

THE INLAND ARCHITECT AND NEWS RECORD

Vol. XIX.

JUNE, 1892.

No. 5



A Monthly Journal Devoted to
ARCHITECTURE,
CONSTRUCTION, DECORATION AND FURNISHING
IN THE WEST.

PUBLISHED BY THE INLAND PUBLISHING CO.,
19 Tribune Building, Chicago, Ill.

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

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Failure of a Registration Bill to Become a Law.

Assembly Bill No. 451, entitled "An Act to regulate the Practice of Architecture in the State of New York," will go down in the history of the efforts of architects to so regulate the practice of their profession as to protect the public from the work of charlatans as the measure that failed because the chief executive was both in ignorance and in his own estimation greater than his constituents. Upon the representations of all the leading architects in the state, either personally or through their societies, the state legislature passed a bill for the regulation of the practice of architecture, and it was placed before Governor Flower for signature. The friends of the bill upon receiving intimation that it would be vetoed went to Albany and made such amendments as seemed to meet the objections of the chief executive, and placed it again before the legislature for passage, which was again done unanimously by both houses. It would appear, however, that this governor has been specially educated in the line of architecture, for he again assumed that his knowledge of what would most benefit the people of his state was greater than that of the entire body of the peoples' representatives, and the bill failed to become a law. The evidence goes to show, however, that he gave heed to the advice of some "architects" in New York city whose knowledge he believed to be co-efficient with his own. Their names are appended to the letter of remonstrance which is printed in full upon another page, and it is needless to say that they have been so proficient in their adopted vocation that they are unknown to the architectural or general public beyond the confines of their respective neighborhoods, and are none of them members of the American Institute of Architects or any of its Chapters. As a form of examination showing a certain proficiency in architectural practice is a condition of membership the reason may be inferred. If the inference be untrue in regard to any of these, we are free to remark that he should be ashamed of himself. It will probably be a long time before such a bill will successfully pass and become a law, for the simple reason that architects are not politicians, and it is not often that a state legislature and senate is made up of men as intelligent and public spirited as that lately in session in New York state, as on the contrary a state is seldom burdened with a governor with so gigantic an intellect as the present incumbent in that state. We need not comment upon the remonstrance which we print or Mr. Adler's masterly answer thereto in behalf of the Executive Committee of the Institute. It is but just to say, however, that it is probable that the personal attention given to the bill by the president of the Western New York State Chapter did much to secure its favorable passage, as the severe illness of that gentleman at a critical time may have had much to do with the ultimate result.

Rapid Progress in World's Fair Work.

The progress in the work of preparation for the World's Columbian Exposition has reached that stage where no doubt can exist of the final completion of all buildings in ample time, nor the entire success of the designs from an architectural standpoint. The engineering features of the construction are in many cases unique, and the

rapidity with which the work has progressed is certainly most remarkable. The last structures to be erected are the state buildings, of which but a few have been commenced, though the plans for twenty-three have been approved by the Chief of Construction. Almost without exception these buildings will in a large degree be representative of the architecture of their respective states. It is to be deplored that this enterprise was and is suffering from the narrow-minded, money-grabbing disposition of a few who have no patriotism and no local pride, but seek in every way to defeat the best efforts of those who have; and who would be well pleased to see this great national enterprise prove a failure. The most prominent case of porcine development comes in the shape of a woman who has taken advantage of some ambiguous passage in an old enactment which gave a tract of land to the city, and placed an injunction upon the erection of the art building that is to be used for the many congresses that will meet during the fair. While this person has probably no legal standing in the courts, the injunction can so delay the work as to make it impossible to complete the structure in the limited time remaining. There is some satisfaction, however, in the fact that the representative of this party has probably laid himself liable to both criminal and civil process in the matter, and will be most energetically proceeded against. As an architectural study the design, construction and ornamentation involved in the World's Fair buildings will be most valuable to every architect, engineer and artist who may visit this grand collection of architectural forms, and the general enlightenment and advancement along these lines will be a lasting benefit to this country and the world.

**Twenty-fourth
Annual
Convention
A. I. A.**

At the April meeting of the executive committee of the American Institute of Architects, it was decided to hold the next convention in Chicago about the time of the inauguration of the World's Columbian Exposition. This will probably occur on October 21, and the convention will be set for about that date. Notice is thus early given so that members may begin to plan their work so that nothing will interfere with their attendance. The occasion will be such as to offer the greatest inducement possible to members, no matter how remote their place of residence, to attend this convention, and it should therefore be the largest in attendance of any ever held or that can hope to be held in many years. Of the five hundred active members at least nine-tenths should be present, and probably will be. An elaborate programme of sightseeing is being prepared by the officers of the Institute and the local Chapter, while in the convention there is much work that requires attention. The profession is on the eve of radical changes in its position and purposes. A bill now before congress making a radical change in the method of procuring plans for public buildings may any day become a law. The history of the state bill in the state of New York for the proper regulation of architectural practice, which was passed twice by the assembly and only failed to become a law through the ignorance or hostility of the governor, shows that the people are becoming alive to the necessity for such an enactment, and only require the active support of the members of the Institute to pass such a law in many of the states. The ethical side of the profession, which has been neglected so long as to have almost become obsolete, should be kept in mind and proper

precepts be promulgated by the Institute, no matter how lax the individual member may be in the observance. These and many other vital matters should receive the earnest attention of the profession, and plans for their advancement should not be left to the hasty thought of a few during the sessions, but should be carefully considered in advance, so that each member can utter his mature thought when the matter is brought up for discussion. In view of this the officers of the Institute should place all reports of committees, and all other subjects likely to be discussed, before the members a month or two before the convention is held.

**Gratifying
Result of the
Art Building
Litigation.**

The people of Chicago are to be congratulated upon the speedy dissolution of the injunction which restrained the Art Institute and the World's Columbian Exposition from proceeding with the erection of the new art building, which was accomplished on June 23. While there has been no doubt in the minds of those legally informed that this injunction had no standing in law, it was probable that the necessary delay would be fatal to the completion of the structure in time for the opening of the Exposition. The foundations were just completed when the injunction was served a month ago, and it will require the most active work upon the part of Shepley, Rutan & Coolidge and their contractors to complete the building by May, 1893. The despicable position held by this property owner in the matter cannot be too loudly condemned nor the active resistance and perseverance of the Art Institute people under the leadership of their president, Mr. Charles L. Hutchinson, too highly commended. While the world's congresses that are to be held will have a building incomparable in location and appointment for their meetings, after the Fair is ended the art treasures that are now in possession of the Art Institute, and those that will come to it through the World's Fair will have a home second to none among the art buildings of the country.

**A Movement
to Secure
Better
Roads.**

While it is probable that the railroads have retarded roadmaking in the United States, it seems destined that another later invention, the bicycle, will largely aid in establishing good roads throughout the country. In no country in the world is the art of roadmaking so little understood or so little practiced. A "dirt road"—the natural soil scraped to the center of the turnpike, seems to be the highest degree of the art known to the bucolic mind, and in most cases not even this is done. This, too, in old farming communities where the produce of the farms is hauled to market in wagons. The road is not a state or often a county affair, but is under the supervision of a "pathmaster" appointed by the township, and his duty is to see that the road tax is paid in money or worked out by the inhabitants. That this system is ridiculous does not need to be pointed out, but it seems strange that with all the intelligence possessed by our farming communities they do not discover the annual loss in dollars they sustain by the almost impassable roads over which they travel. The present season has been unusually wet and the roads consequently worse than usual, but no one seems to take any active measures toward their betterment but the bicycle riders, who seem disposed to even go into politics to secure what should be a natural result of the advancement in population and the actual demand of necessity.

RECENT FIREPROOF BUILDING IN CHICAGO.

BY P. B. WIGHT, ARCHITECT.

PART V.

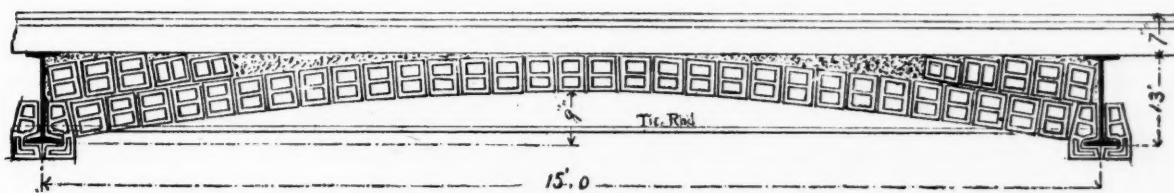
HOLLOW TILE SEGMENT FLOOR ARCHES.

THE earliest fireproof floor arches in which clay was used were built of common bricks. The use of these was general all over this country wherever I beams were employed. Within the last seven years very few have been used in Chicago except in isolated cases over boilers. Where no special covering skewbacks are used such arches do not protect the beams; and in case of even a slight fire the beams are liable to sag, and the floor is thus practically destroyed. Lately hollow tile arches in segment form have been used over boilers in place of brick, even when the beam protection has been

in the latter 20 inches deep. In both buildings the columns and girders were covered before the arches were built.

The first building in which long span segment floor arches were used was the Commerce Office building, Chicago, where the arches are 16 feet span, 6 inches thick and 9-inch rise and spring between the girders, no beam covering being used. In this building the ceilings were furred off to a level, with light suspended 1 irons, 12 inches from centers, supporting split tiles, having grooved edges, set between them. This produced a perfect ceiling effect. The actual tests for strength on these floors showed remarkable results. The work was done by the Pioneer Fireproof Construction Company. But the use of a double system proved to be expensive.

The long span segment arches have continued to be used in buildings wherein a flat ceiling was not a necessity, and everywhere



Floor Arches
On 12" and 15" I Beams.

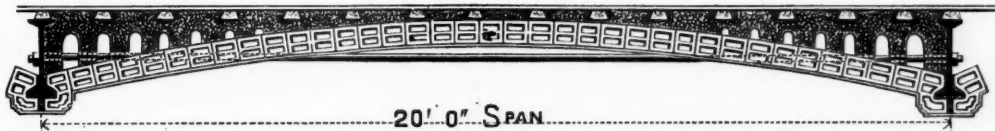
SEGMENT FLOOR ARCH, MADE BY THE WIGHT FIRE PROOFING COMPANY.

omitted. The object of fireproofing over boilers is to prevent fire communicating by continuous radiation, rather than from accidental causes. This, though it might produce combustion in wood, is not great enough to cause iron to warp. The hollow tile is an important substitute for brick in that it prevents conduction of heat through the floor, and leaves the upper surface at an ordinary temperature, which is not the case with brick arches, filled at the haunches with solid concrete.

But it is not so much in the use of hollow tile segment arches between beams at ordinary distances that improvements have been made. One of the greatest advances has been in utilizing the extraordinary strength of hard burned hollow tiles in the construction of long span segment arches. This has been especially the case

they present a better appearance than the old style of short span brick arches. When the tie rods are evenly and carefully spaced they are cased in with fireclay tiles so as to leave a paneled effect when the ceilings are plastered. Segment arches have not, however, superseded the beam construction and flat arches for general use in buildings that are to be plastered, and especially those in which partitions are likely to be shifted. In the Rand-McNally building an attempt was made to use flat tile ceilings under segment hollow tile arches, according to a new system, but though it is an accomplished fact it is not considered a success and has not been used since, the flat arches either on the side or "end pressure" systems having been used in the most recent buildings in which flat ceilings are a desideratum. In the Sibley warehouses, Chicago, an arch was used

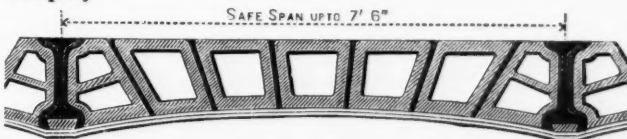
in which the soffit was a segment and the top a flat line. These were intended to carry warehouse weights, and were of extra heavy tiles. There is no advantage in this, however, either in strength, light-



SEGMENT FLOOR ARCH OF THE PIONEER FIREPROOF CONSTRUCTION COMPANY.

since I beams of great depth and light sections have been available. The greatest economy in both weight and cost per superficial foot of floor has thus been attained; this being a little more in the steel used than in the arch construction. Segment arches of from ten to twenty feet span have been successfully used in many buildings. Arches of from sixteen to twenty feet span have been built directly from girders resting on iron columns, the thrust of the exterior arches being taken up by tie rods. This has been done before in England with concrete arches, but the advantage of weight is with the hollow tiles, which is only about half that of concrete. Shorter spans have been built between floor beams resting on girders, those in the new Leiter building on

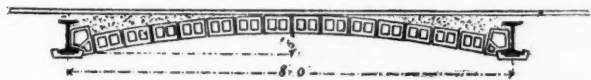
ness or economy, over a segment arch with haunches filled to a level with concrete. The following illustration shows this form of arch, which was made by the Pioneer Fireproof Construction Company:



SPECIAL PATTERN CONCAVE ARCH.

Weight, 40 pounds per square foot.

Sometimes brick arches are specified with protecting skewbacks for the beams. This was done by the Wight Fire Proofing Com-

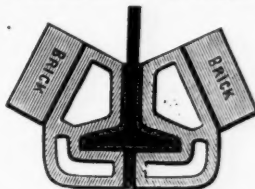


SEGMENT ROOF ARCH OF THE WIGHT FIRE PROOFING COMPANY,

Used also for floors in the Minnesota Hospital for the Insane at Richmond, Minn., up to 14 feet span.

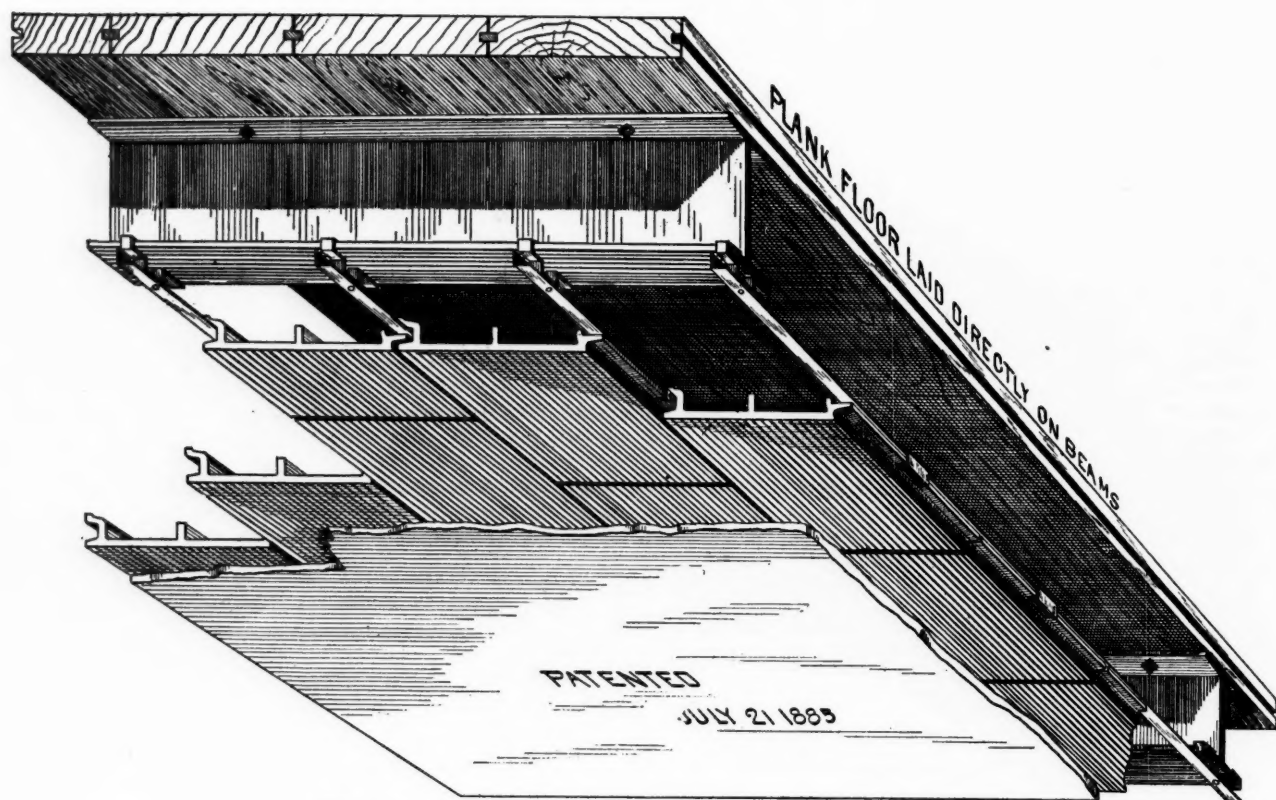
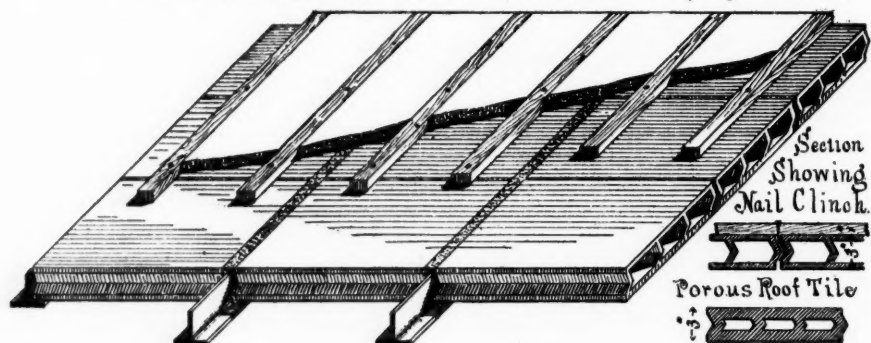
State, Van Buren and Congress streets, just completed, being eight to nine feet from centers, and those of the American Express stable, now in course of construction, being ten to twelve feet from centers. In the former building the beams are 15 inches and

pany in the Berry Varnish Works at Detroit, and the first floor of the United States government building at Pittsburgh. The illustration shows the detail of this construction.

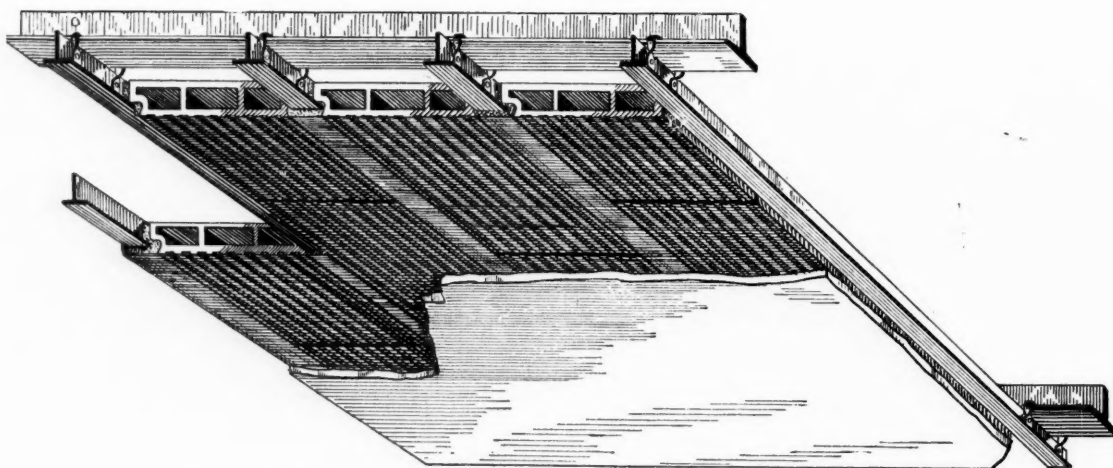


SKWBACK TILE FOR BRICK ARCHES.

HOLLOW TILE ROOF
With Iron T's, 3inch Locked Tiles, Wood Strips & Concrete.



Tile Ceiling Attached to Angle-Iron under Iron Beams



3inch Hollow Tile Ceiling Attached to $\perp$ Beams
for Attic or Suspended Ceilings.

STEEL AND IRON CONSTRUCTION IN BUILDINGS.*

BY C. F. PURDY.

THE members of the Chicago Architectural Sketch Club gathered on June 15 to listen to a paper on steel construction, by John Meigs Ewen, but that gentleman having been called away from the city, Mr. C. F. Purdy consented to take his place and the result was an instructive lecture upon steel and iron as constructive materials. Mr. Purdy spoke in an informal manner, demonstrating particular points upon the blackboard, asking the members to question him freely upon any points they might wish further explained. The lecturer spoke of his youthful education when a certain preceptor had a remarkable ability for getting a trinity out of almost everything and said that some architects have a trinity in capability which consisted of the ability to design, construct and ornament. Mr. Purdy said he would confine his remarks to the structural part. It is not long that metal has been used largely in the construction of buildings, but as the forests are cut away we will use metal more and more, and in the larger structures now required, metals will be still more largely used and thus we come into iron and steel construction throughout the country. It meets the demand much better as regards strength and space than wood and brick. The needs of an architect are extremely wide and his knowledge must not only lie along the lines of reading and observation but must be deep in technical study and a large majority have been unable to obtain such. Thus the engineer is called in. Along the lines of construction that require technical study and skill is not only that of steel construction but plumbing, heating, lighting, ventilation, etc., and in these lines it is wise for architects to employ experts.

The architects in Chicago who have been most successful and prominent, and know the most, depend most upon technical engineers, and those that know the least seem to call for technical assistance the least. Each line is a life study, and yet an architect needs a general knowledge himself, and there are many that he can and does master. Steel construction, or rather metal construction, steel, wrought iron and cast iron, involves a definition to distinguish them, and the old differences are no longer true in composition and manufacture. Iron can be ordered with a tensile strength of 56,000 pounds, and steel for certain purposes of less strength. (Here followed a description of the several methods of manufacture of iron, crucible and open-hearth steel, etc.) Steel is used because it can be made cheaper, as it can be used in larger quantities and of uniform grade. Iron will stand a greater compressive strain than steel, and the latter a greater tensile strain, and the reason we cannot safely use iron in buildings is because its tensile strength is low. It is about 3,000 to 4,000 pounds to the square inch, and should be about 15,000 pounds. A great deal has been said about the relative value of iron and steel in columns. Cast iron will resist fire longer than steel or wrought iron, but the latter gives way slowly and the former is brittle. It is remarkable what a cast-iron column will stand. Fireproofing is, however, depended upon to protect both. The question of cost, of course, has largely to do with the use of metals, but the greater economy is in the use of steel, while pound for pound the cost is now about the same. The success is in the equal proportionment of the load. It will not do to draw off squares and say each of those is a column. In the Venetian building of which Holabird & Roche are the architects, where three and a half inches settlement has occurred, there has not been a variation of one-eighth of an inch.

As in walls the weight is one-half that of columns (i. e., on two sides and in columns on four sides), the latter must be figured as an additional weight, a point worth bearing in mind in reference to the bearing of foundations. Suppose that there are four columns with beams across, and a bay on one side; the supporting beams should be as one beam or it will deflect.

After some object lessons on the blackboard demonstrating points in the construction of floor beams and the general distribution of areas, the speaker said that to have even settlements there must be even distribution of loads with careful calculation of spandril loads with the floor loads to get this even distribution on columns. Spandril is used to mean the space between the columns and the windows from the top of the sill to the cap of the window below, and the spandril beam the connecting beam—a popular rather than a technical definition, which is supposed to have had its origin in the office of Burnham & Root.

*Abstract of lecture delivered before the Chicago Architectural Sketch Club, June 15, 1892.

The speaker referred to the fact that a good deal had been said by eastern newspapers about the danger of Chicago's high steel buildings sinking, and spoke of an old building that had stood for twenty years with a weight of 4,000 pounds to the square foot on the foundations, while the new "Fair" building, with foundations for eighteen stories, only weighed 2,900 pounds to the square foot, which shows the new buildings to be lighter and consequently less danger of settlement. We cannot drive piles in Chicago unless we drive them to a hard strata. Adler & Sullivan, in the German Opera House, has attempted to do this, but only time will tell how successfully; otherwise hold by friction, and it is not always even, as the clay is not of equal density, and even when we think the pile has struck something hard it may not have done so.

In regard to the iron that is used in floating foundations. A few months ago rails were the cheaper, but now beams can be obtained at a less price than rails. It is not known what effect the concrete in which the beams are bedded will have on the iron. It does not seem to affect it, but time only will tell. The safe way is to put in iron as solid as possible, and it should not be less than three-eighths of an inch in thickness, or ten-inch thirty-two-pound beams. Large beams are more economical than small; if you are going to use a twelve-inch forty-pound beam, see if you cannot use a fifteen-inch forty-one-pound beam, because it is something like forty per cent larger.

You who are to be architects and have no technical knowledge will find it wise to employ those who have, for it is surprising the amount of errors and consequent waste that occurs along those lines. Metal will be wasted. The girders may not carry the required loads, while the beams may be strong enough for twice the load. Mistakes are especially apt to occur in designing foundations. It is wonderful the amount of actual profit there is in the careful study of foundations. The center of gravity of resistance must always be equal to the center of resistance of the loads.

In floor construction there are a few principles that may be borne in mind. That referring to the use of large beams applies here. In regard to long or short spans it seems a matter of feasibility. Burnham & Root used long spans in the Masonic Temple, and short in the Ashland block, and it is not determined which is the more economical.

Adding a few inches to the thickness of floors to save in cost often results in additional cost through the extra brick in walls, etc. Avoid going through more than one connection if possible in the distribution of loads.

Architects should be more definite in their specifications and go more into detail as to how connections should be made. This affects bidding and often the highest bidder will give the only perfect job, and it is hard to correct after the work is once started. If specifications were more definite, work would be more satisfactory, and this can only come by a larger knowledge and the employment of technical men. In the stiffening of a building, while the riveting of beams and girders must give considerable resistance to lateral strain, in principle it cannot amount to a great deal. In the use of lateral rods the connections must be as strong as the rods, which is true in regard to all construction. The unit of strength is that of the weakest point. There is no definite data upon the relative strength of steel columns. The most serious problem in a steel construction is that of eccentric loading, and this should be reduced as much as possible in all construction. The Larimer column is most excellent in this and many respects especially for fireproofing, and in this the Phenix column is also serviceable.

In closing, the speaker urged the necessity of conservatism in the construction of high buildings, pointing out the fact that though we had become familiar with them that they were still a serious problem. It was feared that architects were forgetting this and that carelessness would ensue and as a result some building would fall and the general interest suffer from the ignorance, carelessness or inexperience of some architect. The use of cast iron in such buildings should be prohibited by law and no high building should be built without a special inspection by the city. Three thousand five hundred pounds per square foot, including weight of foundations, was a maximum load for Chicago soil. Specifications should say that steel beams should never be hammered or dropped from a wagon, as sudden jars were apt to crystallize the metal, but this could never occur when the beam was covered in the building.

At the conclusion of the lecture a hearty vote of thanks was tendered Mr. Purdy for his instructive remarks which were greatly appreciated by a large attendance of club members.

THE CHICAGO ART INSTITUTE SCHOOLS.



TEA KETTLE AND TRAY, BY "JAQUES."

THE enormous quantity of school work now on exhibition at the Art Institute is the best testimony that could be given as to the extended usefulness of this Chicago institution. Few only besides those immediately interested in it realize how much the Art Institute is doing to develop the latent ability of our native aspirants for reputation in the various lines of artistic work. If only a few of these 844 students should ever become professionals the West will contribute largely to swell the body of American artists; and it might be hoped as a result that the "art center" would thereby be moved a little nearer to Chicago. Next year, for a time, it will be the art center of the world. The permanent result of this to Chicago should be the establishment of all our art associations and schools, whether amateur or professional, on a permanent basis. There should be many of them, and there should be a generous rivalry between them to attain the best results. If the Art Institute is an association of amateurs and business men with abundant means and resources, that is no reason why it should do all the work of developing native talent.



"INCONSOLABLE," BY J. H. HOLMES.

There is still a field for the Society of Artists—well named—which is a spirited and healthy organization. The National Academy of Design long since ceased to be national. It is rather a

close corporation of New York artists, with a few from other seaboard cities admitted. The nation is now too large for any one city to be its art center. Already Philadelphia and Boston are rivals of New York on the eastern seacoast. Cincinnati and St. Louis make no mean pretensions; and the Society of Artists of Chicago, now fire-tested, must see that its time has come. The Art Institute has no reason to be jealous of it. It will reap the material advantages of the World's Exposition, and when that is over, with what must necessarily drift from the exposition into its custody, it will be at once a great museum; for it will also have a permanent building of its own in the heart of the city to receive these treasures.

The Art Palace at Jackson Park, which is to be the finest example of adapted Greek architecture in this country, and to a certain extent a permanent building which could easily be improved and made more permanent from time to time, should be allowed to remain and should be given over to a responsible association of professional artists.

It has recently been made public that the French government will allow a large number of the casts now in the Trocadero, at Paris, to be reproduced for the Columbian Exposition. These will undoubtedly go into the collections of the Art Institute after the great Exposition is closed. They will be mainly of interest to the students of the architectural classes, and will be to the Art Institute



"JUNE—EVENING," BY ORSON LOWELL.

what the Willard collection of models is to the Metropolitan Museum at New York.

It is with these thoughts that we view the work of the past year of the students of the Art Institute which is now on free exhibition. Of these there has been enrolled the enormous number of 844, of which 433 were in the day schools giving their whole time to the work. Perhaps one-tenth of these may become professionals in one line or another of art work. For such they have only learned the rudiments of their craft. They have learned how to learn more. They have had the discipline to enable them to discipline themselves. They have simply learned how to do the work that will make artists of them. Nothing else will; not even that mysterious thing called "genius." For nothing will convince those who imagine they have it—but have it not—so much as work. It is because few appreciate this that few become

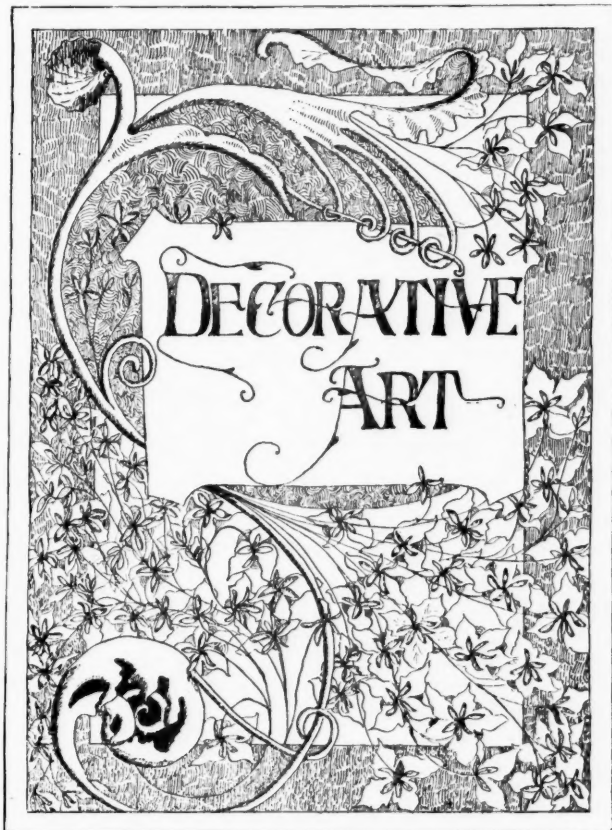
artists in any sense. This will-o'-the-wisp of a distorted imagination will fly before the realization of what they are when they are *inured* to hard work. And the harder the artist works the easier work becomes to him, so that in time when he does not feel longer the burden of work, he is free; and what was work is now pleasure. Then he begins to realize what he is and where he is in the realm of true art.

The other nine-tenths of these young men and women will go out into the world as prophets and apostles of art. What they have learned will make them in future life competent to judge between the good and the bad. They will grow to be intelligent

afternoon and evening sketch classes. The day classes for study comprise:

1. A head and costume life class.
2. A nude life class.
3. A class for painting from still life.
4. An antique class.
5. A modeling class.
6. An architectural class.
7. An ornamental designing class.
8. An artistic anatomy class.
9. A class for pencil drawing from objects, and
10. A class for pen and ink drawing from objects.

Those the work of which will most interest our readers are the architectural and ornamental designing classes. The former has been in operation for three years and is under the direction of Louis J. Millet, graduate of the *École des Beaux Arts*, Paris, and a well-known decorative architect of Chicago, assisted by Walter F. Shattuck, graduate of the Architectural School of the University of Illinois. The latter is under Mr. Millet and Miss Grace Dutton Long. This has been in operation for a much longer time. The most serious work of the architectural classes has been during the past year, and they may be now considered as permanently established. The students are not attached to architects' offices, but give their whole time to the school. There are no night classes for the draftsmen as in the Institute of Technology at



DESIGN FOR TITLE PAGE, BY ABBIE A. FREEMAN.

amateurs and not patronizing connoisseurs; and thus civilization will be the gainer. They will look back upon their crude efforts with a realization that these were the means of enabling them to be good judges of the works of others, and good judges of what is best, most elevating and refining in its influences. They will have more beautiful homes and will dress more becomingly on account of what they have done in this school; and what is better still will be enthusiastic lovers of all that is good and true and beautiful in life, as well as in art, and the active managers of the Art Institutes of the future.

Therefore we will look upon these exhibited results of study, not as pictures or works of art, but simply as evidences of how young men and women try to do their best. The prizes and honorable mentions are encouragements to those who did not get them to try harder the next time, and these do really more good to those who do not get them than to those who do. We regard this matter of prizes in school work as one between the students themselves, which does not interest the public, and therefore there is no occasion to say who received them. It would be interesting to reproduce in facsimile some of these prize drawings and the honorably mentioned designs in the classes in architecture and decorative designing, if only to assist in that encouragement which is due to those who did not get them; but unfortunately most of them, and the best, are in washes or colors that cannot be reproduced. Those that are given have been selected at random from the black and white drawings.

The scheme of the Art Institute is an ambitious one, but it has been pretty successfully carried out so far. There are no less than ten elementary classes, each covering a different subject. There are two courses of class lectures, one life and antique class and two



DESIGN FOR TITLE PAGE, BY MABEL C. PATTERSON.

Boston. No prizes were given in the architectural classes this year but the honorable mention was carried off by a woman, Miss Stella Yeates.

And yet, while this beneficent institution was dispensing its honors to women, one woman has been its only stumbling block. But even though a real estate owner, her machinations have not prevailed, and the injunction to prevent the erection of the new Art Building on the lake front has been dissolved. Thus justice, for once at least, has overcome selfishness and the obstructive tactics which the law permits; and the granite walls of this temple will rise to be, if not a thing of beauty in the eyes of the critics, at least a joy forever to the multitudes who will in coming years receive its benefactions.

Before this is read the exhibition will be closed, and the Institute's property will be moved into the adjoining building for which it holds a lease until it will have possession of its new building.

THE NEW YORK STATE REGISTRATION BILL.

THE following is the amended bill which was passed by the New York state legislature, the amendments being but a slight change from the original bill previously passed; with some interesting correspondence in relation thereto, pending the governor's signature:

AN ACT TO REGULATE THE PRACTICE OF ARCHITECTURE.*

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. Within sixty days after the passage of this act, the American Institute of Architects, with the approval of the governor of the state of New York, shall appoint seven persons to constitute the New York state board of architects, three of whom shall be appointed to hold office for one year, and four of whom shall be appointed to hold office for two years. Such appointments shall be made in writing and be filed with the secretary of state.

SEC. 2. Upon the expiration of the term of office of each member of the state board of architects the American Institute of Architects shall appoint his successor for a term of two years in like manner. Each member shall hold over after the expiration of his term until his successor shall have been duly appointed and qualified.

SEC. 3. Any vacancy occurring in the membership of the board of architects shall be filled for the balance of the unexpired term in like manner. The members of the board shall serve without compensation or reimbursement for their services and expenses except as hereinafter provided.

SEC. 4. The members of the state board of architects shall, before entering upon the discharge of their duties, take and file with the secretary of the state the constitutional oath of office. They shall annually elect from their number a president, and a secretary who shall also be treasurer, to hold office for one year.

SEC. 5. The board may adopt rules and regulations to govern their proceedings not inconsistent with this act. The board may adopt a seal and the secretary shall have the care and custody thereof, and shall keep a record of all proceedings of the board, which shall be open to public examination.

SEC. 6. Five members of the board shall constitute a quorum; but the board may delegate the examination of applicants to a committee of less number to report the examination to the board.

SEC. 7. Special meetings of the board shall be called by the secretary upon the request of any two members by giving at least five days' written notice of the meeting to each member. The American Institute of Architects, with the approval of the governor of the state of New York, may adopt rules and regulations for the examination and licensing of applicants for licenses to practice architecture in accordance with the provisions of this act and may amend, modify and repeal such rules and regulations from time to time.

SEC. 8. The board shall immediately upon the election of each officer thereof, and upon the adoption, repeal or modification of the rules and regulations for the licensing of applicants, file with the secretary of the state, and publish in at least two architectural journals, the name and postoffice address of each officer, and a copy of such rules and regulations, or the amendment, repeal or modification thereof.

SEC. 9. Provision shall be made by the state board of architects for holding examinations of applicants for license to practice architecture at least once a year, if there shall be any application therefor, in each of the judicial departments of the state, and any person over twenty-one years of age, upon the payment of a fee of five dollars to the board, shall be entitled to enter any examination appointed for determining the qualifications of applicants for such license.

SEC. 10. If the examination of any applicant for license shall be satisfactory to a majority of the board, a license shall be issued to the applicant authorizing him to practice the profession of architecture, upon the payment of an additional fee of fifteen dollars. A person who shall at the time of the passage of this act be engaged in the practice of architecture in this state shall be entitled to such a license without fee or examination, on presenting to the state board of architects an affidavit to that effect, or a license from a similarly constituted board in another state. Each person so licensed shall cause the same to be recorded in the clerk's office of the county of his residence, or, if non-resident of the state, in the county in this state in which he shall have an office, and the clerk shall record the same upon payment to him of his fees at the same rate as for recording a deed. Upon every change of such residence or office from such county to another county in this state, the holder of such license shall cause the same to be recorded in like manner in the clerk's office of the county to which such residence or office shall be changed.

SEC. 11. The board shall keep on file in the office of the secretary of state a correct list of all licensed architects. Any license so granted may be revoked by the state board of architects for gross ignorance, recklessness or dishonest practices of the holder thereof, but before any license shall be revoked such holder shall be entitled to at least twenty days' notice of the charge against him, and of the time and place within the county of his residence of the meeting of the board for hearing and determining of such charge.

SEC. 12. For such purpose the board shall have the powers of a court of record, sitting in the county in which their meeting shall be held, and to issue subpoenas and to compel the attendance and testimony of witnesses. Witnesses shall be entitled to the same fees as witnesses in a court of record, to be paid in like manner.

SEC. 13. The accused shall be entitled to the subpoena of the board for his witnesses, and a reasonable opportunity to produce his witnesses before them and to be heard in person or by counsel in open public trial; and no license shall be revoked except upon the unanimous vote of all members of the board. If a person shall pursue the practice of architecture in this state, or shall engage in this state in the business of preparing plans, specifications and preliminary data for the erection or alteration of buildings, or shall advertise or put out any sign or card designating himself as an architect, having an office or doing business within this state without a license therefor, in accordance with the provisions of this act, he shall be guilty of a misdemeanor, and upon conviction, shall be fined not less than fifty dollars, nor more than five hundred dollars.

SEC. 14. But nothing herein contained shall be construed to prohibit any person in this state from acting as designer of his own building, or as designer for any person employing him with full knowledge on the part of such employer that the person so employed is not a licensed architect in accordance with this act; nor to prohibit architects residing in other states and not having an office or carrying on a general business in this state from acting as architect for any building, or from visiting the state for such purpose in person; nor to prohibit students or employees of licensed architects from acting for or upon the authority of such licensed architects.

SEC. 15. The license fees received by the board may be expended for the payment of the traveling and other expenses of the members of the board.

SEC. 16. An itemized account of such receipts and expenditures shall be kept by the secretary of the board, and a report thereof for each year ending with the thirtieth day of September, duly verified by the affidavit of the secretary of the board, shall be filed with the secretary of state within sixty days thereafter.

SEC. 17. Any surplus of such fees exceeding five hundred dollars shall be paid annually by the board to the treasurer of the state.

SEC. 18. This act shall take effect immediately.

IN OPPOSITION TO ASSEMBLY BILL NO. 451, ENTITLED AN ACT TO REGULATE THE PRACTICE OF ARCHITECTURE.

NEW YORK, April 14, 1892.

Hon. Roswell P. Flower, Governor of the State of New York:

SIR,—The undersigned architects in the city of New York respectfully submit the following objections to Assembly Bill No. 451, entitled "An Act to Regulate the Practice of Architecture":

*Introduced by Mr. Guenther, read once and referred to the committee on general laws, January 29, 1892. Assembly Bill 451.

1. It should not be a function of the state to regulate esthetic matters. The "architecture" on a building could be scraped away and the building would still remain. It is no concern of the state whether an architect mixes up Doric with Gothic or otherwise produces architectural monstrosities. The need of the times is good building laws. It is the ignorance of construction, of building, that the state needs to guard itself against. Architects should be compelled by suitable building laws to plan buildings safely, whether they know enough to do so or not, and the truth is that the overwhelming majority of architects do not know how to build safely and well, no matter how competent they may be to draw pretty pictures, or answer correctly questions on the five orders of architecture.

2. No laws requiring the licensing of architects exist in any country in the world, while in every large city, abroad and at home, building laws conserve the public interests.

3. The bill means the exclusion of architects in other states from doing business in this state, except to compete for some special building (Sec. 14, line 6), say when a prize is offered for plans for a public building. It means a restriction on trade, and is therefore against public policy. It is of the class of laws that the United States courts have brushed away, such as laws requiring commercial travelers to take out drummers' licenses in certain states.

4. Such a law would lead to reprisals by other states. If the law is good for New York state, it is good for all the other states. New York city architects have a clientage coextensive with the boundaries of this country. When an expensive residence is to be erected at Newport, Rhode Island, or Bar Harbor, Maine, or at Long Branch, New Jersey, or a great hotel at St. Augustine or Tampa, Florida, a New York architect is employed. New York capitalists and the great moneyed corporations centered in this city send their home architects to put up buildings which they need, even to very distant points. A New York architect is now in Germany erecting a building for a New York insurance company. Shall architects in this state cut off their brethren in other states, and not expect to be cut off from practice in return? Similar laws adopted by other states would deprive New York city architects from a vast amount of work, and be more hurt to them than to the architects anywhere else. If licenses were a universal requirement among the states, some New York city architects would require to go through many distinct examinations, and run the risk of not getting a license at all in some cases, and paying for the privilege of applying in all cases.

5. Such a law would work an injury to country builders who carry on business both as builders and architects. Illustrated publications giving excellent designs for country houses reach the hands of every country builder, and it is not to the interest of residents in the small towns and agricultural portions of this state that builders should be prohibited from preparing plans and practicing as architects as well as builders. It is folly to require that licenses should be taken out in these cases. New York city architects have nothing to fear from the competition of country builders, however much architects in small cities have to complain on this score. Many of the most capable architects are former carpenters or masons.

6. The bill makes no distinction between an architect who never has and perhaps never will draw plans for anything other than frame houses and barns, and architects with a general practice in large cities. All are put on the same plane, and must show themselves equally capable, as a licensee can practice anywhere in the state after he receives his parchment.

7. If the bill proposed to make an architect responsible to an owner for the safety of his building it would have some merit, but it does nothing of the kind. In New York city an architect's plans must first be approved by the building department and the health department, and the supposition is that the building will be safe and sanitary. It seems to be somewhat superfluous to examine the architect and his plans as well. A candidate might know much about "architecture" and very little about construction.

8. The bill has many bad features. A license may be revoked for gross negligence and recklessness (Sec. 11, line 3), not a word is said about gross ignorance. A license may be revoked for "dishonest practices." It does not say what this means. Perhaps taking a commission from a contractor would be deemed dishonest practice. But it may mean that if an architect borrows from some person a sum of money which he is unable or unwilling to repay, that will be deemed a sufficient reason for the revocation of his license.

9. The bill puts a premium on a non-resident architect having an office in New York city. A Jerseyman will be entitled to a license in this state because he practices here. When his own state passes a similar law he will be entitled to a license there as well, without fee or examination, while a New York resident if he desires to do any business as an architect in New Jersey will have to go through a formal examination and pay for a license.

10. The bill proposes to set up architectural court, with power to issue subpoenas, and to compel the attendance and testimony of witnesses (Sec. 13). And if a builder should designate himself an architect, unless he has a license therefor, he is to be deemed guilty of a misdemeanor. These propositions are ridiculous. Our country is too new, and the demand for ability in men as builders and architects too great to restrict the action of individuals within proper lines of enterprise by any such law.

In conclusion, your petitioners beg to state that this is not a case of "sour grapes," as each signer hereof would be entitled to a license under the proposed law. They oppose the bill through

a sense of public duty, as well as because their individual interests would be affected by such a law, and also to save from its ill-effects many architects who have signified their approval of licensing architects without understanding the real import of this bill. Only one side of the question was heard by the Assembly and the Senate. We respectfully ask you to veto the bill.

Very respectfully,

WILLIAM J. FRYER, architect and engineer, 19 Broadway.

CORNELIUS O'REILLY, architect and builder, 121 East Forty-fourth street.

THOMAS GRAHAM, of C. Graham & Sons, architects and builders, corner Thirty-ninth street and Madison avenue.

J. A. WOOD, architect, 153 Broadway.

FRANCIS H. KIMBAL, architect, 40 Broadway.

BRIEF SUBMITTED BY THE EXECUTIVE COMMITTEE OF THE AMERICAN INSTITUTE OF ARCHITECTS.

Hon. Roswell P. Flower, Governor of the State of New York:

SIR,—An argument made by sundry architects in opposition to your approval of Assembly Bill No. 451, entitled "An Act to Regulate the Practice of Architecture," was brought to the notice of a meeting of the Executive Committee of the American Institute of Architects held on April 30, at which were present: Mr. Edward H. Kendall, of New York, president of the Institute; Mr. Richard M. Hunt and Mr. C. F. McKim, of New York; Mr. Alfred Stone, of Providence, Rhode Island; Mr. George B. Ferry, of Milwaukee, Wisconsin; and Messrs. Samuel A. Treat and Dankmar Adler, of Chicago.

I have been instructed by the Executive Committee to submit the following to your notice. The committee regrets that any persons should maintain that architecture is merely the application of decorative features to buildings, and admits that were this assumption justified, there would be no reason for invoking the authority of the state to determine whether or not any person is qualified to call himself an architect.

The Constitution of the American Institute of Architects thus defines the status of an architect: "An architect is a professional person whose occupation consists in originating and supplying artistic and scientific data, preliminary to and in connection with the construction of buildings, their appurtenances and decorations; in supervising the operations of contractors therefor; and in preparing contracts between the proprietors and contractors thereof." This definition is accepted by architects and laymen throughout the civilized world, and in the discharge of the functions and duties thereby implied, many millions of dollars are entrusted annually to the professional care of the architects of the State of New York, and the life and health, and the safety of life and limb of many of its citizens are made dependent upon the greater or less degree of capacity, knowledge and skill possessed by these architects.

The Executive Committee takes the liberty in the following pages of traversing the arguments advanced against Assembly Bill No. 451, and craves your attention, not from the standpoint of the architect, who has no more claim for assistance or protection from the state than any other citizen, but because this bill is conceived for the service and benefit of the people and of the state at large.

Taking up the remonstrance referred to in the order of its paragraphs, the committee begs leave to state:

1. It is not intended that Assembly Bill No. 451 shall regulate esthetic matters. The architecture of a building is not, in its true acceptance, something that can be "be scraped away," but it is the design of the building in its entirety, and embraces its construction, arrangement, equipment and adornment, all determined with regard and reference to each other and in a well-designed structure so interdependent, that neither can be tampered with without injury to the others and to the whole building. It is true that "it is no concern of the state, whether an architect mixes up Doric with Gothic," and it is also true that it is "ignorance of construction of building that the state needs to guard itself against." If it is also true that an "overwhelming majority of architects do not know how to build safely and well," then it is time to protect the people of the state from the possible disastrous effects of this alleged ignorance on the part of architects of the most vital essentials of the professional equipment. It is the purpose of Assembly Bill No. 451 to prevent persons who "do not know how to build safely and well" from calling themselves architects and to make the appellation "architect" when applied to the name of anyone in the State of New York a reasonable guarantee to the citizen employing him, that its bearer knows "how to build safely and well."

2. While it is true that "no laws requiring the licensing of architects exist in any country in the world," yet in Germany and Austria no one may call himself an architect until after he has demonstrated in an examination by a government board of examiners that he is possessed of the knowledge of "how to build safely and well," while in England such examinations as to skill as constructors are being resisted by the architects themselves, who appear to deem themselves above what they seem pleased to treat as a sordid and degrading consideration of their status as artists. In France the legislative requirements and current legal decisions have clearly defined the liabilities for malpractice of architects to their clients and to the public. Therefore, in that country only those who are possessed of a high degree of knowledge and skill dare to face the responsibilities incident to the assumption of the title "architect," and the discharge of the functions incident thereto.

3. If the passage of Assembly Bill No. 451 "means the exclusion of architects in other states from doing business in this state,"

this exclusion can only apply to those who cannot "build safely and well," for those who can do so will not experience difficulty in demonstrating to the examining board their possession of a degree of knowledge and skill sufficient to entitle them to a license. The passage of this bill does not "mean a restriction of trade," and is not "therefore against public policy." On the contrary, being intended to prevent the waste of public and of private funds in imperfect and unsafe buildings, it will encourage and increase the volume of trade in good and safe building, and will protect the public against the evils of buildings constructed in ignorance of the processes of safe and good construction.

4. If "such a law would lead to reprisals by other states," and "if the law is good for New York it is good for all the other states," it is to be hoped by every citizen that all other states will make such reprisals and will follow the example of the Empire State. But if other states do not follow our example, the architects of the State of New York will stand even higher than they do now, for they will then be the only ones in the United States who possess a higher claim to the title of "architect" than that of having chosen to adopt it for themselves. It is no hardship for one who knows "how to build safely and well" to demonstrate to dozens of State Examining Boards the possession of such knowledge, and such person would greatly prefer to do this if by his so doing those not not possessed of that knowledge could be eliminated from the list of his competitors.

5. Such law would not "work an injury to country builders who carry on business both as builders and architects." They need only demonstrate to the examining board that they "know how to build safely and well" to obtain license to call themselves architects. But if they cannot make such demonstration, there is still nothing in the bill to prevent them from making and selling plans of buildings. The law would only prohibit them from writing the word "architect" after their names. While it would be folly, as these objectors state, to require that licenses be taken out to protect the architects of New York city, or of any other place from the competition of country builders, it is not folly to protect the people of the State of New York, in city and country, from being imposed upon by butchers and bakers, by tailors and shoemakers, or even by draftsmen and carpenters, who, unable to earn a living at their legitimate trades, endeavor to impose themselves upon the community as architects.

6. It will certainly work no harm to the people of the country districts of the state if by the operation of the proposed law they are not put on a plane inferior to that occupied by the inhabitants of cities. Nor will it harm the poor of this state if the law demands that the architects who build their houses shall be capable and well-informed men, and does not confine that privilege to the rich.

7. The good architects of this state would certainly not object to a definite statement in legal enactment of their responsibilities to their clients and to the public. Well-informed and competent architects would carry out far more intelligently and successfully the provisions of our existing building laws than the kind of architect who is permitted so to call himself under present conditions.

8. As a license cannot be granted except to those who have proved that they are not ignorant, it is to be presumed that no provision for its revocation for "gross ignorance" is necessary. It certainly cannot be objected to, that the proposed law provides penalties upon architects for malfeasance of trust, for collusion with contractors, for bribe taking, and for dishonest and corrupt practice generally.

9. The hypothetical case of the possible advantage which the stray Jerseyman might gain over the New Yorkers is too trivial for consideration.

10. It has been before stated that, under the proposed law, anyone who can demonstrate that he is an architect, namely, that he "knows how to build safely and well," must be granted a license so to call himself. It is certainly conservative of the financial interests of the people as well as of safety of life and limb, if the law makes it a misdemeanor for one who knows nothing of construction to call himself an architect. Yes, "this country is too new, and the demand for ability in men as builders and architects too great" to permit ignorant and incompetent men to foist themselves upon the public and waste its treasure and imperil the lives of citizens under cover of a self-assumed title implying the possession of a high degree of expert skill and knowledge. It is not an illegitimate restriction of individual enterprise to prohibit a person who does not know "how to build safely and well" from calling himself an architect.

Finally, the Executive Committee wishes to express its sincere regret that persons practising as architects should entertain so low an opinion of their chosen profession and of themselves as to proclaim to as high an authority as the governor of the Empire State of this union, that architects are but picture makers and in a state of ignorance as to all matters relating to safe and good building.

All of which is most respectfully submitted in the hope that you will approve the proposed bill.

I remain, very respectfully yours, on behalf of the Executive Committee of the American Institute of Architects,

DANKMAR ADLER, Secretary, A. I. A.

PALLISER, PALLISER & Co., 24 East Forty-second street, New York, have just published a neatly bound portfolio (?) of photo-autogravure prints of the public statues and monuments of New York city, thirty-five in number. It is handsomely gotten up with gold embossed title and gilded edges. It is a very desirable and appropriate parlor table ornament. Price \$1.50.

OUR ILLUSTRATIONS.

House for H. N. May, Chicago; J. L. Silsbee, architect.
 Mont. St. Michel, upper part; drawn by J. W. Robbins, Boston.
 St. Rose Church, St. Louis, Missouri; Barnett & Haynes, architects.
 The Ostend Gate, Bruges, Belgium; F. M. Andrews, Chicago; del. from photo.
 Dwelling for H. C. Sprague, Hyde Park, Kansas City, Missouri; Walter C. Root, architect.
 Refectory for Humboldt Park, Chicago; W. L. B. Jenney and W. B. Mundie, architects.
 Residence for O. H. Morgan, Highland Park, Illinois; W. W. Boyington & Co., architects.
 Residence for Robert E. Filley, Lindel avenue, St. Louis, Missouri; E. C. Janssen, architect.
 Residence for Mrs. Annalkraus, Albion place, St. Louis, Missouri; E. C. Janssen, architect.
 Mann Hall, University of the Southland, Bluffton, Alabama; George Mort. Pollard, architect.
 Houses for The Winner Investment Company, Kansas City, Missouri; James & James, architects—double page.
 Amateur Athletic Association Building and Lyceum Theater, Memphis, Tennessee; Edbrooke & Burnham, architects, Chicago.
 Saint Teresa Church, San Francisco, California; Shea & Shea, architects. Exterior and interior views are given, occupying two pages.
 Laboratories of the Medical and Pharmaceutical Schools of Northwestern University, Chicago; S. S. Beman, architect. The building is on Dearborn street between Twenty-fourth and Twenty-fifth streets, adjoining the new Wesley Hospital. The practical lectures and the clinical instruction in medicine and surgery will continue to be given in the old college building known as Chicago Medical College.
Photogravure Plate: Residence of Doctor Bell, Denver, Colorado; Varian & Sterner, architects. Residence at Cincinnati.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Entrance, The Temple, Chicago, Burnham & Root, architects.
 Entrance, Masonic Temple, Chicago; Burnham & Root, architects.
 Entrance, Rand & McNally Building, Chicago; Burnham & Root, architects.
 Iron Trusses, Manufactures and Liberal Arts Building; George B. Post, architect.
 Entrance, Owings Office Building, Chicago; Henry Ives Cobb and Charles S. Frost, architects.
 Construction, Machinery Hall, World's Columbian Exposition, Chicago; Peabody & Stearns, architects, Boston.
 Traveling Derrick and Construction, Manufactures and Liberal Arts Building, World's Columbian Exposition, Chicago; George B. Post, architect, New York.

NEW PUBLICATIONS.

BRICK FOR STREET PAVEMENTS. An account of tests made of bricks and paving blocks, with a brief discussion of street pavements and the method of constructing them. By M. D. Burke, C. E. 8vo, paper. Price \$1, sent by mail. Robert Clarke & Co., publishers, Cincinnati.

This is an interesting discussion of a vexed question, occupying 86 pages, and wherein the author endeavors to show, all things considered, for a good roadway, brick is a better, cheaper and more durable material than either granite, cobblestone, asphalt, cedar blocks or macadam. Space prevents a more extended notice of the carefully prepared and analytical text-matter of the book, which is of peculiar interest to those who have the making of the streets of cities and towns, and brickmakers especially are given a few valuable pointers in the chemistry and ceramics of their art, which ought to be invaluable to them.

A TEXT BOOK ON RETAINING WALLS AND MASONRY DAMS, by Mansfield Merriman, Professor of Civil Engineering in Lehigh University. A. C. McClurg & Co., 117 Wabash avenue, Chicago. Price \$2.00.

Mansfield Merriman, C. E., Ph.D., is well known as Professor of Civil Engineering in Lehigh University, at South Bethlehem, Pennsylvania, and as the author of several mathematical works on hydraulics and bridge design, some of which have passed through three or four editions. The text book on "Retaining Walls and Masonry Dams" is issued in uniform style with his previous treatises, and embraces 122 pages octavo. It has a table of contents but no index. The subject matter is arranged in five chapters, thus: Earthwork slopes, the lateral pressure of earth, investigation of retaining walls, design of retaining walls and masonry dams. This book is not a treatise on the construction of retaining walls and masonry dams, but is confined to the development of the mathematical formulæ used in calculating the stability of such structures, and is evidently intended for students of engineering, to whose uses it seems well adapted. A knowledge of trigonometry is a prerequisite. Numerous examples are given to test and illustrate the practical application of the formulæ developed. The value of the book to practical men would be increased if in the summary in Article II each case for which a formula is prescribed were accompanied by an illustration showing clearly the meaning of the letters and terms employed. A busy man is apt to be in too much of a hurry to hunt back through forty pages, more or less, to find what P, Q, etc., designate. An

illustrative cut on the same page would show everything at a glance. To a college student with all the previous pages fresh in his mind the cut is less important. On page 92 by a typographical error the author is made to say, "The earth must be thrown loosely against the wall." This should read, "The earth must *not* be thrown loosely against the wall." The table of weights of materials in Chapter III agrees fairly with other authorities except in the item of brickwork, for which 100 pounds per cubic foot is light. Louis de Coppet Berg gives 110 to 112 pounds, Kidder gives 112 to 140 pounds, Trautwine gives 100 to 140 pounds and the United States Government Practice allows 112 pounds.

THE ARCHITECTS' AND BUILDERS' POCKET-BOOK, by Frank Eugene Kidder; Ninth edition, 1892; New York, John Wiley & Sons. Price \$4.00.

It is needless to speak in detail of the contents of Kidder's handbook; its character is probably known to every member of the architectural profession. Without pretense of original authority it collates tables, formulæ and miscellaneous data, giving usually the authority relied on or quoted from. Lacking thus specialization and original authority it does not take the place of monographs on special topics; but, subject to this qualification, it is reasonably trustworthy and is invaluable for reference on the hundreds of bits of data that one needs to use, but which without daily use he can hardly carry in his head and for which he cannot spend time to hunt through circulars, catalogues and scattered works. This ninth and latest differs from the earlier editions only in the way of bringing down to date and the addition of much new matter of a nature akin to contents of former editions. The tables relating to iron and steel construction have been entirely rewritten to adapt them to changed conditions; and about one hundred pages have been added to Part II, which deals with construction in its various phases. To the miscellaneous matter in Part III eighty pages have been added and the whole part has been rearranged. A sixty-page glossary has been added at end of the volume. Among matters appearing for first time we note the data relating to treatment of foundations on compressible soil, tables of strength of stones, data relating to applications of electricity.

TIMBER PHYSICS. Part I, Preliminary Report Compiled by B. F. Fernow, Chief of Forestry Division. Published by Authority of the Secretary of Agriculture. Bulletin No. 6.

The railway system of the United States requires 80,000,000 ties every year at about 38 cents each, or in round numbers \$30,000,000 annually. By proper selection of timber and other well known but too seldom used methods, the durability of these ties can be doubled, whereby 40,000,000 ties and \$5,000,000 hard cash per annum can be saved. This is but a single illustration of the enormous waste of material and capital which results from ignorance of the physical properties of the timber products of the United States. The Forestry Division of the Department of Agriculture seeks to check these wastes and stop these leaks by obtaining and circulating accurate information on all the practical qualities, uses and adaptabilities of American timber. Bulletin No. 6, containing sixty quarto pages in pamphlet form, is the preliminary report intended to enlighten congress and the public concerning the urgent need for such work as the forestry division is doing, to show what has been done in this direction in other countries and to explain the practical operations of this most important department.

This is one of the most interesting and valuable works which have ever been issued by the government printing office and should have the widest possible circulation. Besides a very convincing account of the losses in every state and in innumerable branches of industry, which annually result from ignorance of the qualities of our native timber, its uses, preservation, etc., the report gives a most valuable list of books, essays, etc., both foreign and American, relating to timber, and a very valuable illustrated paper by Prof. J. B. Johnson, of Washington University, St. Louis, upon the properties of timber and the timber tests made at the university test laboratory, which is one of the finest in the United States. An appendix gives excellent illustrations of the testing machinery used by Professor Johnson, and there are numerous sample records of the tests made. The report closes with a comprehensive index which adds to its value for reference purposes.

DIAGRAMS, FORMULAS AND TABLES FOR BRIDGE ENGINEERS AND ARCHITECTS, by Malverd A. Howe, C. E. Price 25 cents.

Howe's Diagrams, Formulas and Tables are a reprint in pamphlet form, thirty-eight pages 9 by 12, of a series of papers which appeared in the magazine *Mechanics*, during the year 1890. This pamphlet was first published for private circulation. The surplus copies are now offered at the extremely low price of 25 cents each. The author is well known among engineers as Professor of Civil Engineering at the Rose Polytechnic Institute, Terre Haute, Indiana, and is a recognized authority. While especially addressed to bridge engineers the book is of value to architects for its tables of weights of building materials, embracing some items, such as the weights of terra cotta ceiling and of tin roofing, which are not given by the usual handbooks and are difficult to obtain elsewhere. The formulæ for the strength of rafters and purlins involve trigonometric functions. They are not especially useful to architects since they apply only to uniform loading, and for such cases the tables in Kidder's, Trautwine's, Woodbury's, and other handbooks are much more convenient and safe than trigonometric calculations. This objection does not apply to the bridge formulæ, however, the variety of section being too great for the use of tables. The standard bridge specifications of Cooper, Waddell and Bouscaren are liberally quoted, and the methods and data given conform to the latest practice among bridge engineers. Numerous

diagrams are given for determining the sizes of members by inspection. There is also a good index. To both architects and engineers the book cannot fail to be worth many times the price at which it is sold.

BUILDING OUTLOOK.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, Illinois, June 20, 1892.

Architects, constructing engineers and contractors in many sections of the country are reporting new work, new enterprises and schemes of various kinds which are brought to their consideration. The appearances today are that the latter half of the year will be more active than the first half, not only in ordinary house construction, but in engineering enterprises, railroad work, the manufacture of equipments for railroads, and the construction of machinery of many kinds. While the country is not on the eve of a general expansion, it is almost face to face with a heavier movement and greater activity. This is due partly to the fact that prices have reached a very low point, and because reserves and stocks usually kept on hand have been depleted to the lowest advisable limit. Even the manufacturers of building material are not loaded up with marketable stocks. Abundant supplies are to be had in all markets of all kinds of material, but the policy has been followed of keeping material in a raw rather than a finished state, waiting for demand to come in sight. This is a policy which the managers of all industries are following; hence the moderate competition observable.

Much new manufacturing is predicted, but the work actually done is moderate in volume because of the narrow margins, and the lack of urgent need for additional shop and mill room. Throughout the western states a healthy commercial and industrial feeling exists; there is but little idleness. In the agricultural regions new land is being reduced to cultivation as rapidly, perhaps, as it is safe to do so. Prices for farm products are satisfactory, and sales are made without difficulty; and a good export trade at the Atlantic coast is keeping that end of the line well up.

The mining regions throughout the Rocky Mountain district are not quite as prosperous all through as in times past, and some mines are shutting down. Railroad schemes are budding in the southwest under the magic wand of Gould and Huntingdon. This has been the poorest railroad year for twelve or fifteen years past, and it is the opinion of railroad men and others familiar with such things that next year will mark an increase in activity, and perhaps a sudden bound. A large amount of tonnage is under contract at the lake yards, and there is more projected shipbuilding work than ever in our history. The shops and factories of the New England and middle states are pretty well crowded with work. The spring season has passed without serious labor difficulties, and there is now less probability of disturbances and misunderstandings than in the past.

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.

Buffalo, N. Y.—Architect W. H. Archer reports the following work: Society building for St. Mary's Lyceum, Dunkirk, New York; tin roof; 58 by 100 feet; three stories and basement; pressed brick and cut stone front, terra cotta enrichment, copper, etc. Large store first floor; reception parlors, billiard, society and toilet rooms and lavatories, second floor; assembly room, stage and dressing rooms, third floor. Hardwood and pine finish; plate glass windows, steel girders, mantel grates, tile work, gas fixtures, etc. Schools, Tonawanda, New York: Two eight-room schoolhouses, two stories and basement; brick with Medina sandstone basement and trimmings; hollow tile, concrete, maple floors, pine finish, galvanized iron and tin work; schoolrooms, wardrobes, lavatories and toilet rooms for both sexes; hot-air heating and ventilating; glass, seating, blackboards and gas fixtures, electric bells, etc.; cost \$30,000. Society building for the Young Men's Christian Association of North Tonawanda, New York: 132 by 112 feet; brick and stone, tin roof, galvanized iron and stone trimmings; four stories high; comprising suits of association rooms, baths 50 by 50 feet, gymnasium 50 by 50 by 28 feet; public hall 40 by 60 by 20, bowling alley and four stores. Iron girders and columns, mantels, sanitary plumbing, steam heating, gas and electric light, plate glass, concreting, etc.; cost \$45,000. Residence for Mr. Rogers, Atlanta, Georgia: Frame and brick, two stories and basement, hardwood finish, parlors, reception hall, dining and bath rooms, lavatory, kitchen, bed chambers, columnar portico and loggia, bevel plate doors, plate windows, carving, mantels, gas fixtures, tile, bath appointments, heating and plumbing; cost \$12,000. Manufactory building, West Superior, Wisconsin: Kilns, storehouses, derricks, overhead switches, tracks, furnaces, wharves and shipping sheds, offices; cost \$10,000. Hotel Gratiot, Dunkirk, New York: Hotel bar, carving, bevel plate mirrors, fixtures, pumps, marble and oak work, entrance porch, couche and loggia for same, brick, carved stone, tin, etc. Hotel Archer, North Tonawanda, New York: Frame and stone building, 40 by 80 feet, three stories, with accommodations for seventy guests; hardwood finish, tin roof, electric bells and light, heating and ventilating apparatus.

Chicago, Ill.—Architect A. F. Hussander: For A. Peterson, on Clark street near Wellington avenue, a three-story and basement store and flat building, 24 by 90 feet in size; to be of pressed brick and stone front, have gravel roof, sanitary improvements, and cost about \$10,000. For Mrs. Mary Sibley, on Wabash avenue near Forty-fifth street, a two-story and basement flat building, 22 by 67 feet in size; to have a stone front, gravel roof, hardwood interior, electric wiring, furnace heating; cost \$8,000. Also making plans for a four-story store and flat building, 140 by 100 feet in size; to cost about \$50,000; it will have two fronts of stone with galvanized iron bays and cornice, slate tower and gravel roof, gas fireplaces and ranges, and all the modern sanitary improvements.

Architects Wilson & Marble: For J. G. Wilden, at 6332 Cottage Grove avenue, a four-story store, flat and hall building; to have a stone front, galvanized iron bays, electric light, steam heat, etc. For John Agar, on Oakdale avenue near Evanston avenue, a three-story residence; to have a handsome stone front, hardwood interior, electric wiring, modern heating apparatus; also a two-story stable; cost \$20,000. For A. W. Hester, on Diversey street, two three-story and basement residences, of stone fronts, slate, mansard and gravel roof, hardwood finish throughout, hot-water heating, electric light, and the best of modern conveniences; cost about \$40,000. For Thomas Sennott, on Harrison street, two two-story residences, of pressed brick and stone fronts, with galvanized iron bay windows, electric light, steam heating, all improvements; cost about \$12,000. For Antoine Delfosse, to be erected corner Vincennes avenue and Boulevard place, a four-story apartment house, 100 by 143 feet in size; to cost about \$100,000; it will have two fronts of buff pressed brick, with buff Bedford stone trimmings, hardwood interior finish, steam heat, electric light, and the best of sanitary and modern conveniences.

Architect W. L. Carroll: For R. A. Greifenhagen, at 447 to 451 Dearborn avenue, a four-story apartment house, 78 by 80 feet in size; to cost about \$50,000; the front will be of rock-faced Bedford stone of handsome design, with slate mansard roof; the interior will be finished in hardwoods throughout, and

have electric light, steam heating, marble and tile work, and the best of modern improvements. For James Keys, a three-story flat building, 24 by 70 feet in size; to be of pressed brick and stone front, with slate mansard, hardwood finish, etc.; to be erected on Laffin street near Taylor. For V. C. Vosburgh he is making plans for addition and remodeling building on Leavitt street near Van Buren.

Architect H. M. Hansen: For A. Chytraus, on Arlington place near Clark street; a three-story residence; 30 by 57 feet in size; to cost \$12,000. To have a stone front, slate and gravel roof, hardwood finish throughout, hot-water heating, etc.

Architect Julius H. Huber: For Henry Niemann, on Oakdale avenue near Evanston avenue, a three-story and basement flat building, 25 by 70 feet in size; to cost about \$15,000. The first story will be of stone and above of buff pressed brick with stone trimmings. The interior will be finished in hardwood, and have steam heating, electric light, the sanitary and modern conveniences. For Edward Bingle, corner of Southport and Belmont avenues; a two-story store and flat building, of pressed brick and stone front; to cost \$8,000. For Mrs. Mary O'Neill, on Newport avenue; a two-story basement and attic residence; 38 by 59 feet in size; to cost about \$15,000. To be of frame with stone basement, all hardwood finish for interior, electric light, steam heat, etc. For O. M. & E. Hagen, corner Wellington avenue and Center street; a three-story and cellar flat building, of pressed brick and stone front; to cost \$10,000.

Architect William Thomas: For Mrs. Elizabeth A. Horsman, two three-story and basement residences, to be erected corner of Jackson boulevard and Washtenaw avenue. They will have fronts of Bedford stone with copper bays and cornices, hardwood interior finish, all improvements, and cost \$25,000. For M. Ryan, on Grand boulevard; a three-story residence, to have a stone front, slate roof, hardwood finish throughout; cost \$15,000.

Architect George Grussing: For H. Hoffmann, at Mandoda, Illinois, a two-story residence, to be of pressed brick all round, have slate roof, hardwood interior, electric light, furnace and the sanitary plumbing. For H. H. Brinton, on Sacramento avenue near Van Buren street; a three-story and basement flat building, to have a front of Bedford stone, slate mansard and gravel roof; cost \$12,000.

Architects Patton & Fisher: For A. B. Lowther, corner of Ontario and Market streets; a four-story warehouse; 50 by 76 feet in size; to be of brick and stone with gravel roof, steam heat, elevator, etc. For Professor Shorey, a two-story study, to be erected on Woodlawn avenue, to be of pressed brick and stone. For N. S. Bouton, at Dunedin, Florida; a two-story frame clubhouse. For D. J. Kennedy, eight two-story frame houses, to have stone basements, all the sanitary conveniences and cost \$25,000. For E. H. Pitkin, remodeling and additions to residence at Ridgeland. Also making plans for two-story frame parsonage for the Congregational church at Ridgeland. For J. H. Howard, at 4801 Kimbark avenue, a handsome two-story basement and attic residence. The first story will be of stone and above of red Spanish tile. Also making plans for a two-story residence, to be erected at Oak Park, for W. F. Furbeck. The first story will be of brownstone and the rest of frame.

Architect Henry Sierks: For F. Freidenberg, on Pleasant street, a three-story flat building of pressed brick and stone front. Also working on drawings for a two-story building, 200 by 250 feet in size, to be erected at the World's Fair grounds for the state of Nebraska.

Architect A. G. Ferree: For M. Smith, at Evanston, a double two-story frame house, brick basement, plumbing, electric wiring, etc. For F. Turnand, at Ravenswood, a two-story frame residence, stone basement, sanitary improvements, furnace, etc.; cost \$5,000. Also making plans for two-story store and flat building, to be erected at Sixty-ninth and Wright streets; sanitary improvements, etc.

Architects Parke & Purrsell: For M. Hartere, on Halsted street near Sixteenth, a four-story store and flat building; to have a pressed-brick front, trimmed with Bedford stone; cost \$12,000. For the same owner, on Wallace street, between Thirty-third and Thirty-fourth streets, a two-story flat building of pressed brick and stone.

Architect Julius Speyer: For W. J. English, corner of Halsted and Matson streets, a three-story store and flat building, 48 by 62 feet in size; to be of pressed brick and stone front, and cost \$20,000. For M. Considine, corner of Thirteenth street and Center avenue, a four-story apartment house, 73 by 99 feet; to cost \$40,000; pressed brick and stone front, gravel roof, all the sanitary and modern improvements.

Architect E. H. Turnock: For Thomas Lyman, at Ravenswood, a block of five two-story and basement residences. They will have pressed brick and stone fronts, gravel roofs, sanitary improvements, furnaces, and cost \$20,000. For Mrs. Emma Perham, at Ravenswood, a three-story flat building, 40 by 90 feet in size; to cost \$13,000. The front will be of light-colored pressed brick, with buff Bedford stone trimmings. For Fred Heinsler, on State near Fifth street, a three-story flat building; to have a stone front, gravel roof, sanitary and modern conveniences; cost \$12,000. For Fred Hall, at La Grange, a two-story basement and attic residence; stone basement, sanitary improvements, furnace, etc. For C. B. Mears, at La Grange, a two-story basement and attic frame residence, stone basement, furnace and all improvements.

Architect George Garnsey: For M. May, on Calumet avenue and Forty-second street, a three-story and cellar flat building; to have a stone front, all improvements, and cost \$12,000. For M. McCabe, at Edison Park, a two-story and cellar residence; to be of frame construction with stone basement; cost \$6,000. For Mr. Lott, at De Kalb, Illinois, a two-story residence of stone foundation, brick first story and frame above.

Architects Dixon & Brooks: For Mrs. George Driggs, at 5,431 Cornell avenue, a four-story apartment house, 25 by 78 feet in size; to cost \$15,000. The front will be of Roman pressed brick with buff Bedford stone trimmings and copper bays. For Louis Keefer, on Prairie avenue, south of Thirty-ninth street, a block of five three-story residences; to have a frontage of 100 feet by 76 feet in depth. They will have handsome stone fronts, slate mansards and gravel roofs, hardwood finish, electric light and all the improvements. Also making plans for a two-story basement and attic parsonage for the South Park Avenue M. E. Church. Will be of granite front with slate roof, hardwood interior finish, etc.

Architects Hetherington & Warner: For J. Brophy, at Twenty-eighth street and Union avenue; a three-story and basement flat building; of pressed brick and stone. For J. W. Sheridan, on Oakley avenue and Madison street; a four-story and basement apartment house; 33 by 125 feet in size; to cost \$38,000. St. Louis pressed brick and stone, brick bays, copper cornices, electric wiring; to be of iron construction and have the best of sanitary and modern conveniences, heating, etc. Also making plans for a three-story addition to the Servite Father's building, on Albany avenue and Van Buren street.

Architects Ostling Bros.: For E. Cohen, corner of Chestnut and Wells; a four-story store and flat building; to have two fronts of pressed brick and stone, with galvanized iron bays, gravel roof, plumbing; to cost \$12,000. For J. J. Donahue, corner of Diversey avenue and Halsted street; a four-story store and flat building, 59 by 134 feet in size; to cost \$75,000. It will have two fronts of pressed brick and stone. For S. Peterson, at 237 Townsend street; a four-story flat building; 22 by 53; to cost \$10,000. Pressed brick and stone front. For Charles Reiling, at 2215 North Ashland avenue; a two-story and attic store and flat building. For M. Lundquist, on Oak Grove avenue, near Clark street; a two-story flat building. For A. Schroeder, at 117 Sedgwick street; a five-story and basement flat building; 25 by 56 feet in size; to cost \$13,000. To be of pressed brick and stone front, gravel roof, galvanized iron bays, etc.

Architect F. B. Townsend: For J. M. Hanchett, on Fifth Court and Evans avenue; a three-story apartment house, 53 by 74 feet in size; to cost \$17,000. It will have a handsome stone front, hardwood interior and all improvements.

Architect A. W. Cole: For George W. Hoyt, at 5210 Hubbard avenue; a two-story basement and attic residence; 30 by 70 feet; to cost \$10,000. To be of frame, with stone basement, have quarter-sawn oak finish, electric lights, etc. For James McKinney; a four-story store and flat building of pressed brick and stone. Also memorial cottage for ministerial fund in connection with the Clinton College; two-story and attic; size 46 by 58 feet; to be finished in Southern pine and have all the conveniences; cost \$7,000. Rev. Walter Hillman of Clinton, Mississippi, president of Clinton College. Also making plans for a two-story frame residence; to be constructed of redwood and have sanitary plumbing and all the improvements. It will be built at Claremont, California, for Prof. E. C. Norton of Claremont College. Also for President Baldwin, of Claremont College; a two-story residence; to be finished in redwood in oil, with paneled

ceilings, etc. These houses will be supplied with water from the new tunnel which is being made in the neighboring mountains. From this source it is proposed to supply with water and electric lights the three towns of Pasadena, Ontario and Claremont.

Architects Flanders & Zimmermann: For Dr. G. Chamberlain, on Thirty-first street near Prairie avenue, a seven-story apartment hotel, 65 by 100 feet in size; to cost \$100,000; to be of pressed brick and stone front, with copper bays, interior to be finished in hardwood, and have steam heat, electric light, etc. For William K. Griswold, on Ashland avenue near Lake street, a four-story and basement apartment house, 100 by 76 feet in size; to cost \$60,000; pressed brick and stone front, hardwood interior finish, steam heat, electric light, etc. For G. Brown, on Rhodes avenue near Thirty-fifth street, two three-story flat buildings, of stone front with copper bay windows, hardwood finish, etc.

Architects Treat & Foltz: For O. Benson, on Belden avenue west of Clark street, a four-story and basement apartment house, 100 by 100 feet; to cost \$50,000. For Joseph Stockton, on Taylor and De Koven streets, a two and three-story and basement stable, 216 feet long by 50 feet wide; to cost \$25,000. For O. M. Power, on Fifty-seventh street and Jefferson avenue, a three-story residence; to cost \$25,000; the front will be of buff pressed brick and terra cotta, hot-water heating, electric light, etc. For George H. Tripp, on Greenwood avenue near Fifty-first street, a three-story residence; to be of brick on the main floor, and shingles above; have hardwood interior finish, hot-water heating, electric light, the best of modern and sanitary conveniences; the approximate cost \$13,000.

Architects Lamson & Newmann: For C. E. Brown, on the corner of Jackson boulevard and Wood street, four two-story and cellar residences, 90 feet frontage and 72 feet deep; to cost about \$28,000; to be of mottled pressed brick and stone front, with copper bays and cornices. For M. Levermann, corner of Colorado avenue and Sacramento, a three-story store and flat building; to be of pressed brick and stone front, and cost \$10,000.

Architect C. S. Corwin: For George Blossom and Warren McArthur, two two-story and attic residences, of pressed brick and frame; to be erected on Forty-ninth street and Kenwood avenue; they will have all the improvements, and cost \$16,000.

Architect W. W. Boyington: For Hahnemann Medical College, Cottage Grove avenue and University place, a five-story and basement building, 64 by 77 feet in size; to be constructed of pressed brick, stone and terra cotta. Also at same place, a seven-story and basement building, 64 by 130 feet; the two buildings will be fitted up with electric light, steam heat, elevators, and all the sanitary conveniences, and cost \$110,000. For S. M. Millard, on Forty-second street and Evans avenue, a four-story and basement apartment house, 22 by 120 feet; to cost \$15,000; to be of pressed brick, stone and terra cotta front, with galvanized iron bays. For F. D. Stout, a three-story residence, size 36 by 72 feet; to be of frame with stone basement, hardwood interior, etc. For F. A. Peterson, corner of Lincoln and Seminary avenues and Mariana street, a four-story flat building, 50 by 50 feet; to cost \$12,000.

Architect Francis J. Norton has completed drawings for a handsome three-story brownstone residence, 25 by 80 feet, to be erected at Forty-fifth street and Grand boulevard, for Miss Mamie Hayes. It will be finished with plate, stained and art glass, hardwood oil finish and all sanitary, electric and modern improvements; cost \$25,000.

Architect L. G. Hallberg: For Dr. E. S. Talbot, at Clark and School streets; a block of five three-story stores and flats; 100 by 60 feet; to be of pressed brick and stone with galvanized iron bays, sanitary plumbing, electric wiring, etc.; cost about \$25,000. For Theodore Theis, on Sidney court near Wrigwood avenue; a three-story flat building, to be of stone front with slate mansard and gravel roof and cost \$12,000.

Architect Fred Ahlschlager: For St. Bethany Christian church, to be erected corner of Fifty-fifth street and Atlantic avenue; making plans. It will be 70 by 80 feet in size, with basement, auditorium and gallery. Pressed brick and stone with slate roof, stained-glass windows, heating apparatus, etc.; cost \$25,000. Also making plans for J. L. Hocber, corner of Twenty-first and Lincoln streets, for a three-story basement and attic flat building 25 by 75 feet; to be of stone front, cost about \$12,000. For M. D. Carl, at 73 Reese street; a three-story flat building, of pressed brick and stone front, galvanized iron bays, etc.

Architect J. N. Tilton: For J. L. Cochran, three two-story basement and attic residences, to be erected at Edgewater. For C. H. Crosby, at Riverside; a two-story residence of frame, with stone basement, plumbing, furnace, etc. For G. B. Lyman, at La Grange, two two-story frame houses. For W. R. Burleigh, at La Grange, a two-story basement and attic frame residence, to have stone basement, all the sanitary improvements, electric light, etc.

Architects Willet & Pashley: For the Berlin Machine Works at Beloit, Wisconsin; a three-story factory, 200 by 66 feet in size, to be of brick, mill construction, and cost \$31,000. For David Bradley Manufacturing Company, at 55 to 59 Jefferson street; a six-story warehouse 60 by 150 feet in size, to be of pressed brick and stone front, the two first stories in iron, to be of mill construction and have elevators, electric light, steam heat, etc. For E. F. Burton, at Oak Park, five two-story and basement residences of buff pressed brick, stone and terra cotta fronts of very attractive design.

Architect Franklin P. Burnham: For Joseph Levesey, on Warren avenue between Kedzie and Homan avenues; a three-story residence; 25 by 63 feet in size, to have a rock-faced stone front, hardwood finish, hot-water heating, etc. Also making drawings for the cold-storage warehouse, to be erected at the World's Fair grounds. It will be 130 by 280 feet in size, five stories high, to be of staff construction similar to the other buildings. [NOTE.—Edbrooke & Burnham have dissolved partnership by mutual consent and Mr. Burnham will continue the business as usual in the Chamber of Commerce building. George W. Strong has been appointed agent of the old firm and will settle up all accounts, etc.]

Architect A. Druiding: Making plans for church, to be erected at Ravenswood, to be of frame. Also two-story parsonage for the same; cost about \$15,000. Also for two-story school, to be of pressed brick and stone front, slate roof; size 62 by 84 feet; to cost \$12,000. To be erected at Du Quoin, Illinois; Rev. Klocke. Also making plans for frame church; 56 by 100 feet in size; to be erected at Avondale, Illinois. Also two-story basement and attic school, 62 by 37 feet; to cost \$10,000. To be erected at Provemont, Michigan. To be of frame with stone basement, have steam heat and sanitary improvements; Rev. Reussmann.

Cincinnati, O.—Reported by Lawrence Mendenhall: The month of May just closed was indeed a rainy one, the months of April and May seeming to have been reversed in their regular order. The weather was not fully appreciated by the contractors, for if they could not dam the rain literally, they did damn it verbally. The rainfall was phenomenal and interfered with building operations considerably. However, behind the clouds was the silver lining, for the contractors knew that the question of strikes would not prove another hindrance. There will not be many large contracts handled this season, I believe, but the contractors, I think, will be pretty well satisfied when the season ends.

Architect S. S. Godley reports as follows: For Maurice Freiberg, Cincinnati, a residence; materials: pressed brick, furnace, slate roof, plate and stained glass, grates, mantels, laundry, gas, plumbing, etc.; cost \$15,000. For Walter Freiberg; a house similar in construction and materials used; cost \$12,000. For George Prichard, Avondale, Ohio (Cincinnati), a residence; materials: stone, slate roof, furnace, hardwood, stained glass, grates, mantels, gas, plumbing, laundry, etc.; cost \$18,000. For B. Mihalovitch, care architect; a residence; materials: pressed brick, slate roof, grates, mantels, furnace, laundry, gas, hardwood, etc.; cost \$18,000. For Moritz Heilbrunn, Sixth and Mound streets; a residence; materials: brick and stone, slate roof, hardwood, grates, mantels, gas, stained glass, laundry, furnace, etc.; cost \$12,000.

Architects Boll & Taylor report for Rev. H. Kramer, pastor, Ludlow, Kentucky, a church; materials: brick, stone, furnace, stained glass, slate roof, frescoing, organ, furniture, etc.; cost \$30,000.

Architect Henry E. Siter reports for J. D. Hearne, Third National Bank, Cincinnati, two residences; materials: pressed brick, furnace, slate roof, pine finish, mantels, grates, gas, plumbing, blinds, etc.; cost \$12,000. Briggs Swift estate, Ninth and Sycamore streets, Cincinnati, a store and factory building, seven stories high; size 75 by 150 feet; materials: pressed brick, iron, steam, elevators, asphalt roof, gas, plumbing, etc.; cost \$75,000. For Howard Douglass, a residence; materials: pressed brick, furnace, slate roof, stained glass, grates,

mantels, hardwood, gas, plumbing, etc.; cost \$7,500. For Twenty-first district, Cincinnati, a schoolhouse; materials: stone, slate roof, furnace, blinds, etc.; cost \$75,000. Address Jacob E. Cormany, Chairman Building Committee.

Architects Nash & Plympton report for Mrs. A. D. Fisher, a residence; materials: frame and logs, tile roof, stained glass, furnaces, gas, plumbing, blinds, etc.; cost \$12,000. For Walter Snowden Smith, of Syracuse, New York, a residence; materials: stone, tile roof, hardwood, furnace, mantels, grates, stained glass; cost \$15,000. For Mrs. Dr. John Wigglin, 110 Broadway; a residence; materials: plaster and timber, slate roof, hardwood, furnace, blinds, gas, plumbing, etc.; cost \$5,000.

Architects Jes Jardins & Hayward report for A. M. Wasson (in their care), a residence; materials: brick, furnace, slate roof, stained glass, hardwood, grates, mantels, etc.; cost \$7,000. This enterprising firm of young architects have lately moved into more commodious and better lighted offices. May good luck attend them.

Cleveland, O.—Architects Coburn & Barnum: For Cleveland Medical College Company; a four-story brick college building, slate roof; size 37 by 64 feet; cost \$20,000.

Architect J. Richardson: For Cleveland Athletic Club; a four-story brick club house; size 26 by 124 feet; cost \$40,000.

Architect George H. Smith: For Dr. Henderson; a two-story frame dwelling, slate roof; size 31 by 41 feet; cost \$5,000.

Architect B. F. Vanderveld: For Edward Hrabk; a two-story frame store and dwelling; size 42 by 35 feet; to cost \$5,000.

Architect William Warmington: For the Peoples Gas Light Company; a two-story purifying house, brick; size 59 by 111 feet; cost \$9,000.

Architect J. W. Headeck: For J. F. Troyon; a two-story brick dwelling; size 33 by 50 feet; cost \$8,000.

Detroit, Mich.—Architects M. I. Smith & Son: For W. W. Hannan, a two-story double brick residence with slate roof, stone trimmings; cost \$7,500.

Architect R. J. Black: For Thomas Fairbairn, a two-story brick residence, on Crawford street and Cleveland avenue; cost \$6,000.

Architect W. S. Stratton: For E. A. Furguson, a two-and-a-half-story double dwelling house, pressed brick with brownstone trimmings; cost \$12,000.

Architects Mason & Rice: For the Board of Police Commissioners, a two-story field stone and frame police station on Bell Isle Park; size 48 by 103 feet; cost \$10,000.

Architect R. E. Raseman: For Theodore L. Backus, a three-story brick residence, on Hancock avenue and Hastings street; cost \$6,000.

Architects Malcombson & Higginbotham: For Baptist Church Society, Pontiac, Michigan, a brick and stone church building; to cost \$20,000. For John Lauer, a four-story brick manufacturing building, corner Congress and Larned streets; size 44 by 100 feet; cost \$10,000. For Miss Common, a two-story flat building; to cost \$8,000.

Architect Ed. C. Van Leven: For John French, additions and alterations to residence at corner of Clifford and Montcalm streets; cost \$5,000. For John O'Leary, Robert's Landing, Michigan; a two-story frame residence; cost \$7,000.

Architect Harry J. Rill: For Hugh T. Peoples, eight two-story brick store and flat buildings; size 195 by 60 feet; cost \$16,000. For Michael J. Griffin; a two-and-a-half-story brick residence, on Seventeenth street and Kirby avenue; cost \$11,000. For Samuel Moyer, a two-story store and flat building, brick with brownstone trimmings, on Third and Alexander avenues; cost \$5,000.

Architect Gordon W. Lloyd: For David Whitney, Jr., rebuilding of building recently destroyed by fire on Larned near First street; cost \$16,000.

Architect J. G. McLean, Windsor, Ontario: For the British-American Methodist Episcopal Church society, a brick and stone church building; to cost \$6,000.

Duluth, Minn.—Architects McMillen & Radcliffe: For George King, a four-story store; size 25 by 115 feet; steam heat, brick and stone, gravel roof; cost \$28,000. For P. M. Graff, a three-story flat building; size 80 by 125 feet; stone with gravel roof, steam heat; cost \$50,000; contractor, P. L. Peterson. For F. S. Hodges, a three-story store building, brick and cut stone; size 100 by 115 feet; cost \$80,000. For the Board of Education, a three-story school building, brick and stone, steam heat, metal roof, exhaust ventilation; size 100 by 197 feet; cost \$90,000. Also a two-story addition to school building; size 56 by 110 feet; cost \$25,000. Also improvements to schoolhouse; size 38 by 72 feet; cost \$15,000. For the Duluth Street Railroad, a two-story power house, stone and brick; size 50 by 115 feet; cost \$38,000; contractors, A. F. Fisher & Co.

Architect G. H. Tenbusch: For Bishop M. Golrick, a three-story orphanage, brick, steam heated; size 140 by 67 feet; cost \$50,000. For city board, a four-room frame school building; size 67 by 75 feet; cost \$5,000. For John Fraser, a two-story frame residence; size 55,500. Also preparing plans for the Catholic Cathedral, to be of sandstone; size 75 by 185 feet; estimated cost \$200,000.

Milwaukee, Wis.—Architects Craue & Barkhausen: For Charles Button, a seven-story office building; size 80 by 120 feet; brick, with stone trimmings; cost \$100,000.

Architects Rau & Kirsch: For F. Zautcke, a two-story stone residence; size 100 by 200 feet; cost \$20,000.

Pittsburgh, Pa.—Architect L. O. Dause: For A. C. Beeson, a two-story residence, size 36 by 50 feet; brick with stone trimmings; cost \$8,000. For William McConway, a two-story frame residence, size 106 by 45 feet, to cost \$15,000. For A. I. Scott, a two-story and attic residence, pressed brick with stone trimmings; size 45 by 65 feet; cost \$18,000. Clark, Richmond & Co., contractors.

Architect S. T. McClarren: For W. R. Ford, a two-story brick residence, size 33 by 79 feet, on Neville street; cost \$11,000.

Architect F. C. Sauer, for J. C. Schaeffer & Brother, a four-story manufacturing building, size 40 by 90 feet; brick, gravel roof; to cost \$14,000. Contractors, Benz Bros.

Architects Longfellow, Adler & Harlow: For H. G. Dravo, a two-story residence, brick and stone trimmings; to cost about \$10,000.

Architect E. E. Miller: For Mrs. W. C. Moreland, a two-story brick residence; to cost \$6,000.

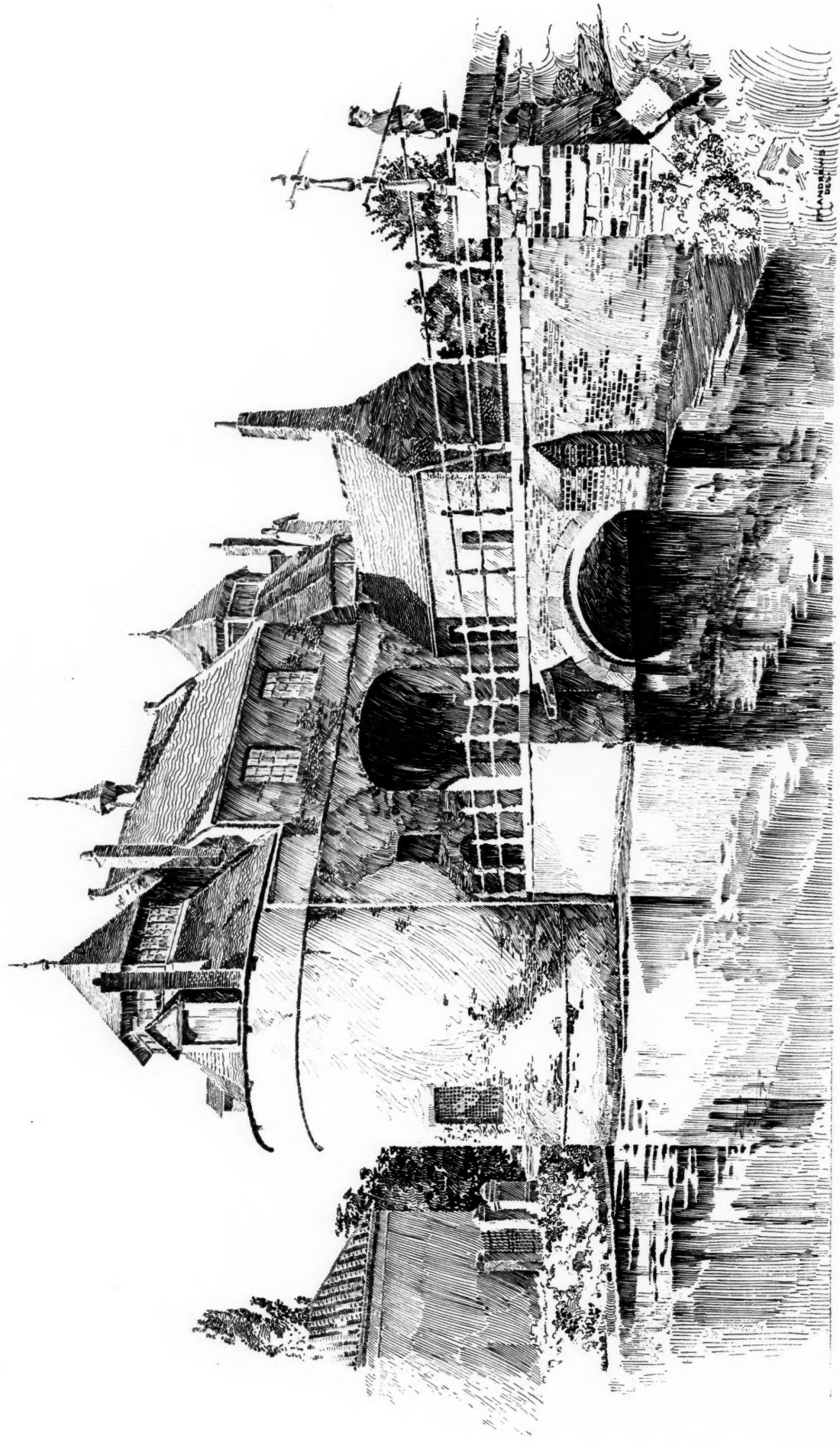
Rochester, N. Y.—Architect Orlando K. Foote is building an edifice for the Third Presbyterian Church Society, corner East avenue and Meigs street, Rochester, New York; the style is modern Romanesque; material, St. Lawrence marble; seating capacity, 1,500; finished in quartered white oak, cased beams and trusses, marble mosaic floors in vestibules, Smead system of warming and ventilation; cost about \$80,000; H. H. Edgerton is the general contractor. Dwelling house for Mrs. Agnes Moore, to be built on Rutger street; cost \$6,000; contracts not let. Dwelling house on University avenue, for J. P. Palmer; cost about \$10,000; contracts not let. Brick block, two stores, two flats, and Masonic hall, in Charlotta, New York; cost \$10,000; contractor, Robert Corbitt. Dwelling house on Court street, for J. W. Gillis; cost \$3,000; A. W. Hopeman, contractor.

Architect W. Foster Kelly is preparing plans for St. Patrick's Church, Belfast, New York; to be of brick and stone, slate roof, finished in hardwood; cost about \$15,000. Polish Church at Albion, New York; materials: brick and stone, slate roof, stained glass windows; dimensions, 42 by 90 feet; height of spire, 125 feet. Double frame house for Joseph Elliott; size 40 by 50 feet; finished in black ash.

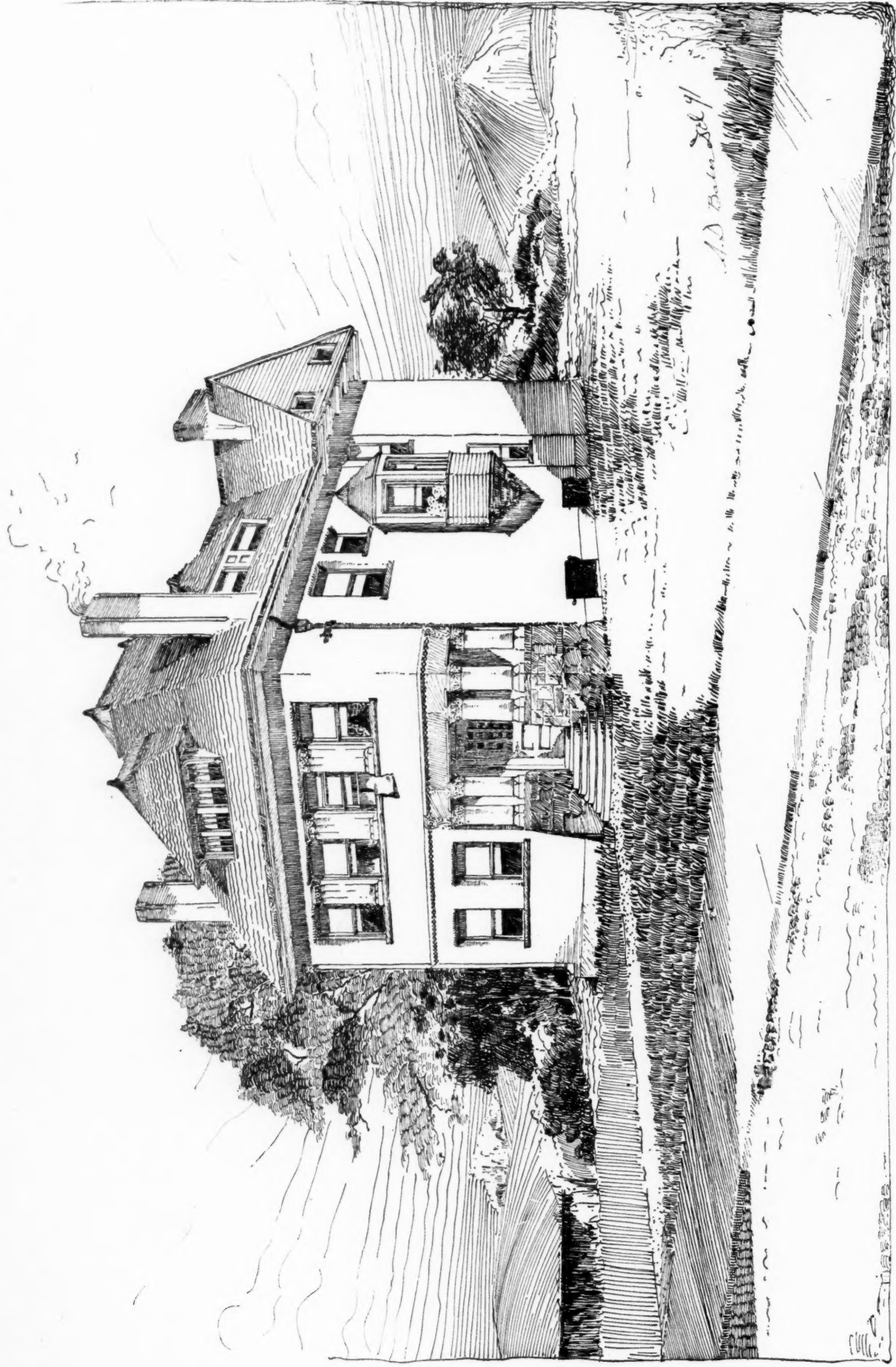
St. Louis, Mo.—F. Kohlenmeyer & Son: For B. M. Verdin, a two-story brick dwelling; to cost \$10,000. Also for the Maple Building Company, a two-story brick store and hall; to cost \$22,000.

St. Paul, Minn.—Architect E. P. Bassford is drawing plans for a handsome five-story brick block, to be erected on the northeast corner of Sixth and Minnesota streets, by Thomas Berrisford; it will be a steel construction building, with plate glass front and façades of hard brick; the Sixth street frontage will be 75 feet, and the Minnesota street front 100 feet; the interior will be fitted up with all modern conveniences.

Architects Reed & Stem report plans for a \$10,000 residence on Dayton's Bluff, for William Hamm; it will be of frame, two stories high, and will have interior hardwood finish, hot-water heating plant, and all modern appurtenances; work will be commenced at once. This firm has also plans for two school buildings at Little Falls, Minnesota; to be two stories in height and built of brick; cost \$12,000. Also plans for a residence at Merriam Park, for L. H. Bishop; to be of frame; costing \$5,000.



THE OSTEND GATE, BRUGES, BELGIUM.
F. M. ANDREWS, DEL., FROM PHOTO.



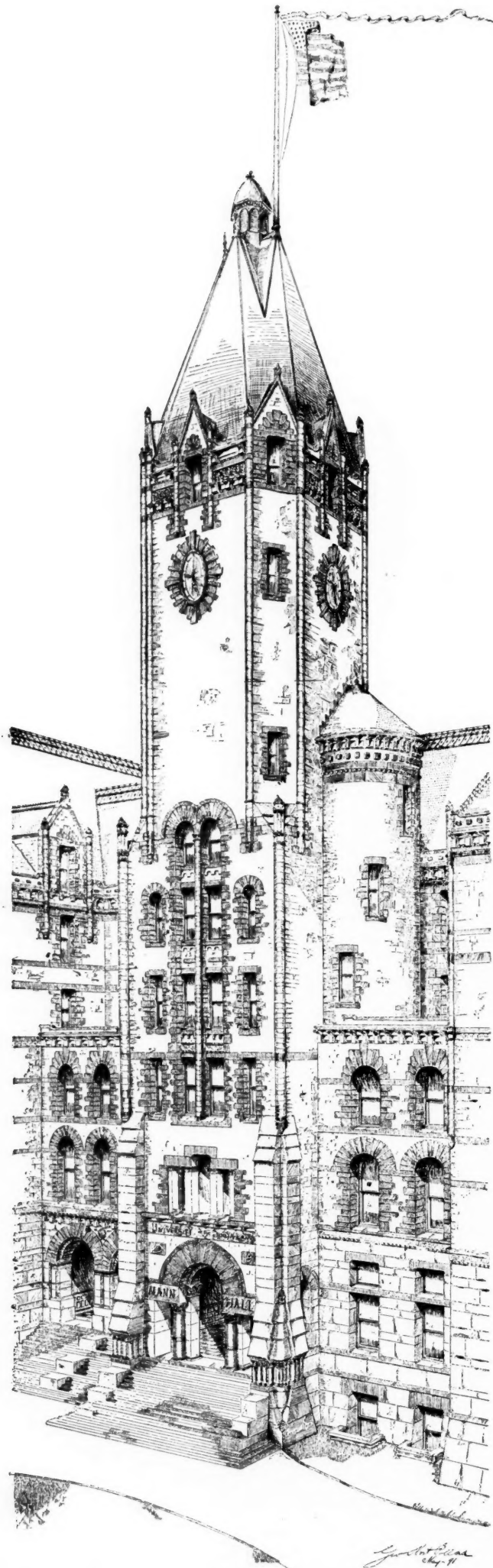
RESIDENCE FOR ROBERT E. FILLEY, LINDEL AVENUE, ST. LOUIS, MISSOURI.

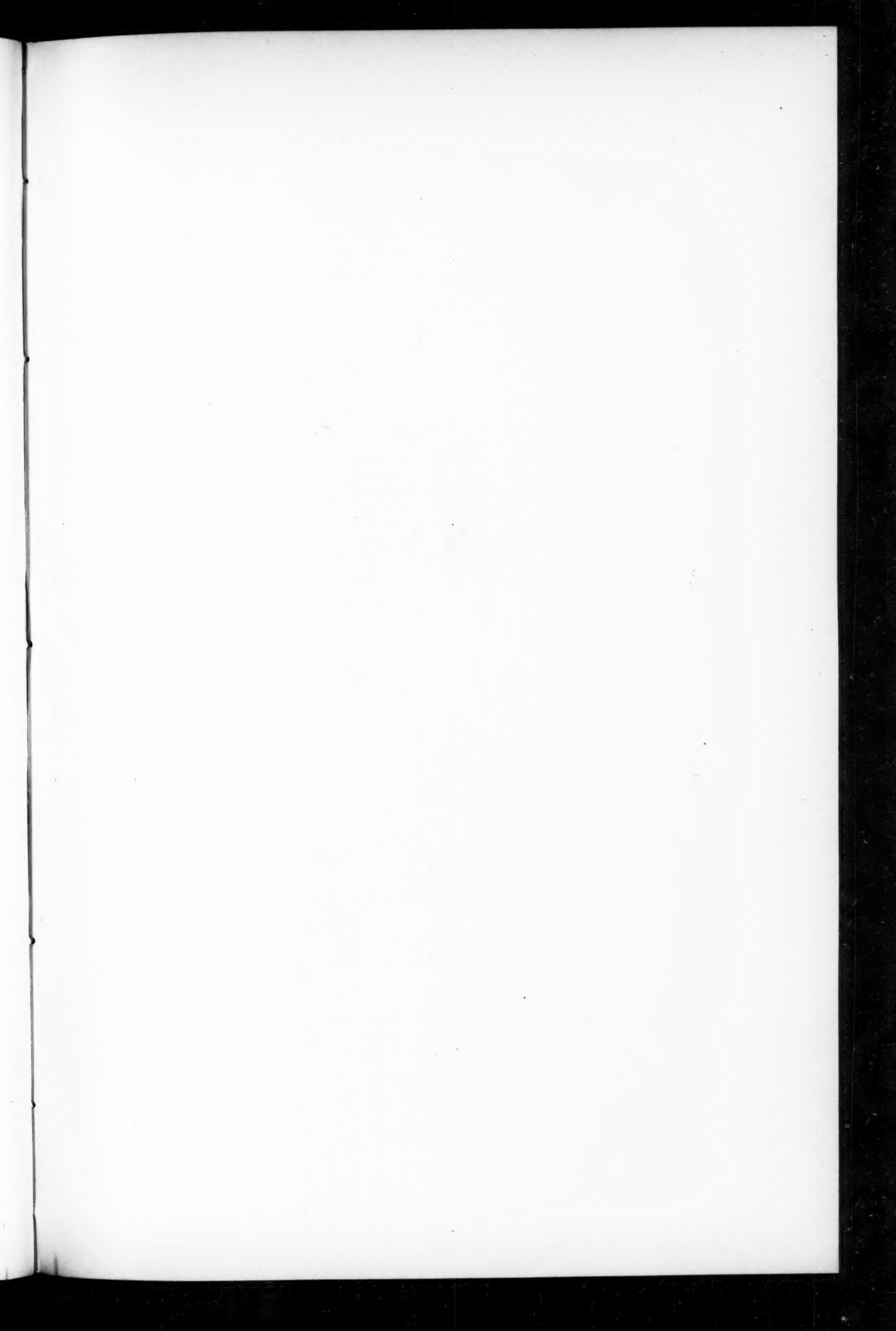
E. C. JANSSEN, ARCHITECT.

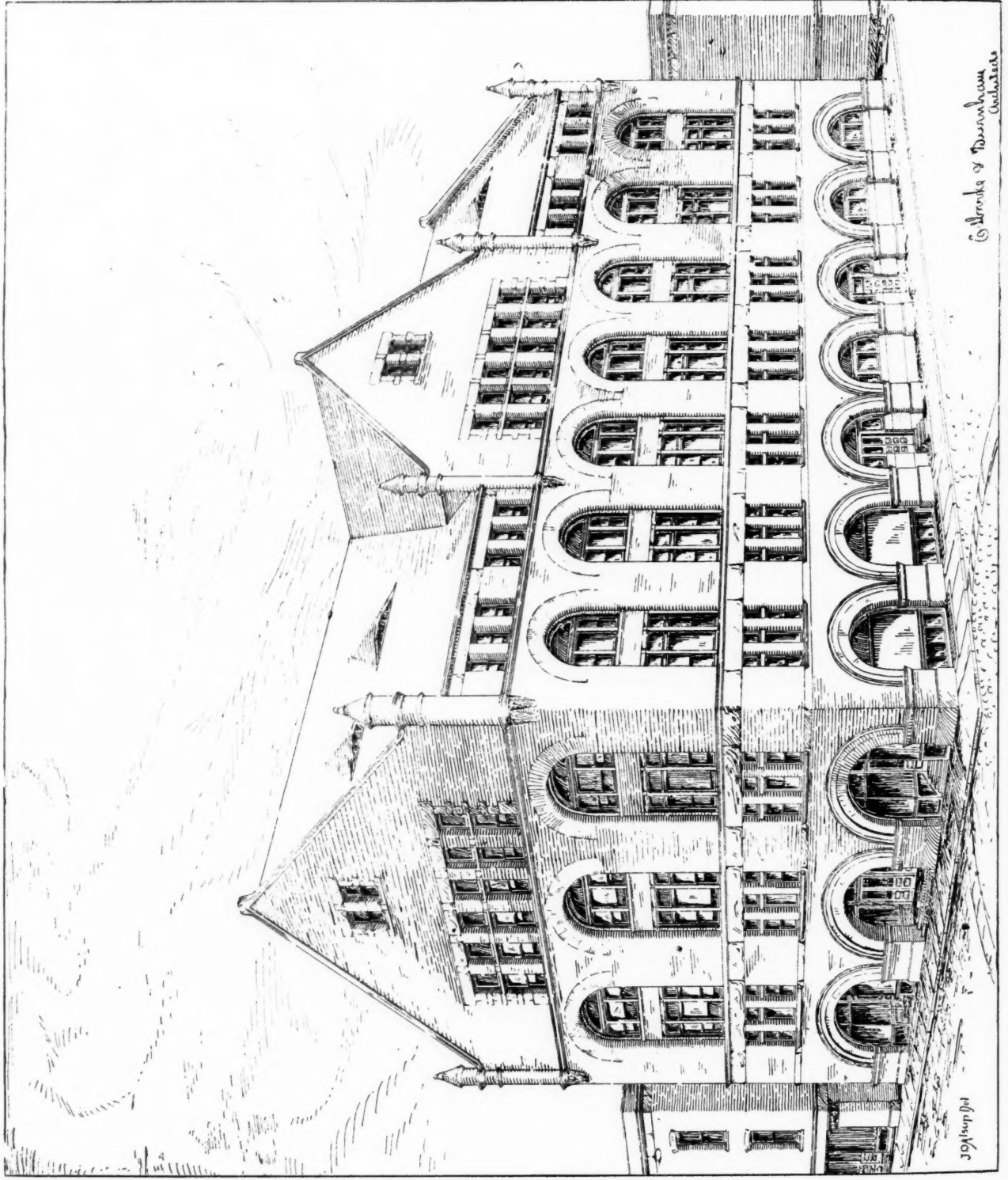
"MANN TOWER"
University of the Southland,
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Arch't. Geo. Moff Fellard,
Bluffton S.C.







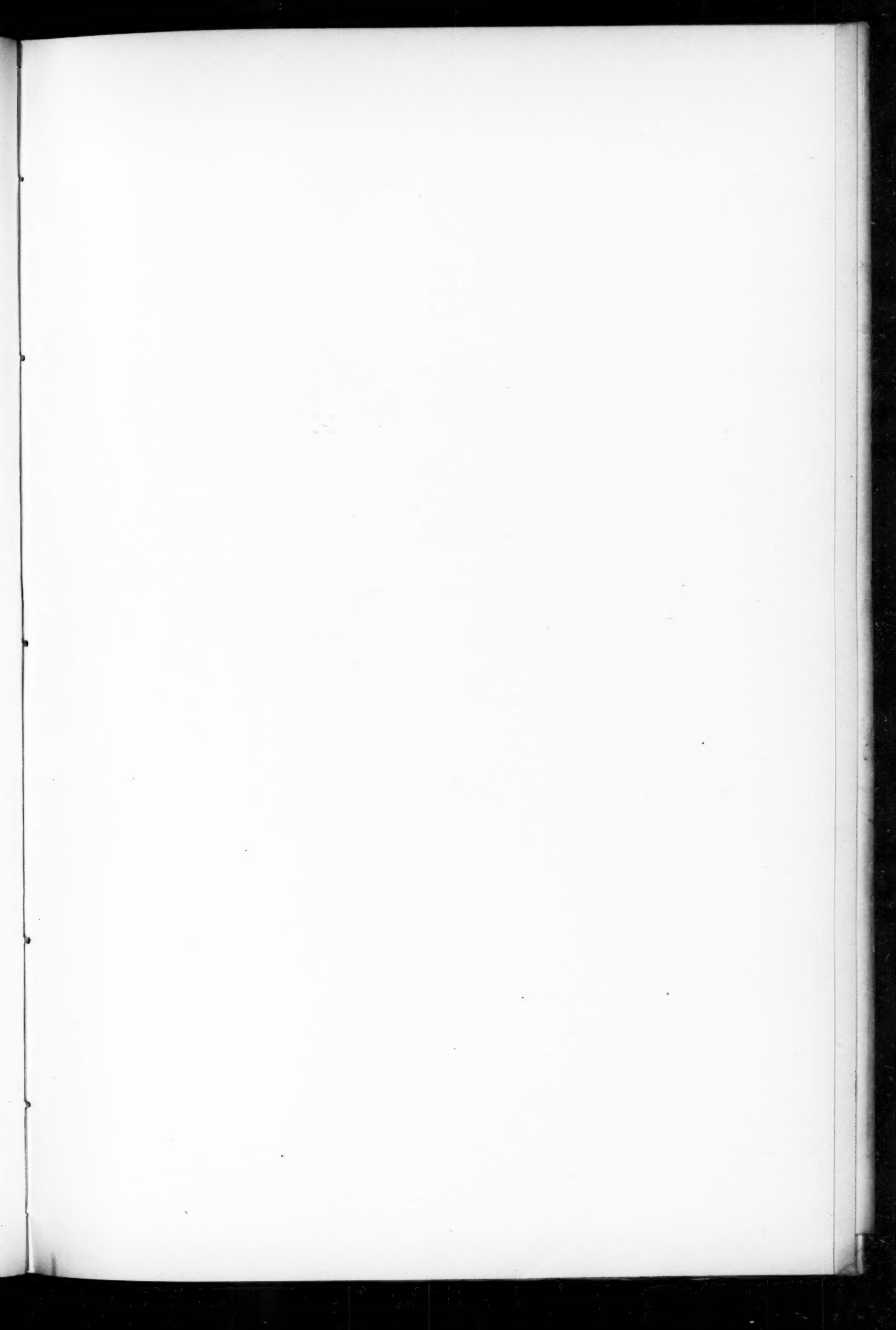
© Burns & Burnham
Architects

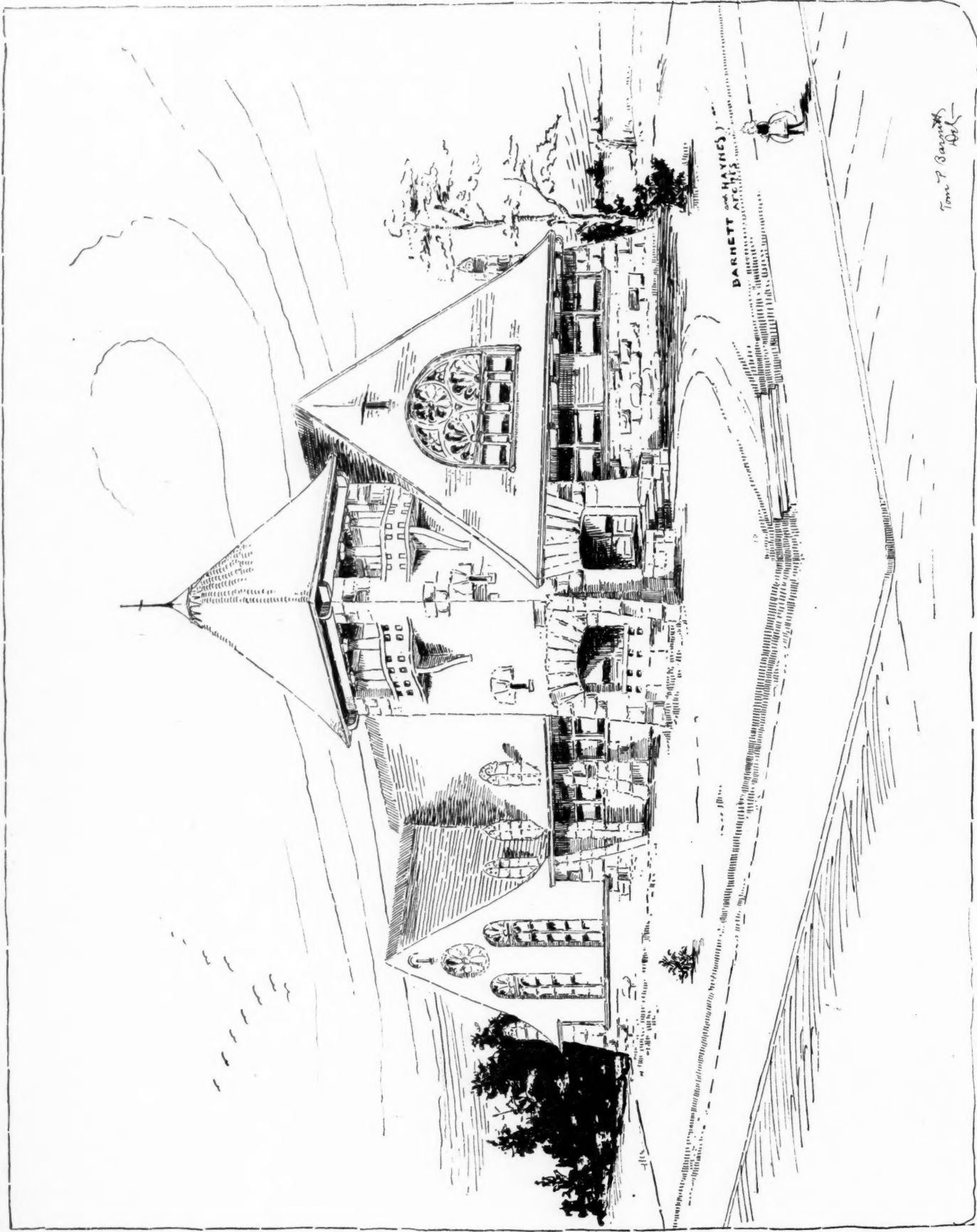
AMATEUR ATHLETIC ASSOCIATION BUILDING AND LYCEUM THEATER, MEMPHIS, TENN.
EDBROOKE & BURNHAM, ARCHITECTS, CHICAGO.



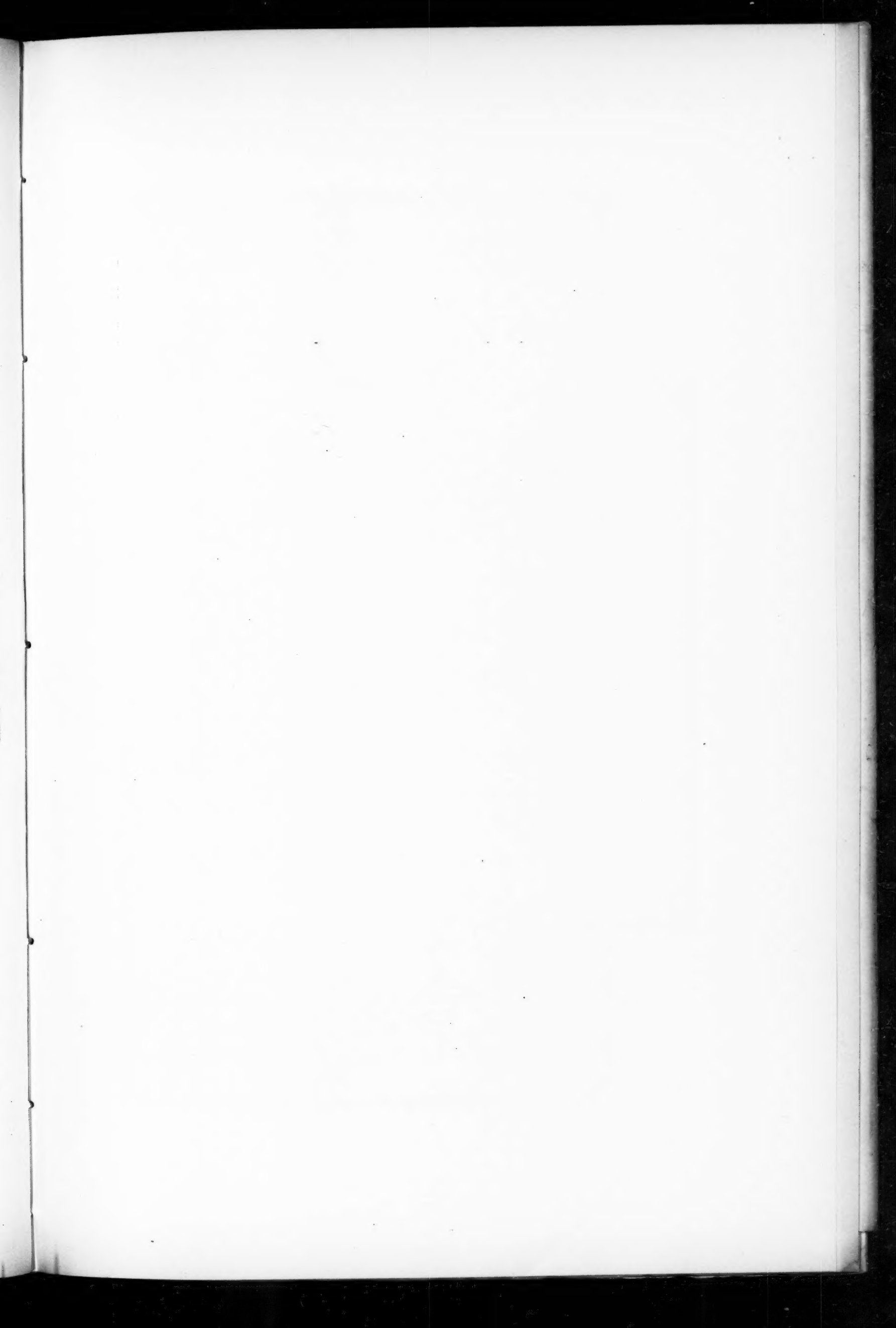
Dwelling for H. C. Sprague Esq. Hyde Park Mo.

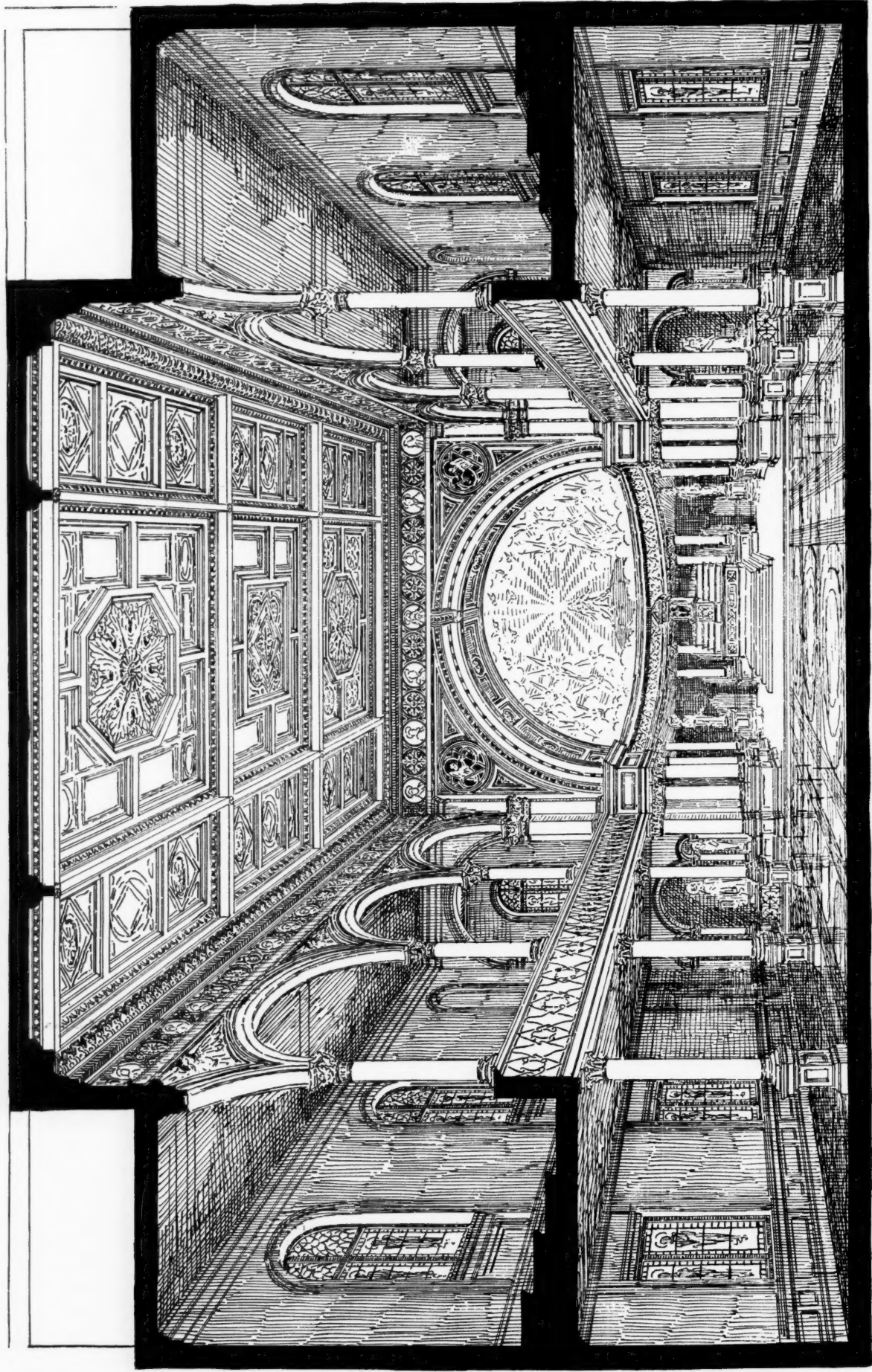
DWELLING FOR H. C. SPRAGUE, HYDE PARK, KANSAS CITY, MISSOURI.
WALTER C. ROOT, ARCHITECT.





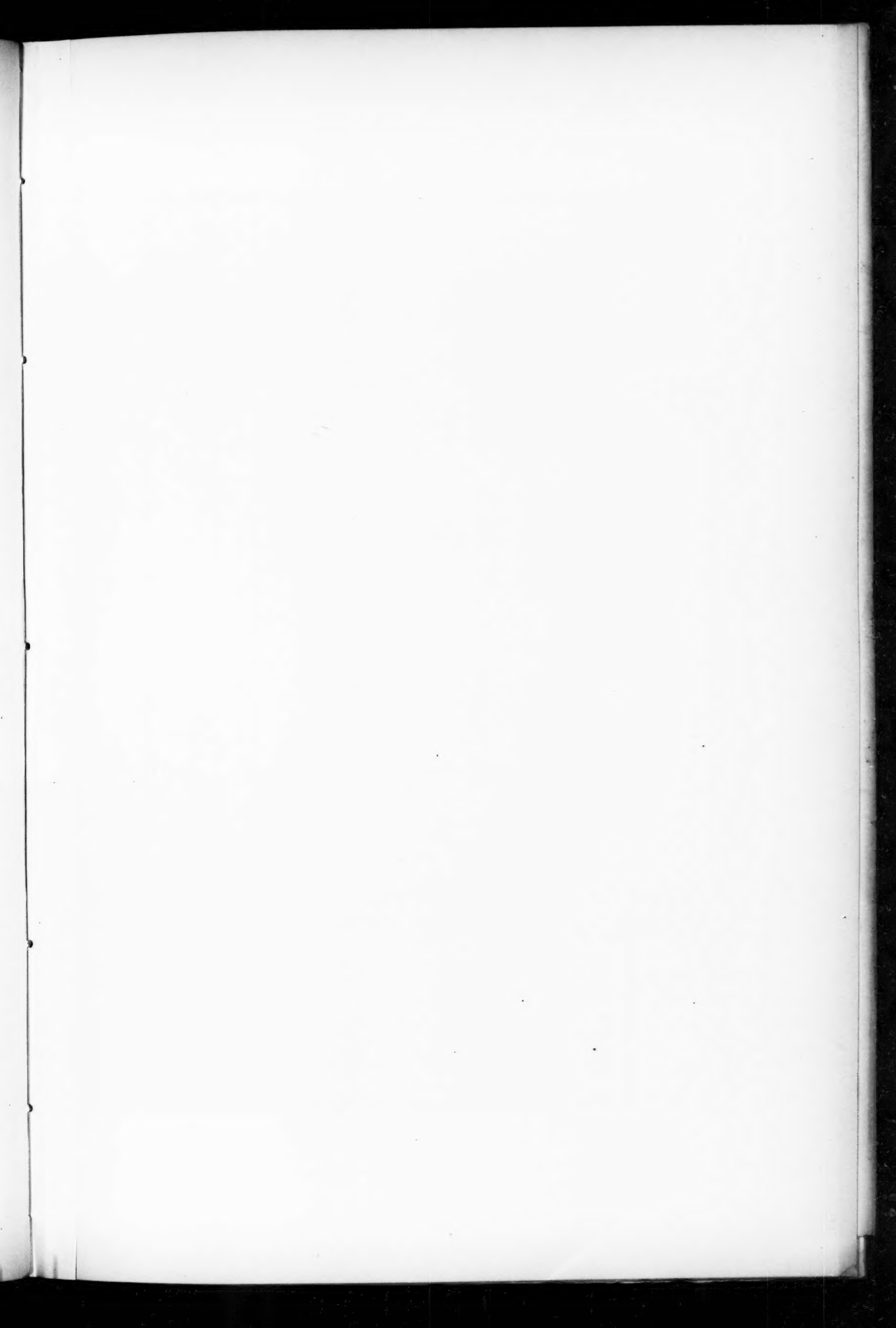
ST. ROSE CHURCH, ST. LOUIS, MISSOURI.
BARNETT & HAYNES, ARCHITECTS.





INTERIOR VIEW, SAINT TERESA CHURCH, SAN FRANCISCO, CALIFORNIA.

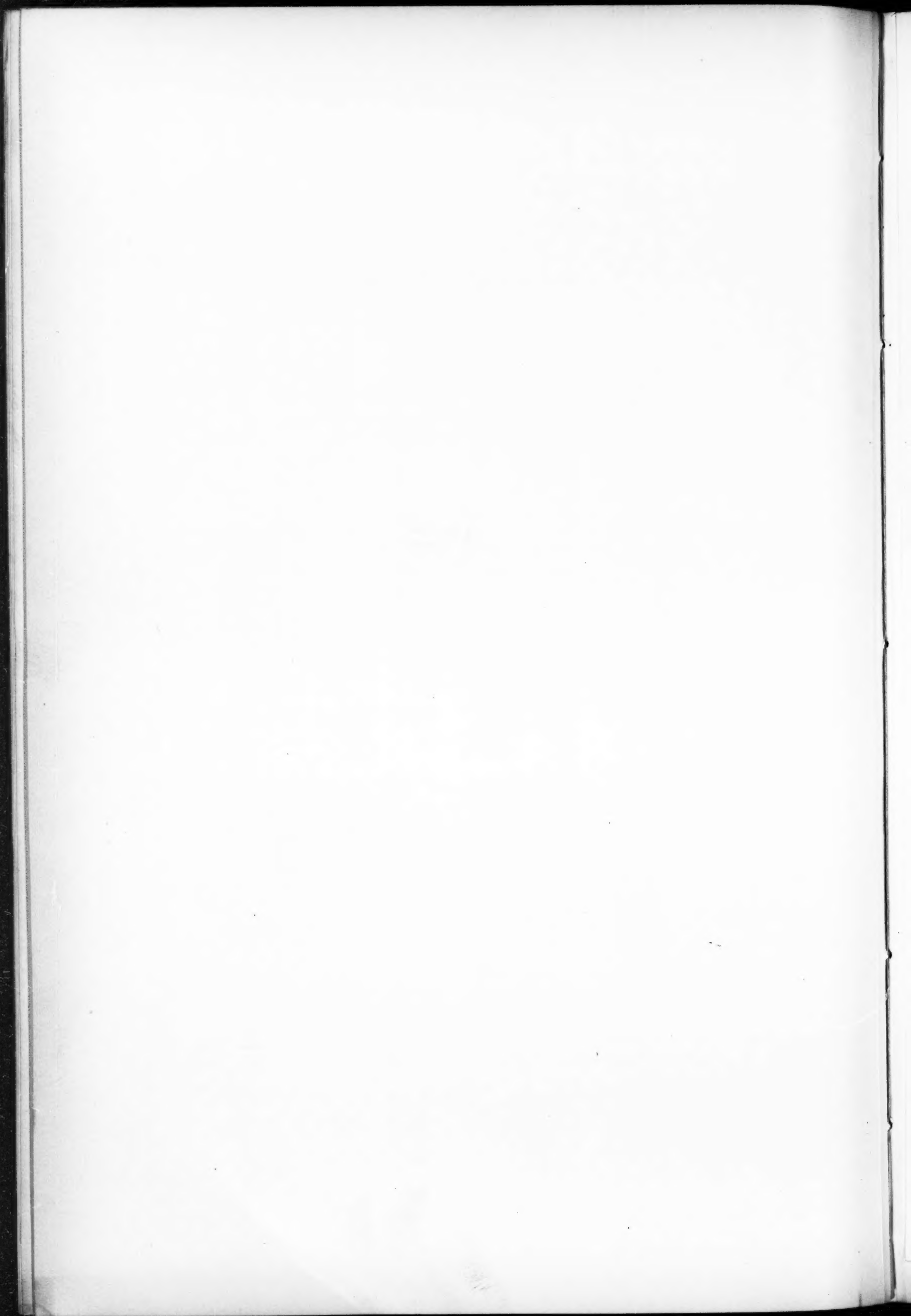
SHEA & SHEA, ARCHITECTS.







HOUSES FOR
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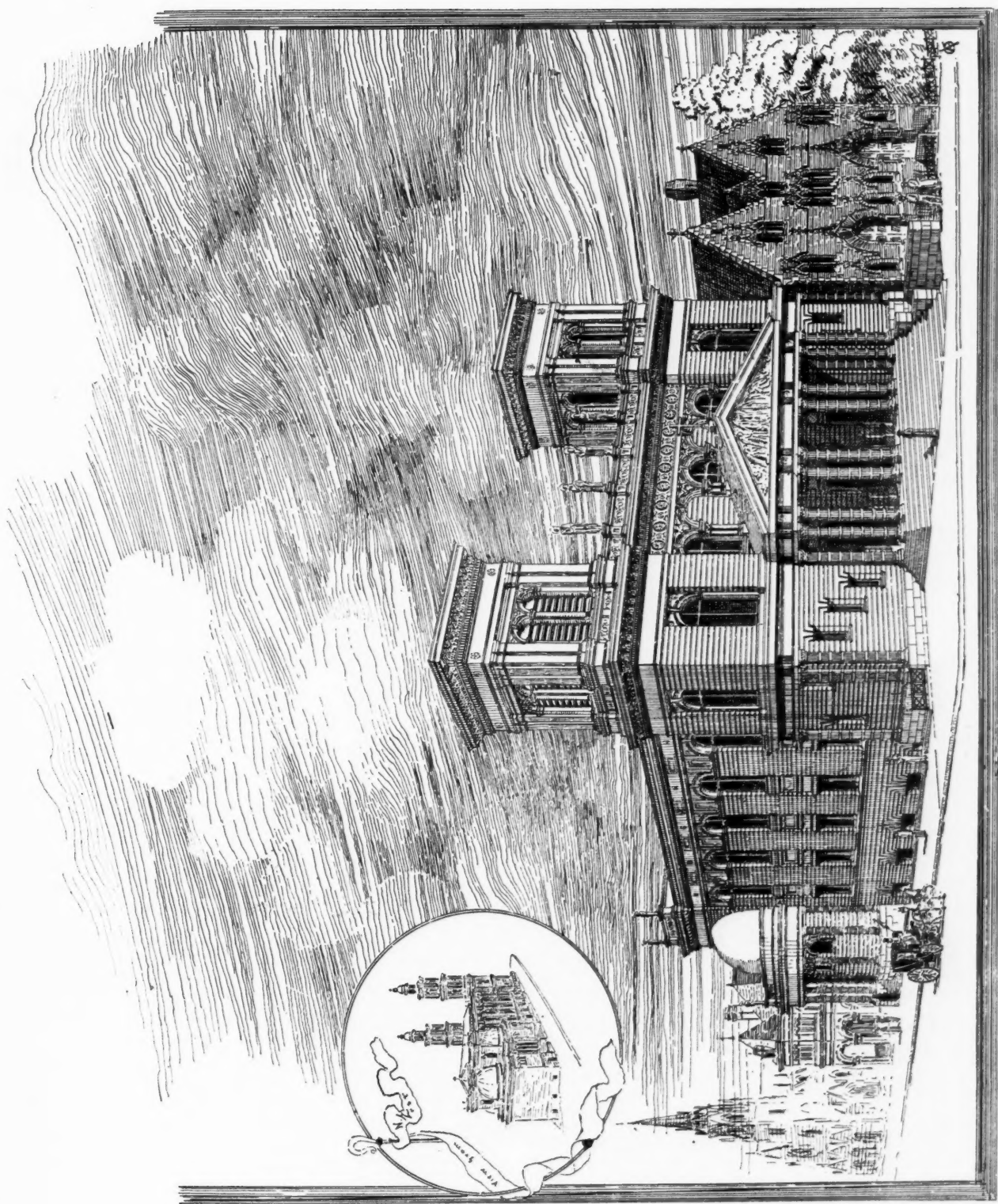


RESIDENCE OF DR. BELL, DENVER, COLORADO.
VARIAN & STERNER, ARCHITECTS.



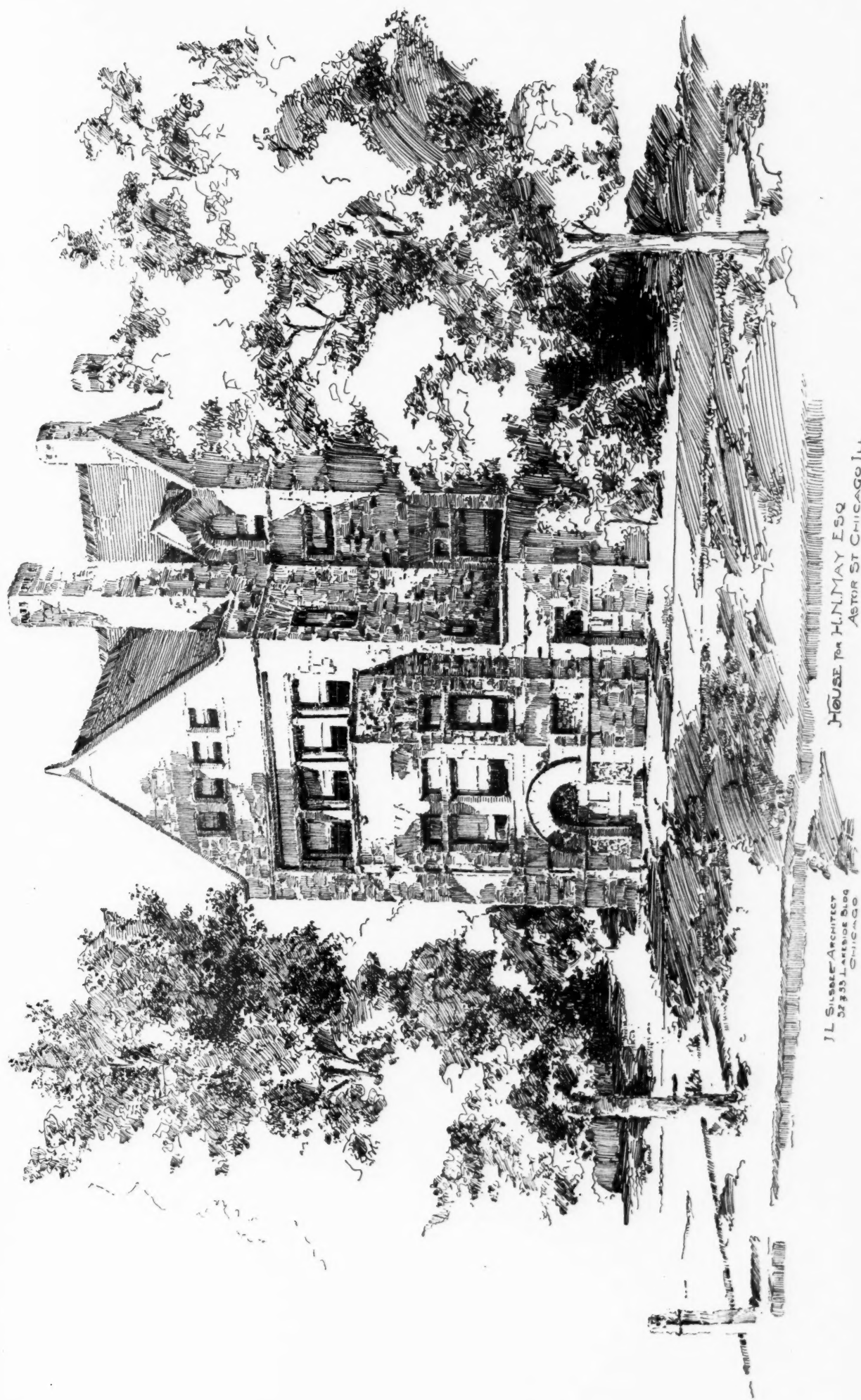
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RESIDENCE AT CINCINNATI.



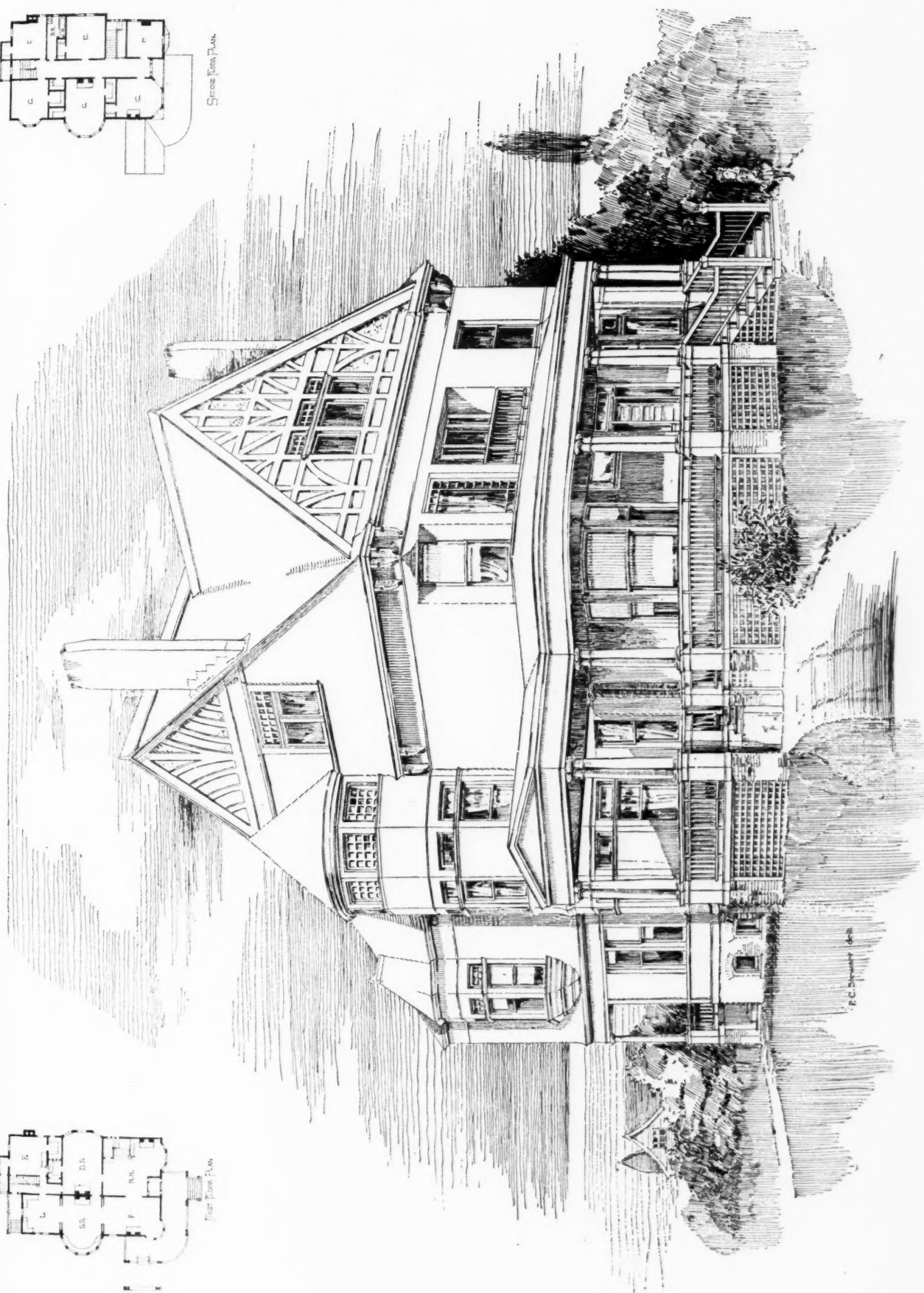
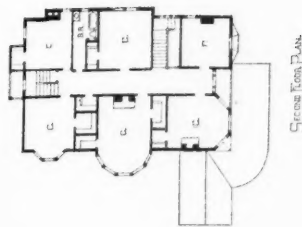
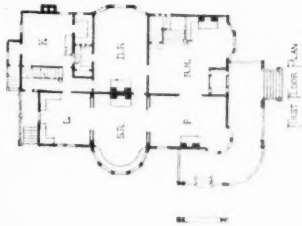
SAINT TERESA CHURCH, SAN FRANCISCO, CALIFORNIA.

SHEA & SHEA, ARCHITECTS.

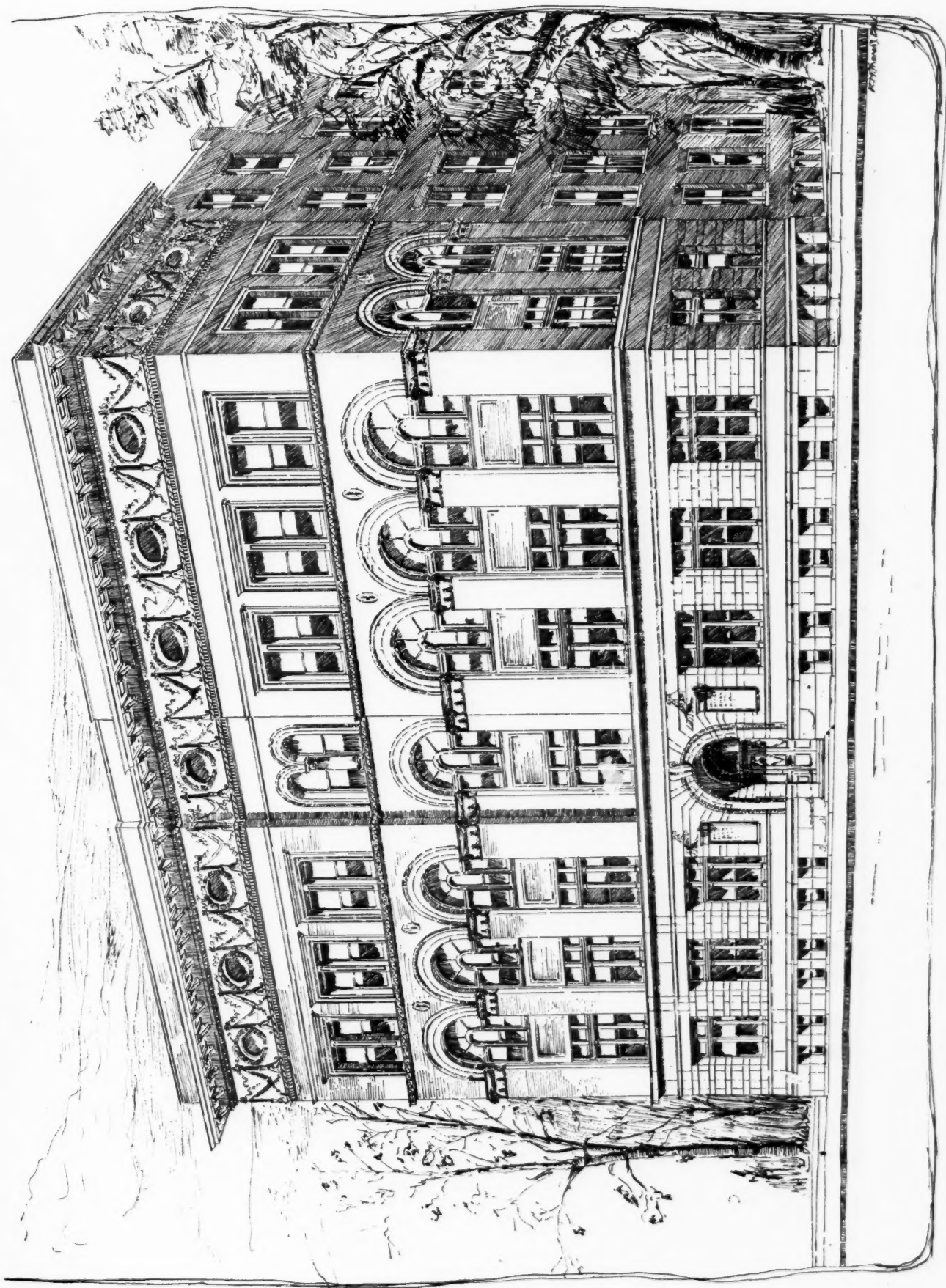


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HOUSE FOR H. N. MAY ESQ
ASTOR ST CHICAGO ILL

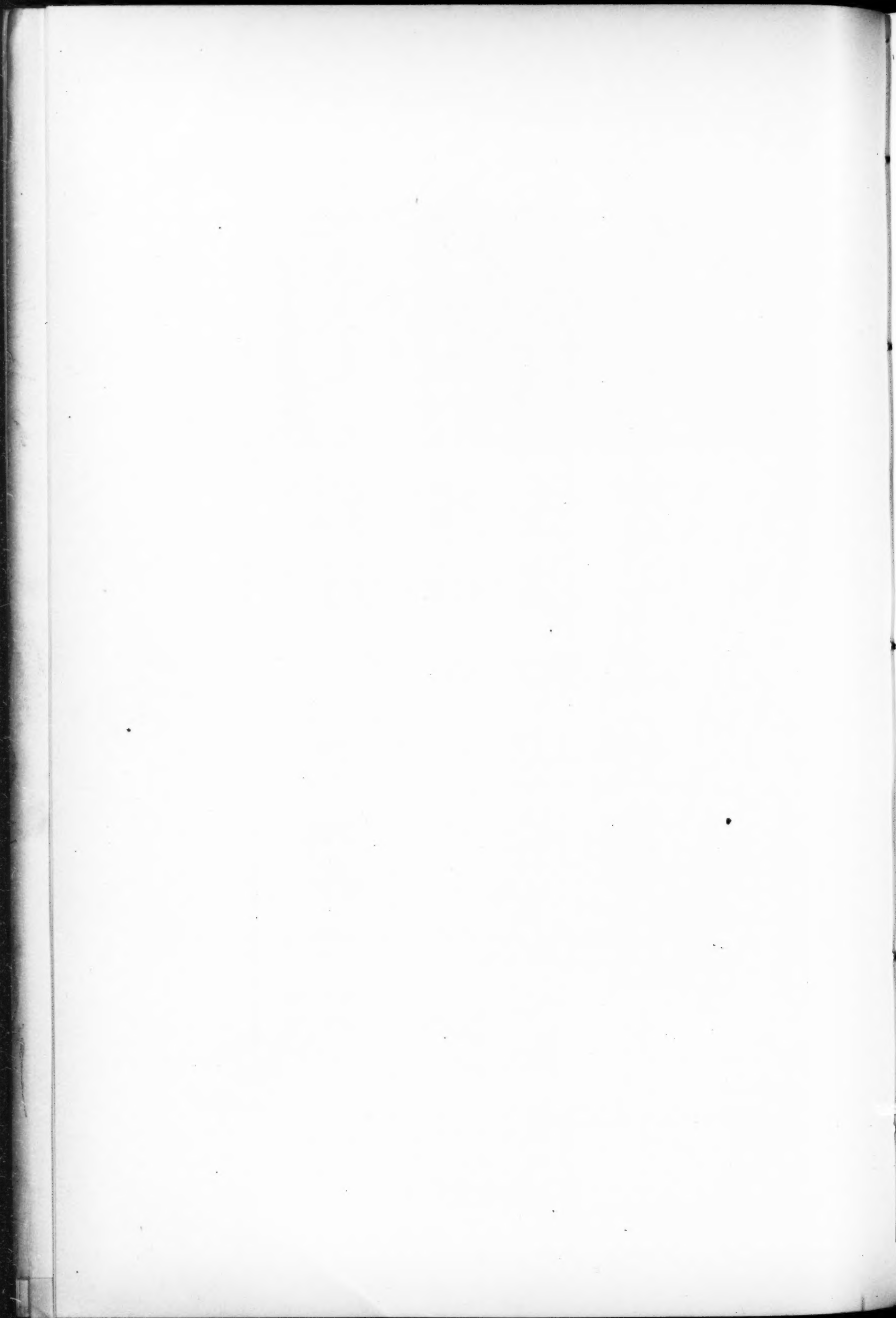


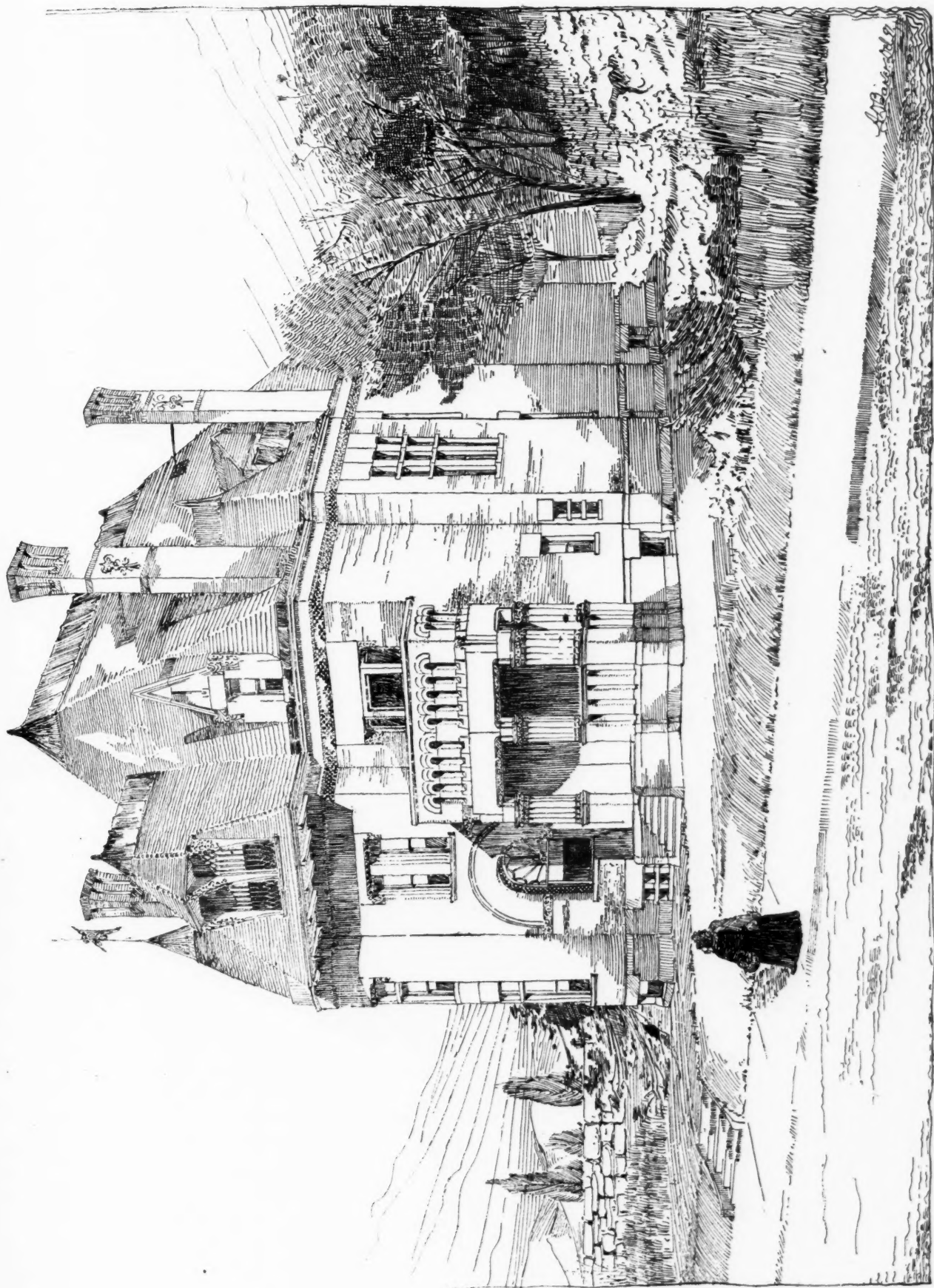
RESIDENCE FOR O. H. MORGAN, HIGHLAND PARK, ILLINOIS.
W. W. BOYINGTON & CO., ARCHITECTS, CHICAGO.



LABORATORIES OF THE MEDICAL AND PHARMACEUTICAL SCHOOLS, NORTHWESTERN UNIVERSITY, CHICAGO.

S. S. BEMAN, ARCHITECT, CHICAGO.





RESIDENCE FOR MRS. ANNALKRAUSSE, ALBION PLACE, ST. LOUIS, MISSOURI.
E. C. JANSSEN, ARCHITECT.

Mont St Michel.
[upper part]
Drawn by J.W. Robbins

