

THE INLAND ARCHITECT AND NEWS RECORD

Vol. XIX.

MAY, 1892.

No. 4



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.

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

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The Public Press and the Windrim Bill.

The present congress will ere long decide on House Bill No. 261, brought before the house of representatives by the Honorable Mr. John C. Tarsney, of Missouri, and embodying the principal features of the bill prepared by Mr. Windrim and indorsed by the American Institute of Architects at its last convention. Our readers may have noticed that our columns have not been bristling with commendations of this bill. It must not be understood that this was from want of sympathy on our part with the objects to be attained by the bill, or with the form of the bill itself. We felt, however, that our readers did not need further argument to convince them of the necessity for the passage of the proposed law. We write this to call attention to the fact that some of the great political journals of the country have taken hold of the subject and have swung into line with the architectural profession, and without regard for party lines are actively supporting it in its efforts to bring about a reform in the architecture of the public buildings of the United States. Notably among those who have espoused our cause up to date are the *Herald*, *Times*, *World* and *Evening Post*, of New York, and also the *Chicago Tribune*. We print on another page the excellent report which accompanied this bill when it was reported back with the indorsement of the Committee on Public Buildings and Grounds to the house of representatives. Extracts from the public journals referred to will give some idea of the interest taken in the matter, and how thoroughly the public is aroused to the vital necessity for the passage of this bill.

"The results (of the present system) are architectural inferiority of government buildings, extravagance in cost and delay in the time of their construction. These evils are not to be charged to the Supervising Architect; they are the faults of the system. What the bill does is to call to the service of the government the architectural talent of the whole country in order that the best of that ability may be used in erecting the United States public buildings, which will be in every way, artistically and economically, a credit to us as a nation. There need not be any fear that the new method will be more expensive than the old, even including the cost of the competitions which would be by a direct selection of the architects, for at the hearing before the committee it was shown that the government buildings cost from half as much again to twice as much per cubic foot as such great and ornate edifices as the Chicago Auditorium building and the Boston public library, without including in the cost of former the expenses of supervising architect's fees; while in the latter case the architects' fees are reckoned as part of the cost of the building."

It is to be hoped that our readers will call the attention of their clients to the committee report herein published, with a view to their interesting other newspapers than those already mentioned in the good cause.

Example Presented by World's Fair Architects.

In the consideration of the benefits to be derived by the people of the United States by the adoption of a system for the designing and erection of public buildings such as is proposed by the Windrim bill, the method of procuring designs for the buildings of the World's Columbian Exposition is an excellent example. Here a natural selection from among the best architects in the country was made, and they were offered the same recompense as they were in the habit of obtaining for private work (though by agreement among themselves this was afterward changed to a fixed sum for each building). The results at the completion of the buildings will be apparent. The government pays a salary of \$4,500 to its supervising architect, and \$6 a day for its best draftsmen. No one of the World's Fair architects could be hired for a salary of

less than \$50,000, with absolute control of his office and liberty to hire at the government expense just such men and at such salaries as he saw fit. A fair sample of the business value of the time of a dozen or more of the architects in the United States may be found in the answers to the questions submitted by the Senate Investigating Committee to the chief of construction of the World's Fair. When he stated that his salary was \$12,000 and he only devoted two-thirds of his time to the work, the committee thought it had at last found a case of extravagance, but when the architect stated that his income from his private practice during the previous year, to which he had devoted but one-third of his time, was over \$100,000, his salary as chief of construction did not seem so exorbitant. This chief of construction was asked to give his services to the World's Fair because he was one of the greatest of our architects, and those who designed the buildings were selected for the same reason. Their services do not cost any more than those of architects much less notable, and it is fair to suppose that the extraordinary skill employed does not only give the best production in design, but a large saving in cost of construction. All this the bill gives to the government, and it is singular that the people have not investigated the matter long ago and placed its architecture in the hands of its most competent men, instead of those who are willing to give their services for a clerk's recompense. Even here the greater evil is in the system which expects this one man to design and construct three hundred government buildings at once. If the report of the Committee on Buildings and Grounds is any indication of the general opinion of the present congress, the bill will pass without a dissenting voice.

A Traveling Scholarship in Pennsylvania Established. Philadelphia architects have inaugurated a movement that will do much toward the development of architectural talent in the state. The project is to found a traveling scholarship in the University of Pennsylvania, not only open to pupils but to all architectural draftsmen in the state. It will be necessary to raise a fund of \$20,000 to yield an annual income of \$1,000. The present exhibition of drawings made exclusively by holders of traveling scholarships which is being held at the Academy of Fine Arts at Philadelphia will do much to stimulate and popularize the movement, and there is no doubt that the required fund will be secured so that the first draftsman will be sent abroad next spring. The architects of Philadelphia have given the plan their hearty indorsement, and the coöperation of the entire profession in the state should be secured for so laudable a purpose.

Death of James Goudie, Shipbuilder. In marine architecture more, perhaps, than in any of the allied arts has the past eighty years brought advancement, and we are called upon to note the death of one who was intimately connected with the construction of vessels from his boyhood, and who with rare intelligence followed each change until the day of his death at eighty-three years of age, on May 7, 1892. Mr. James Goudie was born December 19, 1809, at Quebec, Canada, of Scotch parentage. His father and his grandfather having been shipbuilders, his inclination and genius took that direction, and having learned the art in all its branches in the shipyards of England, he returned to this country and in

1833 superintended the construction of the Royal William, which was the first vessel to cross the Atlantic ocean propelled by steam power alone. This vessel crossed the ocean to London in twenty-five days and subsequently was sold to the Spanish government. Mr. Goudie was connected with the construction of over one hundred vessels, and in 1836 was employed in the New York navy yard in cutting down and rebuilding the United States sloop of war, Natchez. In speaking of a long and eventful life such as his the character of the man is subservient to no other trait. Always prompt in action, always a close student of affairs, Mr. Goudie was a philanthropist in the highest sense. His influence extended over all with whom he came in contact, and the effect of the words of wisdom uttered in his later years upon the future of those whom he taught by action and precept follows him in the world's work.

Robert Clark Medal Competition. For the fourth time the Robert Clark Medal Competition, open to all the draftsmen in the country under thirty years of age, has been formulated by the committee in charge. It is one in which much skill, research and designing ability generally is called for, and will probably bring out the largest number of drawings yet submitted in any of the Clark medal competitions. The report of the committee and arrangement of prizes is as follows:

PROSPECTUS.

The Committee on Competition for the Clark Medal places the following problem before competitors:

Required a design, Egyptian in character, for the entrance to a large cemetery, with which shall be combined a waiting-room, a crematory and chapel.

The scale of drawings and character of rendering to be left to the option of the competitors. The drawings to comprise two sheets, mounted upon stretchers, each measuring 18 by 24 inches. There must be a ground plan and perspective. The furnishing of details and geometrical elevations is left optional with competitors.

Drawings shall be addressed to Dankmar Adler, 1600 Auditorium Tower, and delivered on or before September 15, 1892.

DANKMAR ADLER,		} Committee.
N. CLIFFORD RICKER,	S. A. TREAT,	
HENRY IVES COBB,	LORADO TAFT,	

TESTIMONIALS.

First, Robert Clark,	Gold Medal.
Second, " "	Silver "
Third, " "	Bronze "
Honorable mention	" "
C. A. S. C. Complimentary	" "

Competition is open to all architectural draftsmen under thirty years, excepting practicing architects.

Premeated drawings to become the property of the Chicago Architectural Sketch Club. All other drawings returnable after the annual exhibition and banquet of the club, November 28, 1892. JOHN E. YOUNGBURG, Secretary Chicago Architectural Sketch Club.

In addition to the gold and silver medals the addition of three bronze medals will lend greater interest and encourage the younger and less experienced draftsmen to enter the lists with those who have gained a national reputation for their skill in architectural design. It is notable that one club has postponed the announcement of dates for its own competitions until the date of the Clark competition is announced, which is an indication of the strong interest taken by draftsmen generally in this gift of Mr. Robert Clark for the encouragement of architectural design in the United States.

Typographical changes in The Inland Architect.

It will be noticed that THE INLAND ARCHITECT appears this month in an entirely new and in many respects improved typographical dress. The object is to place the text matter before our readers in the most readable type made, and do what we can, as publishers, to present the best in typographical as well as architectural art. We present the result for the approval of our readers.

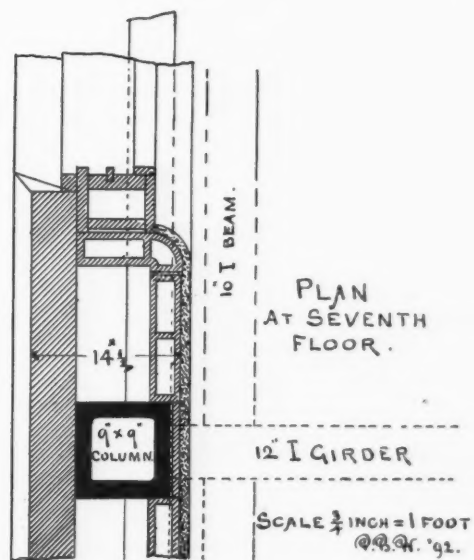
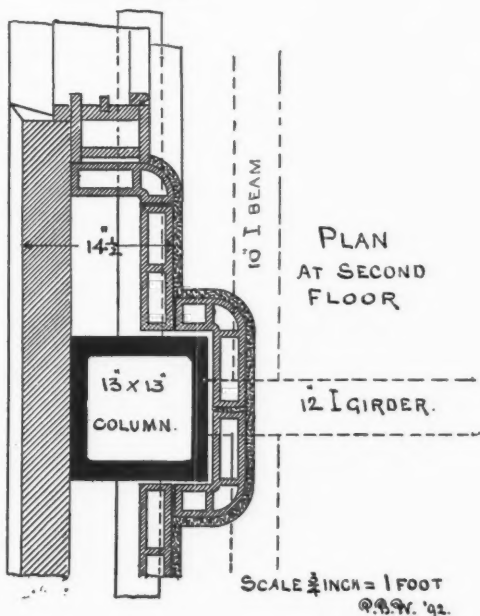
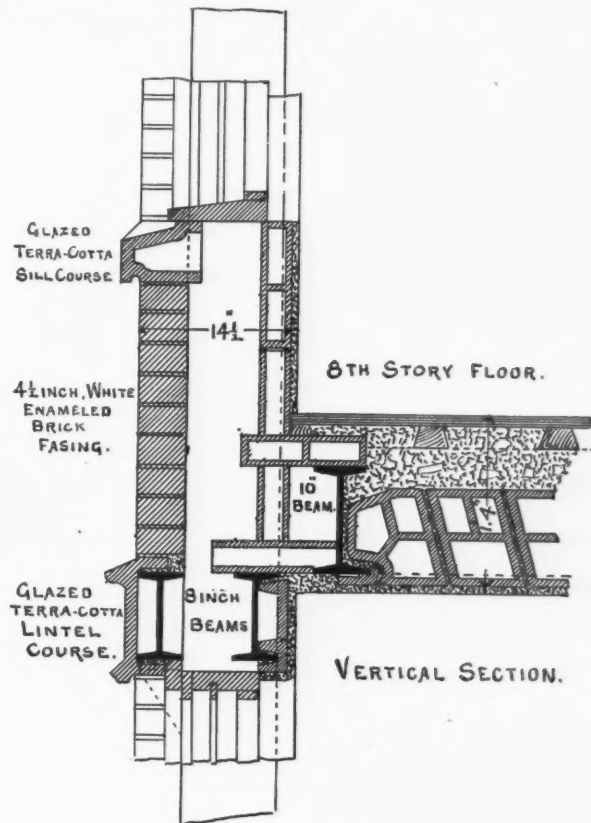
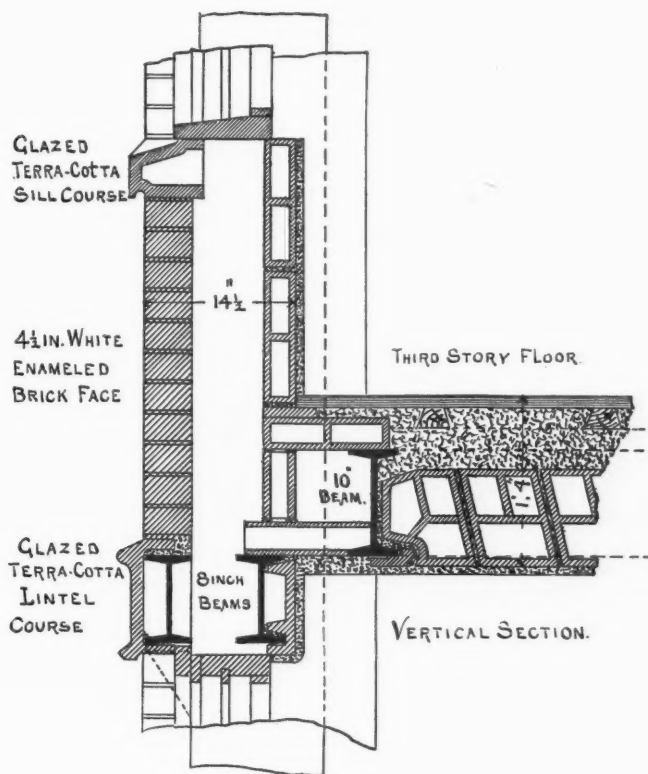
RECENT FIREPROOF BUILDING IN CHICAGO.

BY P. B. WIGHT, ARCHITECT.

PART IV.

THE following illustrations were not prepared in time to appear with Part III. They show the construction in detail of the court wall of a building in which cast-iron columns were used. Ground plans are given at the second and seventh stories, and vertical sections through the third and eighth floors. The architect set the outside floor beam off from the exterior wall to leave a space for carrying up heating pipes outside of the floor arches, which is not a necessary provision. In order to get flat

the outside of the cast-iron columns on brackets, which is the usual method. The I-beams forming the heads of windows on the inside are set between the iron columns on brackets. They also carry the inside lining, which in this case was of three-inch hollow tile. This is a good plan, if the window heads are to be below the ceiling, because the I-beam can be covered with the regular beam tile, which is better than when the filling is a row of tiles set on top of the wooden window frames, which is the case when the outside I-beam of the floor carries the inside lining in addition to the last floor arch. In some cases where deep window jambs are desired, the interior wall of hollow tiles is built on the floor arches irrespective of the position of the beams. Any one floor can be



ceilings throughout showing no girders, so as to enable him to place partitions in any location without showing breaks in the ceiling, he made the ten-inch floor beams flush with the twelve-inch girders at the bottom. This made the floors two inches thicker than would have been required had the girders been set below the floor beams, which two inches is represented by thickness, weight and cost of that amount of concrete. It will be seen that the I-beams carrying the exterior enameled brick are set on

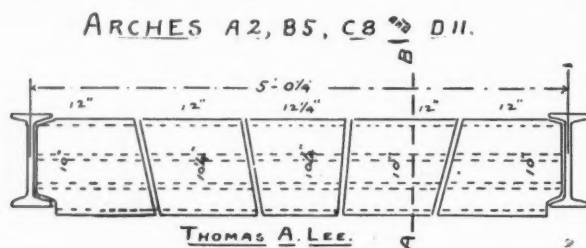
thus treated independent of all others, but the work has to be done after the floor arches are set.

In this illustration it will be seen that the bracketed beam carries a skin of 4 1/2-inch English white enameled bricks, without backing. The lintel course is formed with buff, lead-glazed terra cotta fitting around the beam. The buff, lead-glazed terra cotta sill course is independent of any beam work, and is built in with the brickwork. On the inside the large iron columns are treated

as pilasters, being covered with three-inch hollow tiles continuous with the inside lining, and breaking around the columns. They have rounded corners. In the upper stories this pilaster finish is omitted, and a slab of tile is set against the column. It will be seen that the windows have hollow tile jambs with round corners. The plain plastering is carried to the window frame at sides and top, leaving only the sill to be finished with wood, iron or marble. The wooden frame being thus isolated can be burned out without communicating fire to anything in the interior. An observance of this method is of more importance than anything else entering into the construction of a fireproof building to prevent fire being communicated from the exterior.

THE CONSTRUCTION OF FIREPROOF FLOORS (CONTINUED). FLAT ARCHES ON THE "END-PRESSURE" PRINCIPLE.

It is only within the last two years that flat floor arches on the "end-pressure" principle have been brought into practical use. In 1875 Levi T. Scofield, of Cleveland, Ohio, patented a system of ceiling construction in which burned clay hollow tiles were to be used running from I-beam to I-beam in one piece. They were described to be either in arch form or straight. Long before this it had been proposed in England to use hollow tiles of triangular



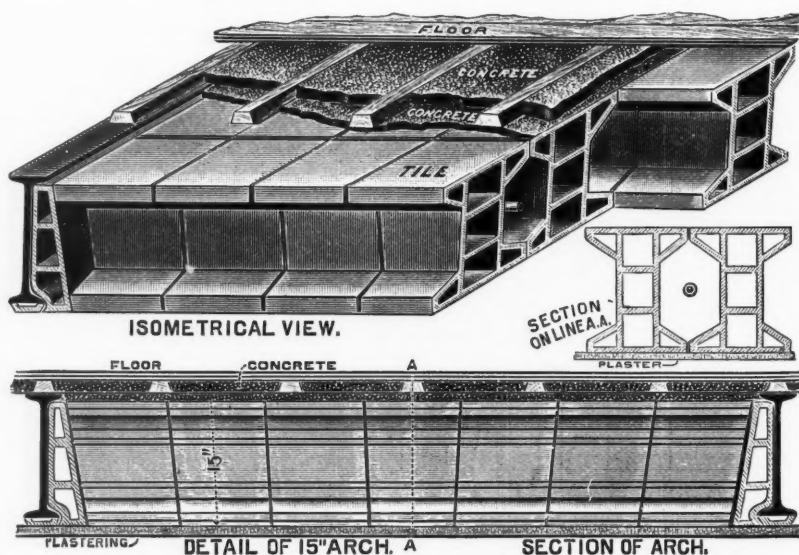
section running from beam to beam to form ceilings. In 1879 Leonard F. Beckwith, of New York, patented a flat arch in two pieces, one being a skewback piece and the other a long, hollow tile running to the opposite beam. These being set close together and the skewbacks alternating on opposite sides would form a continuous ceiling and floor support. But I am not aware that the invention was put into practice. In 1883 Alfred P. Boller, of New York, invented a floor construction in which arches were made of three pieces of porous terra cotta set at intervals, but they are not described as hollow. They were to be cut to fit the beams so as to form skewbacks, and the central piece was to form a key. They were described as being made of a single piece of porous terra cotta run out through a die and cut into the three sections of the desired form before drying and burning. They were to be set at intervals and covered with slabs of the same material to form the floor and ceiling. When set in arch form, the pressure was to be on the "end grain" of the material used. Experimental floors of this construction were made, and they developed an extraordinary strength. Later a demonstration of the strength of floors of similar construction but built of hollow blocks of the same material was made on the site of the "Rookery" at Chicago before its erection. In this case I believe that the arches were set close together to form a continuous floor and ceiling. About three years ago, William B. Owen, of Hobart, Indiana, manufactured square, hollow tiles 9 by 9 inches in size, with two interior webs crossing at right angles and leaving four hollow spaces. They were made of porous terra cotta run out from a horizontal press and cut into the form of skewbacks, voussoirs and keys, and set close together to form continuous ceilings and floors.

As laid they did not break joints either way, and the ceilings presented the lines of joints crossing each other at right angles. These tiles were used for the construction of part of the Metropole hotel at Chicago, in the government building at Denver and some others. About the same time rectangular tiles 6 by 12 inches in size of porous terra cotta with two hollow spaces were used in a hotel connected with the Broadway theater at Denver. They were of the same manufacture and were set by Thomas A. Lee.

It was after this, in December, 1890, that the only accurately recorded test of these arches was made at the new Equitable Building, at Denver. The arch was five feet in span and ten inches thick, and sustained a load of 1,730 pounds per superficial foot without breaking, and showing a deflection of one-half inch. At the same test a hollow tile arch of the same dimensions, but built on the side-pressure principle, broke at a pressure of 1,001 pounds per superficial foot, and another at 651 pounds per superficial foot. The foregoing is an illustration of the end-pressure arch, the material for which was made by William B. Owen, at Hobart, Indiana. It was set and exhibited by Thomas A. Lee.

This arch, unlike those which had previously been used by the exhibitor, was built of porous terra cotta tiles which had been manufactured especially for the test, and had two cross webs, leaving three hollow spaces in the heights of the tiles. The fire-clay hollow tile arches had only one cross web in the center, and were taken from manufactured stock in both cases. The arch which broke at 1,001 pounds per superficial foot, made by the Wight Fireproofing Company, sustained all that it was guaranteed to carry. A full and detailed record of these tests was published at the time in the *American Architect and Building News*. To avoid any discussion of the accuracy of what I have said, it is proper to state that the breaking loads of the still-load test, per superficial foot, were not given in the report. The loads were applied on boxes of sand three feet square, covering a surface of nine feet, and I have divided the total load in each case by nine. They were not uniformly distributed loads for the reason that the sand was not distributed from beam to beam. The tiles next to the skewbacks were subjected to a shearing strain, and this was demonstrated by the way in which they broke.

But the greater strength of a porous terra cotta "end-pressure" arch of the kind tested was demonstrated, as well as its resistance to shearing strains. The fire-tests made at the same time on similar arches did not demonstrate anything favorable to the "end-pressure" system of construction. Whatever superiority there may have been in these arches was due to the nature of porous terra-cotta as a material, which has long been known. It is in itself a non-conductor of heat, and when made hollow has the added advantage of its non-conducting air spaces. But its value as a fire-



resister depends upon the quality of clay used in its manufacture more than hard hollow tiles. In my opinion the fire-tests to which both kinds of hollow tiles were subjected at that time were all that were necessary to enable them to fulfill their purpose in the fiercest conflagration, and while the greater strength of "end-pressure" arches was demonstrated, the hollow tiles showed that they were sufficient for the purpose under all circumstances. When all the

service that is called for is obtained from a material, and it cannot be made lighter, nothing is gained by introducing stronger systems of construction. We do not build of granite because it is stronger than brick when brick will answer, and if the end-pressure system should be more expensive than the old one, there is every reason why we should adhere to the old one. There is a slight advantage in its favor where any undesirable weight can be dispensed with. This has been taken advantage of by E. V. Johnson in the "end-pressure" flat arch which he has invented and patented. The illustration shows its construction in detail.

This form of arch has been recently used by the Pioneer Fireproof Construction Company in the Fair building, the Masonic Temple, the Woman's Temple, the Ashland Block and the Hotel Lexington. It was first made for fifteen-inch arches in the Fair building, where the beams were fifteen inches and the spans eight feet, and lightened the floors by dispensing with nearly all the concrete. These arches, in the other buildings mentioned, have been built twelve inches and nine inches deep, but I can see no advantage in using the system for arches of less than twelve inches.

The Illinois Terra-Cotta Lumber Co., of Chicago, has used twelve-inch porous terra cotta "end-pressure" arches in part of the Monadnock building during the present year. They use the shaped skewback, with openings running parallel with the beam, and cut voussoirs and keys set close together without any hollow space between them, which is the peculiar feature of Mr. Johnson's invention.

SOME NOTES UPON THE EARLIER CHICAGO ARCHITECTS.

THE following notes upon the earlier practitioners in Chicago have come into the possession of the editors of THE INLAND ARCHITECT, and are published as given not only because of the local interest attached to them, but the general interest involved in the many circumstances that surround this bit of architectural history from the pen of one of the best known among those who produced the earlier architecture of Chicago, and is still most active in the work. Coming as a personal communication it is published with all its personality intact.—EDITORS INLAND ARCHITECT.

CHICAGO, May 17, 1892.

MY DEAR MCLEAN,—I send you herewith a letter written months ago to *America*, which was called forth by an anonymous article upon "The Architects and Architecture of Chicago," published in the number for November, 1890, of that journal.

In the hurry and rush of business, my letter was laid aside and forgotten until now. I think that some of its contents will interest at least the older ones among your readers. A melancholy interest attaches to the matter from the fact that the then anonymous author of the article in *America* was none other than our lamented, mutual friend, John W. Root. It was his last contribution to the literature of his profession, and worthy of a place in the collection of local historical and critical writings of everyone interested in the rise and progress of the architecture of Chicago. While Root's article is discriminatingly critical, it also reveals his sympathetic nature and goodness of heart. His criticisms upon his own work show that he had set himself a high standard of perfection, and that had his life been prolonged he would have risen higher and higher in the scale of our esteem. I suggest that, if not in this number, at least in some future number, you republish the article from *America*.*

Very truly yours,

DANKMAR ADLER.

To the Editor of *America*:

Permit me to thank "A Prominent Architect" for his kindly appreciation of my efforts to make myself useful to the community in which I live. His gossip of the methods in vogue among architects in the days of my youth, and his mention of so many familiar old names, has awakened in me a desire to chat of those days when so many of us who now stagger under arduous duties and responsibilities were as light hearted and as unmindful of the morrow as are the boys of the "Sketch Club" of today.

In those days there was no Sketch Club. Draftsmen worked ten hours per day, but the ambitious ones managed to find a little time for sketching tours early of mornings and on Sundays. Of winter evenings we older ones instructed the youngsters in elementary geometry and algebra, and in the theory of perspective. I remember that among my pupils of that day were Jack Flanders, also Charley Kessel, now the Nestor of the Sketch Club, and Bschaidtner, now one of the assistants of George B. Post.

*The article by Mr. Root was republished in THE INLAND ARCHITECT for January, 1891.—EDS.

Fritz Foltz and Fritz Waescher commenced their American career under my tutelage, in the office of Mr. Kinney, in '69 or '70, both just over from Germany, and not on speaking terms with the English tongue. Foltz, then already a great overgrown boy, full of resources, an indefatigable student, and, if possible, more positive and blustering, and every bit as genial and as clever as today. Those were the days when he was one of the Germania Mænnerchor, and varied the flirtations incident to his connection with the choir of Grace Church with similar performances with the stage beauties of the Mænnerchor's presentation of the *Zauberflöte*, on the stage of the Crosby Opera House. And Fritz Waescher, who was a member of the Concordia, the rival musical society, which gave us the *Freischütz* on the same stage, was then, as now, the accurate, painstaking, plodding draftsman, and soon became the stern, unflinching martinet in the discharge of the duties of superintendent, to which I introduced him, and in connection with which he was early brought to the notice of Mr. Blatchford, who has since made such extended use of him in his trusteeship of the Newberry estate, and who has only lately compelled Fritz's return from a well-earned rest in Europe, that he might assume charge of the supervision of the construction of the Newberry Library.

Those were the days when every draftsman in Chicago worshipped John Roberts, the able foreman of Boyington's office, and whom we honored by election to the presidency of our baseball club. We used to play baseball, and I believe this was the beginning of the era of shorter working hours and of half-holidays, every Saturday afternoon, in the open grounds at the corner of Prairie avenue and Thirtieth street. Jack Flanders and Charley Furst, who, by the bye, were our crack players, still can show broken fingers achieved in the contests of those summer afternoons. I wonder whether Bill Thomas, who was then only the son of his father, remembers the day when he used his eye for capturing a sky ball? Other heroes of the architectural baseball field were Welsh and Pitner, both of Boyington's office—Boyington was the Burnham of the sixties and early seventies.

When after the death of the elder Kinney I, conjointly with the younger Kinney, first hung out my shingle, it was in the Oriental building, a few doors removed from Henry L. Gay's room. He was not yet a "Lord" in those days. I remember how we used to look at each other's work and describe to each other the visions of pure delight into which we expected to transmute the tasks confided to us by recklessly over-confident clients. Gay at that time was drawing the Congregational church at the corner of Washington and Ann streets, and the University buildings of Fairbault, Minnesota, while I was working upon two churches, two business blocks and the waterworks, erected at La Porte, Indiana, and the Methodist church of Kalamazoo, and was carrying off most jauntily the responsibilities of the University buildings at Wooster, Wilcoxson's opera house at Freeport, and other work inherited from the elder Kinney.

I made it a habit to visit the offices of such of my seniors as seemed willing to tolerate my presence. Among these I remember particularly, Mr. Wadskier and also Mr. Dixon, who, though I fear this statement will cause many a doubt of my veracity, was established as a practitioner long before I was, and who was at that time superintendent of the old government building, partly destroyed in the fire, afterward known as the Adelphi theater and then as Haverly's, and finally demolished to make room for the First National Bank building. From Wadskier and from Dixon and also from Burling and from Randall I learnt many valuable lessons.

During this period was the advent of the firm of Loring & Jenney in our midst, and I think that "a prominent architect" is mistaken in ascribing the design of Grace Church to Jenney. I am quite certain that it bears all the marks of Loring's erratic genius.

I cannot end my retrospect of this period of my youthful irresponsibility without noting, that already in the sixties Fred Baumann was a "little giant," and had in a checkered career, sometimes as architect, sometimes as contractor, shown himself as brilliant and as resourceful as we know him today. And the biting sarcasms with which he assailed our petty weaknesses seemed to us then only maliciously pungent. We had not learned to read the kindly humor tempering a stern sense of justice and a keenness of judgment, which we now recognize in all his sayings and which endear his picturesque figure to us all. I had no personal acquaintance with either Boyington and Van Osdel until years

after the great fire. The best work of the architects of early Chicago, and in the enumeration of these Otto Matz and Robert Schmid must not be forgotten, was obliterated in the two great fires. Some of the buildings, such as the old Portland block, the Marine bank, the Ogden building, the Illinois Central depot, the Masonic Temple, the Rock Island depot, the Oriental building, would be considered very creditable productions at this day.

An enumeration of those still remaining and stories of their designs would form the substance of an interesting article for your columns, which I should like to see written by one of the "old timers."

In January, 1871, the firm of Kinney & Adler was dissolved, and that of E. Burling & Co. was formed. My place with Kinney was taken by Max Ruppius, a noble, bright, ambitious boy, who soon after died of a malignant fever induced by his chagrin at the unfortunate conduct of his employer.

My connection with Mr. Burling continued for eight years; the firm being at different times E. Burling & Co., Burling & Adler, and Burling, Adler & Co., the company being Mr. William H. Willcox, formerly of Brooklyn, then of St. Paul, and now, I believe, of Seattle.

Our joint career began very prosperously, and therefore our losses due to the destruction of important buildings in course of erection at the time of the great fire, were very great.

Toward midnight on the night of October 8, 1871, I was walking homeward when I saw the glare of the fire on the West Side. I went as far as Twelfth street bridge, did not think it would be much of a fire, turned back, went home and to bed. I was living with my father at No. 41 East Thirteenth street. He aroused me at two o'clock. It was, even at that distance from the fire, as hot as in an oven. It was almost light enough in the street to read a newspaper. Wabash avenue was crowded with people rushing southward, carrying books of account, money boxes, clothing, bedding, clocks, furniture, etc. I was stunned and bewildered by the rush of the crowd, and by the roar of the wind and of the flames, which could be heard already at Twelfth street. But I failed to grasp the situation, or I should have hitched up my horse, driven down town and saved the many drawings stored in our office, which would have possessed inestimable value in the settlements with insurance companies and the labors of rebuilding on old foundations, which had to be begun so soon after.

I sauntered down town as far as the corner of State and Washington streets. At that time there was no fire there, and it was thought that the best part of our business district would be saved from destruction. I wandered about at first in an aimless sort of way, and in my wanderings noted the peculiar and insidious manner in which the fire spread from building to building. At that time the North Side was well ablaze, but the South Side, excepting a strip of I think not over two blocks along the river bank, was unscathed, and the main current of the wind, which was blowing almost a hurricane from the Southwest seemed favorable to its preservation. There came, however, here and there, eddies and return currents, which started occasional blazes in the wake of the main fire, and these minor blazes blown to the windward again and again widened the track of the fire until it had reached the lake as far south as Congress street.

I was engaged several times in efforts to tear down buildings in the track of these minor conflagrations, but in every case the fire overtook us before we had done our work. I also had occasion to help several friends to move their furniture, books, etc., to what were believed to be places of safety. In one instance I carried a great basket containing a set of Encyclopedia Britannica, to three separate and distinct supposed places of safety. Each finally was reached by the flames, and it, together with everything else I had been trying to save was destroyed.

When I reached home that evening I had the sensations which I had felt during my soldier days, after a hard-fought battle. But as in war time, there was no such thing as unbroken sleep for any of us. There were square miles of glowing embers about us, and any change of the wind might have destroyed what was left of the city. The waterworks were destroyed, and the fire department was fagged out. And so every neighborhood organized its home guard, and we patrolled the streets and alleys all night, our duty being two hours on and four hours off—quite military you see. I wonder whether Dr. Hoyne, my brave companion in arms, remembers the bludgeons we carried, and the valor with which we explored the gruesome recesses of the old mill near Sixteenth street.

(To be continued.)

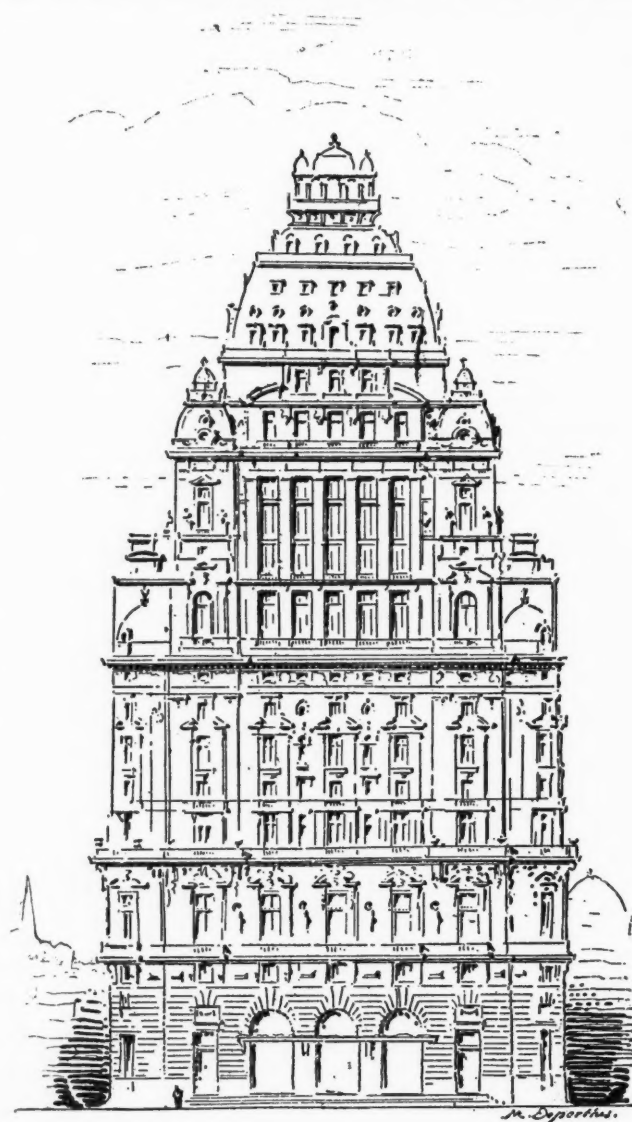
NOTES FROM OUR FRENCH EXCHANGES.*

AMERICAN HIGH BUILDINGS AS CONCEIVED OF BY THE FRENCH.

THE prize known as the "Prix de reconnaissance des Architectes Américains," recently established by former American pupils at the Ecole des Beaux Arts, and open only to French scholars, has just been decided this year in favor of M. Deperthes. There were nine competitors, rather a larger number than usual, and the subject was supposed to be a sky scraper on the American plan, but the programme was so far removed from real American ideas, and so utterly impracticable, that *La Construction Moderne*, in publishing a sketch of the prize, is moved to say: "The Superior Council wishes this year to show to the 'grateful Americans' a proof of appreciation as strong as the latter showed by the establishment of this prize, and accordingly outlined a programme upon the subject of a high building.

As is well known, certain buildings in the hearts of the large cities of the United States are built fourteen, fifteen, and even twenty stories in height. That the architecture of these extraordinary piles is an exceedingly difficult problem is proved by the American publications, which continually contain drawings showing the efforts of the American architects, crowned with more or less success, showing that the designers are continually seeking to render the form and details of these constructions elegant, which are already imposing by their very size.

According to the programme given to the competitors, it appears that it is desired to erect a building of fourteen stories, not counting two or three additional stories that may be placed in the roof,



UNE MAISON A QUATORZE ÉTAGES—PROJECT DE M. DEPERTHES.

which of itself shall be made a feature of the edifice, contributing to the general effect. The lot, 125 feet front by 200 feet deep, has light on all sides.

The fourteen stories are to be used as follows: The first floor will contain the offices for the administration and surveillance of the building, as also restaurants and billiard rooms, with all necessary kitchens, conveniences, etc. The height of this story, which

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

if desired may in certain parts have a half-story, shall be at least thirty feet. (Fine height!)

The second story shall be club rooms, which are very important, with concert room, card rooms, dining room, library, etc.; in fact, everything requisite for such an institution. Height, not less than twenty-five feet or over forty.

This is pretty fine! Imagine the total height of a building twenty stories high. According to this programme, it would appear as if the Americans piled up things as if they cost nothing! Above the second story there shall be three, four or five stories devoted to banking institutions, stores and offices, some large, others small, ranging from nine to twenty-five feet in height. Finally, the three upper stories, including the fourteenth, shall be laid out according to the idea of the designers. "This design should have a bold cornice and roof line." Imagine the result! but this is not all; "in the great roof (and it is a tremendous one) the stories will be lighted either by means of some architectural 'motifs' in stone, or by wood or metal dormers, in such manner that the entire roof shall be interesting artistically."

This is probably for the American artists living in adjoining roofs, since from the street below persons will scarcely be interested in such high art. Above this all, the roof is to be crowned with a terrace or loggia. The height of this construction, according to programme, would be certainly not less than 200 feet, and possibly 275 feet.

Of course no one will be surprised to know that the interior courts of such a building will be nothing more than dark, damp wells. And, apparently, it is unnecessary to think particularly about the lighting of the various rooms in the interior of the building. Near the center would be placed two large elevators and two small staircases, and near the rear of the building two smaller elevators. This programme, in order to make it a veritable picnic in comparison with the usually serious programmes of the school, only requires two plans for such a varied collection of floors, and these are limited to the first two, which are only administration, restaurant and club.

The real subject of the competition consists in the composition and study of a façade, to which it is expected "to give the character of a grand composition (?), and to vary the elements of it while preserving a unity of the whole." For this purpose may be employed "the orders, balconies, loggias or windows (probably bay windows) upon the front or at the corners." Without doubt these accessories constitute the sure means of obtaining "variety in the unity of a grand composition."

"Above the first story, circular or rectangular towers may be used to aid the movement and give diversity," but of course it is understood that these towers "aiding the movement" (something like wings, useful in case of hereafter wishing to transport such a construction as this) should not in the least destroy the effect of a "general conception which shall make of the façade a complete and well-balanced whole. * * * This problem may appear difficult (we confess it does!), but it is far from being unsolvable." That must depend upon the manner in which the problem is stated. If in the beginning it is admitted that the exterior of a building of this importance should show as much as consistent without affectation or the extreme of rationalism, what exists in the interior; and further, if it is noticed that in the problem proposed here that the greater part of the stories instead of being living apartments, as with us, are there utilized as offices, then it would seem as if before all, plans of the different floors should be required of the competitors.

These having been adopted, the exterior form or silhouette might at least be studied out with reference to this interior, and then, if possible, the various minor details which are supposed to give "movement" to the decoration.

The same as an architect here lays out the sketches for a six-story building by commencing with a plan of the apartments and not with a plan of the store, or restaurant, to which the first story may be rented, so in America the plans for a great commercial building are laid out commencing with the office floors, hence the plan of the first and second stories, however influential, might possibly be the "club" that was to occupy these rooms, was really of less importance than the office floors with reference to which the façade should be designed.

According to the report of those in a condition to know, the real cause of these vast buildings of fifteen or twenty stories is the high price of land in those quarters where the commerce is concentrated and where each man desires to have, not his residence (for most persons live far from the place of their work), but rather simply an office. To employ all the land at one's disposal in the most economical manner, placing elevators in the center of the block and leaving the frontage free for light and air is certainly sufficient for a real programme of value. All of this need not, moreover, destroy the architectural treatment of the exterior.

Let us hope that a competition more in harmony with the habits of the professors and the pupils will be tried next year. Certainly this would cause fully as much pleasure to the Americans as such a caricature upon their work, and it would better fulfill the intention of the ex-pupils of the United States.

A NOVEL COMPETITION.

The official organ of the Central Society of Architects, and under the patronage of the most distinguished architects of France, *L'Architecture* has recently opened a rather novel competition. This journal rarely contains any illustrations, being composed, as the committee state, of papers written gratuitously by the highest talent of France, but the desire is to enliven the text

with some vignettes. The programme includes three classes, headings, tail pieces, and ornamental capital letters, all to be executed with pen and ink ready for reproduction. These need not necessarily always be exact vignettes: a balcony in wrought iron, a carved beam, a cornice, a vase, a fragment of tapestry, or painting, in fact any material or any object; historical subjects, landscape, inanimate nature, may all be subjects for a composition, since the society has no other artistic motto than "the true, the beautiful and the useful." With such an extensive field there certainly should be no lack of competitors.

Each competitor has the right to submit ten designs, and the prizes are to be forty in number, each a silver medal. As for the jury to decide this competition, the journal says: You will all, dear young comrades, on account of your talents, be one day called to judge others, and not to be judged by them. Starting upon this basis, as ingenious as evident, we desire that the competitors shall themselves be the judges. Accordingly, all the designs will be numbered and exhibited at the society's rooms. There will be one hundred, two hundred, no matter how many. It is only necessary to pick out the best forty, and to class the remainder in order of merit. Each one of the competitors after having seen and examined will make out a list of the forty numbers that appear to him the best.

THE PRACTICE OF ARCHITECTURE IN ITALY.

M. Hermant, who was sent to Italy to study the legal conditions under which architecture is practiced in that country, says *La Construction Moderne*, has just published his report, and in this document the following questions are considered:

First: Is the practice of the profession of architecture perfectly free in Italy, or is it on the contrary subject to governmental rules? If any regulations exist, what are they?

Second: Are architectural courses of study conducted with the ultimate end of obtaining a diploma, or some sort of a certificate of capacity? If so, is any such document obligatory for those practicing the profession?

A summary of the results obtained by M. Hermant relative to first question is shown by the following quotations: At Palermo, to practice architecture a diploma is absolutely obligatory, and those who practice without it do so illegally. A list is made out by the city authorities, and no one can be put upon that list without presenting his diploma of architect. At Naples, the profession is not free, as a matter of fact, although the law will not prevent anyone from building for himself or for others a house or a store house, but strict laws prohibit the employment of architects without diplomas in all work of the city or government, or as acting as experts, or as testifying as experts before courts of justice, etc. As a result the public in general think that a diploma is a guarantee of ability, and, in fact, without such a degree it is almost impossible to be anything more than a general contractor. At Rome, a diploma obtained from some engineering school is required, and for work in any of the adjoining villages it is necessary to show the diploma at the town offices where it is duly enrolled. At Milan, legally speaking, the practice of the profession of architecture is not free, and one must have a diploma of architect or civil engineer obtained by course of study at Rome, Naples and certain other designated institutions.

Thus one might say that in no part of Italy is the practice of architecture free, and the authorities demand of those who wish to practice, the diploma; however, this rule is not very strictly applied, except in the case of all public works, and anyone can, as a rule, without being the possessor of any diploma, construct for himself or for others without positive infraction of the law. In this case common custom strengthens the law, since the public considers the diploma as a guarantee, and anyone who does not possess it stands but small chance of becoming more than a contractor. As a result of both law and custom, it may be considered that for the Italian architect a diploma is in fact obligatory, since without it they are not eligible to take charge of any state, municipal or town work, nor can they serve as legal experts in any cases.

The diploma is granted by several institutions of learning located in the larger cities of the kingdom, and the courses of study are very nearly the same in every case. Take for example the city of Naples; here the course consists of the lower grade of three years and the upper of four years, making a total of seven years. In the lower grade, plane and solid geometry, algebra, elements of descriptive geometry and trigonometry are the mathematics; while physics, Italian literature, general history and elements of chemistry are the general branches, to which are added the strictly technical ones of modeling, drawing, study of the human figure and of ornament, together with the orders of architecture and their application. In the advanced course are found higher descriptive geometry, graphic analysis, applied chemistry, mineralogy and geology, theory and application of mechanics, elements of the styles of architecture, application of perspective to details of architecture, interior decoration, history of art and architecture, exercises in the restoration of antique monuments, technical architecture, iron construction, and questions of law and legislation.

Let our French architects consider such a course of study; undoubtedly they will find it more suitable for the formation of engineers than of architects, as they are understood with us; but a happy mean between the technical ignorance upon which the Ecole Des Beaux Arts is too often inclined to pride itself and the pure science of the civil engineer would unquestionably be a proper and desirable course to follow.

ERECTION OF PUBLIC BUILDINGS.

ON April 14, 1892, Mr. Tarsney, from the Committee on Public Buildings and Grounds, of the United States House of Representatives, submitted the following report upon the erection of public buildings:

THE REPORT.

The Committee on Public Buildings and Grounds, to whom was referred House bill 261, make the following report, and submit the accompanying substitute for said bill, and recommend the passage of the same for the following reasons:

The United States government has at this date nearly three hundred public buildings in the various stages of progress, of planning and construction, all under the supervision and control of the supervising architect of the Treasury, and from fifty to sixty new buildings are authorized to be constructed by each congress. To carry on these works and to provide for the construction of these buildings, many millions of dollars are annually appropriated and expended. For the expenditure of the moneys thus appropriated, as for the expenditure of moneys appropriated for any other public purpose, methods should be adopted which will secure the largest degree of utility from and economy in the application of the moneys expended. Your committee do not believe that these results and other beneficial results that should be obtained are obtained under the existing methods for planning and constructing the public buildings of the United States.

While the employment of the best artistic thought, the best and most approved systems of construction and equipment, and the utmost development of structural economics ought to be represented in the public edifices of this great nation, the contrary of these propositions is the result obtained under existing methods.

Your committee are advised that the best and highest types of artistic thought and architectural skill, producing the greatest development of structural economics in European countries is found in the government buildings of those countries; that such government buildings in artistic design, if not in economy of construction, surpass those erected by municipal or private enterprise, while in this country the reverse is the rule, and superiority of architectural design and economy of construction is represented in state, municipal and private buildings, and not in those erected by the general government.

A comparison of modern municipal buildings in our great cities, and business buildings erected by private citizens and corporations in such cities, with those belonging to the government of the United States, will show as to the former constant progress in construction, equipment and artistic expression, and that this progress has been accompanied by a continual increase in economy of construction, while in the case of the buildings of the United States there has been but little, if any, advance upon methods of construction or equipment in recent years; in fact, the buildings constructed recently by the United States as compared with those constructed a quarter of a century ago show a marked deterioration of artistic quality; that, despite the marked inferiority of the typical government buildings, the cost has been relatively and positively much greater than that of private buildings of the best type.

Your committee has been furnished reliable and trustworthy information and data showing that the cost of the best types of buildings constructed for states, municipalities, corporations, and private citizens ranges from 38 to 50 cents per cubic foot of space, while the cost of the buildings constructed by the United States ranges from 50 cents to \$1 per cubic foot.

Thus it is demonstrated that the government of the United States, in the methods it employs, does not avail itself of the best and most approved systems of construction or utilize the developments of structural economics, and when we add that it does not employ the best artistic thought in the design of its structures to make such structures to serve as models and standards of excellence and superiority for the works of private ownership, but that such designs and plans fall so far behind the standards of the age that they are obsolete almost before they are drawn, and are always wasteful and extravagant, it is not surprising that it requires double the expenditure by the government that is required to be expended by the private citizen to obtain like structural space results.

The conditions and results to which your committee thus call your attention are the conditions and results which necessarily follow the methods and practices now employed by the government in planning and constructing its buildings, and in no respect gives warrant for criticism of, or for impugning the capability or integrity of, the officers of the government charged with the responsibility for such works.

The office of supervising architect of the Treasury was established at a time when but a few buildings were constructed by the government annually, when the planning and general supervision of such few buildings was easily within the scope of the capacity of one man, and the purpose of the government in creating the office was to obtain the exclusive benefit of the artistic skill and scientific knowledge of one learned and eminent in the profession of architecture for the planning of the buildings to be erected for its use. The main purpose in the creation of the office was that its incumbent should be the artistic designer of such buildings.

If by the development of conditions, methods, and practices it now transpires that the time of the supervising architect is wholly employed in matters of administrative detail, matters pertaining to contracts for construction or with details relating to the actual construction of buildings, and the architectural work of the office, the plans, designs, and specifications are prepared by mere copyists, cheap clerks, such was not the intention of congress when the office was created. It was to obtain architectural skill in the

designing of buildings; to obtain and utilize artistic thought, not mere mechanical or clerical skill, that a supervising architect was wanted. It was not intended that, as now, clerks and copyists should do the work of the learned architect, and that the learned architect should be occupied with the work of clerks and copyists. Yet this is the present condition of the conduct of the work of that office, and it is necessarily so. It need not be urged that it is physically impossible for one man to devote sufficient thought and time to the proper designing and preparation of plans and specifications for fifty or sixty buildings each year, which in their artistic expression shall be creditable to the nation, to the age, and to the architectural genius of the country, and that, in the economy of construction, shall do justice to those from whom the cost of such construction is drawn.

How much of the time of the supervising architect may be devoted to the work of designing and preparing the plans for buildings may be conjectured when the amount of administrative work devolved upon him under the present methods is understood. The volume of work thrown upon him relating to repairs, maintenance, and alterations of existing buildings alone is far greater than was the entire business of the office twenty-five years ago. In addition, every matter of detail relating to contracts for or the construction of new buildings, the appointment of and correspondence with local superintendents of such buildings, has to receive his personal attention as well as the administrative control of the large force of employés in the office. The supervising architect cannot himself design and make original plans for each new building. This condition necessitates that the plans and specifications must be prepared by clerks in the office who possess no architectural skill or learning, and this results in the production of plans and specifications by the simple system of copying the drawings and specifications of a structure constructed in one locality to be used as the design for another in a different locality, and this regardless of the difference in geological or atmospheric conditions or space requirements, this resulting in the most wanton wastefulness of expenditure and absolutely precluding the possibility of progress in architectural design.

The supervising architect rarely ever sees one of these buildings while in course of erection. Its construction is generally under the supervision of some local carpenter or builder who never made any pretense to architectural knowledge or study, and whose appointment was secured, not because of his skill or knowledge of the work, but because of the political influence he could marshal to secure him employment, and whose greatest solicitude is to prolong the tenure of his employment by delaying the completion of the work.

Another very serious evil resulting from the system and methods now employed relating to the construction of public buildings, to which the committee would call your attention, is the length of time required to construct and complete one of these buildings. A building which, if the property of a private citizen would be constructed in months, when erected by the government requires years for its completion. This necessarily results in great wastefulness and loss of money to the government by the payment of unnecessary salaries of superintendents and other agents, by the expense of watching and caring for the materials and structure, and by the loss, waste and deterioration of such material, besides the inconvenience to the citizens resulting from such delayed construction. From three years upward is the time employed in constructing a building that a private citizen or a corporation would complete in one building season.

As an illustration of the extent to which this evil may extend under present methods, your committee would call your attention to the last annual report of the supervising architect in relation to the public building at Detroit, Mich., where the construction was authorized eleven years ago, and \$1,300,000 therefor has been appropriated by congress, years since, and the foundation walls are not yet completed. Indeed, the abuses in the method above referred to have become so serious that the committee cannot conscientiously recommend public buildings at many places where the economical and convenient transaction of the business would require or justify such buildings could they be provided at a cost not greatly exceeding the necessary expenditure by a private owner for similar purposes. Of the bills reported from this committee during the present session many are so reported only on the assumption that the buildings contemplated can be erected under some plan less wasteful than that now in operation.

The scope and purpose of the measure herewith presented is designed to remedy the many evils herein pointed out. To give to the country a better type of architecture in its buildings, and to stop the wasteful extravagance that is the necessary result of the present methods, a system that is universally approved by the best business men and by the best-managed corporations of the country, should be a good system for the government if its adoption is practicable. This measure authorizes the employment of such approved system. It authorizes the secretary, in his discretion, to obtain plans and specifications and local supervision for its public buildings by the system of competition among private architects. While not mandatory, it authorizes the secretary to employ the architect whose plans are approved to superintend the construction. It is to be presumed that this will secure the best architectural ability in the formulation of plans and the construction of the work according to such plans; that the compensation of such architects will be determined, as in private employment, on fixed commission upon the cost of the work, and that this will secure speedy completion of the work.

The measure does not abrogate or take from the supervising architect any of the functions or authority belonging to the office

which, under existing conditions, he is capable of performing. He will still, as now, retain general supervision and control of the work. He will remain and continue the representative of the government in all matters connected with the erection and completion of the buildings, the receipt of proposals, the award of contracts therefor, and the disbursement of money thereunder, and perform all the duties that now pertain to his office, except the designing and preparation of drawings and specifications for such buildings, and the local supervision of the construction, and such drawings and specifications shall be subject to his approval and to modification by him.

In fact, this measure is intended to make him what the title of his office indicates, the supervisor of architects; not the government's architect, but the supervisor of the architects of the government's works.

Your committee therefore recommend that the accompanying substitute do pass.

EFFLORESCENCE ON BRICKWORK.

THE white, semi-crystalline powdery efflorescence that appears on new bricks after being placed *in situ* has engaged the attention of builders and experts for a considerable time; nevertheless, no rapid effectual remedy has yet been promulgated for preventing the unsightly white patches appearing on a newly-erected wall. The result of some experiments the writer (Mr. H. C. Standage in *The Builder* for April 23, 1892) has conducted during the last twelve months may be of value to all builders, as the writer believes he has found the true remedy for the effectual removal and permanent prevention of this disfiguring efflorescence.

In the first place, a few words on the probable causes of the white appearance may not be out of place.

Bricks are naturally porous, and therefore readily imbibe moisture and gases. The mortar in which they are set contains two very active ingredients for the incipient evolution of organic life and crystalline formation of mineral substances, namely, oxygen and lime (an oxide of calcium). The yellow or red color of the sand mixed with the lime in the preparation of mortar is due to the presence in varying quantities of oxide of iron. This salt—oxide of iron—is one that readily gives up a part of its oxygen to any suitable body with which it may be in contact, or it readily acquires a further proportion of oxygen from the air if placed under suitable conditions. The lime also is a body in which the union of the metal (calcium) with the oxygen is not very permanent, the metal uniting with any other suitable compound substance, as, for example, carbon from the air, to form carbonate of lime—a combination of calcium, carbon and oxygen, CaCO_3 , which is a body that is also unstable in composition, readily breaking up and forming new combinations or salts of other metals. Besides the sand—silica colored with oxide of iron—and the lime, there are present in mortar small portions of other bodies, notably sodium salts of some kind. Now sodium (Na) unites with oxygen to form soda (Na_2O), and also with the iodide CO_2 (carbon dioxide) to form carbonate of soda, Na_2CO_3 . (There are several other formulæ for this salt, as it varies in the proportions of its constituents, but the above simple form will do for our purpose.) Now, carbonate of soda can exist in the crystalline form when water is combined with it, or it can be a dry anhydrous powder; and this salt when it loses the CO_2 radical becomes Na_2O (oxide of sodium of soda), and if the elements of water have been present in the carbonate, a deliquescent salt, sodic hydrate (NaHO) can be formed. Without going further into chemical questions, deliquescent is applied to a body capable of imbibing moisture, and hence becoming semi-liquid. Suffice it to say that it is with the salts of soda we purpose to deal.

Let us imagine that the soft porous brick has imbibed water from a passing shower of rain, that it dissolves some of the sodium salts in the water, and thereby becomes impregnated with a solution of a salt of soda. Now, as the surface of the brick dries, this salt of soda, or hydrate of sodium, will become dry and converted into the anhydrous sodic oxide (Na_2O) (every one has seen a piece of ordinary mortar crystallized, and washing soda fall to a white powder after some day's exposure to the air) if the weather be dry. This is the white efflorescence that appears on the surface of the brick. If the weather be damp, it will not be positively dry (anhydrous), but appear in minute crystals (as a crystalline carbonate?). In any case, there the white efflorescence is, and it is a positive eyesore to every builder, for the white patch on the surface of the newly-built wall spoils all architectural beauties by its glaring whiteness and irregular patches. So long as any soluble salts of soda remain in the mortar to be dissolved out by the water imbibed by the porous brick, so long will this white efflorescence continue until the supply of soluble soda salt has been dissolved out and brought to the surface.

The nearest approach to a successful remedy the writer has come across among the various proposals for removing this disfiguring white efflorescence is hydrochloric acid (HCl). This liquid combines with the Na_2O to form water and chloride of sodium (namely, $2\text{HCl} + \text{Na}_2\text{O} = \text{H}_2\text{O} + 2\text{NaCl}$, sodic chloride, i. e., common salt).

As this sodic chloride that is formed is a soluble salt, its presence is not manifested, as it is soluble in water, and, therefore, washed away by every shower of rain. If the efflorescence is due to the presence of NaHO (sodic hydrate), the hydrochloric acid will form sodic chloride and water as before, only half the quantity of acid being required to effect the reformation of salts. The remedy, therefore, would seem to point to saturating the bricks with this

acid—a process that, however, would be expensive and dangerous to the workmen using such fluid.

Acting on the hint conveyed by the fact that the excess of sodic hydrate in soap-making is expelled from the soap by salting it—i. e., strewing the surface of the soap as it floats on the lye with common salt, i. e., sodic chloride—the writer applied a solution of common salt to the white efflorescence on some bricks that were badly stained therewith. In every instance where such fluid was applied the white efflorescence was instantly removed, and, what is more has never reappeared, and in obstinate cases three applications, or one application well saturating the bricks with the common salt solution, has sufficed to effect the desired result.

The chemical reaction that takes place is represented below:—

NaCl (common salt) + NaHO (sodic hydrate) produce Na_2O (sodic oxide) and HCl (hydrochloric acid). Now, theoretically Na_2O is the body we wish to expel or convert into something else, and therefore we are actually forming the body we are endeavoring to expel, and, *ipso facto*, the acid would be the best body to effect the desired result. One fact, however, stands strongly in evidence against such theory, and that is the remarkable non-appearance of the white efflorescence after the application of the salt solution. This may be accounted for by the fact that the combination between the hydrogen and chlorine (HCl) is stronger than between sodium and chlorine (NaCl), and therefore the chemical reaction represented above as occurring between the efflorescent and acid occurs only to a limited extent; whereas in the application of the sodic chloride (NaCl) solution, the chlorine in the sodic chloride readily forsakes that body to unite with the hydrogen (H) in the sodic hydrate, and that, although sodic oxide is formed thereby, the simultaneous production of hydrochloric acid also neutralizes the effect of the sodic oxide efflorescing. As a solution of common salt is much cheaper than hydrochloric acid, the writer would suggest that the bricks should either be dipped in a pail of such solution before being laid *in situ*, or else be well washed—impregnated—with it afterward.

NEW PUBLICATIONS.

A TEXT-BOOK on Retaining Walls and Masonry Dams, by Mansfield Merriman, Professor of Civil Engineering in Lehigh University. Price \$2. New York: John Wiley & Sons.

"CHRISTIAN THOUGHT IN ARCHITECTURE" originally a paper read by Mr. Barr Ferree before the American Society of Church History at its annual meeting in Washington last December, has been privately printed and distributed. It is illustrated with a sketch of Reims Cathedral and an interior from the cathedral at Chartres, and, with its white cover and untrimmed edges, makes a dainty and attractive pamphlet.

"SOME RECENT PUBLIC 'RAIN' BATHS IN NEW YORK CITY," is the title of a small pamphlet by William Paul Gerhard, C. E., and published by the Engineering Press, 277 Pearl street, New York. As may be supposed, the text matter refers to the construction and mode of operation of these douche baths, and their general, practical and economical utility in the light of a cheap, public lavatory. The introduction treats in a historical way, of the beginning and growth of this peculiar bathing method in Europe, and of its first trial in this country. The price of the pamphlet is 50 cents.

WATER AND AIR CIRCULATION IN HEATING AND VENTILATING. A technical description of the Novelty Hot-Water Circulator, with a chapter on "Circulation" and illustrative examples, together with numerous rules, tables and formulæ, useful for steamfitters, engineers, architects and others. Abram Cox Stove Company, Philadelphia.

This is a large quarto book of 112 pages, and although primarily a trade catalogue, it contains so much desirable and valuable scientific and technical information that that characteristic is measurably forgotten in an investigation of the systematically arranged contents. House heating and ventilating, in a limited sense, is so new a field of house economics, that advances are constantly being made and new forms introduced, thereby enlarging scientific knowledge and technical skill, so that every new publication on the subject is naturally expected to add something more that is needed to present knowledge. In this respect this book will not be a disappointment. The introductory chapter on "Circulation," wherein is discussed those important factors, transference of heat, cause of circulation, value of circulation in heating water, advantages of independent circulation and kindred topics, is from the pen of Mr. John J. Hogan, an engineer and author whose writings on questions pertaining to these matters are accepted as highest authority, and is particularly instructive and interesting. The same may be said of a subsequent chapter by the same author on the "Supply and Emission of Heat." There are other important points discussed in chapters under appropriate heads, which space will not permit more than a mention of the fact, and a large number of comparative tables prepared as helps to estimating that for the same cause cannot be specifically named. One peculiar feature of the book and a novelty in the way of diagram illustrations is a series of diagrams illustrating practical work in instances of a constructed cottage residence, suburban mansion, city residence, railway station, church and school, where the method and manner of the service is made distinct by printing the apparatus, piping, etc., in red outlines, and to a scale that makes each an easily comprehended lesson. In a word, this book is undoubtedly one of the most exhaustive treatises on house heating and ventilation that so far has come from the press, and is an invaluable contribution to modern architectural literature.

OUR ILLUSTRATIONS.

Residence of I. K. Boyesen, Chicago; Willett & Pashley, architects.

Residence on Lindell boulevard, St. Louis, Missouri; Theo. C. Link, architect.

Manufacturing building for C. H. Fargo & Co.; L. B. Dixon, architect, Chicago.

Sketches by T. O. Fraenkel, Chicago: a windmill, General Washington chair.

Cottage at Council Bluffs, Iowa, for Mrs. D. B. Sutherland; J. Hackett Kent, architect.

"The Homestead" Hotel, remodeled, Hot Springs, Virginia; G. W. E. Field, architect.

Schoolhouse at Canandaigua, New York; Orlando K. Foote, architect, Rochester, New York.

Residence at Fond Du Lac, Wisconsin, for Mr. Ebert; A. M. F. Colton & Son, architects, Chicago.

St. Paul's Episcopal Church, New Orleans, Louisiana; McDonald Brothers, architects, Louisville, Kentucky.

Colorado State Building, World's Columbian Exposition, Chicago; H. T. E. Wendell, architect, Denver, Colorado.

Burlington Insurance Company Block, Burlington, Iowa; W. L. B. Jenney and W. B. Mundie, architects, Chicago, Illinois.

World's Columbian Exposition, Chicago. General view of court from the Administration building, looking toward lake.

The Wainwright Memorial, St. Louis, Missouri; Adler & Sullivan, Chicago, and Charles K. Ramsey, St. Louis, associated architects.

New court house, Rome, Georgia, to be built of Georgia marble by the Blue Ridge Marble Co.; Bruce & Morgan, architects, Atlanta, Georgia.

Architectural plate case to hold from 8,000 to 10,000 plates. Has been in use for some time and found very convenient. Designed by Will L. Fuchs, architect, Buffalo, New York.

Richardson, Roberts, Byrne & Co., wholesale dry goods house, St. Joseph, Missouri; Eckel & Van Brunt, architects. The material is Portage stone and St. Louis press brick. Dimensions, 90 by 135 feet, 2 inches. Construction: Mill or slow combustion; two elevators; boiler-room, vaults and stairways outside the building. There is a clear floor space, exclusive of the interior columns, twenty-eight in number, of about 88 by 133 feet, average. The foundation of the building is well under way.

Photogravure Plate. Residence of H. A. Knott, Buena Park, Chicago; J. L. Silsbee, architect. Residence of R. Conklin, Kansas City, Missouri; Van Brunt & Howe, architects.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for the Photogravure edition.)

Residence of Col. W. R. Nelson, Kansas City, Missouri; Frederick E. Hill, architect.

Church, Sixteenth and Holmes streets, Kansas City, Missouri; Hogg & Rose, architects.

The Lombard Residence, Kansas City, Missouri; Burnham & Root, architects, Chicago.

Residence of C. F. Morse, Kansas City, Missouri; Peabody & Stearns, architects, Boston.

Residence of W. C. Scarette, Kansas City, Missouri; Burnham & Root, architects, Chicago.

Residence of Charles Mendenhall, East Walnut Hills, Cincinnati, Ohio; A. O. Elzner, architect.

Groups of statuary for Administration and Agricultural buildings, World's Columbian Exposition, Chicago; Carl Bitter and Philip Martiny, sculptors; two subjects.

ASSOCIATION NOTES.

CINCINNATI ARCHITECTURAL CLUB.

The Cincinnati Architectural Club held a reception in its new rooms on May 6, in celebration of its fourth year of work and general prosperity. The reception was attended by the largest and most enthusiastic gathering ever received by the club. The rooms were decked with flowers, an orchestra discoursed music of an exhilarating character, the efforts of the caterer supplementing the music in a substantial manner. In fact a degree of enthusiasm was generated that will not soon effervesce.

After the reports of the different officers had been received the club proceeded to the election of officers for the ensuing year, which resulted in the election of John Zettel, president; L. G. Dittoe, vice-president; M. S. Heister, secretary; E. Burt, treasurer; and H. Hake, member of executive committee.

The following code of competitions has been prepared for the coming year: 1, park shelter house; 2, sheet of local renaissance; 3, enter the Clark competition; 4, bookcase; 5, suburban residence; 6, stone entrance including a fountain; 7, inglenook; 8, village school and library. All of these have certain conditions under which they must be entered. The dates have not been decided upon, owing to the fact that the club has not been informed when the "Clark medal competition" is to be closed.

Mr. J. Zettel was the winner of last year's prize, he having secured the highest number of points on all competitions.

THE AMERICAN SOCIETY OF IRRIGATION ENGINEERS.

At the close of the Irrigation Congress in Salt Lake City on September 18, 1891, a few engineers who were delegates, were called

together by Prof. L. G. Carpenter, of Colorado, who suggested the organization of a Society of Irrigation engineers.

A meeting was held during the evening at the rooms of the Polytechnic Society of Utah. Little time or opportunity was afforded for details of organization. Officers were, however, elected, and the Board of Directors was instructed to draft a constitution and by-laws and send it to the members for suggestions and additions. A few hours of rather informal discussion brought out the ideas of those present, as to the aims of such a society.

It seemed evident to all that an organization of men interested in the physical problems of the arid regions, would be of benefit to its members, and also that an organized body of skilled engineers with experience in the peculiar work of arid land reclamation was almost a necessity, not for the increase of their own knowledge only, but far more for the security of those investing their time or money in reclamation or irrigation works.

There will be one annual meeting of the society, and it is hoped that there can also be one meeting each year in San Francisco, Denver, Salt Lake, and possibly in other cities north or south. At these meetings papers will be read and discussed in the usual manner. Arthur D. Foote is the president.

CORRESPONDENCE.

A EUROPEAN TOUR.

Editors Inland Architect: Through your courtesy last February mention was made in THE INLAND ARCHITECT of a tour on bicycles through the chateau region of France, on which I am anxious to have a party of twenty of my brother wheelmen. Since then my call for companions has met with a hearty response, and the party is being completed with gratifying rapidity. We now have representatives from Milwaukee, Wis., Providence, R. I., Quincy, Ill., Philadelphia, Pa., Boston, Mass., New York City, and various other places.

The T-Square Club, of Philadelphia, will be well represented, also the Architectural Sketch Club, of Boston. The Massachusetts Institute of Technology and Cornell University are both to send students from their architectural departments.

I am in hopes that the Chicago Architectural Sketch Club and Indianapolis Architectural Sketch Club will be represented, and should this meet the eye of the members of either of said clubs, I trust they will take this as an invitation to join one of the pleasantest parties that ever crossed the Atlantic.

This invitation is also extended to all architects who would enjoy our way of traveling.

I have secured the most comfortable berths on S. S. Veendam, just forward of the dining saloon, and have the refusal of all the staterooms in that part of the boat.

We sail July 30. I shall be pleased to send full information to anyone who so desires.

Portland, Maine.

Very truly yours,

JOHN CALVIN STEVENS.

Editors Inland Architect:

CHICAGO, April 29, 1892.

Information has already been published that the current exhibition of the Chicago Society of Artists was destroyed by fire upon the evening of Tuesday, April 26. The collection was exhibited in the top floor of a seven-story building, called the Chicago Athenaeum, which had no pretensions to being a fireproof building. For the credit of Chicago it should be clearly understood that the exhibition had nothing to do with the Art Institute of Chicago, and the fire was not in the museum building.

Yours very truly,

W. M. R. FRENCH, Director.

BUILDING OUTLOOK.

OFFICE OF THE INLAND ARCHITECT, }
CHICAGO, Illinois, May 15, 1892. }

The downward tendency in prices and values has not yet reached its limit. There is a hesitancy among builders, promoters, contractors, manufacturers and money lenders to push work, except where the requirements are urgent and well defined. A number of contingencies are recognized as likely to arise during the next two months which will affect the situation favorably or unfavorably. One of them is the possibility of strikes more or less general. At some eastern points rumors have arisen within the past few days of the possibility of disturbances among laborers about the middle of the month. This may disappear; there is, however, a feeling of unrest. Regarding the probable volume of this year's construction, it is impossible to speak with any degree of definiteness; the inducements to build are not as urgent as two years ago. In the larger cities a good deal of work will continue to be done, but speaking generally it is not probable that in the larger cities throughout the East the volume of business will be much, if any, in excess of last year. With regard to the cities throughout the West, it is probable quite an increased activity in general building will take place during the next four or five months. Building material of all kinds is low in price. Contracts for large supplies have been made within the past week or two at figures favorable to builders. Manufacturers of all kinds of material complain of the very narrow margins existing, and naturally hope for improvement, but it is hardly probable that the improvement, if it does come, will come in time to profit them much. Lumber is very abundant and low, but the white pine and yellow pine interests are pretty well organized, and competition will be kept within some sort of bounds. All kinds of hardwoods are selling at as low prices as have prevailed within a year. Iron and steel are low and abundant. The small industries are prosperous, though an over-supply is constantly threatened. The manufacturers of machinery complain of a lagging demand, but while it exists the falling off has not yet reached very serious dimensions. In the financial world money is said to be abundant, but this must be understood as applying to financial

centers, and to large dealings; there is not an abundance of money throughout the country among the small business men. Collections are difficult, and it requires careful management to keep even.

Our export trade in cereals, breadstuffs and machinery continues quite heavy, and prices are maintained at what are regarded in trade circles as satisfactory. Throughout the South there is continued depression. Through the West opportunities are multiplying for investment. Land has been taken up pretty freely, and so far as can be seen at this time, the present season will be one of great activity.

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.

Albuquerque, N. M.—Architect H. D. Johnson: For Charles Mansard, a two-story brick residence, size 38 by 53 feet; cost \$8,000. For Public School Board, a two-story brick schoolhouse, size 86 by 48 feet; cost \$12,300. For E. J. Post & Co., a two-story brick warehouse, size 50 by 136 feet; cost \$8,000.

Chicago, Ill.—Architect Francis M. Whitehouse: Is working on plans for the remodeling of the Art building into a suitable home for the Chicago Club; in the transformation the exterior of the structure will be left as it now stands, it being so beautiful it would be a pity to mar its architectural effects; new plumbing, steam heating, electric light and the best of improvements will be put in. The same architect is preparing drawings for the Choral building for the World's Fair; it will be the same in construction as the other buildings, and will be located between the Transportation and Horticultural buildings; it will be 160 by 280 feet in size, and cost about \$125,000; accommodation will be provided for 10,000 people.

Architect H. B. Wheelock: For James Madden, on Indiana avenue near Forty-eighth street, a two-story flat building; to have a stone front, hardwood finish, and cost \$7,000. For Mrs. Flora Dodson, on Prairie avenue near Forty-second street, two three-story and basement residences; to have stone fronts, hardwood finish; cost \$15,000.

Architects Flanders & Zimmerman: For C. Patterson, at 2132 Michigan avenue, a three-story and basement store and flat building; to have pressed brick front, with copper bay windows, hardwood interior finish, steam heat, and all the improvements. Also preparing plans for a two-story basement and attic school, 87 by 117 feet in size; to be erected on Wood and Seventieth streets; pressed brick, stone and terra cotta, copper bays, hardwood finish, steam heat. For Mr. Hammill, at Fifty-eighth street and Madison avenue, a three-story flat building, of pressed brick and stone, with copper bay window, hardwood finish, steam heat, electric light. For E. E. Hudson, on Thirty-first street, between Wabash and Michigan avenues, a four-story and basement store and flat building, of pressed brick and stone, with copper bay windows, steam heat, hardwood finish, the best of plumbing; cost \$40,000. For Mr. Stafford, on Reynolds avenue near Seventy-eighth street, a two-story and basement flat building, of pressed brick, stone and terra cotta front, galvanized iron bays, etc. For C. Matthews, on Kenwood avenue near Forty-ninth street, a two-story residence, 35 by 50 feet in size, of pressed brick and stone front, steam heat, hardwood interior finish; cost \$15,000. For City of Chicago, a one-story and basement school, 23 by 80 feet in size, to be constructed of pressed brick, stone and terra cotta.

Architect J. A. Miller: For the Arcade Company, a three-story store and flat building, 66 by 266 feet in size, to be erected on Thirty-sixth street and Cottage Grove avenue; to be of pressed brick and stone front, have gravel roof, the best of plumbing, electric wiring, steam heat, etc. For Mrs. B. Hogan, on Sawyer avenue near Ogden avenue, a three-story flat building, of buff Bedford stone front; to cost \$10,000.

Architects Hyde & Castner: For Charles City Board of Education, a two-story school, to be constructed of common brick and stone, have heating and modern conveniences; cost \$9,000. Also making plans for two frame residences, to be built at the same place, for Mrs. Tower and C. D. Ellis.

Architect Jules De Horvath: For W. A. Dougherty, on Woodlawn terrace, near Midway Plaisance, a six-story apartment house; size 40 by 90 feet; to cost \$75,000; to be of pressed brick and stone front, have electric light, steam heat, elevator, marble work and the best of modern sanitary improvements. For Dr. F. M. Stringfield, corner of Twelfth street and Wabash avenue, an eight-story store and apartment house; size 50 by 110 feet; to cost about \$150,000; it will be constructed of stone up to the second story and above this will be of pressed brick with stone trimmings; electric light, elevators, steam heat, marble wainscoting, mosaic and tile floors, etc. For Mr. Groesbeck: Preparing drawings for a four-story store and apartment house; to have a stone front with copper bay windows, hardwood finish, etc.; to be erected at 344 Madison street. For G. R. Wright and others: Four two-story basement and attic residences; to be erected at Edgewater; to be of frame with stone basements, have hardwood finish, electric wiring, the best of plumbing, furnaces, etc. For a syndicate: A six-story apartment house; size 150 by 100 feet; to be erected at the corner of Forty-ninth street and Michigan avenue; it will be of pressed brick with stone trimmings, have hardwood interior, electric light, steam heating, elevators, marble, mosaic and tile work; and cost about \$200,000. For a local syndicate: A five-story apartment house; size 60 by 131 feet; to cost about \$150,000; it will be constructed of pressed brick and stone, have electric light, steam heat, elevator and all the improvements. He is also getting out drawings for a four-story apartment house; to have a frontage of 150 feet and a depth of 100 feet; to be erected on Wabash avenue, near Thirty-fifth street; to have a pressed brick and stone front, steam heat, electric light, etc.

Architects Wilson & Marble: For George C. Watts, on Grand Boulevard and Forty-fourth street, two three-story residences; to cost \$16,000 each; one will have a brownstone front with Spanish tile roof, and the other a handsomely designed front of Kasota pinkstone and roof of Spanish tile; the interiors will be finished in hardwoods, hot-water heating, electric light, gas ranges, fireplaces, and the very best of sanitary and modern conveniences will be put in. For Albert Mendel they are also designing two handsome three-story residences; to cost about \$32,000; they will have Kasota pinkstone and Raindrop stone for the fronts, slate roof, hardwood interiors, hot-water heating, electric light, etc. For Dr. O. A. Baxter, corner of Grand Boulevard and Forty-fourth street, a three-story and basement residence of beautiful design; the front will be of stone, the interior being elegantly finished in hardwoods and electric light, hot-water heating and the finest of sanitary and modern improvements will be put in; the cost will be \$25,000.

Architect L. G. Hallberg: Preparing plans for a three-story residence; size 31 by 60 feet; to be erected on Michigan avenue, near Thirty-eighth street, for George A. Seaverns; to be of pressed brick and stone front with slate roof, have electric light, hot-water heating, hardwood finish, marble and tile work; and cost about \$20,000. For E. L. Hambleton, at Buena Park, a two-story basement and attic residence; size 30 by 50 feet; to be constructed of buff pressed brick and stone, have electric light; and cost \$8,000.

Architects Stiles & Stone: For J. F. Pershing, on Fifty-third street, west of Kimbark avenue, four three-story residences; to have stone fronts, slate roofs, copper cornices, hot-water heating, electric light, all the best of improvements; cost \$34,000. They have also just completed plans for the First Congregational Church to be erected at La Grange; it will be constructed of stone all round, have stained glass windows, steam heat, and pews to seat five hundred persons. They will also build a two-story school with seating capacity of five hundred; cost \$20,000. For Mrs. Elizabeth Taylor they are making plans for a three-story tenement; size 25 by 80 feet; to have a cut stone front, hardwood finish; cost about \$10,000.

Architect W. D. Cowles: For E. D. Murray, on St. Lawrence avenue near Seventy-first street, a three-story apartment house; 72 by 86 feet in size; to cost \$30,000; to be of pressed brick and stone front, hardwood interior finish.

Architect C. A. Weary: For John Brady, on Indiana street near Wood, a two-story barn; size 36 by 85 feet; to be of pressed brick and stone front, with

gravel roof; cost \$6,000. For John Coakley, on Colorado avenue, a three-story flat building; to have a stone front, hardwood finish, sanitary plumbing; cost \$6,800. For P. A. Shriver, on Madison street near Sacramento avenue, a three-story and cellar store and flat building; to have a stone front, gravel roof, best of plumbing and cost \$9,000. Also making plans for a two-story and basement flat building to be erected on Adams street near Francisco, for Rome O'Connell; to have a front of pressed brick with stone trimmings, gravel roof, sanitary plumbing, furnaces, etc.

Architect C. M. Palmer: Making plans for remodeling building at the southwest corner of State and Monroe streets.

Architect Julius Speyer: Making plans for three-story and basement store and flat building; to be of stone front with copper bay windows, hardwood finish, etc.; to be erected on Kedzie avenue near Thirteenth street, for George Nolan. For M. Kyle, on Seventy-first street and South Chicago avenue, a three-story store and flat building, to contain thirty-four suites of apartments, and cost \$35,000; the front will be of pressed brick, with stone trimmings, gravel roof; sanitary plumbing and steam heat will be put in. Also making plans for remodeling building at 167 Madison street for M. McErnery; fine plumbing, marble, tile and mosaic work, electric light, elevators, steamfitting, engine, pump, two boilers, etc. For Messrs. Lansing & McGarigle, at 126 Clark street, remodeling interior of three upper floors; will put in elevator, electric light, marble and mosaic work, etc.; cost about \$15,000.

Architect George W. Maher: For J. L. Cochran, at Edgewater, three two-story and basement residences; to have stone basements, hardwood finish, furnaces, electric light, etc.

Architects J. F. & J. P. Doerr: For Meyer Louer, on Maryland avenue between Sixty-sixth and Sixty-seventh streets, a three-story flat building; size 50 by 76 feet; to cost \$12,000; to be of pressed brick and stone front. For Patrick Walsh, on Thirty-seventh street near Wallace street, a three-story and basement store and flat building; size 24 by 70 feet; to cost \$7,000.

Architect J. C. Swope: For A. Campbell, corner of Belden avenue and Larrabee street, a four-story apartment house; 60 by 100 feet in size; to cost about \$75,000; it will be constructed of Lake Superior red sandstone on two sides, have slate towers and gravel roof, three copper bays, one galvanized iron; the best of plumbing; to be fireproofed and have steam heating and electric light. The same architect also making plans for a three-story store and flat building; 98 by 107 feet in size; to be erected at Sixty-fifth street and Cottage Grove avenue for F. C. Delamater; it will have two fronts of St. Louis pressed brick, with Bedford stone trimmings, steam heat, electric light, and all the conveniences.

Architects Jaffray & Ohrenstein: For Dr. Thomas L. Gilmer, at Lake Park avenue and Thirty-third street, a two-story residence; to have a buff Bedford stone front, slate roof, hardwood finish, hot-water heating. For Dr. William McCarthy, on Aberdeen street near Taylor street, a three-story flat building; to cost \$12,000.

Architect George Grussing: For Martin Lewis, on Dunning street near Racine avenue, four two-story flat buildings, of pressed brick and stone, to have hardwood finish, all the sanitary improvements, furnaces; to cost about \$16,000; working on plans.

Architect Ira C. Saxe: For J. R. Lyman, on Rhodes avenue near Washington Park, a two-story rockfaced stone front flat building. Also for the same owner, on Sixty-third street near St. Lawrence avenue, a three-story store and flat building, to be of pressed brick and stone front. For T. H. Marston, a three-story store and flat building, of rockfaced stone front, gravel roof, sanitary plumbing and furnaces.

Architects Parke & Purrsell: For E. Greenburg, on Jackson boulevard, between Sacramento avenue and Whipple street, a four-story flat building, to have redstone front with circular bay of stone, copper cornice, hardwood finish, steam heat, etc. For F. Smith, a two-story frame flat building, brick veneered; to have sanitary plumbing, galvanized iron bays, furnaces, etc.

Architects Fraenkel & Schmidt: For George R. Thorn, a three-story and basement store and flat building, 49 by 125 feet in size; to cost \$25,000; it will have a pressed brick and stone front, and be erected on Fifty-fifth street and Wentworth avenue.

Architects Ostling Bros.: For Mrs. Muller, 200 East Huron street, a four-story and basement flat building, 21 by 100 feet, to be of pressed brick and stone with galvanized iron bays; cost \$10,000. For Mrs. Wood, at 136 Sigel street, a four-story and basement flat building; to cost \$10,000; to have a pressed brick and stone front, electric bells, speaking tubes, etc. For Charles Siebert, on Clark street, corner of Dewey Court, a three-story store and flat building, of pressed brick and stone front, with galvanized iron bays and cornice; cost \$10,000.

Architect Charles S. Frost: For the Chicago & North-Western Railway Company, on Kinzie street, a two-story building, 240 by 35 feet in size, to be of pressed brick and stone front, with slate roof; when completed it will be occupied by the United States and American Express Companies. For the same company he is getting out drawings for a two-story electric light plant, 75 by 65 feet in size, with chimney stack 130 feet high, to be erected on Kinzie street and the river. For Thomas Foster, two three-story and basement residences, to be erected on Woodlawn avenue and Forty-seventh street; to be of pressed brick and stone front, with slate roof, hardwood finish; cost \$20,000. For Messrs. Kuh, Nathan & Fisher, to be erected on the northwest corner of Franklin and Van Buren streets, a seven-story and basement store and office building; to have a frontage of 50 feet on Franklin, 50 feet on Van Buren, and a depth of 160 feet; the first story will be of stone, and the rest of pressed brick and stone; it will be of mill construction and practically fireproof; cost \$150,000.

Architect George H. Borst: For M. L. Wheeler, on Woodlawn avenue between Forty-sixth and Forty-seventh streets, a three-story and basement residence, 35 by 65 feet in size; to cost \$25,000; it will be of red Portage stone front, with slate roof and pressed brick sides; the interior will be handsomely finished in hardwoods, and have steam heating, electric lights, etc. For Miss Hundt he is preparing drawings for a three-story and basement flat building, to be erected on Garfield avenue; it will be constructed of pressed brick, with copper bays, have interior finish in pine, and cost \$10,000. For John A. and George Lomax, on Adams street near Peoria, a two-story flat building, of pressed brick and stone. For Dr. E. C. Dudley, at 2112 Michigan avenue, remodeling building; putting in new store front, marble wainscoting, etc. Mr. Borst will remove this month into suite 1306, Chicago Title and Trust Building.

Architects Bettinghofer & Hermann: For Otto Stumpf, on Perry street, Lane Park, a two-story frame residence. For John Muno, corner of North avenue and Town court, a four-story and basement store and flat building, of pressed brick and stone front, galvanized iron bay and tower; cost \$13,000. For Casper Wiener, on Bosworth avenue, Lutz Park, a two-story frame residence. For Miss A. Ruhneke, on Davis street near Hirsch street, a three-story and basement flat building, of pressed brick and stone. For Joseph Lister, on Elston Road near Fullerton avenue, a two-story barn, of pressed brick all round; cost \$10,000. For McWienand, on Ashland avenue near Belmont avenue, a three-story flat building of pressed brick and stone front. For Henry Kraisslich, on the southwest corner of North avenue and Hudson avenue, a four-story store, flat and office building; 27 by 106 feet in size; to cost \$20,000; it will have two fronts of pressed brick and stone, with galvanized iron bays, slate tower, hot-water heating, etc. For C. R. Williams, on the southwest corner of North avenue and Wieland street, a five-story and basement store and flat building; 50 by 116 feet in size; to cost \$50,000; stone front and pressed brick on the side, galvanized iron bays, slate tower; the best of sanitary improvements.

Architect Robert C. Berlin: For S. Miller, corner of Webster avenue and Burling street, a three-story flat building, to have a stone front, and cost \$14,000. For W. J. Lee, at 85 Seminary avenue, a three-story flat building; stone front; to cost \$9,000. For F. L. Eckenbrecht, corner of Webster and Sheffield avenues, a four-story store and flat building of pressed brick and stone front; to cost \$25,000.

Architect E. M. Newman: For J. F. Penfield, at Rockford, Illinois, three two-story frame houses. For John H. Camblin, at Rockford, a two-story frame residence. For J. Gottra, at Montrose, a two-story frame house. For Mrs. J. P. Harter, at Edgewater, a two-story frame residence. For Will Eckel, at La Grange, a two-story frame house.

Architect M. E. Bell: For J. F. Rice, a three-story residence, to be erected corner of Woodlawn avenue and Fifty-sixth street. It will be of pressed brick and stone, with hardwood interior, tile floors, steam heat and cost \$20,000. For

B. F. Cronkrite, a two-story residence; to cost \$12,000. For B. F. Cronkrite, on Berkeley avenue and Forty-third street, a four-story apartment house; 150 by 70 feet in size; to cost \$70,000. The basement and first story will be of stone, and above of buff pressed brick and terra cotta. He is also getting out plans for the state reformatory to be erected at Pontiac, Illinois. Also new hall for the Carleton club on Vincennes avenue.

Architects Edbrooke & Burnham: For Milo G. Kellogg, corner of Jackson and Green streets, a two-story store and flat building of pressed brick and stone; to cost \$20,000. For Charles Morris McCook, at Kenilworth, a two-story residence; to cost \$10,000. For Mrs. Pratt, at Kenilworth, a two-story basement and attic frame residence; to have stone basement, hardwood interior finish, hot-water heating; to cost \$12,000.

Architect Francis J. Norton has completed plans, and is also supervising the following structures: A four-story hotel, 110 by 174 feet in size, to be erected at Seventy-fifth street and Kinney avenue, for Mr. Gilbertson. It will contain six hundred rooms, with all modern improvements; estimated cost \$50,000. Also a three-story hotel for C. Dorn, 60 by 100 feet in size, to be built on Seventy-first street near the Fair grounds, at a cost of \$18,000. Also a three-story apartment building, 25 by 60 feet in size, to be erected at Thirty-first and Arch streets, for Mrs. Van Buren, at a cost of \$10,000. Also ten stone residences to be erected at Auburn for the Chicago Mill Construction Company, at a cost of \$60,000. A three-story stone residence to be built at Forty-third street and Wabash avenue, for Mr. Parks; size 25 by 75 feet; with all modern improvements, at a cost of \$10,000. Also a three-story and flat building to be erected at Sixty-third street and Cottage Grove avenue, for Mr. Rhodes, of Boston; size 50 by 100 feet; with all modern improvements, at a cost of \$20,000. Also three houses, three stories high, to be erected at Fortieth street and Grand boulevard, for Mr. Hisgen, at a cost of \$14,000. Also a block of residences 60 by 125 feet in size, three stories high, to be built at Seventy-second street and Wentworth avenue, for John R. Dawson, with all modern improvements, at a cost of \$30,000.

Cincinnati, Ohio.—Reported by Lawrence Mendenhall: Collins, in one of his productions says, "Peace rules the day where reason rules the mind." This aptly describes the situation of the threatened strike, for the carpenters and contractors have arrived at an understanding. They are to pay 30 cents an hour to August 15, 1902, and for two years after 33½ cents per hour. This precludes all fears for strikes for over two years, and contractors know just what to expect. At the present writing the millmen have not succeeded in arriving at any definite arrangement as to wages. Notwithstanding this settlement at this early stage of the season, the fear of trouble has had the effect of driving a few plans out of the market, let us hope temporarily. There will be few blocks of fine stores erected this year, dwelling houses taking their places, which in turn will reduce the aggregate of the season's work.

Architects Crapsey & Brown report for Mount Auburn Baptist Church an edifice for worship; materials: stone, slate roof, hardwood, furnace, pews, organ, stained glass, etc.; cost \$20,000. For Dr. W. S. Burkhardt, a residence; materials: frame, shingle roof, furnace, grates, mantels, stained glass, etc.; cost \$5,000.

Architects Boll & Taylor report for Mr. Charles A. Gerold, of Cincinnati, a residence; materials: frame, shingle roof, furnace, stained glass, grates, mantels, etc.; cost \$4,000. Also plans drawn for a large Catholic Church at Ludlow, Kentucky, of which particulars will be given later on. Also a store building five stories high for White Star Laundry Company; materials: pressed brick, tin roof, elevator, etc.; cost \$25,000. Also plans for an addition to school house at Pleasant Ridge, Ohio; materials: brick and stone, tin roof, furniture, furnace, etc.; cost \$12,000.

Architects Vogel Bros. report for Mr. Springard, Newport, Kentucky, a residence; materials: pressed brick, tin roof, gas, plumbing, stained glass, grates, mantels, etc.; cost \$4,000. Also for Mr. J. E. Mountjoy, Warsaw, Kentucky, a residence; materials: frame, tin roof, blinds, grates, mantels, plumbing, etc.; cost \$4,000.

Architect W. W. Franklin reports for Henry Wessel, a residence; materials: pressed brick, slate roof, furnace, hardwood, grates, mantels, stained glass, etc.; cost \$12,000.

Architect A. O. Elzner reports the following: residence for Mr. Fenton Lawson; materials: pressed brick, stone trimmings, furnace, hardwood, stained glass, grates, plumbing, mantels, etc.; cost \$6,000. Also for Mr. A. H. Chatfield, a residence; materials: frame, slate roof, furnaces, plate and stained glass, gas, plumbing, laundry fixtures, etc.; cost \$6,000. Also a warehouse for the McAlpin Company; size 22 by 75 feet; six stories high; materials: brick, elevators, asphalt roof, gas, plumbing, etc.; cost \$15,000.

Architects Nash & Plympton report for the Mount Auburn Cable Company, Cincinnati, a power house; materials: brick and stone, slate roof, machinery, gas, plumbing, etc.; cost \$15,000.

Samuel Hannaford & Sons report for Mr. H. L. Lovell, Lexington, Kentucky, a residence; materials: pressed brick, stone trimmings, slate roof, hardwood, gas, plumbing, stained glass, grates, mantels; cost \$15,000.

Cleveland, Ohio.—Architects Cramer & Fugman: For Philip Kraft, a three-story store and flat building, brick, size 40 by 70 feet; cost \$16,500. For F. B. Bell, a three-story store and flat building, size 24 by 37 feet; cost \$6,300.

Architect D. H. Burnham, Chicago: For the Cuyahoga Company, an eight-story store and office building, size 42 by 92 feet; cost \$212,000.

Architects Shengle & Dolman: For the Army and Navy Hall Company, a two-story addition to hall, brick and iron, size 60 by 110 feet; cost \$10,000.

Architect B. F. Vandevelde: For the St. Cassemers congregation, a two-story church and school building, size 44 by 120 feet; cost \$15,000.

Architects Coburn & Barnum: For J. H. Roemer, a two-story frame dwelling, size 35 by 66 feet; cost \$6,000.

Architect F. C. Bate: For J. C. Trask, a two-story residence, frame, size 33 by 56 feet; cost \$8,500.

Architect George F. Hammond: For F. H. Glidden, a two-story frame dwelling, size 36 by 40 feet; cost \$10,000.

Architects A. & W. French: For Rose & Burdick, a two-story double dwelling, size 42 by 52 feet; cost \$4,500.

Denver, Colo.—Architect J. Huddart: For R. D. Trean, a two-story residence, size 38 by 45 feet, brick and stone; cost \$10,000.

Architects Lang & Pugh: For Dr. Ordway, a three-story residence, size 45 by 50 feet, brick with stone trimmings; cost \$15,000.

Architect M. A. Stuckert: For Lang & Bugle, a three-story dwelling, size 40 by 52 feet, pressed brick, stone foundations, terra cotta trimmings; cost \$15,000.

Detroit, Mich.—Architects M. L. Smith & Son: For the Detroit College of Medicine, a four-story addition, size 43 by 74 feet, brick with brownstone trimmings; cost \$15,000. For W. W. Hannan, six three-story brick stores and flats, size 100 by 80 feet; cost \$15,000. For James M. Jamieson, a block of three-story stores and flats; cost \$12,000. For Charles Grover, Ypsilanti, Michigan, a two-story frame residence, stone foundations, slate roof; cost \$8,000.

Architect A. H. Nelson: For A. B. Scott, New York City, New York, a four-story residence, brownstone; cost \$100,000.

Architect Albert E. French: For Fred Guenther, a two and one-half-story brick residence; cost \$8,000.

Architects A. C. Varney & Co.: For Henry Holcomb, five three-story brick flat dwellings; cost \$40,000. For A. S. Lapham, a three-story double brick residence; cost \$9,000. For George S. Robinson, a two and one-half-story residence, brick with brownstone trimmings, on Charlotte avenue near Woodward avenue; cost \$7,500. For George H. Southworth, a three-story brick residence, at Marshall, Michigan; cost \$6,000.

Architect Leon Coquard: For St. Joachim's Roman Catholic Church, a three-story brick rectory, on Congress street; cost \$8,000. For S. B. Hueber, a two-story brick residence; cost \$5,000.

Architects Spier & Rohns: For City Hall Commissioners, Windsor, Ontario, remodeling and building in fireproof vaults; cost \$8,000.

Architect A. B. Cram: For the Michigan Normal School Board, two brick annexes to building in Ypsilanti, Mich.

Architects Malcombson & Higginbotham: For the Board of Education, a two-story brick schoolhouse; cost \$30,000. For Louis Grenthal, a two-story brick store and flat building; cost \$6,000.

Architects John Scott & Co.: For the Detroit House of Correction, addition to prison; cost \$10,000. For the Irland & Mathews Manufacturing Company,

a three-story brick manufacturing building, size 104 by 116 feet; cost \$11,000. For Detroit Police Commission, a two-story police station, size 36 by 90 feet; cost \$8,000.

Architect Joseph E. Mills: For the Board of Education, Winamac, Indiana, a large two-story brick school; cost \$19,000.

Architects Rogers & Macfarland: For Mrs. Clara C. Kuhee, a three-story double pressed brick residence; cost \$8,500.

Architect George L. Depew: For C. L. Laurence, a three-story residence, artificial stone; cost \$7,000.

Architect Ed. C. Van Leyen: For Mrs. I. T. Hibbard, a block of seven three-story frame dwellings, size 50 by 160 feet; cost \$16,000. For Charles Farnsworth, a double frame residence, size 43 by 60 feet; cost \$5,500. For H. G. Milward, a two-story brick residence, size 30 by 50 feet; cost \$5,300.

Architect H. J. Rill: For St. Boniface Roman Catholic Church Society, a two-story society building, brick, size 60 by 90 feet; cost \$15,000.

Architects Hess & Raseman have dissolved partnership, Mr. Richard Raseman continuing the successful business in the firm's old offices in the Buhl building. Mr. Julius Hess retires to take charge of the Sulphite Fiber Works in Port Huron, Michigan.

Evanston, Ill.—Architect S. A. Jennings reports: Two-story frame house for C. P. Walcott, all modern improvements, to be built on Judson avenue; cost \$5,200. Two-story brick-veneered double residence for Fred Chapin, with all modern improvements, to be built on Chicago avenue; cost \$15,000. A two-story and attic brick-veneered residence on University place, for Thomas Talbot; cost \$6,500. Extensive alterations on residence of Dr. P. L. McKinney, at South Evanston; cost \$5,000. Alterations on L. D. Parker's residence, corner of Maple avenue and Dempster street; cost \$5,000. A large frame double house for Mrs. M. E. Wilson, of Aurora, Illinois, to be built on Sheridan Drive, Evanston, Illinois; cost \$15,000. Frame residence for Mrs. Olive Beason, on Orrington avenue; cost \$5,500. Extensive alterations on the residence of Volney W. Foster, on Greenwood boulevard, with all modern improvements; cost \$6,000. A Swiss villa design, combination brick and frame, for Edward L. Brooks, to be built at "Ingleside," Evanston; cost \$7,500. A two-story brick and frame residence, for W. W. Catlin, with all modern improvements, also to be erected at "Ingleside," Evanston; cost \$8,000. Alterations on the residence of A. J. Brown, on Oak avenue; cost \$5,000. Addition to livery stables owned by Andrew Schwall, on Orrington avenue, of brick; cost \$5,000. A double house for W. H. Bartlett, brick-veneered, to be built at Edgewater, Illinois; cost \$9,000. A double brick-veneered residence, to be built at Edgewater, Illinois, for A. A. Thomas, all modern improvements; cost \$8,000. And also a block of four two-story houses, brick construction; cost \$16,000. A two-story frame residence for William T. VanArsdale, to be built on Oak avenue; cost \$7,000. A block of eight houses, frame construction, to be built on the corner of Church street and Asbury avenue, with modern improvements; cost \$32,000. A three-story brick flat building, for John Deitmeyer, at Waukegan, Illinois; cost \$6,000.

Milwaukee, Wis.—Architects Rau & Kirsch: For Val Blatz, a double brick block; size 44 by 85 feet; cost \$12,000. For H. Weber, a brick and stone residence; size 26 by 76 feet; hardwood finish, mantels, stained and plate glass and hot-water heating; cost \$15,000. For the Public School Board, ninth ward, a brick and stone school building; size 104 by 77 feet; cost \$38,000.

New York City, N. Y.—Office building for E. L. Kellogg & Co., Educational Publishers, New York City, Wilson Eyre, Jr., Philadelphia, architect. This building has just been started on the north side of Ninth street, near Broadway, New York, on the site of one of the substantial old-time dwellings. The basement covers the entire lot and the rear and side walls are carried on steel girders and beams to give a long skylight to rear basement. The basement and first story front is to be of Indiana limestone, tool dressed, and the bay and rest of front of mottled terra cotta and brick 1½ by 12 inches; the terra cotta is to be modeled from special designs; the front slope of roof is to be of dull chocolate glaze tiles; the building is to be six stories high not including basement; the plans provide for fine plumbing, hot-water heating, electric elevator, gas and electric lighting, plate glass on entire front windows, oak and pine finish stained; a rather novel feature for such a building will be the mill construction of the floors using 6 by 18 inch, Georgia pine girders and 3-inch spruce planks for under floor finished by ¾-inch pine floor on top; seven fire-places are scattered in various parts of the building to have mantels of special design; the office furniture, partitions, etc., are also to be designed in harmony with the building. Many of the daily papers of the country have erected fine buildings for their offices, but this is one of the first to be built by the publishers of class publications. The *School Journal* and *Teachers' Institute* are two of the journals published by the owners, and are well-known as the standard educational periodicals of the United States.

Pittsburgh, Pa.—Architect J. E. Obitz: For George Schmidt, a three-story brick residence; cost \$15,000.

Architect J. W. Campbell: For the M. E. Congregation at Mansfield, Pennsylvania, a two-story church building; brick, with stone trimmings; tower, 106 feet.

Architect S. T. McClarren: For G. W. Alley, a two-story brick dwelling; size 43 by 40 feet; cost \$9,500.

Architect Kauffman has prepared plans for the Italian Catholics, for a two-story church building; to cost \$43,000.

Springfield, Ill.—Architect Geo. H. Helmle: For Z. A. Enos, block of city dwelling houses; 130 feet front, 48 feet deep, two stories and basement; pressed brick and stone, hardwood finish, wood mantels, furnace heat, plate glass; cost \$16,000. For Ihlenfeld & Weidlock, two-story music hall; size 60 by 157 feet; pressed brick and stone, plate glass, stage, etc.; cost \$18,000. For J. H. Schuck, remodeling store building; size 40 by 157 feet; plate glass and pressed brick front; cost \$6,000.

St. Cloud, Minn.—Architect A. E. Hussey: For John Leisen, a two-story brick residence, size 30 by 75 feet; cost \$8,000. For Theodore Bruener, a two-story brick store building; granite trimmings, size 27 by 80 feet; cost \$6,000. For John Heiman, a two-story dwelling, brick, size 27 by 80 feet; cost \$5,000. For the State Normal School, a two-story addition, brick and granite, size 50 by 84 feet; cost \$20,000. For J. W. Close, Little Falls, Minnesota, a two-story brick store, size 25 by 102 feet; cost \$9,000.

St. Louis, Mo.—Architect L. C. Miller: For H. Frank, Natchez, Mississippi, an office building, brick and stone, size 50 by 90 feet; cost \$25,000.

Architect A. M. Baker: For Miss C. Schulte, a three-story store and flat building, size 33 by 62 feet, brick and stone; cost \$10,000. For F. R. Dun, a two-story residence, pressed brick, size 34 by 55 feet, slate roof; cost \$10,000. Architects Shepley, Rutan & Coolidge: For the Knox estate, a block of four-story stores, brick and terra cotta, size 130 by 185 feet; cost \$125,000.

Architects James Stewart & Co.: For James Stewart, six three-story dwellings, brick and stone, size 108 by 61 feet; cost \$33,000.

Architects Beinke & Wees: For Mrs. H. Peating, a two-story brick dwelling, size 36 by 39 feet; cost \$17,500. Also for Mrs. Schulmann, two-story residence, size 30 by 32 feet; cost \$5,000.

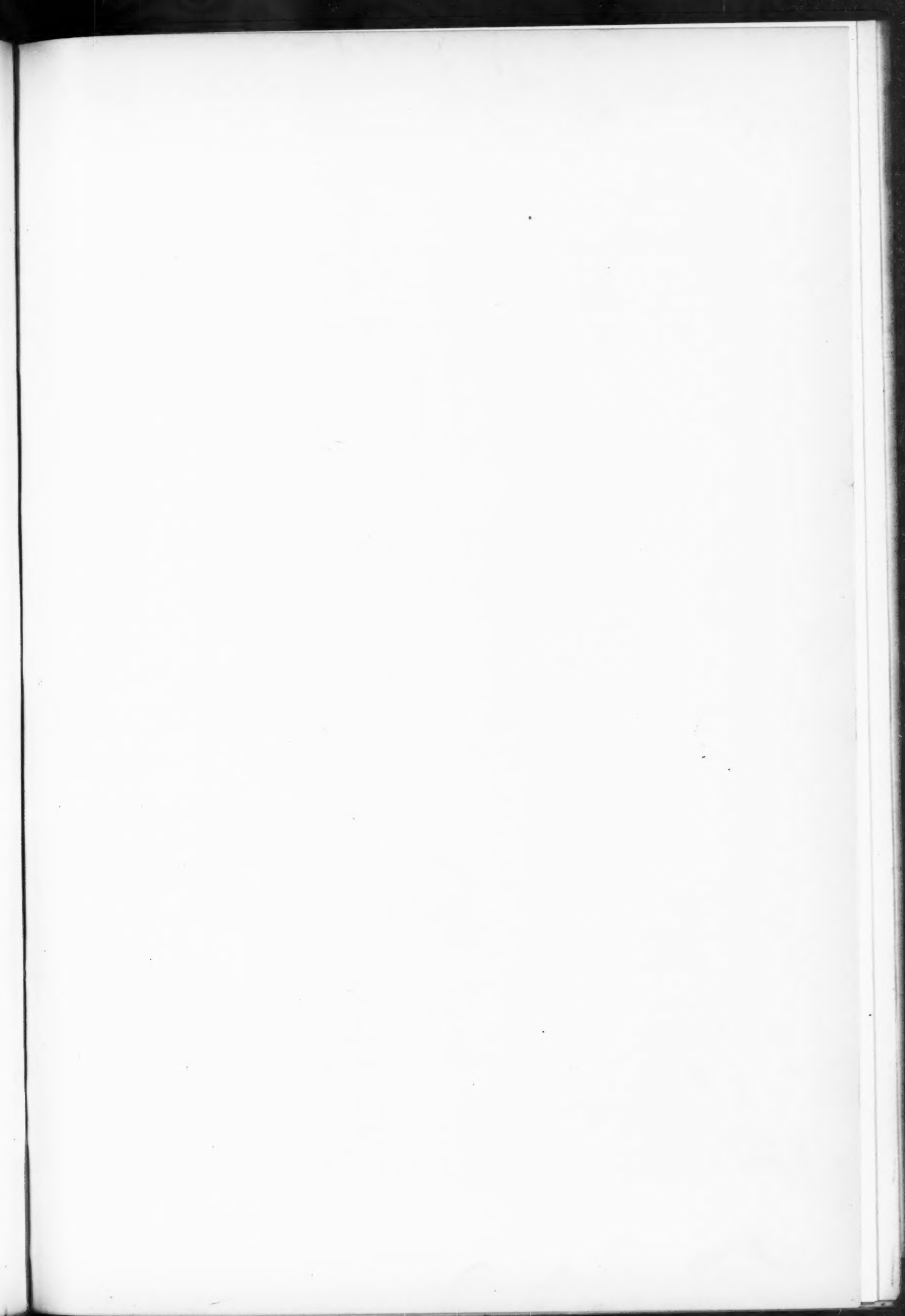
Architect M. T. O. Allardt: For Thomas Ayryl, a two-story flat building, size 44 by 66 feet; cost \$6,000.

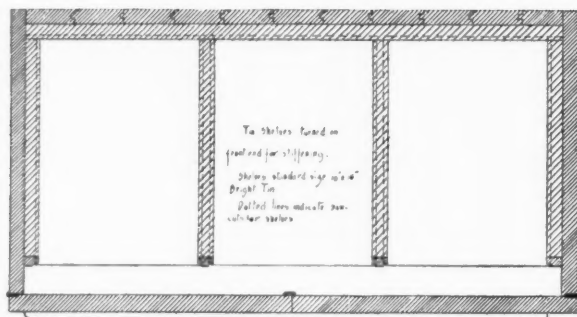
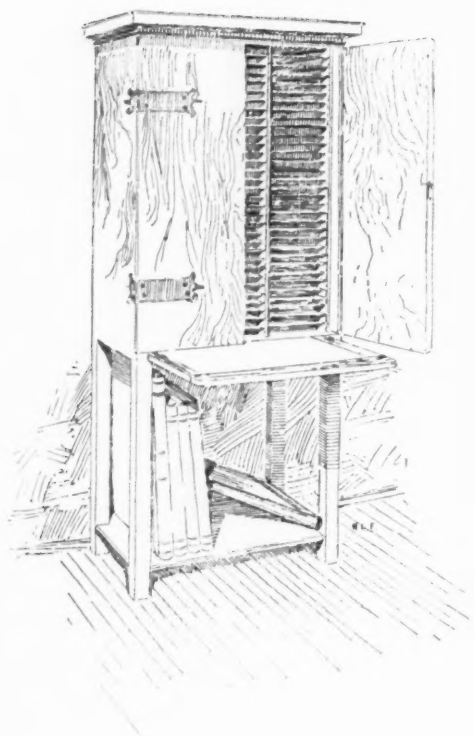
Architects Matthews, Clarke & James: For Henry Tatum, a three-story dwelling, size 32 by 61 feet, brick and stone; cost \$10,000.

St. Paul, Minn.—Architect L. D. Cushing reports plans for a five-story steel construction building on the corner of Cushing and Robert streets, to be erected by the Boston Northwest Real Estate Company, at a cost of about \$80,000; the façades will be of buff brick, with copper bay; the building has a frontage of 100 feet on each of the streets named; it will be occupied by a dry goods firm, and will be fitted with all modern conveniences. The same architect is also drawing plans for a building with a frontage of 25 feet on Robert street and 50 on Sixth, running around the building just described; it will be four stories in height, and will be of stone, brick and iron.

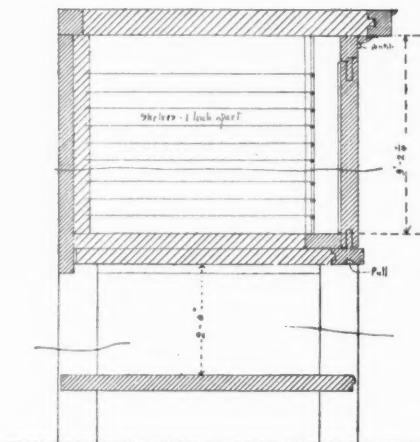
H. M. Bylesby is having plans drawn for a row of two-story brick and stone dwellings, on the west side of St. Albans street between Summit and Grand avenues; to cost about \$25,000.

W. J. Dyer & Bro. will erect a five-story store building, of steel and brick, on Fifth street between Wabasha and St. Peter streets; it will be 90 by 150 feet in dimensions, and will be fitted up with the usual modern appurtenances.





Plan.



Quartered Oak

White Pine

Plates classified and put in in Architect's wrapper, labelled as shown

Scale for Details in Inches

Architectural Plate Case

Will. L. Fuchs, Architect.

Buffalo, N.Y.

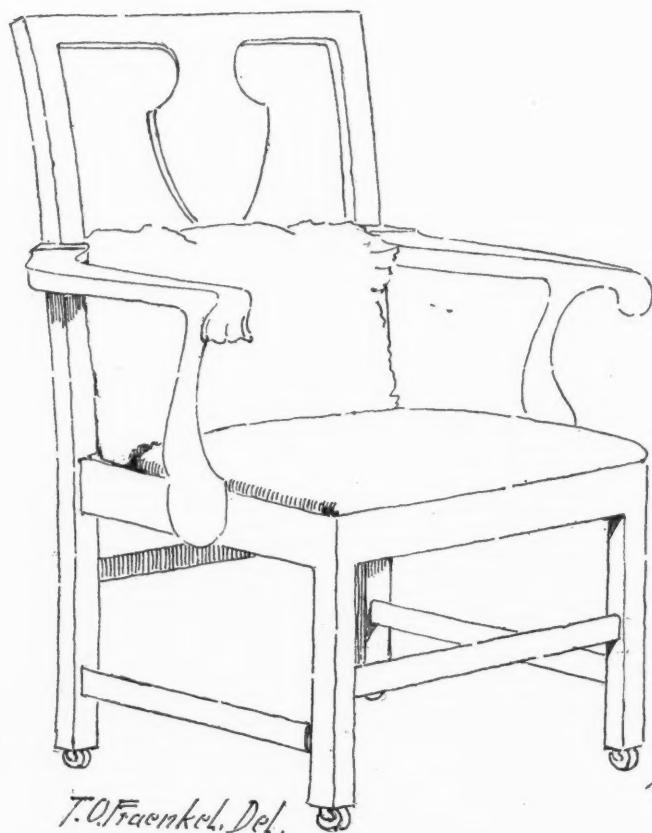
Section.

General Washington Chair
from Mt Vernon. Owned
by Mrs A.D. McLeod. of
Alexandria Va.

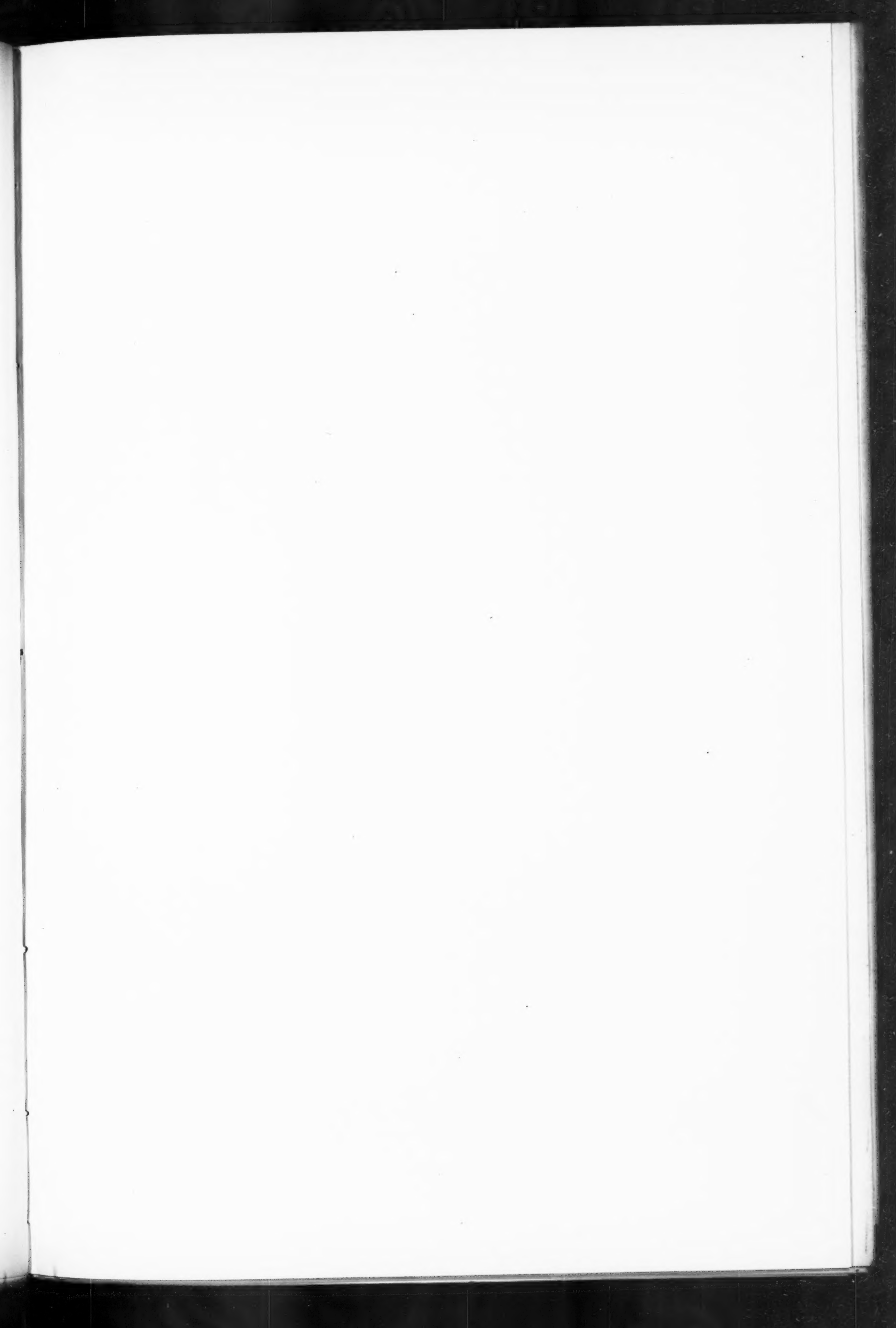


T.O. Faenkel, Del.

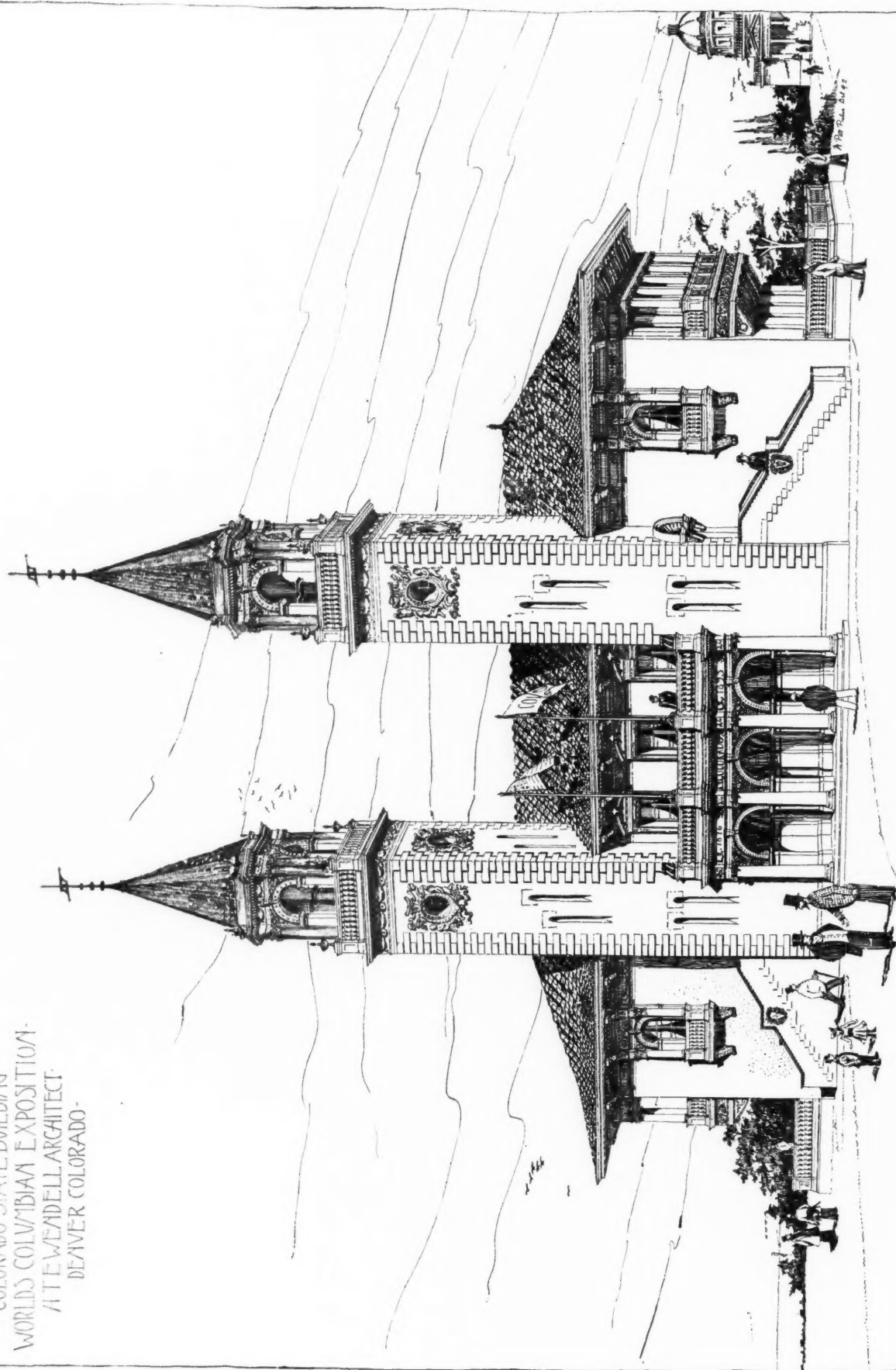
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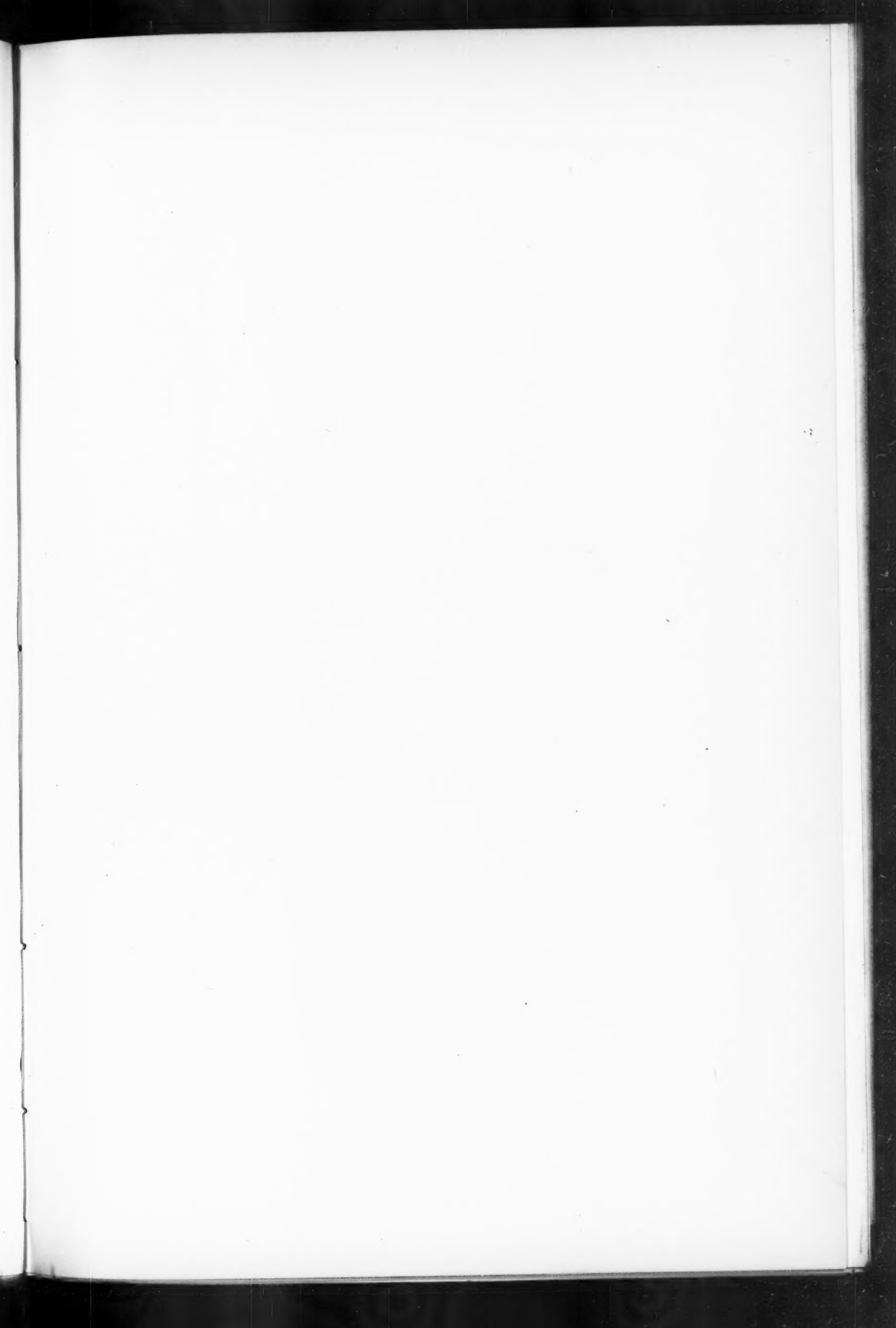


T.O. Faenkel, Del.

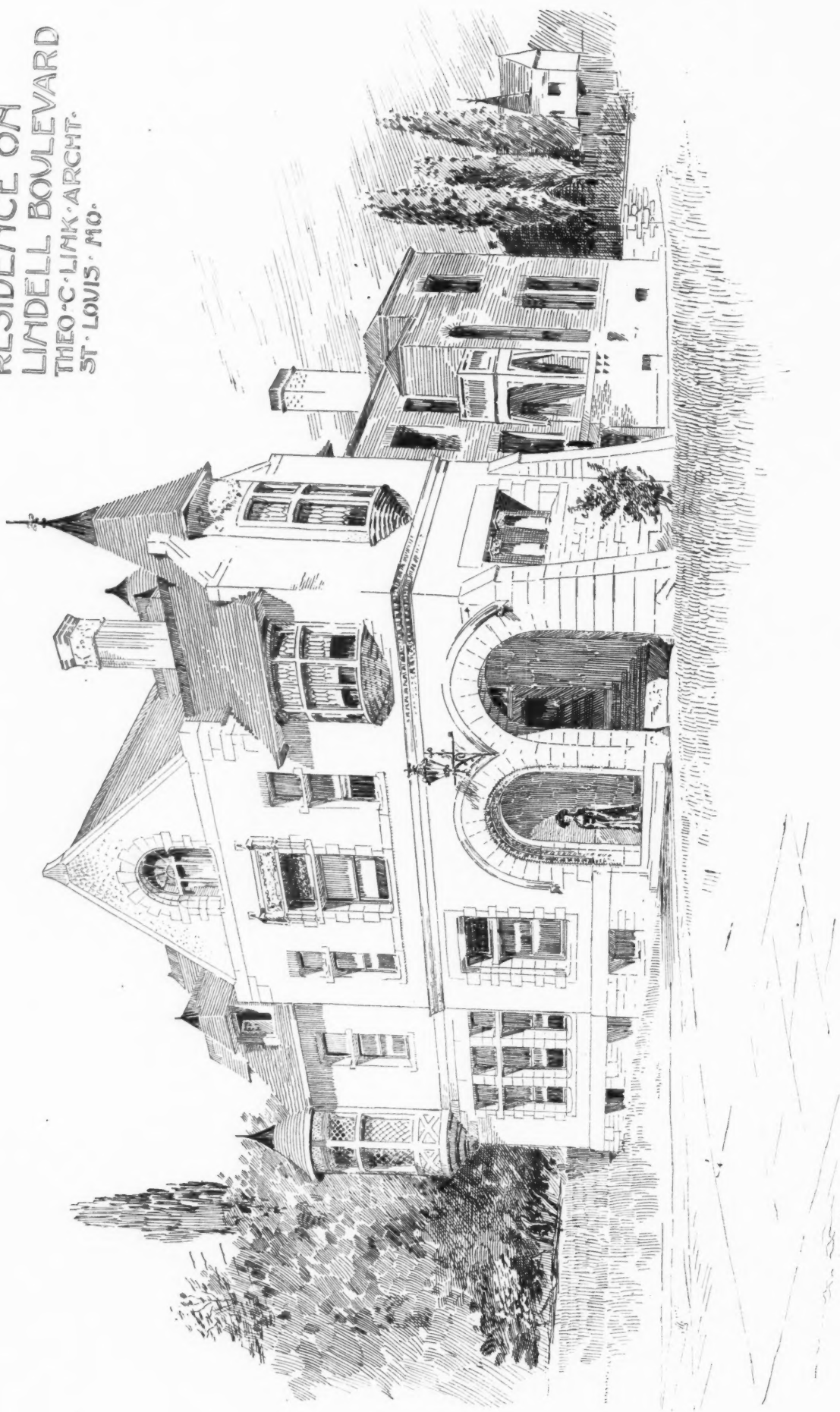


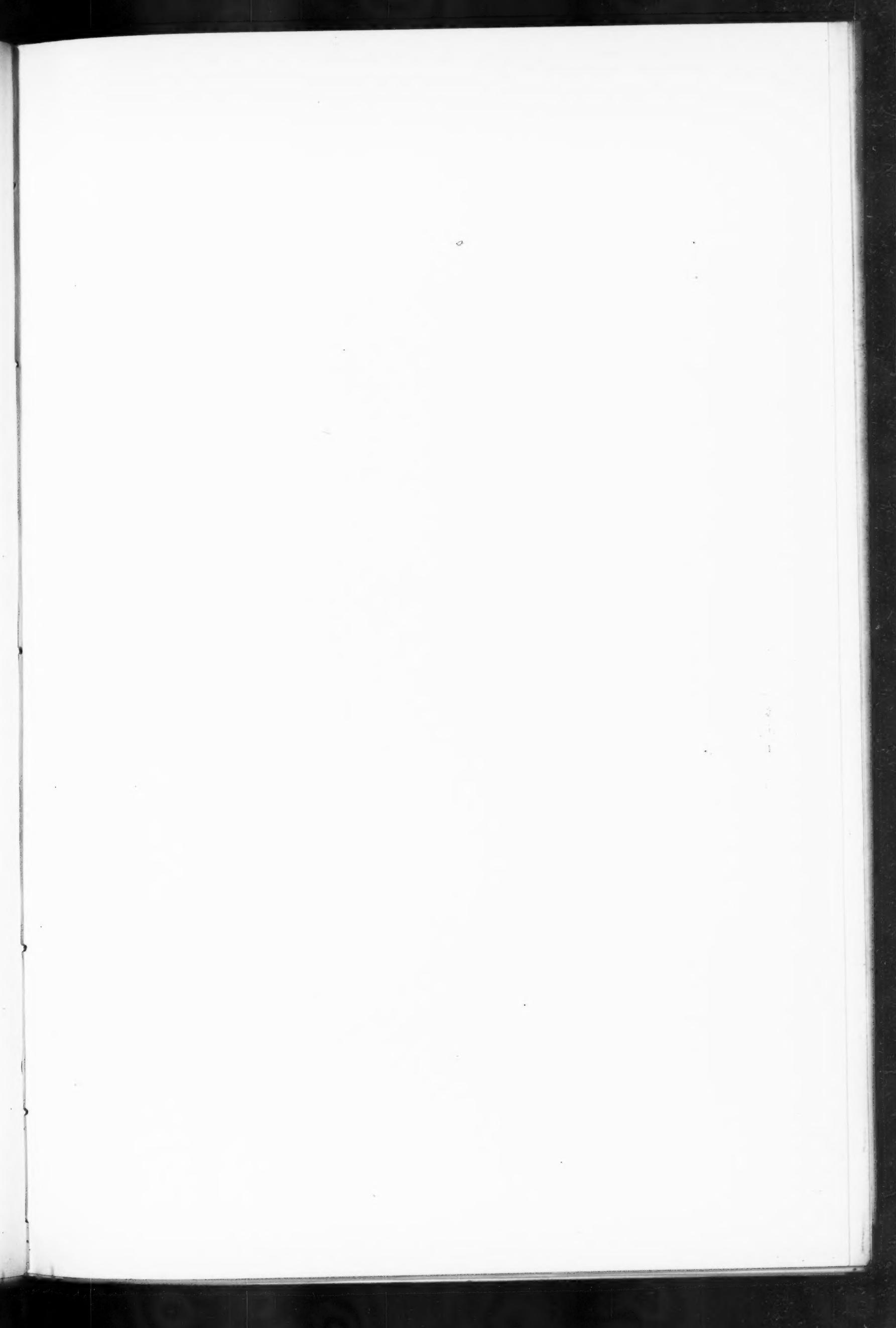
COLORADO STATE BUILDING
WORLD'S COLUMBIAN EXPOSITION
ATTENUE/DELL ARCHITECT
DENVER COLORADO

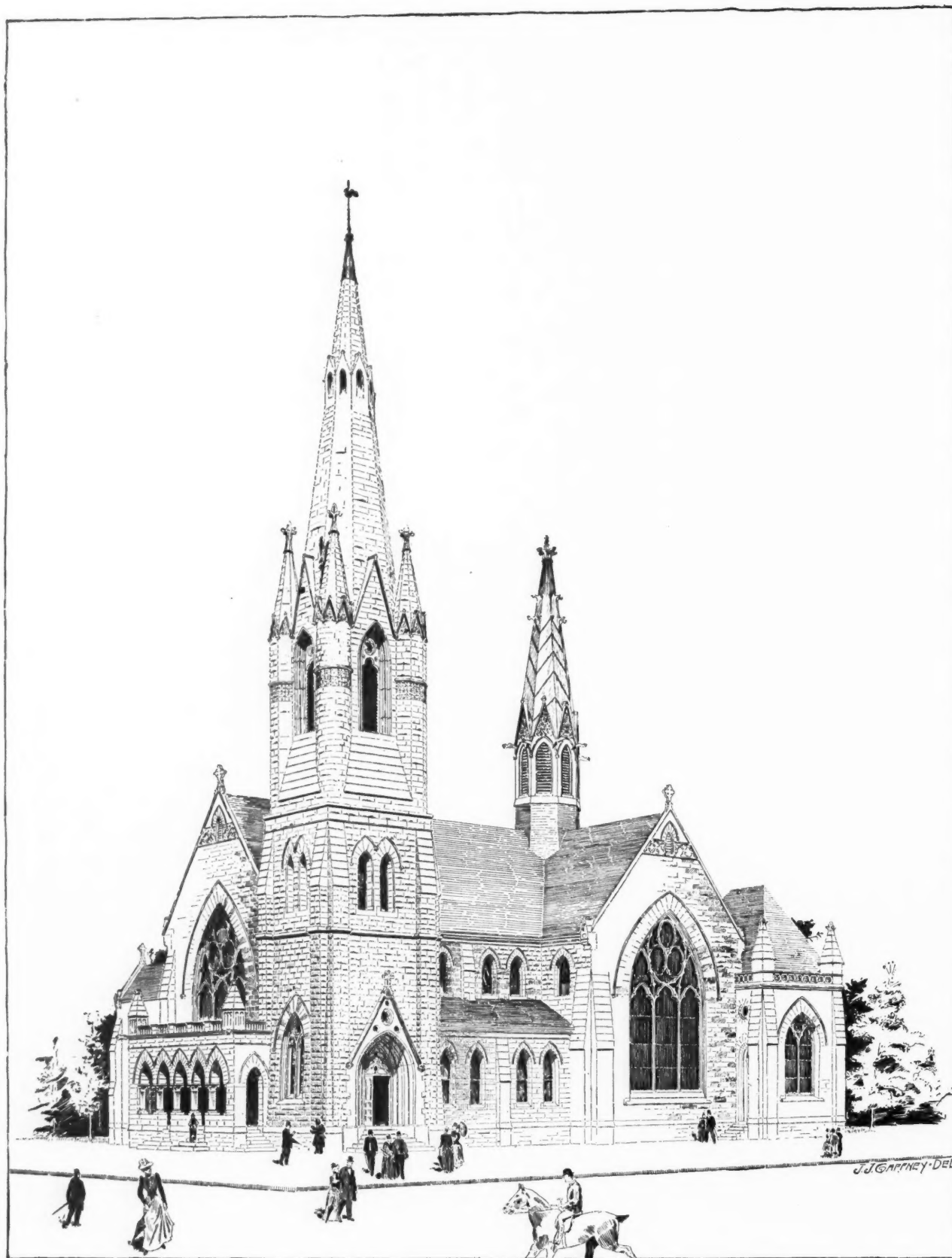




RESIDENCE ON
LINDELL BOULEVARD
THEO. C. LINK ARCHT.
ST. LOUIS, MO.

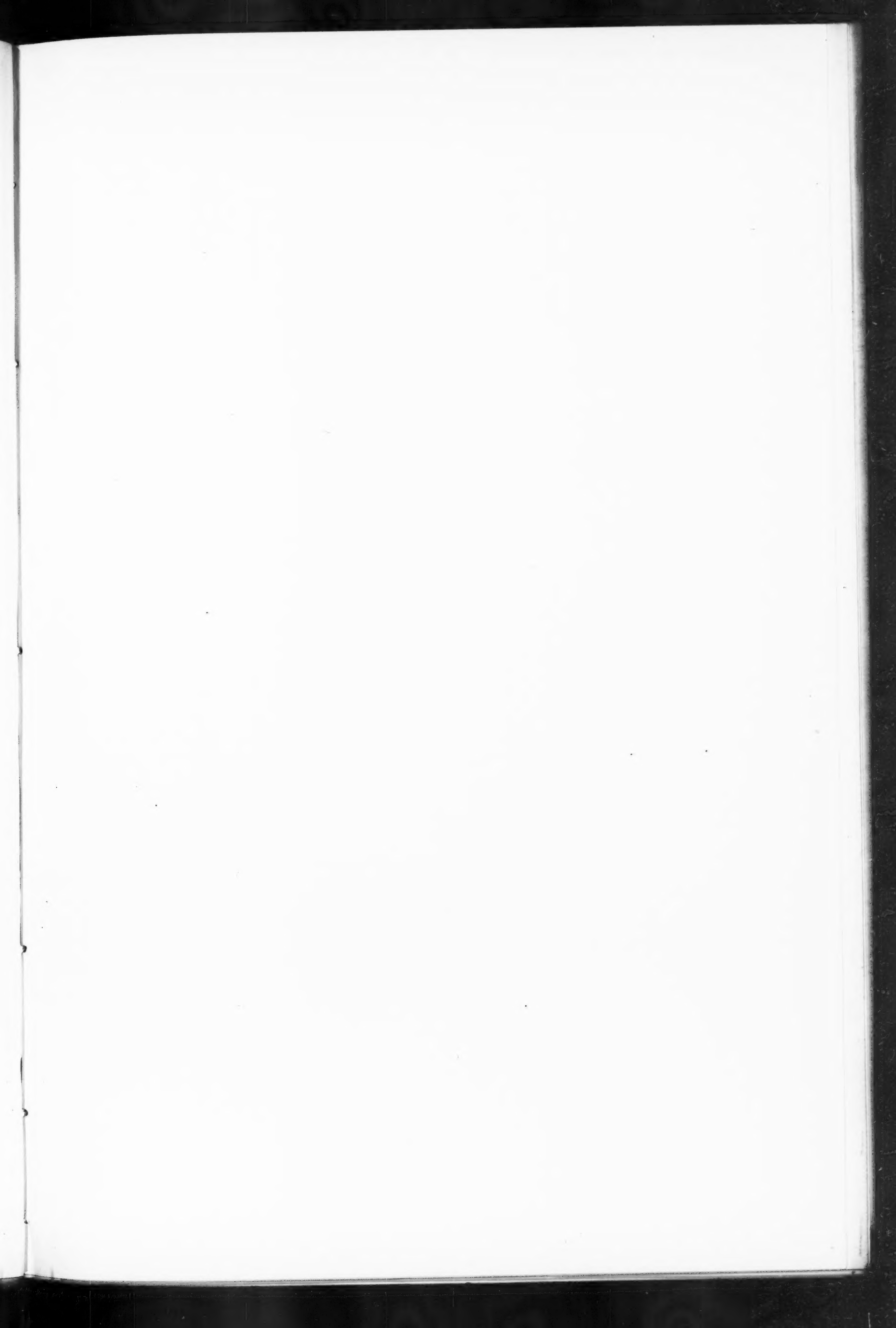


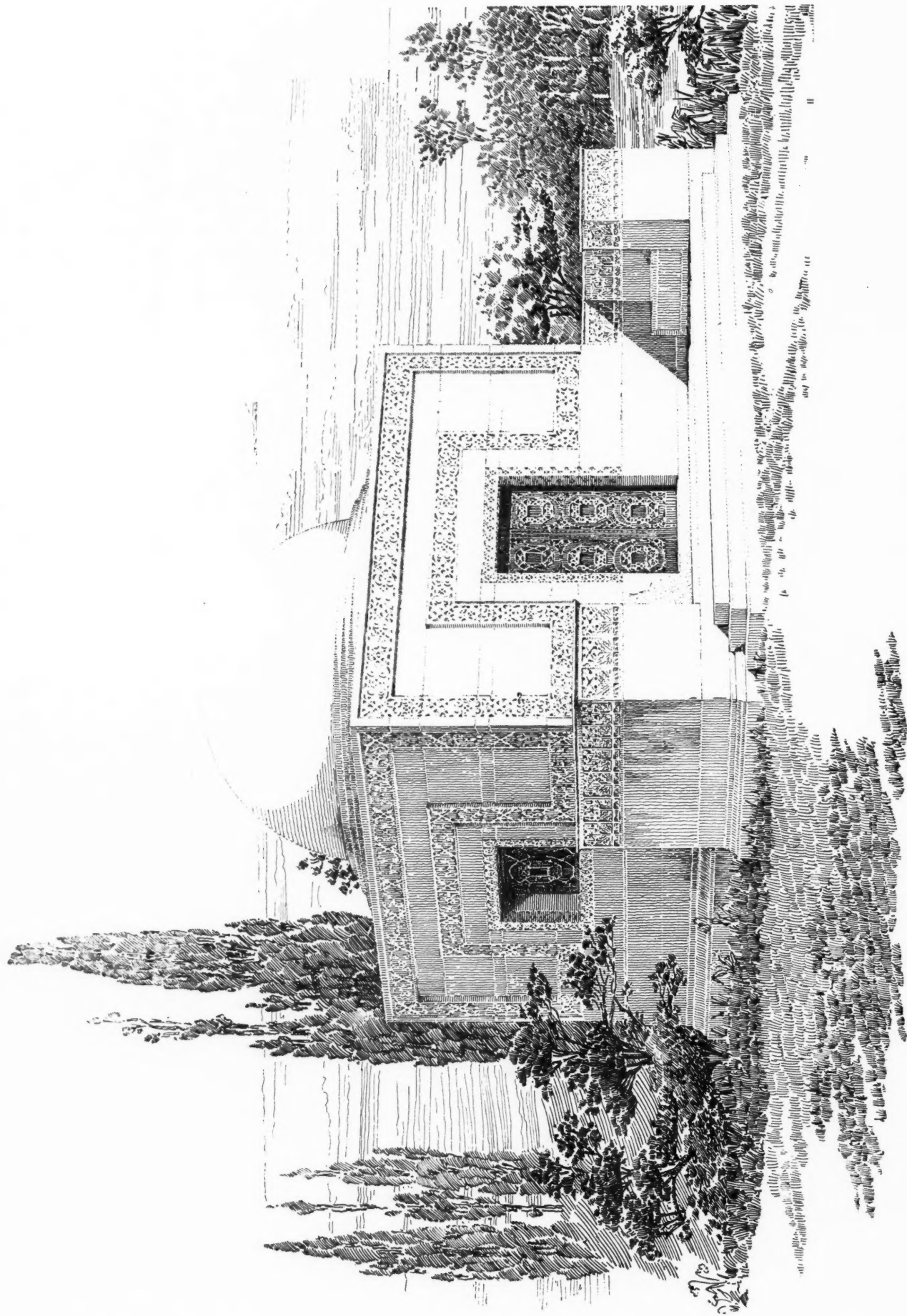




ST. PAUL'S EPISCOPAL CHURCH, NEW ORLEANS, LA.

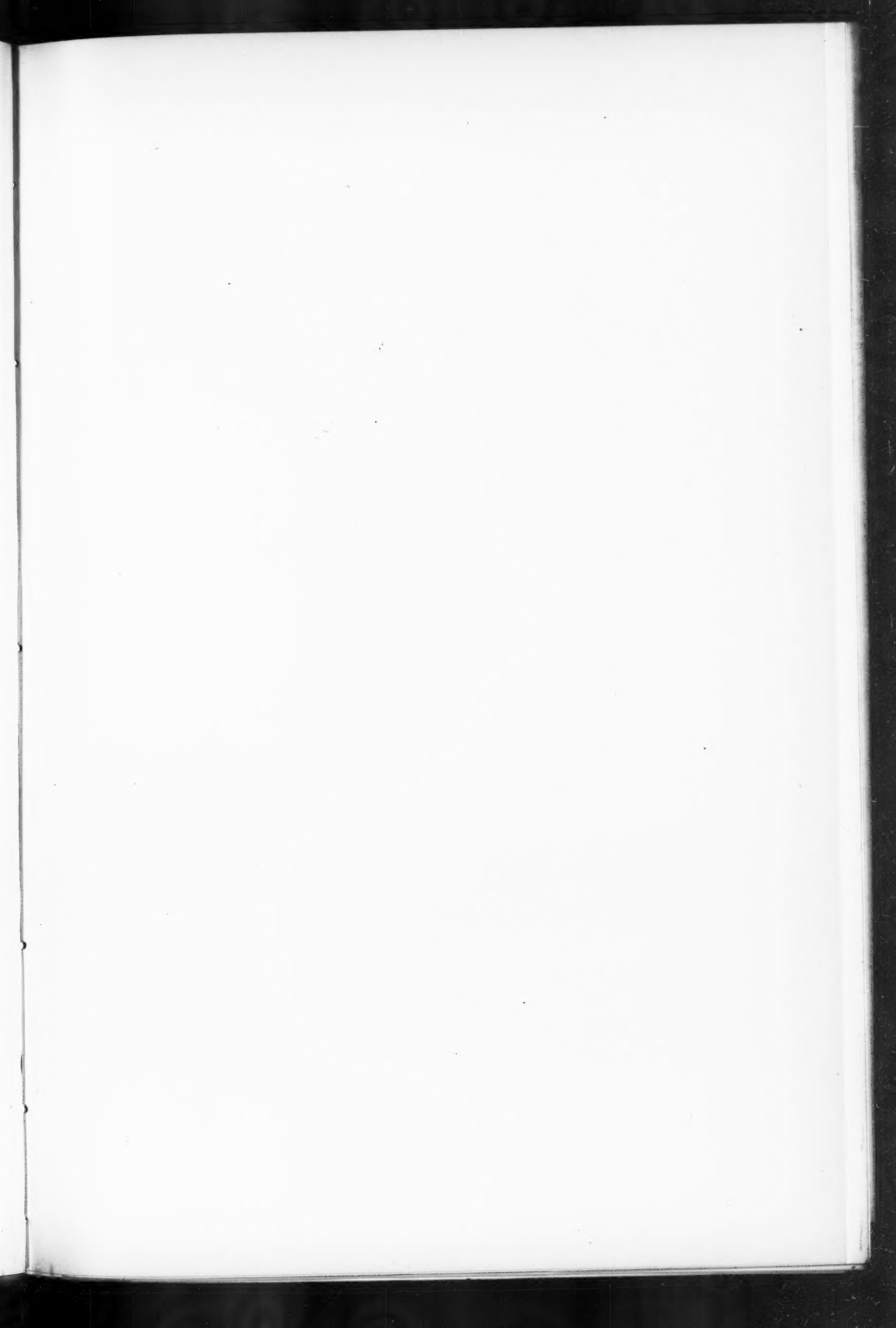
MCDONALD BROS., ARCHITECTS, LOUISVILLE, KY.

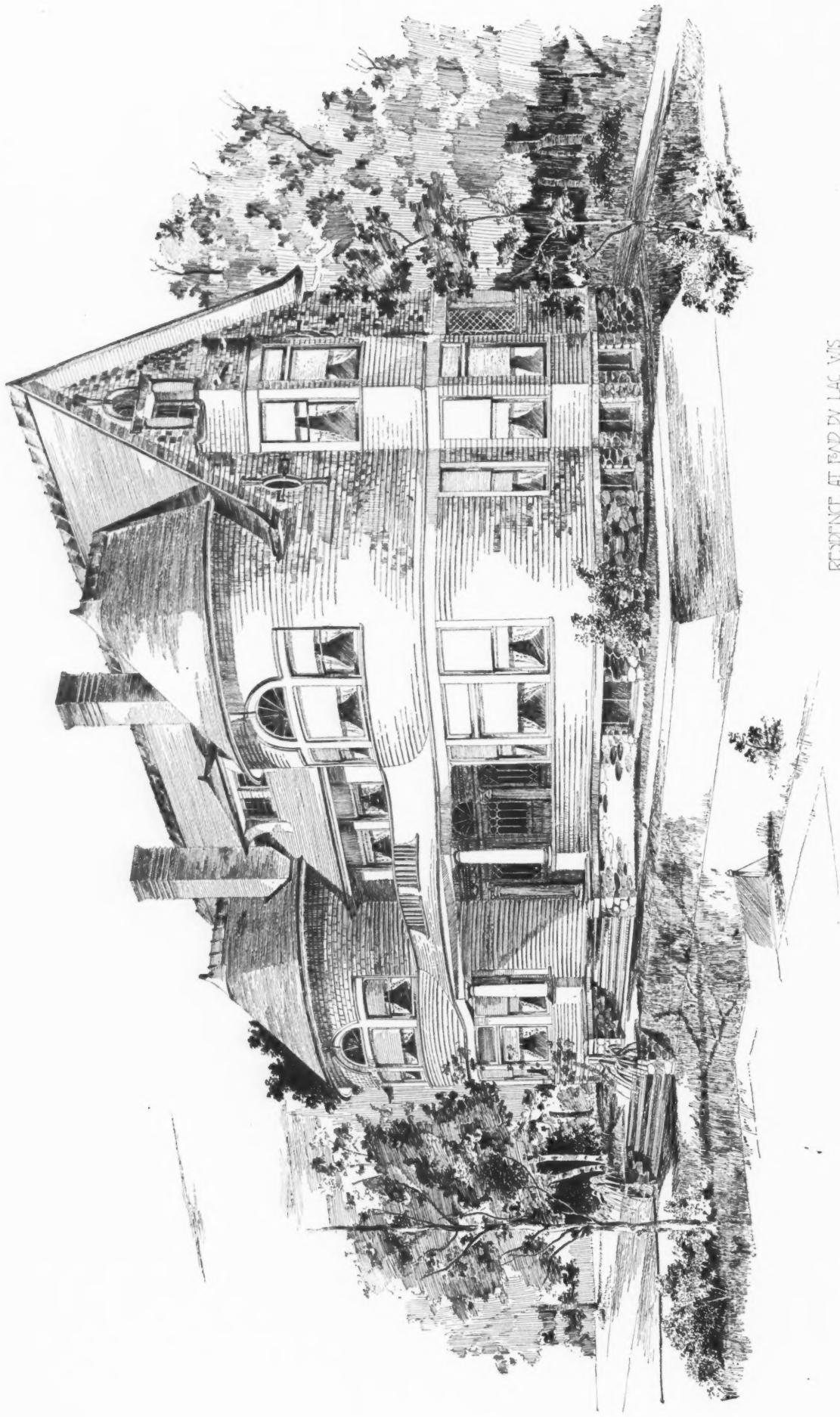




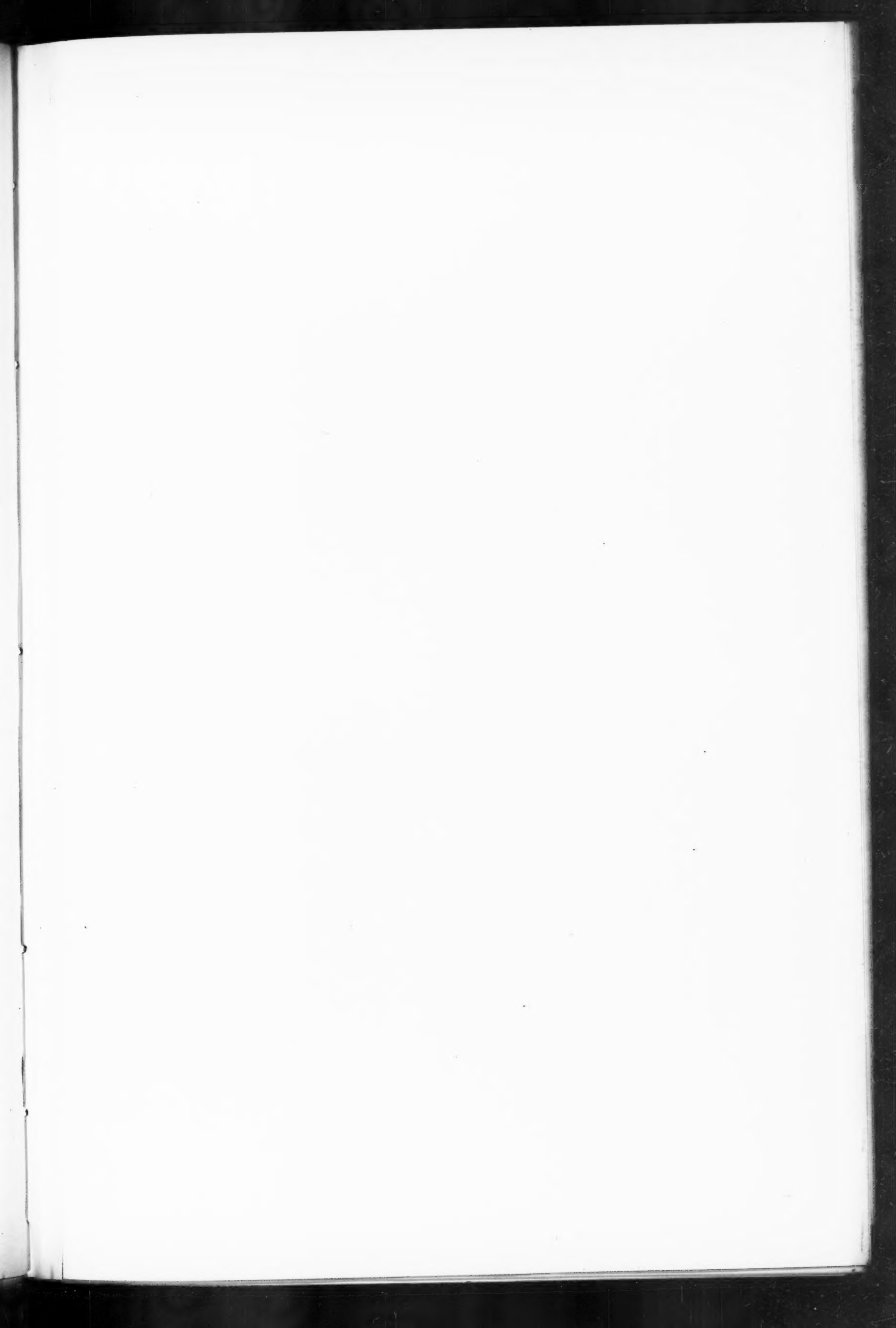
THE WAINWRIGHT MEMORIAL, ST. LOUIS, MO.

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

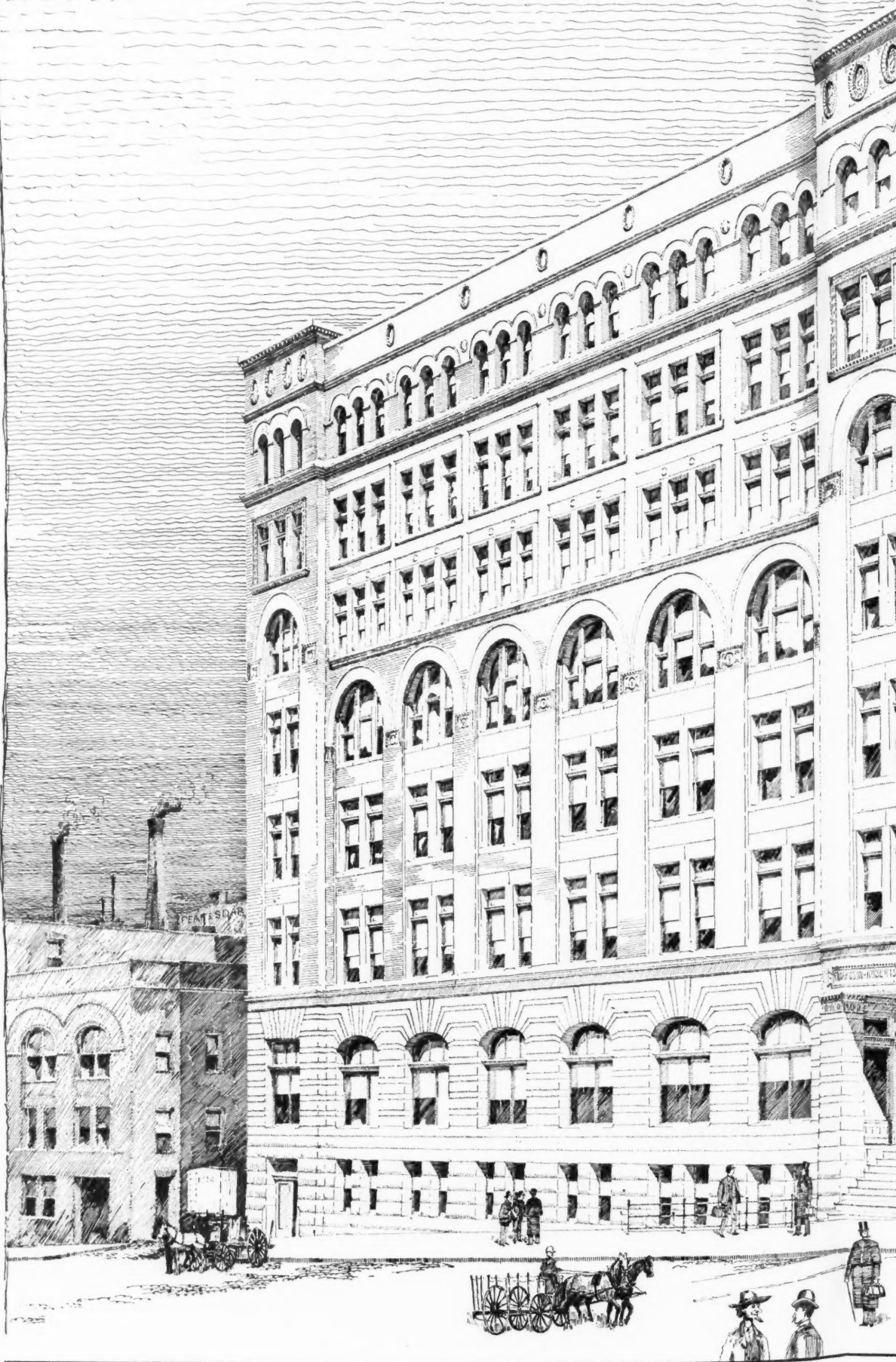


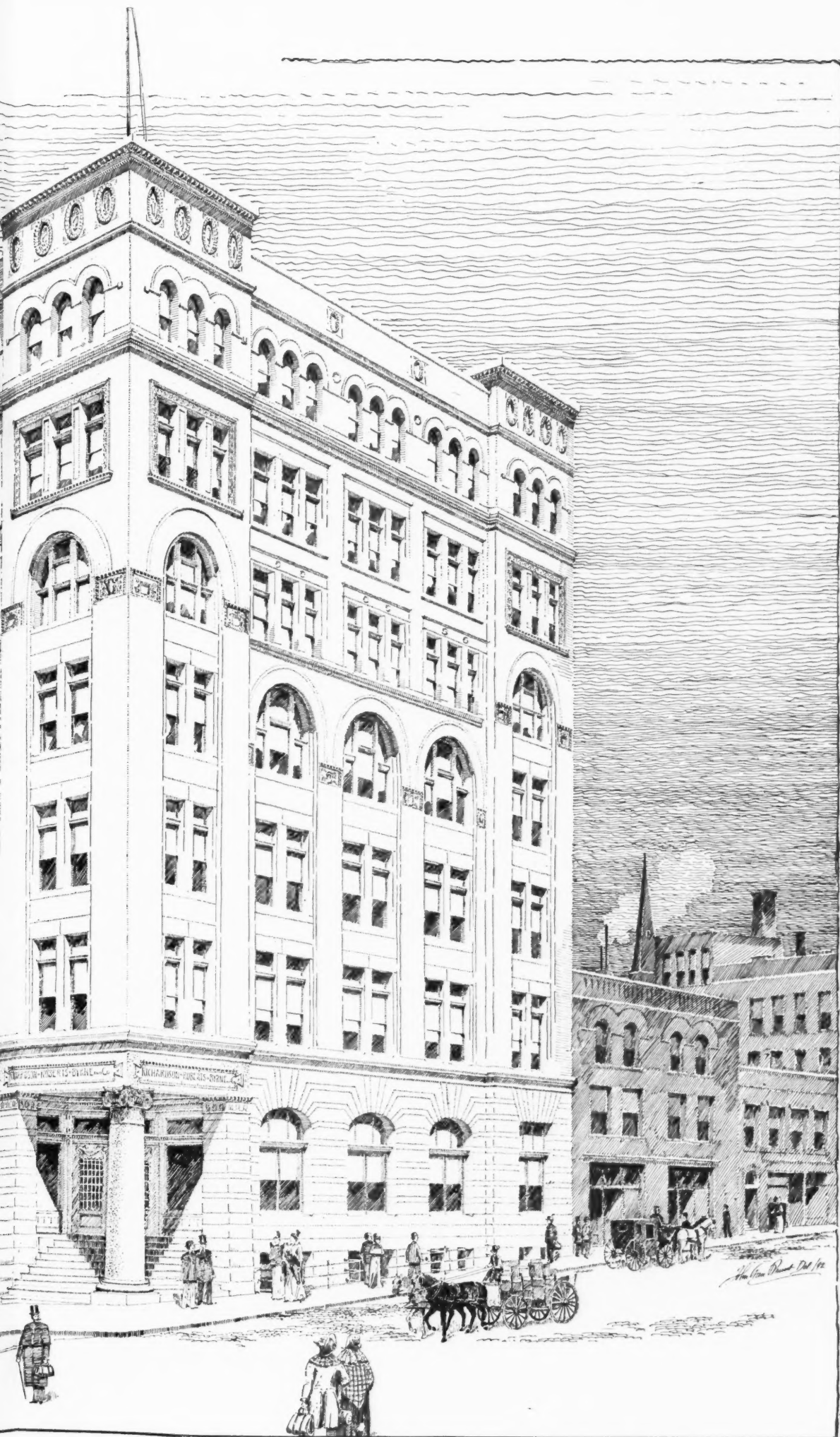


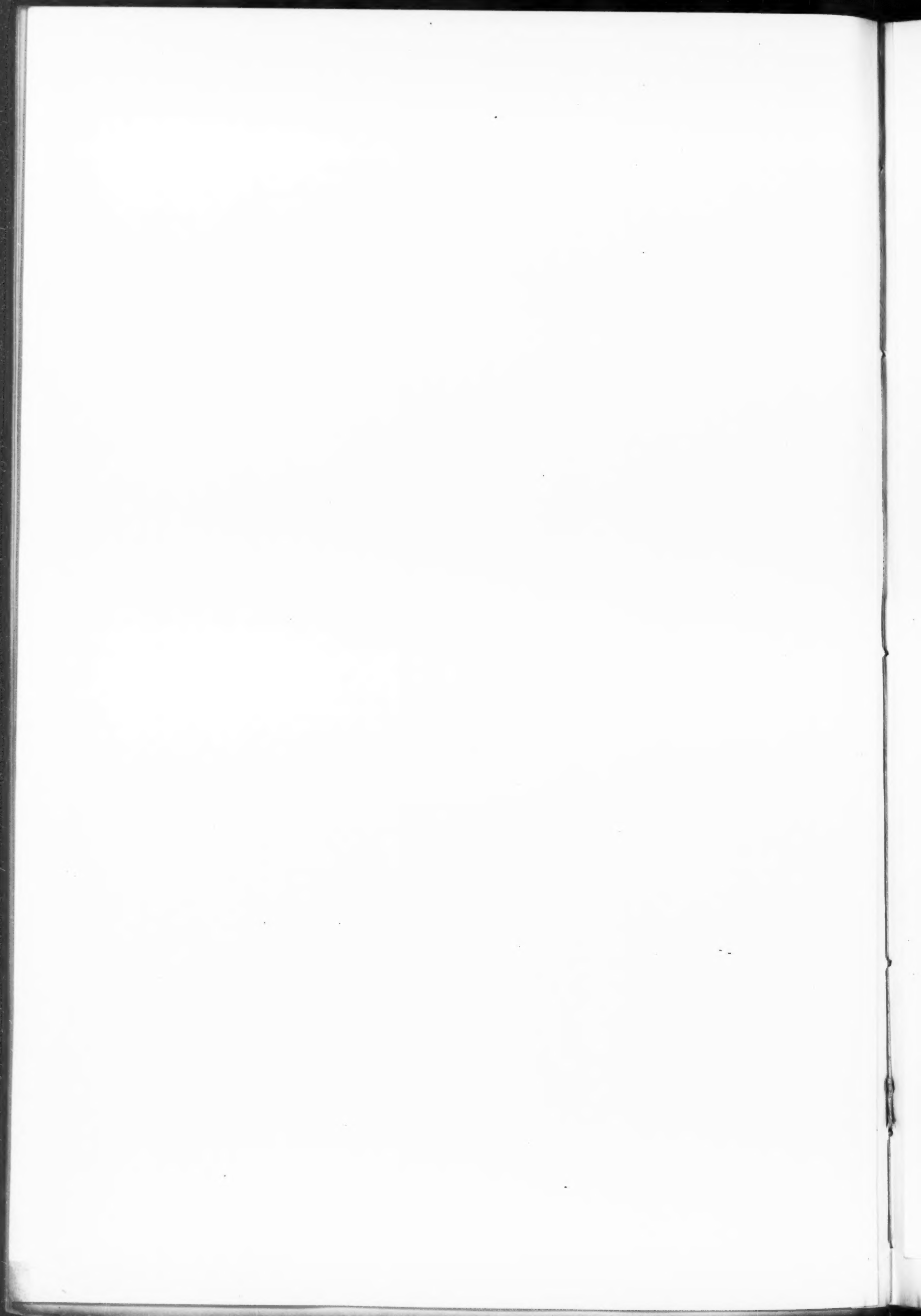
RESIDENCE AT FOND DU LAC WIS.
FOR MR. J. C. FLETCHER
ARCHT. BY J. C. FLETCHER AND SAN ARCHT. CHICAGO



RICHARDSON-ROBERTS-BYRNE AND CO.
WHOLESALE DRYGOODS HOUSE - 1892 -
ECKEL AND VAN BRUNT - ARCHT^s. ST. JOSEPH, MO.









RESIDENCE OF H. A. KNOTT, BUENA PARK, CHICAGO.

J. L. SILSBEE, ARCHITECT.



RESIDENCE OF R. CONKLIN, KANSAS CITY, MISSOURI.

VAN BRUNT & HOWE, ARCHITECTS.

INLAND ARCHITECT PRESS.

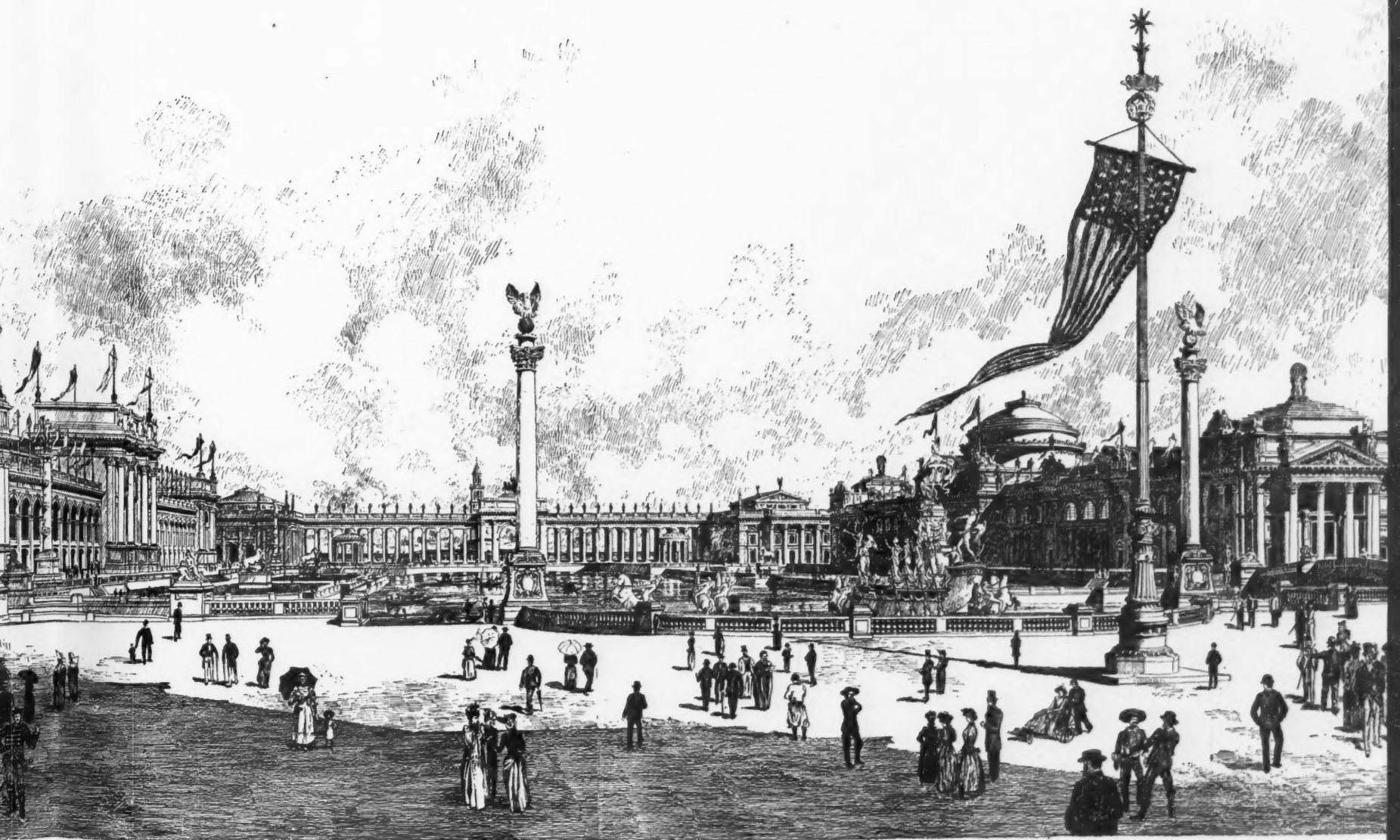


Electricity Building.

Manufactures and Liberal Arts Building.

From Official Drawing by H. G. Ripley.

GENERAL VIEW OF COURSE



Peristyle, Casino and Music Hall.

Fountain.

OF COURT, LOOKING TOWARD THE LAKE FROM ADMINISTRATION BUILDING, WORLD'S COLUMBIAN EXPOSITION, CHICAGO, 1892.
DEPARTMENT OF CONSTRUCTION, MAY, 1892.



Fountain.

ATION BUILDING, WORLD'S COLUMBIAN EXPO
MAY, 1892.

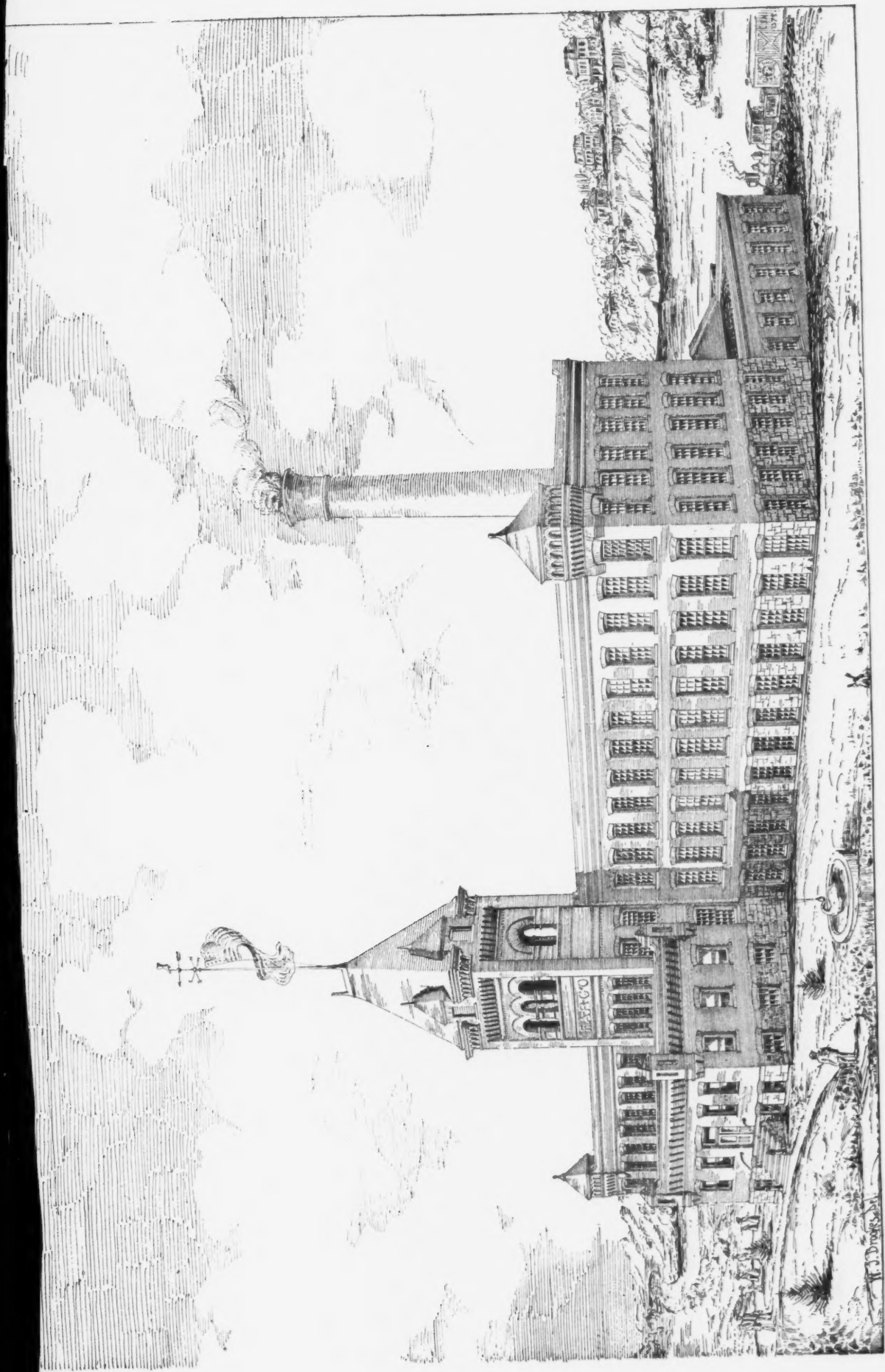


Agricultural Building.

Machinery Hall.

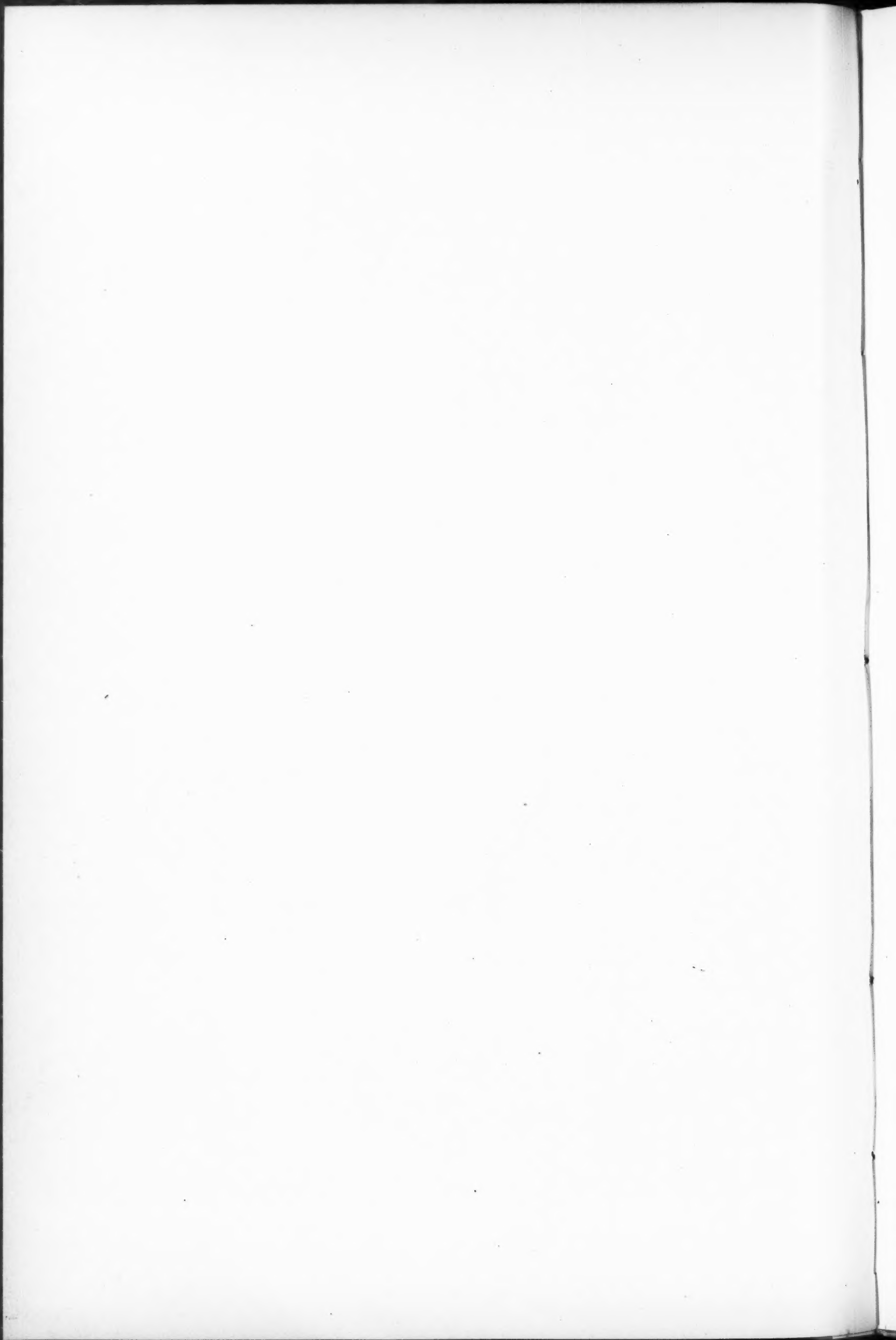
THE INLAND ARCHITECT AND NEWS RECORD.
VOL. XIX. No. 4.

N EXPOSITION, CHICAGO.

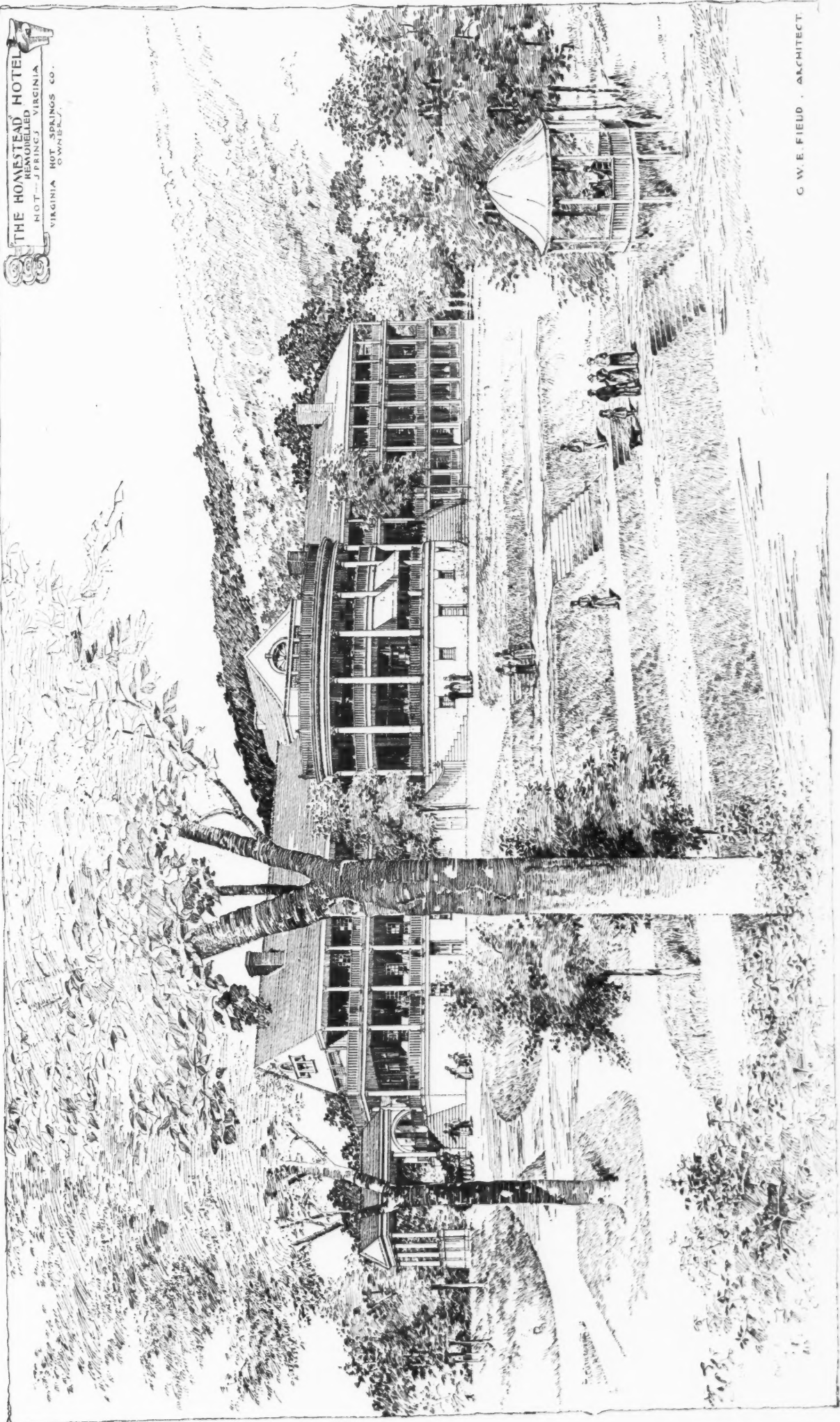


MANUFACTURING BUILDING FOR C. H. FARGO & CO.

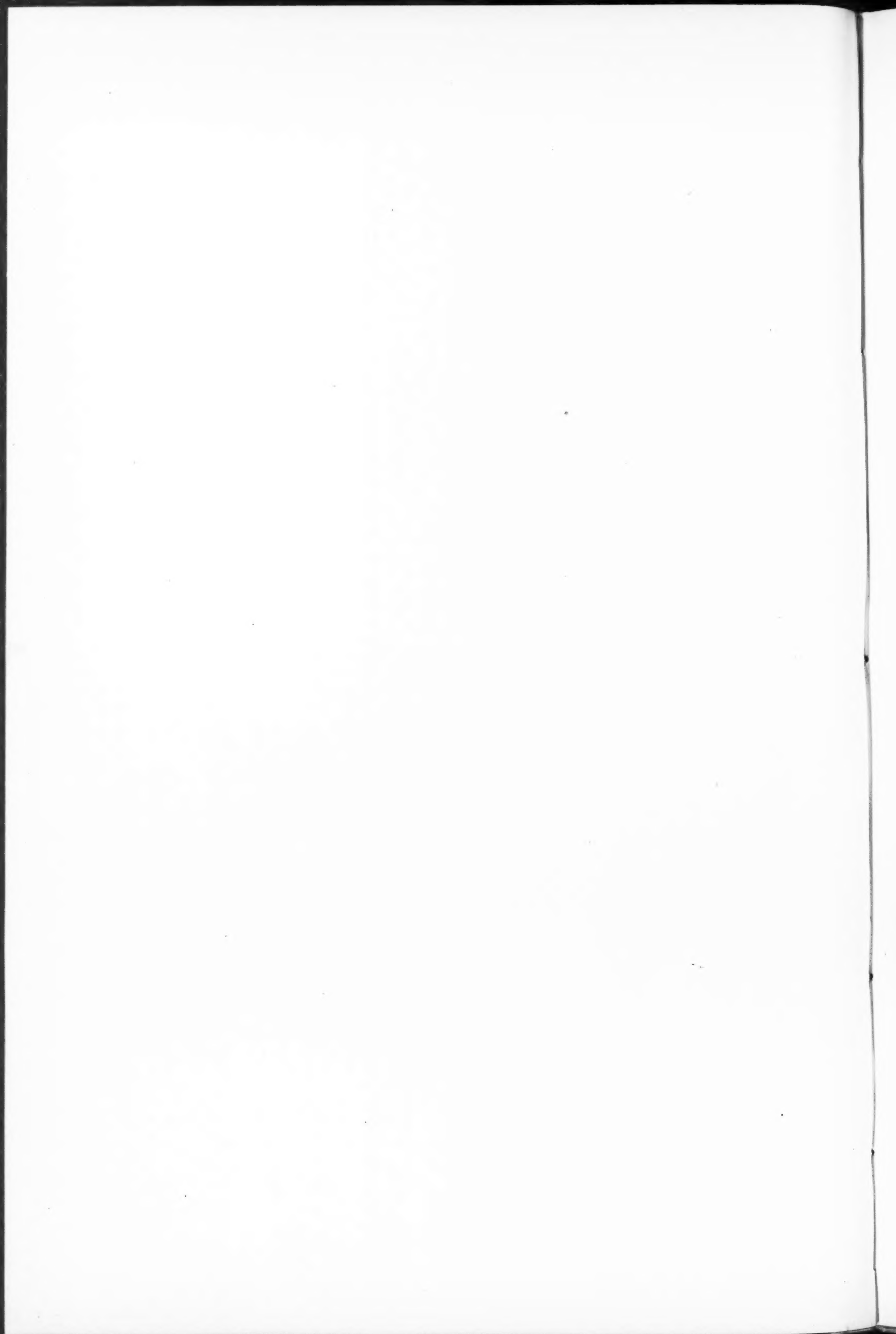
L. B. DIXON, ARCHITECT, CHICAGO.



THE HOMESTEAD HOTEL
RENOVATED
HOT-SPRINGS VIRGINIA
VIRGINIA HOT-SPRINGS CO.
OWNERS



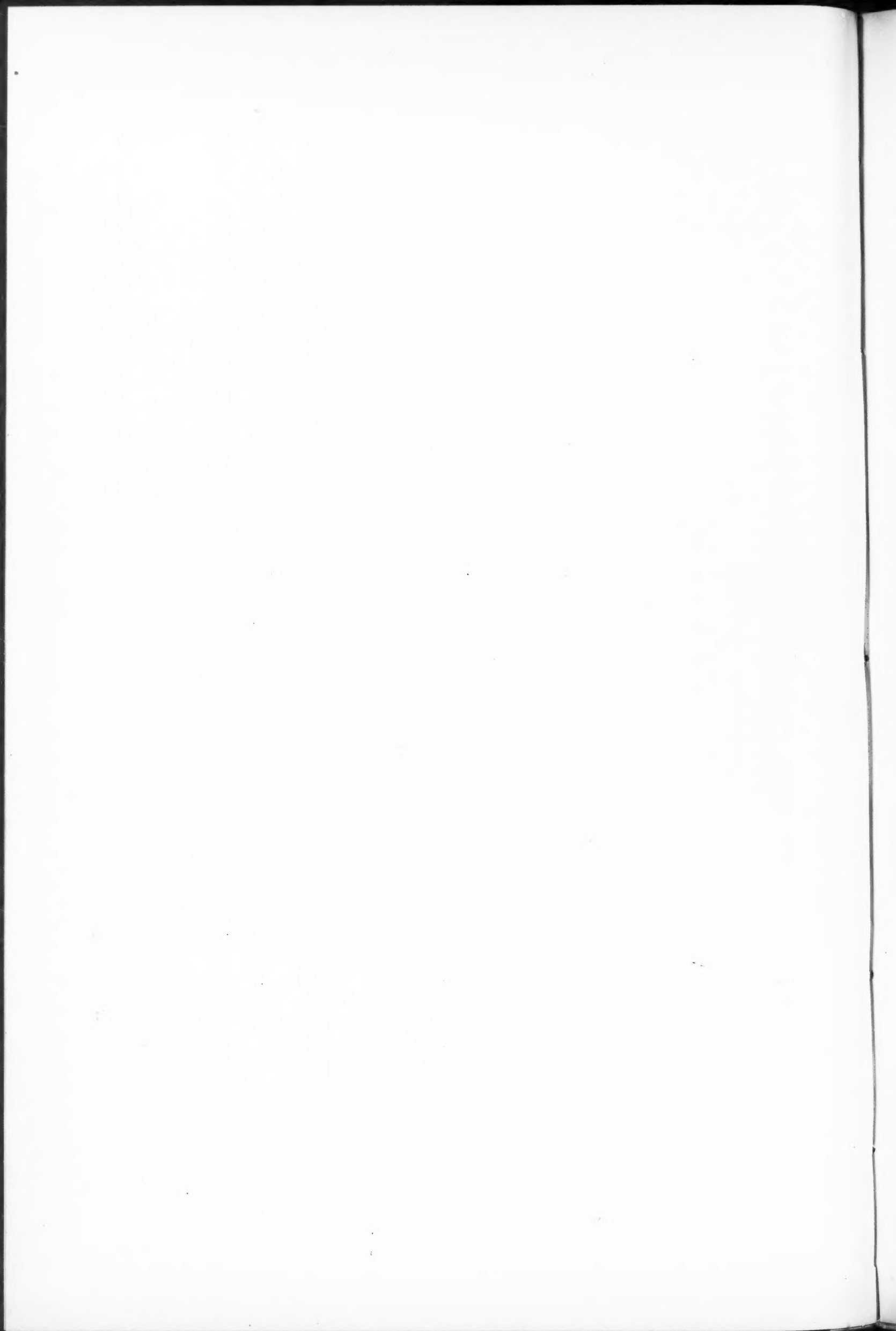
G. W. E. FIELD - ARCHITECT





Design for
Floyd County Court House
Rome, Ga.

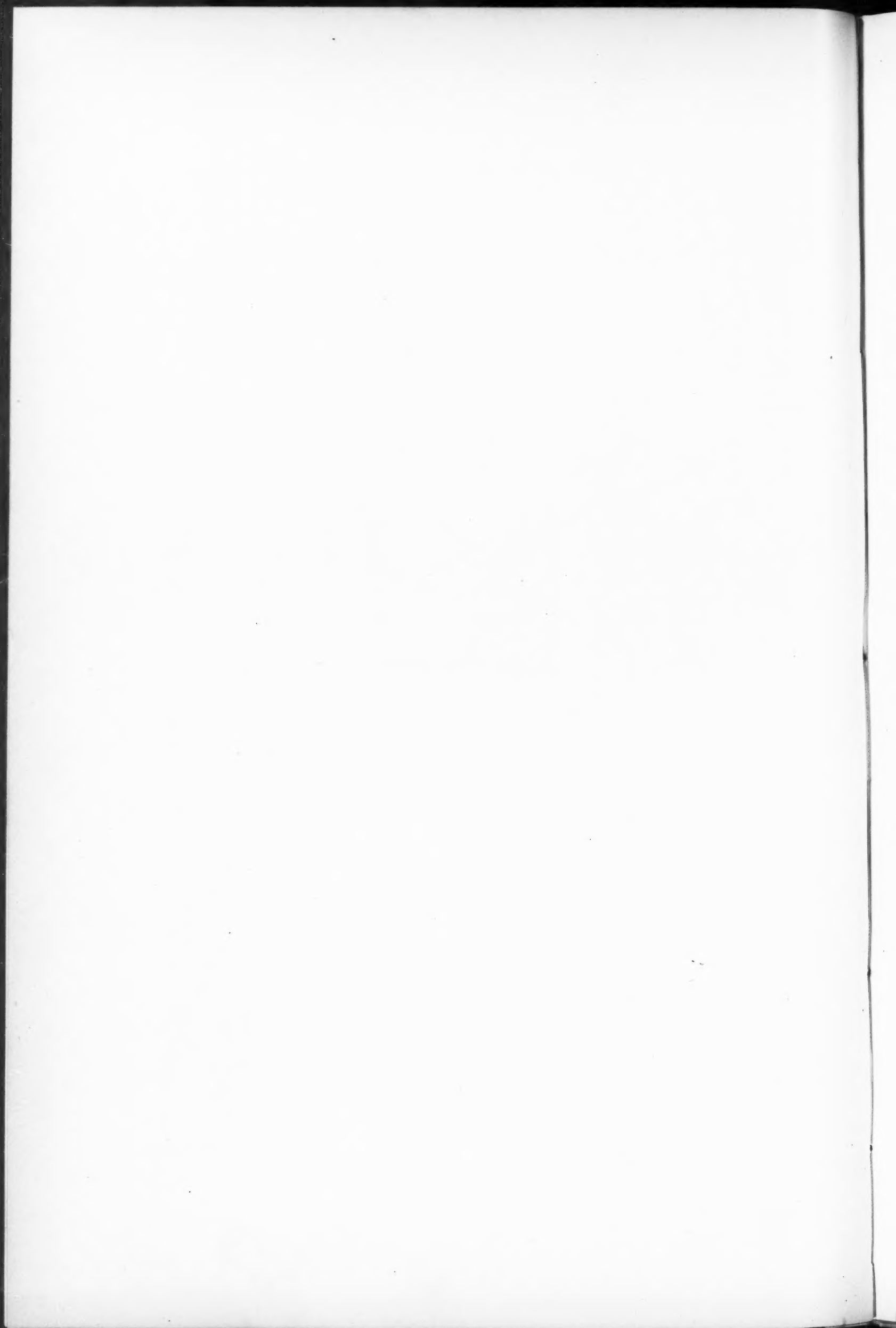
Bruce & Morgan Architects
Atlanta, Ga.

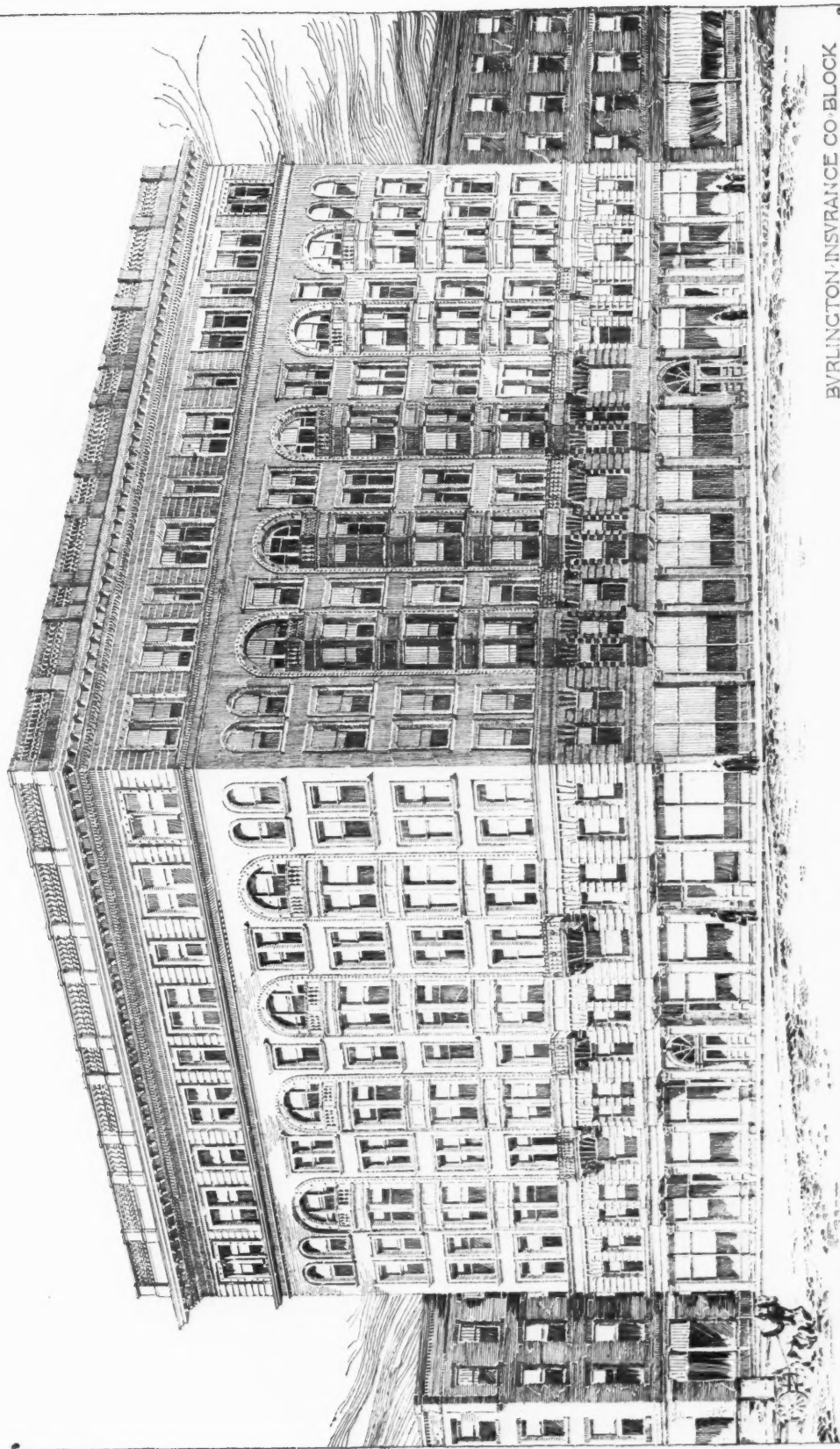


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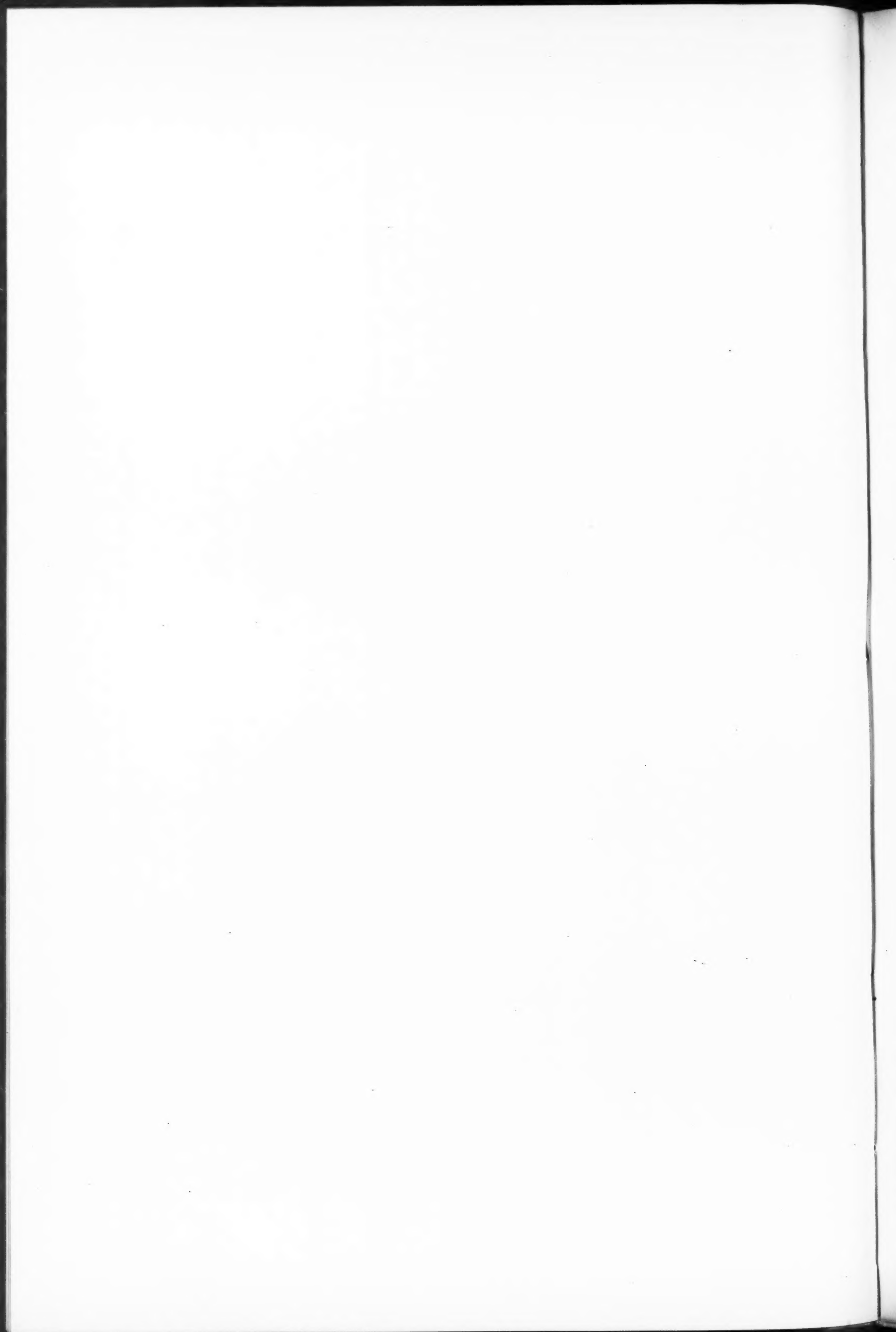


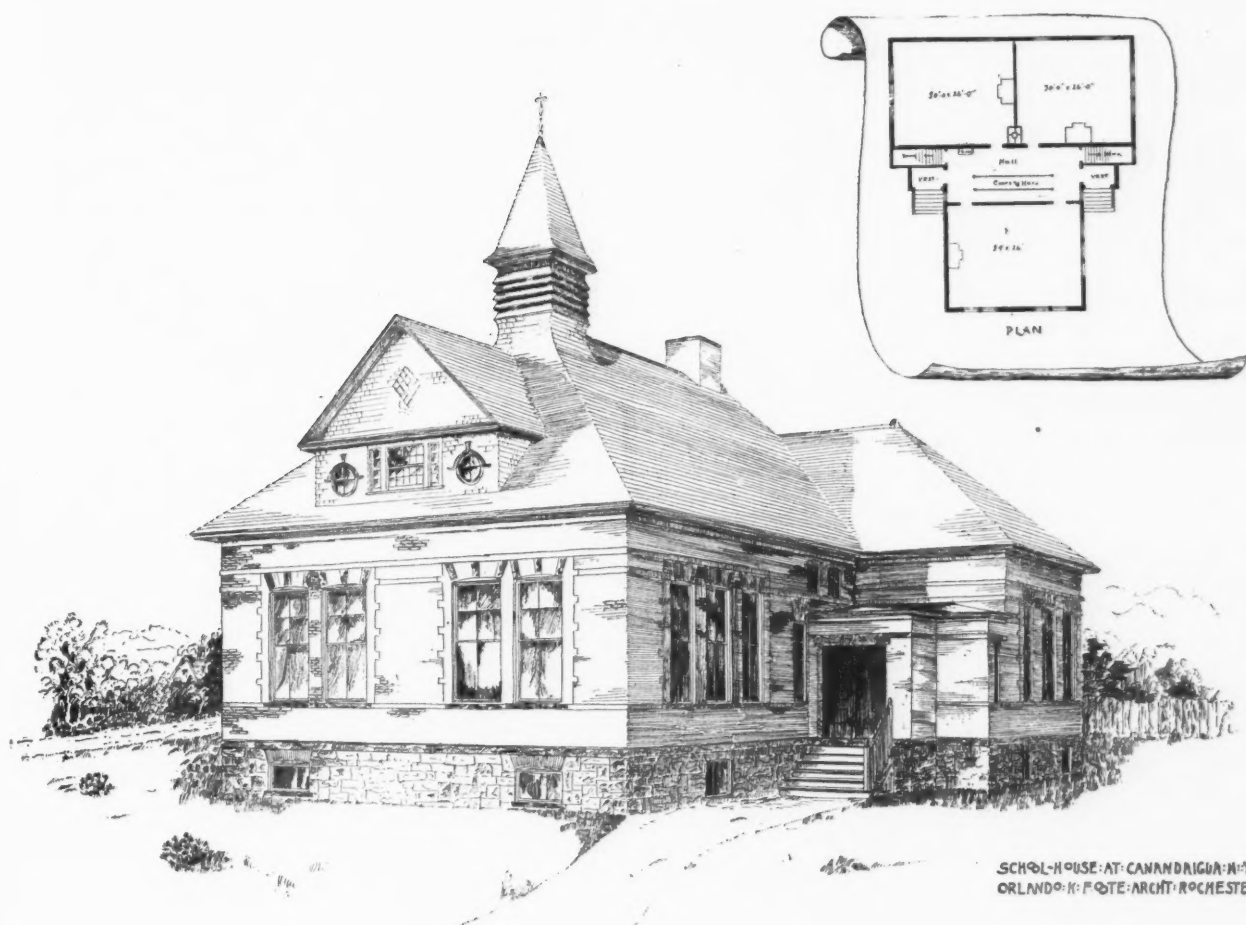




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J. Hockett Kent, Architect