, 50 feet frontage:
No. 15, S. P. Ogden, 954 Lexington avenue.
No. 17, Walter P. Banks, Bridgeport, Connecticut.
No. 44, O. L. Spannhaake, 315 Madison avenue.
No. 80, Robert S. Farrington, 382 Mott avenue.
No. 146, A. A. Schuster, 37 Kingston avenue, Brooklyn.
No. 158, George Pallister, 32 Park place.
No. 176, Frank L. Baker, 16 East Twenty-third street.
Class 2, 75 feet frontage:
No. 57, Elmer C. Jensen, Chicago, Illinois.
No. 75, A. B. LeBoutillier, Franklin H. Hutchins, Albert A. Pollard, Boston.
No. 97, F. R. Comstock, 124 West Forty-fifth street.
No. 130, Ward & Davis, 203 Broadway.
Class 3, 100 feet frontage:
No. 96, F. R. Comstock, 124 West Forty-fifth street.
No. 129, Israels & Harder, 194 Broadway.
No. 160, Creighton Withers, 22 Bellevue avenue, Newport, and Francis E. Ward, 4 Warren street, city.
The Jury beg leave to "highly commend" the following plans:
Class 1, 50 feet frontage:
No. 10, George S. Drew, Jr., 304 East One Hundred and Twenty-third street.
No. 11, John Bagley Day, 19 West Twenty-fourth street.
No. 56, Adamo Boari, 17 Van Buren street, Chicago.
No. 125, Joseph Wolf, 1125 Broadway.
No. 128, Israels & Harder, 194 Broadway.
Class 2, 75 feet frontage:
No. 126, Israels & Harder, 194 Broadway.
No. 144, George M. Lawton and Robert B. Field, 95 Lenox Road, Brooklyn.
Class 3, 100 feet frontage:
No. 27, Stevenson & Greene, Temple court.
No. 99, R. Thomas Short, 3 West Twenty-ninth street.
No. 107, Covell & Smith, 152 Broadway.
No. 110, Frederick P. Kelly and Arthur E. Wells, 124 East Twenty-fourth street.
No. 115, Quinby & Broome, 99 Nassau street.

From among the highly commended plans the Jury have, with almost entire unanimity and after the most careful, prolonged and painstaking study, finally agreed upon the award of prizes as follows:

First prize, No. 99, R. Thomas Short, 3 West Twenty-ninth street.
Second prize, No. 126, Israels & Harder, 194 Broadway.
Third prize, No. 107, Covell & Smith, 152 Broadway; No. 125, Joseph Wolf, 1125 Broadway; No. 128, Israels & Harder, 194 Broadway.

In awarding the third prize the Jury felt that three plans presented such equal merits that they were unable to do otherwise than to recognize all of them. One of the members of the Jury has therefore generously agreed to donate \$100, and the Jury recommend that the Committee add \$25, making a total of \$225, to be divided equally between the three architects whose plans have been bracketed for third prize.

It is a matter of great regret that the Jury were deprived of the valuable assistance of Mr. John D. Crammins, one of the members originally appointed. Mr. Crammins was prevented from serving by illness which necessitated several weeks' absence in the South.

The Tenement House Committee is much gratified by the very excellent results that have been obtained by this competition, and feel sure that it will lead to a decided improvement in the type of tenement house erected in this city.

Yours sincerely,
LAWRENCE VEILLER, Secretary Tenement House Committee.

PAINTS IN ARCHITECTURE.

THE NUMBER OF COATS.

FOR cheap contract work, where the only object appears to be to get the job finished and sold, it is a sanctioned custom to give the building just as few coats as will make it look respectable. Since it is perfectly obvious that the chief item of expense is not the material, but the labor, this method is natural where the money to be made on the spot is the only consideration. Here thick pigment, with little oil and much turpentine or benzine is used, and in two coats the painter manages to get the surfaces tolerably obscured. The conditions prevailing on such a surface are a dearth of oil and an excess of pigment in two thick layers.

Now since one of the prime requisites to durability in paint is linseed oil, the curtailment of this ingredient must be injurious, especially if the pigment itself be pure white lead, which at its

best carries comparatively little oil and has a chemical effect upon a portion of that. Furthermore, since paints become solid and resistant through atmospheric oxidation of their contained oil, the thickness of such a coat will retard this action and will result in the production of unequal tension in the coating.

When, on the other hand, the paint is applied in thin layers, with plenty of oil, well brushed out, and ample time is allowed for the drying of each successive coat, the requisite conditions for durability have been fulfilled. It is perhaps safe to assert, without exceptions, that any paint thus applied will more than repay in added length of service the extra cost of the original work. On these grounds three or four thin coats are always more economical than two or three heavy ones; and *pari passu*, other things being equal, the pigments carrying the largest percentage of oil will also make the most lasting paints.

These are the principal grounds on which the value of zinc white as an ingredient of paint bases rests: It increases the relative proportion of oil required for application, makes thinner coats possible without reduction of consistency, and reduces the chemical reaction between the other pigments (especially the lead pigments) and the oil.

Four coats of a proper combination of zinc with lead or inert material, applied to well-seasoned wood in dry weather, with ample time allowed for the drying of each coat, should remain in good condition almost indefinitely; while two coats of heavy paint, with the dearth of oil eked out by volatile thinners, will perish almost in a single season.

CHARLES JOURDAIN.

NEW PUBLICATIONS.

THE catalogue issued by the Chicago Architectural Club for the Exhibition of 1900 contains 156 pages of printed matter, none of which are incumbered with advertising. The title-page is artistic in composition, printed in gold on dark green. The illustrations are profuse and well selected.

THE CORNICE WORK MANUAL. By Sidney P. Johnston. American Artisan Press. 1900.

This is a compilation of articles which have already appeared in the *American Artisan*. It is a book of reference for the workers in sheet metal rather than for architects. Indeed, architects of standing avoid the use of such shams as sheet-metal cornices, etc., although they are much used in inferior classes of buildings. For those engaged in such pursuits, the book will likely prove useful.

CHIMNEY DESIGN AND THEORY. By William Wallace Christie, New York: D. Van Nostrand Company. 1899. Price, \$3.

The first chapters of this work are devoted to the history of chimneys, also to the theory of chimney draft, etc., but the most of it is occupied by descriptions of chimneys that have been actually built. It is similar to Bancroft's "Tall Chimney Construction," but it also embraces the subject of steel chimneys, which, if we recollect correctly, Bancroft does not, and which is a valuable addition. We do not place very much reliance on chimney draft formulæ. There are quite a number of them, but that given in Kent's Pocket Book is perhaps as good as any, and possesses the merit of being very simple. A number of such formulæ are given in this work, from which one can make his selection. If any mistakes are made in erecting a chimney shaft, it is usually that its horizontal cross section is made too small. Much has been written about the proper size of such sections, and that they should neither be made too large or too small, but in our opinion the making of it too large is much the less evil of the two. There are very many chimneys which are too small, but very few which are too large. The writer has had this experience more than once: A boiler-house, with its accompanying chimney stack, has been erected so as to hold a number of boilers, say eight. It was not intended to put up eight boilers at first, but rather to put them up as the business grew, say one boiler was erected per year, the chimney shaft, of course, being put up large enough for eight boilers, which it was ultimately destined to serve. When at first but two boilers were used, the draft was more than ample. As time passed the successive boilers were put up, the draft remained quite sufficient for the eight boilers, yet in every instance the draft diminished as each successive boiler was erected.

STRUCTURAL MECHANICS. By Charles E. Greene, Ann Arbor, Michigan. Printed for the Author. 1897.

This book is a collection of rules and methods for solving the problems that occur in the erection of structures, both of an engineering or of an architectural character, by a professor in the University of Michigan. The name of the author may recall to the memories of some of the older men another work by the same author, published in Chicago some twenty years or more ago, by the *Engineering News*, which, at that time, was published here. The book was the "Graphical Analysis of Roof Trusses," which was an elementary work on graphics, published at a time when graphics were just beginning to be considered, and was, we think, the first American book published on that subject; it was just such an elementary work as was needed at the time, and was warmly welcomed by the public. The present work is not an elementary one in the ordinary school sense. It is intended apparently and principally for post-graduates of technical schools who may need at times to carry a problem farther than the time that can be given to instruction therein in a school will permit; in any case, the book is valuable for reference, and to aid in the solution of such problems as arise in the practice of an engineer or architect, and to refresh the memory. It can not be said to con-

tain rules, etc., that are original, but they appear to be both standard and reliable. A professional man in active practice has many other things to think of than symbols, so that his mind is apt to be greatly burdened. He can not always stop to find the exact meaning of a symbol, though the explanation may be hid away somewhere in the book. There should be a symbol index to which ready reference can be had without delay, and no shadow of doubt as to the meaning of symbol entertained. There are quite a number of problems in the book which will interest those for whom the book is intended.

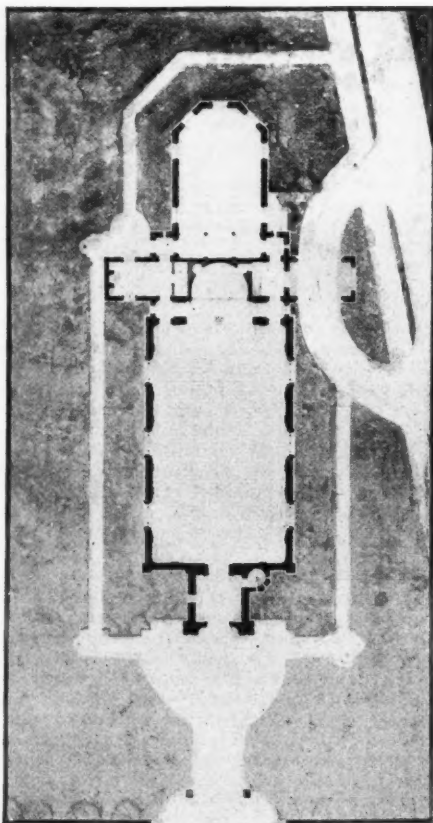
OUR ILLUSTRATIONS.

Selections from Chicago Architectural Club Exhibition of 1900, as follows: Villa Crest, Summer Residence at Manchester, Mass., Arthur Heun, architect, Chicago, two views; Crowhurst, Residence of Architect Francis M. Whitehouse, Manchester, Mass.; Westminster College, Cambridge, Henry T. Hare, architect; Northwestern University Settlement, Dwight Heald Perkins, architect; University of Chicago Settlement, Dwight Heald Perkins, architect; All Souls Building, Chicago, Frank Lloyd Wright and Dwight Heald Perkins, architects, associated; design submitted in Mexican National Capitol Competition by Adams Boari, architect, awarded first prize; design submitted in New York Customhouse Competition by Israels & Harder, architects; Buildings for College of Agriculture, University of Illinois, J. C. Llewellyn, architect; Studio of Frank Lloyd Wright, architect, exterior and interior views; Dwelling for E. C. Waller, River Forest, Frank Lloyd Wright, architect; Dwelling for Mrs. Robert Eckart, River Forest, Frank Lloyd Wright, architect.

Selections for American Architectural Exhibit at Paris Exposition, Wilson Eyre, Jr., architect: Cottage, Germantown, Pennsylvania; house for Craig Haberton, Camp Hill, Pennsylvania; house for Charles Bone, Jenkintown, Pennsylvania.

The façade and details for the United States exhibit in the Palace of Mines and Metallurgy adjoining the Champs de Mars, Paris Exposition; designed and executed by Winslow Brothers Company, Chicago, under the direction of the Directory of the United States Government Commissioners; cost about \$20,000. The façade is 162 feet 5 inches long and constructed of bronze with a rich satin finish produced by a novel process by use of emery. The onyx, marble, granite and different stone used for columns and bases enhance the effect of the bronze and represent the product of American quarries.

Photogravure Plate: Shepard Memorial Church, Scarborough, Haydel & Shepard, architects, New York. Selected for American Architectural Exhibit, Paris Exposition.



PLAN OF CHURCH.

PHOTOGRAVURE PLATES.

Issued only with the Photogravure Edition.

Banking House for the Messrs. Borie, Philadelphia, Wilson Eyre, Jr., architect. Selected for American Architectural Exhibit at Paris Exposition.

Main Hall, House in Germantown, Pennsylvania, David Knickerbacker Boyd-Lawrence Visscher Boyd, associate architects, Philadelphia. View in Dining-room also shown.

Avondale Presbyterian Church, Elzner & Anderson, architects, Cincinnati, Ohio. Four full-page plates are shown as follows: Exterior view, view in vestibule, chancel, view looking toward gallery.

MOSAICS.

THE Atelier Fitzwilliam has been opened at 1101 Auditorium Tower, for instruction in architectural design and rendering by *Beaux-Arts* methods, with individual criticism, by F. J. Fitzwilliam, pupil of D'Espouy, who was gainer of the "Grand Prix de Rome" in 1884, and member of the jury of awards of the Ecole des Beaux-Arts. Mr. Fitzwilliam is a graduate of the University of Pennsylvania, class of 1896. He also studied with De Monclos at Paris, and with Masquery in New York.

THE isolating and fireproofing efficiency of mineral wool has long been recognized, but it is now manufactured in the new form of mineral wool boards of any desired thickness, so that this isolating material can be applied easily and cheaply in any place where an ordinary board can be nailed, and can be similarly cut and sawed to meet all requirements. The Cellular Insulating Company, of Chicago, has recently furnished the largest shipment of mineral wool ever made for the United States Government for use in the cold storage plant constructed at Manila. This consists of one hundred and forty tons of their product, and was adopted after the most exhaustive investigation in regard to its isolating and fireproofing qualities. The wool in its ordinary cellular form takes the place of all filling materials for deadening or isolation from heat or cold.

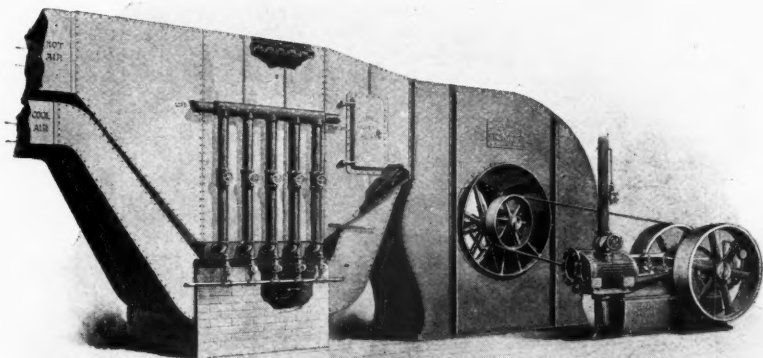
BUILDING OUTLOOK.

OFFICE OF THE INLAND ARCHITECT, {
CHICAGO, April, 1900. }

It is needless to remark concerning local conditions. Throughout the country at large prosperity prevails. Builders are preparing for a season of great activity. Building material of all kinds is high, but in many lines not advancing. Preparations are being made for an enlargement of operations calling for building material, particularly in the erection of manufacturing plants, most of them of large capacity. Railroads will be large buyers of material and will do a great deal in the way of track-laying, station-building, erection of terminal facilities, and in other ways will absorb a large amount of lumber, bricks, etc. Most of the builders will be buyers more or less extensively of building material and the opinion of leading interests in this line is that the prices will remain at a high level throughout the season. As far as small houses are concerned, there will be the usual rush of work, excepting in localities where there are signs of overbuilding. Iron and steel, nails and hardware are all high and will likely remain about where they are, builders' hardware especially. Glass is cheaper relatively than any of the other articles of building material, owing to the fight between the controlling interests. Cement rules high, shingles, lath, etc., are also high; raw paper and material for interior decoration rule high, and, in a general way, the cost of construction is above the level of last year. This will, of course, interfere with building to a certain extent, but authorities on the subject differ as to the volume of business and to the amount of repression. The general consensus of opinion, however, is that there will be more work done this year than last, the reason being that the prosperity of the country warrants it, and, in fact, demands the extension of building operations, particularly in the building of factories. Manufacturing interests are extremely prosperous, margins are large and steady. Activity is guaranteed for the balance of the year. Everywhere we look there are evidences of prosperity, health and vigor. The action of the Government in creating a large circulating medium will have a beneficial effect. Opinions differ as to the volume of the increased circulation, but a fair statement is that within one year, or year and a half at most, the increase may reach \$100,000,000 through the surrender of bonds and their refunding in 2 per cent bonds. No other government on the face of the earth is able to borrow money on such favorable terms. Among the leading activities this year will be railroad building, trolley-line building, factory expansion, an increase in mining development and a general expansion of manufacturing activity. All evidences are of a sort to stimulate and encourage. There is nothing to arouse suspicion or alarm. There may be considerable discontent over the attitude of trusts and of their growing power, as well as those of the trades-unions, but there seems to be no way of controlling the former at present; no matter which political party may succeed, they will find this problem one beyond their comprehension. Reports from iron and steel mills throughout the country show an enormous amount of business in hand. Prices have been weakening a little, but there is no danger of a general drop. Reports from lumber centers, both North and South, show an enormous demand for all kinds of lumber, from the log down to the shingle and lath, and the indications are that the capacity of the lumber mills will be kept busy throughout the year. The agricultural implement establishments are all busy with orders for months ahead. It is evident that the agricultural area both North and South, for corn, wheat, cotton and other products, will be worked to its utmost capacity.



Buffalo Fan System of Heating, Ventilating, Drying and Cooling.



Apparatus arranged for a Double Duct System.

Electric Light Engines, Forges,
Blowers, Exhausters.

Buffalo Forge Co.

BUFFALO, N. Y., U. S. A.

New York. Chicago. Cleveland. Philadelphia.



DIXON'S SILICA GRAPHITE PAINT

FOR TIN OR SHINGLE ROOFS AND IRON WORK. Tin roofs well painted have not required repainting for 10 to 15 years.
IT IS ABSOLUTELY WITHOUT AN EQUAL.

If you need any paint it will pay you to send for circular.

JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J.

Chicago Floor Company

Manufacturers, Jobbers and Layers of

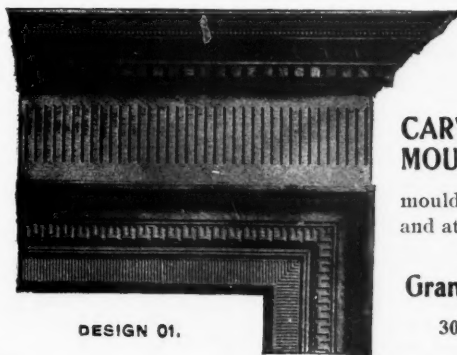
Ornamental Hardwood Floors, Parquetry, Wood Carpet, Grilles.

155 WABASH AVENUE (near Madison St. Station),

Telephone, Central 1043.

Send for catalogue, free.

CHICAGO.



DESIGN 01.

The Real Thing!

CARVED WOOD MOULDINGS :::: Made by machine. Not pressed or burned; not metal, but wood. These mouldings are more perfect than hand work, and at a very small per cent of cost.

Grand Rapids Carved Moulding Co.

30 to 35 Myrtle St., GRAND RAPIDS, MICH.

W. W. ABBOTT

MANUFACTURER OF

Picture Frames

FRAMES MADE
TO ORDER.

ARCHITECTURAL
DRAWINGS
REMOUNTED.

MATS AND PASSEPARTOUTS

Telephone, Central 2087.

182 Wabash Avenue, CHICAGO.



The improved Shingle Stain and preservative. Imparts an artistic finish to shingles and prolongs their life by penetrating the pores of the wood and retarding decay.

SHINGLETINT is made in all desirable shades, is easily applied, the colors are permanent, and money is saved by its use.

Full information and finished samples of wood mailed free for the asking.

BERRY BROTHERS, Limited

Varnish Manufacturers,

DETROIT, MICH.

NEW YORK, 252 Pearl St.

CHICAGO, 15 and 17 Lake St.

BOSTON, 520 Atlantic Ave.

CINCINNATI, 304 Main St.

PHILADELPHIA, 25 and 28 N. Fourth St.

ST. LOUIS, 112 S. Fourth St.

BALTIMORE, 22 E. Lombard St.

SAN FRANCISCO, 117 and 119 Market St.

Without Using Any Chemicals

SCAIFE FILTERS

WILL FURNISH

CLEAR, PURE WATER.

CAPACITY: 10 TO 10,000 GALLONS PER HOUR.

Simple in Construction

Easy to Operate

Results Guaranteed

SEND CATALOGUE ON APPLICATION.

Wm. B. Scaife & Sons, Pittsburg, Pa.

Martin G.

GOOD

Photographic

Supplies for

Architects and

Draftsmen.

92 State Street,
CHICAGO.

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.

THE INLAND ARCHITECT AND NEWS RECORD

Vol. XXXV.

ADVERTISERS' TRADE SUPPLEMENT.

No. 3

Valuable Publications Free.

Any architect can secure valuable books of reference without cost by sending for the catalogues of materials, etc., noticed from month to month in these columns. Large sums are spent on these catalogues, and they contain much practical information. Many are art productions. They may be obtained free on application to those issuing them. In writing please mention **THE INLAND ARCHITECT**, and oblige the journal and the dealer.

REQUESTS FOR CATALOGUES AND SAMPLES.

Those wishing catalogues and samples sent them by dealers in general may have their names inserted under this heading free of charge. The only recompense desired is that the dealers who send catalogues to these addresses give **THE INLAND ARCHITECT** due credit for business benefits that result.

ARTHUR J. WILLIAMS, Architect, Oklahoma City, Oklahoma.

BUILDERS' EXCHANGE, 204 St. James St., Montreal, Canada. Ask for catalogues, etc.

MR. JOHN STAFFORD WHITE, who has been in charge of the draughting room of the St. Louis office of Messrs. Shepley, Rutan & Coolidge for the past three years, announces that he has opened an office in the Chemical building for the practice of architecture, the rendering of architectural drawings in water-color and pen-and-ink, and the making of special designs for furniture, gas fixtures, etc. He will be pleased to receive samples, etc., from the trade.

COWLES & EASTMAN, Architects, Calumet, Michigan.

The general offices of the J. RIELY GORDON COMPANY, Architects, have been moved from San Antonio, Texas, to their new building, corner Main and Field streets, Dallas, Texas, where they will be pleased to receive catalogues and samples.

USES OF VARNISH.

The most recent and perhaps the most important application of varnish to architectural work is in the finishing of hardwood floors, the varnish used for this purpose being known as "Supremis Floor Finish," a product of the Chicago Varnish Company. Almost from time immemorial the only finish known for a hardwood floor has been wax; in Europe no other is used, but in America a new departure has been made, and varnish is now considered the floor finish *par excellence*. Sixteen years ago this material was unknown in the architectural world; it is now universally known and used, and the only seeming drawback to its use is the supposed difficulty in removing the old wax finish from the floors. Methods of doing this are now in vogue and enable any one to perfectly remove all wax and to fit any floor for application of varnish. A booklet, "The Treatment of Floors," issued by the above-named company, and which will be furnished on application, gives much valuable information on this matter.

White Enamelite and Shipoleum are two other products of this company which are deserving of notice. The former is an excellent enamel paint for Colonial interiors, while the Shipoleum makes a beautiful finish and is very desirable. An advertisement of this company appears in the current number, and the firm will be pleased to correspond with any interested in the matter.

AUTOMATIC CONTROL OF TEMPERATURE.

The importance of temperature regulation can hardly be overestimated. And while this is true in its general application, it is doubly true of heated buildings. It is unnecessary to call attention to the fact that much more and better work can be done in an office where the temperature is at all times at the proper stage. So also in schools. No teacher or pupil can do good work in an irregularly heated room, and more important than this is the fact that the foundation of disease is often laid in a schoolroom subject to quickly changing temperature. Another point is the fact that a teacher is a

poor judge of how the temperature is affecting the pupils. It is probably not too much to say that an automatic device for the regulation of temperature in any heated building, be it office, school, hotel or apartment, is superior in the result secured to anything achieved by a janitor or other person in charge. In this connection it is proper to call attention to Powers' automatic device, manufactured by the Powers Regulator Company, 40 Dearborn street, Chicago. The claims for this device, which appear to be well established, certainly recommend it to the attention of all those interested in this very important subject, as it not only secures the comfort and health of the occupant of a room or building regulated under this system, but has an added value in the economy in fuel. This system of heat regulation added to a building makes it certain that the rooms will none of them be overheated and therefore no more fuel used than is absolutely necessary. It is claimed that under ordinary conditions fifteen to twenty per cent is lost in overheating, which loss is entirely eliminated by using the Powers system. These facts are of such generally recognized importance that progressive architects are specifying temperature regulation in a great majority of our modern buildings. The Powers Company will be pleased to furnish its descriptive catalogue on application.

COLD WATER PAINT.

Among the valuable improvements in the decorative and preservative art recently brought to public attention is the Lythite Cold Water Paint. It is prepared in the



form of a dry powder in a variety of tints, and is ready for application by the simple addition of cold water. It is both weather-proof and fireproof, very easily applied, and the cost is only about one-half that of oil paint, to which for certain classes of work it will undoubtedly prove to be preferable. While it is a new product, it can hardly be called an experiment, as those manufacturing it have had years of experience in the preparation of paints, and the new product is the result of careful study along this line. Its use for interior or exterior application to factories, farm and railroad buildings, tenements, hospitals, etc., is specially commended. Adams & Elting Company, Chicago, are the general Western agents, and will be pleased to furnish estimates and prices on application.

TRADE NOTES.

THE Kenney-Flushometer System had a very successful season the past year, as indicated by the large number of installations in all parts of the Union. The sanitary condition of all buildings is of such importance that architects and builders are quick to recognize a really meritorious appliance bearing on the subject. The Kenney System is based on correct principles, and its undoubted success is well deserved.

THE Elevator Supply & Repair Company, of Chicago, has issued an attractive booklet descriptive of their system of electric signals for passenger elevators, which has come to be recognized as a most valuable adjunct to the modern passenger elevator plant. These signals have been endorsed and are now in successful operation in many of the principal office buildings throughout the United States and it has been demonstrated that they add very materially to the efficiency and also to

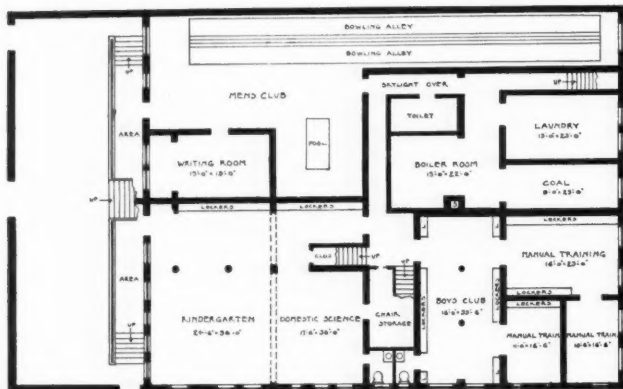
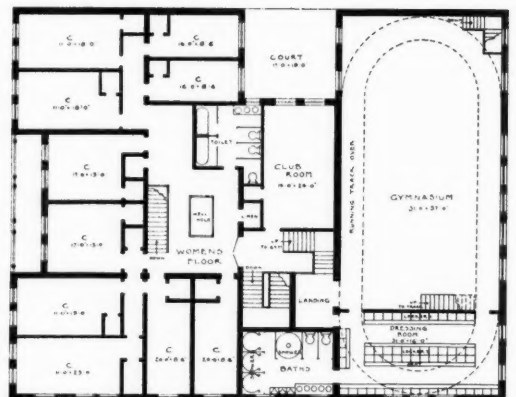
the economy of operation of these elevators. The construction is very ingenious and is certainly worthy of consideration.

TRAVELING on the Burlington Railroad on the way to Denver, a little town called Atlanta, near Hastings, Nebraska, is pointed out as a point of interest because of the corn cribs built there along the tracks. In all there are twenty-four separate cribs, 12 feet wide and 12 feet high, with a total length of 5,964 feet, or a distance of nearly a mile and a quarter. This year's enormous crop (three hundred million bushels for the State of Nebraska) will test their capacity. Everybody seems prosperous in Nebraska. Nobody complains but the bankers, who find it hard to lend their money. Nobody wants to borrow it.

THE Aquila Rich Paint & Color Company, of 257 Dearborn street, Chicago, suffered considerable loss by fire a few weeks ago but are now fully refitted and doing their usual good business. In addition to a full assortment of colors in the standard grades of paints, they specialize on oils and varnishes. "David B. Crockett's Preservative" is one of their leading lines. It is a transparent architectural wood finish, and it is claimed to have no superior for use on interior surfaces finished in the natural wood, and is especially recommended for use in dining-rooms, bathrooms, hospitals, and in fact in all places where moisture often spoils the effect of the more ordinary brands of oils or varnishes.

NELSON'S Metallic Tension Bridging is certainly a meritorious departure from the ordinary wood bridging in several particulars. On the score of economy it is an improvement both in time and material. It overcomes the irregularity of spaces between joists; and in this respect, if it had no other advantage, it would claim superiority over wood. The metallic bridging is made of 3/8-inch wire with ends pointed and bent at right angles. These ends driven into the upper edge of one joist and into the lower edge of the next, after the floor is laid, make the floor a unit of tensile strength. It is cheaper than 2 by 4 wood-bridging, and can be put in place in much less time. In factories and basements where the bridging is exposed there is no accumulation of dust or dirt. Another marked advantage over wood bridging is noticeable when plumbing is considered. The A. H. Pierce Manufacturing Company, 108 North Green street, Chicago, is putting this product on the market and will be pleased to furnish more detailed information on application.

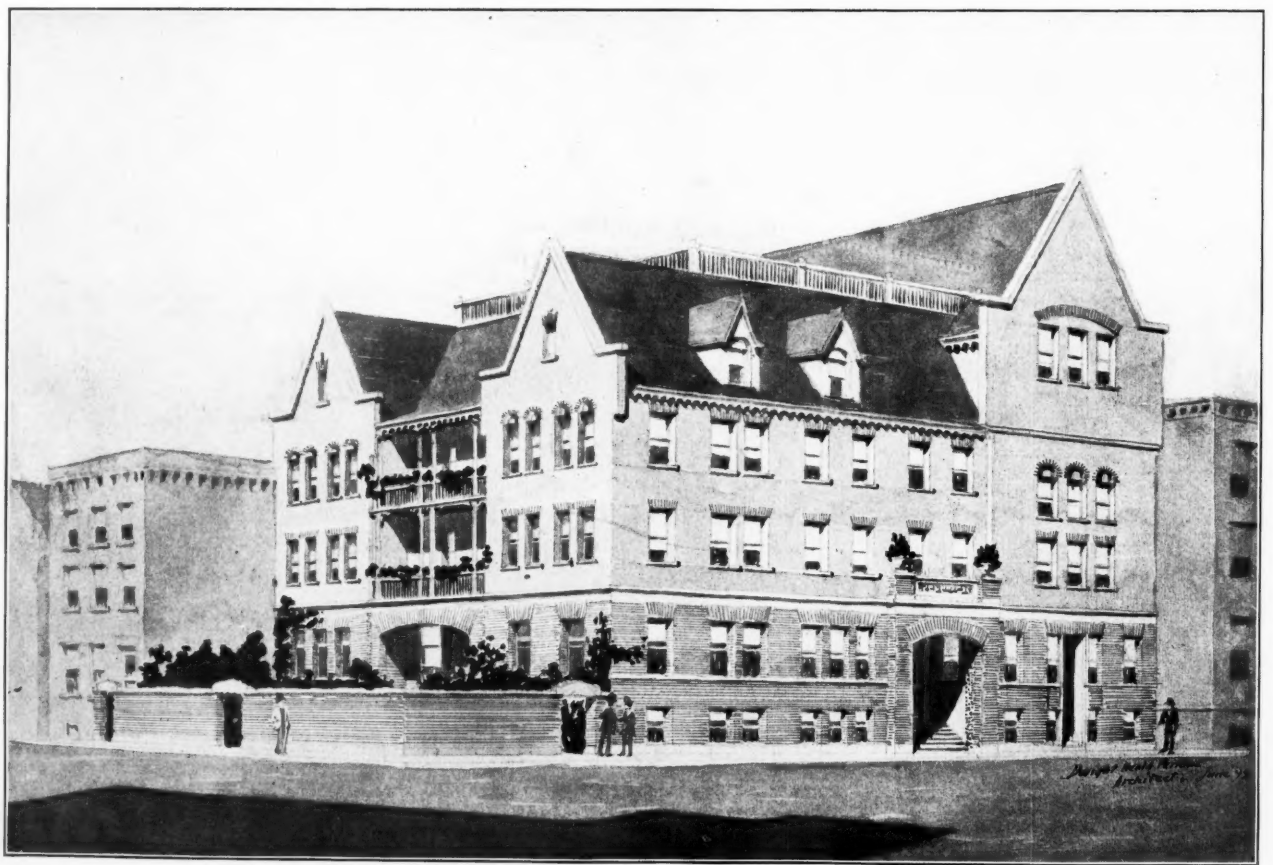
PROBABLY a gallery of paintings is the hardest thing there is to light satisfactorily, and the fact that all the curators of all the leading American galleries unite in pronouncing the Frink system to be unqualifiedly the best, is the strongest proof of its superiority, for curators as a class are exceedingly exacting in everything that relates to the proper exhibition of the art treasures in their charge. As the up-to-date store window presents an exactly identical problem of lighting, it naturally follows that the Frink Window Reflector—which is the Picture Reflector adapted to show windows—is the best picture for window lighting. We see many makeshifts that are an attempt to force other kinds of fixtures into conformity with the true principles of window and picture lighting, but if any other arrangement of lighting devices were as good as the Frink Special Reflector, would not some of the leading galleries have adopted it? No merchant who has once used it can be persuaded to make experiments with other fixtures, while those who first try the "just as good" arrangements frequently install the Frink Reflector when enlarging or remodeling their stores.



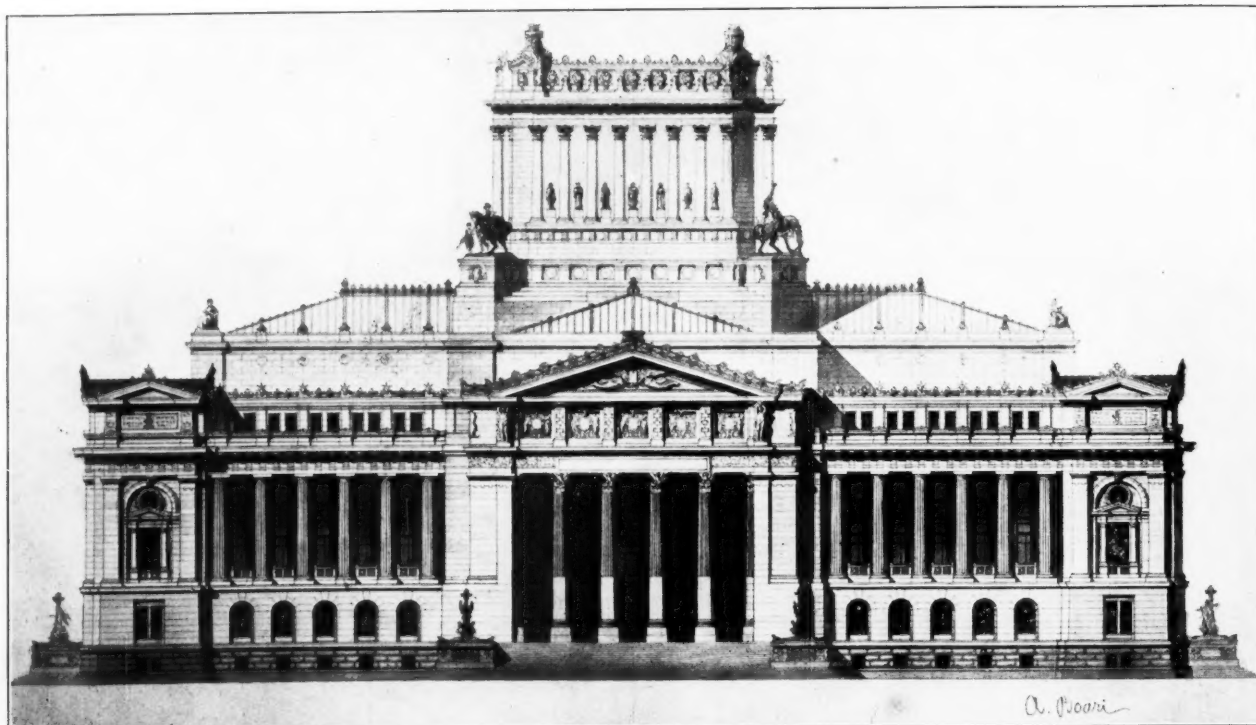
First Story.
Basement.

PLANS.

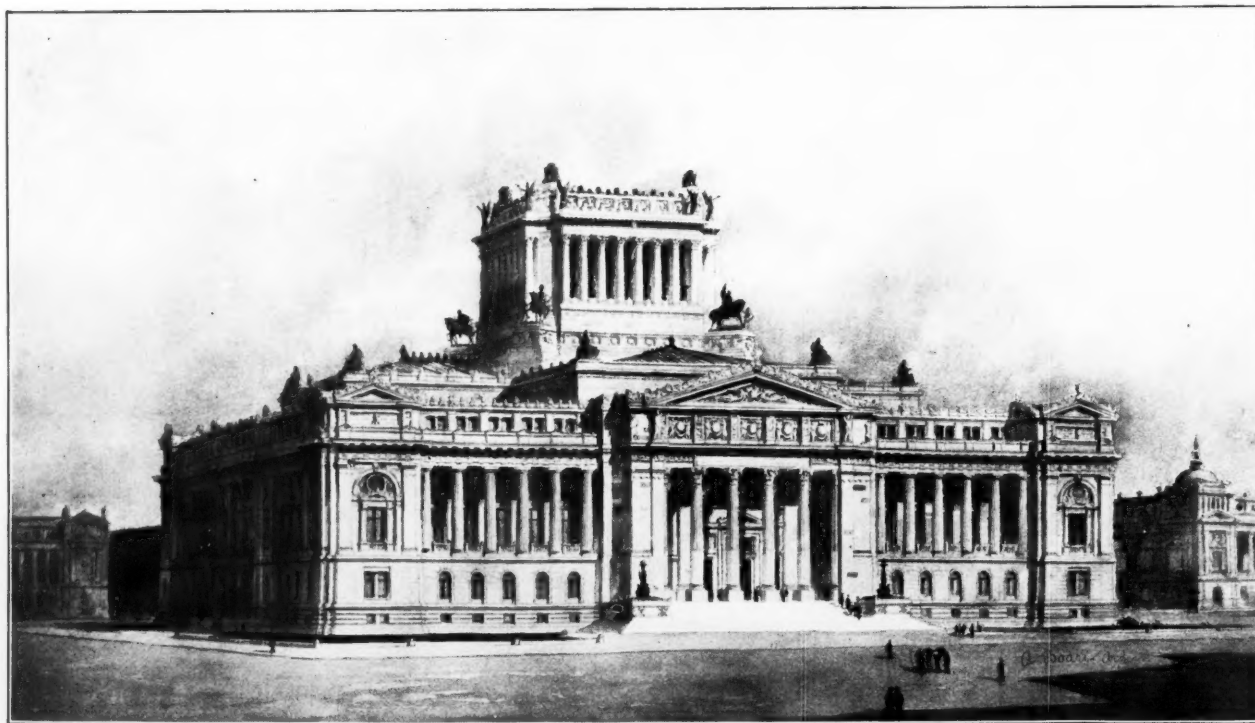
Third Story.
Second Story.



NORTHWESTERN UNIVERSITY SETTLEMENT.
Dwight Heald Perkins, Architect.



Elevation.



DESIGN SUBMITTED IN MEXICAN NATIONAL CAPITOL COMPETITION.
By Adamo Boari, Architect. Awarded First Prize.

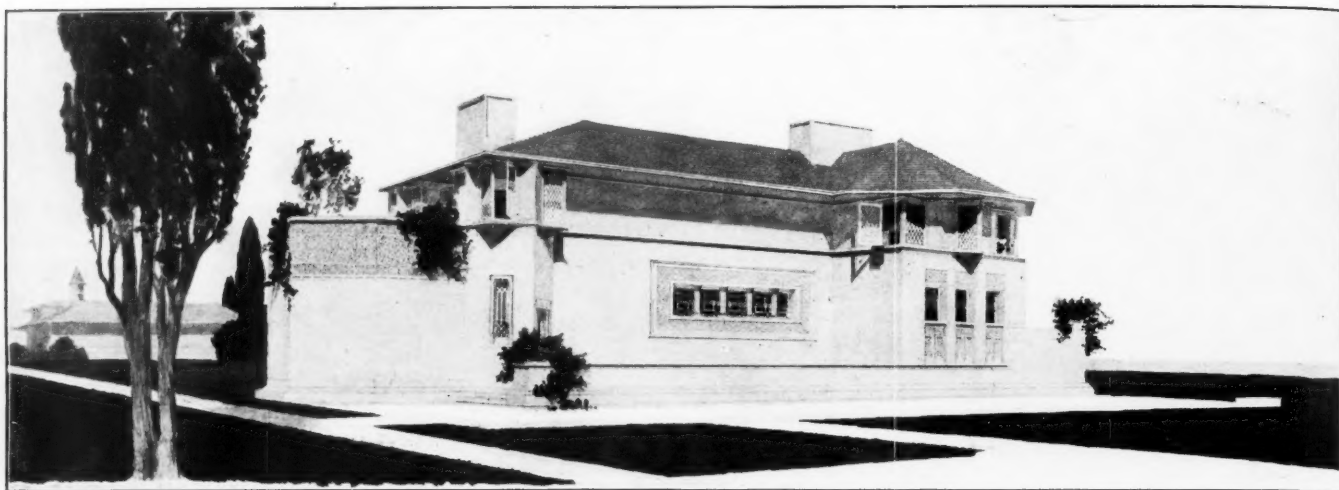
SELECTIONS FROM CHICAGO A



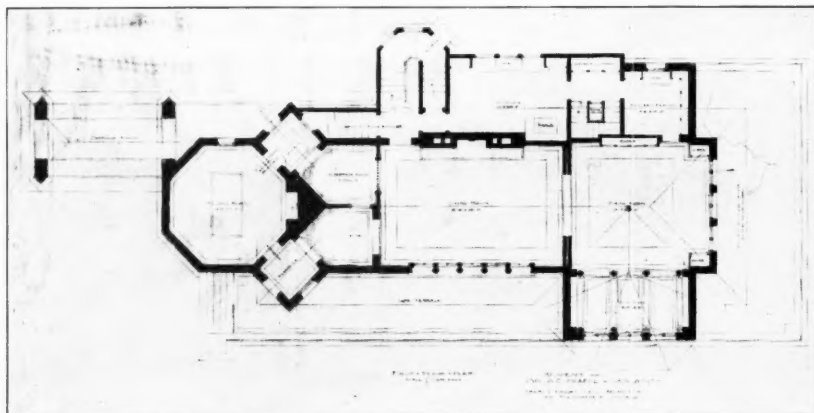
VILLA CREST. VIEW IN COURT.



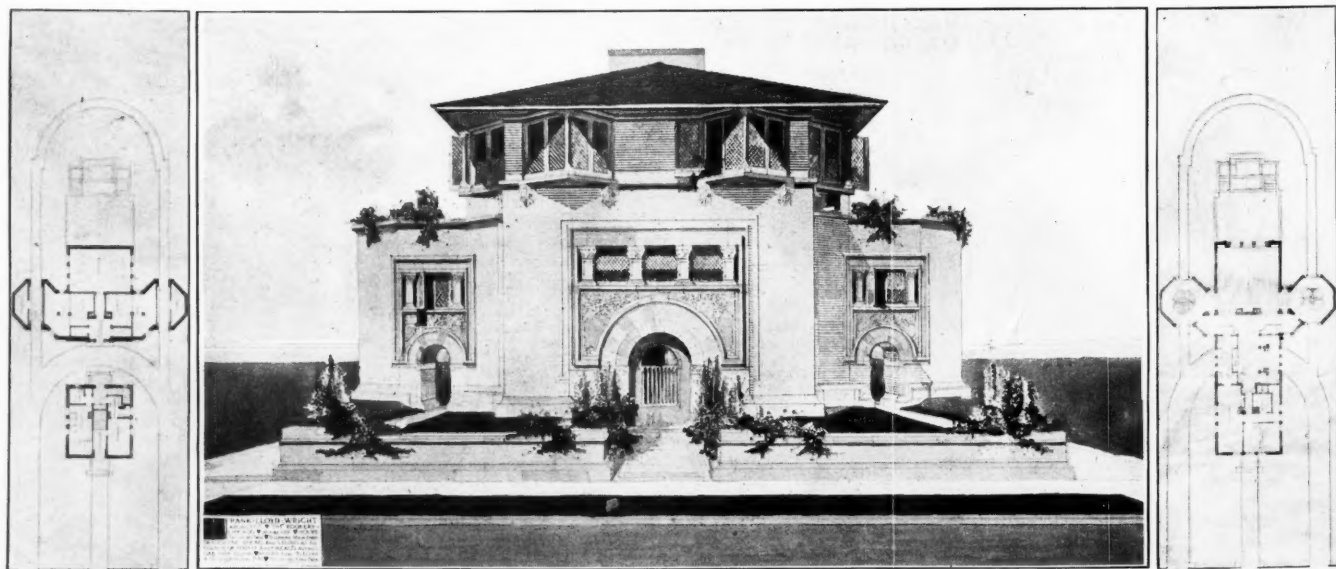
VILLA CREST, SUMMER RESIDENCE AT MANCHESTER, MASS.
Arthur Heun, Architect, Chicago.



SKETCH FOR MR. A. C. MCAFEE.
Frank Lloyd Wright, Architect.

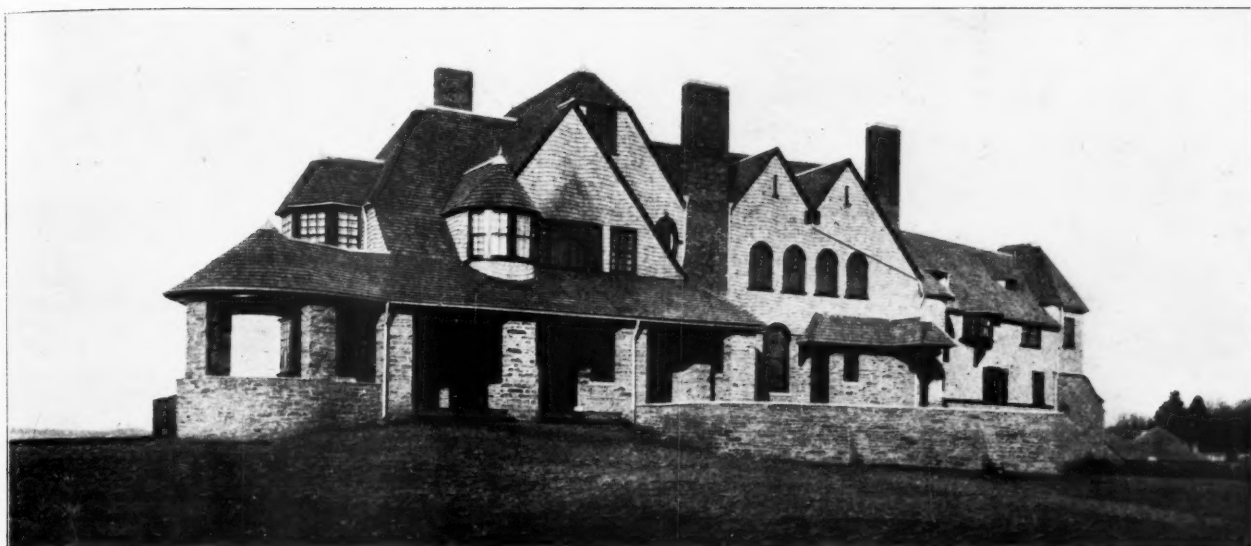


PLAN.



SKETCH FOR MRS. DAVID DEVIN.
Frank Lloyd Wright, Architect.

Suburban lot, 65 feet on Sheridan Road, extending 200 feet to Lake Michigan. Problem: To take full advantage of lake front, with due respect to Sheridan Road and neighbors.



HOUSE FOR CRAIG HEBERTON, CAMP HILL, PA.
Wilson Eyre, Jr., Architect, Philadelphia.



COTTAGE, GERMANTOWN, PA.
Wilson Eyre, Jr., Architect, Philadelphia.



HOUSE FOR CHAS. BONE, JENKINTOWN, PA.
Wilson Eyre, Jr., Architect, Philadelphia.

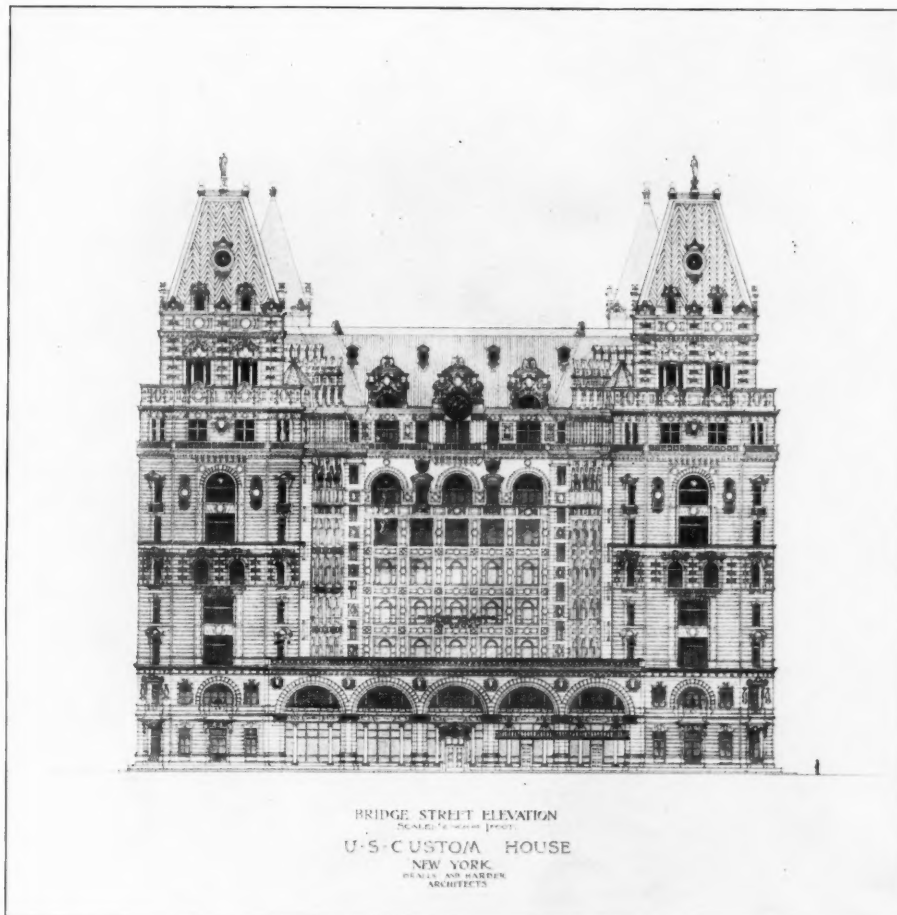
SELECTIONS FROM WORK OF WILSON EYRE, JR., FOR AMERICAN ARCHITECTURAL
EXHIBIT, AT PARIS EXPOSITION.



WESTMINSTER COLLEGE, CAMBRIDGE.
Henry T. Hare, Architect.



CROWHURST — RESIDENCE OF ARCHITECT FRANCIS M. WHITEHOUSE, MANCHESTER, MASS.

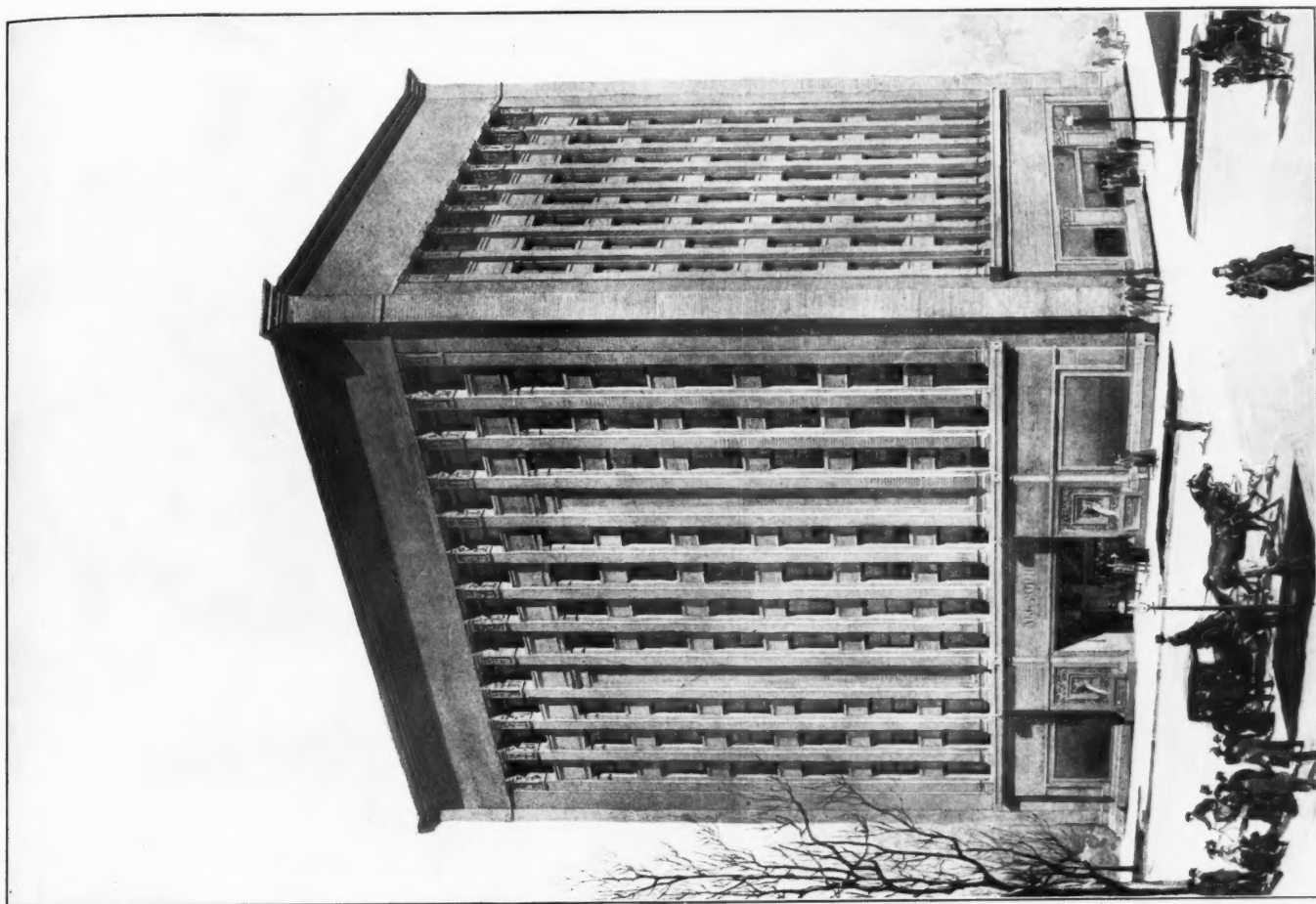


DESIGN SUBMITTED IN NEW YORK CUSTOMHOUSE COMPETITION.
 By Israel & Harder, Architects.

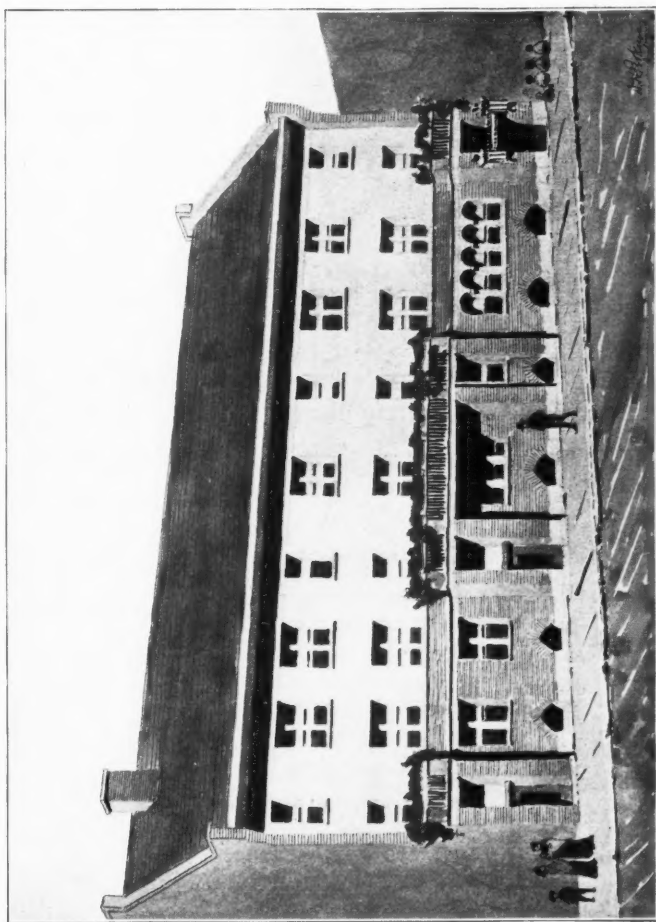
BUILDINGS FOR THE COLLEGE OF AGRICULTURE - UNIVERSITY OF ILLINOIS -
 J. C. LEEVELLYN - ARCHITECT "RIB ASSOCIATION BUILDING - CHICAGO



LECTURAL CLUB EXHIBITION OF 1900.



ALL SOULS BUILDING, CHICAGO.
Frank Lloyd Wright and Dwight Heald Perkins, Architects, Associated.

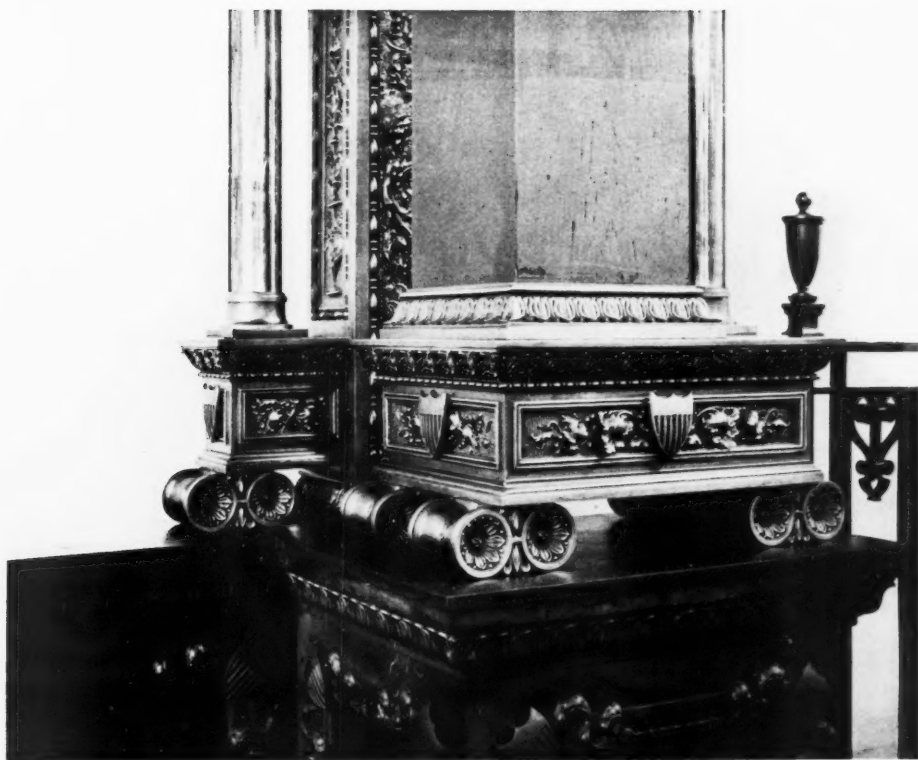
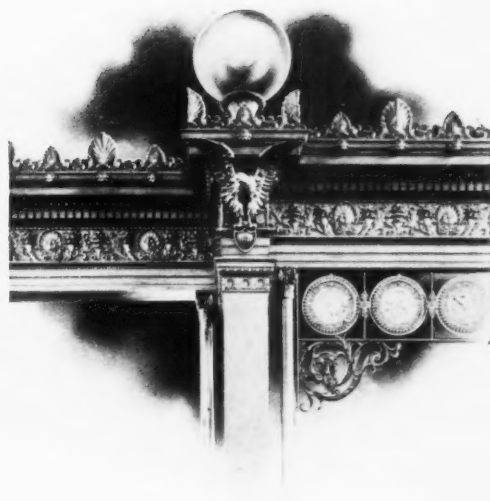
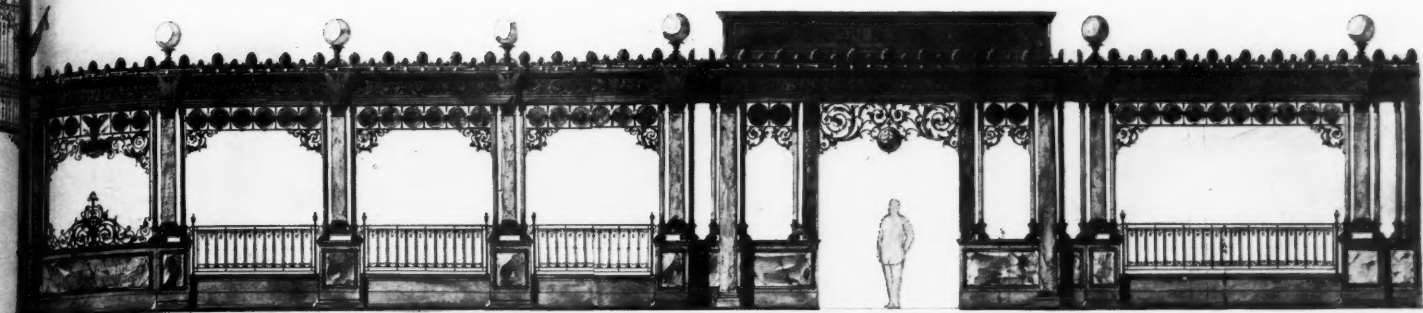


UNIVERSITY OF CHICAGO SETTLEMENT.
Dwight Heald Perkins, Architect.



THE FACADE AND DETAILS FOR THE UNITED STATES EXHIBIT, PALACE

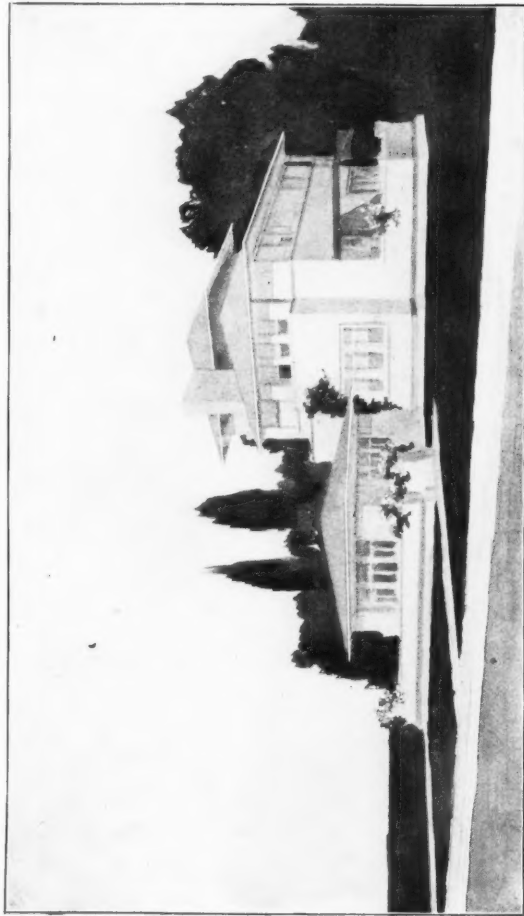
DESIGNED AND EXECUTED BY WISLOW BROS.
 Façade is 162 feet 5 inches long and constructed of



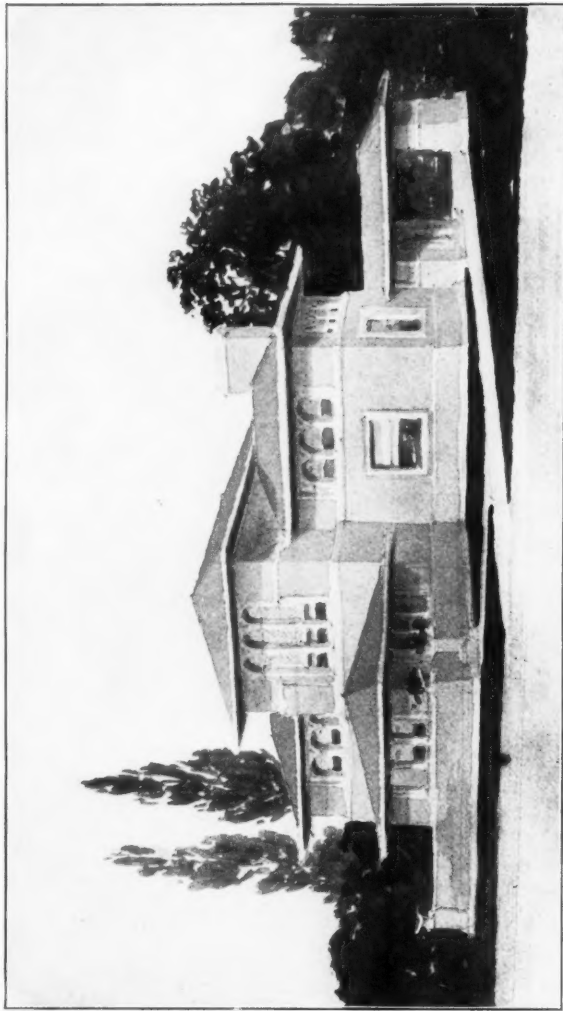
PALACE OF MINES AND METALLURGY, PARIS EXPOSITION OF 1900.

WISBLOW BROTHERS CO., CHICAGO.

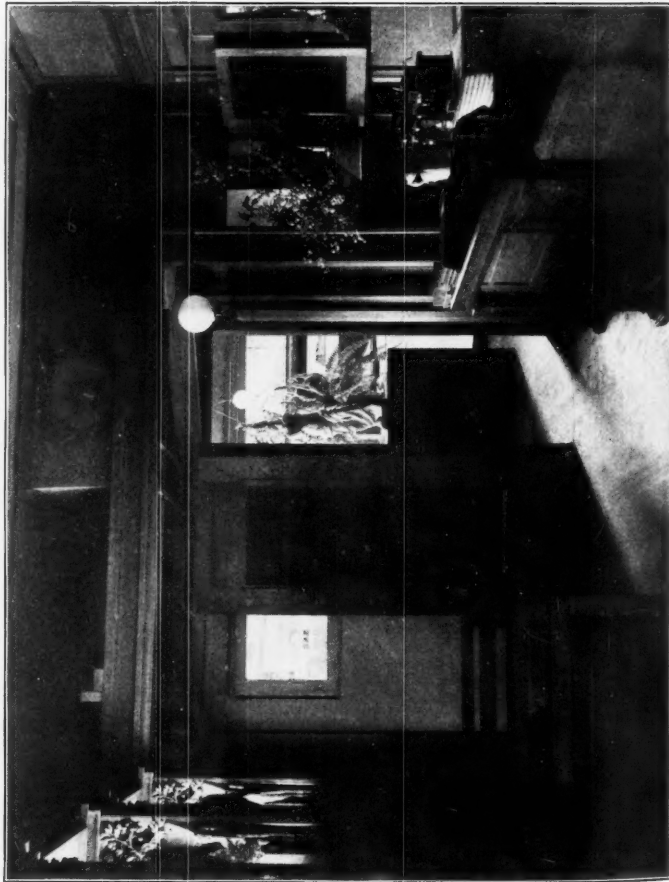
Constructed of Bronze and Onyx, Marble, etc.



FOR MR. E. C. WALLER, RIVER FOREST.
Frank Lloyd Wright, Architect.



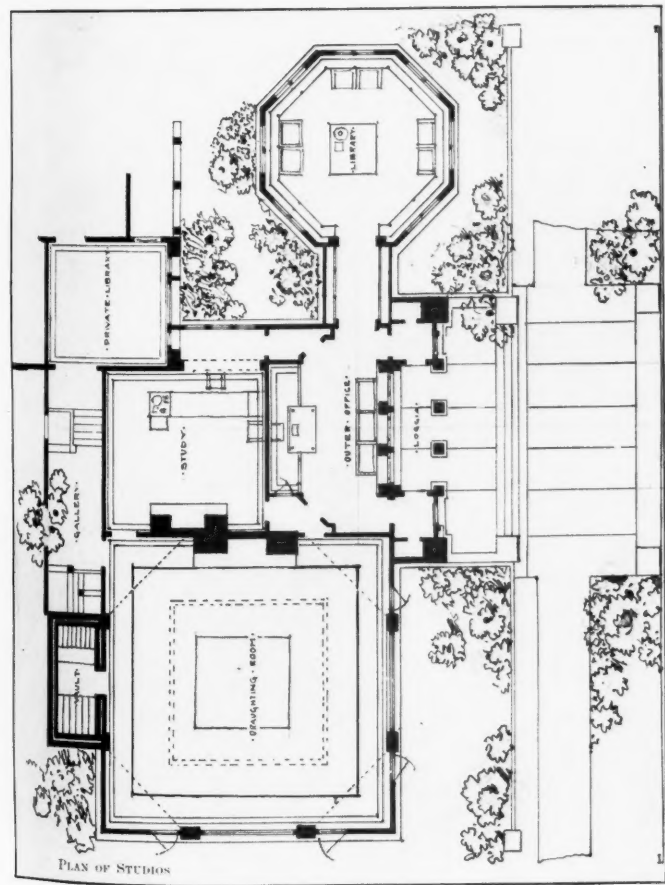
DWELLING FOR MRS. ROBERT ECKART, RIVER FOREST.
Frank Lloyd Wright, Architect.



INTERIOR DETAIL OF MAIN ENTRANCE LOOKING INTO DRAFTING ROOM.

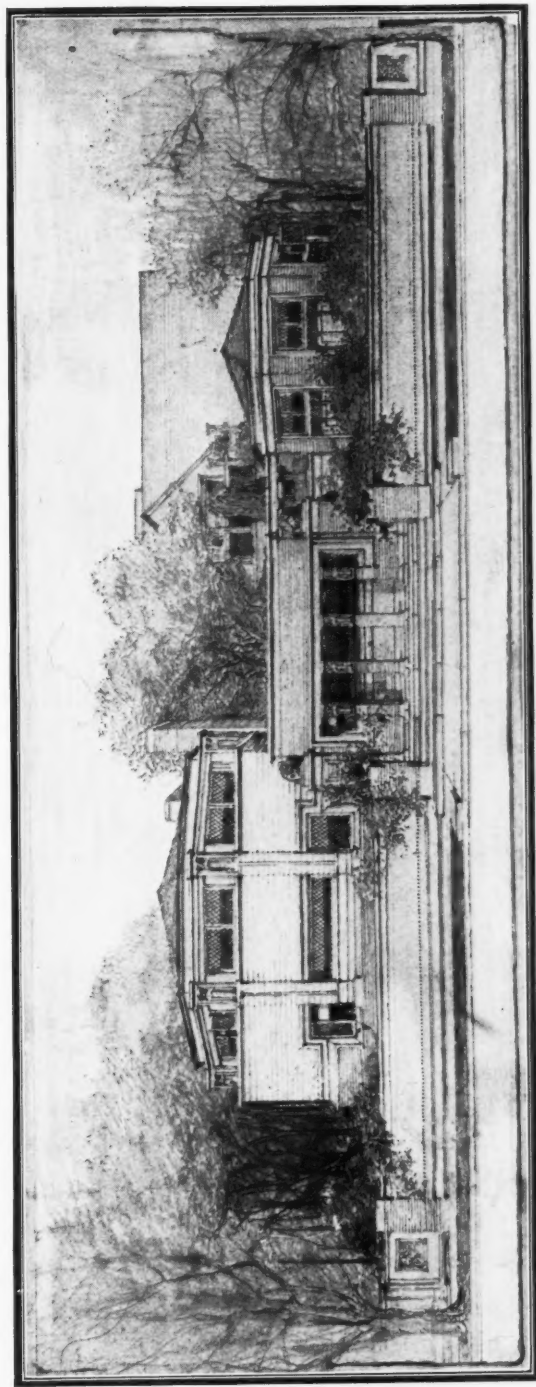


INTERIOR DETAIL OF PRIVATE STUDIO.



PLAN OF STUDIO.

ENTRANCE TO STUDIO.



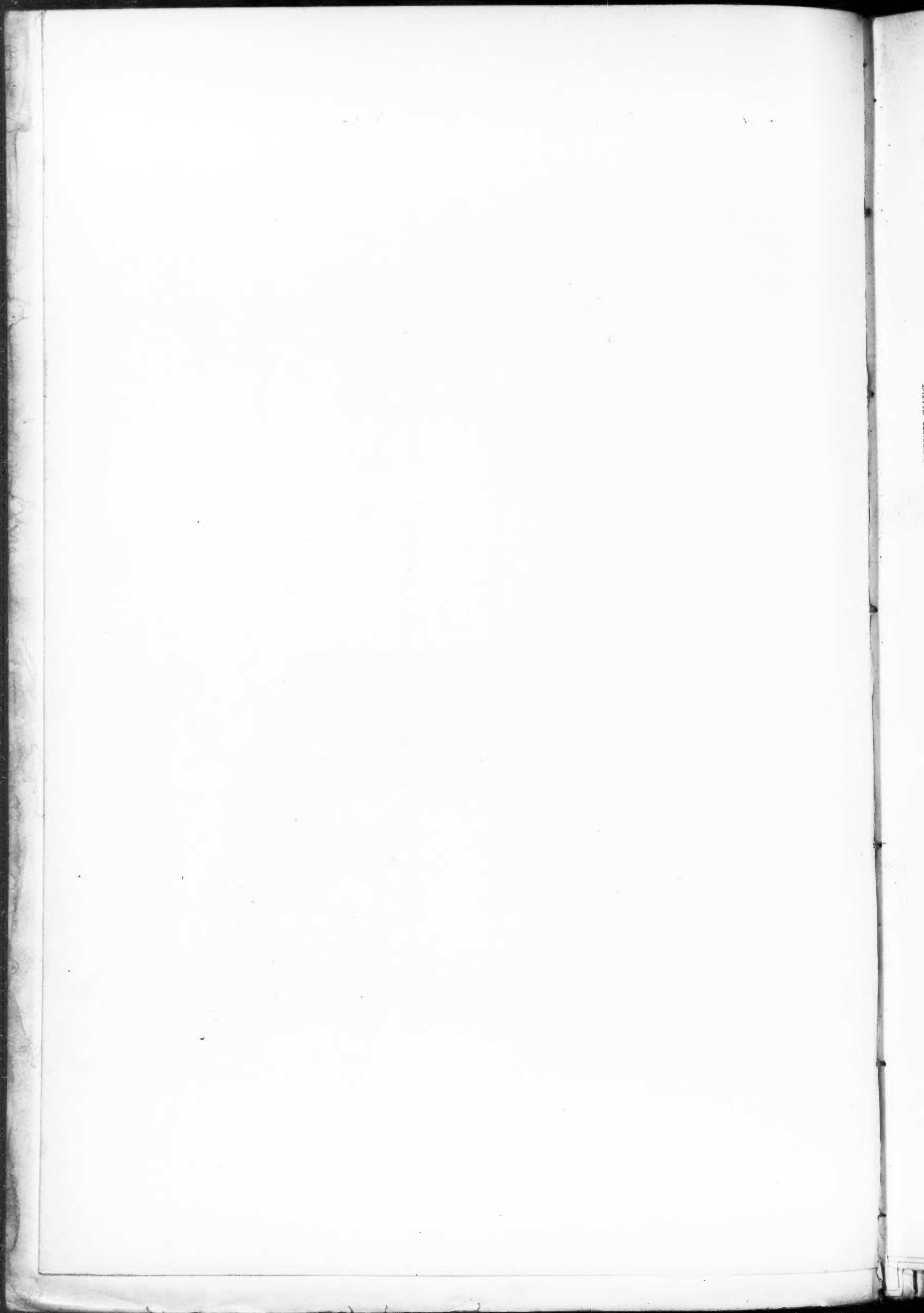
STUDIO OF FRANK LLOYD WRIGHT, ARCHITECT.

SELECTIONS FROM CHICAGO ARCHITECTURAL CLUB EXHIBITION OF 1900.



MAIN HALL, HOUSE AT GERMANTOWN, PENNSYLVANIA.
DAVID KNICKERBACKER BOYD AND LAURENCE VISSCHER BOYD, ASSOCIATE ARCHITECTS, PHILADELPHIA.

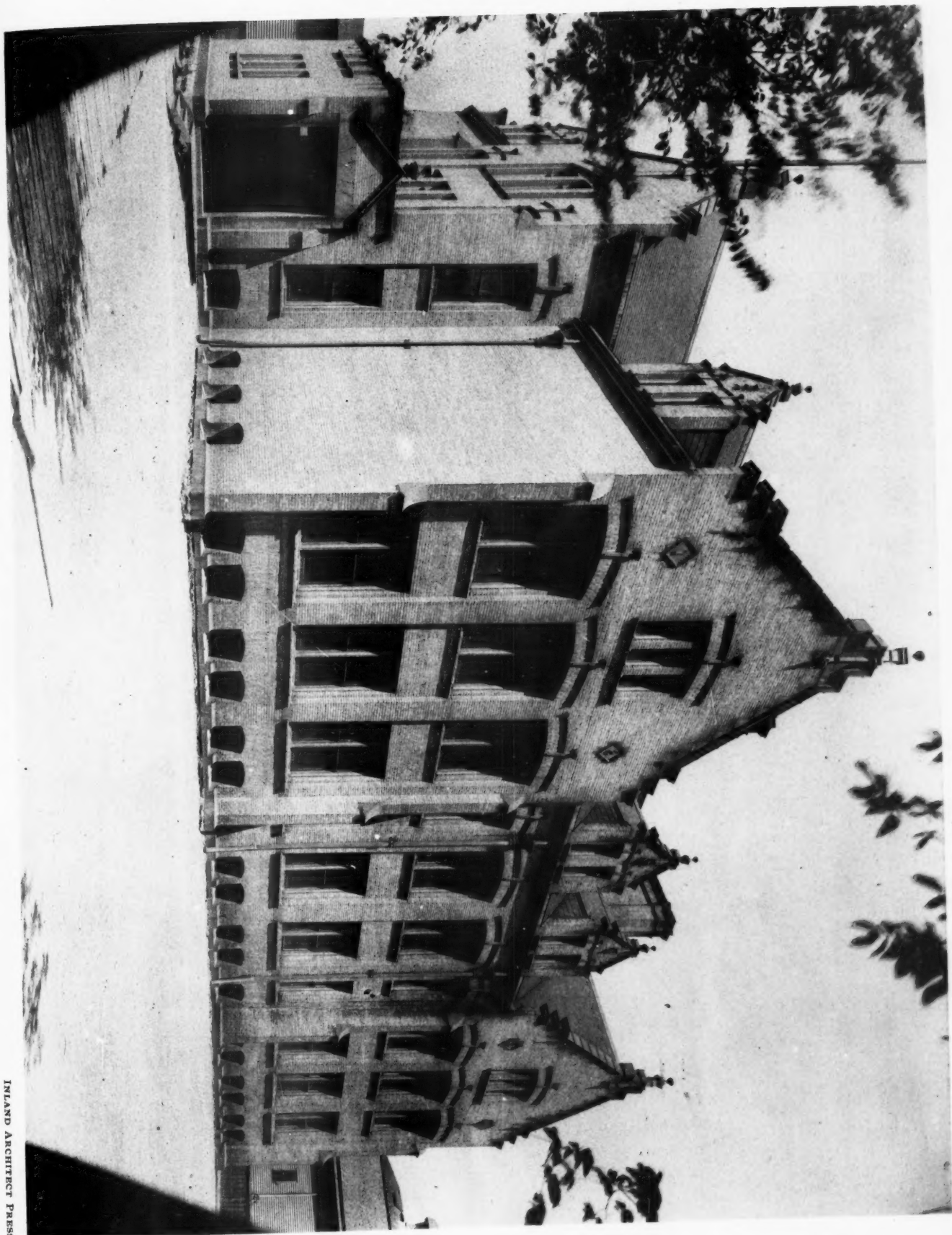
INLAND ARCHITECT PRESS.





DINING ROOM, HOUSE AT GERMANTOWN, PENNSYLVANIA.
DAVID KNICKERBACKER BOYD AND LAURENCE VISSCHER BOYD, ASSOCIATE ARCHITECTS, PHILADELPHIA.

INLAND ARCHITECT PRESS.



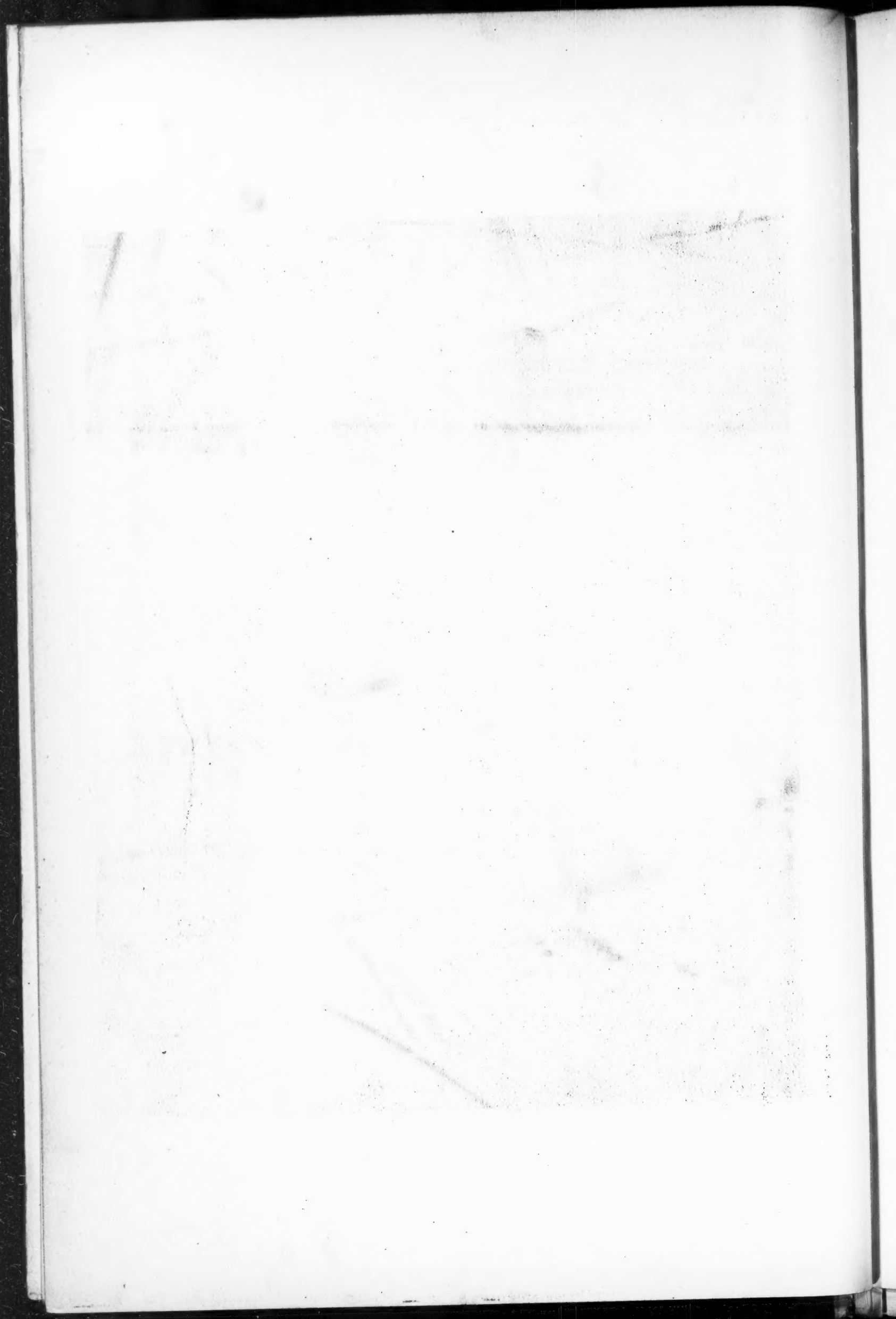
SCHOOL BUILDING, MILWAUKEE, WISCONSIN.

INLAND ARCHITECT PRESS.



VIEW IN DINING-ROOM, RESIDENCE, CINCINNATI, OHIO.
ELZNER & ANDERSON, ARCHITECTS.

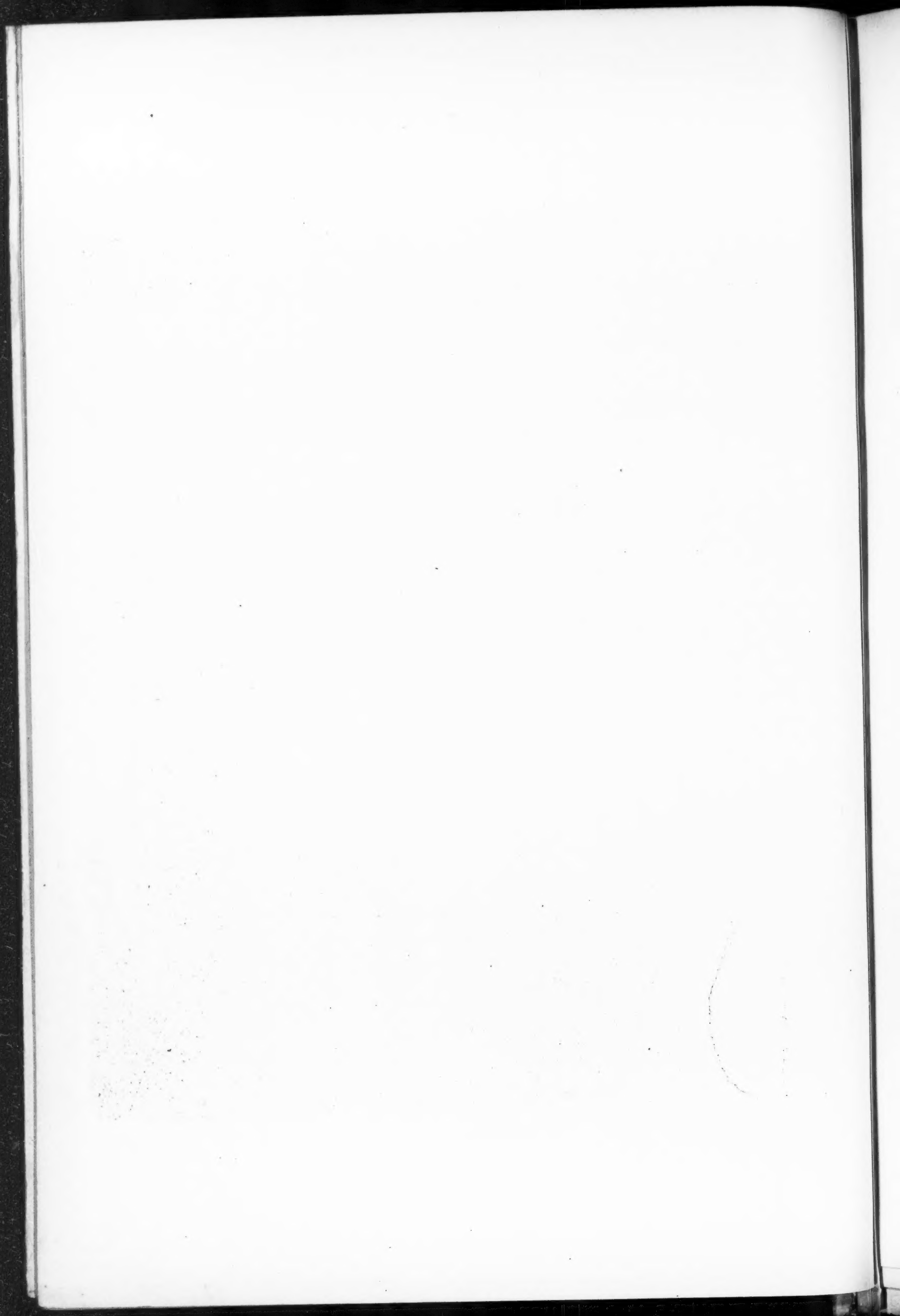
INLAND ARCHITECT PRESS.

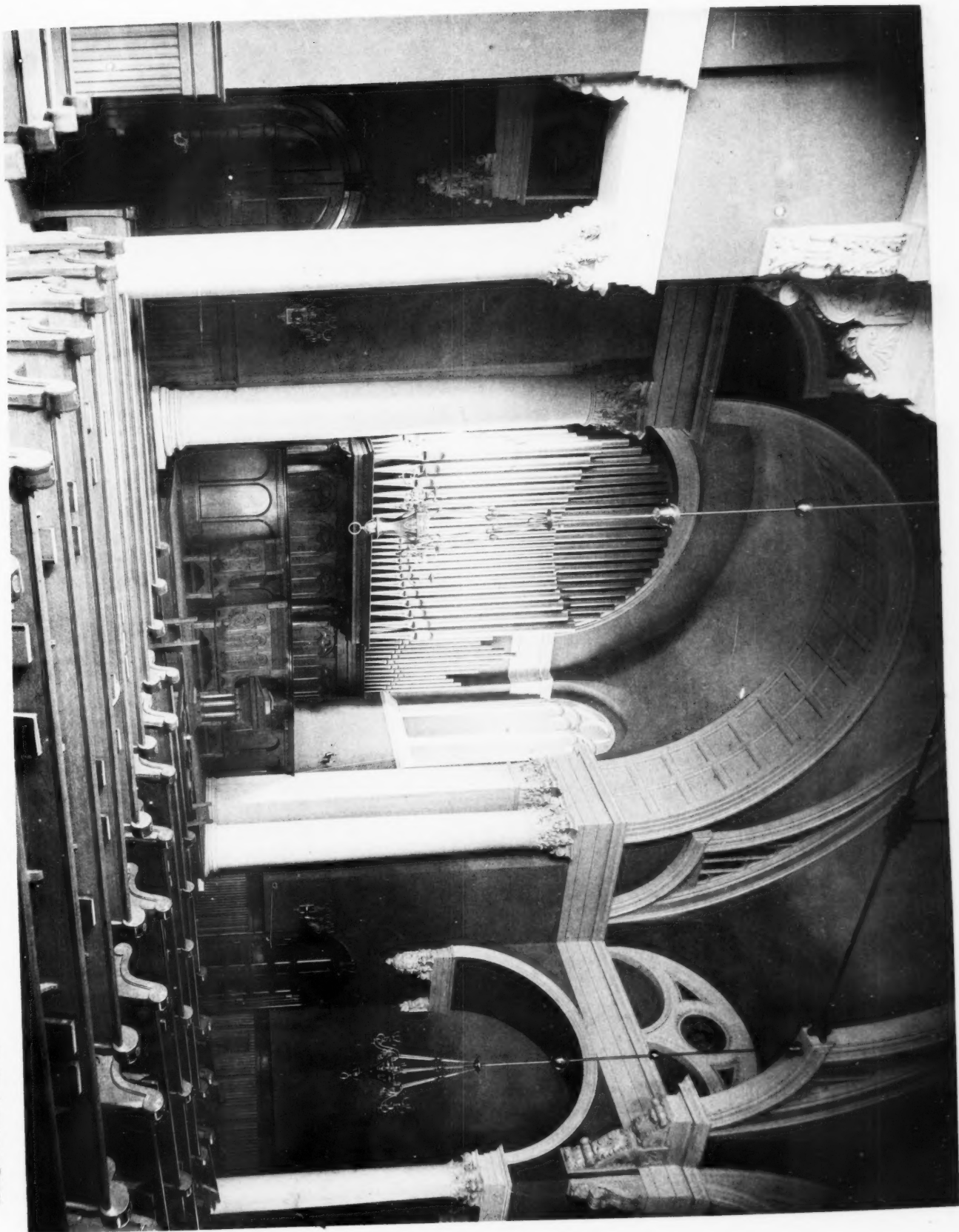




AVONDALE PRESBYTERIAN CHURCH.
ELZNER & ANDERSON, ARCHITECTS, CINCINNATI, OHIO.

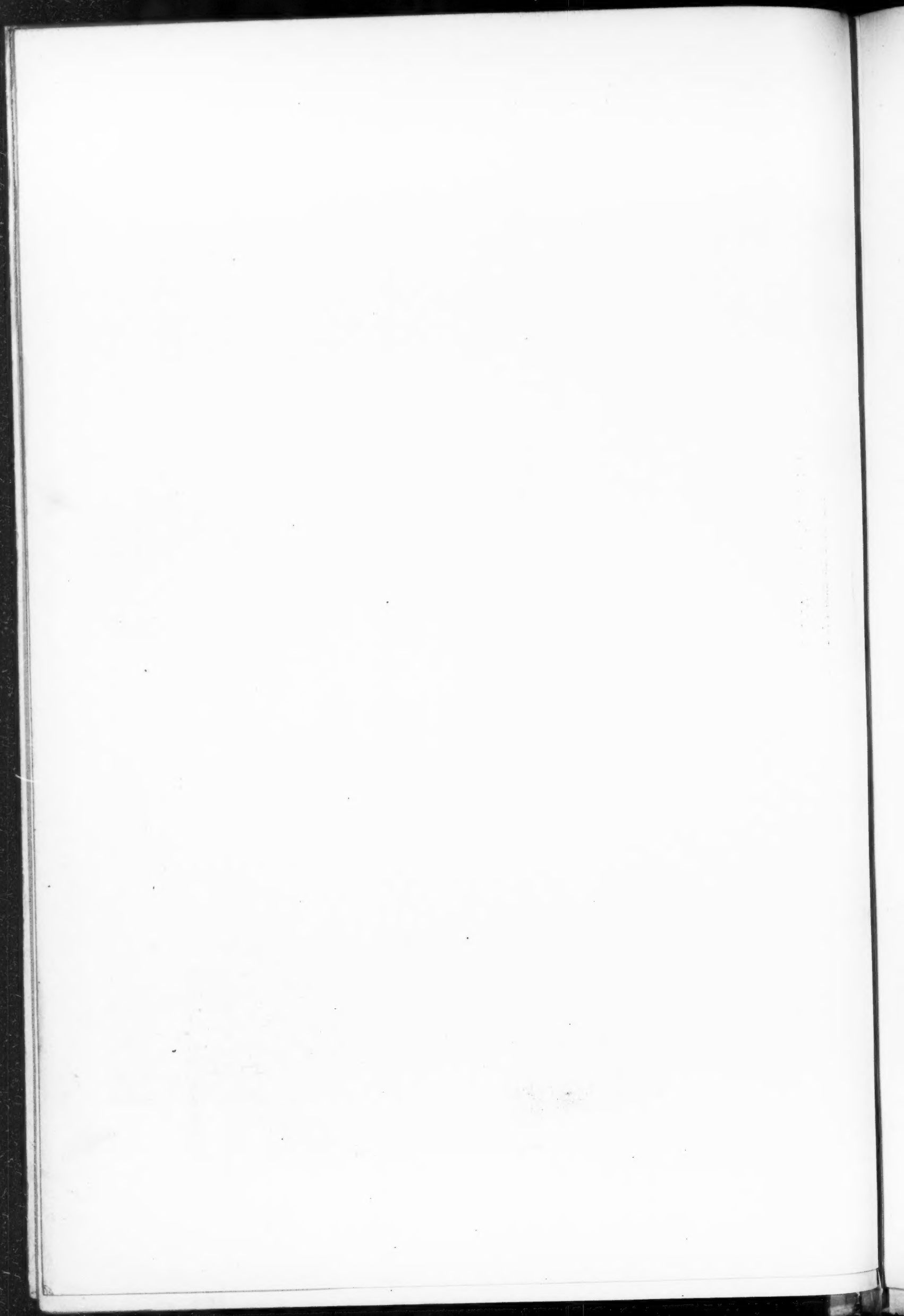
INLAND ARCHITECT PRESS.





CHANCEL, AVONDALE PRESBYTERIAN CHURCH.
ELZNER & ANDERSON, ARCHITECTS, CINCINNATI, OHIO.

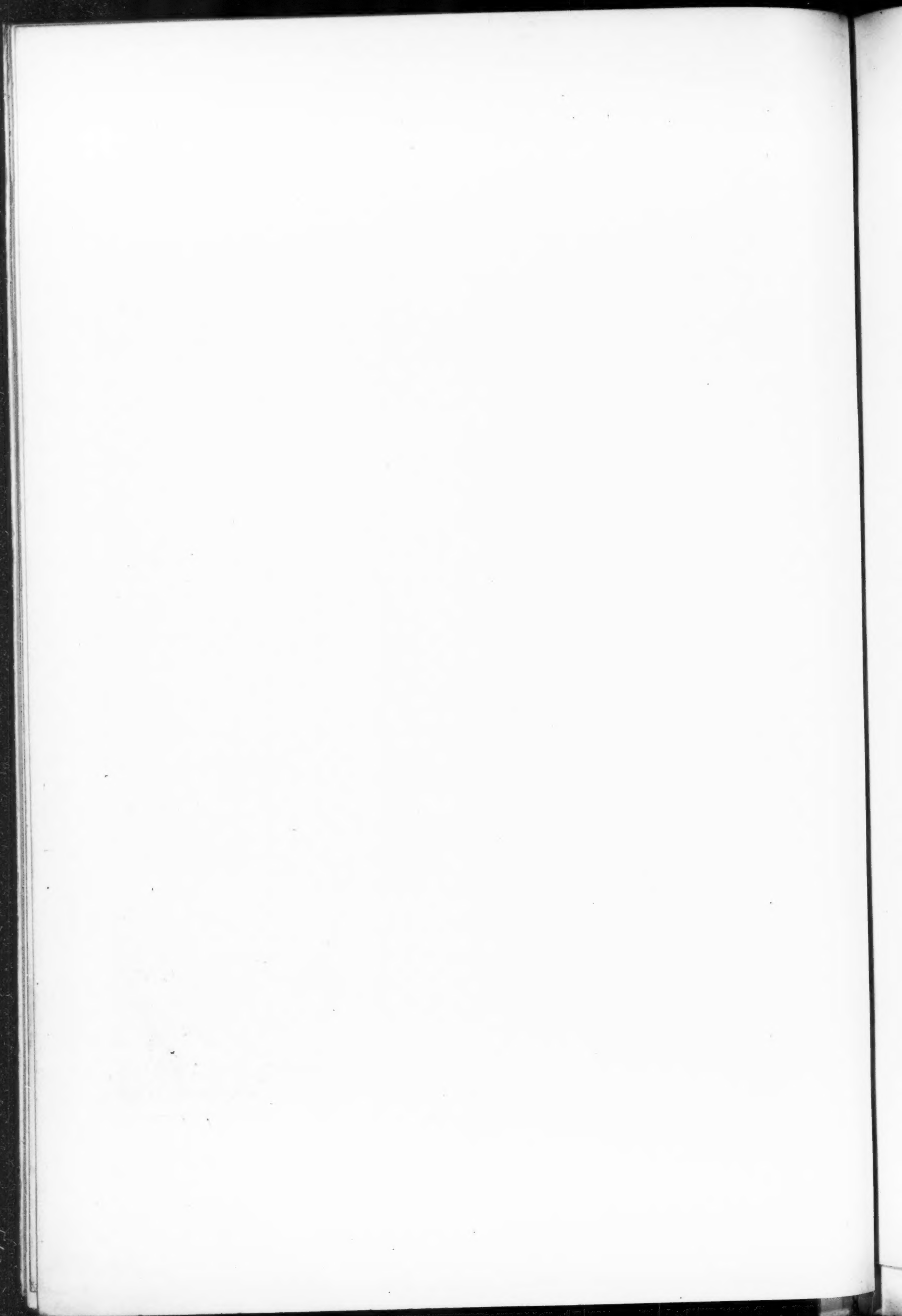
INLAND ARCHITECT PRESS.





VESTIBULE, AVONDALE PRESBYTERIAN CHURCH.
ELZNER & ANDERSON, ARCHITECTS, CINCINNATI, OHIO.

INLAND ARCHITECT PRESS.





VIEW LOOKING TOWARD GALLERY, AVONDALE PRESBYTERIAN CHURCH.

ELZNER & ANDERSON, ARCHITECTS, CINCINNATI, OHIO.

INLAND ARCHITECT PRESS.