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FROM a late number of *La Semaine des Constructeurs* we gather particulars of the career of M. Charles Auguste Questel, architect, who died in Paris January 30th, 1888, at the advanced age of eighty years. In 1824, at the age of seventeen, young Questel entered the École Royale des Beaux Arts, Paris, where he was the pupil successively of Blouet, and of Duban. He was inducted into the practical details of construction as a pupil first in the Sarbonne, then in the Institute of France, the College of France, the School of Fine Arts, in charge of his eminent master, Duban, and later on the Offices of the Department of the Interior under Architect Moreau. He also spent three years in Italy as a traveling student. At the age of twenty-eight M. Questel won his first great success in a competition for the church of St. Paul, at Nimes, France. Ten years later he won the first prize again in the same city, for the construction of a monumental fountain. Three years afterward he was appointed member of the Commission for the Preservation of Historic Monuments, in which capacity he executed many restorations, including important churches at Lyons, Arles, and other places. He was also diocesan architect of Nimes, of Marseilles and of Ajaccio; architect of the palace of Versailles, and of the Trianon, which latter position he held for thirty years, and was appointed Inspector General of Public Buildings in 1862. From 1855 to 1872 he gave assiduous attention to the instruction of architectural pupils. His atelier was the *alma mater* of many able artists and constructors, including Pascal, who succeeds him as its chief. Among the notable works of M. Questel are the hospice at Gisors (Eure) 1857, the town hall at Grenoble in 1858, the insane asylum of St. Anne from 1862 to 1867, and the restoration of the gilded gallery of the Bank of France in 1876. With M. Riouel he was also architect of the museum and library of Grenoble, an interior view of which was published in the *American Architect* for June 9, 1877. In grandeur, simplicity, boldness and graceful proportion this interior is unsurpassed. In 1871 M. Questel was elected member of the Academy of Fine Arts, to succeed Duban, deceased. He bore the cross of the Legion of Honor, was an officer of public instruction, and from 1882 to 1886 he was President of the Société Centrale des Architectes, Paris. His pupils speak with affection of the uniform courtesy and affability of their wise instructor and friend.

GENERAL details of the falling of two roof trusses on the Midland Hotel, at Kansas City, have become so widely known through the daily press that we need not go further into the matter by way of description than the article, with diagram of the pier that first gave way, found on another page. No building accident during the last decade has occasioned such general comment, for, as a rare exception to the rule, it occurred upon a building being erected from the designs and under the supervision of one of the leading firms of architects in the United States, and whose greatest success lies in the erection of a large number of a similar class to that upon which the disaster occurred. But, while the verdict of the coroner's jury will show the general circumstances surrounding the cause and the effect, there are a few pertinent observations that can be made, developing as it does the attitude of the architect to his client, his legal or moral responsibility for the acts of his employes, and the responsibility of the employe or the contractor to the public as well as to him. The parties interested in a case of this kind are: first, the general public, and with them the relatives of the parties injured or killed; second, the owners of the building; third,

the architects and their employés; fourth, the contractors. The public at large, for its own protection, must ascertain whether there has been any criminal carelessness in the management of the work, and, if there has been, must determine by whom committed. It is further necessary to fix the financial responsibility, and to mete out the proper and just penalties. But in this investigation the representatives of the public should be absolutely impartial, and should fix the responsibility only after a most careful and thorough examination of the facts, and the strictures and penalties should be confined absolutely to the guilty parties. The duty of the owner of the building is to select architects of sufficiently high standing in the profession and in the community to give reasonable assurances that the contemplated building will be, during its erection and when completed, safe and sound in every respect. The duty of the architects to the public is to so conduct their office work in the preparation of drawings and specifications that these, when conscientiously executed, will produce an absolutely safe building. They must also, if they cannot personally act as superintendents of the building, select a person of experience, judgment, energy and honesty, to act as their representative in the supervision of the building. When they have done that, they have done all that their clients or the public can ask of them. They certainly cannot be held criminally, and we doubt whether they can be held financially liable, when it is clearly shown that the person deputed by them to act as superintendent was unquestionably qualified to discharge the duties of such position.

WITH reference to the liability of the superintendent, no matter how careful and how conscientious he may have been in a hundred cases, if he finally is remiss in one case, he is responsible to his employers, their clients and to the public for the consequences of his carelessness. His previous good conduct would, however, entitle him to the benefit of a doubt, when one exists. The contractors are also responsible to the architect and to the public for any failure to comply with the terms of their contract, as regards plans and specifications or the orders of superintendents. The use of material inferior in quantity or in quality to that called for by the terms of contract is in itself a criminal act, which, if committed, should fasten upon them the responsibility, financial and criminal, for all the consequences of such criminal act. Their financial and criminal responsibility is not lessened by failure on the part of a person employed by other parties as a superintendent to point out the error. In this case the drawings and specifications, if carried out, would have produced an absolutely safe structure. The superintendents were men who had been tried in similar positions and found competent; and the architects, as residents of Chicago, could not be expected to personally superintend their Kansas City work, and have therefore done their full duty. The architects, we are glad to observe, have acted in a most straightforward and manly manner throughout this trying ordeal, have sought to avoid no just responsibility, and are still enjoying the full confidence of the owners of this and other buildings under construction as before.

EITHER through the pressure brought to bear upon the committee in charge of the competition for a city hall and court house at Minneapolis by the architectural press, or through the good sense of the commissioners, Architect W. W. Boyington, of Chicago, was called in as an expert to aid in making a proper selection. As Mr. Boyington has had a broad experience in the construction of heavy buildings, and did not even know there was such a competition before he was summoned, he was enabled to make a perfectly

unbiased selection. In this competition, in which the final employment of an expert was the only saving feature, five premiums were awarded: \$1,500 being given to W. H. Dennis, of Minneapolis; \$1,000 to Mifflin E. Bell, of Chicago; \$600 to E. E. Myers, of Detroit; \$500 to Long & Kees, of Minneapolis, and \$400 to Alexander Murrie, of Minneapolis. These plans, by the terms of the competition, belong to the commissioners, and while they may select the architect to whom the highest premium is awarded, they can without violation of any agreement or point of honor hire any builder they choose to execute the work. If there is anything good about this kind of a competition, it is the fact that, no matter how badly a sanguine competitor may be "left," he can blame no one but himself, and pocket his loss with the best grace possible.

THE Grant Monument Association of New York has issued a circular letter, accompanied by a topographical map, addressed to the artists, architects and sculptors of the United States, inviting them to present competitive designs for a monument or memorial building, based upon an estimated expenditure of \$500,000. The competition is to close November 1, 1888, the best five designs to be selected and awarded premiums, ranging from \$1,500 to \$200. Though the drawings are to be submitted under a *nom de plume*, the general plan of the competition, as outlined by the circular letter, is such that no architect of any professional standing can become a competitor. As the architectural associations, east and west, are entering protests against the plan adopted, and as the members of the association seem desirous of securing the best possible design and willing to be instructed in the method, it is possible that this may yet prove an honorable and successful competition. We would suggest, however, that the monument association decide on either a monument, or a memorial building, as a similar competition, lately closed, showed that while a monument was from the first the preference of the committee, and finally chosen, the competitors were not informed of the fact, and many of the best architects designed memorial buildings, and in this way were practically thrown out of the competition from the start. It would be better to decide on one form or the other than oblige competitors to make a design of each in order to stand a chance of success.

WHILE architecture as an art is practically coeval with civilization, architecture as a profession has been slow in taking its place with the other learned and artistic callings. Its greatest historic triumphs have been the work of men eminent as painters, sculptors, modelers, etc., as Michael Angelo, Bernini, and Blondel, rather than as architects. The Louvre was designed by Perrault, who was a physician. Even Sir Christopher Wren began his career as a man of affairs and of scientific research rather than as an architect. Architectural associations are likewise of a comparatively modern development, both at home and abroad. One of the oldest organizations of the kind in the world is the Société Académique d'Architecture, of Lyons, France, which was founded in 1830, less than sixty years ago. The Paris Société Centrale des Architectes, dates only from 1840. The comparatively venerable Royal Institute of British Architects takes us back only to the year 1834. The American Institute of Architects was incorporated in 1857, but held its first convention ten years later. The Western Association of Architects, which has now eighteen state associations affiliated with it, was organized as recently as 1884. The Belgian Société Centrale d'Architecture was formed in 1872, and the Italian Society of Engineers and Architects took its present shape in December, 1885.

Photography in Architecture.*

PART V.—BY FRED D. FOSS.

THE exposure of a plate on a subject has no visible effect on the negative, but there is a chemical action formed whereby the effect is rendered visible by the subsequent application of a liquid called a developer. There are numerous formulas for developers, each and every dry plate manufacturer publishing a formula which is best adapted to his plates, and it would be very hard, if not impossible, to find a developer that would work equally well with all brands of plates. Upon the first introduction of dry plates but one standard developer was used, that of oxalate of potash and sulphate of iron, and for many purposes or classes of negatives, this developer has never been equaled by any of the later formulas of potash, soda and pyrogallic acid. While there is a greater latitude allowed to exposure by using the commonly called pyro developer, the oxalate and iron developer can be made to give very fine results by using a few drops of a weak solution of hyposulphite of soda, say 1 to 5,000, as an accelerator, or a few drops of a 1 to 10 solution of bromide of potassium as a restrainer. The use of the above and the method of compounding them will be given later on. It is proposed to give the formula for compounding the oxalate and iron developer, commonly known as the ferrous-oxalate, as it is one of the cleanest, if not the very cleanest, developers known. While the ferrous-oxalate developer will not allow the beginner the latitude of exposure (as before remarked) he may desire, yet, with a little practice it will yield very fine results. It is proposed in these articles to give the formulas of all the best developers known to date, and to explain their various characteristics. The oxalic being the older, preference will be given to it. Make a saturated solution of neutral oxalate of potash and one of sulphate of iron. A saturated solution of any salt is obtained when more of the soluble salt is placed in the water than will dissolve, in which case the excess will remain lying undissolved on the bottom of the vessel. If the water be warmed, say to 80 degrees Fahr., a saturated solution can be more readily and surely obtained. The solubility of neutral oxalate of potash is 1 to 3 (one part potash to three parts of water at 59 degrees Fahr.) so any quantity can be made by observing the proportion. The solubility of sulphate of iron (ferrous) is 1 to 1.3 (one part of iron to one and three-tenths parts of water at 59 degrees Fahr.) and the same rule as to quantity applies to the iron solution. The solution of oxalate should be decidedly acid, and, as it is made from a neutral salt, it must be rendered acid by the addition of citric acid. A good formula for the developer is the following:

No. 1.

Neutral oxalate of potash.....	1 pound.
Water (at 75 degrees Fahr.).....	5 pints.
Citric acid.....	60 grains.

Test with blue litmus paper, which should turn a decided red; should it not do so, add citric acid slowly until it does.

No. 2.

Sulphate of iron.....	1 pound.
Water (75 degrees Fahr.).....	2 quarts.
Sulphuric acid (C. P.).....	60 drops.

No. 3.

Bromide ammonium.....	30 grains.
Water.....	1 ounce.

Both salts should be thoroughly dissolved, allowed to settle, then decant and filter. To develop, take of No. 1, 3 ounces; of No. 2, 1 ounce. It has already been said that the defects of exposure may be remedied by the treatment of the plate in development. I do not mean to say that a very great under-exposure or over-exposure can be remedied, but a moderate defect one way or the other may be. In giving the formula for the developer we measure out three ounces of the No. 1, or oxalate solution, one ounce of the No. 2, or iron solution, adding but two drams of the iron to the oxalate, and five to ten drops of the No. 3, or bromide solution. It is the province of the oxalate solution to combine with the iron of the iron solution, forming the ferrous-oxalate, which is the active developing material; and it is the province of the bromide solution to restrain the action of the ferrous-oxalate upon the sensitive surface of the plate. The formula for mixing the developer previously given is that which has been found best adapted for a properly exposed plate, but a much under-exposed plate could not be developed with the quantity of iron solution used in that instance, so two drams more of the iron solution is added to bring out the image, and it may be necessary to add the entire ounce first measured out in order to start the development, but do not add more than the ounce of the iron solution; instead, add three drops of a solution of

Hyposulphite of soda.....	1 grain.
Water.....	1 ounce.

*Continued from Vol. XI, No. 1, page 3.

In case the plate, after using this full strength of the developer, still lacks its proper character, it will be no use to add any more of the iron solution, as it is now saturated, and the addition of even one-half dram more of it will cause a decomposition of the developer, a precipitate of a yellowish color being produced, which sticks to the surface of the plate like sand, and the solution will at once cease to act as a developer. It will, in fact, begin to react, and will soon redissolve the image which has already been developed. This fact shows the importance of using the oxalate solution absolutely saturated, because, in case of the necessity at any time of using a large proportion of the iron solution, the iron might be added in excess before the original ounce poured out was entirely used, and thus the developer be spoiled. Caution: *Always add the iron to the oxalate, never add the oxalate to the iron.* Having found the first plate under-exposed, and you have others to develop which may be troubled with the same complaint, proceed differently. It has been said that the bromide solution is a restrainer of the action of the oxalate and iron, and, as there was some of the bromide solution used in that developer, try the next plate without any bromide solution at all, merely using the oxalate solution and two drams of iron. If the development proceeds gradually, as it should, all is well; but if, upon the addition of more of the iron, as may become necessary, the picture seems to develop and become black too quickly, pour off the developer into the graduate, add a few drops of the bromide solution, which will restrain the action of the developer, return the developer to the plate and continue development until finished. Negatives developed with ferrous-oxalate should be carried until the image shows plainly on the back of the plate, and the front or film side appears sunken in or covered with a veil.

(To be continued.)

Foundations of the Auditorium Building, Chicago.*

BY DANKMAR ADLER, ARCHITECT.

THE design of the foundations of the Auditorium building now being erected in Chicago by Architects Adler & Sullivan, involved the solution of several perplexing problems, and, as is usual in such cases, this solution implied the adoption of a series of compromises between conflicting positive wants and imperative conditions.

The most salient and prominent want appeared to be a pit under the stage, 62 by 120 feet in extent, and sunk to as low a level as possible. Every additional foot of depth gained for this pit promised greater possibilities of improvement in stage mechanism, and threatened increased difficulties and complications of construction. Among the many limitations to the accomplishment of all that seemed desirable in this connection, there appeared considerations as to the safety of adjacent buildings, and the close proximity to the stage walls of the foundations of other parts of this building; and there was underlying all the proposed constructions a compressible and slippery soil, and overlying the floor of the stage pit, the water level of Lake Michigan, only from twelve to fifteen feet below the street grade. Again, a boiler and machinery plant of nearly 2,000 horse-power, incidental to the lighting, heating, cooling, ventilating, elevator, kitchen and laundry apparatus of the building required for its suitable accommodation an area equal to fully two-thirds that of the entire building, and to make the basement story available for this purpose, a story height of from ten to fourteen feet was indispensable. In view of the commercial reasons for keeping the first floor as near as possible to the ground, it became necessary to sink the basement floor, and therefore the foundations, to a considerable depth below grade, and to adopt a practice different from that so successfully followed in the construction of the tall buildings of the board of trade district, the foundations of which average but thirteen feet below street grade.†

Another limitation to absolute freedom of action was the existence on the north line of the proposed building of two party-walls, that of the Giles building, 160 feet long, and extending to a depth of about twelve feet below grade, and that of the Studebaker building, 170 feet long and extending to a depth of nearly 17 feet below grade. As, for the reasons before stated, it was absolutely impossible to confine the foundations within the limits of depth of those of the first-mentioned party-wall, their entire reconstruction was determined upon.

Diagram No. 1 shows the old and the new foundations of this wall, and is an interesting exhibit of the characteristics of the buildings of the old and new Chicago; it also shows the methods adopted for holding the wall. As the entire or even a partial reconstruction of the foundations of the party-wall of the Studebaker building was inexpedient, seventeen feet,

*For diagrams see double page illustration, also three photographs of foundations from a series taken for THE INLAND ARCHITECT during the progress of the work.

†The reader will infer from this that the floor of the stage pit and parts of the boiler and machinery space are below the surface of Lake Michigan, and that the greater part of the basement floor is below sewer level. A description of the methods adopted for draining the latter and for protecting the former against seepage will be given in another article to be published in the future.

the depth below grade of its foundations, was adopted as the standard depth for foundations of the Auditorium building. The exceptions made were first, the walls surrounding the stage, which were sunk to a depth of twenty feet below grade, that being the limit of safety of variation of level for contiguous foundations in soil of the character developed by the preliminary borings and pressure tests. The next exception was the tower, the foundations of which are carried down to a depth of eighteen feet, with a view to keeping the projections of the individual offsets within the limits of safety without the sacrifice of the basement story. Finally, a number of minor foundations were carried down but twelve to fifteen feet below grade. The method of bonding together contiguous foundations started at different levels is indicated on Figs. 2, 2a and 2b.

The spread from the faces of the basement walls and piers to the extreme limits of the foundations being very great, the requisite transverse strength of the individual layers was secured by the use as the base of the entire structure of two layers of twelve inch timbers, covered by a bed of concrete, inclosing seventy pound steel rails, twelve inch steel I beams, and fifteen inch steel I beams, as occasion demanded in the different cases.

In determining the timber areas and metal weights required to resist these transverse strains, the projecting parts were calculated, in each case, as cantilevers of length equal to their projection with an equally distributed load, as determined in each case from the calculated weights of the superstructure. The fibre strain allotted to the timber, both for compression and tension, was twelve hundred pounds per square inch, and for the steel twelve thousand pounds per square inch.

Quite interesting were the foundations of three pillars adjoining the Studebaker Building, the load of which it was intended to carry independently of the foundation of that building. Fig. 3 illustrates the expedients here used. Great care was taken to leave a clear space of four inches between the twenty inch cantilever beams and the offset of the Studebaker foundations. In another case where it was found necessary to relieve the Studebaker foundations of the weight of parts of this building, this was accomplished by the process illustrated by Figs. 4 and 4a.

Another interesting piece of construction is illustrated by Figs. 5 and 5a, which shows the treatment of the foundations of a number of small columns carrying weights scarcely more than nominal. As it was impossible to make foundations small enough for these, to insure settlements equal to that of their more heavily loaded mates, they were set upon screws, so that as the more heavily loaded portions of the foundations took their settlement, the lighter weights could be made to follow by a proper turning of the screws.

The tower foundation is a solid mass of material 100 feet long, 67½ feet wide, and 7 feet thick, composed of timbers, steel rails, twelve inch and fifteen inch steel I beams, crossing each other in such manner as to distribute the weight of the tower which exceeds thirteen thousand tons, over the entire surface of the foundation.

The method of laying the foundations may be briefly described as follows: The lower course of timbers was bedded in sand, the second course was bedded in cement. The timbers were laid with rather open vertical cross joints, and wherever practicable a filling of broken stone, brick or of sand was worked in between the edges of the timbers and the trenches. All of this was done to insure a certainty that the water of the lake (the surface of which varies from the level of the tops of the timbers to a height of three feet above the same) would completely surround all the timbers. The various individual foundations are also united with each other by small trenches filled with building debris or sand. This is done to permit the artificial flooding of the trenches should the level of the lake ever sink to a much lower level than the lowest stage of water yet recorded.

The foundation above the timbers for all walls is a layer of concrete in which railroad bars running lengthwise of the walls are imbedded. From the top of this concrete to the first story floor joists, the walls are built of rubble masonry laid in cement. The pier foundations have a bed of concrete in which from one to three layers of railroad bars are imbedded, forming offsets of such dimensions as to keep the fibre strains of the metal within the limit before stated. In the case of the foundations of two of the smoke stacks, this limitation of fibre strains made it necessary to introduce a layer of twelve inch steel beams, as shown on diagram, Figs. 2a and 2b, while in the tower foundation the offsets were so great as to require a mass of concrete five feet high, enclosing three layers of rails and two layers of fifteen inch steel beams, distributed as shown on diagrams Figs. 6 to 9. From the top of the concrete to the first story floor, the tower foundations are formed of block rubble masonry, with binders of planed dimension stone.

For all concrete and for all stone masonry below the basement floor level, American Portland cement was used. For the masonry above that line, about one-third of Louisville and two-thirds of Utica cement were used. The concrete was mixed in the proportion of two parts coarse-broken stones, three parts fine ditto, two parts coarse sand, one part fine

ditto, to one part cement. About one-half of this was mixed by hand, dry, and then tempered with water. The remainder was mixed by machines. It was put in in layers from four to six inches thick, and each layer was well rammed. No difference in quality was observed as between the hand-made and the machine-made concrete, and the use of the latter was found advantageous only when very large masses of concrete were wanted in close proximity to the bank on which the mixing machine was set.

The volume of earth excavated was 28,860 cubic yards. The quantities of materials used were as follows: One million feet timber, 231¼ tons steel rails, 76¼ tons steel I beams, 2,565 cubic yards broken stone, 2,921 cubic yards sand, 2,650 barrels cement, 933 cords rubble stone, 4,296 cubic feet dimension stone, and 1,280 thousand brick.

The borings and tests made to determine the character of the soil underlying these foundations were unusually thorough. They were made by Gen. William Sooy Smith, well known through his valuable services in connection with some of the most noted engineering structures throughout the country. Borings were made at an average distance of twenty feet apart over the area occupied by the building. Diagram of these is given on Figs. 10 and 11.

Tests as to the bearing capacity of the soil were made under quite a number of varying conditions; first, they were made with bearing disks of various areas so as to determine the difference, if any, of bearing capacity of the larger or smaller areas, with a view of establishing the extent to which the shearing of the edges of the foundation is an element to be considered in their calculation. Next, these test disks were set at varying levels so as to determine the relative bearing capacity of the soil at these different levels.

Our Illustrations.

Residence for J. L. Woodward, Chicago; W. W. Clay, architect.

Block of residences for Joseph Beifeld, Chicago; L. B. Dixon, architect.

Residence for J. L. Cochrane, Esq., Edgewater, Ill.; J. L. Silsbee, Chicago, architect.

Barn for Mr. Clem Studebaker, South Bend, Ind.; Cobb & Frost, Chicago, architects.

Amusement Hall and Pavilion, Lake Minnetonka, Minn.; L. S. Buffington, Minneapolis, architect.

Diagrams showing expedients used in the foundation construction of the Auditorium building, Chicago; Adler & Sullivan, architects.

Competition sketches for city house front, by the Buffalo Architectural Sketch Club, February 13, 1888. The criticisms of the adjudicating committee were as follows:

"Ass's Head," F. R. Fuller. The effort which takes the prize in this competition, shows very fair but mixed treatment of Medieval, Italian and Romanesque. Italian in Loggia and Romanesque treatment of entrance, the design strongly suggesting the entrance to the Hotel Lallemand in Bruges. The whole composition is very pleasing and satisfactory, and the rendering excellent. "Crow," J. A. Johnson, is a design of considerable merit. Main room, first story, has rather meager light, and the brackets are bad. There are no indications of down spouts, and if water was taken care of, inside conductors would still leave snow and ice to slide on to neighboring property or into the street. "You know," M. G. Beierl, is somewhat Italian in style, and but for the small windows in the second story would rank first. It is good in all other ways, especially in rendering. "Pants," W. L. Fuchs, is rather nondescript in ornament, having Francis I style, Elizabethan and Romanesque for ornamentation in frame of second story window. The height of the second story is shown to be fifteen or sixteen feet. A bad idea to return down spouts back into the building.

PHOTOGRAPHURE PLATES.

(Issued only to subscribers for the Photographure edition.)

Residence of B. H. Warder, Washington, D. C.; H. H. Richardson, architect.

Entrance to residence of B. H. Warder, Washington, D. C.; H. H. Richardson, architect.

Residences on 16th street, Washington, D. C.; H. L. Page, architect. Principal floor plans in margin.

Residence for C. T. Yerkes, Chicago; Burling & Whitehouse, architects. Principal floor plan in margin.

Two plates showing foundation construction Auditorium building, Chicago; Adler & Sullivan, architects.

A NEW and revised edition of a celebrated "cook book" has been issued by the Chicago, Rock Island & Pacific Railway. It contains a choice selection of valuable recipes, with much other useful information pertaining to the culinary art, including many formulas contributed by noted cooks and caterers. It is an elegant volume of 126 pages in illustrated cover, one department (105 pages) being devoted to the cooking of meats, fish, game, oysters, entrees, vegetables, baking, frying, roasting, etc., another to medical prescriptions and a chapter to laundry work. Housekeepers are delighted with it, and find it indispensable for frequent household reference. Copies sent at 10 cents each (for postage) to any applicant. Address E. A. HOLBROOK, General Ticket and Passenger Agent, Chicago.

The Chicago Architectural Sketch Club.



IS the legend that meets the eye, beautifully executed in stained glass, at the entrance to the new quarters of the Chicago Architectural Sketch Club in the Art Institute. Since the club moved into these elegant apartments an air of proprietorship hangs about the ulsters of the draftsmen on the street; they no longer chaff the elevator boy as they ascend to the

tenth story where the offices of their employers are located (selected for the excellent north light, you know), and at the drafting board the C. A. S. C. member is not only monarch of all he surveys (or draws to) but even his dividers put on an air of stiffness as they stand with their legs apart and make pointed remarks.

On entering the club rooms in the Art Institute on opening night, the first thing of beauty noticeable was a stained glass panel in the door, bearing the front initials of the club; the next thing of beauty was Schmidt, telling a group of admirers of his last bicycle ride to Aurora.

What a rare chance to describe the more notable members of the club—notable, of course, through the illustrations from their drawings that have appeared from time to time in THE INLAND ARCHITECT. If this be a criterion, W. G. Williamson, secretary of the club, should be first spoken of. With his clear cut, energetic face and high forehead, he shows the indefatigable worker he is, and to him, perhaps, more than to any other member, does the club owe its past success and present prosperity. He seldom misses a club meeting or fails to present a drawing in a competi-



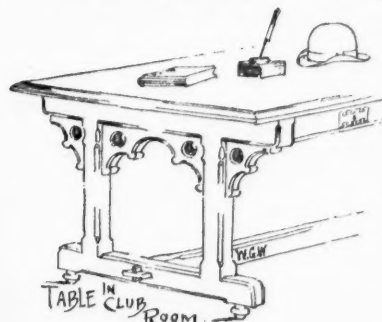
tion. There is George Beaumont, the president, now a practicing architect,—a hard practical Saxon face, North of England accent when he speaks, and an experience gained by close study and practical work on two continents.

Fraenkel is there, and Schmidt, his chum, the former tall and slim, but otherwise never like the captain's spare topmast, left at home, for he is always at the club meetings. The latter is a blonde, with brown eyes, smooth face, and the figure of an athlete; devoted to the pencil, the water-color brush, his bicycle and pretzels. Over yonder is William Bryce Mundie, he who took the second prize in the architectural league competition, and whose handling of the pencil, as well as designing talent, has made

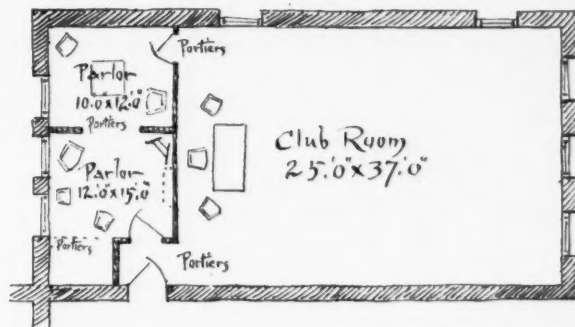
him known to every draftsman in the country. He comes from Hamilton, Canada, and if he should ever go back to that picturesque old town, where the highest art they know is to use white stone lintels and caps, in connection with red brick set in white mortar, he would revolutionize the architecture of the past century that has been merged without change into the present.

Linden is fair, slight built and unassuming, but if a comparison can be made,

the best artist in pencil and water-color in the club. He and his partner, Wagner, treasurer of the club (a dark-complexioned, business-like young man), are artists in decoration and stained glass, and the decoration of the walls, as well as the stained glass panel in the door, are not only their work but their donation to the club. At this date they are the envy of the club members, as they are enjoying a sketching tour in the South and Cuba.



O. C. Christian. See him now, and he looks like a good-natured clerical Christian, but see him at the drafting board, and he shows himself skillful and accurate. He can execute geometrical drawings as well as freehand sketches.



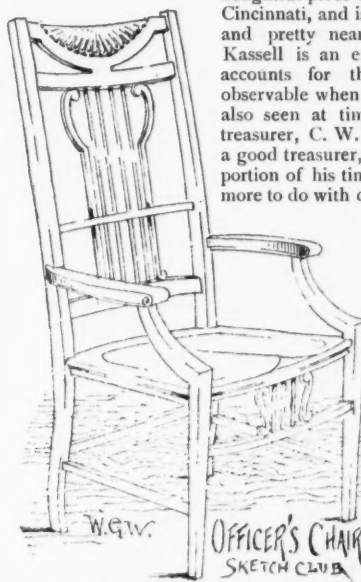
Where there is a Christian there should be a Church, and there he stands talking to O. C. Smith and Charley Kassell. He has not spent all his time in designing churches, but is one of the most thorough students in the club. His sketch of the Monte Cristo will be remembered as a delightful piece of penwork. Smith comes from Cincinnati, and is an old friend of H. P. Kerby, and pretty near as good a draftsman, too.

Kassell is an ex-treasurer of the club, which accounts for the affable bank president-like look observable when he puts on his glasses, a look also seen at times in the face of another ex-treasurer, C. W. Trowbridge. The latter made a good treasurer, too, though he did give a large portion of his time to steel beams. He has had more to do with columns than the editor member

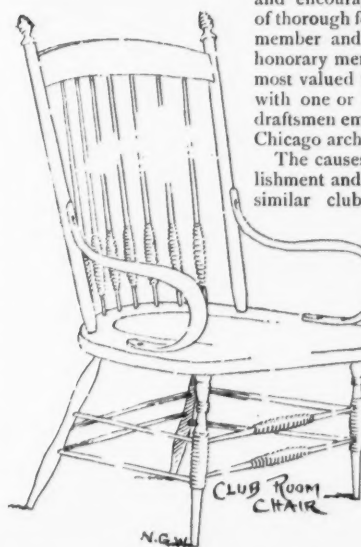
(another ex-treasurer), and his conversation is always somewhat ironical. That young man with the fresh, ruddy complexion is Johnson. He represents the Scotch element in the club since Harry Lawrie went west to build up the country, and he is a credit to his profession both at home and abroad.

But to describe the notable members would be to describe them all, for each has to a greater or lesser extent become known through their drawings in the architectural publications, and each has much architectural honor in store for him in the future. The event of the evening is a paper by Architect John W. Root, and, for the time being, he, the greatest architectural genius in the West, if not in the country, is a draftsman among draftsmen. After his paper is read and discussion invited, how he seems to enjoy the bright questions, practical ideas, and ingenious theories that are so freely expressed by the members, drawn out, and encouraged as they are by the feeling of thorough fellowship existing between every member and their guest. Mr. Root is an honorary member of the club, and one of its most valued friends. The club is composed, with one or two exceptions, of architectural draftsmen employed daily in the offices of the Chicago architects.

The causes which have lead to the establishment and success of this as well as other similar clubs in the United States, are peculiar. Sketching, as applied in the profession of architecture, has never been considered so important a part of a draftsman's training as at present. In England geometrical drawing is more largely practiced where the work goes beyond preparation of working plans, but in America, the accurate geometrical drawing to scale has given place to freehand sketches, which, though still retaining the accuracy of scale, have the more pleasing effect obtained in the freehand etching or water-color



perspective sketch. While to some, and more particularly those educated in European schools, it may seem that the exercise of a talent for freehand work may tend to make the draftsman simply a picture maker, it must be understood that he loses nothing in accuracy, but gains in the exercise of his artistic talent in the use of his pencil and ability to design. Quite early



in the nation's architectural history came a demand for architectural schools, and departments of architecture were established in connection with several leading colleges, and these without exception have become notable; but either because they are not adequate, or the average draftsman cannot afford the time or expense involved, but must work by day and study by night, if he would rise in his profession, his alternative being an abandonment of his profession and the adoption of some mercantile pursuit as a means of livelihood, the draftsmen are seeking among themselves to institute clubs like this for their mutual improvement.

The Chicago Architectural Sketch Club was organized in 1885, through a call issued by THE INLAND ARCHITECT. The first meeting was held at the offices of that journal, the project being suggested and placed before the draftsmen by J. H. Carpenter, who was the first president of the club.

The Builders and Traders' Exchange immediately offered the club the free use of its assembly hall, and to this generosity the club owes much of its success, and now that a permanent home for the club has been secured this disinterested friendship of the builders of Chicago is not forgotten.

The new quarters in the Art Institute, of which floor plan and sketches of decorations and furniture are given, were opened January 16 last. While the study of architecture is the main object, and the papers read and the club competitions all have some bearing on that profession, the club is essentially a sketch club, and the rules of membership admit anyone who can submit a sketch showing artistic skill, the club exhibits showing bits of landscape, bridges and ruins, quite as frequently as stately piles of brick or stone.

The club rooms are open to members at all times, and in the summer months the sketching trips of the club are most popular and enjoyable, so that until the time comes when Chicago has an architectural school properly organized, the sketch club will fill its niche and fill it well. It is, however, essentially a club for recreation, and the disposition of its members is rather to avoid the practical work of the day and devote the club evenings to the art side of their profession.

The Minneapolis Court House and City Hall Competition.*

TO what cause must I attribute the scarcity of Chicagoan competitors for our court house and city hall? Their own good sense, your esteemed editorial in December, or to the much circulated report that "none others" than Minneapolitans "need apply"? Your esteemed editorial did it. Why of course it did! And Messrs. Edbrooke & Burnham were too busy to read it; and Mr. M. E. Bell has returned but so very lately among you that he can almost be called a Washingtonian yet. Whatever excuses you may make for these two firms, they alone represent you in this competition.

Philadelphia has one representative, C. F. Collom; San Francisco one also, J. Gash; McDonald Bros. show what Louisville, Kentucky, can do; and Colonel E. E. Myers, with his "thirty-five years' experience, and those gentlemen, spent entirely upon the execution of just such important work," comes here from Detroit, via Texas. R. T. Brooks is another Detroitier, and there is one design from Pittsburgh by Mr. L. O. Danse. St. Paul sends in four victims, Minneapolis, ten; the world at large, three, making a grand total of twenty-three designs submitted.

Out of the twenty-three represented there, not one of the architects, as we may well suppose, had a glimpse of the other fellow's design, until the public did, so there is no probability of his knowing what style or shape or form the others' efforts would be in. Then again, not more than three (if that many) out of the twenty-five ever studied together, or in anything like the same school; yet fully two-thirds of the aforesaid efforts were to follow in the steps of the great Richardson. Some, naturally, rather toddled after than followed him. Others, notably Messrs. Long & Kees and Mr. Dennis (both of Minneapolis), have not only well followed his style, but actually come out with almost fac similes of his Pittsburgh Court House: massive triple-arched entrance, a bold and handsome tower rising directly over it—everything, in fact, to lead one to believe that if not a cold copy from the Pittsburgh Court House, the latter was surely a strong, very strong motif for their designs.

Well, two-thirds were Richardsonian, and all of these, of course, had tall, square towers growing out of the center of the building, or in the middle of one of the façades, or upon a corner, and several of the others adopted the square tower feature (without being Romanesque), so that there were really but three, which, twenty years ago, would have looked at all like a government building. Yes, the dome is fast becoming a relic of the past, and twenty years hence, they will be reviving them again, and our sons will be designing "Renaissance Washington Capitol" domes upon every blessed new court house in the land, i.e., if they need courts then.

The plans are all safely hidden away for the private inspection of the honorable commissioners; only the exteriors are left for the vulgar gaze of the rabble, so that you have to guess at the arrangement of the buildings from what you can gather from perspectives. The great majority have planned for an open court in the center, and there are a few in the form of the letter H.

The location and space afforded a good opportunity for a striking design; a full block, 330 feet square, and well up above grade. Most of the designs are for buildings about 250 feet square or so, while some few cover up to the sidewalk; these latter are apt to be left out in the cold, as the commissioners lay great stress upon the fact that they will not consider any plan that cannot be built for the appropriation—\$1,150,000, and have called for the exact cubical contents of each plan.

Now, then, such a building thoroughly fireproofed cannot be touched for less than 28 cents per cubic foot, and the commissioners know it as well as the architects do; so where will the latter be, who have much over 4,000,000 feet in their buildings—and they are legion.

I will describe ten of these designs in particular, they are the best; the others begin with mediocre, and dwindle down by rapid strides, to the absolutely abominable.

Of the ten, the first I saw was by Mr. Farwell, of St. Paul, a young and promising student. It is a well studied design; Romanesque in feeling and with a bold touch here and there of elaborate ornamentation. A rather heavy tower in the middle, and a too monotonous arrangement of the windows as its worst faults. It differs widely from the average student's work in not being an ideal; everything seems practically and economically studied out.

No. 2 was by Yost Brothers, Minneapolis, and Columbus, Ohio. It is "Romanesque." A very tall and heavy tower surmounts the main entrance. The building has an inner court, covered over at the second story and forming a grand rotunda, which they have shown by a very clever interior view. This one looks somewhat like the Pittsburgh Court House and is very colossal in all its details. Some of the courses of stone below the water-table are represented as fully six feet thick (they are about four and one-half), but perhaps that is a defect in the drawing.

A pleasant surprise awaited me in the next room: three designs, side by side, and facing the door and all different. Nos. 3 and 4 are the work of Messrs. Handy & Cady, of Minneapolis; one a splendid specimen of Florentine 15th century architecture; a perfectly square, plain building, with a high but slender square tower. The flat, tiled roof, bold and far-projecting cornice, darkly shaded loggia under the roof, well accented, almost Venetian windows, all, in fact, to carry me back to sunny Italy. A splendid design, but, I have to confess, hardly suitable for a court house in this country. Minus the tower, it would make a grand college or museum building, and hardly that, for I would hate to see it other than a fine *plaza* in its own native Florence.

The other was a good, modernized, and somewhat westernized, Flemish design. Modest yet fairly imposing. A good substantial tower over the main entrance; a first-class roof-line; good dormers, and a design that I am confident could be built for the money and yet not look cheap. I almost gave it first place in my mind, all conditions considered.

No. 5 is by Messrs. Orff Bros., local men too. It is a French design (of about the François premier period), with a large square tower over the main driveway into the court; roof-line good, detail bold; massing, fair. The greatest fault I could find with it was the absence of imposing entrances; they were *evident* enough, but I think that to such a building, they should be a *little* grand. The detail, like in the two preceding designs, is the pure thing of its particular style (an unusual occurrence). This and the water-color perspective are pronounced even by competitors one of the best executed and presented designs in the competition.

No. 6, by Messrs. Edbrooke & Burnham, Chicago, is a good, substantial building, severely plain, and of what I might call an Egypto-American style, for the only distinctive ornaments about the building are some very Egyptian capitals on the main piers of the front. The form is an H with a good tower, rising out of the connecting bar. It is, to my taste at least, the best design submitted by any of the *outside* competitors.

No. 7 is the work of Mr. Alexander Murrie of Minneapolis. A good building, well rendered in the regulation English pattern. Classic, i.e., the English Renaissance of that style; portico, dome, rusticated basement, everything just like the Glasgow municipal buildings and a hundred others.

No. 8, by Messrs. Appleyard & Dorr, Minneapolis; a plain, almost too severe rendition of the Romanesque. Some parts really very good.

No. 9, Messrs. Long & Kees, Minneapolis, is a double design; one in the old demi-semi-Classic style (called by one of your northwestern contemporaries Neo-Greek (?), with a dome, columned portico, and that we used to delight in before the birth of the—must I repeat it—Romanesque craze. The other, a better building, but it is in the above mentioned style, and very much like the Pittsburgh Court House. It is not a good copy, however, as there are too many unhappy little bays, jerks and breaks—some-what choppy, in fact.

Finally, my No. 10 is Mr. Dennis' design. It is a splendid building and worthy of the great master himself; really, when I first looked at it I thought it *was* his Pittsburgh Court House, and to one not familiar with the master's work, the disciple's seems almost perfection. But to me it was discouraging, for even at the risk of bungling, I do like a wee bit of originality; whereas, in this one, the tower, the entrances, roof-line, aye, even the smallest detail, seem to have been most painfully copied.

Mr. M. E. Bell, of Chicago, has a very good design, with something more of novelty about it than his stock United States buildings. Mr. (Col.) Myers of Detroit, a large, ponderous structure with a corner tower; of no particular style or school. I heard a wag call it the bamboo-fishing-rod style; his stepped-in turrets, with their huge string courses, do, I confess, put one in mind of such things, and yet it has excited much favorable comment, but then, you know what the *vox populi* amounts to in matters of art.

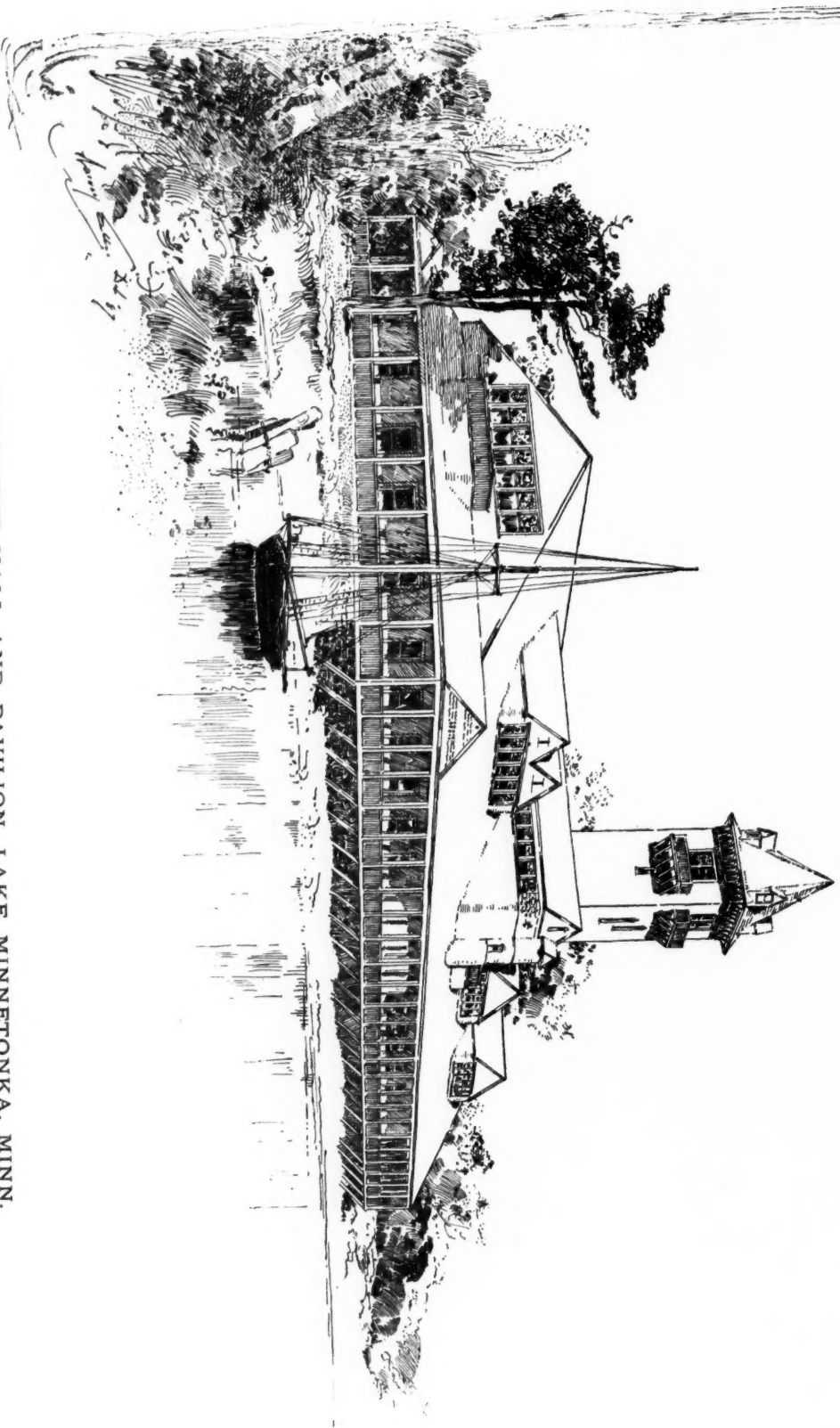
From these two the scale rapidly decreases; perhaps I had better not name them in order, for I do wish to live a few years longer, so I will simply state that the other Minneapolis competitors were Messrs. Kimball & Co., Messrs. Haley & Son, and F. E. Hoover. From St. Paul came Omeyer & Thori; C. B. Seaton, and a Mr. Maltby. Then from at large "L'Etoile du Nord" and a "Star" and Messrs. I. Hodgson & Son, who are in Minneapolis, Omaha and Kansas City.

The drawings are worthy of much study; the great majority are good; some beautiful, and then, necessarily, some poor ones. But when I see such drawings as Mr. C. F. Collom's, of San Francisco, and Mr. Maltby's of St. Paul, I grow blue all over to think that even a court house commission should be insulted by our profession.

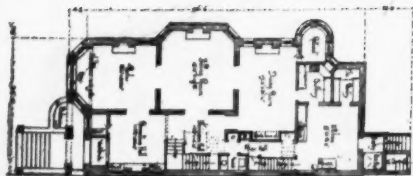
The A No. 1 drawings are the Messrs. Long & Kees' two designs. One a water-color by Mr. J. K. Wilson; a perfect rendering of the old school, every line and cloud just so; gum arabic glazing all complete; the other a clean and well-defined pen-and-ink by D. A. Gregg. Mr. Dennis has three elegant drawings, all by M. J. Anderson; one a most beautiful sepia pen-and-ink on cream tinted paper, and two water-colors. These are a little tropical for my taste; too much sun and flower—still, very fine.

*Special correspondence of THE INLAND ARCHITECT AND NEWS RECORD.

L.S. BUFFINGTON ARCHITECT
MINNEAPOLIS MINN. 1887.



AMUSEMENT HALL AND PAVILION, LAKE MINNETONKA, MINN.
L. S. BUFFINGTON, ARCHITECT, MINNEAPOLIS, MINN.



RESIDENCE FOR J. L. WOODWARD, CHICAGO.

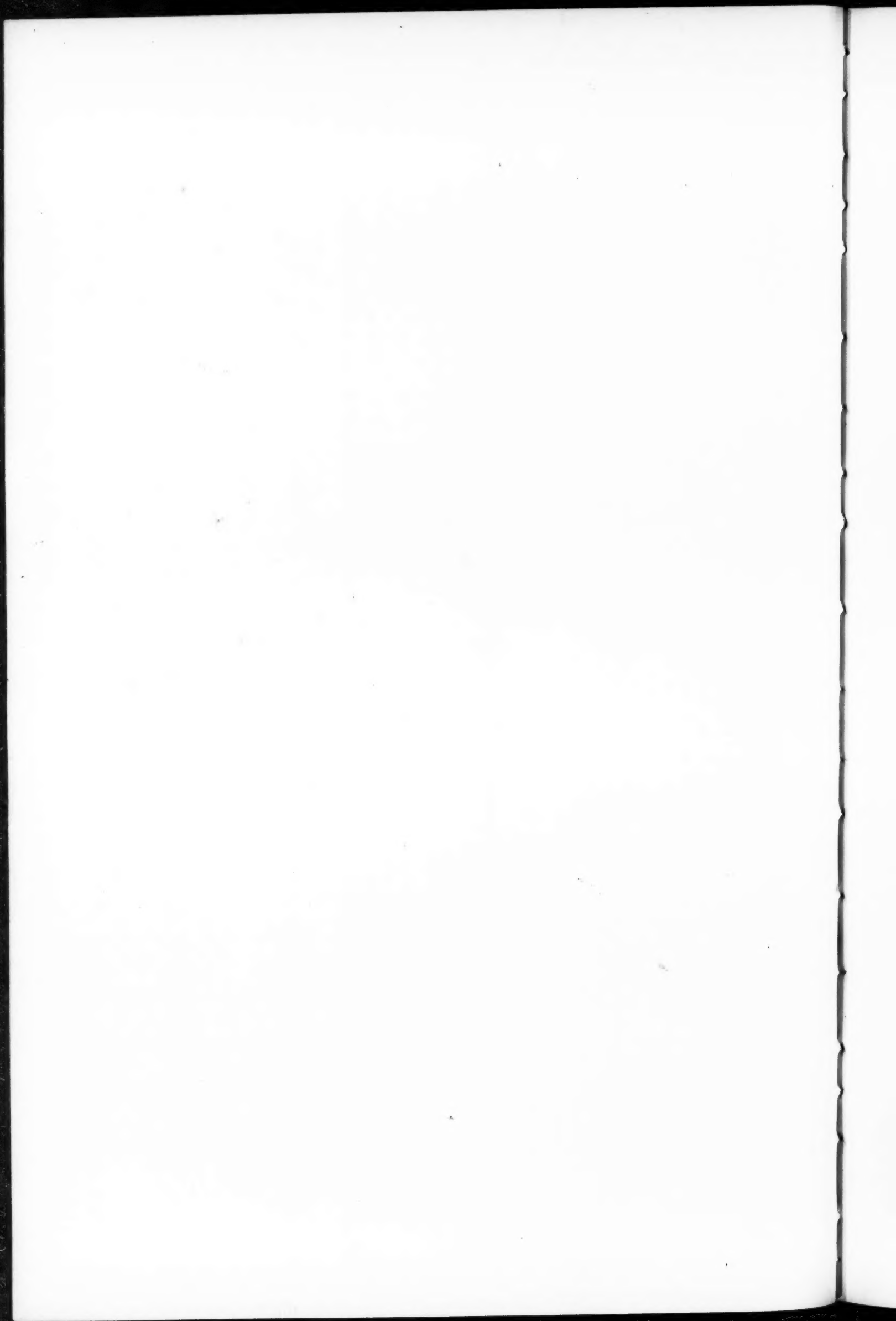
W. W. CLAY, Architect.



FOUNDATION CONSTRUCTION, AUDITORIUM BUILDING, CHICAGO.

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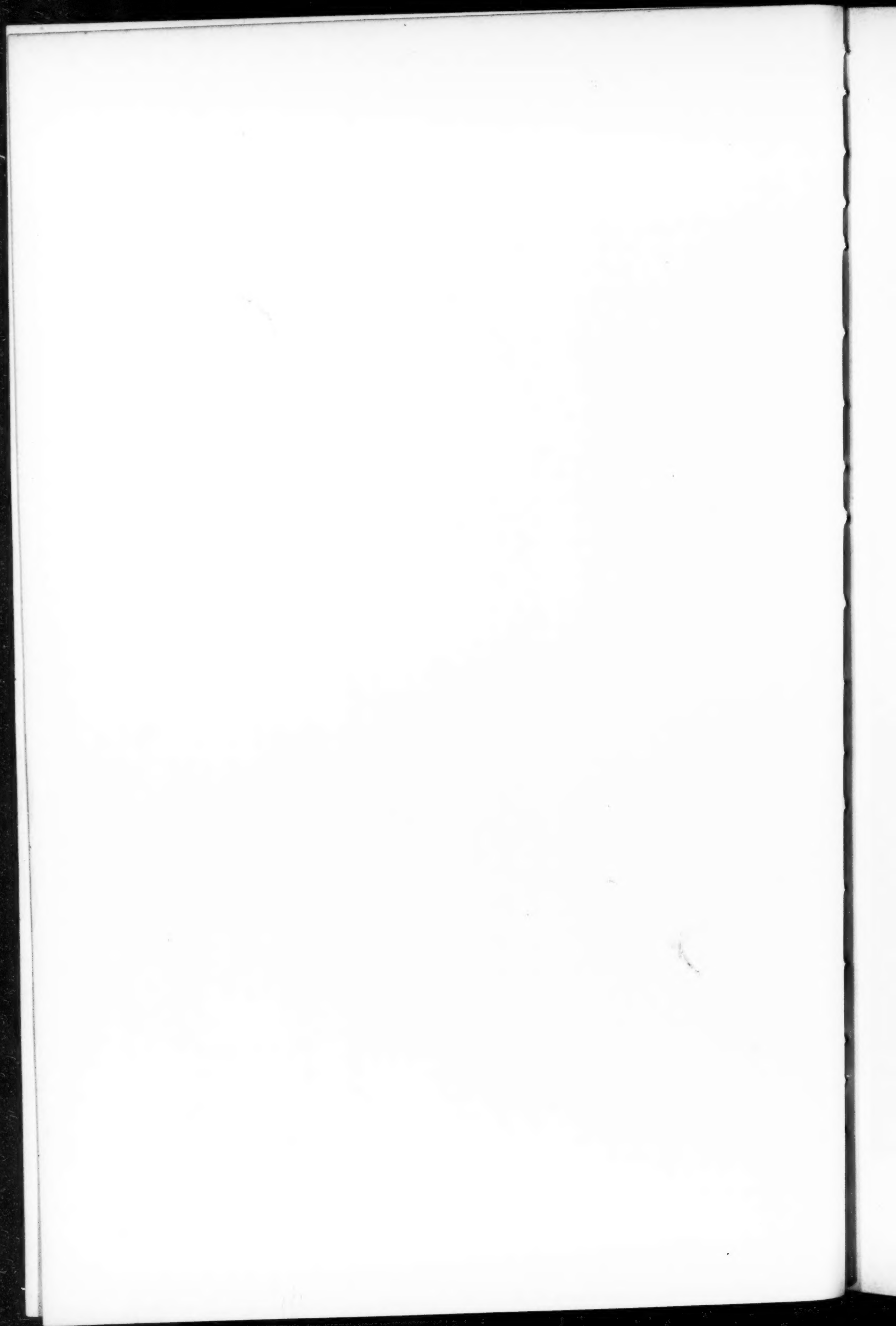




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ENTRANCE TO RESIDENCE OF B. H. WARDER, WASHINGTON, D. C.

H. H. RICHARDSON, ARCHITECT.

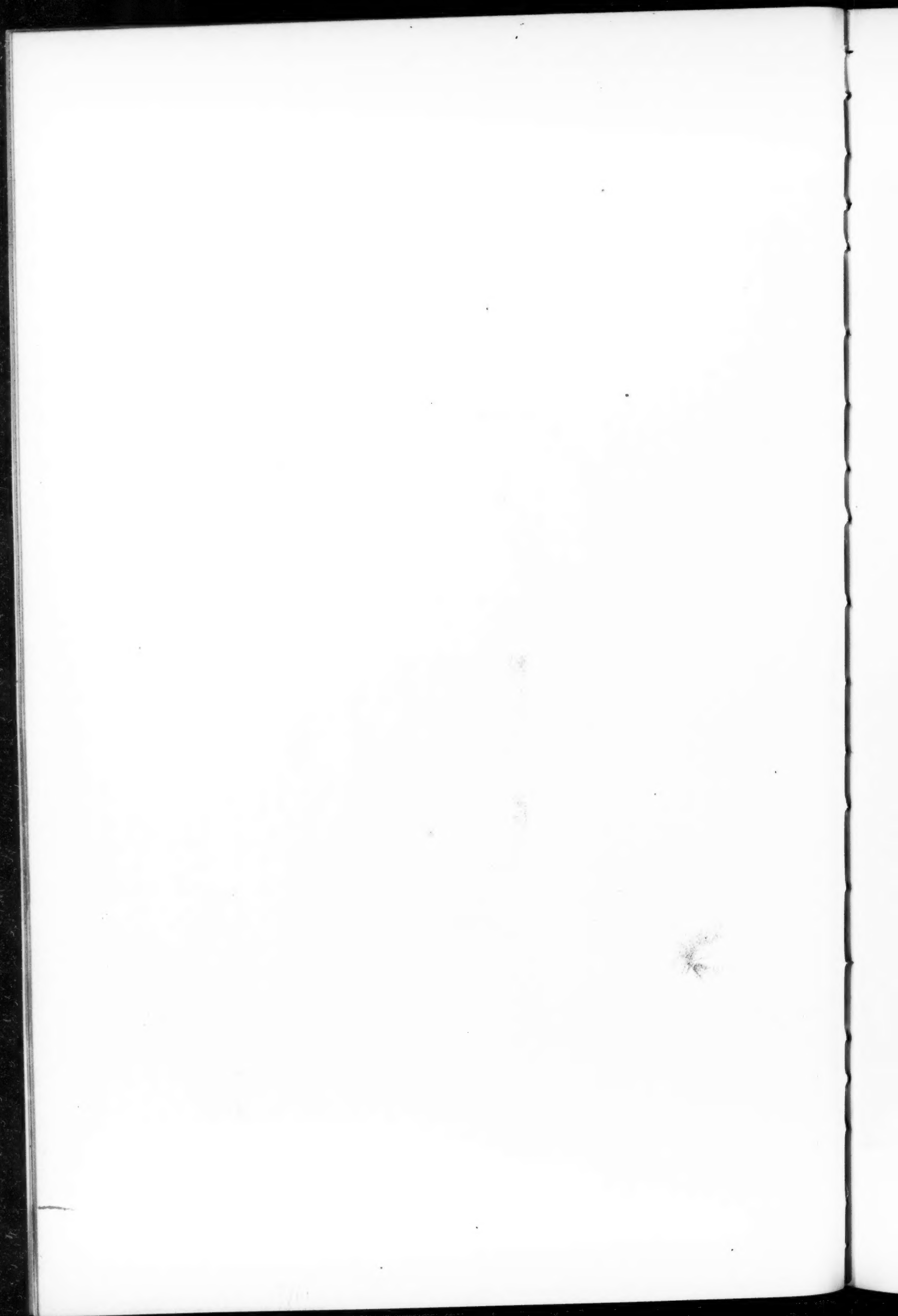
RESIDENCE OF B. H. WARDER, WASHINGTON, D. C.
H. H. RICHARDSON, ARCHITECT.



RESIDENCE OF E. H. WARDER, WASHINGTON, D. C.

H. H. RICHARDSON, ARCHITECT.

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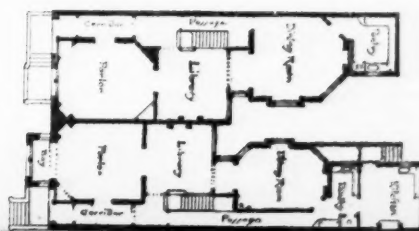


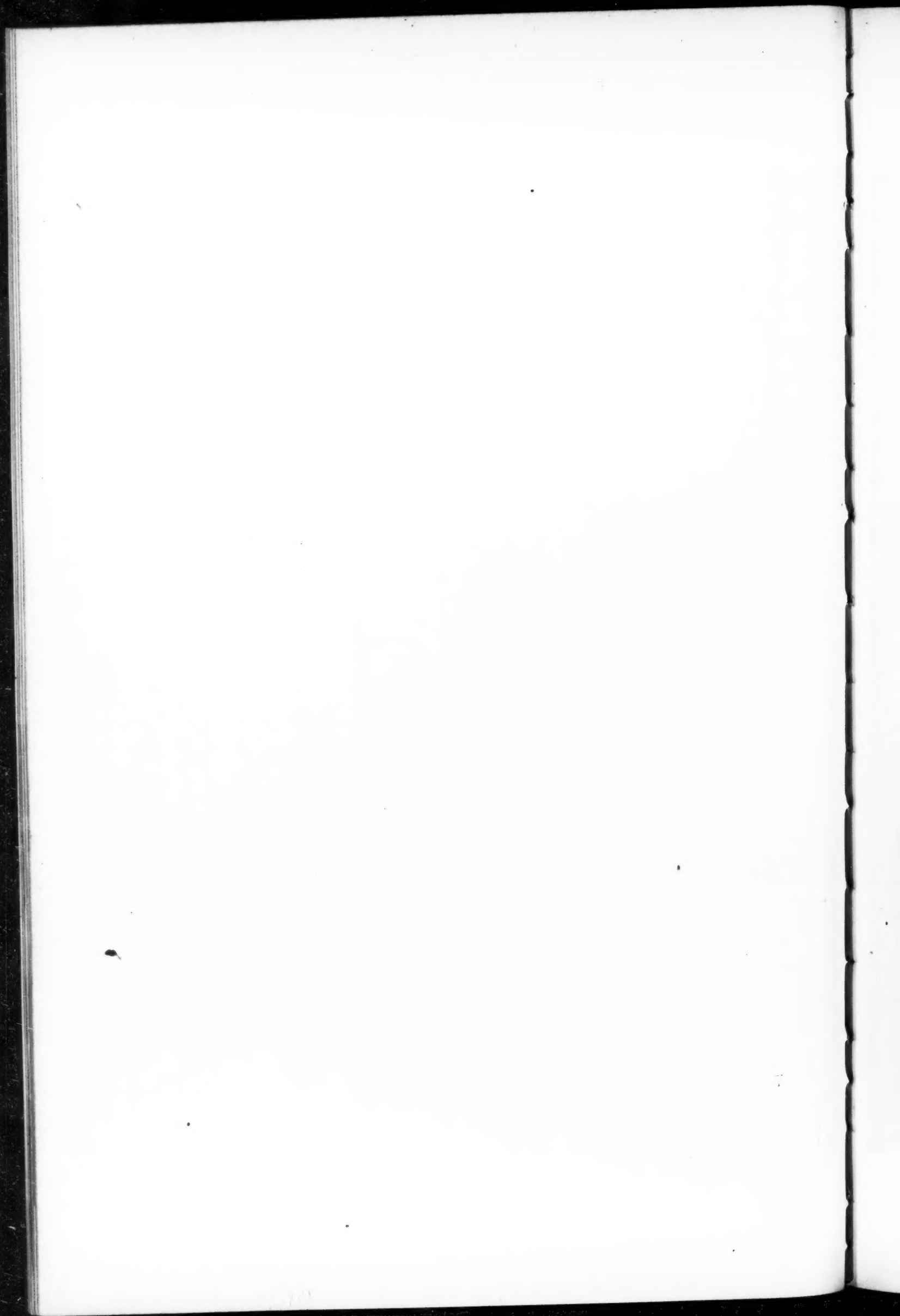


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RESIDENCES, WASHINGTON, D. C.

H. L. PAGE, ARCHITECT.



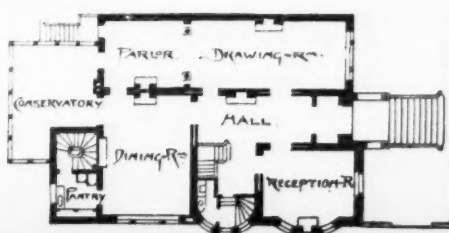


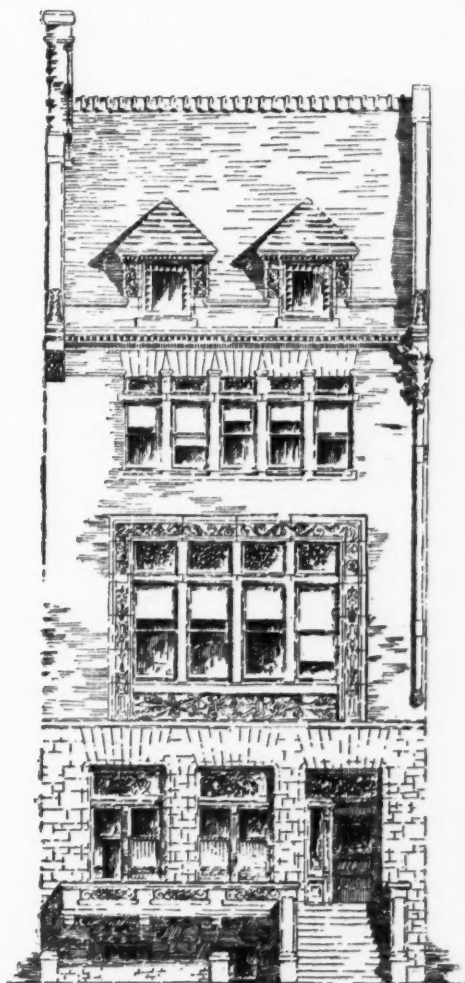
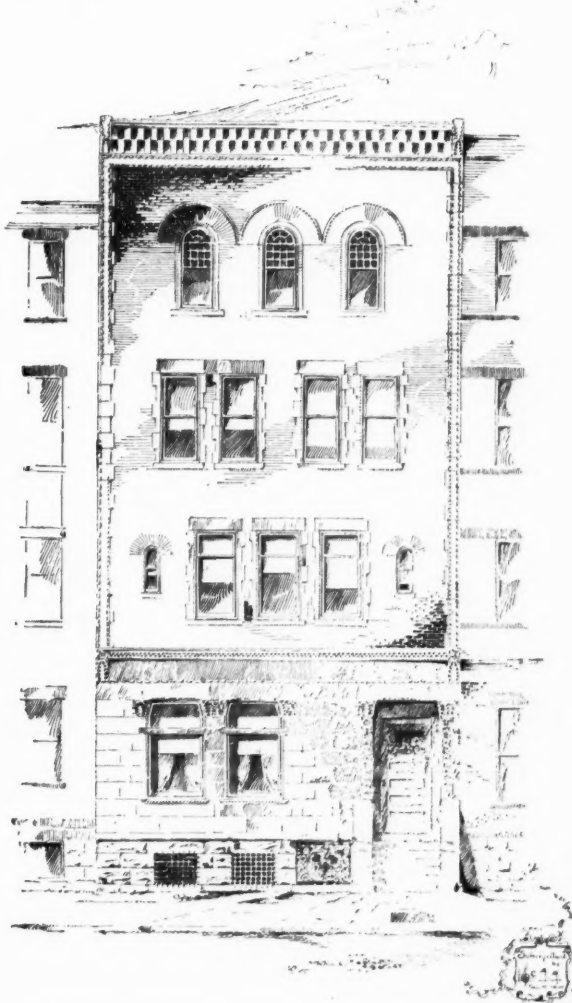
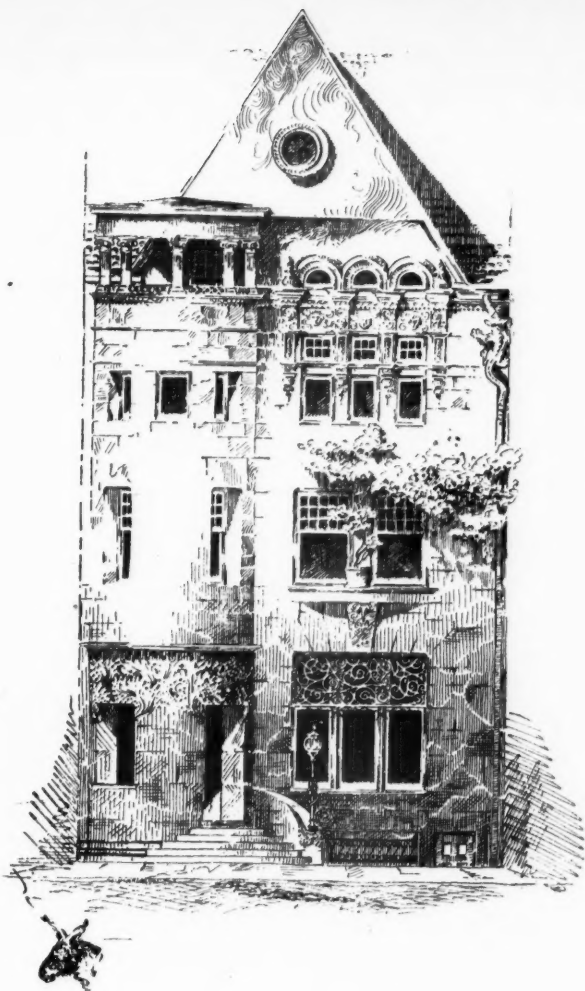


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RESIDENCE FOR C. T. YERKES, CHICAGO.

BURLING & WHITEHOUSE, ARCHITECTS.

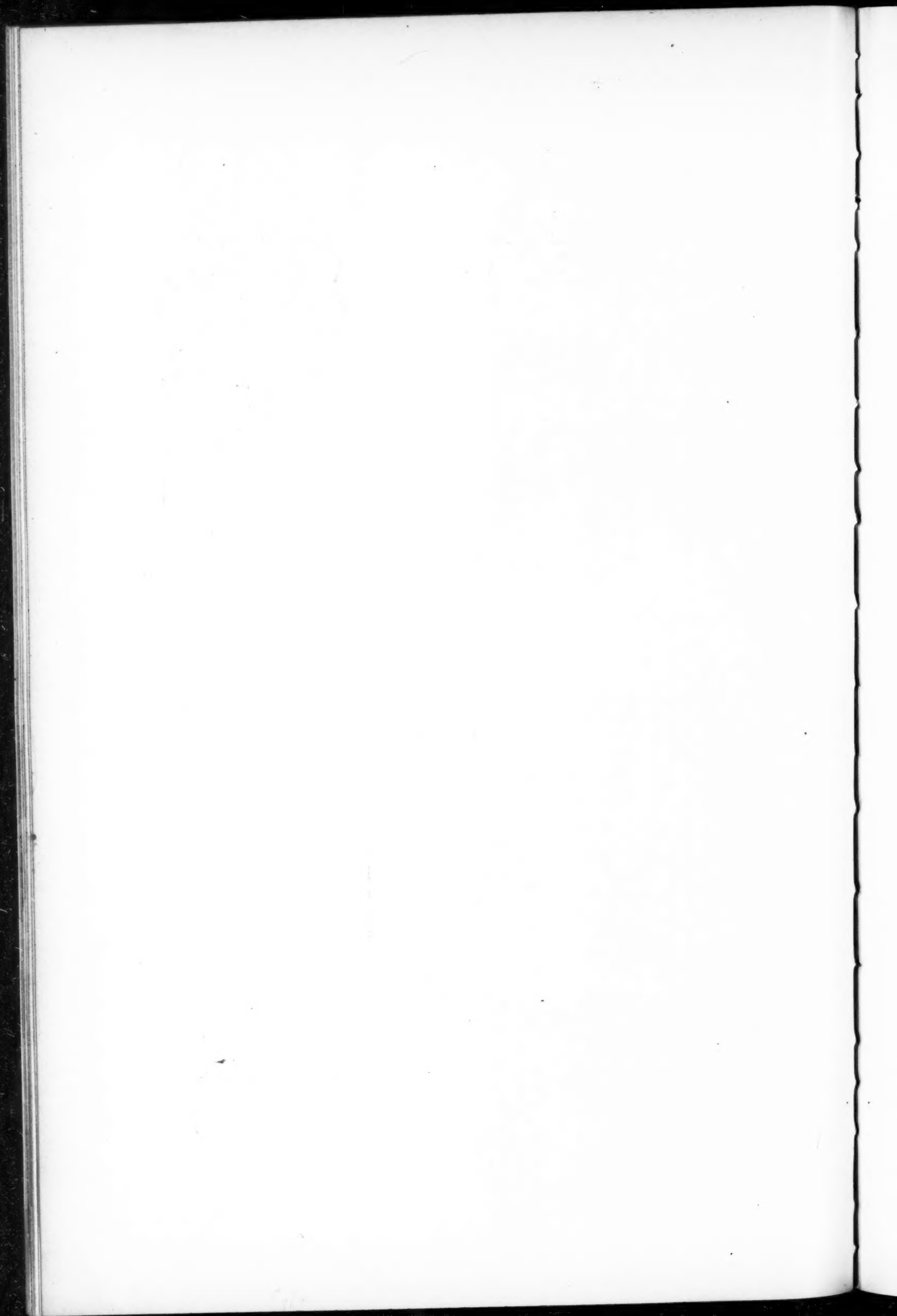


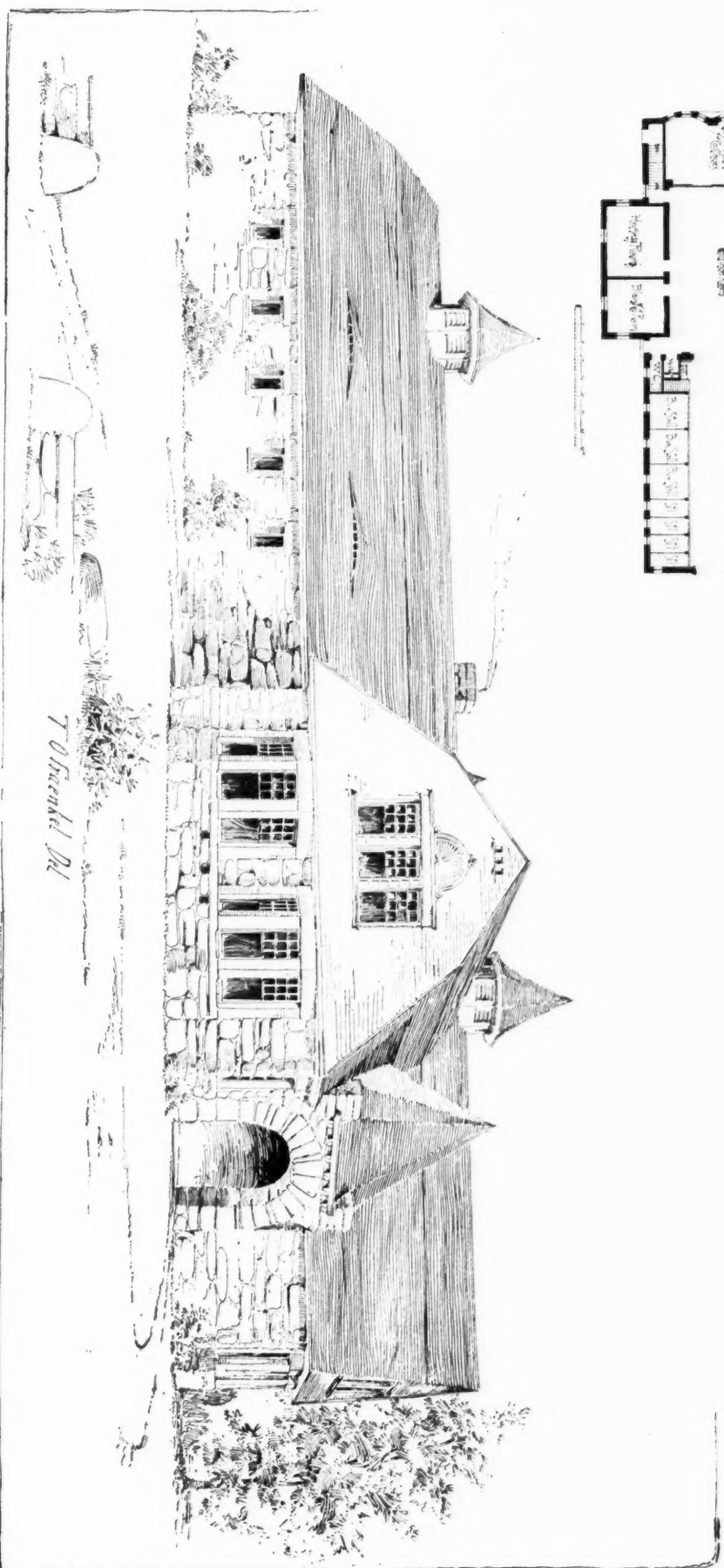
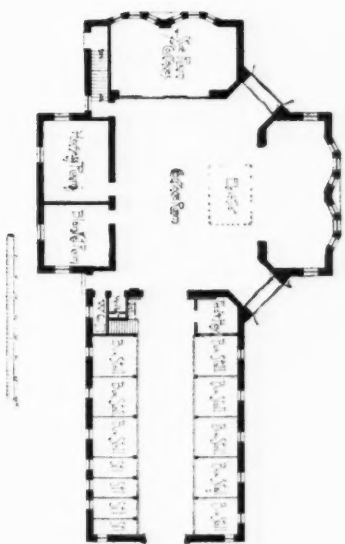


COMPETITION FOR CITY FRONT, BUFFALO ARCHITECTURAL SKETCH CLUB.

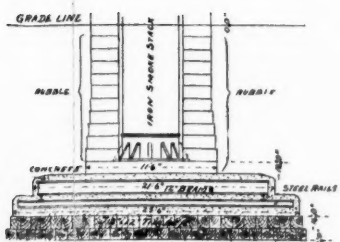
FIRST PLACE—F. R. FULLER.
THIRD PLACE—M. G. BEIERL.

SECOND PLACE—J. A. JOHNSON.
FOURTH PLACE—W. L. FUCHS.

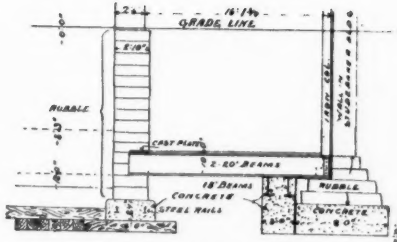




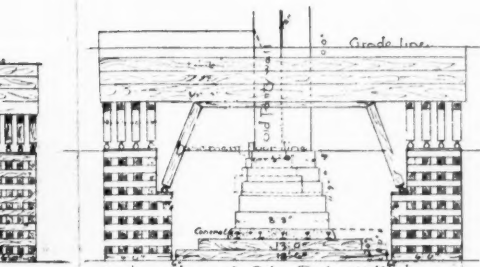
BARN FOR MR. CLEM. STUDEBAKER, SOUTH BEND, IND.
COBB & FROST, ARCHITECTS, CHICAGO.



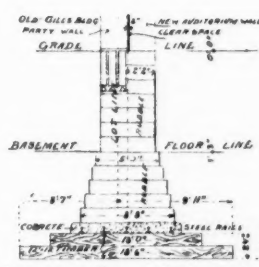
Section of Touting of Smoke Stack on North Wall looking South. Figure 2 D.



Section through Cantilever supporting Columns against Stedehaker Bldg. Figure 3.



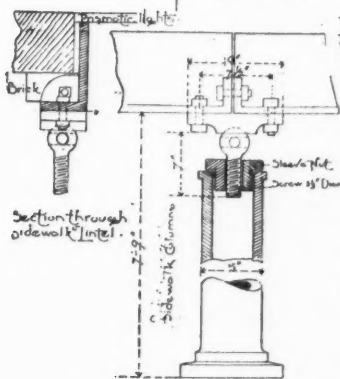
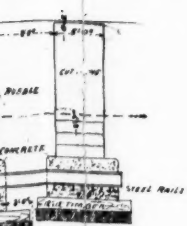
Section through Giles Party Wall showing process of underpinning. Figure 2 A.



Present condition of Giles Party wall and of new foundation and new wall the screws will remain until all settlement has taken place. Figure 1.

illustrating special adopted in the of the AUDITORIUM BUILDING Adler & Sullivan Architects.

Engraved and published by the Chicago Architect & News Record Chicago, Ill.



Section through sidewalk. Figure 2 B.

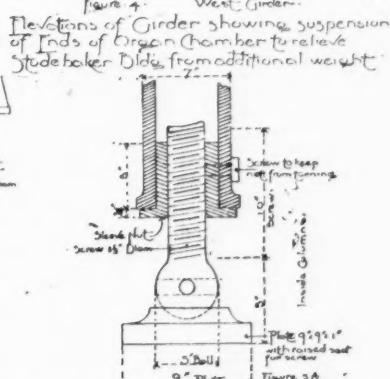
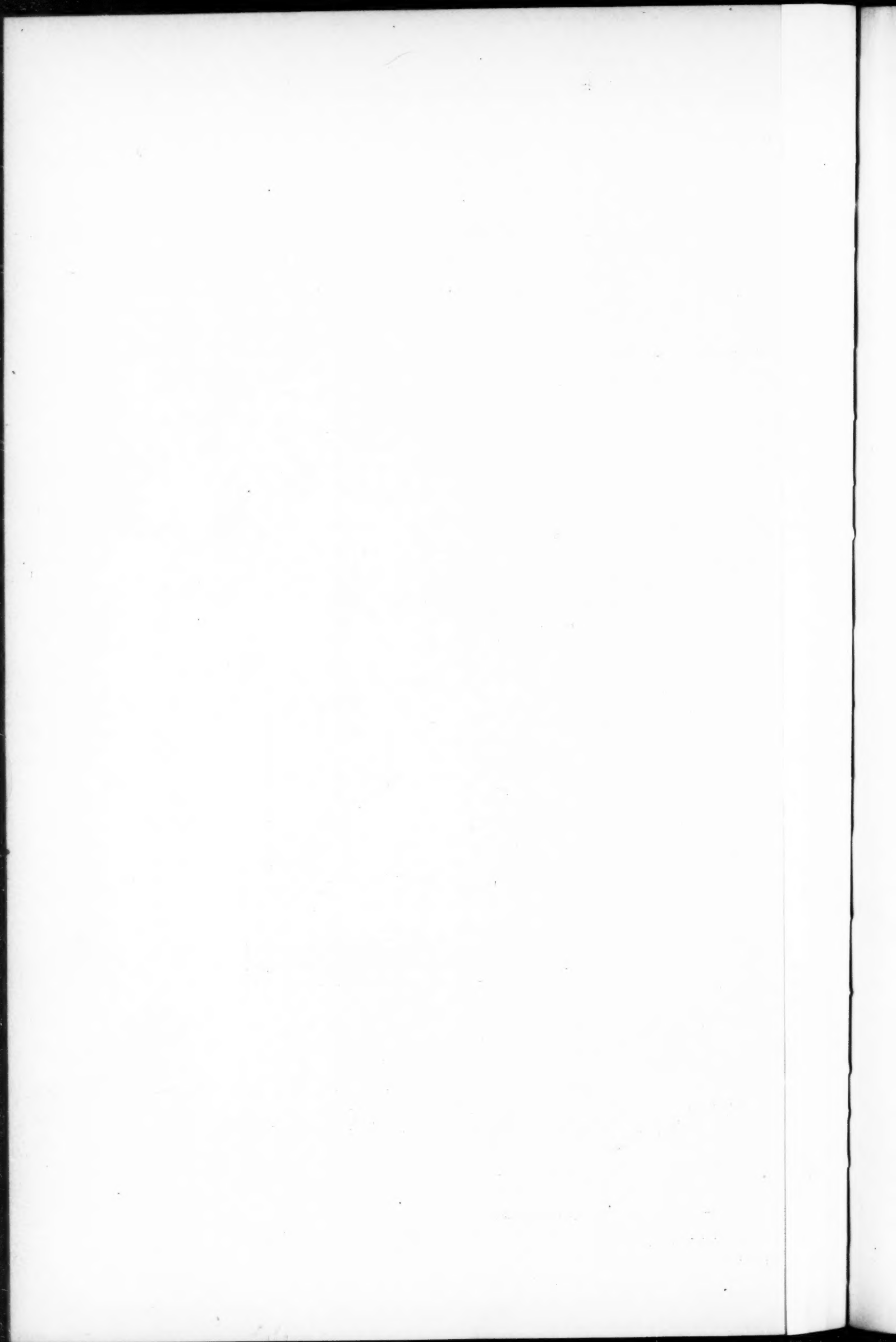


Diagram of Screw Adjustments of small iron pillars. Figure 3 A.

CHICAGO, AUDITORIUM BUILDING, CHICAGO. ARCHITECTS. (For description, see page 31.)



The Orff Bros., have a water-color by F. W. Fitzpatrick, who I see is permanently associated with them, a winter scene very good, but the colors a little muddy.

The two designs of Messrs. Handy & Cady are water-colors by your own dear Paul C. Lautrup; splendid tones; fine texture, and a brilliant handling of shadows, and only one fault—no, not a fault, but a peculiarity. Now, I have seen and studied skies for ever so many years, but have never struck a very serene blue one yet, with one intensely and perfectly straight, white ruff in it. May be he was thinking of the day of the crucifixion, when "the skies where rent in twain," or, perhaps, he had been eating pretzels.

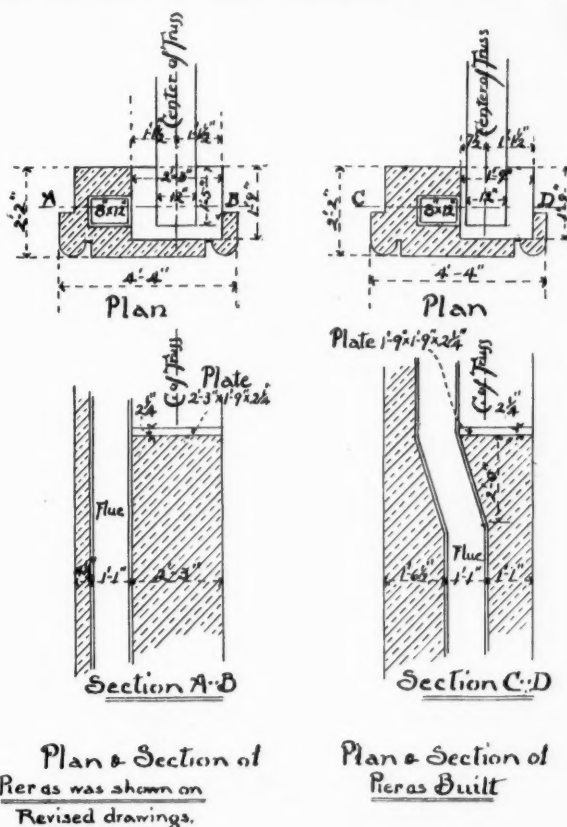
All these drawings which I have just mentioned, are equal to, if not superior to the much-admired exhibits we have seen at the Salmagundi and League displays. They are well worthy of a day's study; in fact, the whole exhibition is highly interesting, and attracts much attention, and well worth a trip to Minneapolis to see.

I have tried to describe what I saw, and you have, perhaps, received a faint impression of what there really is, but the pen is so inadequate to such a task that a few illustrations of the best would be, I think, much more interesting to your readers, for you know that: "*Li poeti dipingono con la parole; li pittori parlano con l'opere.*"

The Midland Hotel Disaster.

ON the first day of March, at the hour of noon, two of four trusses supporting the roof over the dining room of the Midland Hotel in course of construction at Kansas City fell. The building was eight stories in height, and built of brick, iron construction, and fireproofed. As one workman was killed, a coroner's jury, assisted by a committee of experts, investigated the causes which led to the disaster. The investigation showed that Burnham & Root, of Chicago, were the architects of the building. A local superintendent was in charge of the work of the firm in Kansas City, and an inspector was employed upon the hotel under his direction.

By the copies of the original and revised plans, placed before the investigators, it was shown that the architects' plans were correct and ample from a construction standpoint. From the investigation, which occupied several



days, and in which a large number of witnesses and experts were examined, the following facts are sifted as those having the most direct bearing upon the causes for the disaster:

First—That when it was determined about May 5, last, to use trusses to support the roof and ceiling of the dining room, which was located on the eighth floor, that revised plans from first story up were drawn and sent to the contractor, who received and used them throughout.

Second—That the general superintendent gave instructions that, whereas the original specification had been in dispute as to the use of a certain percentage of soft or "salmon" brick, under the new conditions only hard brick was to be used for the piers, and that cement was to be used throughout, a written memorandum to this effect being signed by contractor. These instructions the mason acknowledged before the coroner's jury to have received, and agreed with the general superintendent to be careful to keep soft brick out of the piers, placing them only under windows.

Third—That the size of plates under trusses was designed by the architects, 1 foot 9 inches by 2 feet 3 inches.

The causes of the accident are then to be found in the pier, which was first to give way, as sworn to by many competent witnesses, diagrams of which are given.

First—The flue, which had in the revised plan been taken from the center and placed on the side of the north pier, was built in the center, in violation of large scale pier diagram.

Second—A considerable percentage of soft brick had been employed, against the architects' instructions.

Third—The plates furnished and set at this point were only 1 foot 9 inches by 1 foot 9 inches, instead of 1 foot 9 inches by 2 feet 3 inches.

From which it is most evident that the combination at one point of these three variations from the architects' plans caused the accident. For not only was the solid bearing of brick destroyed, beneath this plate, but the plate itself was made smaller, and thus the bearing of the truss came on one side of the plate itself—making three causes of weakness all in one spot.

The six gentlemen engaged to investigate and determine the cause of the disaster made the following comments upon the causes and responsibility:

That we believe from the evidence that the falling of said portion of the structure was due to a failure of the brickwork supporting the two easterly trusses over the dining room.

That we believe from the evidence that the falling of said part of the building was not due to or caused by the defects in the revised plans and drawings therefor; but the architects, Messrs. Burnham & Root, were neglectful in that they did not also revise the specifications in such manner as to insure an improvement in the quality of the brick construction in the sixth and seventh stories supporting the two easterly trusses.

That we believe from the evidence as to Walter C. Root, the general superintendent of construction, that by reason of the large amount of work under his charge, which, besides the hotel, included the Exchange building and the American bank building, and that he had given special orders for the proper execution of the work in question, and which orders were disregarded; therefore, it is of our opinion that he should not be held responsible for the failure of said part of the building; but that we censure him for not having made a personal examination of the setting of the plates and trusses thereon.

That we believe from the evidence as to A. B. McKay, the local superintendent of construction in immediate charge of the building for Burnham & Root, architects, in that he was grossly negligent in the performance of his duties for the part of the work in question and in carrying out the special orders given him by Walter C. Root, the general superintendent.

That we believe from the evidence as to Taylor, Seddon & Edwards, the contractors for the brickwork for said building, were grossly negligent in that they did not thoroughly inform themselves as to the particular requirements of the revised plans and as set forth in part of section 3 of the specifications, which provides: "that he will use all diligence to inform himself as to its construction and finish and in no case to proceed with the different parts of the work without obtaining first from the architects at their office, such directions or drawings as may be necessary for the proper execution of the work," and to which negligence we attribute the diminished thickness of the south wall of dining room above the bottom cord of the trusses; to which diminished thickness we attribute the setting of the smaller plates under the south ends of the upper chords of the two easterly trusses.

And further, that with their knowledge of the proposed increased weighting on those parts of the walls, they should have seen to it that extra care was taken in accordance with the last clause of section 4 of the specifications which provides that: "No excuse of ordinary care or quality of work will be allowed where the nature of the work requires extra care."

That we believe from the evidence as to Charles Burch, the foreman in charge of the brickwork for Taylor, Seddon & Edwards, that he was negligent and careless in that he did not obey the orders of Taylor to use hard bricks only in the walls supporting the trusses, and that he did not inform himself as to the particular requirements of the revised plans.

That we believe from the evidence as to Hough, Ketchum & Co., contractors for the iron work for said building, in that they were careless by reason of having provided cast-iron plates of diminished sizes from those indicated in the detail drawing therefor, on which the top chords of the two easterly trusses were set.

That we believe from the evidence that Frank Smallwood, the foreman ironsetter for said Hough, Ketchum & Co., was careless, in that he gave to the foreman bricklayer the smaller plates to set under the south ends of the upper chords of the two easterly trusses, after having been told that the larger plates were too wide for the wall as built, and without consulting the detail drawings for the same or informing the superintendent, which, had they been done, would reasonably have led to an investigation revealing the fact that the south wall was $\frac{1}{4}$ inches thinner than called for in the revised plans.

A. VAN BRUNT,
JAS. G. ADKINS,
O. L. REMICK,
J. J. SQUIER,
W. G. BAIRD,
V. B. BUCK.

This was a fair statement, except that the architects should not have been called even "neglectful" as to specifications, as the evidence shows they were, on the contrary, most careful regarding them—to the extent of having very explicit agreements as to the brick and cement in piers, all of which was clearly shown in the masons and superintendent's evidence, though in the great mass of testimony the coroner's jury seemed to fail to clearly grasp and credit them.

The case was taken up by the grand jury, and they returned a verdict, indicting the superintendent, the inspector, the masons' foreman, and the iron foreman for manslaughter in the fourth degree.

It is noted from the reports of this grand jury investigation in the Kansas City papers that the jury first brought in a written verdict of acquittal for all, but were instructed by the judge to reexamine and report again on general principles. The jury retired to their room, and without reexamination of the building, or of witnesses, returned indictments against those mentioned above, failing to indict either the mason or iron contractor, whose measure of responsibility was certainly as great as that of the general superintendent for the architects.

MR. ARTHUR L. TUCKERMAN, of the architectural firm of Weston & Tuckerman, is manager of the art schools of the Metropolitan Museum of New York, and also fills the chair of architecture in that institution. The art schools have been established by the trustees of the Metropolitan Museum of Art, in order to furnish superior opportunities for thorough instruction in design, modeling, color, freehand, architectural, cabinet and perspective drawing, chasing and hammered metal work, carving in wood, etc., to those especially who desire to acquire an artistic education applicable to industrial and commercial uses. They have provided large, new, well-lit and ventilated rooms, in a central position, with superior art material and instruction and a liberal basis of admission. In order to offer all genuine students every facility in their work, a series of lectures have been added, the privilege of visiting the museum free of expense, prizes, diplomas, and opportunities for the sale of meritorious work, so that each one may measure his progress by his own industry and application.

Illinois State Association of Architects.

A SPECIAL meeting of the association was held February 18, to consider the formulation of a new building law for the city of Chicago. The following architects were present: Samuel A. Treat, Dankmar Adler, Robert C. Berlin, Louis H. Schaub, L. G. Hallberg, Clinton J. Warren, Normand S. Patton, George Beaumont, Fred Baumann, Alfred Smith, O. J. Pierce, S. M. Randolph, Henry Raeder.

The following guests were invited to participate in the conference:

W. J. Edbrooke, Commissioner of Buildings.

The Chicago Fire Underwriters' Association.—Representatives: Edward M. Teall, Wm. R. Kerr, R. N. Trimmingham, secretary; T. A. Bowden, superintendent of surveys.

Citizens' Association.—Representatives: S. D. Kimbark, chairman; James W. Beach, attorney; J. H. McVicker, Fred Baumann, Ed. Gobel, C. G. Dixon.

Real Estate Board.—Representatives: Wm. D. Kerfoot, E. A. Cummings, A. S. Coe.

After the usual lunch, President S. A. Treat called the meeting to order, stating the object of the conference as follows:

The President: Gentlemen, I will state that the Illinois State Association of Architects, in calling this meeting, has extended an invitation to the Board of Underwriters, the Citizens' Association, the Real Estate Board to send representatives to meet with us; also to the building and fire departments of the city, to discuss with us the propriety and to what extent the present building ordinance should be changed, and in what manner. It was our purpose that all who are directly interested in this matter should meet together in conference, in order that there might be harmony of action. I do not know exactly how we ought to proceed, but I think Mr. Adler has formulated a programme, and I therefore call upon him to announce it to you.

D. Adler: Mr. President, I am sorry to say that I have not formulated any programme outlining the course of our proceeding this afternoon, although, perhaps, I should have done so, having been measurably the cause of this meeting. The architects of Chicago, who are generally members of this association, or, at least, this association, composed of the principal practitioners in the city, have felt, with other citizens, that the present building ordinance is inadequate and indefinite, and to a great extent has outlived its usefulness, as while they might have been adapted to the old city of Chicago, they certainly need revision to meet the needs of the new Chicago. Learning that the building department of the city has been invited to frame a new ordinance, we have taken it for granted that that department would be willing to learn our views as architects, and would also be glad to learn the views of the underwriters, the real estate men, the Citizens' Association and fire department, we have extended the invitation to you gentlemen, all, to join us in a conference. Of course, we architects would like to have an ordinance framed so as to call for a high grade of buildings, yet not so restrictive as to make its requirements impracticable. It is to the interest of underwriters to have an ordinance so framed as to call for the construction of buildings that when a fire does occur the damage will be as light as possible, and the real estate men want one that will not prohibit the erection of low-priced buildings in the outlying districts of the city. What we desired was to get the views of these different parties together, and for our deliberations to be guided by the counsel of the building department of the city, so that our action might be in harmony and to the best interests of the citizens at large. I believe, with this end in view it will be best first to hear from the building department of the city.

The President: We would be pleased to listen to Mr. Edbrooke in behalf of the building department.

W. J. Edbrooke: I came here rather to listen than to give any views. I would say I think that most of our business buildings in Chicago are not constructed substantially enough. I notice, generally, when one of them burns out, the walls have gone down in the wreck. Again, I think many are higher than needed, and while it might not be in accord with the ideas of capitalists it would be in the direction of public interest to limit the heights of buildings to a degree of greater safety, and particularly in the direction of buildings that are added to in height after construction. This is a matter of some difficulty to arrange, as also others that will present themselves in the revision of the present ordinance. I would say the building department of the city will be very glad to act in harmony with others having the matter of revision under consideration.

The President: We would be pleased to hear the views of the underwriters.

E. M. Teall: Mr. Chairman and gentlemen, as one of the representatives of the Chicago Underwriters' Association, I wish to say there is no question of more importance to the underwriter than a good substantial building. The underwriters carry the burden of all the citizen property owners. We have now an association comprised of most of the fire insurance companies doing business in the city of Chicago, and we have adopted a system of schedule rates, showing what shall be the standard height of an insurable building, what the thickness of the walls of the structure shall be in proportion to its height, etc. We are bitterly opposed to great high buildings, unless they are made of fireproof material, when they are beyond eighty or one hundred feet high. As most six, seven and eight story buildings are constructed, they are little more than fire-traps, destroyers of life and property. When a fire takes place in one of this class of buildings and is beyond the reach of the fire department it has got to burn down to where the fire department can reach it. We have buildings in this city which are uninsurable on account of their height. I have been asked by your president, since I have been sitting here, if the underwriters would like to have all buildings constructed of fireproof material. I answered him by saying I never expected to see that come to pass in my day. In the future, perhaps, our buildings may be constructed as our best buildings are now constructed, but at present we do not hope for any such state of things and are willing to leave that to the future. As Mr. Edbrooke has said, many of our business buildings are so constructed that when a fire

does occur in one of them it is very destructive. We have an instance in the fire that occurred on Fifth avenue and Adams street. When the fire department arrived the fire was all over the building, and it had to turn its attention to the protection of the surrounding property, as it was useless to attempt to save the building and property. I understand the companies who had risks on that building met with total loss. I do not care to make a speech or to give my views as to what proper legislation would be. I hardly think we will be able to arrive at any definite conclusion until a committee is appointed, to consist of some from the Architects' Association, some from the Real Estate Board, some from the Underwriters' Association, who shall endeavor to formulate an ordinance that will cover the needs of the city as far as may be. I can say the underwriters are deeply interested in this matter and want to assist all they can to so desirable an end.

The President: Has the Real Estate Board any suggestions to offer?

E. A. Cummings: Mr. Chairman and gentlemen, the question of the revision of the building ordinance is one that no organized body of men are so well qualified to discuss as that of the architects of this city. You come daily in contact with its deficiencies, you are cognizant of them. This ordinance is your rule and guide in your business, and the remedies which are necessary your experience will readily suggest; and when we speak of remedies we speak of those that are practical, such as will encourage investment and not prohibit it. However, it would seem as a cardinal principle in the formation of a building ordinance, the greatest possible latitude should be permitted in the matter of building consistent with public safety. The question of building in a great city, when it comes to those buildings that are to be erected in the central portion, is of vital interest. Such buildings, made valuable by the adjoining property, should be constructed so as not to be a menace to that property and those who occupy it, and hence it follows that such buildings, in their construction, should be so regulated as to protect the lives and property of those that are to occupy them, as well as the property adjacent to them; and to this end it would seem that no building should be permitted to be erected of so great height that, when a fire does occur, it cannot be successfully combatted by the fire department, unless it be made practically fireproof; that all hotels, theaters, public halls, and such places as people are expected to assemble in, should be made as safe as it is possible to make them, not only in respect to their ability to withstand fire, but in stability as well. The matters of storage, heating, lighting, sanitation, etc., are also matters that should be under more absolute control, as we real estate agents have occasion to know, having found in our experience a great many cases where, to say the least, great carelessness has been noticeable on the part of those who had charge of the construction. There are many other matters of detail that one who is on the outside is hardly qualified to speak of, but which comes within your profession and experience, and of which you are cognizant. There is one thing, however, I want to speak to you about, and that is, the fire limits. There are many people who believe the fire limits should be extended to the extent of the city limits; that there should not be a class of citizen property owners who should have greater privileges than another; that the erection of frame houses would be a standing menace to the city. Now, between the seven miles from the eastern to the outermost western boundary of the city, there are hundreds of acres of land under such restrictions that they must necessarily lie vacant for years. If all property within this city was of the same class, and had the same facilities, there would be good reason for that position. Just outside of the old city limits there are hundreds of acres of land that have never produced a dollar for their owners, and that have been almost eaten up with taxation; while just over the line, Jefferson, Cicero, and the town of Lake, have sprung up thriving and prosperous communities because the workmen have been able to build their homes there, within their means; and it should not be forgotten in considering this question, that the erection of these same frame houses has made an increase in taxable property that would not otherwise have been. As to the claim that frame structures are too great a fire risk, I think the experience of the insurance companies will go to show that those little isolated frame cottages are not among their most undesirable risks, and the aggregate of losses show they are not. I would ask you if there are not other things beside fires to be dreaded in workmen's homes? Isn't there a greater danger from the discontented? Isn't the man who owns his own home a better citizen? Let a man once own his own home and he becomes a defender of law and order, and when votes are counted he is always to be found on the right side. Large cities become the abodes of the very rich and the very poor, and as a consequence, the government is too often controlled by the vicious element. I have never known a workman who owned his own home that was a bad and vicious man. Gentlemen, we are looking forward to be not only the greatest, but the safest city on this continent, and we should be careful not to draft an ordinance so arbitrary as to drive the workmen beyond our borders, to build their homes there at our expense. Mr. President and gentlemen, I thank you.

S. D. Kimbark: Mr. Chairman and gentlemen, I have been invited here as a member of the Citizens' Association, especially as the chairman of the committee to which has been referred the subject of our houses of public amusement. The association has no legal authority, but is anxious to coöperate with those that have, in everything that tends to the welfare of our citizens; and especially are we willing to help the building department all we can in framing a building ordinance which shall make safe the places for the amusement and instruction of people, rich and poor. The committee has drafted an ordinance in reference to public buildings which we are anxious to have incorporated in this bill. We have on our committee as many as two architects, and one member from the Board of Underwriters, and, I think, perhaps two. We have given our special work a great deal of attention, and we believe the draft of the proposed ordinance will commend itself to the building department of the city and to all good citizens. Our work, as I have said before, is especially public halls and theaters.

D. Adler: Mr. Chairman, Mr. Cummings has touched upon a point on which, perhaps, there will be a greater diversity of opinion than any

other in the provisions of a new building ordinance adapted to the wants of the New Chicago. While probably we all agree with him that it is necessary to give the workman facilities to own his own home, yet those who may agree with Mr. Cummings in this might consider it impracticable to have it in one district permissible to erect frame structures of a certain character, while in others only brick buildings are allowed. This city may be said now to be an aggregation of villages, in parts a howling wilderness. In coming over the railroads from the south, we pass through miles and miles of vacant territory which we are told is Chicago. Now it is folly to presume that on these vacant tracts nothing but brick buildings should be erected. It would be folly to try to prevent the erection of frame structures in those places. On the other hand we have blocks upon blocks of frame houses; blocks with buildings not to exceed three feet apart. The multiplication of them would be a menace to the community at large, and if permitted the privilege would become an injury to the very class whom it was intended to benefit, as the insurance would soon get to be so high in those neighborhoods as to very materially deteriorate the value of the property. Now, it has occurred to me—and I broached the scheme at a previous meeting of this association—that in the drafting a new building ordinance provision might be made for the annexed portion of the city; that outside of a certain point the erection of frame buildings would be permitted under a certain height and a given distance apart, to the extent of covering a half block on alternate sides of the street, and that after these portions were covered then the erection of frame buildings should cease and no other buildings but brick should be erected. It is not necessary on account of expense that workmen's homes should be built of frame, as brick buildings can be built very economically. It should be the aim to reduce the limit of destructive fires as low as possible. We should not forget our great fire of October 9, 1871, was the result of frame buildings, and so, too, the somewhat lesser fire that preceded that and the fire that occurred about a year after. Those three fires show that a large aggregation of frame buildings are a menace to the better class of buildings that may be contiguous to the sections where they may be. Now, we architects, perhaps, desire that the general class of buildings should be a higher grade than others, and might be inclined to too restrictive legislation, but we do not wish to be exacting or to work for other than the best public interest, and it is for this purpose of arriving at some just and proper plan that we have invited the coöperation of you gentlemen, and we, all of us, real estate, Underwriters, Citizens' Association, building and fire department, wish Chicago to become a great city, but we know it can't be built up at once of such structures as we could wish, but we can by wholesome provision that while all the buildings may not be great, they can be, when we cover this twenty-odd square miles of territory, buildings that will not endanger the districts in which they are erected. I should like to hear the views of other gentlemen.

W. D. Kerfoot: Mr. Chairman and Gentlemen, The Real Estate Board is in thorough accord with the architects and the city authorities, in their efforts to prepare a proper fire ordinance for this city, to cover not only the old city limits, but also that embraced in the new territories lately annexed. This question of a fire ordinance, we are satisfied, is not fully understood by the people of Chicago. In the first place, very few of our citizens have any distinct ideas of the exact boundaries of the city limits, and when you tell them that the present city limits, including the new territory lately annexed, stretches away to the westward seven miles, to the southward sixteen miles, and northward four miles, while the southwestern corner of its limits is fully thirteen miles, they will hardly believe it. The majority of the streets running through this vast territory are unsewered, and hence it is impossible to build upon these unsewered streets, brick houses. Our theory is, in locations where there are no sewers, to allow the erection of frame buildings (outside of a prescribed line) to be not over 18 feet in height, and they to front on a line 50 feet from the front or recorded line of the lot, and within 50 feet of each other. By this means the street would be in most instances practically 160 feet in width, and in others 180 feet in width, and whenever one of these unsewered streets becomes sewered, then the ordinance should provide that no additions be made to these cottages or buildings, unless of material other than wood, and should permits be issued to build upon the 50 feet in front of the lot, this permit should only be issued for a brick building or other material not combustible. The great difficulty in regard to the sewerage of our streets, is owing to the fact that the City of Chicago started out on a wrong theory; instead of building all of our sewers out of a general fund, they should have been built by a special assessment upon the property abutting or benefited by the sewer. Now we can hardly get an appropriation for sewers over \$200,000 annually, and the bulk of this money is used in keeping the present sewers in repair. In regard to the fire of 1871, it did not spread owing to the number of frame buildings inside the City of Chicago, but it was owing to the inadequate supply of water. Our mains then were from four to twelve inches, and the large engines then in use could not be supplied with water rapidly enough from these mains. All this has since been changed; we now have water mains from twelve to thirty-six inches, and our fire department can not only put out a fire in a frame building, but when a fire occurs in a cottage, the force of the water literally knocks the building over. Owing to the peculiarity of the clay from which our bricks are made, it is impracticable to build brick buildings with safety outside the sewer district. This clay is filled with particles of limestone, which when burnt becomes quicklime, and buildings built from the ground with this material disintegrate, owing to the fact that the surface water washing against them explodes the brick in the walls, rendering them unsafe. We all know that the prairies which surround this city in spring and fall, are one sea of water, and remain so for days, until the water can find an outlet in the nearest sewer. We have resorted to the expediency of building brick cottages on cedar posts, but these houses are very unsafe, owing to the fact that in the spring of the year, the frost forces the posts out of the ground, and the building cracks from top to bottom. All the territory west of Western avenue since it was taken into the city limits, prior to the fire of 1871, has been lying vacant and unoccupied, and this was all owing

to the lack of sewers. The property owners a few years ago, advanced sufficient money to the city, to build a sewer on Western avenue, and one on Kedzie avenue, and they in a measure have been relieved, but all the property lying west and north of these improvements still remains vacant, and will continue so, unless they can be relieved, either by sewers or a proper building ordinance. These suggestions should have an important bearing in the framing of a new ordinance.

J. H. McVicker: Mr. Chairman, I should be quite as much at home in a medical college as here in an assemblage of architects. I came to listen, not to speak, and I doubt if I can add to the interest of the occasion by talking, as I claim no knowledge in the art of building except so far as it pertains to structures for my business; I am vain enough to think I know how a theatre should be constructed, and while I have, I hope, built my last one, I would say in reference to them and all public buildings wherein large numbers of people are likely to gather—churches, theatres, school-houses, and all buildings for public amusement—their construction should be governed by laws, not arbitrary but firm. Architects in planning such buildings should consider lines of safety as of more importance than those of beauty. The people of America are very nervous, made so by their modes of life and their sensational environments, and my observation teaches me they are becoming more so, and therefore all places erected for them to meet in large numbers should be so constructed as to stairways, outlets, aisles and general comfort as to give the impression at a glance that under all circumstances they are safe. We should fear panic more than fire, as the latter is more easily controlled than the former; but we should legislate to lessen the danger of both by wholesome and simple laws. I have noticed during the discussion a tinge of selfishness on the part of the different interests present. The association I am here to represent exists but for one object: the general good of the entire city, and I think Mr. Cummings struck the main thought for our consideration in claiming that all measures should be adopted calculated to make Chicago a city of homes, and as far as possible induce our mechanics and all working people to become the owners of their homes. The taxpayer is blinded with selfishness who grumbles at the amount of his taxes so long as the money is properly expended in building sewers, extending and improving our water system, and in every way perfecting the sanitary condition of the city. As to who should formulate the laws we require would it not be well to trust the matter to those in authority, making it plain to them that the main desire is to build a city of prosperous homes rather than one for mere profit.

E. M. Teall: Allow me one word. I did not know this discussion was going to take the line it has in regard to extending the fire limits to the lately annexed districts. The discussion arose on the permission to erect frame buildings, and the objection was to continue their construction. There are methods of separating frame buildings to which the Underwriters would not object, but any ordinance that would put no limit to their height and contiguity would be most earnestly opposed by the Underwriters.

W. D. Kerfoot: Mr. Chairman, to get the sense of this meeting I move you, sir, that a committee be appointed from the Board of Underwriters, the Real Estate Board, the Architects' Association and the Citizens' Association to formulate a revision of the present building ordinance and to report at a subsequent meeting.

The President: I would like to have added Mr. Edbrooke, of the City Building Department, and the fire marshal to the committee.

D. Adler: How would you have the committee appointed? I think it would be better to let each association appoint its own committee and that these should form a joint committee.

The President: The motion, as I understand it, is that a committee of three be appointed from each: the Board of Underwriters, the Real Estate Board, the Citizens' Association and the Architects' Association—each association to form its own committee—together with the building commissioner and the fire marshal, for the purpose of discussing and formulating a new building ordinance.

D. Adler: To report at a meeting to be called by the Illinois Architects' Association.

T. A. Bowden: Mr. Chairman, we have had the views of the real estate men who seem to be interested in the erection of frame buildings in the outlying districts, and to the fire Underwriters who are interested in having buildings that will not have to be endangered by fire. Our experience in the outlying districts with fires is that we haven't had water to put them out. Before talking about the character of buildings to be erected in the outlying districts, we had better just talk about the water supply. If we are called to the town of Lake we find there, for a water supply, what the firemen call "a hole in the ground," that is, a four-inch pipe. I think the different committees that are to be appointed by the different associations should consider this matter as well as the ordinance contemplated. In the city we have high buildings, and our experience is, if we have water we can get up to the fires. The next thing to plenty of water to be considered is a slow burning construction, and that is next to fireproofing. I think the main point to be look to is the water supply, and after that is attended to you can consider the matter of frame construction.

The President: It is understood that the committees to be appointed by the several associations will be subject to the call of the president of this association.

On motion, the meeting adjourned.

REGULAR MONTHLY MEETING OF THE ILLINOIS STATE ASSOCIATION OF ARCHITECTS.

The regular monthly session of the Illinois State Association of Architects was held Saturday afternoon, March 3, in the assembly rooms of the association, on Washington street.

Immediately after luncheon, President Samuel Treat called the meeting to order and stated the programmed business of the session.

The Chair: The subject chosen for consideration today is, "The Construction of a Line Wall on a One-Sided Foundation." If any of you gentlemen are prepared to discuss the question without preparation we are ready to listen to you.

F. Baumann: I don't want to discuss a one-sided line wall. I don't want to take any stock in them. I could tell you a story about a line wall of that kind, but I don't want to discuss the matter.

W. W. Clay: Let some one take the affirmative and you take the negative.

F. Baumann: I wish it was in Germany instead of Chicago.

N. S. Patton: What, the story?

W. W. Clay: Let's have the story.

F. Baumann: Well, gentlemen, the story is about a building on North Clark street—

W. W. Clay: In Germany?

F. Baumann: No—Yes, Germany; on the North Side! We were putting up a four-story building on an eight-inch thick foundation of dimension stone. When we came to lay the foundation the owner of the next lot, who had a shanty on it, said we couldn't come an inch on his land, and he staid right there, morning, noon, and night, to see that we didn't. Well, we put in the wall up four feet, and then we made it twelve inches. When the building was up about two-thirds the line wall began to belly, and it looked as if the whole thing was going to spill all over the neighborhood. Well, when we came to look at that wall again the next day the wall had straightened itself. The stone in the foundation had been bought of Walker, who had just opened a quarry, and it was the first strippings, the veneer of the quarry, and wasn't extra stone any way; and when we came to look, the first course of the foundation had broken in two and let the wall of the building right straight down all right. Now, how it came to do that without breaking and damaging the wall is the question. It went right straight back, gentlemen!

The Chair: Mr. Baumann, I believe, you are an authority on foundations. What is your judgment in regard to continuous walls and pier walls?

Here followed a discussion, in which Mr. Baumann declared in favor of a continuous wall constructed somewhat heavier for pier construction, one ton to the foot being about the estimate for proper bearing. It was stated that if the owner of an adjoining lot saw an infringement on his premises he could stop it, but if the foundations were in he would have to prove actual damage.

Mr. Baumann: Mr. President, I have another subject I want to bring before this meeting. There has been a card or paper issued to architects, artists and sculptors by the Grant Monument Association of New York—you have all no doubt received it—inviting competition in designs for a monument to cost \$500,000. They offer so much for the first best design, so much for the second, so much for the third, etc. They don't appear to have a committee yet of judges. Now, I think the most effective way to put a stop to this kind of business is for the architects to speak right out; and I would suggest that the Illinois State Association of Architects prepare and send the Grant Monument Association a proper answer, and have it put in plain English, that it can't be misunderstood. It might possibly bring them to see that that isn't just the way to get what they want, and with the good advice they might conclude to change their present plan and get up a proper competition. It is possible that something has already gone in, but if there isn't I think a protest should go out from this body. Those designs are not called for until July, and there is time enough to do it. They have no committee appointed as yet.

I move that a committee be appointed to draft a proper reply to the invitation of the Grant Monument Association circular, to report the same for action at the next meeting of this association.

N. S. Patton: Let the board of directors draw it up and send it.

F. Baumann: I think if we succeed in getting up a dignified answer to this circular it will have a very wholesome influence on the profession generally.

N. S. Patton: Mr. President, in regard to the object intended to be accomplished—of course we all sympathize with it—but in this particular case the call has been made to architects, artists and sculptors. While the architects through their associations might enter their protest, I am not aware that sculptors and artists have any such associations; and right here comes the thought that may be worthy of consideration, whether a protest and a refusal on the part of the architects to take part in the competition on the proposed terms, would not be simply throwing the competition into the hands of the sculptors and artists and secure to them the work.

The Chair: We do not say we will not go into competitions, but that we will not enter into them unless they are properly conducted.

W. W. Clay: My impression is such action by this association will have a good effect on architects whether they are going into this competition or not. The object is to draw a line as to what shall be considered honorable competitions and those that are not, and that the promoters will understand how best results may be expected. My impression is they expect the very best architects to enter into these competitive schemes, and they are ignorant of the fact that they, as a rule, only get inferior talent. Our desire and aim should be to get this false idea removed.

F. Baumann: I do not know what the intentions of these gentlemen are. If they are building booblers, then it would not have any effect at all; but if they are honest men, then this answer, if properly worded, will have a good effect, and they will cancel the present circular and put out a new one inviting honorable and legitimate competition. Everybody is disgusted with this method. There was lately an honest competition in the Indiana Soldiers' and Sailors' Monument. The board selected a committee and bound themselves to submit the designs to the committee and to abide by its decision. Seventy-two designs were submitted, and what was the result? The committee found that the best design came from an architect in the city of Berlin, Prussia. The board expected it would go to this country, but it went out of the country.

W. W. Clay: I believe that, as a general thing, those who decide in these competitions do it on the actual merits of the plans; that they are honest in their intentions; but the difficulty is they do not secure the best talent.

F. Baumann: Twenty-five and thirty years ago I was of your opinion, but I have learned in ninety-nine cases out of a hundred they are simply

boodlers and nothing else. You know even in the church competitions there is boodle.

After further reference to the impolicy of this class of competitions, whereby the public has been defrauded of large sums of money through incompetent and designing men, it was ordered that the matter of a proper response to the Grant Monument Association be placed in the hands of the board of directors, to report at the next meeting.

It was also decided that the sessions of the association should begin at 1.30 P.M. hereafter.

On motion, the meeting adjourned.

Western New York State Association of Architects.

THE second regular meeting of the Western New York State Association of Architects, was held at Syracuse, at the Vanderbilt House, February 7, 1888.

The convention was called to order at 2:30 P.M. by James G. Cutler, president. The roll was called by Secretary W. W. Carlin, to which the following members responded:

Rochester: Otto Block, James G. Cutler, J. R. Church, Chas. F. Crandall, O. W. Dryer, Jay Fay, Orlando K. Foote, W. Foster Kelly, Louis P. Rodgers, Wm. C. Walker.

Syracuse: Geo. W. Baxter, E. M. Buell, Chas. E. Colton, Ellis G. Hall, J. H. Kirby, Asa L. Merrick, James A. Randall.

Buffalo: R. A. Bethune, W. W. Carlin, Jesse R. Porter, W. S. Wicks.

Palmyra: Joseph Blaby.

Fredonia: E. A. Curtis.

Elmira: Otis Dockstader, J. Q. Ingham, J. H. Pierce.

Utica: Fred H. Gouge.

Ogdensburg: J. P. Johnston.

Watertown: D. D. Kieff.

Binghamton: T. I. Lacey.

Ithaca: C. Francis Osborne.

President J. G. Cutler then read his opening address as follows:

GENTLEMEN.—The order of business which you have adopted, following a very old precedent devolves upon me the duty, which is at the same time a privilege, of saying a few words before the routine work of the session is taken up. I am not unmindful of the fact that the time at our disposal is very limited, and shall therefore confine myself to the mere mention of but few of the many topics which the occasion suggests, and anything like the discussion of which, even if I could summon the temerity to undertake it, I could hardly expect your patience to survive. I feel that I must express to you my thanks for the complimentary vote, in consequence of which I stand here to open the proceedings of this second meeting of the Western New York State Association of Architects. I am conscious that it was to your respect for the American Institute of Architects of which, at the first meeting of this society, I happened to be the only member present, rather than to any personal considerations, that I am indebted for the honor incidentally conferred upon me, and I hope that this sentiment of regard for the oldest architectural society in the United States, and the fact that several of the members recently elected are also members of the Institute, may lead, at no distant day, to the formation of a Western New York Chapter of the Institute, with which many of the members of this association will connect themselves.

I am tempted to talk a little about the important plan for the consolidation of the architectural societies of the country, now under active and promising discussion by the committees of the Institute and the Western Association, but the questions involved are too important and comprehensive for presentation in the time at my disposal, and I reluctantly leave them with the bare statement that such discussion is going on, and with considerable probability of ultimate success. To all who understand and feel the importance of organized effort and association, and I assume this will include every reputable architect in the country, this idea of a National Society of Architects must be an attractive subject for reflection and anticipation. Did time permit, I should be glad to present some argument in support of the proposition that the association of architects in organized bodies, like the one represented here today, is not limited in its good effect to the advancement of the welfare of its members, but that, by promoting free interchange of ideas, inculcating a higher standard of practice, and increasing the sense of personal responsibility, it extends its benefit to the community at large; and how much every center of population is affected by, not simply the ability of architects to do, but the sense of obligation to do the right thing in the right way, need not be enlarged upon in addressing these to whom the expending of large sums of money for persons whose only ideas of building are sentimental rather than practical, is an every day experience.

Of course this thought suggests that some method of protecting the public from architectural quackery would be desirable both for it and also for the architect, who having qualified himself to do the best work, and inspired by a determination to maintain for himself a high standard of professional responsibility, finds himself estimated by the public, from which his business must come, on an equality which the manufacturer of drawings, who has now the same legal right to call himself an architect, and whose sense of responsibility is strictly limited to getting out of a given piece of work all there is in it in the way of emolument.

Fortunately for the public, and fortunately for the architect who sets out to maintain the professional idea, the empiric in architecture, though not yet extinct, is becoming rarer every decade, and should the next ten years fail to retire him from the field in consequence of such legislation as will provide a reasonable standard of qualifications, to which every person proposing to practice architecture must first conform, I am not without hope that the growth of societies like our own (as now going on so rapidly in all parts of the country), and the influence of the more generally diffused architectural education, will render him comparatively harmless. Old things are indeed passing away. The time, distinctly remembered by many of us, when the so-called architect usually entitled "and builder," pursued a policy of strict non-intercourse with the establishment over the way, as necessary to preserve inviolate the mysteries of the craft or trade, when a house was a house, and a house with a wing was a house and a half; when to be able to inscribe an Ionic volute was to be accomplished, and to understand the elements of full circle stairs constituted greatness; when education in architecture was limited to a period of work as carpenter and joiner, and in the case of a very literary subject, a course of Nicholson's dictionary of architecture—all this is gone, not to return, and in its place we have architecture where it should be estimated as a profession for the successful practice of which a serious course of well-defined study is prescribed, and for instruction in which many leading institutions of learning now maintain able and well qualified professors. In this work our own state has taken an advanced place, and you are all familiar with what is doing in this way at Columbia, at Syracuse, and at Cornell. Following close on the education of the architect, and perhaps more important to the profession than has yet been fully understood, come the schools of technical education in the trades. No good art work in architecture is possible without the highest technical skill on the part of those into whose hands the architect must intrust his design. It does not seem necessary to advance argument to show that the tendency of trade unionism so widely prevalent at the present time, is to carry the process of leveling down a good workman to the standard of the incompetent, to an alarming extent, and I believe that the remedy is to be looked for in trade schools, where an American born youth can be taught the dignity of labor, and at the same time acquire such skill as will assure him the highest wages because his labor will be worth the money. I am, of course, aware that I am stating this question only as it affects the profession in one particular, and while not unmindful of the fact that the decay of the skilled artisan is only an incident of the trade union movement, and its object, I have no wish to go into the other phases of the matter. I am proud to say that it is to a townsman of my own, the Hon. Hiram Sibley, that Cornell University is indebted for the means to carry on the work of its trade school. If it should seem to you that there is anything in the suggestion that in such education is to be found a remedy for a lack of skilled workmen, can you not do something to inspire the founding of such schools in the communities in which you live, or emphasize the value of those already established?

The very large and encouraging increase in our membership since the last meeting seems to indicate a confidence in the aims of the society on the part of our professional brethren in this part of the state, and justifies the expectation that it will go on its way to increasing growth and usefulness in the future. I believe that the high and increasing consideration now so generally shown to the architect in the centers of civilization, is largely due to that mutual esteem and respectful consideration which has been fostered among architects by association and organization. I think we may take it to be true that the community in which we live will not be likely to entertain for us any higher consideration than we are willing to show for each other, and I commend this thought to the careful consideration of each member of the society, as being the key to the solution of the problem of still further advancement in this direction in this part of the world. But I restrain my inclination to elaborate this theme, and will close with a word as to some matters which are to come before you today for discussion.

At our first meeting the time available for the work of framing a constitution and by-laws was much too brief, as was evidenced by certain defects made manifest in them when subjected to the test of actual use. The improvements proposed by the executive committee are most of them formal and need not detain us here even long enough for their recapitulation. More important is the suggested change in the mode of electing new members. As now provided for, a member elected today, unless he happened to be a resident of Syracuse, would not participate in this meeting, and might easily be a member three months before he would enjoy such intercourse with his fellow-members. The letter ballot in use by other similar Associations seems the natural substitute for the present plan, and to be open to no serious criticism.

I have doubts in my own mind as to the wisdom of holding the June meeting. We shall be too busy at that time to do justice to it, and I fear the effect of a lightly attended meeting would not be a good thing to risk at so early a stage in our existence.

I am sure that I should not be forgiven by the other Rochester members of this society if I omitted to say at this time, that it was and is a source of great regret to all of us that the absence of any preliminary consultation on our part, and the brief stay of visiting members in our city, combined to deprive us of the privilege of imparting to that meeting more of the social and friendly character which has been so gracefully given to the present gathering.

In a society composed of members residing at points remote from each other, the routine work of the organization must necessarily be done by a small representative body, holding regular meetings. This has been provided for, as you know, in our case, and the Executive Committee of the society has carried on its business in a series of meetings, which have been fully attended and characterized by the highest interest in the welfare of the society. It is no disparagement to the other workers to say that we are specially indebted to our secretary, Mr. Carlin, who has devoted himself to the business of the society with an enthusiasm which entitles him to our warmest thanks. The report of the Executive Committee will give you more in detail an account of its work, but I may be permitted to point out that the increase of membership since the last meeting is evidence not only of confidence on the part of the profession in the aims and work of the society, but of faithful service done by the Executive Committee, of which being only *ex-officio* the presiding officer, I feel I may speak in this way without impropriety.

In conclusion, I thank you for your attention to my rambling talk, and congratulate you on the fact that we are assembled in the beautiful city of Syracuse; of course you will not expect me to admit that it is as beautiful as Rochester, but most interesting in its admirable and constantly improving architecture, famed for its hospitality, its university, and although it must of necessity be taken *cum grano salis*, a place of meeting which I know we shall enjoy, and of which we shall take away with us only pleasant recollections.

The minutes of the last meeting were then read by Mr. Carlin, the secretary, and approved.

The treasurer, C. E. Colton, read his report, which was referred by the president to an auditing committee, consisting of O. K. Foote, of Rochester; R. A. Bethune, of Buffalo, and T. I. Lacey, of Binghamton.

The secretary then read the report of the Executive Committee, which stated that four meetings had been held and nine applications for membership reported favorably upon. The committee also recommended the following names to the association for election as honorary members: Prof. Chas. Babcock, of Ithaca, and Prof. Geo. F. Comfort, and H. N. White, of Syracuse, which were elected by letter ballot. The Executive Committee also recommend a revision of the constitution and by-laws. Those in the constitution affect sections 2, 6 and 7, and in the by-laws, articles 1, 3, 7, 8, 9 and 10. A recommendation regarding the publication of association matters, on motion, was referred to a special committee of three.

A paper on "The Training of an Architect," was read by Prof. C. Francis Osborne, of Cornell University, and on motion of Mr. Block, seconded by Mr. Bethune, a vote of thanks was passed to Mr. Osborne for his able and instructive paper.

The president introduced Mr. E. Kuichling, of Rochester, who read a paper on "Town sewerage in relation to civil architecture," and on motion, a vote of thanks was passed for the excellent paper read by Mr. Kuichling.

Prof. G. F. Comfort, of Syracuse University, made an excellent address, which was also received with a vote of thanks from the assembly.

The recommendations of the Executive Committee were then taken up, discussed and disposed of, after which the convention adjourned.

A banquet was given the visitors by the Syracuse architects, which was a very enjoyable affair. The tables were most elaborately and tastefully arranged, the menu excellent and the menu card unique, having on one side a design by H. R. Kimball, of Buffalo, and on the reverse side a space for the autographs of the guests.

C. E. Colton, of Syracuse, in a few fitting remarks, welcomed the guests, and E. M. Buell occupied the toastmaster's chair.

The speeches of the evening were all instructive, some witty, and were delivered by the following gentlemen: Chancellor Simms, Syracuse University; Prof. Comfort, of Syracuse University; W. W. Carlin, of Buffalo; C. Francis Osborne, of Cornell University; J. Q. Ingham, of Elmira; J. G. Cutler, of Rochester; and Dr. Little, of Syracuse.

The convention adjourned to meet the first Tuesday in October next, at Buffalo.

Association Notes.

EDINBURGH ARCHITECTURAL ASSOCIATION.

The usual fortnightly meeting of the association was held February 9, the president, Mr. Hippolyte J. Blanc, in the chair. After the usual preliminary business a paper on "The Medieval Monastery and its place in the History of the Industrial Arts" was read by Professor G. Baldwin Brown, M. A. Emphasis was laid on the value of tradition in the practice of the industrial arts. Our recent failures in artistic matters, illustrated by the jubilee coinage, which was in its own small way a national disgrace, showed that we had much ground to make up. The introduction of machinery seemed to have robbed us of much of the advantage which a continuous artistic tradition secured to the workers of the past. Nowhere could the working of sound artistic traditions be better studied than in the productions of the monastic workshops of the middle ages. These were generally excellent in style and were much better models for the modern workman

than the brilliant, but misleading examples like the bronze gates of Ghiberti, reproduced in all our museums. The general life of a medieval monastery would be illustrated from the data furnished on the famous plan of St. Gall; and ample details about the practice of the arts in conventual workshops were furnished by the *Schedula Diversarum Artium* of Theophilus Bishop, Bernward of Wildesheim and the Monk Tutilo of St. Gall were examples of the monastic artist in different grades of rank. The artistic productions of the monastery were then reviewed and the excellence in style of treatment and choice of motive explained by the close connection in those ages of the industrial arts with architecture. Some technical details from Theophilus were added and the paper closed with a few practical suggestions for the improvement of our artistic industries. A hearty vote of thanks was accorded to the professor for his paper.

ASSOCIATION OF TENNESSEE ARCHITECTS.

The Association of Tennessee Architects have decided to hold the next meeting of that body at Nashville, and the following circular has been issued by the secretary:

NASHVILLE, Tenn., February 6, 1888.

At a called meeting of the Association of Tennessee Architects, held in Nashville on February 3, it was decided to defer the annual meeting of the Association until Tuesday, March 20, and change the place of meeting from Memphis to Nashville.

Will you kindly state on the enclosed postal card whether you can, or cannot, be present with us on that date, and mail same to Mr. Ed. Laurent?

The association has made the above change with extreme regret, and has done so only because so few architects outside of this city appear to take interest in the organization.

The architects of Nashville are willing to hold the annual meetings in any city in the state, providing architects of other cities manifest a proper interest in the association.

Cannot you lend your aid and countenance by attending the March meeting here? Let us have a rousing meeting, and place ourselves in the line of professional advancement with associations of sister states.

T. L. DISMUKES, Secretary, A. T. A.

NEW YORK CHAPTER OF AMERICAN INSTITUTE OF ARCHITECTS.

At a meeting of the New York Chapter of the American Institute of Architects, held February 2, the following resolutions were passed:

WHEREAS, The Commissioners of the Sinking Fund of the city of New York have, under authority given to them by an act of the legislature, entitled an act to provide for the erection of a building for criminal courts, and other purposes, issued an invitation to architects to prepare plans in competition, in accordance with certain printed instructions and general plans:

The New York Chapter of the American Institute of Architects, having at heart the proper architectural embellishment and future architectural standing of this metropolis, believe it to be their duty, which they owe to the municipal officers, to the citizens, to the profession of architecture, and to themselves, to earnestly advise against the adoption or execution of any plans based upon the instructions and general plans issued, and would recommend to the commissioners, if it is still their determination to place the proposed structures on the City Hall park, in contiguity to the city hall, that sufficient extension of time be granted, and the following conditions be observed:

First. That the manner of grouping the buildings, and the planning and distribution of the rooms be left to the competitors, limited only by the specified requirements of space for the various departments, etc., to be accommodated.

Second. That disinterested professional experts, who should be architects of acknowledged ability, experience and standing, should be appointed to whom all the plans would be referred for analysis and classification, and who would make a detailed report to the commission for their consideration, with recommendations as to the award of premiums and choice of plans.

Third. That the successful competitor should be appointed architect of the building; provided that in case he should not be, in the judgment of the said experts and commission, a person of sufficient artistic or constructive or administrative capacity, then there shall be appointed an associate or consulting architect, so qualified, whose compensation shall be deducted in equitable proportion from that of the architect.

A true copy.

A. J. BLOOR, Secretary, A. I. A.

NATIONAL ASSOCIATION OF COMPOSITION ROOFERS.

The National Association of Master Composition Roofers held its annual convention at Chicago, February 15. The following officers were chosen for the ensuing year: M. W. Powell, Chicago, president; E. S. Bortie, Philadelphia, first vice-president; Hugh Huntington, Cleveland, second vice-president; W. K. Thomas, Chicago, secretary; H. R. Shaffer, Chicago, treasurer. The newly-elected Board of Directors include, G. W. Gitchell, Chicago; John M. Sellers, St. Louis; J. L. Jones, Chicago; H. M. Reynolds, Grand Rapids; and Mr. Murdoch, Chicago. J. Wilkes Ford, of Chicago, W. S. Hayes, of New York, and E. A. Kimball, of Chicago, were appointed as the committee on legislation. The committee appointed to draft a specification for an improved style of roofing, to be recommended by the National Association to the consideration of architects and builders throughout the country, reported, showing the details of an improved method of construction. Before adjournment it was decided that the next annual convention would be held in Cleveland the last Tuesday in January, 1889. There are about three hundred men employed, it was reported, in the roofing business in the city of Chicago, and nearly as many in Philadelphia and in the larger cities throughout the country.

Mosaics.

CORNELL UNIVERSITY has fifty-five regular four-year students, fourteen special two-year students, and two resident graduates in its architectural department.

ARCHITECT JOHN H. COXHEAD, formerly of Chicago, has opened an office in St. Paul, Minnesota. Mr. Coxhead, who is well and favorably known in Chicago and the East, merits the success which will no doubt be his.

THE architectural firm of Thomas & Rodger, of Chicago, have dissolved, C. P. Thomas retaining the old stand and business of the firm and John Rodger opening an office in the Cisco building, 84 and 86 Washington street.

SEVEN cheap excursions to the West have been organized by the "GREAT ROCK ISLAND" route. Take advantage of the series of cheap excursions to Kansas, Nebraska, Northwestern Iowa, Minnesota and Dakota, leaving Chicago March 20, April 3 and 24, May 8 and 22, June 5 and 19. Rate, one fare for the round trip; tickets first-class, and good for 30 days for return passage. Do not fail to take advantage of this opportunity—you may never have such another. Be sure your tickets read via

Chicago, Rock Island & Pacific Railway, which has its own lines to principal points in all these states. For rates and full particulars, address E. A. Holbrook, G. T. and P. A., Chicago, Ill.

THAT the merits of Frink's reflectors are thoroughly appreciated by architects is shown by the large number of prominent art galleries, theaters, churches and public buildings that are adopting his system of reflectors and reflecting chandeliers for lighting.

CALLING attention to the advertisement of the Tiffany Pressed Brick Co., in this paper, we are told that it is the only "ad" that this company has in any journal. A constantly increasing demand, already reaching to Minneapolis, St. Paul, Duluth, Omaha, New York City and other markets, is absorbing the Tiffany product as rapidly as it is ready for market. The company is constantly enlarging its works.

THE March Century contains the story of "Colonel Rose's Tunnel at Libby Prison," told by one of the one hundred and nine Union officers who escaped on the night of February 9, 1864. The successful construction of this tunnel, dug from a dark corner of the cellar of the prison, through fifty feet of solid earth—the only tools being two broken chisels and a wooden spittoon, in which to carry out the dirt—was one of the most remarkable incidents of the war.

AMONG the most talented of the draftsmen members of the Chicago Architectural Sketch Club has been Mr. Ashton Pentecost. For several years he has had charge of the office of Architect Alfred Smith, and now has begun practice for himself, entering upon a partnership with his brother, D. S. Pentecost, who is a well and favorably known architect. Mr. Pentecost enjoys the best wishes of his friends, and the public will be benefited by the entering of one more reliable architect into the practice of his profession.

THE Builders' and Manufacturers' Benefit Association is the title of a life insurance association on the assessment plan, organized in New York, February 8, 1882, by a number of Master Builders and prominent manufacturers, for the purpose of furnishing employes connected with building and other laboring classes with cheap life insurance. The risks are taken on individuals, in good health and of good habits, from twenty to sixty years of age, which are divided into three classes, affording an insurance in case of death from \$1,000 to \$3,000. Mr. Jno. J. Tucker, a leading builder of New York, is president of the association; and, among the vice-presidents, Mr. T. E. Yates, of the Big Sandy & Lexington Railroad Company, or Mr. A. J. Bicknell, of No. 239 Broadway, New York, the secretary, may be addressed for full information in regard to the enterprise.

Synopsis of Building News.

Argenta, Ark.—Architect B. J. Bartlett, of Little Rock, has prepared plans for a two-story brick school building, 40 by 60 feet; cost \$5,000.

Chicago, Ill.—Plans are being prepared by Geo. O. Garnsey for alterations to the Honor building, which is to be fitted up for a hotel at an expense of about \$350,000, for A. J. Cooper and others who recently purchased the building. It is expected the work will commence very soon.

Plans are being prepared by Architect E. Baumann for remodeling the old Chamber of Commerce building, recently purchased by Hannah, Lay & Co., which is to be converted into a twelve-story office building.

Architect H. B. Wheelock: For Rev. Thos. C. Hall, two-story and basement and attic residence, 31 by 55 feet; brick and brownstone, slate roof, hardwood finish; cost \$8,000.

Architects Flanders & Zimmerman: For W. J. Evans, three-story store and flat building, 73 by 20 feet, brick and stone; cost \$8,000. For Jonathan Clark, six-story rock-faced stone warehouse, 60 by 140 feet, at 1523 to 1527 State street; cost \$80,000.

Architects Edbrooke & Burnham: For John J. Hall, three-story brick and terracotta store and flats, 23 by 82 feet; cost about \$9,000.

Architect P. W. Ruehl: For C. Barin, three-story and basement store and flat building; cost \$8,000. For P. Brennan, two-story and basement and attic residence, all modern improvements; cost \$9,000. For R. McGuire, two-story and basement flat building; cost \$7,000.

Architect Wm. Thomas: For F. J. Wilson, two-story flat building, 46 by 64 feet, brownstone front; cost \$18,000.

Architect E. S. Jennison: For first regiment I. N. G., four-story armory, 284 by 171 feet, brick; cost \$200,000.

Architect S. S. Beman: For St. Paul Pioneer Press, twelve-story brick and granite office building, 124 by 120 feet; cost \$500,000. For Lutheran Society at Pullman, Illinois, brick and stone church building, 50 by 70 feet; cost \$15,000.

Architects Burling & Whitehouse prepared the plans for the building of Mr. J. H. Swart, which was recently gutted by fire and is rapidly being rebuilt at a cost of \$10,000.

Architect M. L. Beers: For J. J. Schobinger, brick residence; cost \$6,000. For Mrs. Addie Burget, pressed brick residence; cost \$5,000.

Architects Holabird & Roche: For L. D. Webster, four-story store and office building, 100 by 125 feet, on West Madison street. The building will also contain a music hall; cost \$80,000.

Architect L. H. Marston: For Wm. Iliff, three two-story brick and stone dwellings, 50 by 60 feet; cost \$15,000.

Architect W. H. Drake: For J. W. McCaskey, three-story stores and flats, 54 by 56 feet; cost \$15,000.

Architect L. B. Dixon: For Geo. H. Fox, three two-story brick and stone residences, 135 by 28 feet; cost \$20,000. For Mrs. M. Livings, two-story flats, 40 by 70 feet; cost \$10,000.

Architect John H. Wagner: For Luman Allen, five-story brick, stone and terracotta building, 50 by 105 feet; cost \$60,000. For G. A. Hyers, three-story warehouse, 20 by 100 feet; cost \$10,000.

Cincinnati, Ohio.—Reported by Mr. Lawrence Mendenhall. Well, the National Association of Builders' Convention has come and gone, after a most profitable session, leaving behind it, I hope, a lasting effect. A most happy fraternal feeling prevailed throughout, and the essays read were beautifully "and wonderfully made," or rather more properly—written.

We gave them the best that the pantry afforded, with the invitation to call again. The same hopeful feeling as regards business prospects continues.

The ground for the city hall has been broken, and the process of erection will go rapidly ahead.

Architect S. E. Des Jardins has returned from Europe looking better for his European trip. He enjoyed himself hugely, and brought home three hundred exquisite photographs of castles, cathedrals, and other architectural subjects in France. He is tolerably busy.

C. E. Walton, M. D., is about to erect quite an ornamental residence at Hamilton also. The first story will be brick, the second story cement, and the house contain twelve rooms. The roof will be a gambrel shingle roof, and is quite picturesque.

Architects Crapey & Brown report the following work: For the village of Westwood, Ohio, a town hall, 90 by 122 feet; first story brick, second story cement, with slate roof. In this building will also be a station house, fire engine room, and halls for common council. Upstairs will be two halls, one 63 by 51, and the other for concerts, 30 by

30. There will also be a gymnasium and Y. M. C. A. hall; cost \$17,000. This firm seems to be perfectly at home in this class of work, and churches especially. G. W. St. Clair, Hamilton, Ohio, will erect a frame house of nine rooms, with slate roof. The finish will be of quartered oak; cost \$5,000.

Architect H. E. Siter has the following under way, in addition to other important work: For the Board of Education, a school building of eighteen rooms to be erected in the twelfth ward. It is three stories high, built of brick, with stone trimmings and slate roof; size 66 by 140 feet; cost \$50,000. The building when erected will be a valuable addition to our fast-improving school architecture. For Thomas Lee, a store and flats building, pressed brick front, with an ornamental copper bay, tin roof; cost \$10,000; outlook reasonably fair.

Architect Geo. W. Rapp is busy on the Addyston Iron and Pipe Co's buildings. He has prepared working drawings for the cleaning and testing building, of iron and wood construction; size 102 by 227 feet; also the machine foundry for casting purposes, of brick, stone, and iron; size 81 by 227 feet; prospects fair.

Architects Saml. Hannaford & Sons report the following work on the boards: Residence for T. L. Griffith, brick, two and a half stories high, with slate roof, ten rooms, and pine finish. Apartment house for Chas. E. Iliff, brick, four stories high, with tin roof. The Big 4 (I. C. St. L. & C.) R. R. will build an immense freight depot, 150 by 800 feet, of brick and iron. American Cotton Oil Co. will build two buildings, one of brick, four stories high, 60 by 174 feet; the other a frame building for cooper shop, 48 by 60 feet. G. H. Burroughs will build a frame house two and a half stories high, of frame, with slate roof.

The following are the bids on the new city hall:

Excavating, foundations, brick and stone work, D. Hummel.....	\$326,500
Fireproofing, Finnigan & Co.....	18,645
Ironwork, M. Clements & Co.....	125,700
Copper and Virginia slate, Jas. Hunter & Co.....	17,498
Interior concreting, P. T. Scabill.....	10,475
Asphalt, F. Schillinger.....	2,900
All Cincinnati men except the last.	

Colorado Springs, Col.—Architect F. T. Lent reports: For W. H. Sanford, residence, 44 by 80 feet; cost \$12,000; under way; Joseph Dozier, builder. For John De Witte Pelly, residence, 30 by 56 feet; cost \$10,000; projected. For Otis & Waerman, two residences; cost \$11,000; under way; A. H. Harrison, builder. For Chas. B. Cowell, residence, 32 by 42 feet; cost \$5,000; under way; A. H. Harrison, builder. Also several dwellings, etc., to cost \$2,000 to \$2,500 each.

Columbia City, Ind.—Architect B. S. Talan, of Fort Wayne, reports: Contract for the Whitley County Court House was let, February 3, to Jos. S. Baker, of Warsaw, for \$124,700. Three story stone and iron construction, 112 by 96 feet.

Council Bluffs, Iowa.—Architects Allen & Bell are preparing plans for N. Merriam, for a store and office building, to cost \$60,000. Work will be commenced at once.

Mr. Sol. Foster is about to build a flat building, to cost \$15,000.

Prospects for an active season are very flattering.

Crawfordsville, Ind.—Architect W. L. Carroll, of Chicago, Ill.: For W. P. Herron, two-story frame residence; cost \$15,000.

Cresco, Iowa.—Architect F. D. Hyde, of Dubuque, reports: For Cresco Union Savings Bank, three-story and basement bank and office building, 25 by 80 feet; cost \$9,000; plans completed.

Denver, Col.—Architect William Quayle has completed plans for the Board of Education for a two-story school building, 84 by 90 feet; cost \$30,000. Also preparing plans for a two-story and basement school building, 107 by 156 feet; cost \$80,000.

Architects F. E. Edbrooke & Co. have prepared plans for the Exchange Building; \$210,000. Stock has been subscribed, and it is intended to push the building at once. The syndicate is known as the Exchange Building Association. Among the heaviest stockholders are F. L. Dana, editor of the *Denver Exchange Journal*; T. W. Herr & Co., Henri R. Foster, A. S. Pettit, A. C. Fisk and Hicks & Bailey.

Among the building permits recently issued are the following contemplating an expenditure of \$4,000 or over: W. E. Stone, two-story brick dwelling, 33 by 45 feet; cost \$5,000. A. J. Scott, two-story double brick dwelling, 45 by 48 feet; cost \$4,500. Mrs. C. S. Silver, two brick dwellings, 25 by 40 feet; cost \$5,000. Geo. H. Higgins, brick dwelling, 23 by 45 feet; cost \$4,800. A. S. Miller, two-story brick terrace; cost \$15,000. H. C. Dillon, three two-story brick dwellings, 32 by 48 feet; cost \$10,000. Mrs. H. Evans, two-story double brick dwelling, 48 by 68 feet; cost \$10,000. Woman's Hospital, two-story brick addition; cost \$8,500.

Detroit, Mich.—Present condition is an improvement on the past month, and the outlook is excellent.

Architect A. Bloquette: For Art Stone Co., two-story brick and frame foundry, 70 by 158 feet; cost \$3,000; John Vandergyp, builder.

Jos. Keugel is building, for himself, a block of nine two-story brick stores and dwellings, 171 by 46 feet; cost \$10,000.

Architect A. C. Varney, for himself: Two-story brick double dwelling, 33 by 52 feet; cost \$3,000; Holland & Son, builders.

Architects Hess & Raseman: For G. A. Whitney, two-story frame dwelling, 32 by 48 feet; cost \$2,700; Phil. Cook, builder.

Henry Carew is building, for S. J. Murphy & Co., a two-story brick shop, 55 by 120 feet; cost \$4,500.

Architects Scott & Co.: For Henry Carew, two-story brick double dwelling, 42 by 64 feet; cost \$9,000; Henry Carew, builder.

A. Corbelle is building, for himself, three three-story frame dwellings, 20 by 52 feet each; cost \$4,200.

Architects E. E. Myers & Son: For St. Phillip's Episcopal Society, frame church building, 50 by 52 feet; cost \$4,000; R. Helson, builder.

Van Leyen & Preston, together with Mason L. Brown, civil engineer, of Detroit, moved, January 1, into their new suit of offices in the Burns Block, No. 90 Griswold street, being expressly fitted up for the business with general office, private office, large light drafting room, storage closet, etc., all complete, in special design is one of the most attractive offices in the city.

There were 120 permits issued for new buildings to cost \$101,455; alterations, cost \$8,300; total cost \$109,755.

Architects Donaldson & Meier report: For Dr. F. W. Clawson, three-story brick and stone dwelling, 25 by 45 feet; cost \$5,000; under way. For Peter Smith, two-story brick and stone dwelling, 24 by 65 feet; cost \$5,000; Gideon Vivier, builder.

Architect W. G. Malcomson reports: For Dr. Pulling, double two-story brick and stone dwelling, 44 by 65 feet; cost \$6,000; J. M. Martin, builder. For O. Wardell, three-story double dwelling, 48 by 65 feet, brick and stone; cost \$7,000.

Wm. Storms is building for himself five one-and-one-half-story frame dwellings, 24 by 52 feet each; cost \$4,300.

John J. Duryea is building a two-story brick dwelling, 30 by 52 feet; cost \$4,000.

Architects Scott & Co. report: For S. F. Young, two-story brick and stone dwelling, 27 by 50 feet, slate roof; cost \$6,500; J. E. Boomer, builder.

Henry Hubler is building five one-story frame dwellings, 22 by 42 feet each; cost \$3,800.

Robert Balton is building a three-story brick and stone dwelling, 25 by 46 feet; cost \$6,500.

Henry Carew is building machine shops, etc., for the Peninsular Car Works; cost \$7,500.

During the month of February there were 162 permits for new buildings to cost \$158,405; 17 permits for alterations to cost \$9,325; total cost \$167,730.

Dubuque, Ia.—Architect F. D. Hyde reports: For Byrnes Bros., two-story and basement brick livery stable, 102 by 100 feet; cost \$13,000; under way. For C. J. Lesure, two-story frame cottage; cost \$5,000; contracts let. For Dubuque Water Works Co., one-story brick pumping station, 40 by 50 feet; making plans. For W. R. French, Waterloo, two-story frame cottage; cost \$2,500; making plans.

Fort Smith, Ark.—Outlook good, and building will probably equal if not exceed the amount of last year.

The county court house is well under way and will be finished by fall.

Architects Wm. H. Byram & Co. report: For Thos. B. Latham, brick residence, furnace heat, metal roof; cost \$9,000. For Judge Jas. F. Read, frame residence, to cost \$4,000. For Thomas Davis, frame dwelling; cost \$3,000. For school board, brick and stone school building; cost about \$18,000; plans completed. For Wm. Breen, four-story and basement office building, 70 by 105 feet, steam heat, elevator, etc.; cost about \$35,000; projected. Also four business houses to cost about \$30,000; projected. Also a double, three-story wholesale building to cost about \$15,000. Several small dwellings; costing from \$1,000 to \$5,000.