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World's Columbian Exposition Progress.

Rapid progress is being made in all departments of preparation for the World's Columbian Exposition. The principal acquisition in the line of exhibits of interest to architects is the arrangement that has been made by Mr. Halsey Ives, chief of the department of fine arts, with the French government, by which duplicates of the casts in the Trocadero have been secured. This is the first time the French government has made such a concession, and its value to the architects of this country is inestimable, especially as the casts will probably remain in Chicago after the closing of the Exposition. The time for the forwarding of plans of buildings by foreign governments has nearly expired and only three nations, Germany, England and Ceylon, have as yet sent drawings. The chief of construction has recommended that in case plans are not received by September that the allotted space be vacated. Of the forty-four states in the Union plans for but twenty-four buildings have been approved by the construction department up to July 1. These include the following:

Maine, C. S. Frost, Chicago, architect; North Dakota, J. L. Silsbee, Chicago, architect; Connecticut, Warren R. Briggs, Bridgeport, architect; Ohio, James W. McLaughlin, Cincinnati, architect; Indiana, Henry Ives Cobb, Chicago, architect; West Virginia, J. L. Silsbee, Chicago, architect; Rhode Island, Stone, Carpenter & Wilson, Providence, architects; California, A. Page Brown, San Francisco, architect; Maryland, Baldwin & Pennington, Baltimore, architects; Wyoming, Van Brunt & Howe, Kansas City, Missouri, architects; Michigan, M. L. Smith & Son, Detroit, architects; Nebraska, Henry Voss, Omaha, architect; Montana, Galbraith & Fuller, Missoula, architects; Colorado, H. T. E. Wendell, Denver, architect; Wisconsin, William Walters, Oshkosh, architect; Delaware, E. L. Rice, Jr., Wilmington, architect; South Dakota, E. W. Van Meter, Aberdeen, architect; Massachusetts, Peabody & Stearns, Boston, architects; Illinois, W. W. Boyington, Chicago, architect; Iowa, Joselyn & Taylor, Cedar Rapids, architects; New York, McKim, Mead & White, New York city, architects; Kansas, Seymour Davis, Topeka, architect; Texas, Gordon & Lamb, San Antonio, architects; New Jersey (W. L. Lenox, secretary, Trenton), architect unknown.

There has been an exhaustive test of steam and electric launches upon the lagoons, in which the steam launches showed the greater speed, burning hard coal and using keel condensers, emitting no smoke nor exhaust steam, the speed averaging seven miles an hour. The electric launches accomplished the continuous running of ten hours required at a rate of speed of from three to five miles an hour. The serious strike in an eastern steel mill has not affected the progress of construction, as most of the steel work has been received. In fact, the buildings begin to assume an air of completion that is gratifying, and no doubt now exists regarding their completion long before the specified time.

Suggestions to Amend the Uniform Contract.

In receiving from the Boston Society of Architects a copy of "Suggestions for a Form of Contract," it is presumed that, as this body is a Chapter of the American Institute of Architects, and that a serious attempt to originate a contract which to be useful should supersede the Uniform Contract issued four years ago by the Institute in conjunction with the National Association of Builders would be a direct condemnation of the Institute's work, it is only intended to bring the matter of amendment of the Uniform Contract before the members, so that an intelligent discussion may be had at the next convention. Otherwise it is hard to understand what these gentlemen in Boston expect or wish to accomplish. They certainly do not intend to censure the Institute in

its recommendation and support of the Uniform Contract, which is doing so much to secure uniformity and harmony in contracting throughout the country. Nor is it probable that they expect that the combined wisdom of the practitioners in Boston is superior to that of the profession and the builders throughout the United States, and that they know more regarding not so much as to what is proper but that which is practicable as the gentlemen who have formulated and from time to time amended the Uniform Contract. The suggestions sent out are in the main unobjectionable, but are generally contained, and we think in better form, in the blanks, of which more than two hundred thousand have been used by architects from Maine to California during the past four years, and we recommend that they be reviewed by the joint committee which will meet in Chicago in October to consider amendments to the Uniform Contract, and that they be considered by members of the Institute generally, so that if brought before the convention they may be intelligently discussed.

**British and
American
Competition
Methods.**

In publishing upon another page the suggestions lately issued by the Royal Institute of British Architects for the government of architectural competitions it is with a wish to show the latest thought upon this subject among English architects rather than because some new and better form for conducting competitions has been found. The evils that have always surrounded architectural competitions will always exist and their senseless quality can never be lessened. It will be remembered that in November, 1885, a committee of the Western Association reported to the convention of that year fully upon this subject, and the finding of that committee has stood ever since as the essence of all argument upon the question of architectural competitions. D. H. Burnham, as chairman of the committee, made an exhaustive report which in thirty-five articles of objection showed the main evils which surround competitions, and concluded by saying: "But with all these evils, both inherent and unnecessary, competition is a fixed fact of our unwritten policy and we may as well recognize it frankly and at once." The result was the adoption of a "code" which has been the basis of many important competitions, and is still circulated when called for, by the secretary of the American Institute of Architects. Some members of the profession refuse to enter competitions as the only way in which they can protest against them, while others enter them because the building is notable and the committee in charge honorable, and almost invariably find that preference is given to an architect and seldom to a design, no matter how closely the identity of the competitors may be concealed, and in any event both money and time is lost in a lottery scheme in which the premiums are seldom forthcoming.

**Ohio Chapter
A. I. A.
on State
Organization.**

The Ohio Chapter of the American Institute of Architects, a member of which body presented the resolution passed at the last convention of the Institute in relation to local Chapters, have taken further action and in a circular letter, which is printed in full on another page, have suggested amendments to the Chapter's Constitution and By-Laws in accordance with the plan outlined in the resolution. While each state Chapter will be governed by its local conditions, the fact that the integrity and usefulness of the Institute depends upon the healthy growth and

activity of the state organizations needs little argument. In states where there are but two or three large cities, these having local Chapters, the state organization need not have all the machinery and detail that is necessary when the Chapters are many or only one in number; but for legislative purposes some form of state organization should always be maintained. The Ohio Chapter has found it advisable to waive initiation fees upon entrance to the state Chapter, provided the applicant is a member of a local Chapter, and in the same event the annual dues are likewise nominal. It may not be necessary to even preserve so complete an organization as that in Ohio for state purposes, as a board from among the officers of the local Chapters could be established to represent the state, and all members of local Chapters be enrolled members of the state organization, the expenses for state work being defrayed by special assessment as occasion required, but the Ohio architects find in their midsummer meeting a sociability and general exchange of views that pays them many times for the small expense involved in the support of a state Chapter. Containing also some of the most wise and far-seeing members in the Institute they continually keep in mind that the profession has no legal status and that no real advancement can be made and all other work is in a degree abortive until such status is obtained through state enactment, and only by persistent concerted effort through state organizations can this be attained. The seventh annual meeting of the Ohio State Chapter will be held at Columbus August 18. As this is the first meeting at Columbus since the organization of the Chapter there, it will probably be attended by a large majority of the members in the state, when the amendments proposed will be discussed.

**Competition
for Memorial
to the late
J. W. Root.**

The announcement by the officers of the Chicago Architectural Sketch Club of a special prize competition limited to members only for designs for "a permanent memorial monument to the late John Wellborn Root, to be located at Jackson Park, to cost \$15,000," gives to draftsmen a rare opportunity for not only displaying their designing ability, but, by the number of drawings presented in the competition, making a slight tribute to the memory of an architect who was the friend of all draftsmen, and particularly of the C. A. S. C. The time for closing the competition, October 17 next, is none too far away to allow any time to be wasted, as no draftsman will care to send in a design that is ungrammatical or undignified — a result of haste and lack of study. Known as Mr. Root was to every member, for he had that rare quality of making himself known to those with whom he came in contact, this monument can show each draftsman's conception of his character as well as a knowledge of monumental design. The prizes, of which there are three, contributed by Mr. D. H. Burnham and Mr. John Meiggs Ewen, are \$75, \$50 and \$25 in gold, and though the club members will enter this competition wishing to honor their friend rather than in a mercenary spirit, the substantial reward will emphasize the judgment of the committee. The committee of adjudication will be C. B. Atwood, D. H. Burnham, Charles F. McKim, Lorado Taft and Charles L. Hutchinson. In the absence of club meetings during the summer months, each member should keep this competition in mind and when the time has arrived present a drawing that will, as far as in him lies, be worthy of the great object for which it is designed.

RECENT FIREPROOF BUILDING IN CHICAGO.

BY P. B. WIGHT, ARCHITECT.

PART VI.

FLOORS IN WHICH STEEL IS USED ONLY IN TENSION, AND FIRE-CLAY ARCHES CARRY ALL THE WEIGHTS OF FLOORS.

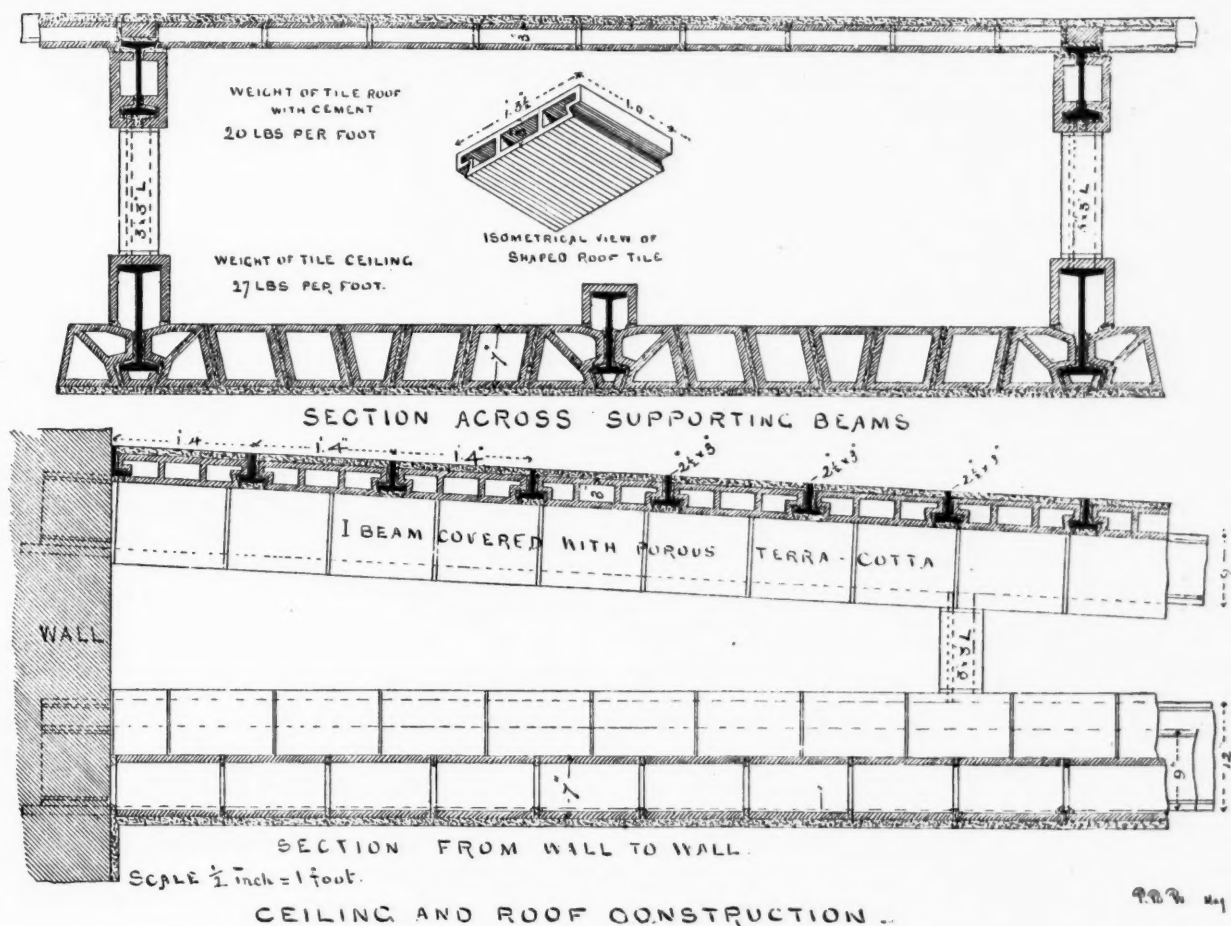
THIS system of construction, with hollow tiles, has been used only to a limited extent in Chicago. Several floors were built by the Wight Fire Proofing Company over boilers, in which light steel beams buried in the walls were used only for skewbacks, they giving a good bearing to the tie rods which were left exposed. Spans were from sixteen to eighteen feet. Some spans of fourteen feet were also built in the same manner over isolated rooms in the Minnesota Hospital for the Insane, at Richmond, Minnesota.

The most extensive use of this system is by the Guastavino Construction Company, of New York and Boston. They have only floored one building in the West in this manner, the Denver Telephone Exchange. It cannot, therefore, be considered a western system. This company uses only a laminated arch built of flat tiles laid in almost pure Portland cement. In place of girders it constructs segment arches under the tie rods, the latter

tiles have been used in a single course without lamination. In this the ties are all buried in the walls, and the domical as well as segmental forms are used to cover entire rooms, while long rooms are covered with a series of domes very much flattened. The office building in which Mr. Tyrrell is located is thus constructed, small hollow tiles being used generally. No tie rods are exposed in Mr. Tyrrell's system.

ROOF AND CEILING CONSTRUCTION.

In some cases the roof and ceiling construction are practically one. In others, when separated, the ceiling is self-supporting and becomes a light floor, not calculated to carry heavy loads. The practice of architects differs very much in this respect. The simplest and best method of constructing a roof for fireproof purposes is to make it exactly like a floor, only that it has the necessary pitch to drain off the water and is covered by any of the waterproof coverings in general use. As this does not give a flat ceiling it is confined generally to warehouses, of which several have been built in this way. Nothing is more dangerous to the stability of a fireproof building than an attic. It is liable to be stored with light materials and rubbish which are always very combustible because they are light, and inaccessible when they take fire because they are in an attic. Many fireproof buildings



being generally small forms of I beams. On these segment arches it builds ceiling arches which are of equal section at all parts; but rising from a curved line, they are, in fact, domical arches. The principle of construction is very simple, that of the egg shell, which has been demonstrated to be the strongest material and form in nature to resist compression. It is claimed for these arches that they are self-supporting, and would stand and bear weight after a reasonable time if the tie rods were removed. Their substantiality depends largely upon the quality of the tiles and cement used and the care taken in setting them. Consequently they are more expensive per superficial foot than hollow tile work, and their economy is only demonstrated where enough steel, that would otherwise be used, can be dispensed with, to bring the cost below that of floors constructed on the other system. This system, however, has many advantages in special cases where curved and domical ceilings form part of the design.

A similar system has been used at Columbus, Ohio, under the direction of Mr. Tyrrell, architect, in which bricks and hollow

have been seriously damaged from this cause. The destruction of a large part of the patent office was attributable to it, and resulted in the construction of a new fireproof roof in which anything like an attic was studiously avoided by the architects, Messrs. Cluss & Schultz, of Washington. It is today the most thoroughly fireproof roof on any building belonging to the government, and while it has stood for six years the example has never been followed by any of the government architects, who have nothing else to do except government work. Having done work, when a contractor, on twenty or more government buildings, I am competent to judge, and do not hesitate to say that if a fire should occur of any magnitude in the attic of any of them the roof would be speedily destroyed.

In Chicago buildings in some cases the ceiling and the roof are both made with hollow flat arches and of independent construction, but lighter than floors. In some the ceiling is of flat arch construction between I beams, and the roof of segment arches. In others the ceiling is the same as the last and supports a light

construction of roof on struts. This is shown in large illustration, and represents a thoroughly fireproof ceiling and roof construction. In all the above the ceiling is practicable as a floor and is liable to be used for storage purposes. In many buildings the roof is of heavy construction with flat arches and I beams, and a light ceiling is suspended from it. This ceiling is either of 3-inch $\perp$ irons 16 inches from centers, carrying 3-inch shaped hollow tiles sufficient to carry light loads, or of 1-inch angle or $\perp$ irons 12 inches from centers, carrying tiles of half-inch thickness, which are only strong enough to carry their own weight.

The lightest roof and ceiling construction is one on which the roof is of "book" tiles set between $\perp$ irons placed 18 inches from centers and supported on I beam purlins. From these purlins are suspended $\perp$ irons from 4 to 6 feet from centers, which support light angles or $\perp$'s placed 12 inches from centers to carry the half-inch ceiling tiles. As this construction will not admit of the use of the attic for storage purposes, it is the safest as well as the lightest construction to resist fire; for if the roof space is cut off from communication from below, the ceiling will protect the roof. A still safer system is to use heavier $\perp$'s for the ceiling placed 16 inches from centers, and to set 3-inch hollow shaped tiles between them. These tiles can extend half an inch below the $\perp$ irons and the space filled with plaster in dovetail form. It is safer because the 3-inch hollow tile is a better fire resister than the half-inch split tile. But it is liable to be used for storage purposes. Such tiles will carry any ordinary floor load, and the strength of the ceiling depends on the size of $\perp$'s used. It is singular that the 3-inch hollow ceiling has never been used in Chicago. This ceiling has been generally used in the new buildings of Pittsburgh and Cincinnati, executed by Chicago contractors.

In general it may be observed that book-tile roofs are simply incombustible, and not fireproof on the under side, because the tiles rest on unprotected $\perp$ irons, and wherever used such roofs should be protected by a fireproof ceiling and all communication with the attic cut off. It is common to omit the fireproofing of the girders under roofs where suspended ceilings are used. It is also common to omit the fireproofing of trussed constructions under similar circumstances. The remark made as to roofs of government buildings will hold good as to the roofs of a large majority of the fireproof buildings of Chicago. The roofs of all buildings in which iron and steel are used need more careful fire protection than any other parts of buildings, for the reason that they can seldom be reached by water; and yet they are most frequently neglected in this respect. It is fair to state in this connection that the roof trusses of the Milwaukee Chamber of Commerce, the Hammond Library at Chicago, and the Auditorium are all fireproofed with porous terra cotta. The fireproof qualities of most of the Chicago buildings end at the ceilings of the upper story. But from that point downward they are the best in the world.

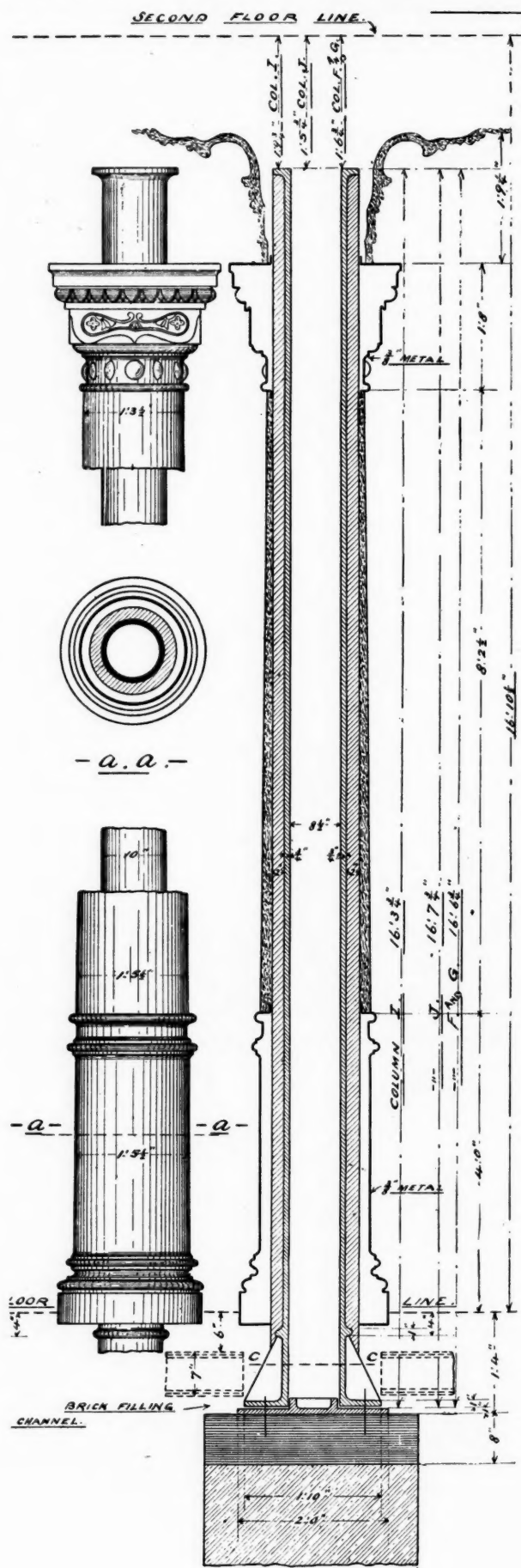
It is not the purpose of these papers to criticise or to recommend new or better methods, but to record only what has been accomplished. But I am so much impressed with the faults of roof and ceiling constructions now existing that, to make the matter brief, I will only suggest what constitute safe fire-resisting roofs. First in order is the roof of flat arch construction, similar to floors, without suspended ceilings. Second, in the case where a flat ceiling is demanded, comes the ceiling of I beams and flat arches, also similar to the floors, in connection with a roof as last described. Third, a ceiling and roof as shown in illustration. These provide a fireproof blind attic. Fourth comes a roof similar to floor construction with suspended ceiling of $\perp$ irons and 3-inch shaped hollow tiles, or a lighter ceiling with half-inch grooved tiles. Fifth. If the roof must be of the lightest construction, it should be of $\perp$ irons and shaped tiles, and not of "book" tiles, and all metal work should be protected with tile (including the bottoms of $\perp$'s). Either form of ceiling may be suspended, but the lightest is best, because it forbids the use of the attic for storage purposes. This attic should be inaccessible and permanently ceiled up by building tile walls around all skylights and other openings through the roof. Hence, no pipes of any kind should be allowed in it, because someone will make an opening to get to them and leave it open.

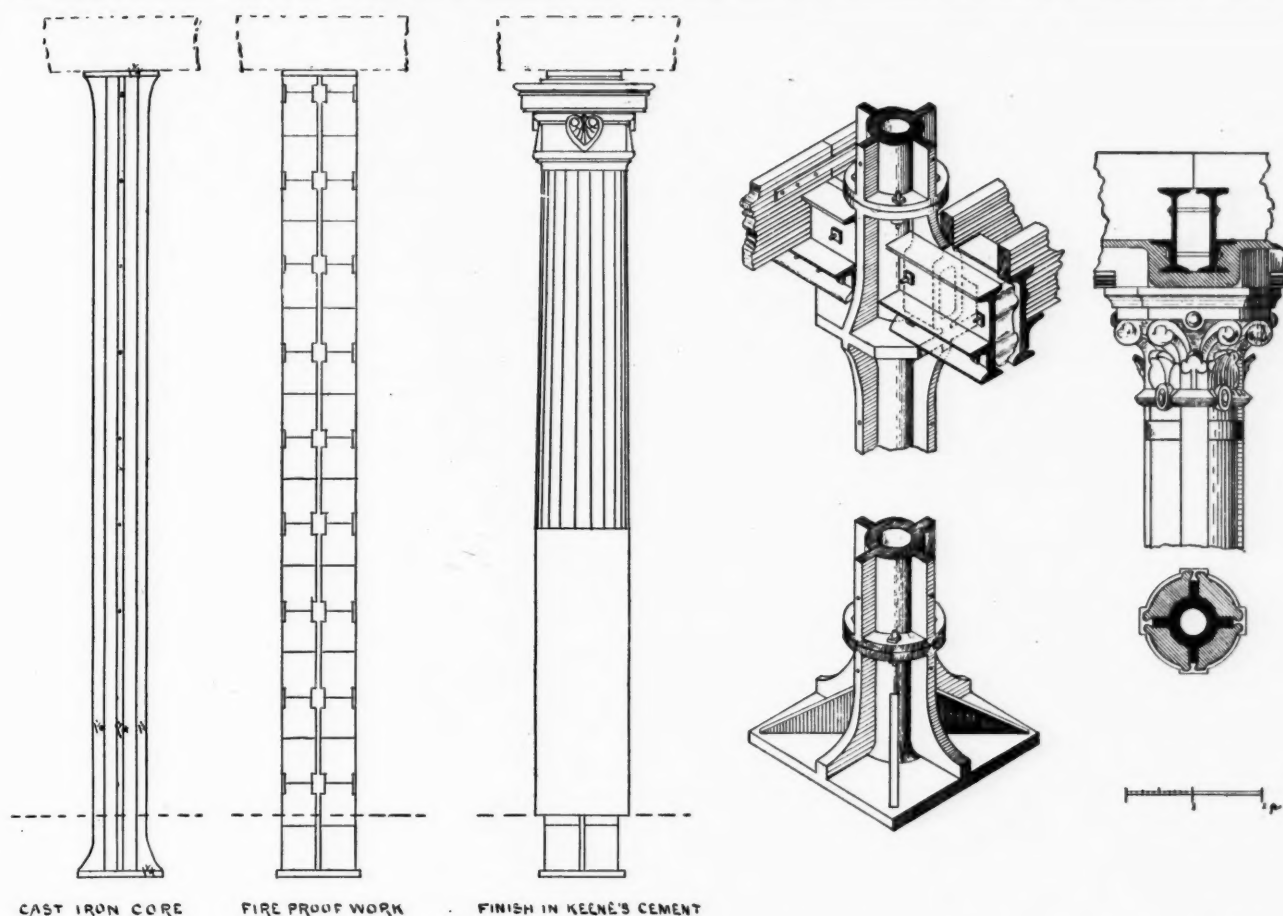
The illustration shows, somewhat in detail, the third method, the best to produce a thoroughly fireproof attic, when the ceiling follows the floor construction of I beams and flat arches, and a light roof is desired. This kind of ceiling can readily be changed into a floor in case the building should be increased in height by the addition of other stories. When the roof is to be of floor

construction and the ceiling is suspended, the construction is reversed and rods are used instead of fireproofed angle-iron studs. The beams in that case are set level on the top, and the arches stilted by using a different form of covering skewback.

ALL PIPES A SOURCE OF DANGER IN FIREPROOF BUILDINGS.

Pipes of all kinds are the enemies of fireproof construction, and in general they are arranged in buildings in the positions in





which they do the most harm. In many cases where it is attempted to make special provision for them, open shafts are built, which are practically flues for distributing fire into unseen places. Even where the greatest caution is taken in new buildings, repairs and alterations are subsequently made by careless and ignorant men who do not know what dangers they may cause. An innocent looking gas pipe passing down through a thoroughly fireproof ceiling, and carefully cemented in place, may cause a fire to communicate from room to room. If it becomes red hot below the ceiling, the upper end, which may come in contact with a floor strip, will soon become hot enough to cause combustion under a wooden floor. I know of only one building in which an extreme precaution against this was taken. In the American Bank Note Building, in New York, all the gas pipes were fastened to wooden strips, which had been secured to the ceilings. But they can be placed *under* any ceiling without disfiguring it. This only requires a little forethought and a little expense. The remarkably sudden and mysterious spread of fire in modern buildings is largely due to the multiplicity of pipes called for by modern inventions and improvements, just as the now ubiquitous elevator has been conducive to the rapid spread of many fires. Hence the multitude of new inventions which make modern buildings more comfortable, convenient and luxurious than any heretofore built carry with them a cause of danger which calls for the utmost vigilance on the part of the architect and his superintendent, and improved methods and precautions from the fireproofing expert. The open attic, the elevator and the pipe of all kinds are the most common and dangerous impediments to contend with.

FIREPROOFED IRON COLUMNS.

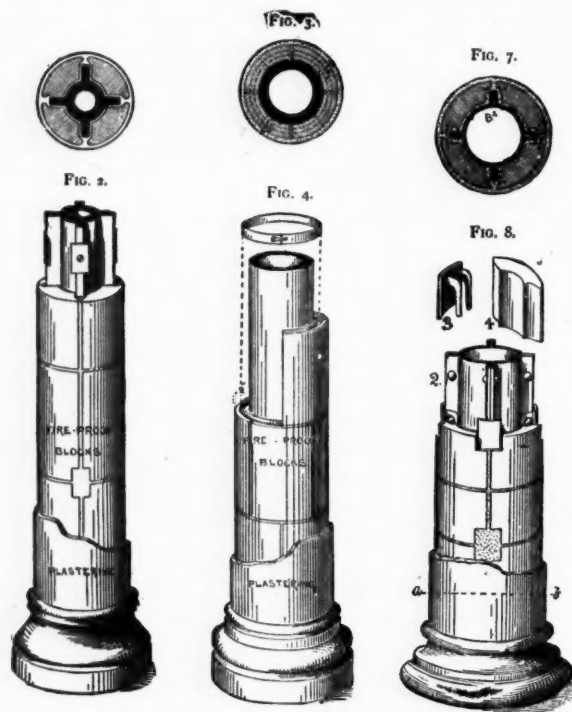
As long as iron was considered to be a fireproof material, iron columns were exposed and decorated with iron ornamentation. But as they were discovered to be the most vulnerable features in so-called fireproof buildings, they were the first parts of iron construction to receive fire protection. Wherever the unreliability of iron construction to resist fire is recognized, iron columns now receive the first attention. The writer first began to agitate this matter in an address delivered in Boston in 1871 on the results of the great Chicago conflagration, and always insisted that the fireproofing of iron columns was not a matter to be determined upon for combustible buildings only, but was a necessity in all buildings where

ever used. This had been made evident by the number of buildings which had practically collapsed during the early stages of fires, by reason of the breaking of columns, which might have been saved had they been held up long enough to allow the fire extinguishing companies to do their work.

Before that time the danger of using unprotected cast-iron columns supporting *interior brick walls* had been recognized by the building laws applicable to the city of New York, and such columns were required to be double, or one within another. This was the first attempt ever made in America to protect constructive iron columns. The process was patented. The patent specified that the space between the two concentric columns should be filled with plaster. It happened, however, that in some buildings which were unoccupied during the winter months the freezing of the plaster burst the outside iron shells. The plaster filling was thereafter discarded, and the air space alone was depended upon to afford protection to the inside column which carried the weight. This system is still in use in New York city to a slight extent, but has never been used in Chicago except in one building. Recently these columns have been removed and plain ones have taken their place. I am not aware that any test was ever made of the efficiency of these columns as fire resisters, and I have never seen any report of their action under the effect of accidental fires in buildings.

It was in 1874 that the writer first experimented in this field and patented a method which was afterward considerably improved and came into extensive use for a time. The first experiments were in the protection of columns of cruciform section with gores of hard, slow-burning oak secured to the iron with protected screws and plates. But these were never actually used in any buildings. Porous terra cotta was at that time being successfully made at Chicago, and was substituted for wood, being used in sections about one foot long. This admitted of a plaster or cement finish and could be decorated to any extent, or covered with scagliola finish in imitation of marble. Methods were invented for attaching porous terra cotta blocks not only to flanged columns, but to square and round ones; in fact, to iron cores of any section. The methods used would alike permit the finishing of round columns as square and square ones as round, and a great variety was given to the exterior sections of fireproofed columns. There was also a great variety in the methods of covering the exterior.

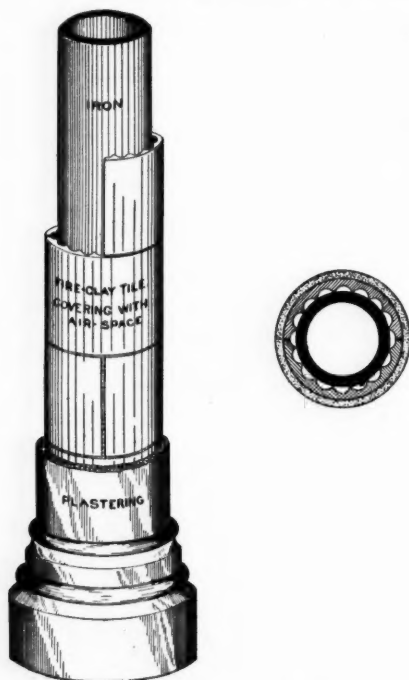
The invention of fireproofed columns led to a very extensive use of Keene's cement, which was suitable not only for plain surfaces but for molded work, and having a hardness almost equal to that of marble was able to resist the wear and tear to which buildings in use are subjected. Generally the shafts, dados and molded bases were finished with Keene's cement, and the capitals with plaster. In many cases the dados and bases were shells of cast-iron, and in some cases the capitals also. In government



RELIABLE FIREPROOF COLUMNS.

buildings, after fireproofing for columns was adopted, the capitals and bases were always of cast iron, and I only know of one instance in which the capitals are of plaster.

The first iron columns ever fireproofed with gores of porous terra cotta were those in the Chicago Club house. The shafts were



AN UNRELIABLE FIREPROOF COLUMN.

finished with plaster, and the capitals were made of ornamental terra cotta. To Treat & Foltz, architects, is due the credit of having introduced them. Cast-iron flanged columns or Phenix flanged columns, were also fireproofed in the same manner in the United States Patent Office, 1884; the Hamilton County Court House, Cincinnati, 1885; Chamber of Commerce, Milwaukee, 1880; Montauk

Block, Chicago, 1881; First National Bank, Chicago, 1881; Grannis Block, Chicago, 1881; Wilshire Building, Cleveland, 1882; Chicago Board of Trade, 1884; Newcomb, Endicott & Co's store, Detroit, 1880; Martin Ryerson's two buildings on Wabash avenue, Chicago, 1881-2; the Milwaukee Exposition Art Department, 1881, and Hammond Library, Chicago, 1882.

A system of covering round iron columns with porous terra cotta slabs about 1½ inches thick secured with continuous hoop-iron dowels in the joints was used mainly in government buildings under the direction of Mr. Hill, supervising architect, and his successors. This was employed in eighteen government buildings in various parts of the West between 1880 and 1886. After 1886 architects generally began to specify iron columns to be "encased in terra cotta," "covered with jackets of fire clay or porous terra cotta," "fireproofed with tiles, with approved fastenings," also using many other kindred phrases, even when they had taken the precaution to provide flanged iron cores. Fireproofing columns became from then to the present time a question, "Who could do them the cheapest?" The cheapest proved to be a thin cylinder of hard burned fire clay, split in two and set around the column *without any fastening to the iron*, but simply hooked together or depending upon the breaking of joints to hold them together until plastered. The natural result was that the old system of using blocks of porous terra cotta *screwed to the iron* was driven out by competition. Very little of this kind of work has been done since then, and where porous terra cotta is used it is in thin slabs, built like a wall around the columns.

It is greatly to be regretted that cheap methods should thus creep into this branch of the building arts. But they may be found in column treatment in many of our most pretentious buildings, just as they may in flimsy vault construction. The columns are the most vital parts of interior construction, and vault building is the most responsible work of the fireproofers. But as long as competition for contracts prevails, and specifications are drawn without sufficient regard to essential parts of buildings, this state of affairs must continue.

This is no reflection upon the use of hard fire clay tiles as such, but upon the way in which they are used. The three essentials of all fireproof construction are: first, that the material must be indestructible by fire; second, that it must be secured in place so that it cannot be dislodged or broken by any of the usual contingencies during a fire; third, that it must be non-conducting so as to keep the heat away from structural parts. In this last respect hard fire clay tiles are only effective so long as they are in hollow form. Porous terra cotta on the contrary is a non-conducting material, and may be used in solid blocks, but hard tile for column covering should be hollow. In many of the most recently constructed buildings of Chicago, in which Z columns are used, these are covered with hollow tiles, but it often occurs that in the same buildings isolated round columns are covered only with shells of hard tile.

The difference between thorough fireproofing with porous terra cotta, well secured, and cylinder tile not secured, is shown by the above illustrations.

FIFTY DAYS IN FRANCE.

THE summer bicycle tour organized by Architect John Calvin Stevens, of Portland, Maine, will start from New York July 27. The party is limited to twenty and eighteen of the full complement have been enrolled. They are as follows:

Walter F. Price, 1719 North Eighteenth street, Philadelphia, Pa.; S. Gifford Slocum, 126 West Twenty-third street, New York city; Fred H. Gouge, Rowlands Building, Utica, N. Y.; Chester H. Kirk, 480 Regent Square, Philadelphia, Pa.; Junius H. Morse, 8 Exchange Place, Room 14, Boston, Mass.; William E. Evans, Jamaica Plain, Mass.; F. Walter Fountain, 8 Unity Building, Woonsocket, R. I.; Arthur Woltersdorf, 360 Ashland Boulevard, Chicago; H. P. Fowler, 280 Broadway, New York city; Elmer Grey, care of Ferry & Clas, Milwaukee, Wis.; Cyrus J. Williams, 911 Kinikinick avenue, Milwaukee, Wis.; Albert Kelsey, Penn Mutual Building, Philadelphia, Pa.; Louis C. Hickman, Penn Mutual Building, Philadelphia, Pa.; W. Waters, Jr., 125 East Buffalo street, Ithaca, N. Y.; Ernest M. Wood, Fifth and Vermont streets, Quincy, Ill.; George P. Fernald, 93 Mason Building, Boston, Mass.; Will A. Graves, 4 Spruce Place, Boston, Mass.; C. E. Hawley, Hotel Huntington, Boston, Mass.; John Calvin Stevens, Oxford Building, Portland, Me.

There will be eight Hawkeye cameras taken by the party and besides the valuable collection of sketches and photographs each will secure there will be \$300 worth at least of solid fun. These tours should become popular with draftsmen in search of things that are "different." An informal reception will be given the party before sailing by the Sketch Club of New York.

NOTES FROM OUR FRENCH EXCHANGES.*

THE ACOUSTIC PROPERTIES OF THE TROCADERO.

AN extremely interesting and often discussed subject, according to *La Semaine des Constructeurs*, is that of the acoustics of theaters and assembly halls, and yet how very far we yet are from satisfactorily meeting the requirements of the public, which demands, first, to see well; second, to hear well.

Among the numerous difficulties of the problem, possibly one of the greatest, is that of the resonance of the walls, and the unequal manner in which these walls or ceilings reflect the sound, relatively to the different places occupied by the spectators. Add to this the infinite variety of requirements forced upon the designer; the differences of sonority which are shown, according as the hall be vacant or filled, furnished or unfurnished, provided with large openings for ventilation or lighting, etc., and the difficulties become very apparent.

On account of all these obstacles, it is not necessary to say, as do certain practitioners, that the problem is impossible, but rather it would certainly seem preferable to study with care those halls already constructed.

Note the results reached, and seek to discover if these results were obtained merely by chance, or if by precaution taken in advance. Also see how many of the requirements were fulfilled, and those not successfully treated; in a word, make a searching inquiry into the question. At this time, however, we would only call attention to one particular case, and that one which we have been able to personally investigate; we mean the grand auditorium of the Trocadero, considered for some time past as defective in acoustic properties. If there is some truth in this assertion, there is also much that is false, for I know of no criticism which has been anything but vague and general, and to be a serious criticism it certainly should point out the particular points of defect.

A few weeks ago, we were present at a musical matinee in this hall of which the plan is as shown in Fig. 1. Occupying a seat at the point marked A on the very center line of the auditorium we felt sure of seeing well and supposed that of course we could hear equally well. Alas! if all the pieces played upon the organ were clearly heard it was not so with the singing and the recitations: an extremely annoying echo, doubled and sometimes even tripled the sounds, rendering the whole effect confused and unintelligible. Moreover, this effect was the more intense, the more sharp was the tone of the voice. After the performance we explained our grievances to M. Bourdais, who kindly gave the following explanation, making a sketch which we reproduce from memory: "Your discomfort is not surprising to me since you were in the 'bean' and so saying he traced upon the plan a contour which was in fact similar to this interesting vegetable (shown in the drawing by a

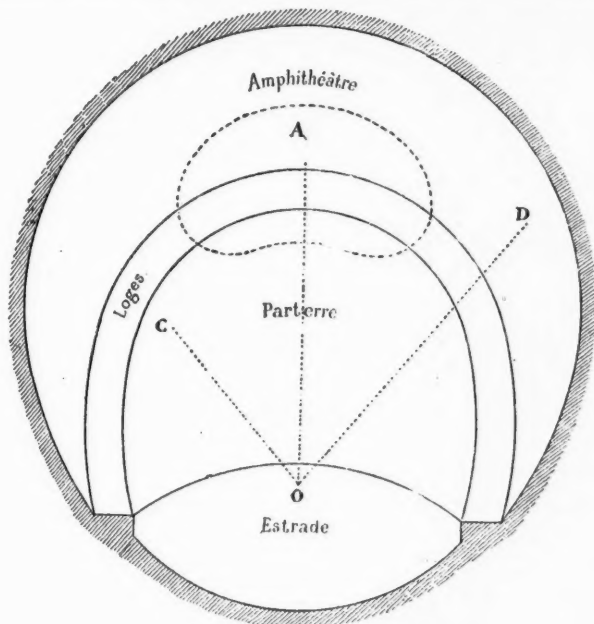


FIG. 1.

dotted line), and as you see your seat A was completely enveloped. Now, this echo is perceptible, it appears in all seats situated within this singular line, and nowhere else."

According to the sketch, this locality of useless seats is in the axis of the hall, and, so to speak, astride the boxes, touching the gallery above and the parterre below. It is not the distance from the stage which prevents hearing clearly the sounds, since they are perfectly distinct beyond the perimeter in question and as is well known, the words of an ordinary conversation under common conditions should be distinguished fully 250 feet, while the largest dimension of the hall is less than this.

Figure 2 gives an explanation of the phenomenon:

A sound sent forth at O is naturally projected in all directions. Among these sound waves there will be for the spectator at A a

direct wave, O A, but also there are waves which strike the ceiling and sides of the hall at all possible angles. Now, there exists in the ceiling or dome of the Trocadero a zone or portion that reflects the sound. As is well known, the angle of reflection is equal to

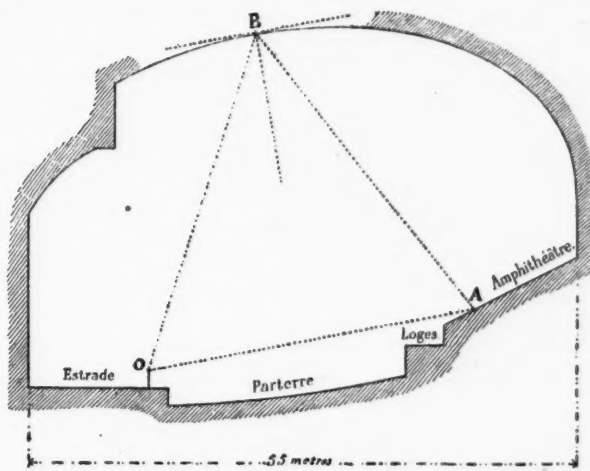


FIG. 2.

the angle of incidence, and in virtue of this law the reflected sound wave falls upon one of the points, as A, so that the person occupying that seat has received two sound waves, one the direct O A, the other the indirect and much longer O B A, hence the echo. Thus to a reflecting zone in the ceiling there corresponds a surface of seats figured on the plan by the "bean," and whose contour had been exactly determined point by point in the course of a series of experiments.

To remedy this serious defect, M. Bourdais proposed to destroy or at least decrease the resonance of what might be called the dangerous zone of the ceiling. For a surface reflecting the sound waves he desired to substitute a material which would absorb them. After numerous experiments, he chose a soft floss silk of a certain quality to cover this space, but in order to make it harmonize with the remainder of the ceiling it was necessary to paint it. But what was the result? This paint hardened the silk and left the surface rough, it is true, but solid and resonant, not in the least deadening the force of the sound waves.

Thus this defect exists, and without doubt will cost a very considerable sum to remedy, even if it may not be necessary to entirely modify the form and construction of the ceiling. Whatever may be necessary, it seems as if the results noted in this great hall of the Trocadero would be of value to architects who may have similar problems presented to them in their designing. Would it be impossible, then, to determine in advance the size and extent of these dangerous zones? We think not.

Such, then, is the explanation of the principal defect in the hall of the Trocadero. There are others, among which we would note the one resulting from the openings for light. These great windows in the outer walls form by the glass in them extremely resonant surfaces. Everything possible has been done to remedy this. Large panes of glass have been replaced by a rough glass, leaded in small pieces, considered thus to better absorb the sound. Even they have tried suspending an almost invisible curtain in front of them, but all the same, the windows still are resonant.

However successful these measures of precaution may be, it appears well to call attention to them, and it should also be borne in mind that among all halls devoted to music the Trocadero hall is probably the largest in the world, and is certainly one of those where the known laws of acoustics have been most carefully observed. However, it was not constructed for the use that it is now put to, and the organ only ought to be heard there, and the effect of this instrument, as we have said above, is truly remarkable.

THE ARCHITECTURE OF TOMORROW.

A project has just been broached and only slightly noticed by the daily press, which seems to be an interesting sign of the architectural evolution now in progress, according to *La Semaine des Constructeurs*. This scheme is known as "The Peoples' House" of Paris.

Most persons have heard of the building erected at Antwerp under this same name, by the workingmen's party of Belgium, and know that it was built from the profits realized from the eating places gradually started by their newspaper, the *Voruit*. A body of French socialists, struck by the results obtained, have been inspired with the idea of building upon the heights of Montmartre, at Paris, a new Peoples' House. This is in our eyes something more than a simple everyday fact, in its possible bearing upon architecture par excellence, an art expressive of social conditions, and it would appear not improbable that our art will soon be called upon to satisfy these new aspirations as at the same time respond to the want scarcely yet expressed. It looks as if this movement would indicate that by the side of the public official architecture, by the side of the monument that the governmental solicitude places at the disposal of the nation to celebrate its social strength, there is being born a new architecture, the free and spontaneous expression of a doctrine which after having been promulgated by book and by speech is now to be expressed in stone. No one

*Translated and arranged for THE INLAND ARCHITECT by W. A. Otis.

would pretend that the promoters of the "House of the People" had in any way been preoccupied with any esthetic ideas, but it is certain that architecture will here, the same as it had done in all times, affirm by its assistance the legitimacy and vitality of the new doctrines and the transition from dreams and theoretical speculations to actual practice and execution. This house of the people is intended to be at one and the same time a center of meeting and instruction, an eating place where meals will be served cheaply, and also a building for popular meetings and celebrations. There will be a library and the socialist newspapers of the whole world will be on file. There will be lectures, and here socialists passing through Paris will meet their political friends.

Moreover, to attract the younger persons, there will be a gymnasium, and also a music hall and society. The house will sell food at reduced prices, and will also furnish meals, and for ten cents one may obtain breakfast or luncheon. Coöperative kitchens are to be established, and as the propaganda increases, coöperative societies for furnishing food will be started. The promoters of the scheme hope that in the near future a similar house will be opened in each of the populous quarters. This establishment on the heights of Montmartre will thus become the parent house, and in the same manner the large provincial cities are expected to follow the example set at Paris. Is this not a vast enough project to tempt the most ambitious architect, and is not the scheme new enough to permit of the most original treatment?

It is scarcely conceivable but that other forms than those of our cold, official architecture, so essentially aristocratic, will be employed, and this may give a new direction to our architecture, now so monotonous and lacking in individuality.

EXPLORATIONS IN MASHONALAND.

An English explorer, Mr. Bent, has been exploring some of the ruins in Mashonaland, South Africa, and has brought to light among others a vast edifice, which is a perfect specimen of an ancient phallic temple, in the style of the round temple at Malta. While this sanctuary does not appear to Mr. Bent to be necessarily of Phœnician origin itself, yet its style shows very great similarity to these monuments. Near to the temple, says *La Construction Moderne*, is a fortress surrounded by a high wall, which itself is on the edge of a precipice. Upon this wall huge monoliths alternate with small towers. A portion of this fortress was occupied as a temple, and here were found representations of birds resembling vultures and ravens perched upon immense pedestals. Also iron bells of curious shapes, innumerable signs of phallic worship, and a broken-down altar, were among the ruins.

In excavations in the neighborhood of this fortress were found drinking cups ornamented with hunting scenes, and numerous fragments of pottery of pure design, often rigorously mathematical in shape. Also tools used for working gold, a smelting furnace, and even a supply of cement, in which were imbedded ingots of gold and all sorts of workmen's tools. Numbers of these specimens will shortly arrive in England, together with a collection of native implements made by the explorer.—*La Construction Moderne*.

A DIONYSIUS BY PRAXITELES.

The museum of the Louvre has just become the purchaser of a piece possessing great value both historically and artistically. This is a bronze statuette of Dionysius, thought to have been discovered at Athens upon the acropolis, which for a long time was a part of the collection belonging to one of the Turkish pachas, a governor of Crete. Finally it passed into the possession of Signor Sambon, an Italian antiquary, who has but just disposed of it to the Louvre.

It has long been reputed by archaeologists and amateurs as one of the purest productions of the Greek statuary, and all have agreed in attributing its extremely simple and exquisite execution to some of the great masters of antiquity. Signor Milani, in the "Museo Italiano," and later M. Reinach, have indisputably established that this master was Praxiteles. They establish the fact that this statuette answers exactly the description of a work by that celebrated artist mentioned by Callistrates, and in every minute detail establish their argument point by point.

THE LILLE PRIZE OF ROME.

The city of Lille, following in the footsteps of Paris, is to have its "Prize of Rome"; in fact the competition for the two purses founded by the Chevalier Wicar for painting and for architecture has already opened. These purses give to each of the fortunate artists a sum of about \$320 per year and lodgings at Rome, besides which the city of Lille has added \$60 for traveling expenses, and \$160 pension per annum.

Without doubt the successful competitors will profit by the study of the treasures of antiquity, but certainly a trip through Belgium and Holland (and possibly certain parts of England), together with a careful and finished series of studies in Flemish art, would be of still greater benefit to these young members of our profession, and it is only to be hoped that soon some generous person will found a prize for this purpose.

THE MADRID EXPOSITION OF 1892.

The fourth century of the discovery of America, says *La Semaine des Constructeurs*, is to be celebrated in Spain in a particularly interesting manner. On this occasion it is intended to have an exhibition of retrospective art. Under the title of the "European Historical Exposition of Madrid" there will be presented as complete a picture as possible of the state of civilization in

Europe, and especially in Spain and Portugal, at the period of Christopher Columbus. Painting, sculpture and engraving will be represented by work of the fifteenth, sixteenth and seventeenth centuries, to which is to be added a special department of decorative art. The programme is most attractive; but since it is to be a history of art that will be exhibited, why has architecture been thrown out of the list? Certainly a series of photographs of ensemble and details of the principal monuments of this period, accompanied by plans showing the evolution of three centuries, would have very considerable interest.

This exposition is to be opened the 12th of September, 1892, and closed the 31st of December of the same year. Prizes of medals and honorable mentions will be given.

ARCHITECTURAL COMPETITIONS.

UNDER date of June 2, the Royal Institute of British Architects issued the following suggestions for the conduct of architectural competitions, for the guidance of those wishing to inaugurate competitions:

SUGGESTIONS FOR THE CONDUCT OF ARCHITECTURAL COMPETITIONS SANCTIONED BY THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.

1. The promoters of an intended competition should, as their first step, appoint one or more professional assessors, architects of established reputation, whose appointment should be published in the original advertisements and instructions, and whose decision should govern the selection of the designs.

All the designs sent in should be submitted to the assessors.

2. The duty of assessors should be:

(a) To draw up the particulars and conditions as instructions to competitors, and to advise upon the question of cost.

(b) To determine which of the designs conform to the instructions, and to exclude all others.

(c) To advise the promoters on the relative merits of the designs admitted to the competition, and to make a selection in accordance with the conditions.

3. Every promoter of a competition, and every assessor engaged upon it, should abstain absolutely from competing, and from acting as architect, for the proposed work.

4. The number and scale of the required drawings should be distinctly set forth, and they should not be more in number, or to a larger scale, than necessary to clearly explain the design. If perspective views be required, it should be so stated; and they should be uniform in scale, number, mode of coloring, etc.

5. Competitions should be conducted in one of the following ways:

(A) By advertisement, inviting architects willing to compete for the intended work to send in designs. The promoters, with the advice of the assessor or assessors, should make their selection from such designs. The author of the design awarded the first place should be employed to carry out the work.

(B) By advertisement, inviting architects willing to compete for the intended work to send in their names by a given day; with such other information as the candidate may think likely to advance his claim to be admitted to the competition. From these names the promoters, with the advice of the assessor or assessors, should select: (a) an architect to carry out the work; or (b) a limited number to compete, and each competitor thus selected should receive a specified sum for the preparation of his design. The author of the design awarded the first place should be employed to carry out the work.

(C) By personal invitation to a limited number of selected architects, to join in a competition for the intended work. Each competitor should receive a specified sum for the preparation of his design. The author of the design awarded the first place should be employed to carry out the work.

6. No design should bear any motto, device, or distinguishing mark; but all designs should be numbered by the promoters in order of receipt. Any attempt to influence the decision of the promoters, or of the assessor or assessors, should disqualify a competitor.

7. In every case the amount of premium or remuneration for the competitive designs should be fixed by the promoters, acting under the advice of the assessor or assessors, and should be paid in addition to the usual professional charges for carrying out the work.

8. Where a deposit is required for supplying the instructions, it should be returned on the receipt of a *bona fide* design; or if the applicant declines to compete and returns the said instructions within a month after their receipt.

A design should be excluded from a competition—

(a) If sent in after the period named (accidents in transit excepted);

(b) If it does not substantially give the accommodation asked for;

(c) If it exceeds the limits of site as shown on the plan issued by the promoters, the figured dimensions on which should be adhered to until officially altered;

(d) If the assessor or assessors should determine that its probable cost will exceed the outlay stated in the instructions, or the estimate of the competitor should no outlay be stated; provided always that should the assessor or assessors not have been consulted in the first instance respecting the cost, as recommended in Paragraph (a) of Clause 2, and should he or they be of opinion that the outlay stated in the instructions is inadequate for the proper execution of the proposed works, the assessor or assessors shall not be bound in the selection of a design by the amount named in such instructions, but the question of cost shall nevertheless be a material element in the consideration of the award;

(e) If any of the other instructions are violated.

10. It is desirable that all designs submitted in a competition, except any excluded under Clause 9, should, with the consent of their authors, be publicly exhibited after the award has been made, which award should be published at the time of exhibition.

11. The architect, whose design may be selected as the best, should be employed to carry out the work, and he should be paid in accordance with the schedule of *Professional Practice and Charges of Architects* sanctioned and published by the Royal Institute. If no instructions are given to him to proceed within twelve months from the date of the selection, he should receive adequate compensation in addition to the premium (if any) awarded to him. In the event of a part only of his original design being carried out, he should be paid a sum to be agreed upon in respect of the deferred portion, such sum to be merged in the usual professional charge when the completion of the design is proceeded with.

*It should be understood that the Royal Institute issues these suggestions as a guide to promoters where a competition has been decided upon, but not as necessarily recommending the principle of competition.

ASTON WEBB, Hon. Secretary.

WILLIAM H. WHITE, Secretary.

Reissue after revision June 2, 1892.

The Western Association of Architects, at the convention held at St. Louis in November, 1885, came to a similar conclusion regarding competitions and adopted a "code" or "competition contract" upon which all important competitions among architects of standing have been based to the present time. The "code" is reprinted in connection with the R. I. B. A. suggestions that a comparison may be made.* It is as follows:

*For full report of Committee on Competitions, see THE INLAND ARCHITECT for November, 1885.

CODE.

M.....18.....

Architect.....
 DEAR SIR:—The undersigned building committee, being vested with the power to erect and complete a.....
 building on the following property.....
 hereby invites you to form one of.....competitors for the position of architect. The others to be the following.....
 Each design to embody the following suggestions.....

The cost of the building, according to your design, not to exceed the sum of.....
 exclusive of architect's fees; for which amount we are assured in writing by the following well known experts that the building can be completed, viz.....

The competition to be conducted under the following code: The selection of the best design, which shall carry with it the appointment of architect of the building, shall be made by an expert jury of three; one chosen by the named competing architects, one by this committee, and a third by the first two selected. Each to be an expert architect of good standing, and not from the town where the building is to be erected. This committee to meet all expenses of jury. The competing architects to meet and select their juryman without expense to the committee.

Each set of drawings, with its accompanying description, to be enclosed in a sealed envelope or portfolio, and between the hours of 12 o'clock M., and 1 o'clock P.M., of.....
 to be placed in the hands of.....
 at.....which gentleman has been appointed custodian by this committee.

The custodian to open all the envelopes at the above-mentioned time in the presence of those competitors who desire to be present, and no one else, and no design to be accepted by him after that hour. He shall thereupon call out every drawing or description not in accordance with the requirements herein contained. Said drawings and descriptions so called out to be then inclosed in an envelope and sealed by the competitors, the custodian to keep the envelope unbroken until after the jury decides. Each competitor to be allowed one design only, and no alternative. The custodian, in the presence of the competitors, to then reseal the accepted drawings and descriptions of each set, and allow no one to examine any of them thereafter until the jury meets, when he shall unseal each accepted set before said jury for their inspection. The custodian to see that no one else inspects any of these drawings or descriptions until the jury has reached a decision.

The jury, either publicly or privately, is not to look at any drawing or description for this building other than those that shall be laid before it by the custodian, and which are in strict accordance with the requirements herein contained; and must base its decision on the designs so submitted.

The undersigned committee will leave the jury free, and no preference or leaning of the committee, or any member of it, shall be conveyed to any juryman, publicly or privately, directly or indirectly, until a decision has been made and published.

The jury is to allow no direct or indirect conferences with any competitor, in public or private, other than those proper consultations to be held between the jury as a whole and the individual competitor, for the purpose of receiving necessary explanations in regard to the design.

Should any competitor seek further explanations than those contained herein, he may apply directly to this committee, who shall thereupon send the question and answer alike to the rest of the competitors, in order to keep all on exactly the same basis throughout the competition.

On or before.....day of....., 18....., the jury shall premiate one of the designs of the competitors, and its judgment shall be final and binding; and this selection shall carry with it the appointment of the designer as architect, with the regular compensation allowed in the schedule of charges adopted by the Western Association of Architects.

The premiated design may afterward be altered, and the cost increased or decreased by this committee, but this is not to be construed as revoking what is said herein as to the cost of any design according to its description, at the time same is submitted to the jury for a choice.

No competitor shall serve on the jury, or be allowed to give any advice in any matter relating to the competition.

Each design shall consist of the following drawings, all of a uniform method of presentation, and to a uniform scale, namely:

A written or printed description and specification may accompany each set of drawings, but without any sketches interspersed.

Before any design is finally premiated, the cost of the building as shown by it shall be determined by an assessor, who shall be satisfactory to a majority of the competing architects, and who shall act under oath.

Should the assessor claim that a building cannot be erected according to any given design for the sum mentioned, the designer thereof shall be heard by the jury before throwing him out of the competition on that account. Should the jury then determine that the assessor is right, and that the cost will exceed the amount named above, it must throw out the design and proceed to premiate the design of another one of the architects in the competition. Cost of assessor and his expenses to be paid by the building committee.

At the close of the competition this committee agrees to return each set of drawings except the one presented by the successful architect, and, further, that no part of any rejected design which is original as to this competition, shall ever be used in the construction of the building, without the written consent of the designer thereof.

Should the work not proceed within one year from the date of the selection of the design, the premiated architect shall then be paid for what he has already done up to that date, according to the schedule of charges adopted by the Western Association of Architects, his design in competition being ranked as full preliminary sketches. Whenever the work shall proceed thereafter, the premiated architect shall still be the architect, having full charge as above mentioned.

} Committee.

OHIO STATE CHAPTER, A. I. A.

THE following circular letter has been issued to members of the Ohio State Chapter of the American Institute of Architects in regard to the resolution adopted at the last meeting of the Institute in relation to local Chapters:

DEAR SIR,—At the last convention of the American Institute of Architects held at Boston, the following resolution was passed:

WHEREAS, It is important that the profession—especially the members of this Institute—should perfect such organization as will most effectually combine the influence of its members in every work of importance to the profession, and

WHEREAS, The legislation by the several states sought by the profession can be more easily effected through state organizations and their representatives than through local organizations or no organizations, and

WHEREAS, There are many other advantages which may and will accrue from state organizations, and

Resolved, That the board of directors be requested to suggest to the several local Chapters such form of state organization as can best unite and uphold the interests of the profession and its members in the several states; and

Resolved, That membership in such state organization shall rest upon the same qualifications as in local Chapters as laid down by this Institute, and that

membership in such state organization shall be accepted as the requisite to membership in this Institute now required in local Chapters.

At an adjourned meeting of the Ohio Chapter, American Institute of Architects, held in Boston, October 30, 1891, the following resolution was passed in accordance with the previous action of the Institute:

Resolved, That a committee of three be appointed, authorized to prepare a definite plan or arrangement in regard to dues, privileges and relations which shall exist between the state and local Chapters; their report to be offered as an amendment to the Constitution and By-Laws in such manner as is provided for by the Constitution and By-Laws, and shall be submitted to letter ballot at as early a date as practicable to obtain a full expression of the members.

Desiring to encourage the formation and existence of local Chapters wherever possible and afford the advantages of membership and organization to such of the profession as are so located that the formation of local Chapters is impracticable or inconvenient, and at the same time approximately equalizing the expense of membership necessary to secure Institute privileges, the committee would recommend the following amendments to the By-Laws as advisable to accomplish this purpose:

First. That Article V, Section 1, be amended to read: "All regular members and associate members shall pay an initiation fee of Ten Dollars (\$10) within three (3) months from the time they are notified of their election by the Secretary. If not paid within that time, their election shall be declared void by the Executive Committee. Should any applicant present a certificate of membership in good standing in any local Chapter of the American Institute of Architects, signed by the Secretary and President of such Chapter, such certificate shall be accepted in lieu of the initiation fee, and also in lieu of the forms of application prescribed by the first part of Article I, Section 3, of these By-Laws."

Second. Article V, Section 2, shall be amended to read: "The dues of regular members and associate members shall be \$5 per year, except for persons who are also members of local Chapters, whose dues shall be \$2 per year; all dues shall be payable in advance, during the month of January of each year."

Third. Article V, Section 6, shall be amended to read: "A sum not to exceed \$5 for each member in ACTUAL ATTENDANCE AT ANY ANNUAL MEETING may be allowed to defray the expenses of entertainment at such annual meeting, at the discretion of the Executive Committee." (Amendments in italics.)

It is quite apparent that state Chapters should be supported and be active in their work. The influence of local Chapters is circumscribed as compared with a body even of the same members organized as a state Chapter. Legislators who will not give ear to local or class legislation will give consideration to matters presented by a state organization. It is upon the prestige and vigorous work of the state Chapters that all the desired legislation, both state and national, depends. They will thus be an aid and a benefit to the local Chapters.

We consider it within the province of the state Chapter and a duty of their Executive Board to collect and have printed all existing state laws pertaining to building interests, liens, etc., in the state of Ohio, and also secure advance copies of new laws as soon as passed, and distribute to all members of the state Chapter and other architects on application. By having these collected we can point out existing inconsistencies and secure the passage of uniform and comprehensive laws, and at the same time take a step toward gaining that recognition which is necessary before we can secure the desired legislation in our interests.

We trust that each member will take the matter under careful consideration, and we feel confident that in so doing they will see the great possibilities for usefulness that open out for the state organization beyond what can be accomplished by local Chapters, and the benefit that may be derived from the mutual interchange of ideas and opinions on professional subjects.

In order that we may secure a full expression of the membership on this subject, these circulars are sent to each member in advance for consideration.

The amendments to the By-Laws will be considered, discussed and determined at the next meeting, and it is desired that any members who cannot attend will, prior to such meeting, notify the Secretary of their wishes regarding this matter.

Respectfully submitted,

Approved,

JAMES W. McLAUGHLIN,
 GEORGE W. KRAMER,
 SAMUEL HANNAFORD,
 GUSTAV W. DRACH,
 F. A. COBURN,

Executive Committee.

J. W. YOST,

GEORGE W. RAPP,

GEORGE W. KRAMER,

Committee.

THE ARCHITECTURAL SCHOOL AT THE CHICAGO ART INSTITUTE.

IT is now two years and a half since a department of architecture was founded in the school of the Art Institute of Chicago.

This department, seriously undertaken by an institution having the full confidence of the public, has, quietly and almost unheralded, solidified into a regular architectural school. It should be better known than it is that there is now opportunity without leaving Chicago to study not only the designing and drafting connected with architecture, but also the mathematics, construction and history.

The present prescribed course at the Art Institute requires two years' full attendance, a period certainly short enough to acquire even the rudiments of architectural training. The classes are open to both men and women. Mr. Louis J. Millet has general charge of the school, assisted by Mr. Walter F. Shattuck, the latter teaching mathematics and exercising supervision over the drafting. Regular courses of lectures upon a variety of professional topics are delivered by practicing architects of the city.

During the present year the students have pursued by regular trigonometry and examinations geometry, descriptive geometry and freehand drawing, and have begun the design of buildings. A long and systematic course of lectures upon the History of Architecture has been given by Mr. William A. Otis, courses upon Construction and the Theory of Design by Mr. W. L. B. Jenney and Mr. Irving K. Pond respectively, while a course upon Sewerage and Ventilation by Mr. William S. MacHarg, the civil engineer, is now in progress. A very good beginning of a library upon architecture has already

been acquired by gift and purchase, and the various academic lectures and classes of the Art Institute are open to students of architecture under the advice of their teachers. Miss C. D. Wade directs the freehand watercolor work. There are no evening classes, experiment having shown that successful systematic study could only be secured from full-time students.

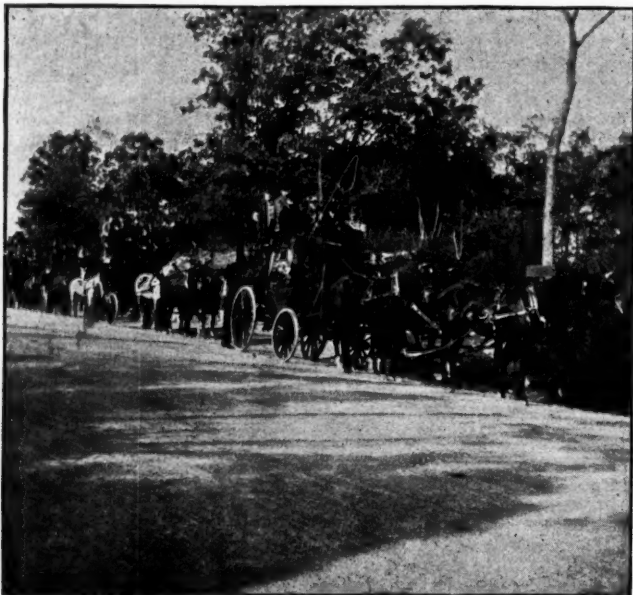
The next year will open about October 1, 1892, when it is hoped that the number of students will be greatly increased.

The advantages afforded by the Art Institute through its collections and opportunities for following the arts of design are very great.

PHOTOGRAPHY IN ARCHITECTURE.

WHILE all architects are deeply interested in photographs and spend large sums each year for pictures of their own work and that of their contemporaries, they have yet to become photographers. When a photographic outfit was an impossibility the architect or draftsman depended upon his skill in sketching to secure to him a peculiar piece of construction or design which he might observe and wish to retain, but at best this sketch was unsatisfactory, for the mind was obliged to supply the detail and the general effect was often lost. Now all this is changed and the architect of today takes a camera with him on his travels and in a moment secures what hours of sketching would not give him.

It is true that many have attempted the use of the camera and given it up because of the complicated method of operation, but there are cameras of simple and accurate operation. Take the "Hawkeye," for instance, made by the Blair Company, of Boston. It makes a picture 4 by 5 inches, which is as large as an architect needs for "sketching" purposes, though the "Kamaret," newly improved so as to take tall buildings at an angle with a 5 by 8 plate, is an excellent camera and simple in operation. The "Hawkeye" is fitted so that glass plates or film rollholder can be used. In operation it requires but three movements. It may be packed with holders and put under your seat in a car. As the train stops at a station you see something you wish to photograph. You reach for your "Hawkeye," open the top and pull the slide of the plateholder. As you walk to the door you turn the focus to the estimated distance and set the shutter according to the light out of doors. When you reach the platform you hold the camera



COACHING PARTY OF ARCHITECTS, FRANKLIN PARK, BOSTON.
TAKEN WITH A "HAWKEYE" CAMERA.

and touch the shutter-spring, and the picture is yours. This is simple indeed, and it does not take a year's practice either. Now it is not necessary to send this plate to the makers to have it developed and printed. When you get home at night (if you have no darkroom) go into the kitchen, light your ruby lantern and mix the developer and in a few minutes your negative is secured, and in the morning it is dry and you can print a copy while you are eating your breakfast. Surely every architect should have a "Hawkeye."

This is not all this camera will accomplish. You wish to preserve a picture of a residence interior. The light is not sufficient to make a good daylight picture. Therefore you use a flashlight. Suppose you have three rooms, a parlor, sitting-room and dining-room, say in line with wide curtain openings or folding doors between. Place the camera at the best point of observation in the parlor at A and open the shutter (gaslight will not affect the plate unless it shines directly upon it). Take a small table and place it against the wall at B and set off a flashlight. Then move the table to the same position at C and set off another flashlight, repeating again at D. Then close the shutter and the picture is

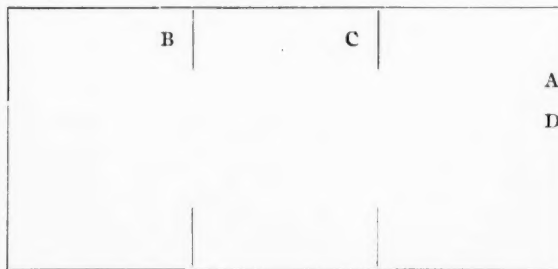
taken. If these flashlights can be set off simultaneously the effect is somewhat improved. (See diagram below.)

What will an outfit cost? The outfit with which the group of tallyho coaches was taken and in which several well-known



OBSERVATORY, MASONIC BUILDING, CHICAGO.
TAKEN WITH A "HAWKEYE" CAMERA.

architects can be distinguished, was one of the first Hawkeye cameras made and cost \$15, with perhaps \$5 added for plateholders, developing apparatus, etc. The view of the observation floor of the Masonic Temple was taken with a camera of later make fitted with a special double lens, which adds somewhat to the original cost. But the main point is the accuracy of the work and the simplicity of operation, and in this the "Hawkeye" is



preferable. A valuable use of the "Hawkeye" is the copying of all plans before they are sent out, the private note which the architect can make upon the stage of construction at a given time, which afterward cannot be disputed, and a dozen other uses which make a "Hawkeye" outfit an indispensable adjunct to every office.

AN INSURANCE-ARCHITECTURAL EXHIBIT BUILDING.

THE secretary of the Illinois Chapter of the American Institute of Architects received the following communication in relation to a fire insurance exhibit, for which space has been allotted at the World's Columbian Exposition:

CHICAGO, July 16, 1892.
Mr. Geo. Beaumont, No. 115 Dearborn street, City, Secretary Illinois Chapter American Institute of Architects:

DEAR SIR,—Referring to the matter of the probable amalgamation of the underwriters' and architects' interest in the Insurance Building Exhibit of the World's Columbian Exposition, we beg to advise you that the underwriters secured some time ago valuable franchises from the World's Columbian Exposition, as follows:

First.—An allotment of space, 75 by 125 feet, at Jackson Park, in a most desirable situation.

Second.—The privilege of erecting thereon a building to be devoted entirely to a display of methods and materials showing the evolution of building construction.

Third.—Club rooms where members could register, meet their friends, socially or otherwise—a general rendezvous and bureau of information.

Fourth.—The only provision being that we erect this building at our own expense, and that the Exposition have reserved for them sufficient space for a model fire department in active operation in the first story of the building.

We believe that the interests of architects and our own in construction are identical. We also believe that if the money can be raised promptly—say not to exceed \$15,000 by the architects—we can go on with this building, combining our interests, making the Underwriters' and Architects' Building Exposition one of the most interesting and instructive exhibits at the Fair, and also self-supporting.

The connection of the architects with the enterprise will allow its scope to be extended far beyond the original idea of fire protection, and provide for its covering the wide field of decorative and sanitary building arts. The ground

space for the building can likewise be extended to at least 80 by 190 feet. Very respectfully yours,

THE WORLD'S INSURANCE BUILDING EXPOSITION,
By W. A. ALEXANDER.

A meeting of the executive committee of the Chapter was called and it was decided to ascertain the financial support the proposition would receive from architects, and a circular letter was ordered sent to the architects of the United States, asking their opinion regarding the matter and the amount each would be willing to contribute toward the \$15,000 necessary to contribute to the proposed exhibit. The matter is worthy of the support of architects generally, as the result would be of incalculable benefit to the profession.

OUR ILLUSTRATIONS.

Nester Block, Marquette, Mich.; Charlton & Gilbert.
A St. Louis residence, Grable & Weber, architects, St. Louis, Missouri.
Residence for S. M. Nave, St. Joseph, Mo.; Eckel & Mann, architects.
Block of flats for G. W. Crouch, Rochester, N. Y.; Block & Barnes, architects.
Residence for T. C. Power, Helena, Mont.; Willett & Pashley, architects, Chicago.
St. Peter's Church and parish buildings, St. Louis, Mo.; Tully & Clark, architects.
German Home for Old People, Cincinnati, Ohio; James W. McLaughlin, architect.
House for Nelson Millett and hall of same, Denver, Colo.; A. Morris Stuckert, architect.
Cumberland Presbyterian Church, Madisonville, Ky.; William C. Smith, architect, Nashville, Tenn.
Nebraska State Building, World's Columbian Exposition, Chicago; Henry Voss, architect, Omaha, Neb.
Two houses in Charlesgate, East Boston. Of one, Peabody & Stearns, architects; the other, McKim, Mead & White, architects.
Union Trust Building, St. Louis, Mo.; Adler & Sullivan, Chicago, and Charles K. Ramsey, St. Louis, associated architects.
Two double-page cuts are given, showing general perspective view and detail of main entrance.
Photogravure Plate: Residence of A. Offner, Avondale, Cincinnati; A. O. Elzner, architect. A Chicago residence.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Entrance, Ashland Block, Chicago; D. H. Burnham, architect.
Portion of Title & Trust Building, Chicago; Henry Ives Cobb, architect.
Residence of Mr. Galbreath, Cincinnati, Ohio; Waite & Cutter, architects, Boston.
Residence of Dr. A. Springer, Norwood, Cincinnati; A. O. Elzner, architect.
Views in house of Grant B. Schley, New York; W. W. Kent, architect. Three full-page plates are given, showing the following views: in parlor, entrance hall, dining room.

SYNOPSIS OF BUILDING NEWS.

Architects are invited to furnish for publication in this department monthly or occasional reports of their new work before the letting of contracts. Reports of buildings costing less than \$5,000 are not published.

Chicago, Ill.—Architect W. T. Leshar is making plans for a four-story and basement store and flat building, to be erected on Indiana street near Ada, for George Fairweather; to be of pressed brick and stone front, and cost \$12,000.
For Frank Murphy, on Fifty-fifth boulevard near Halsted street, a three-story flat building, of pressed brick and stone; to cost about \$18,000.
For Charles Urath, corner Elkhorn avenue and Lincoln street, a three-story store and flat building, of pressed brick and stone, 106 feet front by 75 deep; to cost \$35,000.
For John Morton, on Fremont street east of Belmont avenue, two three-story flat buildings, of pressed brick and stone fronts, copper bays, hardwood trim, etc.; to cost about \$16,000. He is also finishing drawings for a five-story hospital, 135 by 100 feet in size, to be erected corner of Lincoln and Congress streets, for the Railway Brotherhood Association.
For John N. Cooper, on Indiana street to Illinois street east of St. Clair street, a two-story livery stable, 66 by 218 feet in size, to be of pressed brick and stone, and cost about \$30,000.
Architects Marston & Hotchkiss: For Elias Benzing, at Sheridan Park, a two-story frame residence; to have stone basement, electric wiring, furnace, etc.
For M. Schelgren, at Ravenswood, a two-story residence; to be of frame with brick basement, have all the sanitary improvements, furnace, etc.
For La Grange Water Works Company, a two-story frame residence with brick basement, sanitary plumbing, furnace, etc. Also making plans for power house at Covington, Indiana, for the Covington Water Works Company; to be of brick with slate roof, electric light, etc.

Architect C. M. Palmer: For Potter Palmer, on Huron street near the lake, a block of five four-story residences, 102 feet frontage by 77 deep; to be of blue Bedford and buff stone fronts.
For Mrs. H. D. Platt, at 4423 Prairie avenue, a three-story residence, 25 by 70 feet; to be of Bedford stone front.

Architect D. A. Lapointe: For James Perry, at 16 Sacramento avenue; a two-story and basement flat building, 40 by 55 feet, to be of cut stone front, and cost \$16,000.
For E. J. Lewis, on Washington boulevard east of Francisco street, a three-story and cellar flat building; 50 by 75 feet, to be of stone front; and cost \$30,000.
For the same owner, on Washington boulevard near Kedzie avenue; a three-story flat building, 25 by 75 feet; to cost about \$13,000.
For Mrs. M. Venard, at 341 Warren avenue; a two-story and cellar flat building, to have a stone front, and cost \$10,000.
For O. M. Brady, at 1304 Fulton street; a two-story flat building of stone front; to cost \$8,000.

Architect Perley Hale: For C. W. Lasher, corner of Fulton and Robey; a two-story flat building, 75 by 125 feet in size, of pressed brick and stone; cost \$21,000.

Architects Crowen & Richards: For Roman Stobiecki, on Milwaukee avenue near Division street; a four-story store and flat building, to be of pressed brick and stone, have tile and mosaic floors in the main hall, ornamental and beveled glass; size 25 by 100 feet; cost \$15,000.
For Gus Walker, on Fifty-first street; a two-story store and flat building, 45 by 75 feet, to be of pressed brick and stone front; cost \$10,000.
For Edmund Nicholas, a three-story flat building, to have two fronts, 50 by 60 feet, of pressed brick and stone, with copper bays

and cornice; interior to be finished in red oak and Georgia pine; cost \$14,000.
They have also just let contracts for a five-story hotel, 65 by 150 feet in size, to be erected on Lake avenue and Thirty-ninth street, for Strickland & Co. It will be of pressed brick and stone, the interior to be finished in hardwood and Georgia pine; cost \$50,000.

Architect Thomas Wing is making plans for a five-story addition to the plant of D. H. Fritts, on Smart street near Austin avenue. It will be of pressed brick and stone front, 50 by 125 feet; and cost \$20,000.

Architect Ira C. Saxe: For Ed. Lundy, on Rhodes avenue, near Sixty-first street, a two-story flat building, of pressed brick and stone. For W. E. Conan, at Ravenswood; a two-story flat building, to be of stone and pressed brick. Also for same owner, on Ellis avenue near Thirty-sixth street; a three-story flat building, of pressed brick and stone. For A. Shook, on California avenue near Ogden, a three-story flat building, 52 by 88 feet; to cost about \$15,000.

Architects Ostling Bros.: For C. Olson, on Milton avenue near Oak street; a four-story store, shop and flat building; 25 by 100 feet; to be of pressed brick and stone front; cost \$16,000.
For M. Pauly, at 178 Jay street; a three-story flat building of pressed brick and stone; to cost \$8,000.
For Charles Ostrand, on George street near May; a pressed brick and stone front cottage; to have best plumbing, furnace, etc.
For Charles Kallbon, at 112 Schiller street; a three-story flat building of pressed brick and stone; to cost \$8,000.
For Mrs. Newberg, on Newport avenue near Clark street; a three-story flat building of pressed brick and stone front; to cost \$9,000.
For L. Hesselroth, on Chicago avenue and Franklin street; a five-story store and flat building; 75 by 130 feet in size; to have two fronts of pressed brick and stone, all the improvements, steam heat, electric wiring, etc.; cost \$90,000.

Architect F. L. Fry: For Simon Straus, at 62 West Madison street; a three-story furniture store; 40 by 100 feet; to cost \$15,000.
Pressed brick and stone front, electric light and all improvements.
For Mr. Falkner, on Drexel avenue and Fifty-ninth street; a two-story flat building of pressed brick and stone front.
For Michael Graf, at Irving Park; a two-story frame residence.
For T. M. Simmons, on Twelfth street near Lincoln; a three-story store and flat building; 50 by 75; to cost about \$20,000.
Pressed brick and stone front, with galvanized iron bays, all sanitary improvements, electric wiring, etc.

Architect L. G. Hallberg: For W. A. Hansburg, on Stony Island avenue between Seventieth and Seventy-first streets; a three-story flat building; 50 by 72 feet; to be of pressed brick and stone and cost about \$15,000.

Architect W. H. Drake: For W. H. McDonald, on the northwest corner of Twenty-seventh and Dearborn streets; a four-story flat building and one store; to be of pressed brick and stone, galvanized iron bays and cornice; to cost about \$15,000.
For H. E. Bennett, on the northeast corner of Armour and Twenty-seventh streets; a four-story flat building; 48 by 100 feet; to be of pressed brick and stone front, with first story and basement of stone; cost \$25,000.

Architects Beers, Clay & Dutton have just let contracts for the four-story and basement apartment house to be erected at 3450 Prairie avenue, for C. E. Adams. It will have a stone front of handsome design, with stone bays, hardwood interior finish, electric light, steam heat, hot-water plant, etc.; the cost will be \$20,000.

Architect A. L. Schellenger made plans for remodeling the Central Church of Christ, on Thirty-seventh street and Indiana avenue. He will put on a new front seventy-three feet; will be all of stone; also raise up the old building eight feet and build underneath of stone. The interior will be thoroughly renovated and have added, steam heating, electric light, stained glass windows, etc. The seating capacity will be increased 500, making the accommodation 1,100. He is also getting out drawings for a M. E. church, 68 by 110 feet in size, to be erected on Fifty-fifth street and Emerald avenue. It will have a handsome stone front, slate roof, steam heat, electric light, stained glass windows and all the improvements.

Architects Wilson & Marble: For W. H. Pruyn, on Drexel boulevard, Nos. 247 and 249, two three-story residences, 50 by 80 feet in size; to cost \$40,000. The fronts will be of very attractive design in Bedford and Portage brownstone. The interiors will be handsomely finished in hardwoods, with marble wainscoting, tile and mosaic floors, specially designed consols and mantels, hot-water heating, electric light, etc.
For Thomas W. Phillips they are designing two fine three-story residences, to be erected on Wrightwood avenue, 150 feet east of Hampden court. They will have stone fronts, slate mansards and gravel roof; hot-water heating, electric light, hardwood interiors and the finest sanitary arrangements; they will cost about \$30,000.
For W. H. Moore they designed a two-story barn, 32 by 100 feet in size, to be built at 29 Walsh avenue.
For Berriman Brothers, two three-story residences, to be erected at 1911 to 1913 Diversey street. They will have stone fronts, steam heating, electric light, and all improvements, and cost about \$40,000.
For John G. Wilden, on Prairie avenue near Forty-sixth street, a three-story residence, to have a stone front, hardwood interior, hot-water heating, electric light; cost \$20,000.
For Mrs. M. Wert, on the northwest corner of Kimball avenue and Jackson boulevard, a three-story and cellar flat building; to be of stone front with galvanized iron cornice; steam heating, electric light, all the sanitary improvements, and cost about \$20,000.
Have just completed plans for the Everett apartment house, to be erected on Washington avenue and Fifty-sixth street. It will be a handsome four-story structure covering a ground space of 150 by 100 feet. The basement will be of rock-faced stone and above this will be of pressed brick and stone; steam heating, electric light, marble and tile work, gas ranges and fireplaces and the best of plumbing and modern conveniences will be put in; cost about \$150,000.

Architect Charles S. Frost: For James Ingram, on Michigan avenue near Twenty-second street, a seven-story store and apartment house, 50 by 119 feet; to cost \$125,000. The first two stories will be of stone and above of buff pressed brick and terra cotta. He is also preparing plans for a pretty station, to be erected at Rockford, Illinois, for the Chicago & North-Western Railway Company. It will be of rock-faced stone and pressed brick with slate and copper roof; and cost about \$25,000.

Architects Faber & Pagels: For J. F. Jarecke, corner of Huron and Noble streets, a four-story and basement store and flat building, 51 by 85 feet; to be of pressed brick and stone front, pressed brick bays, gravel roof, all the sanitary conveniences, steam heating, etc.; cost \$22,000.
For August Schubert, on Wash-tenaw avenue, near Humboldt Park, a two-story and basement flat building; of pressed brick and stone front, sanitary conveniences, furnaces, electric wiring, etc.; cost \$8,000.

Architect W. D. Cowles: For M. H. & F. H. Biggs, at South Evanston, two two-story and attic frame houses; to have stone basements, sanitary plumbing, furnaces, etc.
For E. D. Murray, on South Chicago avenue near St. Lawrence avenue, a three-story store and flat building, 68 by 67 feet in size; to have pressed brick and stone front, hardwood finish, plumbing, electric wiring, etc.; cost about \$20,000.
For the same owner, on Cottage Grove avenue near South Chicago avenue, a four-story store and flat building, 63 feet front and 76 feet deep; to be of pressed brick and stone, with copper bays and corner tower of slate and copper; the cost will be about \$30,000.

Architects Matts & Curry: For J. E. Keeney, remodeling building corner of Ohio and Rush streets, "Granada flats", they will put in marble wainscoting, mosaic floors, hardwood finish, steam heat, electric light, and all the modern conveniences; the cost will be about \$35,000.
For J. Clark, at Oak Park, a two-story frame residence; to have stone basement, hardwood finish, furnace, etc.

Architect I. C. Zarbell: For Colonel Kennicott, on Forty-first and Ellis avenue, a three-story store and flat building, 60 by 75 feet; of pressed brick and stone, sanitary plumbing, steam heating, etc.; to cost \$12,000.
For Adolph Arnold, on Surf street near the lake, a three-story residence of very handsome design; stone front, hardwood finish, etc.; cost about \$30,000.
For Herman Arnold, on Wellington street near the lake, a three-story residence and stable; to be of stone, and cost \$30,000.

Architects I. K. & A. B. Pond: For J. A. Miller, on Woodlawn avenue and Fifty-fifth street, a three-story and basement apartment building, 50 by 84 feet; to cost \$26,000. It will be of buff and brown pressed brick with stone trimmings, slate and gravel roof; cost \$20,000.
For William M. Craig, on Forty-eighth and Kenwood avenue, two three-story and basement residences; to cost \$22,000. Also two-story suburban villa, to be erected at Evanston, for James T. Hatfield. They are also getting out drawings for a three-story academy, two three-story and basement dormitories and several cottages for the Lake Forest

university. In the academy there will be a chapel with accommodation for a congregation of four hundred. For E. B. Smith, they are working on drawings for a four-story tenement, 50 by 80 feet in size, to be erected on Lake avenue near Fifty-sixth street. It will have a pressed brick and stone front, gravel roof, hardwood finish and all the conveniences; cost about \$20,000.

Architect H. M. Hansen: For Henry Jaeshke, at 1765 North Halsted street, a three-story flat building; of pressed brick and stone front, 80 feet front. For Henry Rang, on Dearborn avenue, a double three-story residence; of stone front, gravel roof, etc.

Architect E. R. Krause: For A. Zeese, at Buena Park, a two-story basement and attic residence; 45 by 60 feet in size, to be of stone all round with slate roof, hardwood interior finish, hot-water heating, electric light, etc.; cost about \$30,000. For J. Gross, on Denning court, a two-story basement and attic residence, to have a stone front, slate roof, hardwood finish, hot-water heating, electric light; cost \$20,000.

Architect T. C. Goudie: For C. H. Moore et al., nine two-story frame houses, brick basements, sanitary plumbing, furnaces, laundries, etc., to be erected at West Ravenswood. For J. H. White, at Rogers Park, a two-story frame residence; stone basement, plumbing, furnace, etc.

Architect Fred. Ahlschlager: Making plans for Jewish Temple (Anshe Emeth). It will be two-story and basement, 26 by 81 feet in size, have stone front, tin roof, hardwood finish, pews, stained glass, heating apparatus, etc.; cost about \$10,000. Also making plans for a three-story basement and attic building, 28 by 124 feet in size, to be erected corner of Halsted street and Englewood avenue for the German Illinois State Bank and Safe Depository of Chicago. It will have a stone front, hardwood finish, steam heat, electric light and all the improvements; the cost will be \$30,000. For H. Benjamin, at 6230 Halsted street, a three-story and attic store and flat building, 50 by 85 feet, to have a pressed brick and stone front, hardwood finish, electric light, etc.; cost about \$20,000.

Architects Lamson & Newman: For H. Rech, corner of Monroe and Honore streets, a four-story and basement flat building, 25 by 80 feet, to be of stone front with copper bays, pressed brick side, copper cornice, hardwood finish throughout, open plumbing, steam heating; cost \$23,000.

Architect L. G. Quackenboss: For H. Botsford, on Ogden avenue near Twelfth street, a four-story store and apartment house, 100 by 70 feet in size, to be of pressed brick and stone with copper bays, etc.; cost \$40,000.

Architects Hetherington & Warner: For Thomas Corrigan, on Van Buren street near Sacramento avenue, a three-story addition, 50 by 78 feet in size, to be of pressed brick and stone with copper bays, gravel roof, sanitary plumbing, steam heat, electric light, etc.; the cost will be about \$20,000. For G. Clark, on Wellington street near Sacramento avenue, a two-story and basement flat building, of pressed brick and stone, plumbing, furnaces, etc.

Architect W. R. Gibb: For J. Nichols, at 71 Armour street, a three-story and basement flat building, of pressed brick and stone trimmings, galvanized iron bays, etc.; cost \$8,000.

Architect Robert Rae: For C. Follansbee, at Twenty-third and State streets; a stable to be remodeled into a modern three-story flat building, to have all the sanitary and modern conveniences, steam heat, etc.; cost about \$15,000. For W. H. Cairnduff, at Winnetka, three two-story frame residences, stone basements, all the sanitary improvements, hot-water heating, etc. For George A. Otis, at 4585 Oakwald avenue, a three-story residence, 27 by 60 feet, of pressed brick and stone, slate mansard and gravel roof, quarter-sawn oak finish, steam heating, electric light, the best of plumbing; \$10,000. For L. Brinckenhoff, at Kenilworth, a two-story basement and attic frame residence; stone basement, hardwood finish, furnace, etc. For E. E. Fayerweather, at Hinsdale, a two-story cellar and attic frame residence, stone basement, hardwood interior, steam heating, electric light, all the sanitary appliances; cost about \$10,000.

Architect W. L. Carroll: Making plans for a four-story apartment house; 38 by 104 feet in size; to be erected at 491 to 493 Dearborn avenue, for L. B. Mantonya. It will have a stone front of very handsome design, the interior to be finished throughout in hardwoods and have marble wainscoting, tile floors, fine open plumbing, gas ranges and fireplaces, refrigerators, sideboards, elevator, steam heating, electric light, laundries, etc.; cost \$50,000.

Architect William Strippelman: For W. W. Kimball & Co., on Twenty-sixth and Rockwell streets, a five-story warehouse; 80 by 180 feet in size; to be constructed of common brick with stone trimmings; cost \$52,000. For J. M. Smyth, in the rear of Jackson boulevard east of Dearborn street, a three-story stable; 100 by 100 feet in size; to be of pressed brick, rock-faced stone basement, gravel roof, 130 stalls, etc.; cost \$30,000. For C. B. Sheffer, at 4420 Ellis avenue, a two-story residence; 25 by 68 feet in size; to be of Ashland brown-stone front, flat roof, hardwood finish, electric light, hot-water heating, etc. For Mrs. Amelia Sunderland, at 2067 South Park avenue, remodeling residence. For Joseph Klicka, on Humboldt boulevard north of North avenue, a two-story residence; 30 by 75 feet in size; to cost \$15,000. To be of stone front and side, have hardwood finish, hot-water heating, electric light, etc.

Architect W. K. Johnston: For John Torrent, at Muskegon, Michigan, a two-story basement and attic residence; 60 by 93 feet in size; to cost \$65,000. It will be constructed of blue Bedford stone, with red slate roof; have interior elegantly finished in hardwoods, electric and gas lighting, etc. Also completed drawings for the library building; 80 by 144 feet in size; to be erected at Holland, Michigan, for Hope College. To be of stone with slate roof, hardwood interior finish, steam heating, electric light, etc.; cost \$30,000. Also completed plans for the City State Bank of Holland, Michigan. It will be three stories, of pressed brick and stone, tin roof, steam heat, electric light, etc.

Cincinnati, Ohio.—Reported by Lawrence Mendenhall:

The situation since my last report has not changed materially, the volume of building not being increased. The strike scare has had its effect, and many contemplated structures have only progressed as far as the pencil stage of construction, namely, the preparatory drawings of the architects. Unintentionally, no doubt, the Builders' Congress raised an antagonistic spirit in the breasts of the architects, by the issuing of a circular, the purport of it being that they would not bid with persons outside the congress. This struck the architects as being decidedly dictatorial and resulted in their advising for all contractors outside the congress to send their names to the secretary of the Chapter. Thus the matter stands.

Architects Crapsey & Brown: For the Baptist church at Augusta, Kentucky, an edifice; materials: brick, stone trimming, stained glass, slate roof, hardwood, furnaces, gas, plumbing, seats, etc.; cost \$8,000. Also for Henry Broadwell, Tusculum, Ohio (Cincinnati), a residence; materials: frame, slate roof, hardwood, mantels, grates, stained glass, furnace, gas, plumbing, etc.; cost \$5,500.

Architect James W. McLaughlin: For Mr. Caleb W. Shipley, a residence; materials: frame, slate roof, stained glass, hardwood, grates, mantels, gas, plumbing, etc.; cost \$6,000. For Mr. Thomas McDougall, a chapel for the Presbyterian church; materials: frame, slate roof, furnace, pews, stained glass, etc.; cost \$8,000; size 40 by 75 feet.

Architect S. S. Godley: For Mr. Samuel Fleischmann, a residence; materials: pressed brick, slate roof, hardwood, stained glass, mantels, grates, furnace, gas, plumbing, etc.; cost \$12,000. For Walter J. Freiberg, a residence; materials: pressed brick, slate roof, wood mantels, grates, furnace, stained glass, gas, plumbing, etc.; cost \$18,000. For Hon. Charles Fleischman, a residence; materials: pressed brick, slate roof, grates, mantels, furnace, stained glass, etc.; cost \$12,000.

Architect G. W. Drach: For Albert H. Chatfield, a residence; materials: pressed brick, slate roof, hardwood, mantels, grates, furnaces, stained glass, etc.; cost \$18,000. For Mrs. M. Y. Schmidlapp, a residence; materials: pressed brick, stone, slate roof, stained glass, furnace, gas, plumbing, hardwood, etc.; cost \$12,000.

Architect A. O. Elzner: For Mr. N. Plant, a residence; materials: brick, stone, hardwood, furnaces, mantels, grates, stained glass, etc.; cost \$15,000. For the Cincinnati Jewish Club, a clubhouse; materials: pressed brick, slate roof, stained glass, furnaces, grates, frescoing, hardwood finish, mantels, etc.; cost \$75,000. For Mr. Fenton Lawson, a residence; materials: brick, slate roof, furnace, hardwood, mantels, grates, blinds, stained glass, etc.; cost \$8,000. For Mrs. Lauretta B. Gibson, a store; materials: pressed brick, steam heat, tin roof, freight elevators, gas, plumbing, etc.; cost \$12,000.

Architects Des Jardins & Hayward: For Louis Voight, a warehouse, 40 by 90 feet and four stories high; materials: pressed brick, stone trimmings, tin

roof, steam heat, elevator, gas, plumbing, etc.; cost \$15,000. Flat for George Stribley, Walnut Hill, Cincinnati; materials: pressed brick, tin roof, mantels, grates, gas, plumbing, etc.; cost \$20,000. Alterations and addition to a house for Dr. A. W. Johnstone, care Dr. T. A. Reamy. Remodeling into a hospital. The contract will probably run to \$10,000. Residence for A. E. Heinsheimer, attorney at law; materials: frame, slate roof, furnace, mantels, grates, stained glass, etc.; cost \$5,000.

George W. Rapp and William Martin Aiken have formed a partnership. THE INLAND ARCHITECT never loses an opportunity to wish one well, so "here's to your health, gentlemen, and may you live long and prosper."

Cleveland, Ohio.—Architect J. Daniels: For United States Baking Company, four-story bakery block, brick, 47 by 96 feet, John Gill & Co., contractors; cost \$36,500. For Merchants Banking and Storage Company, three storage warehouses, brick, 80 by 19 feet; cost \$6,000.

Architect J. N. Richardson: For Masonic Association Temple, six stories stone, 80 by 82 feet, S. C. Kane, contractor; cost \$4,500.

Architect F. Felkel: For Van Wagoner & Williams, two-story foundry, brick, 110 by 200 feet, D. & G. Griese, contractors; cost \$24,000. For same, two-story factory, brick, 40 by 90 feet; cost \$8,000.

Architect C. F. Schweinfurth: For Ursuline Convent, two-and-a-half stories, 96 by 187 feet, brick, Grant & Richardson, contractors; cost \$103,000.

Architects Coburn & Barnum: For Dr. D. H. Beckwith, two-story drug store, 34 by 60 feet; cost \$5,200. For Charles F. Olney, art gallery, brick, 32 by 64 feet; cost \$20,000. For E. M. Stover, two two-story brick residences, 36 by 23 feet and 42 by 45 feet; cost \$8,000.

Contractor J. M. Waterson: For Burtes Patterson Sargent Paint Company, four-story paint works, brick; cost \$12,000.

Architect J. N. Richardson: For Woodland Avenue Street Railway Company, electric power house, brick, 92 by 152 feet; cost \$35,000.

Architect J. W. Russell: For Newton M. Anderson, two-story dwelling, frame, 35 by 44 feet; cost \$5,000.

Architect A. Milmeler: For Aurora Vapor Stove Company, two-story manufacturing building, brick, 50 by 200 feet and 100 by 50 feet; cost \$10,000.

Architect W. W. Sabin: For Miles Park Presbyterian Church Association, school, 58 by 75 feet; cost \$6,700.

Detroit, Mich.—Architect W. B. Stratton: For Sylvan Lake Improvement Company, two and one-half story frame hotel on the lake near Pontiac, Michigan; projected; cost \$10,000.

Architect R. E. Roseman: For Joseph Porrein, three-story brick stores and flats, on Detroit avenue; projected; cost \$20,000.

Architects Rogers & McFarlane: For T. H. Newburg, remodeling three-story brick residence, 28 by 30 feet; cost \$15,000. For Hugh McMillan, three-story double brick residence; cost \$30,000. For Don M. Dickinson, remodeling three-story brick residence, 32 by 23 feet.

Architects John Scott & Co.: For Detroit Fire Department, two-story brick engine house, 40 by 70 feet; cost \$12,500.

Architects M. L. Smith & Son: For C. H. Cowler, two and one-half story brick residence; cost \$12,000.

Architects J. L. Gearing & Son: For Central Methodist Episcopal Church, enlarging chapel; cost \$19,000.

Architect E. C. Van Leyen: For Mashen Flush, two-story frame stable.

Architect Peter Dederich: For J. Keugel, four-story brick carriage manufactory, 36 by 65 feet; cost \$12,000. For Henry Andries, two-story brick store and residence; cost \$7,500.

Architect Gordon W. Lloyd: For SS. Peter and Paul Church, remodeling. For D. M. Terry & Co., addition to warehouse; cost \$6,500. For Elmwood Cemetery, brick barn and keeper's house; cost \$5,000.

Architects A. C. Vorney & Co.: For Charles Keinicke, Jr., six three-story brick residences, covering 108 by 60 feet; cost \$22,000.

Architects John Schuman & Co.: For St. Albertus School, three-story brick schoolhouse; cost \$38,000.

Architect Peter Dederichs, Jr.: For St. Mary's Church, a granite cathedral, for Richmond, Virginia; cost \$150,000; projected. For St. Gertrude Church, brick church at Santa Cruise; cost \$10,000; projected. For St. Peter's Church, a brick and stone church at Ft. Wayne, Indiana; projected.

Architects A. E. Walshe & Son: For Wilson & Forley, two and one-half story pressed brick residence; cost \$10,000; projected.

Architects Spier & Rohens: For Michigan Central Railway, passenger engine station, at Niagara Falls; cost \$8,000.

Architect G. W. Myers: For Alice G. Phelps, two-story brick residence; cost \$5,500. For E. A. Davis, two-story frame residence; cost \$5,000.

Architect Henry Englebert: For Servite Brothers, a brick and stone cathedral for the monastery of the brothers at Chicago, on Jackson boulevard near Fortieth street; cost \$125,000. Projected.

Architect Edward C. Van Leyer has removed his offices from 24 Hodges building to more commodious quarters at 36 Pennsylvania Bank building, West Fort street.

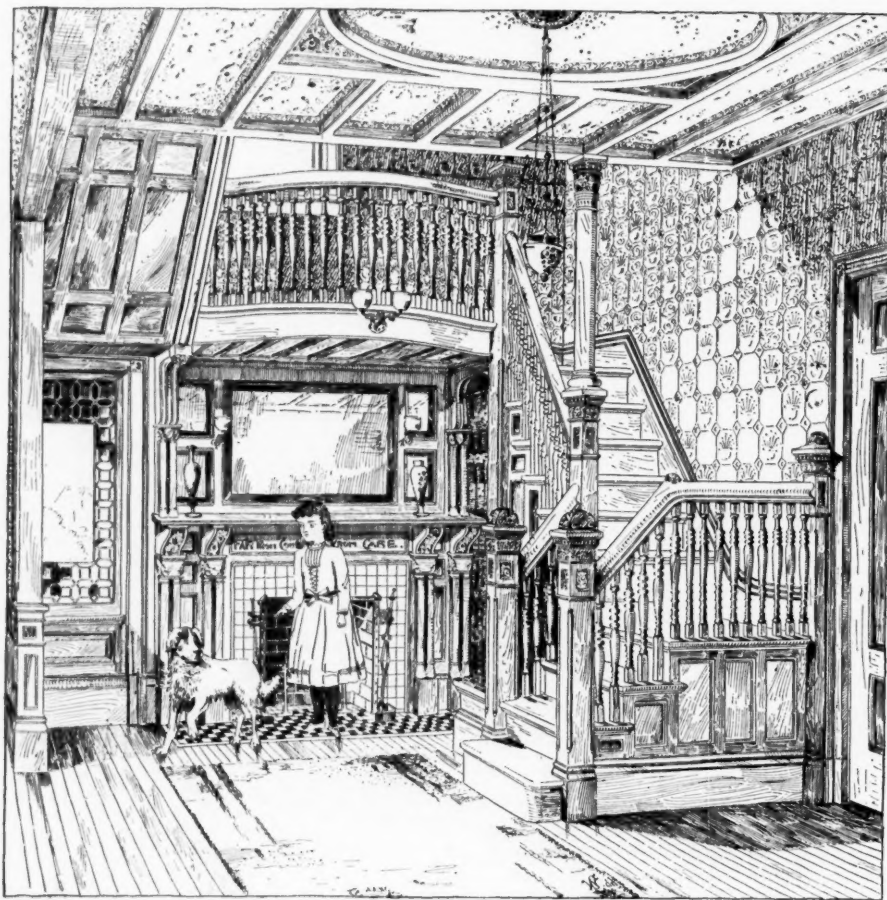
Louisville, Ky.—Architects Mowbray & Bohne report the following: Storehouse for Mrs. Emelia Bretzfelder, on Market between Fifth and Sixth streets; to cost \$20,000; pressed brick front, stone trimming, four stories; asphalt roof, slow burning construction, elevators, size of building 40 by 120 feet. Residence for Mr. J. B. Browning, Third and B streets; to cost \$7,000; pressed brick front, stone trimming, slate roof; two-and-a-half stories, size 28 by 45 feet, heated with furnace; stable, to cost \$1,500; frame and metal roof. Residence for Mr. C. B. Castner, on Park avenue; to cost \$8,000; slate roof, two and a half stories, size 35 by 55 feet, pressed brick, stone trimming, heated with furnace. Residence for Mr. S. C. Jones, on St. James court; to cost \$5,000; slate roof, two and a half stories; pressed brick and stone, size 28 by 45 feet. Bous market house, Jefferson near Preston street; alterations and addition of hall rooms, lodge room and bar; to cost \$4,500. Residence for Mr. Gus Bruner, on Floyd street near Oak; brick and shingles, two and a half stories; cost \$3,500, size 25 by 30 feet. Residence for Mr. T. W. Boden, Edwards and Hepburn avenues; cost \$3,000, frame two stories, size 29 by 35 feet. Alteration and addition to residence for Mr. E. T. Pfingst, on Breck near Third street; cost \$4,500, house when completed making two dwellings. Residence for Mr. W. F. German, Edward and Hepburn avenues, to be frame, two stories; \$3,500; size 30 by 40 feet. Residence for Mrs. Sarah Fox, on Floyd street near Oak; to cost \$3,500; brick and shingles, two stories, size 25 by 30 feet.

Architects Drach & Thomas: For National Building and Loan Company eleven dwellings; to cost \$72,000. For Charles Meudel, residence; cost \$7,200. For R. A. Basson, residence; to cost \$6,500. For J. P. Field, residence; to cost \$6,100. For C. P. Vance, residence; cost \$3,000. For Jameson & Hutchinson, remodeling store; cost \$3,500. For American Tobacco Company, warehouse; cost \$7,600. For Louisville school board, schoolhouse; cost \$18,000. For same, schoolhouse, addition; cost \$3,500.

Rochester, N. Y.—Architects Jay Fay and O. W. Dryer are preparing plans for: stone and frame residence, to be built on East Main street, for C. J. Kalush; to cost \$10,000. Colonial residence for Edmund Wetmore, at Glen Cove, Long Island; cost \$10,000. Frame house, on Rutger street for Frank C. Walker; cost \$6,500. Dormitory building for Genesee and Wesley seminary at Lima, New York, three-story brick, 68 by 130 feet; cost \$30,000. Double house for M. Samuels, on Charlotte street; to cost \$5,500. Factory building for E. Grimble, three stories high; cost \$5,500. Baptist church, at Attica, New York, material: brick; cost \$8,000.

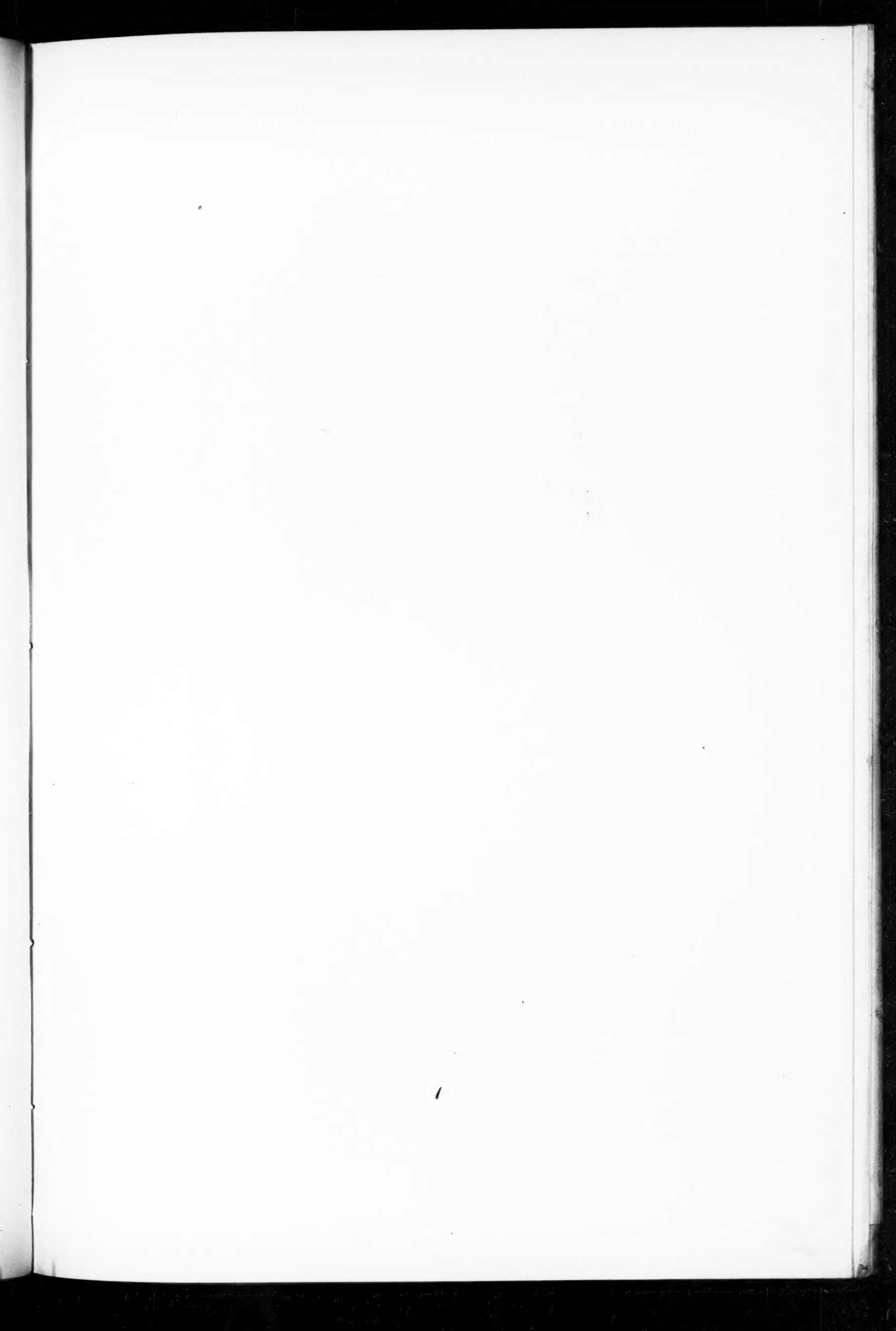
Architects Otis & Crandall: A six-story factory building for the Eastman Kodak Company, corner Vogt and State streets, A. Fredericks & Son are the mason contractors; T. Finucane, the carpenter; the building is to be of brick with stone trimmings; cost about \$60,000.

Architect William C. Walker is preparing plans for: Office and Gate Lodge Riverside Cemetery, preserving vault for same, stable for same; station on electric railroad for same, all to be built of stone. Block of four stores and eighteen apartments on Central avenue for M. Raleigh Farrar; cost \$20,000. Block on State street, three stories, twelve apartments; cost \$16,000. Residence on Lake avenue for Henry Hanson, cost \$7,000. Residence on Grainger place for James Vick; cost \$9,000. Residence on Lake avenue for Hon. Charles A. Baker. Block of flats on Phelps avenue, cost \$10,000. Dwellings on Frost avenue, Church Walk, Meigs street, Rochester, New York. Dwelling house, at Albion, New York, for Mr. John Bordwell.

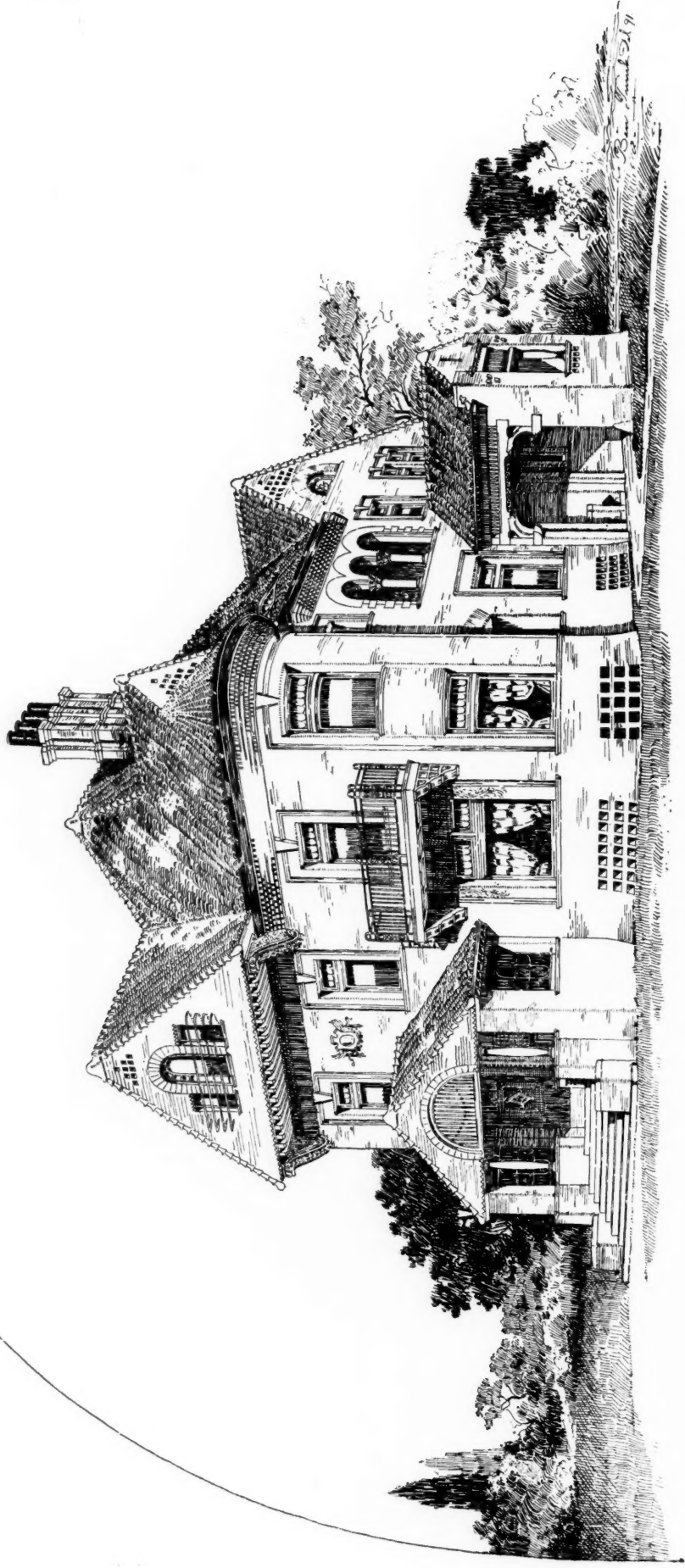


THE HALL: MR MILLETT'S HOUSE, DENVER, COLO.: A. MORRIS STUCKERT, ARCHITECT.

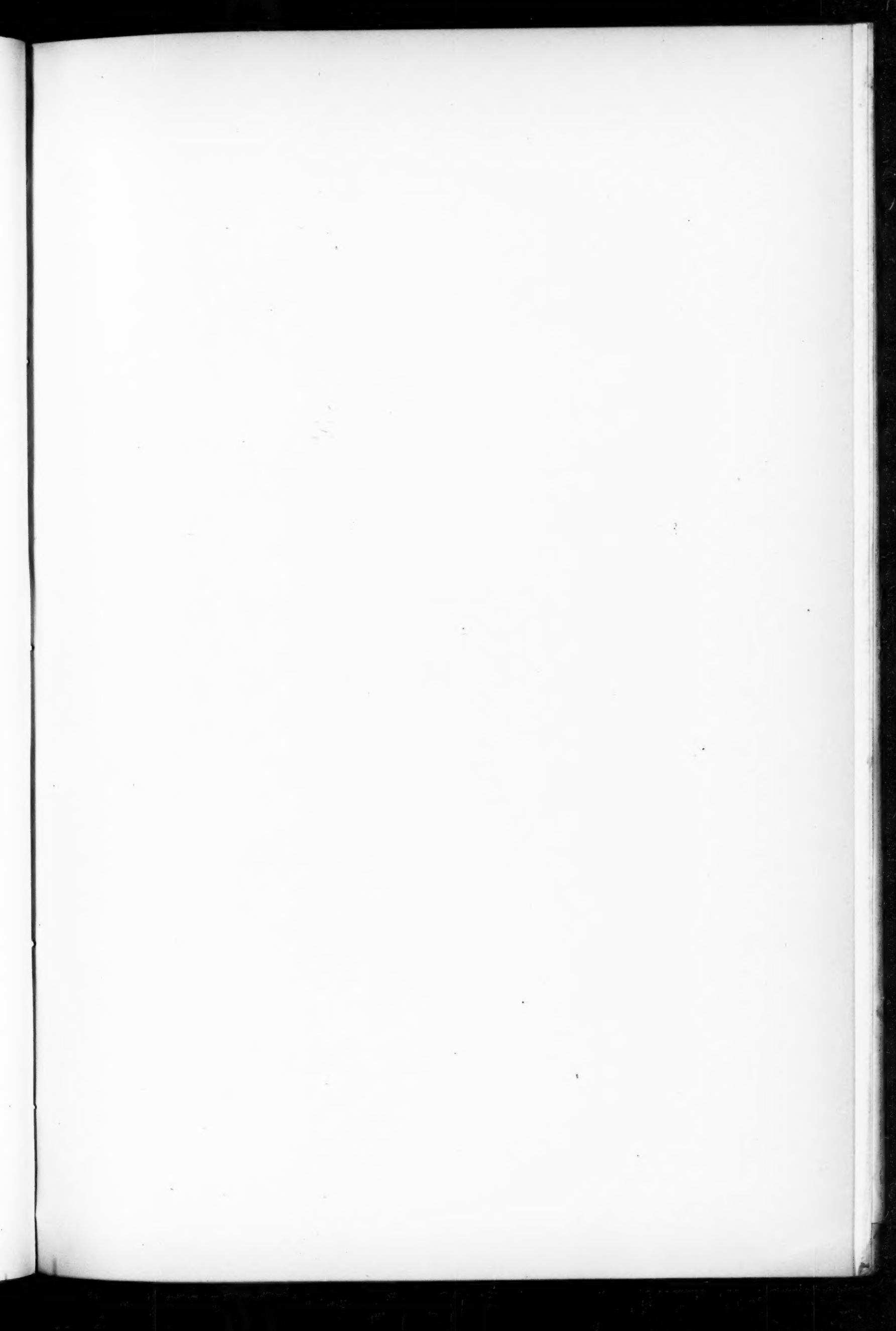




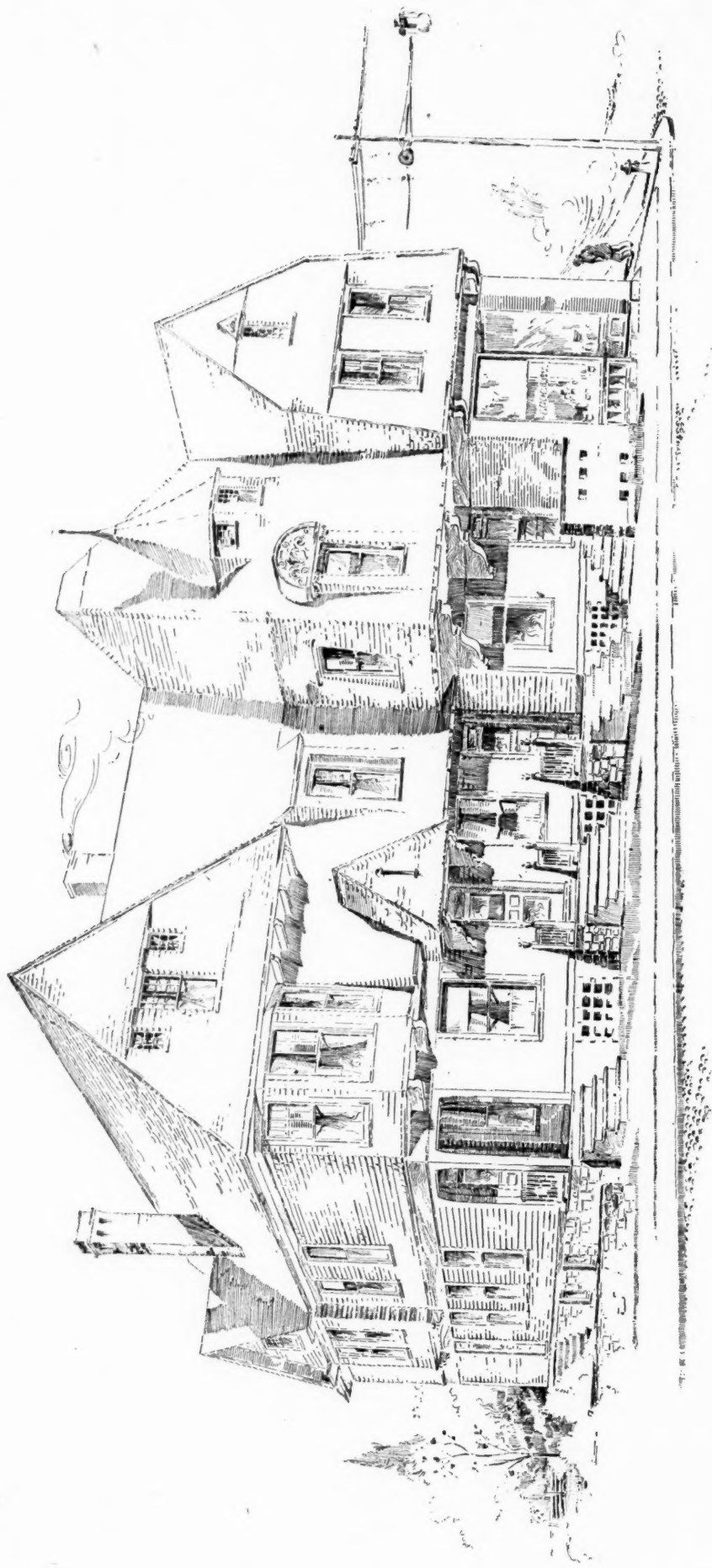
ECKEL & MANN ARCHITECTS
ST. JOSEPH & ST. LOUIS. 1891.

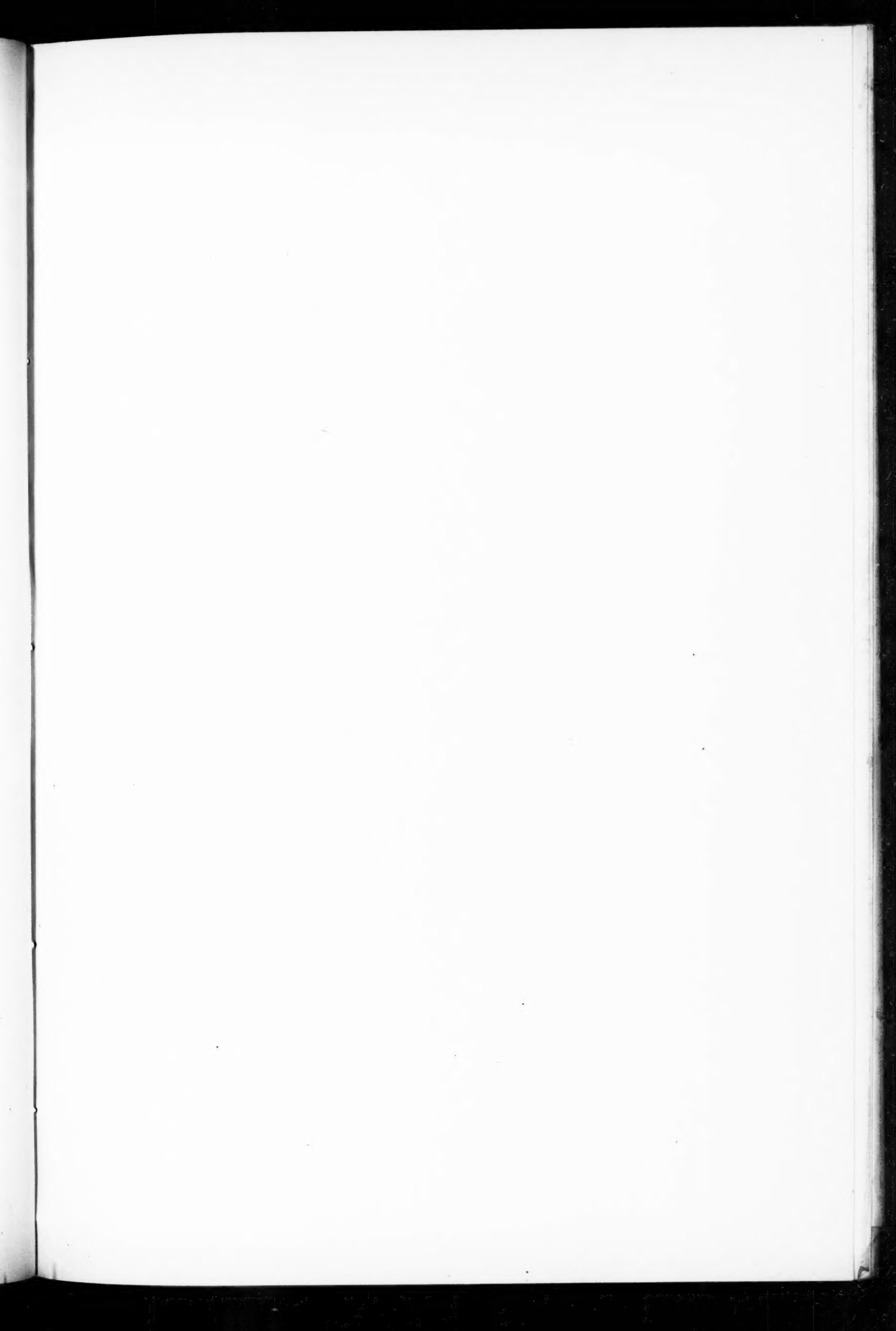


RESIDENCE FOR S. M. NAVE, ST. JOSEPH, MISSOURI.
ECKEL & MANN, ARCHITECTS.

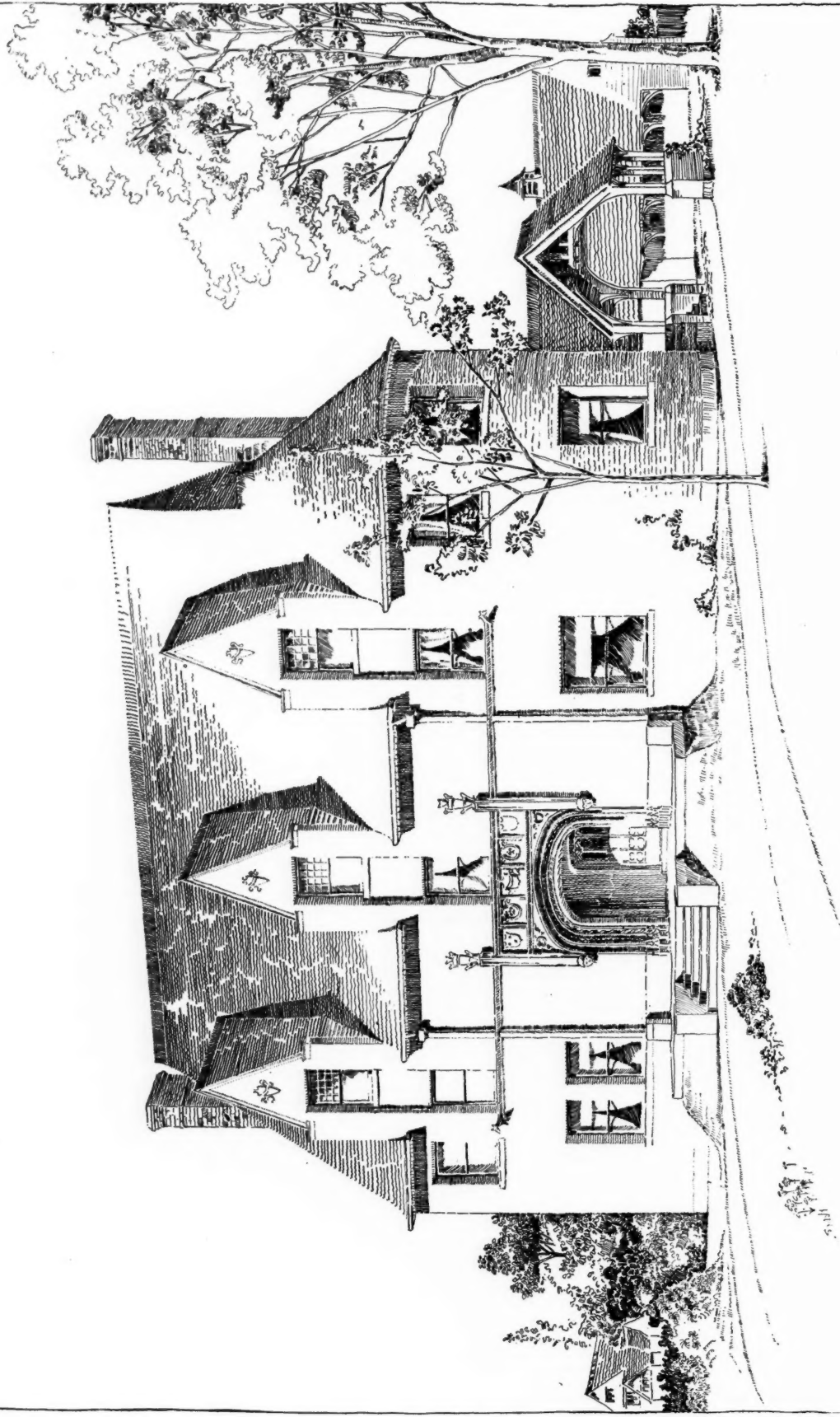


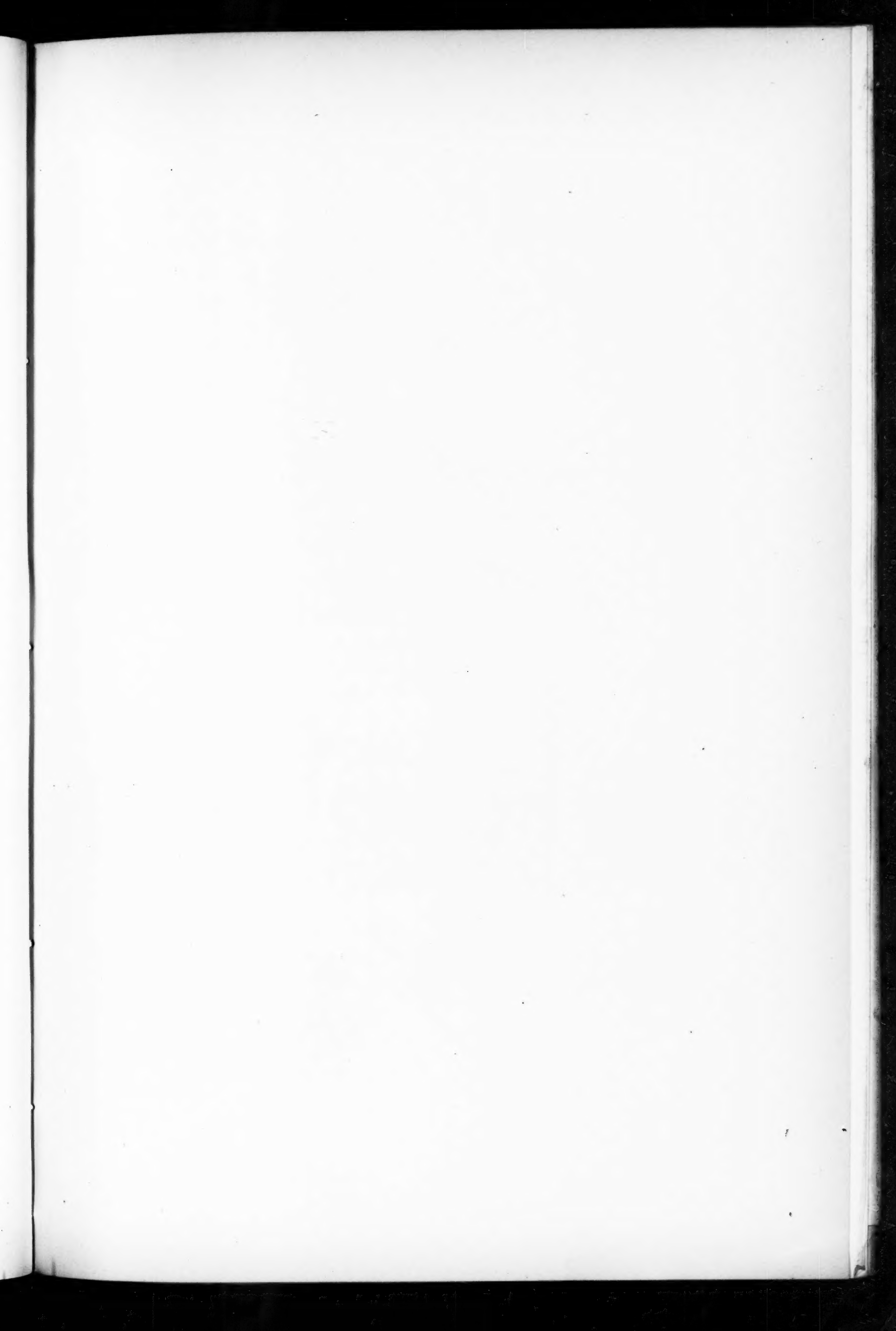
BLOCK OF FLATS - FOR G. W. CROUCH - ESQ -
BLOCK C. BARNES - ARCHITECTS -
ROCHESTER - N. Y.

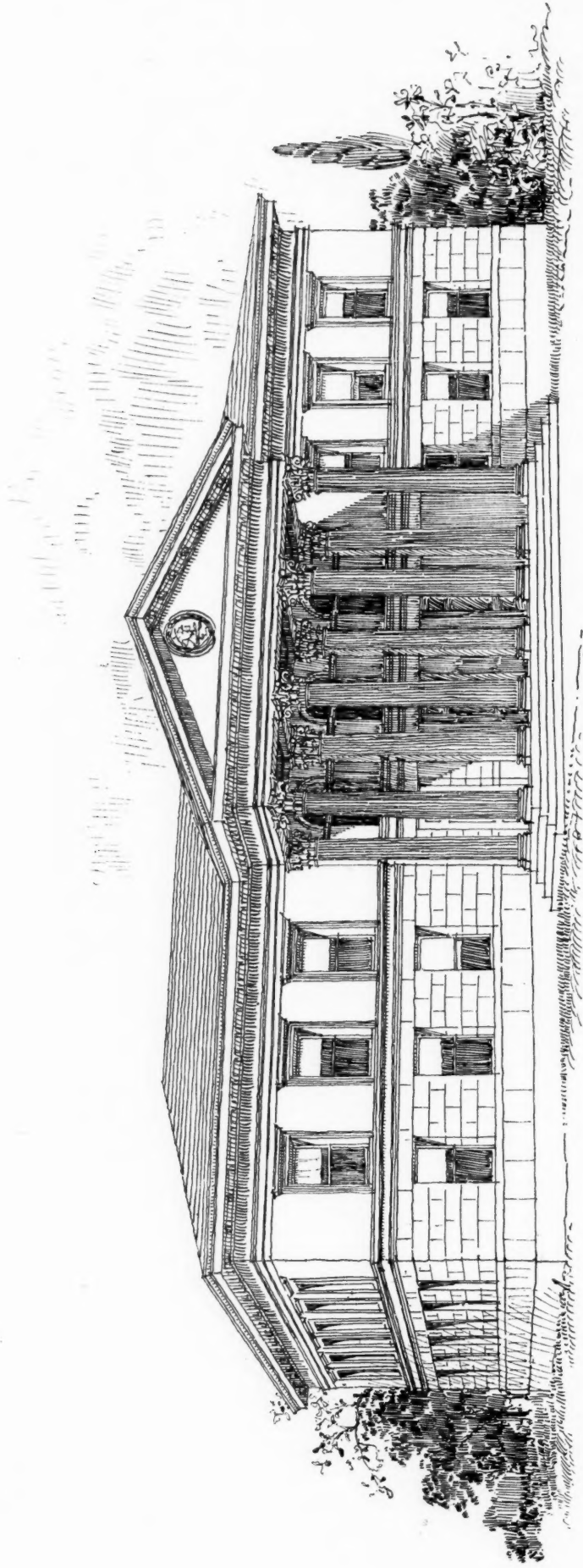




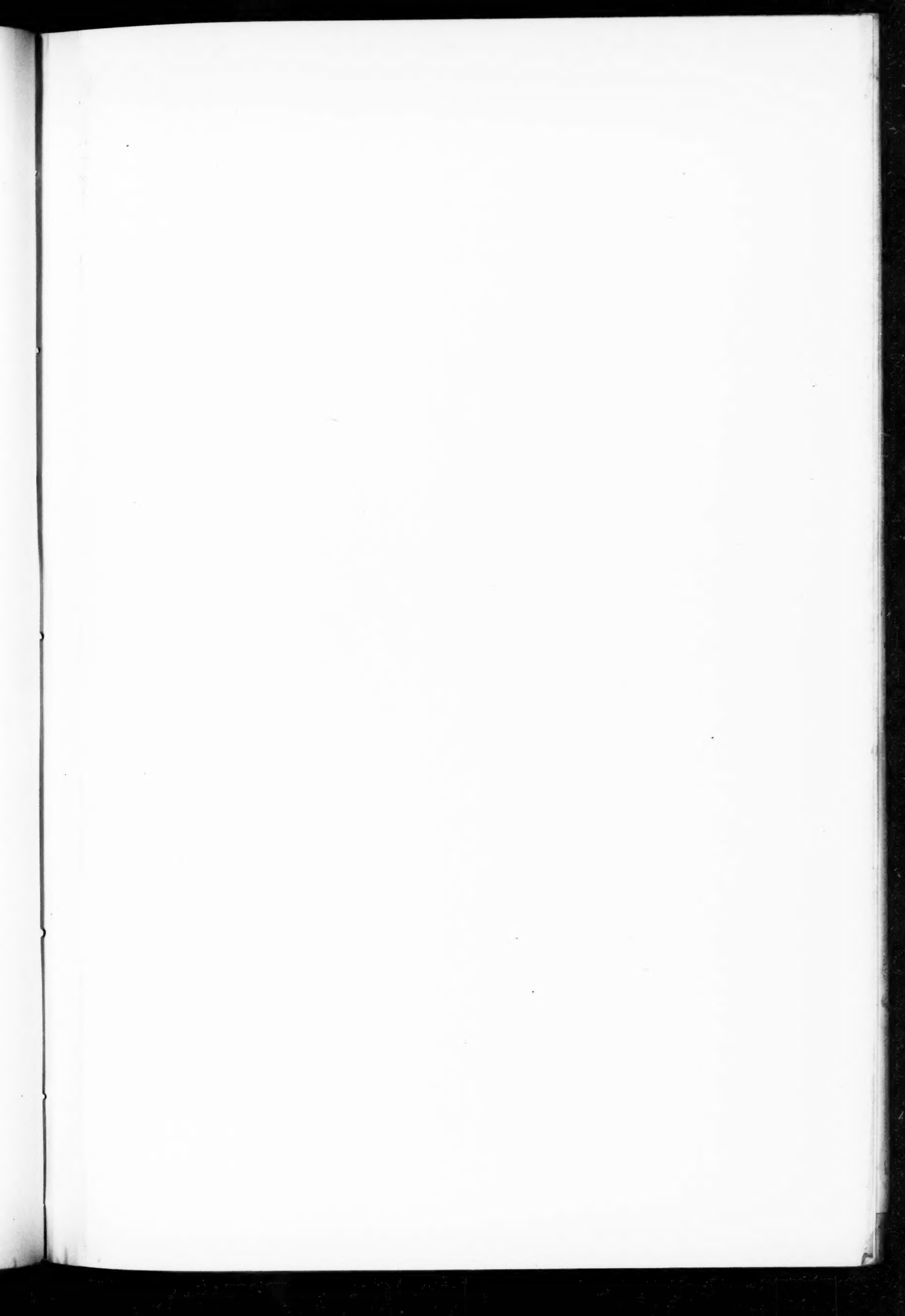
A SAINT LOUIS RESIDENCE
GRABLE & WEBER ARCHTS
ST LOUIS MO







NEBRASKA STATE BUILDING, WORLD'S COLUMBIAN EXPOSITION, CHICAGO.
HENRY VOSS, ARCHITECT, OMAHA, NEBRASKA.

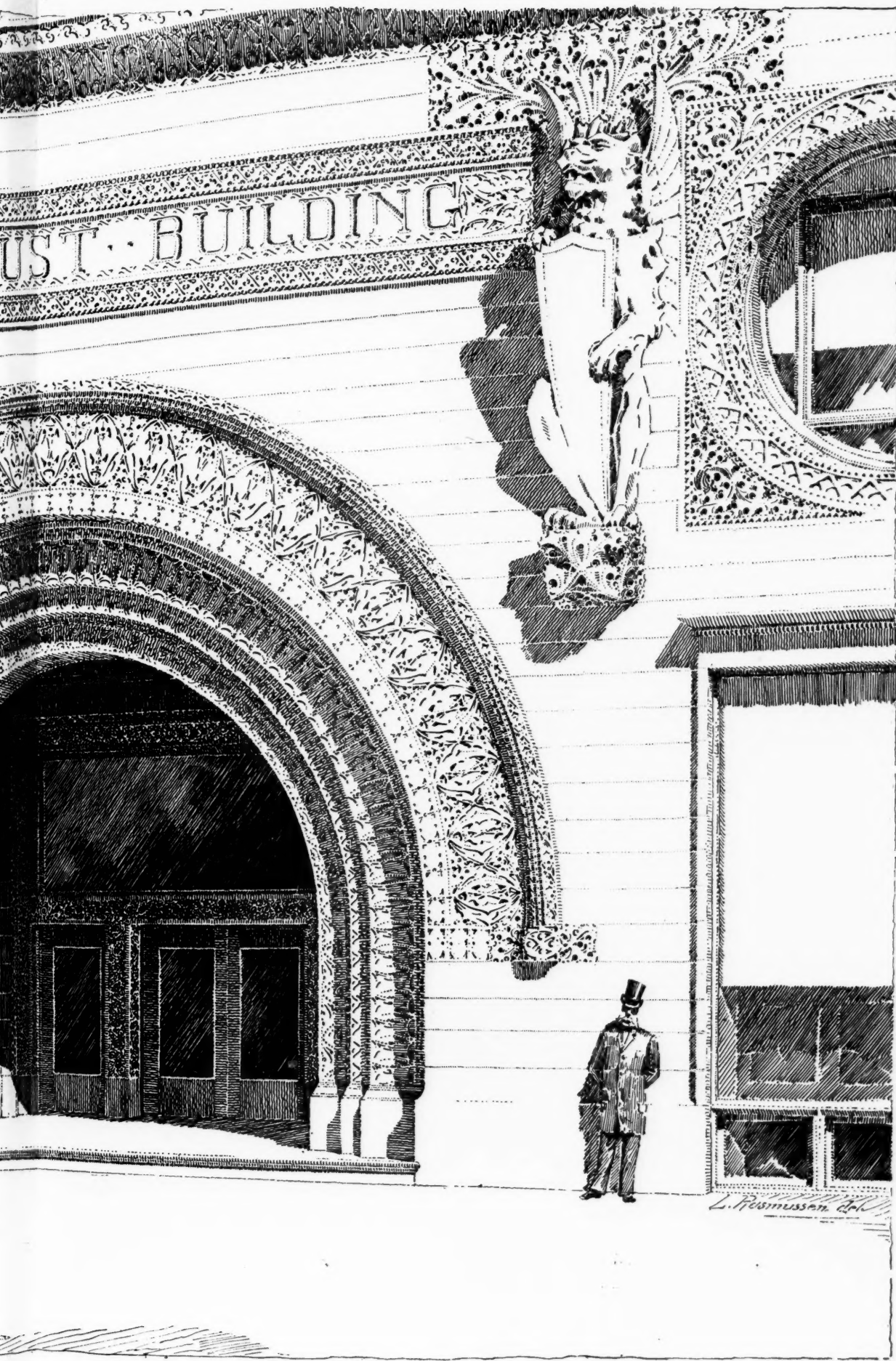




MAIN ENTRANCE.

ADLER AND SULLIVAN, CHICAGO.
CHAS. K. RAMSEY, ST. LOUIS.

ASSOCIATED ARCHITECTS.

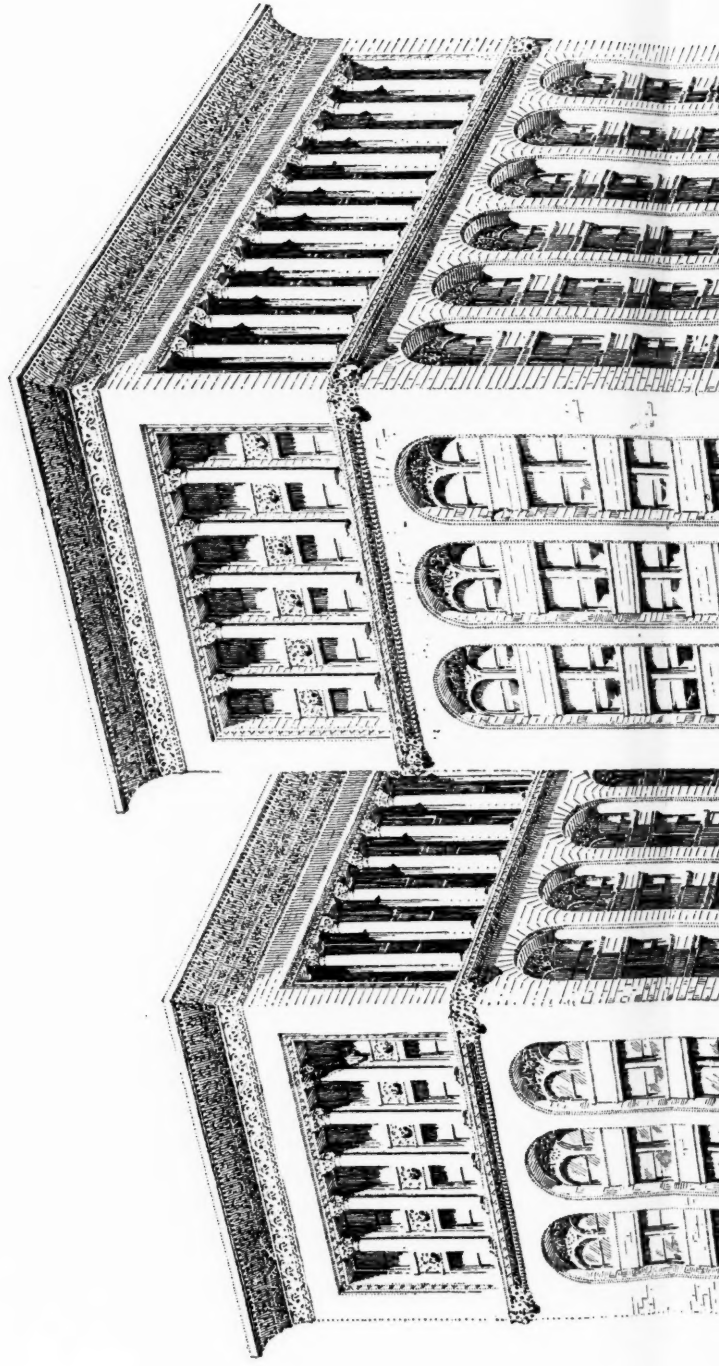


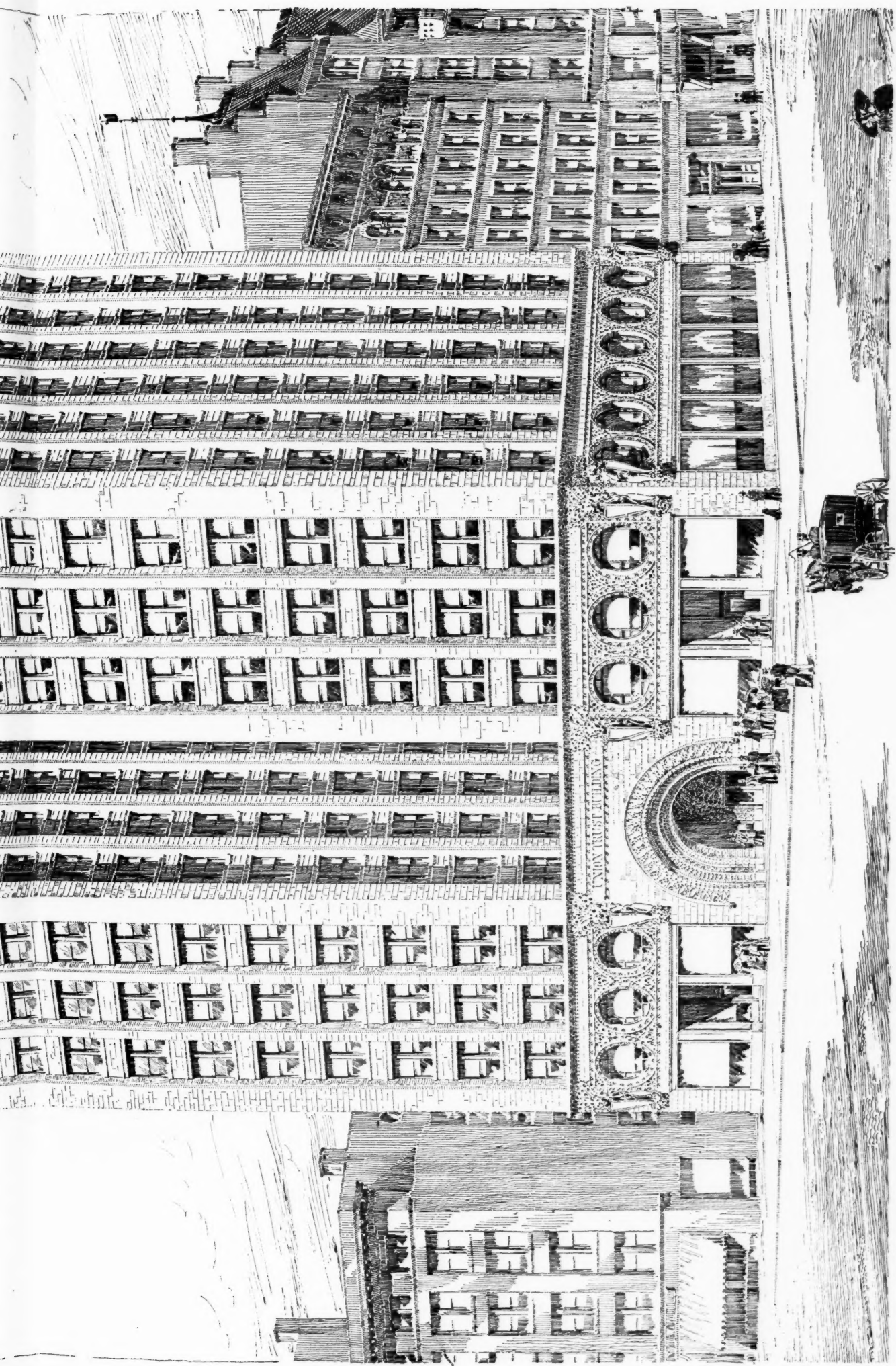
UNION TRUST BLDG.

ST. LOUIS, MO.

THE UNION TRUST BUILDING. St. Louis, Mo.

ADLER AND SULLIVAN CHICAGO
CHAS. K. RAMSEY ST. LOUIS
ASSOCIATED ARCHITECTS.







RESIDENCE OF A. OFFNER, AVONDALE, CINCINNATI, OHIO.

A. O. ELZNER, ARCHITECT.



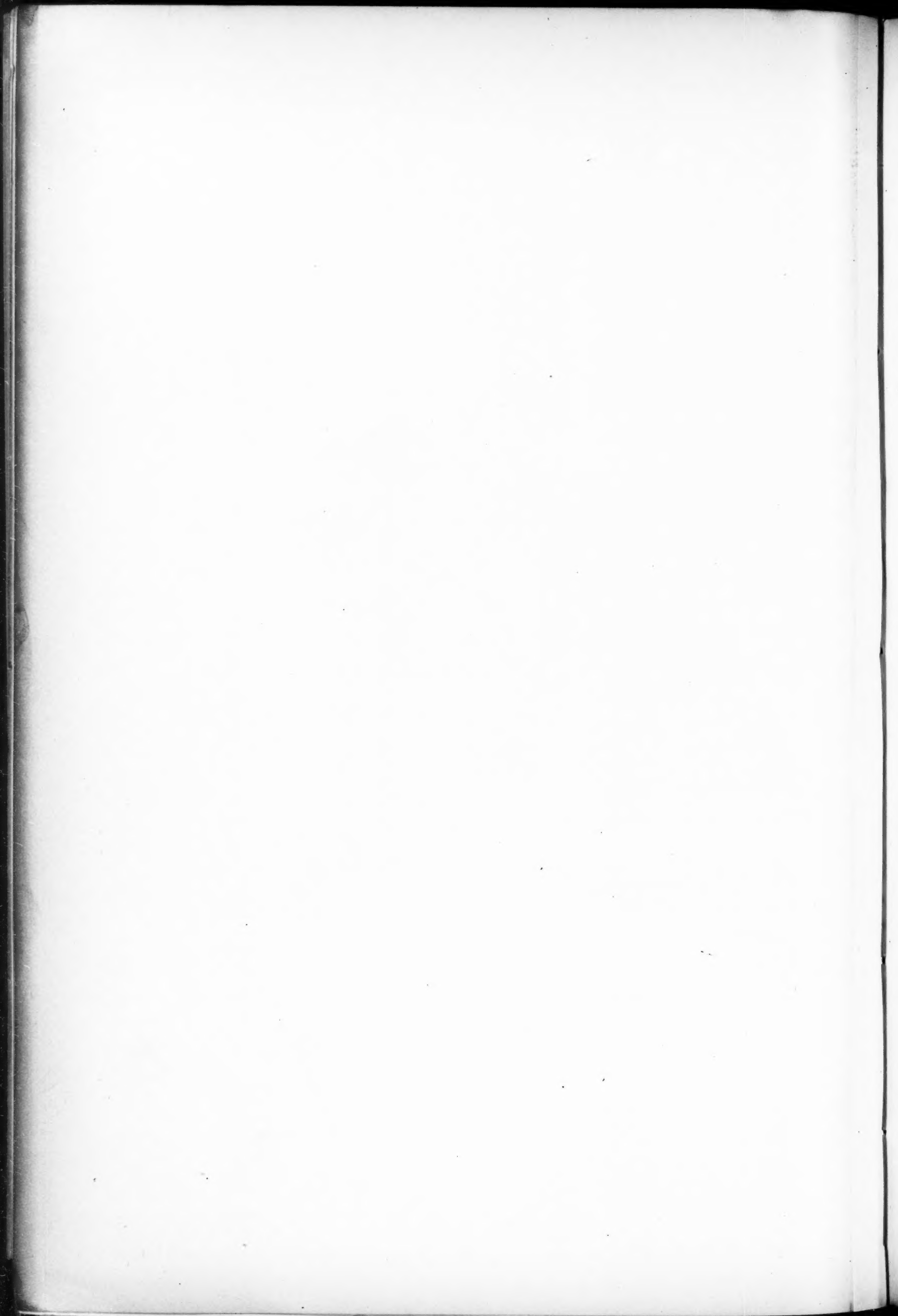
RESIDENCE FOR A. W. SULLIVAN, CHICAGO.

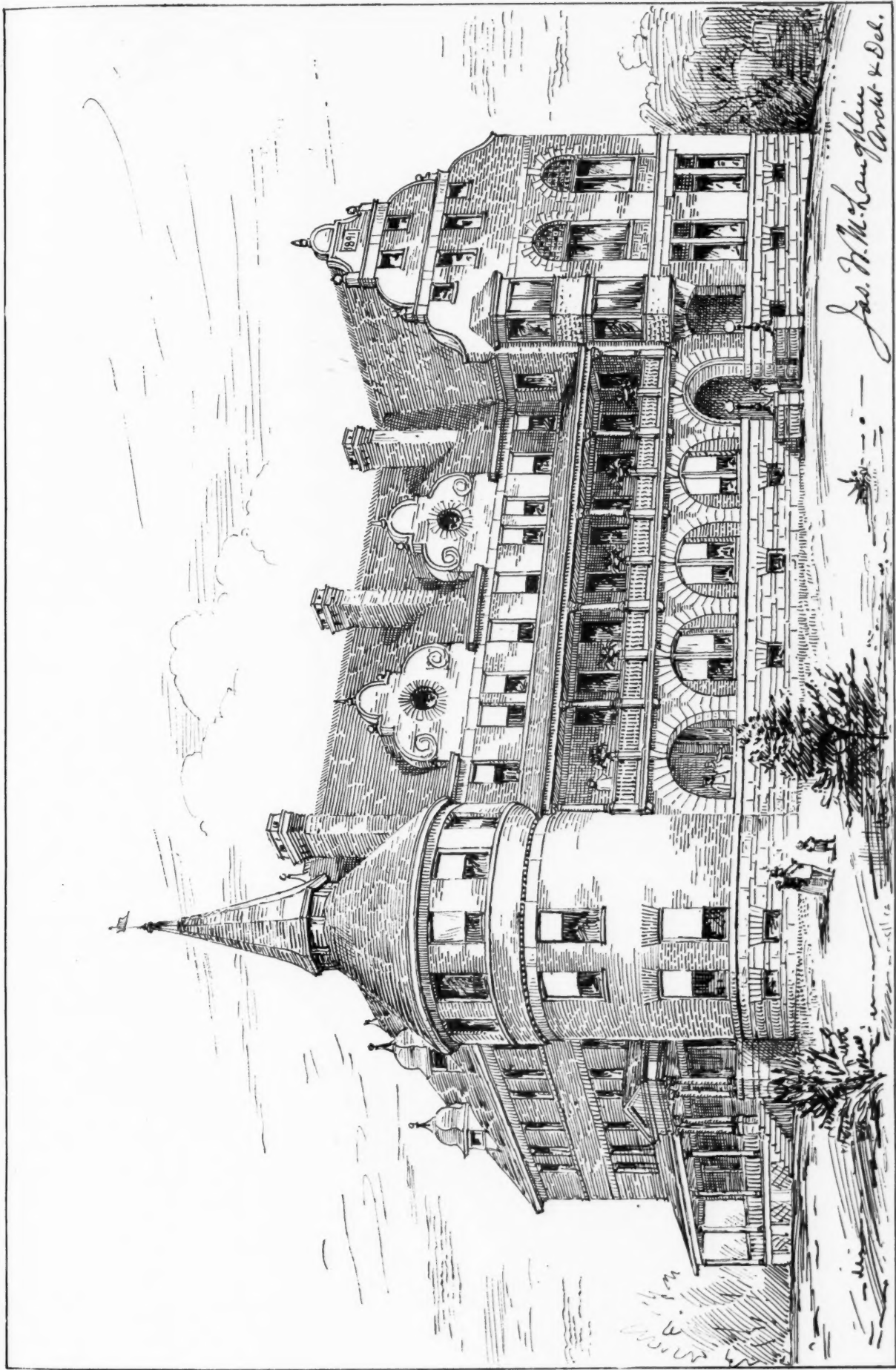
H. H. SPRAGUE, ARCHITECT.

INLAND ARCHITECT PRESS.



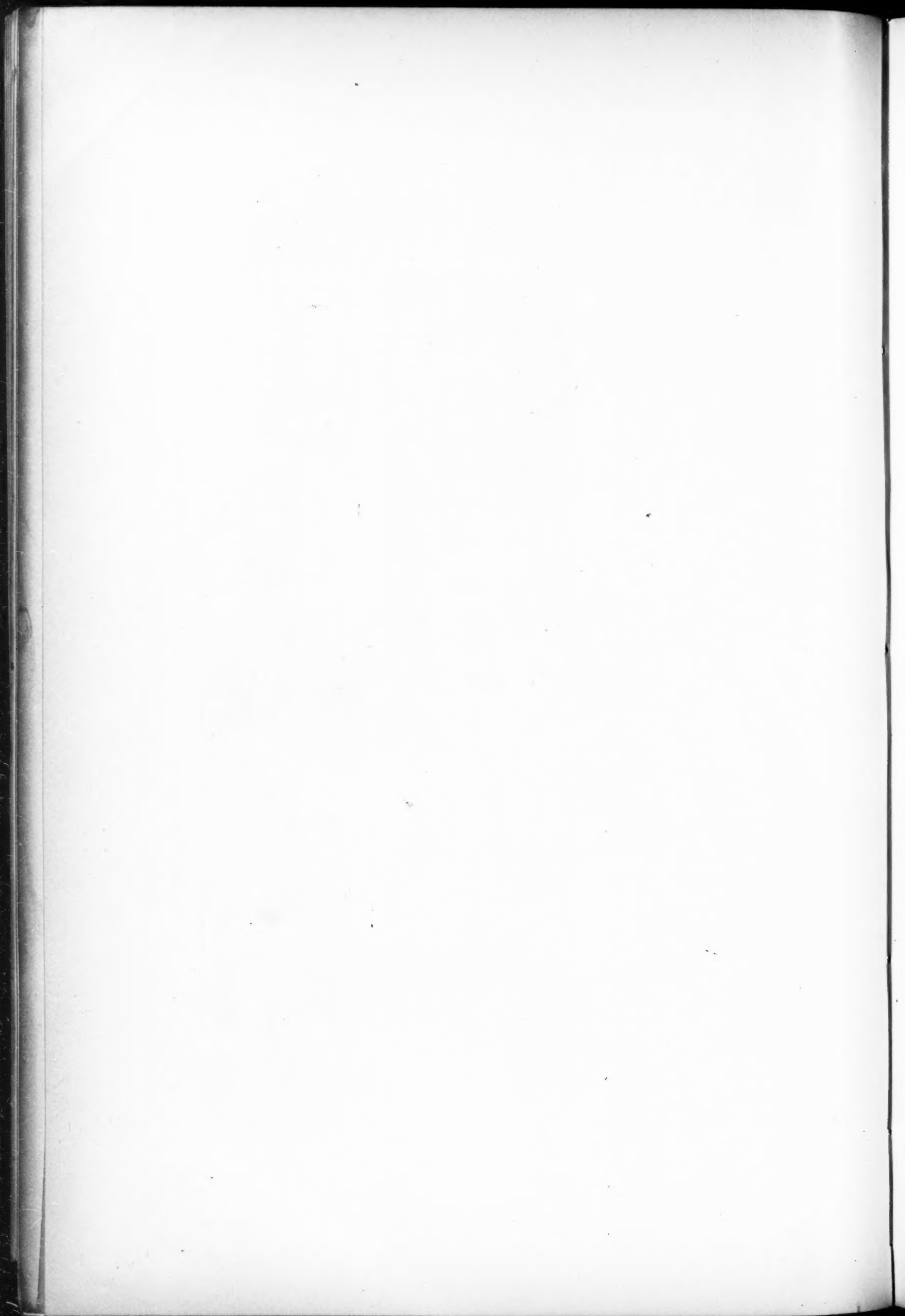


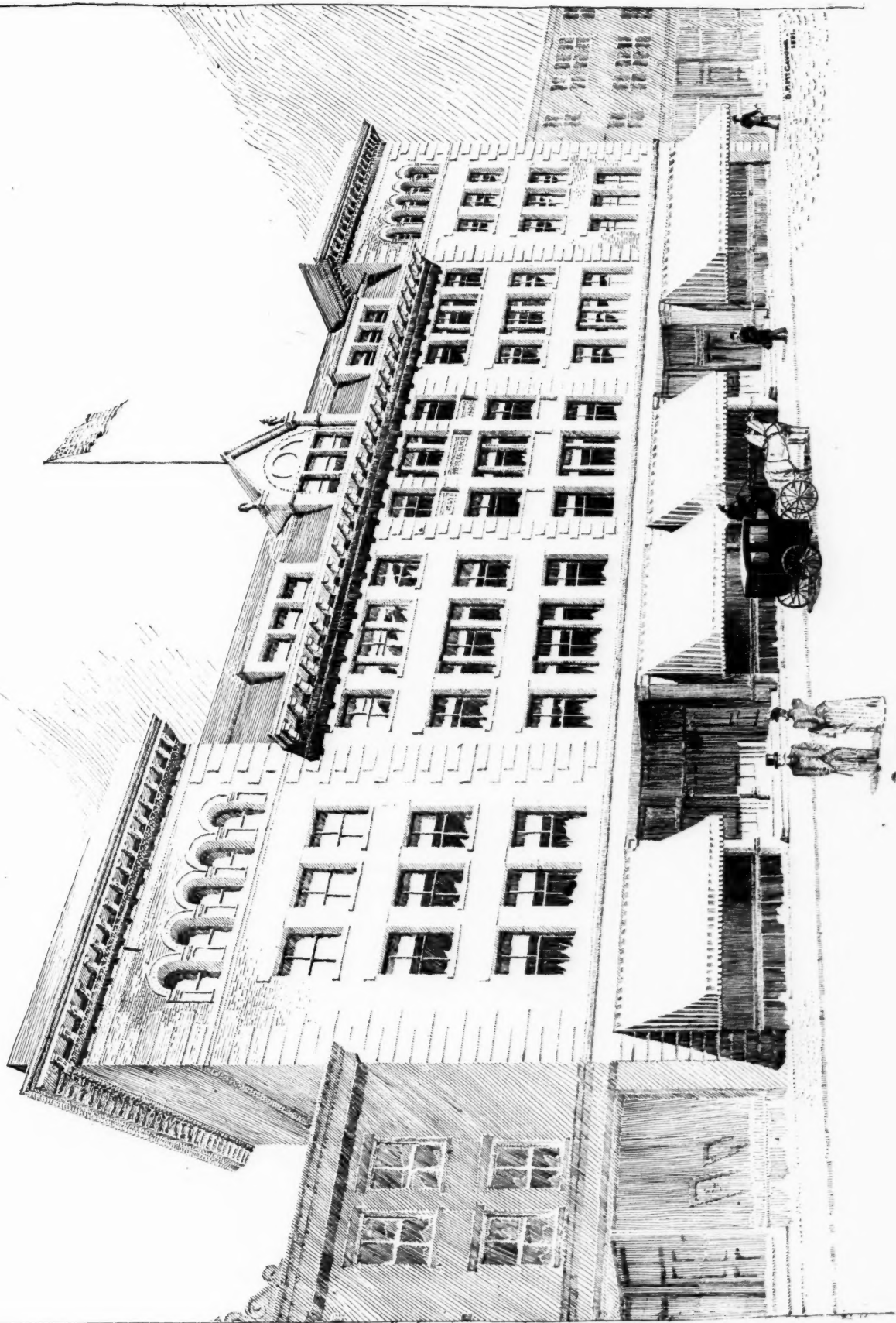




GERMAN HOME FOR OLD PEOPLE, CINCINNATI, OHIO

JAS. W. McLAUGHLIN, ARCHITECT.





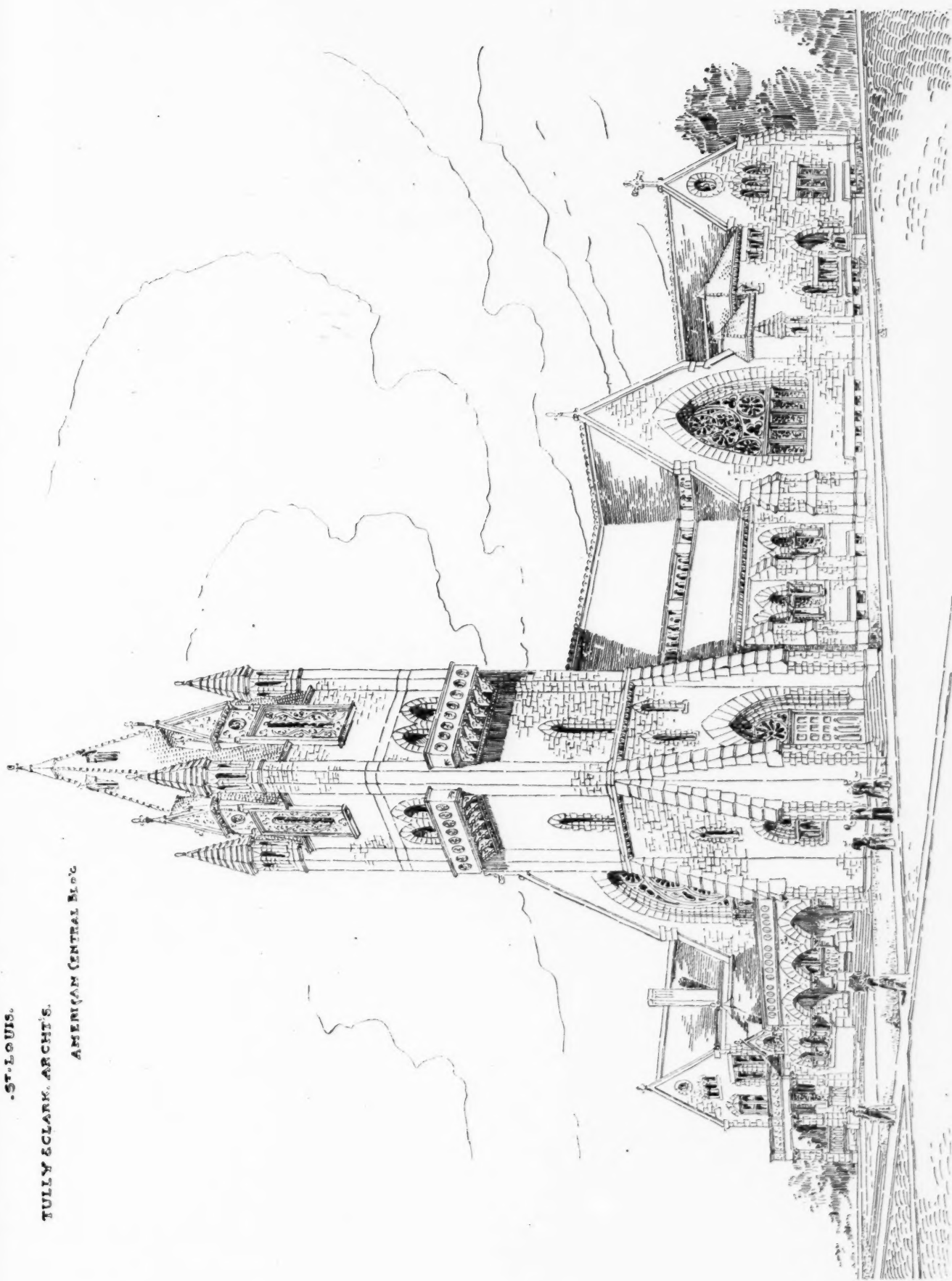
NESTER BLOCK, MARQUETTE, MICHIGAN.
CHARLTON & GILBERT, ARCHITECTS.

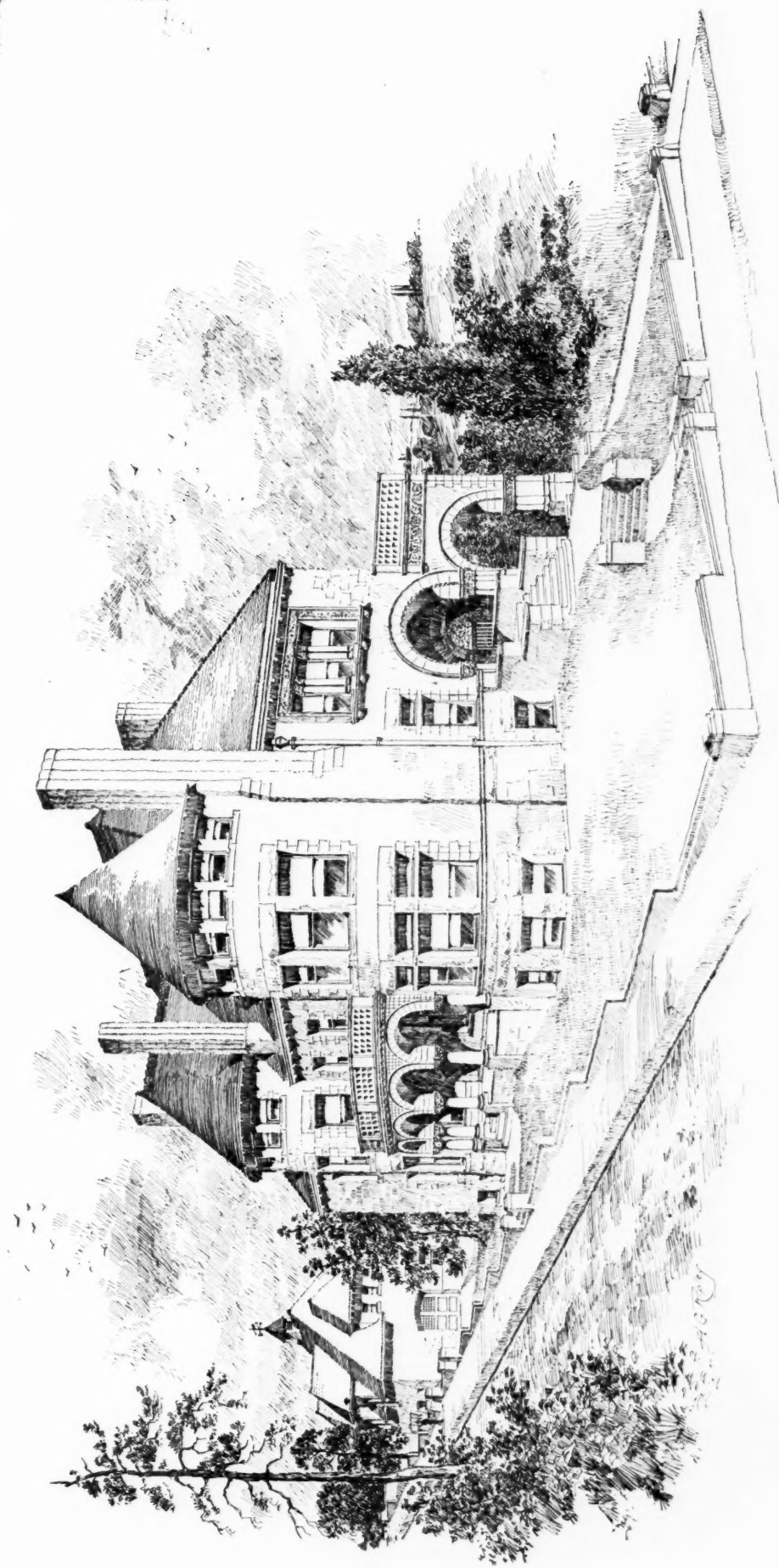
ST. PETER'S CHURCH AND PARISH BUILDINGS.

ST. LOUIS.

TULLY & CLARK, ARCHT'S.

AMERICAN CENTRAL BLDG





RESIDENCE FOR T. C. POWER, HELENA, MONTANA.
WILLETT & PASHLEY, ARCHITECTS, CHICAGO.

