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An Architects' Registration Act Passed in Ontario.

A bill entitled the "Ontario Architects Act" has passed the Ontario legislature and is the first recognition the profession of architecture has received from legislative bodies in this country. While the act, which is printed as passed upon another page of this number, is not as it was first outlined and approved by the Ontario association, it is still a valuable aid to correct practice and a protection to legitimate practitioners. We are of the opinion, and in fact, the friends of the bill in its passage intimated that when the architects had practiced under its provisions and the hoped for elevation of the profession through it had been accomplished to some degree, further powers would be given as originally asked for. We heartily congratulate the profession in Ontario upon the passage of this bill, which gives them all that architects in the United States can hope for at present from state legislatures, and much more than the registration act now before the British parliament asks for. Organization under this act should be completed at once and its provisions so wisely carried out that the association will be beyond criticism when in the future it asks for further confidence and professional power.

The Strike of Carpenters and the Situation in Chicago.

We have given in the news department, with some attempt at detail, a statement of the condition of labor in the building trades in Chicago at the present writing. We know that much therein will seem incorrect to those who have read the daily papers during the past month; but with better facilities for obtaining the exact facts and carefully examining the situation, we are in a better position to judge than the daily press can possibly be. In this statement we neither extenuate nor seek to excuse. The unions claim the right to organize, which we do not deny. They also claim the right, the necessity of which we do deny, to obtain arbitrary control of all labor in their particular line. In the strike of the Carpenters' Union they emulate the bricklayers' organization of Chicago, which is probably the most arbitrary as well as strongest and well managed union in the United States. While the movement of both capital and labor is general toward organization, neither those combinations of capital nor of labor that disregard the rights of others will succeed in the long run. Trusts will be declared illegal and be suppressed, and labor unions that are practically conspiracies against all interests outside of their combinations will be likewise abolished, though each will flourish till their tyranny of action and the evil results of their control will lead to their abolition. In Chicago the Carpenters' strike has, as President Goldie said in a late address, been one of the "most useless, uncalled for, unnecessary, blind, imaginative" of all the strikes that city has known. While a stipulation regarding hours and wages was made, these were practically in operation before, the entire matter being summed up in the word "recognition." We have explained elsewhere what the union definition of the word is. The membership of the Carpenters' Association, the men who have built the city, are now and will continue to stand upon the principle of personal liberty, both for their own benefit and that of the workmen who wish to enjoy the same privilege, which is the foundation of the constitution under which they live. The building trades in other cities may depend upon them to maintain

this position, for they are determined to a man to either do so or go out of business. The architects and owners, we are glad to see, are in thorough accord with the position taken by this association, urging them to maintain their rights as citizens in the control of their business. There is a movement on foot among those journeymen who have and still do depend upon their skill rather than the strength of a union to secure them work at good wages, to establish a union benevolent in form and for the improvement of the craft, which we would be glad to see successful. For unions of workmen are proper and necessary, but it will take many years for the American public to look upon a union with anything but distrust through the example given by those that have made strikes and disturbances their chief object.

A Trade School Inaugurated by the Chicago Exchange. It is a hopeful sign in view of the labor disturbances throughout the country, which in a large measure, where not entirely, are caused by the labor unions wishing to obtain recognition which to them means arbitrary control, that philanthropic and thinking men are uniting in the movement toward the establishment of trade schools. Following Colonel Auchmuty's work in New York and Philadelphia is the proposed establishment of such a school in Chicago, the progress of which we give in full elsewhere in this number. This Exchange, numerically the largest in the country and probably as wealthy as any, has before it a work which cannot be performed by resolution and passive approval, but by the contribution of money and time for its consummation. As a reward it will have honor which it may not care for, and educated workmen to employ which will more than repay its members as individuals for any outlay in hard cash they may have contributed. The best indication that the Chicago Exchange has commenced the work in earnest and will carry it through speedily is the raising of \$2,000 in its support in a few minutes by passing a hat at a meeting at which not one-tenth of the Exchange membership were present. It cannot now withdraw from the work with honor any more than it can expend the large surplus in the treasury in a more creditable and eventually remunerative enterprise. It is a significant fact, indicative of the complex condition of the labor problem of the present day, that the meeting of the Exchange which gathered to receive the report upon a training school was sandwiched between meetings held in the same building by the carpenters' association in conference with representatives of their striking employés.

The Lewis Polytechnic School at Chicago. Following the establishment of a trade school will be the organization of a polytechnic school, the inception of the latter being prior to that of the others. Thirty-five years ago a citizen of Chicago, Mr. John Lewis, conceived the idea and arranged by will for its carrying out. This bequest was left in a brother's hands, Mr. Allan C. Lewis, and he in turn died and left it to a brother, Mr. Henry F. Lewis, who, with Messrs. John M. Adsit and Hugh A. White, were appointed trustees to carry out the provisions of the original bequest. The original bequest was \$150,000. Allan C. Lewis, when he died thirteen years ago, left it \$400,000, directing that the school should be erected when this sum had doubled. It now amounts to \$1,000,000, and as soon as some of the provisions of the will are regulated, such as a proper site being secured, that designated by the will, through change in surroundings, being undesirable, the

work will be carried out. Thus Chicago has already established the primary department of trade training in the work of the manual training school. In the Builders' and Traders' Exchange trade school project the high school department is secured, while the Lewis Polytechnic School will provide for those who wish to further advance in these lines or seek for a scientific training. While each of these institutions will be, to a degree, limited in capacity and private in management, they will do a vast amount of good to the coming generations, and their future growth can no more be estimated than can that of this great central portion of the greatest civilization the world has seen. The great educational center of the future is undoubtedly here, and the progressiveness of the people will make such a consummation surpass all that has gone before it. The example of such private enterprises will show their necessity and value and lead to the establishment of similar schools by the state or national government as a part of the public school system, which, next to the national constitution, is the foundation upon which our republic rests and sustains its place among the nations.

A Proposed Model Law Governing Building. The subject of fires, their causes and prevention, broadly stated, will occupy the attention of the National Association of Fire Engineers, at their annual convention at Detroit, August 12 next, and the discussion will be held under twenty-one heads, each topic dealing with some phase of the general subject of fires. One subject which should attract the attention of architects is number six in the programme. It is given in the programme as follows:

Topic No. 6.—(a) Flues and fire hearths—How should they be built? (b) Which is the best economy, to continue building as now done and trust to the fire department; or put up better buildings that will not destroy each other, but will burn out individually? (c) Should firemen take an active part in urging that better methods of construction be adopted, and in what way can they do this best? Is it policy for the National Association to urge that the architects and the builders' associations frame a model building law? (d) Will it cause the public to adopt better methods of building if the chiefs, in making their reports, would adopt the plan of reporting, in addition to the total loss, also the probable loss that would have occurred if the building, in which the fire originated, had been built with adequate fire walls or in a proper manner? (e) Slow combustion buildings. To what extent has their construction reduced the fire hazard in cities?—Henry A. Goetz, of New Albany, Indiana.

It does not seem improper that the American Institute of Architects and the National Association of Builders should take some such action, if requested to do so, as is suggested in regard to a model building law. The evils of existing building laws are well known. That of Kentucky just passed is said by architects and builders to be impracticable, even using names and terms unknown to the profession, besides imposing hardships that will have the effect of retarding rather than stimulating building. Boston is now revising an admittedly bad law, New York has had a revision committee to work for six months; St. Paul, Minneapolis, Philadelphia and Baltimore are at work seeking to improve the existing laws. The State of New York has just passed a law creating a commission to frame a new law, such action showing the necessity for just such a model, that none could frame with such freedom from error as the national associations mentioned. Such a model would be immediately indorsed by underwriters, by a difference in rates in its favor, and in this way only can we ever hope to have any improvement in the fire situation. It is certain that fire insurance is too expensive under the present method of rating, but it can hardly be less so until the building laws are so revised that a better class of buildings be erected, especially in the smaller towns, where fireproof buildings are seldom built.

Romanesque Architecture.*

CHAPTER XV.

THE CHURCH OF FONTEVRAULT—CHURCH OF SAUMUR—THE CHURCH OF PUY-EN-VELAY (FRANCE).

THE Abbey church of Fontevrault was built at nearly the same time as the cathedral at Angoulême, from 1101 to 1120.

The plan of those two churches is identical, except the choir; the cupolas are alike, and certainly derived from those of St. Front, as far as the architectural part and mode of construction is concerned. However, the progress which we have observed at Cahors and Angoulême is still more noticeable, and a state of perfection more nearly reached, by the increasing ability of the Romanesque architects; the piers, the arch ribs and the pendentives have now only the necessary divisions, the thrust and resistance are skillfully calculated, and the buttresses placed at necessary points are decreased in size, so as to permit a desirable decrease in the thickness of the outside walls.

The details of construction and the carved ornamentation are more refined and show an art approaching its highest development, which was soon to be the starting point of a new style.

The choir of Fontevrault is less ancient than the nave. It is a different expression of the Romanesque architecture, in which can

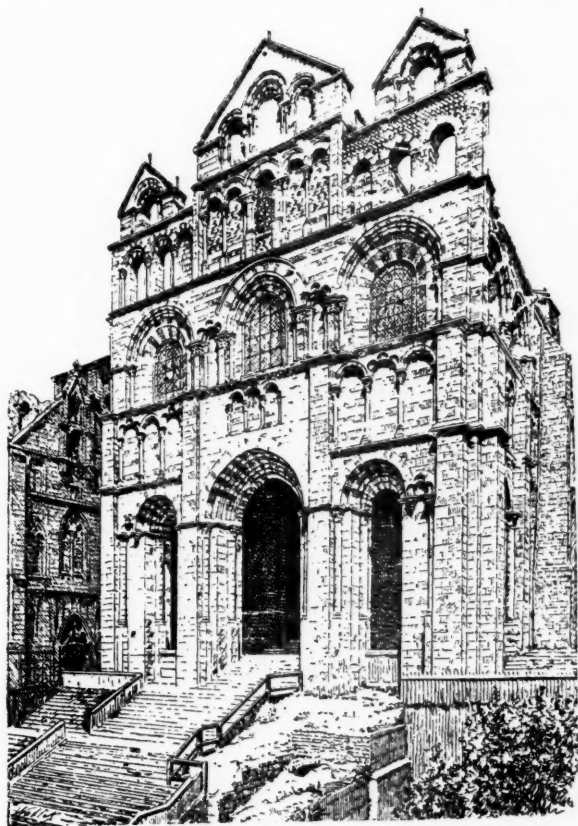


FIG. 178.

easily be recognized the arrangement of the churches of Auvergne, for this part of the church bears a very strong resemblance to the choir of the church of St. Paul at Issoire.

But the manner, then new, in which the cross of the transept was vaulted was particularly remarkable. This is, properly speaking, no longer a cupola, but is a spherical vault cut by the four groins of the transept of the arms of the cross. In a word, it is a ribbed vault, the thrust of which is less energetic than that of the cupola, because of the lesser weight. The construction is very simple, for each course of stone forming a concave keystone, the centers are reduced to their simplest expression. The springing points and this annular vault are marked by capitals a little higher than those which receive the arch ribs of the cross.

We have already seen the mode of construction of the vaults. The change from the vaulted cupola to vaults resting on crossed ribs

was shown some years after the erection of the church of Fontevrault in the church of St. Peter at Saumur, with much greater clearness than in the church of St. Avit-Sénieur.

This last system, which gave much greater lightness to the vaults, and necessitated less prominent ribs and points of support, rapidly developed. (Fig. 178.)

Among the churches with cupolas we must not fail to mention the church of Notre-Dame at Puy-en-Velay. This originated in the same type, but has a peculiar characteristic.

The nave terminating in an apse, without smaller apses, consists of a series of vaulted bays, as the square of the transept is ordinarily arranged in Romanesque churches. That is, each bay is surrounded by an octagonal drum on a square plan, connected by very ingeniously arranged corbeling and by an elegant octagonal cupola, which recalls that of St. Vitelle at Ravenna, or the palatine church of Aix-la-Chapelle; the cupola, surmounting the cross of the transept, is arranged the same way, but more elevated above the sloping roof, which covers those of the nave. The transepts are covered with barreled vaults. (Fig. 179.)

According to Viollet-Leduc, Notre Dame du Puy is unique in its arrangement. "Through a lofty porch, like an immense loggia, the inclosure of the church is entered, and, by a flight of stairs, one can arrive before the high altar. These steps are continued for a distance into the street, where the portals are. This strange arrangement was made to permit the number of pilgrims that visited Notre Dame du Puy to go in a procession even to the holy relics. The cathedral of Puy presents some of the peculiarities of an edifice of the eleventh century. The three eastern bays are round arched and the others are pointed arches, finished about the middle of the twelfth century, and crowned by octagonal cupolas. The external walls are composed of courses of white sandstone and black lava, so laid as to form great mosaics."

The belfry recalls those of Limousin and Perigueux, especially that of St. Leonard and Brantôme. It is composed at the base of a square wall, relieved by four piers, separated by arches bearing barreled vaults, perpendicular to the four sides of this wall; on the barreled vaults rest the upper stories, which grow smaller at each floor by the width of the walls of the preceding story.

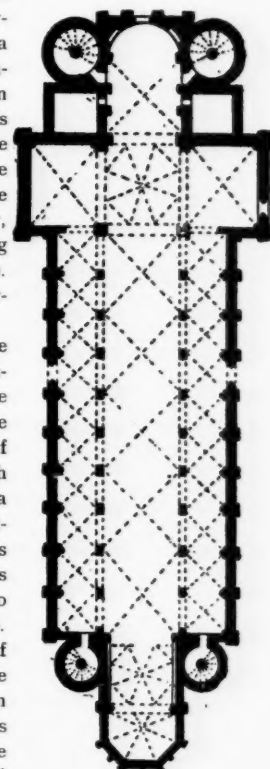


FIG. 181.

CHAPTER XVI.

CHURCH AT WORMS (HESSE-DARMSTADT)—CHURCH AT SPIRE (BAVARIA).

The first half of the twelfth century must be looked upon as an epoch of transition. To this word transition is given a broader significance than is usually attributed to it by modern archæologists, for one cannot admit that the gradual improvement and perfecting which mark the middle of the twelfth century were alone shown in the changes pertaining to the form of the arch.

Round or pointed arches have a very ancient origin, and if the best authorities can be believed, the Persians used the pointed arch even before the Roman epoch. Moreover, the pointed arch was in use not as an habitual form, and still less as a system, but as a means, as an expedient of construction in edifices erected in Provence in the early part of the eleventh century. Examples of groined arches and arcades, where the pointed arch is used, abound in the most ancient Romanesque edifices of Limousin and Poitou; one often sees this form and the round arch used simultaneously in the same edifice.

The transition ought to be understood in its largest and most general sense, for it would seem that that epoch was characterized by the transformation of the system of vaulting churches, a fact more important than the form of the arch, which is only a small detail in a vast whole.

This grand movement in art sprung from the general application of the mode of construction of churches with cupolas, which system

* "L'Architecture Romane," by Edouard Corroyer, Paris. Translated and abridged from the French for THE INLAND ARCHITECT, by W. A. Otis, architect. Commenced Vol. XIII, No. 3.

had so greatly modified in the first years of the eleventh century the art of building in the West, of which St. Front is an admirable example.

We know the different stages that have been passed from the building of the Holy Apostles at Constantinople to the erection of the

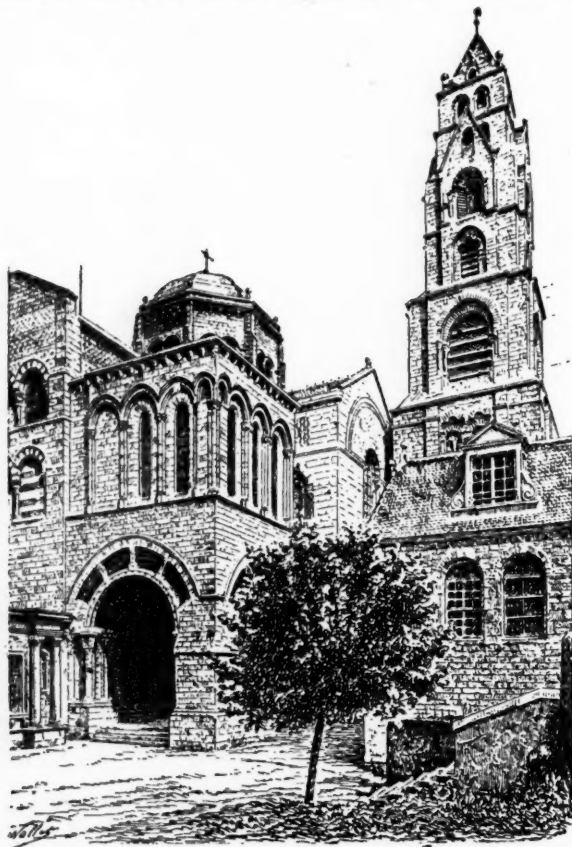


FIG. 179.

church of St. Front in France. We know with what marvelous skill the architects of Aquitania appropriated Byzantine traditions, applying them to their own resources, and wisely using them with material which they had at their disposal; we have followed the progress realized by their Romanesque successors from the church

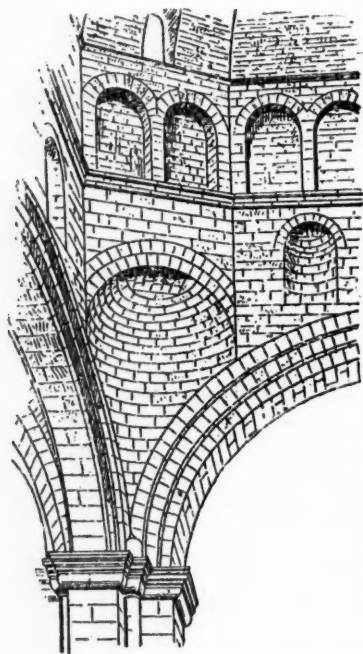


FIG. 182.

form of the cupola or annular vaults, places the weight on the principal piers, which are solidly counter-butressed by lateral vaults. They are arranged on a square plan, a reminiscence or rather a

traditional imitation of the churches with cupolas built on a similar plan. Built in the middle of the twelfth century or about that time, the churches at Worms and at Spire in Germany, of St. Ambrose at Milan and of the Trinity at Caen, furnish us with most interesting examples of the epoch of transformation which was a preparation for the monumental revolution of the thirteenth century. (Fig. 181.)

The nave of the cathedral at Worms, Violet-Leduc states, a nave which dates from the first half of the twelfth century, is covered by a grand groined vault without arch ribs, which rises from a square plan. The intermediate piers, forming compartments in the side aisles, are also covered with groined arches which follow Romanesque-Byzantine traditions. (Fig. 182.)

The cathedral at Worms has three naves, recalling the arrangement of the basilicas, and the naves abut on a transept, giving to the edifice the form of a Latin cross. The church has two choirs, one at the east which ends in a hemicycle on the interior, and whose exterior face is square; the other at the west is formed by a small polygonal spire.

The cupola which crowns the cross of the transept is constructed according to the Græco-Byzantine ideas; it especially recalls the cupolas of Daphni near Athens, and even more strongly yet that of St. Nicodemus, by the arrangement of the niches, covered with quarter spherical vaults,

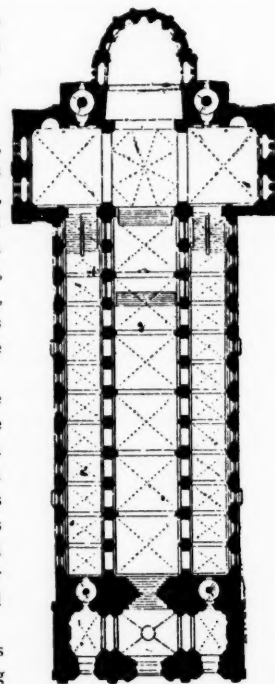


FIG. 183.

which bring the cupola by means of an octagon into harmony with a square plan.

The church at Spire is of about the same date as the cathedral at Worms. Its plan recalls the arrangement of the Norman churches of the eleventh century. It is a basilica, composed of three naves of a transept, crowned at the intersection by an octagonal cupola, and of a hemispherical choir, covered by a quarter spherical vault. Inside and out it is adorned with columns ornamented with capitals, which support an arched arcade, crowned by a band course, above which rises an open gallery formed of small columns, relieved by an arcade, an arrangement which resembles the covering of the apse of the church at Auvergne. (Fig. 183.)

The nave of six bays is formed by two rows of arcades rising to the vault and relieving the principal points of support. The bays are subdivided by intermediate pillars united by superimposed arcades,

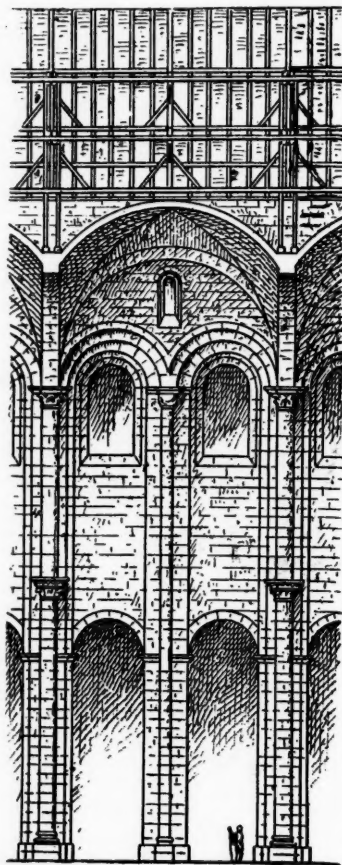


FIG. 185.

following the arrangement indicated in figure 185 (Fig. 185), which shows at the same time the particulars of the details of the columns supporting the great arch ribs of the nave, which divide it into six parts. The subdivided side aisles are covered by groined arches.

The principal nave is covered by a groined vault without ribs, built on the square plan between ribbed arches. The diagonal groins

of the vault form a circle. This arrangement, which is to be met with in a great many German churches, gives to the vault the appearance of a part of a cupola, constructed in imitation of the churches which were modeled after St. Front.

CHAPTER XVII.

CHURCH OF ST. AMBROISE AT MILAN—CHURCH OF THE TRINITY AT CAEN.

The general form of the church of St. Ambrose at Milan is that of a Latin basilica; it resembles St. Peter of Vincoli, erected at Rome in the fifth century. With the exception of the interior arrangement there is still greater resemblance between it and those Christian churches built in Syria on the plan of the Roman basilicas, especially that of Qalb-Louzeh and Tourmarin, which dates from the sixth century, and St. Clement, erected in Rome in the ninth century. Like this latter basilica, St. Ambrose is preceded across the width of its

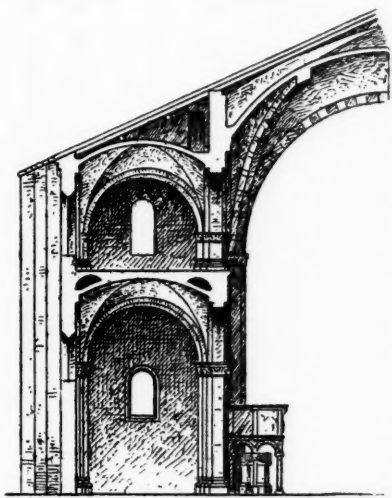


FIG. 187.

façade by a narthex, which forms one of the sides of the four-sided porch, arranged before the church. The plan is that of a parallelogram divided into three galleries, a large one in the middle and two side ones. The principal nave ends in a hemicycle, and the two side aisles in small apses, all of them covered with quarter spherical vaults.

The construction of the vaults of St. Ambrose is particularly worthy of attention, because it furnishes us with an example of the

construction of this epoch of transition, spoken of in the preceding chapter. (Fig. 187.)

The church of the Trinity, or the ancient Abbaye aux Dames at Caen, which dates from 1046, was, perhaps, originally covered by an open timber roof; but it must have been completed in a different manner from that in which it was commenced, or, what is more probable, the nave must have been remodeled after a fire.

The proof is furnished to us by the same arrangement of the high parts and the nave. In the Romanesque churches of Normandy the bays are equal and the piers are of the same thickness, since they had only to sustain an open timber roof, the beams of which rest on one of the columns, which spring from the pier, and reach from the ground to the wooden covering. The churches of Cerisy-la-Forêt and of Mount St. Michel, with which the Abbaye aux Dames at Caen presents many analogies, are, with a great many other churches, authentic examples of the regular and equal arrangement of piers. The vaults of the nave are

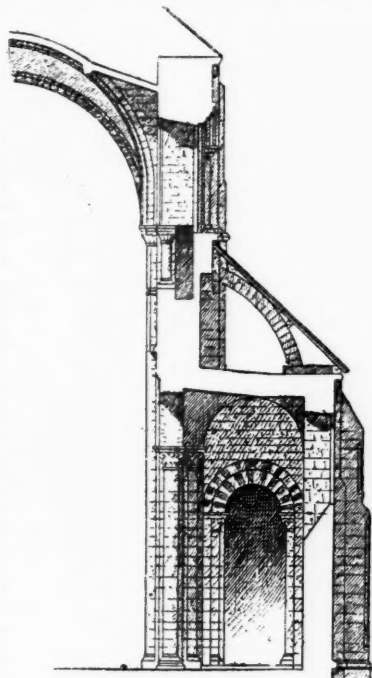


FIG. 190.

on the square plan, like the German and Italian churches which have been mentioned, with the addition of an intermediate arch. The side aisles are covered by groined vaults between the ribbed arches, which appear to be the vaults of the eleventh century, before the modification of the upper part of the nave, or its reconstruction at the middle

of the twelfth century. In the center of the cross of the transept rises a high lantern tower, which in monastic, and especially Norman churches, were so numerous.

The churches of the Trinity and of St. Etienne possess central towers, which are also a part of the central interior nave, and are not belfries, but cupolas, or, more exactly, lantern towers, giving light to the center of the edifice. The belfries erected on the façade of the Romanesque churches in Normandy are equally important, but they are narrow and terminate in pointed pyramids. (Fig. 190.)

The transverse cut of the nave of the Trinity (Fig. 190) shows the rudiment of the flying buttress, which is still hidden in the thickness of the roof of the side aisles; it effectively counterbuttressed the thrust of the vaults of the side aisles, but is not yet to be seen from the outside.

The vaults of the Trinity still mark a step in advance, a progress realized later by the builders at the time when the period of Romanesque architecture was about to close after having prepared for a new revolution in the art of building by a new system of construction, which began to be felt from the first half of the twelfth century, which increased till the end of the century, and reached complete development at the thirteenth century.

The origin of Romanesque architecture has been sought and found. The birth, the transformation, the superb developments of the grand and beautiful system, so absolutely rational in its principles, as well as in its applications, have been shown. In Gothic architecture, which followed Romanesque, are monuments marvelous in their ingenious combination and almost miraculous in the boldness of their construction, but homage should be given to the mother of all these masterpieces: to Romanesque architecture, which produced monuments which were imitated because they were recognized models as much for their simple beauty as for the wisdom of their construction.

(Concluded.)

The Establishment of Trade Schools.*

BY R. T. AUCHMUTY, OF NEW YORK.

FROM about the year 1835 until quite recent times, there seems to have been very little desire on the part of enterprising young Americans to be mechanics. During that period the West was being made accessible by the construction of railroads. Then came the discovery of gold in California, with the rush for the new El Dorado, and then the drain on the youth of our country by the civil war. Now, all is changed, and the trades have splendid opportunities for ambitious young men. Unless a young man knows how to do some one thing well, there is very little use for him; he certainly cannot command high wages. Twenty-five or thirty years ago a man became a master mechanic very much as he might today start a livery stable or keep a store. That, now, is not possible; a master mechanic must understand his trade, or his business is likely to be in the hands of a receiver. If Horace Greeley was still alive the *Tribune* would no longer say, "Young man, go West." It would say, "Young man, learn a trade and you can take care of yourself in any part of the United States."

During those years I mentioned, from about 1835 to 1865, the old apprenticeship system dropped out of sight. No one cared about it and no one noted when it disappeared. It had outlived its usefulness, as it practically disappeared in England at the same time, where few of the conditions existed which affected it here.

Nine years ago an effort was made to give our young countrymen the same opportunity to learn the trades as they had to learn law, or medicine, or engineering, or bookkeeping and business methods. There seemed no reason why a trade school should not do for the mechanic what the professional school did for the professional man or the business college for the bookkeeper.

Nine years is a considerable length of time to look back upon, but during those years more has been accomplished than I dared hope for when I started the New York trade schools. The young men, ever on the alert to find some means of bettering their condition, saw that the trade schools would make their labor more valuable, and they surprised their friends with their quickly-acquired skill. Then the master mechanics saw what these trade school youths could do, and began to realize that a new system of trade instruction was being established.

Now the New York trade schools have the active support of the Master Plumbers', Master Painters' and Decorators' and Master Stonecutters' associations and the Merchant Tailors' Society. The master plumbers not only aid in instructing the young plumbers, but they won the right of young men to work in New York, at the cost, as you know, of a long and bitter strike. All honor to them. The master painters take a deep interest in the schools, and no graduate of the stone-cutting class has ever gone unemployed. The merchant tailors first teach and then employ the young tailors. The Mason Builders' Association does not assist the New York trade schools nor protect the young bricklayers, although I have asked them to do both. I do not mention this because I want to criticize—I do not claim the

* Address delivered before a special meeting of the Chicago Builders' and Traders' Exchange, April 17, 1890.

right to sit in judgment—but because I do not want to give the impression that all the associations of master mechanics in the building trades in New York are interested in my schools. My young carpenters and plasterers take care of themselves. I am not aware that the employers in these trades have separate organizations.

During the past two years there has not been a convention of master mechanics in which it is not admitted that trade schools are a necessity and that the workshop is no longer the best place to learn a trade. The National Association of Master Builders, with which you are affiliated, recommend that a lad who wishes to be a mechanic shall go first to a trade school to learn how to work and then shall serve a term for a fixed length of time, or until "old enough and competent" to do a full day's work. Those rules, I need not tell you, were intended to provide both for young lads, who formerly were the only ones who went into the trades, and for young men who have remained at school until well educated and who are old enough to know for what calling in life they are best fitted.

The trade school committees which are appointed by the Master Plumbers', Master Painters' and Decorators' and the Master Stonecutters' associations, do not hold merely an honorary position. It took the trade school committee of the Master Plumbers' Association fourteen hours this spring to read the examination papers and examine the work of the day and evening plumbing classes, and they had to call in last year's committee to help them to get through in that time. The trade school committee of the Master Painters' Association gave each member of the painting classes a careful examination. For two winters one member of that committee spent three evenings each week at the schools, and this winter another member took charge of the fresco class for over a month to put new life into it. Neither of these gentlemen would accept any compensation for their services.

Let us see what trade instruction means. I will take as an example the plumbing trade. At the New York trade schools there are day and evening plumbing classes. Instruction is given to the day class from 8 A.M. to 4 P.M. every day during the three winter months. This class during the past winter had an attendance of sixty young men, coming not only from New York and its vicinity, but from all over the United States. Instruction is given to the evening class on three evenings each week for six months. The members of the evening class are from New York and the neighboring cities. The day class is limited to young men between eighteen and twenty-two years of age, and the evening class to young men between sixteen and twenty-one years of age. The young men in the day class nearly all come to the trade schools without any previous knowledge of the trade. In the evening class, which last winter numbered 146, about seventy per cent of the young men were employed in plumbing shops. The fee for the day class is \$35 and for the evening class \$12.

All the young men who enter the plumbing classes are required to do the following work, each being advanced as rapidly as his proficiency will allow: 1, lead seams; 2, overcast joints; 3, cup joints; 4, S traps; 5, horizontal wipe joints; 6, horizontal branch joints; 7, upright wipe joints, and joints on pipe placed at various angles; 8, upright branch joints; 9, wiping on a stop-cock; 10, wiping a flange on a 2-inch pipe; 11, wiping on a ferule; 12, caulking; 13, putting an overflow pipe in a safe waste. At the conclusion of this course, miscellaneous and fancy work, sand bends, etc., are done. Some of this work is not now required in plumbing a building, but the exercises are arranged so that the young men will understand lead work. Each young man is furnished with a set of tools, and has his allotted place at the work bench. The instructors are skilled mechanics. Each member of the class is shown how his work should be done, and it is the duty of the instructor to see that it is done neatly and in a workmanlike manner. The solder is melted by means of Bunsen burners, supplied with gas. This avoids the heat and unwholesome gases of charcoal, or the danger which might arise from a great number of gasoline furnaces. Each member of the class is provided with a separate compartment, in which the specimens of his work are kept after being approved of by the instructor. These specimens can be taken away at the end of the course by paying for the cost of the material used.

Great care is bestowed on the scientific instruction. For each of the following subjects printed forms are furnished containing questions with blank spaces left for the answers: 1, Soil and drain pipes; 2, trapping and ventilation of soil and drain pipes; 3, supply pipes; 4, boilers; 5, tanks; 6, fixtures; 7, trapping and ventilation of fixtures; 8, mistakes in plumbing; 9, pumps. The lecturer reads a question and writes the answer to it on the blackboard. This answer is copied by the young men in the blank space in the printed forms. The lecturer then proceeds to explain fully what is meant, to illustrate his meaning by diagrams, and to answer questions put by members of the class. The printed forms, after being filled up, are kept by the young man for future reference. Diagrams are also given the members of the class of improperly arranged plumbing, many of them taken from faulty work that has actually been done in New York and other cities, which they are required to correct. By this course of manual and theoretical instruction, a knowledge of the trade is acquired which it would be difficult to obtain in any other way.

The skill that can be acquired by beginners by means of this course is shown by the photographs I have brought with me of the work done at the schools without assistance from the instructors. In giving the young men their certificates, in March, 1888, the president of the Master Plumbers' Association of New York said that their work was "simply marvelous." The Trade School Committee reported to the Master Plumbers' Association that the work of the day class of 1888-1889 "was as good as could be done by many journeymen," and that the examination was a most trying one. The same system of practical and scientific instruction is followed in the bricklaying, plastering, carpentry, house, sign and fresco painting,

stone-cutting and blacksmith classes. I do not propose, as my circular states, to graduate mechanics. The young men learn how to work and the science on which their trade is based at the New York trade schools; then they must serve a term at real work to gain speed of execution and experience. This term is long or short, according to the age or ability of the young man or the trade he may have chosen. My plasterers usually get full wages when they leave the schools, while my young plumbers require from six months to two years shop practice. My bricklayers can lay from six hundred to one thousand brick per day on a straight wall in a workmanlike manner; they can turn corners and build cross walls in 12, 16 and 20 inch walls, construct arches, piers, flues, etc. I have employed my bricklayers, on leaving the New York trade schools, to build fourteen dwelling houses, two apartment houses and three stores, and their work was in every way first-class. I paid them in proportion to the number of brick they could lay in a day.

It is proposed by the Builders' and Traders' Exchange of Chicago to establish a trade school. It will repay you to do so. You will bring a class of young men in the building trades to which you are unaccustomed, and it will gain public sympathy for your association, for there is a wide-spread feeling that the young men of this country are not fairly treated by mechanics.

I gave the advice at the Philadelphia convention that a trade school when first started should be confined to a few trades, as it will save both trouble and expense. The trades, if my experience is of any value, I would advise you to commence with are bricklaying, plumbing and carpentry. Some factory building, or what would be better some small building with a vacant piece of land attached to it, which could be cheaply roofed over for a bricklaying shed, is all that is needed. You know what the rent of such a piece of property would be. If you give a reasonable assurance that the graduates of your school shall have the preference in your employ, the young men's fees will meet the running expenses—that is, the cost of the material wasted and the pay of one teacher to each twenty-five pupils.

Because I advise you not to start too many trades at once, I do not advise your having a small trade school. Chicago is not the place for small things. Chicago people like things on a big scale. I had this winter 520 young men at the New York trade schools. These young men came from nineteen different states of the Union; many of them came to New York to learn a trade, from far west of Chicago. Utah, Colorado, Dakota and Kansas were represented this winter. You might reasonably provide for two hundred bricklayers, as many carpenters and say one hundred plumbers. Then you will have made a good beginning.

Some of you may be wondering if I do not know that you have trade unions in Chicago and that the policy of the unions is to prevent young Americans coming into the trades. Yes, I know all that, and it is just the reason why you should establish a trade school and give the young men of this great city a chance to be mechanics.

Our strength will yield us about \$1.75 per day; add skill to strength and the possessor of both can earn from \$3 to \$5 per day. Now are any organizations, particularly organizations of foreigners, as most trade unions are, to tell us that a young American may develop his strength, but that he shall not develop his skill? God gave each of us certain tastes or inclinations, that the world's work might be done. It is our duty to the young to try to develop those tastes, not to crush them out. Gentlemen, there is a wrong being done our young countrymen. Those who persecute them are committing a crime against humanity, and those who condone a crime share in its guilt.

Do not leave your right to teach your young men to arbitration; there is nothing to arbitrate. Do not seek a compromise with the unions. They will tell you (I have had my experience with them) that if you will confine your trade school to boys of sixteen, you will be allowed to open it. The young men who are wanted in the trades are young men who have graduated from your high schools and your manual training schools, well educated young men, the sons of well-to-do parents. They will elevate labor and make the mechanic arts to be held in higher esteem by the community than they are at present. Take as many poor boys as you can employ, but do not shut out those who are not poor.

Soon, gentlemen, all the world is to be invited here to the great fair. We can see towers and domes and long lines of buildings, of brick and stone, of iron and glass, rising from stately terraces along the lake. Chicago will look on them with pride, the stranger with wonder. Then among the visitors from other lands will come the man with the inquiring mind. He will see Irish, German, French, English and Italian mechanics at work, and will come to this exchange to ask where the American mechanics are. You will be called off suddenly; you will have an important engagement. The man in quest of facts will not be satisfied; he will open the census of 1880 and find that sixty per cent of the skilled workmen of Chicago are foreign born. It is to be hoped that the census of 1890 will not be out, as during the past ten years skilled workmen have been coming from Europe by the tens of thousands, and never before have American boys been so vigorously excluded from the trades. Your visitor will ask the stalwart, intelligent looking youths who are wandering about your streets wondering how they can get a living, if they would not like to be mechanics. The answer will be, "Of course we would, but the trade unions do not permit the master mechanics to teach us or to employ us." The glory of the exhibition will be tarnished. In every land, in many languages, it will be printed that Americans accomplish great works, but, unlike any other civilized or uncivilized race, they do not protect their young.

Let the Builders and Traders' Exchange of Chicago establish a trade school within the exhibition grounds or near its gates. Have

in it one thousand young men at work learning the building trades — a moderate number for a city of over a million inhabitants; and what the Eiffel tower was to the Paris Exhibition, will the trade school of your association be to the World's Fair of 1892.

Specifications.*

BY J. G. MCCARTHY, OF CHICAGO.

WEBSTER defines specifications to mean "definite, fixed instruction for the strict performance of a particular duty or undertaking." It is evident from this definition that Mr. Webster or his co-laborers never had any experience with specifications in the sense in which they are generally understood in the relations between architects and contractors. There can be no question about the average contractor being the proper individual for Webster to invite to define this term when the task of revising the dictionary is to be undertaken. By so doing, that we will have at least a more liberal construction of the term may, we think, be safely assumed.

Of the many trials and tribulations which beset the pathway of the contractor, and their name is legion, the greater percentage can, it may be assumed, be attributed to this one simple, apparently inoffensive word, specification. In it can be seen, at least through the optical vision of the contractor, all the legal lore in a concrete form which has been inflicted on suffering humanity from the time of John Doe and Richard Roe, of respected memory, down to and including the latest production of deviltry emanating from the office of a government supervising architect in our own times, under a democratic administration. Whether this poor word has been made to suffer the tortures of the damned through the innate absent-mindedness of the contractor, or its sufferings are the result of overfeeding and consequent indigestion, terminating in bad dreams on the part of the architect, your orator saith not. That it has been tortured, twisted and maligned in such a manner that it is scarcely recognizable by its nearest friend (the owner), can readily be proven by going arm in arm in a friendly way with a set of specifications to the nearest building erected under the guiding hand of these said specifications.

The writer has some times thought, perhaps if architects could be induced to consult with practical, honest contractors in the several trades in relation to their specifications, that great good might inure to all concerned, and that many of the incongruities and absurdities to be found in specifications might be avoided.

The great danger of this plan lies in the fact that the architect would be more than liable to find himself in much the same position after the aforesaid consultation which the Irishman did who had a new sign made for his business — reading "Fresh Fish Sold Here," and immediately after putting it in place consulted a number of friends in relation to it, with about the following results:

"Hello, Mike, got a new sign?"

"I have."

"But it isn't right!"

"What's wrong wid it?"

"What do you mane by saying, 'Fresh Fish Sold Here!' Sure everybody knows your store is here and not in Oshkosh."

"Faith, an' you're right," and he rubbed out the word "here."

Along came another friend.

"Morning, Mike; got a new sign?"

"I have."

"But it isn't right."

"What's wrong wid it?"

"Rub out the 'Fresh!' Everybody knows your fish are not stale."

"Ye have a great head on you; I'll do it," and a daub of the brush eliminated the word.

While Mike was gazing on the result, another friend came along.

"Sure your paintin' is all wrong."

"Arrah! go long wid you. What's wrong?"

"Your sign reads 'Fish Sold.' Everybody knows you sell fish. Nobody expects you to give them away."

Out went the word "Sold."

This was no sooner done than along came another friend.

"What's this I see, 'Fish.' Why Mike, what the devil have you that word there for. Sure everybody knows you sell fish and not tobacco and whisky. Rub it out, it's no good."

This we fear would be the fate of specifications after passing through the hands of the several contractors. Since we cannot ask the architect to do away entirely with his specifications, we must endeavor to adjust ourselves to the existing order of things, and respectfully suggest wherein they may perhaps be improved within the pale of orthodoxy, so to speak.

It is freely admitted on all sides that one of the greatest needs of the profession of architecture at the present time is the lack of facilities for acquiring a sufficient knowledge of the practical work pertaining to building to enable the architect to intelligently guide and direct the several mechanics engaged in the construction and completion thereof. While all are willing to concede to the trained architect a more general and comprehensive knowledge of building in its entirety than can be accredited to any other class, it may safely be assumed that persons engaged in a particular trade pertaining to building and pursuing honestly and intelligently will acquire a knowledge of the especial calling which cannot be expected of the architect who has to give equal attention to a number of departments.

In no other feature of the profession is this lack of practical knowledge more readily discernible than in specifications, and particularly in the specifications of the young architects, a majority of whom must of necessity in their first years of study confine themselves

to office work and the technique of the profession. It is not here assumed that young men in architecture are not equally as studious and painstaking in their work as are those in any of the other professions, but unfortunately for the young architect, about one of the first acts of his professional life must be to put his knowledge, or the lack of it, on record in the form of a set of specifications, the net results of which will, to a great extent, make or mar his future success professionally.

The human family is apparently much more interested in the perfect and well paying building of houses than they are in the preservation of life. The young physician who follows in the fixed grooves of his eminent predecessors, may, and oftentimes does, administer Number Seven when Number Eight should be used, and buries his blunder seven feet under the ground, soon to be forgotten, even by those most interested, and not at all, or but slightly, affecting his professional success in after life. The young attorney who misunderstands or misapplies the law can amend his error by the introduction of a new bill or issue in the form of an amendment, and thus succeed in saving both his fee and his professional good name.

The errors of the young architect, however, unlike those of the physician or attorney, cannot be hidden away or forgotten, but stare him constantly in the face, whether they are under or over the ground, and in the majority of cases cannot be amended, except on the plan of the Indian for repairing his gun — supplying it with a new lock, cock, stock and barrel.

The older men in the profession will, it may be assumed, readily concede that only by long years of observation, experience and annoyance, oftentimes hazarding their reputation, have they been able to acquire the practical knowledge which enables them to know and obviate the difficulties which beset their younger brethren on every hand. They have also, we think, placed themselves on record in one or more of their annual gatherings as the foremost advocates for the introduction into the curriculum of the profession of a course in a good and sufficient "mechanical trade school."

The profession in our own city have recently taken an important step in this direction by purchasing the Permanent Exhibit of Building Materials and Appliances, which, we understand, is to be controlled and directed by the local society of architects in the future. It is earnestly to be hoped that instead of passing resolutions to harmonize with the spirit of the moment, to be forgotten immediately on adjournment, architects will go a step or two farther than the purchase, good though it be, and institute during the long winter evenings (or at some other suitable time) a course of lectures and papers by practical men in their own profession, as well as by men of intelligence and character in the building and kindred mechanical trades.

It diminishes no man's knowledge to spread it broadcast, but rather increases its usefulness to his fellow man; neither does it increase his knowledge or benefit humanity to hide it "under a bushel."

If, through associations like your own and those of the older men in your profession, in conjunction with the various organizations in the building and other trades, a spirit of harmony and a better understanding of all the interests concerned can be brought about, then, indeed, will the several associations and clubs have accomplished a good work and justified their coming into existence. This seeming divergence from the text is not introduced with a view to lose sight of our specifications, but rather as a passing thought given to what, to the minds of your readers, is an important element for bringing about the very things we are striving for.

It will not here be attempted to point out any of the errors made by young men, and, indeed, by some of the older ones in the profession, in their specifications, for the reason that the knowledge possessed is special rather than general, but on the assumption that they are co-equal in all the trades connected with building. There is nothing can be done which will so readily remedy them as a series of lectures and papers by practical men in the trades, and the profession of architecture. It may be well here to state that the knowledge of Armstrong, Ruskin and Richardson combined would not enable an architect to successfully cope with dishonest tradesmen; and only by the closest scrutiny into the character of his contractors can the architect hope to bring about the results he has in view in the construction of an edifice. It has become axiomatic that a business or professional generation only lasts on an average about one decade, and the young men who are to-day the students will be called upon tomorrow to take the place of the world's workers who have passed away. It, therefore behooves them to leave nothing undone that will prepare them to grapple with the realities of business and professional life.

The older men, too, owe it to the world about them, as well as to posterity, to impart in its most concrete form to all who seek it the results of their life work, to the end that those who follow them may be able to devote their energies to new fields of action in the world's affairs.

Like most men who aspire to be philosophers and guardians of the public weal, I have denied all that I asserted, and will not assume to having told you anything new, but merely repeated an old, old story in addition to, in the words of Bill Nye, defining "in my own simple way my position in this universe."

In conclusion permit me to ask you, if I have not in this hurried attempt thoughtlessly grated on your intelligence, to command me in any way you think I can be of service to your club, and like (in the words of Wilder) the girl who upon being invited to take some refreshment, said she would take champagne, and was invited to guess again, I will be pleased at any time, and in any capacity within my power, to at least, if I cannot give you mental champagne, guess again in any way that I can serve you.

* Paper read before the Chicago Architectural Sketch Club, May 5, 1890.

Chicago Builders and Traders' Exchange.

ON April 17 a special meeting of the Chicago Builders and Traders Exchange was held to consider the establishment of a trade school, under the direction of the Exchange. The meeting was called to order by the president, Mr. W. P. Ketcham, who introduced Col. R. T. Auchmuty, of New York, as the principal speaker. There was a full attendance of the Exchange members, and the remarks of the speaker were listened to with attention by those in the front seats, but the constant tramp of "stogy" and creaking boots in the rear of the hall and the incessant hum of voices, in spite of the protests of the president, so drowned the speaker's voice as to make it impossible for the stenographer to take complete notes, necessitating the assistance of Mr. Auchmuty to complete a report of his remarks. This shows that there should be an improvement in the manners of members, who should know better than to disturb so important a meeting, and also the great necessity for a hall connected with the Exchange, especially set apart for meetings, the door of which could be locked after the speaker had been introduced.

Mr. Auchmuty was introduced by President Ketcham. His remarks, which are printed in this number, on page 57, were illustrated by many photographs of work done by pupils in trade schools. At the conclusion of this address President Ketcham said:

President Ketcham: I see Prof. E. W. Blatchford, of the Chicago Manual Training School, is present with us this afternoon, and I know all of you will be glad to have a few remarks from him. Gentlemen, Professor Blatchford.

Professor Blatchford: Gentlemen of the Exchange, I did not expect to speak here today. I came to listen. But first, before I say anything, I wish to express my individual thanks to friend Colonel Auchmuty for the statements he has made today in behalf of the youth of America. Of course I, as all of you, have known of him and his labors in connection with the great trade school of which he is the head—of what he has accomplished through that pioneer enterprise, and therefore expected to be interested and entertained by him; nevertheless, I feel it a pleasure and a duty to make this acknowledgment on my part for what he has said today. I presume your president called upon me because of my connection with the Manual Training School, located on the corner of Twelfth street and Michigan avenue, which originated with and was organized by the Commercial Club of this city in 1884. The business men of this city felt there was need of a different, a broader education for the boys and girls of our city, especially boys, than was provided for at our public schools; a place where they could be taught to use the capacities God had given them to their own advantage and the advantage of the people. These views were often discussed, and finally the matter was brought formally before our club, and the whole ground was carefully gone over, when it was decided to start the school at once. One hundred thousand dollars cash was subscribed. The lot was bought and the building put up. The result is that it has been a success from the start. We take boys from fourteen years of age up to eighteen years of age. They are taught six hours a day; three hours to the study of mathematics and drawing, and three hours in the manual school. We teach drawing because drawing is the language of mechanics. The first year we teach them carpenter work. The second year, molding. The third year, work in the machine shop. In the carpenter shop, the boy is taught the use of the plane—we have over twenty different kinds of planes. He is taught how they are made and everything pertaining to them, including their various uses. So with the saw, the chisel and the other tools. He is taught the character and uses of the different woods. Where pine is obtained; oak, walnut, etc. Why we want to use pine, or oak, or walnut. He must submit to frequent examinations by his teachers, and by an examining committee of experts at the end of the third year, when he must show some work done by himself, when, if he passes successfully, he is given a diploma. Now these trade schools of which Colonel Auchmuty has been telling us about are something we need here in Chicago. Some may say because we have a manual training school we do not need a trade school; but because we have the manual training school makes the need of a trade school more of a necessity. The manual training school stands in the relation to a trade school that the public schools do to the high schools. We prepare the boys so that when they go into a trade school they will feel the good of our training there, and we feel the need of such a supplemental school in this city. There is another thing I want to thank Colonel Auchmuty for, and that is what he said about the coming World's Fair. When I first came to this country there was no town nearer than Galena, and we traveled to it by the old-fashioned stage coach. Now, there are many towns with railroads reaching to them and beyond this large city with its great, massive business houses piling ten and twelve stories high. We have made the geography of this country. Nature did but little for us. While we have done much and have much, there are some things we still need, and if there is any one thing we do need more than another it is a place where we can teach our boys so that when they become men they will be able and competent to carry on this work. We shall be honored by getting up this World's Fair; honored by other states and countries contributing to it, but, if we can show them we are engaged in building up the greatest thing God ever made—manhood, we shall be accorded greater honor than for the building up this marvelous city. Gentlemen, the time was when the workingman was considered beneath those who followed other occupations, and there are some who still hold to those opinions of other days, but I tell you, gentlemen, among the thinking men of this land it is recognized there are no nobler men than those who have created the wealth of the world—the workingmen—and the history of the world proves the assertion. What each

one of us should do, you working in your place, I in mine—all working together—is to help build up this temple of manhood. I am glad to say there are a number of institutions where young women are taught, and thoroughly taught, in avocations whereby they can get better wages. What we want more is a school for boys of the same character and capacity as those in New York and Philadelphia. Now I want to express my thanks for being invited here today. Just before I came I got word from two members of our club who intended to be here, but were called away by sickness, who would have been glad by their own words to have expressed their appreciation of the victory that has come to Colonel Auchmuty through his indomitable energy and wisdom. And now I want to invite you each to come down to our school so that we can show you just what we are doing. We have now seventy-five boys, and are about to increase our capacity to receive twenty-five more. I want to take in one hundred. Come down and spend an hour. You will receive a warm welcome.

President Ketcham: I am sure the Exchange is much obliged to Mr. Blatchford for the kind words expressed, and also to Colonel Auchmuty, whom we have called here and listened to today.

On motion, a vote of thanks was returned to Colonel Auchmuty and Professor Blatchford for their addresses before the Exchange.

President Ketcham: In this matter of a training school, as you know, we have appointed a special committee for the purpose of formulating a plan. I see Mr. J. G. McCarthy, the chairman of that committee, is present, and I would like to inquire what steps have been taken and how far the committee has got?

Mr. McCarthy responded to the call of the chair and spoke at some length in regard to the importance of such a school in Chicago, premising his remarks by saying he was as ready as any man to move or second a motion for a vote of thanks, but begged to remind the Exchange that passing a resolution wouldn't pay the national debt nor in any degree aid in bringing about a trade school in this city. To do that the members would have to get down to business, which meant money. To stimulate the members the committee had brought Colonel Auchmuty to Chicago to tell them of his success in New York and to show them the same success could be met with here. He concluded by stating the committee had completed a report which recommended a school upon the plan of Colonel Auchmuty's school in New York, copying the plan of that school in all its essential features. That the committee was ready to make that report at the earliest call of the Exchange.

At the suggestion of President Ketcham Saturday, April 26, at 1 P.M., was set for hearing the report of the committee. The Exchange then adjourned to that date and hour.

The association was called to order by President Ketcham, at 1 o'clock, April 26, and after reports upon the work of the classes in the New York trade school, received from Colonel Auchmuty, had been distributed, Mr. J. G. McCarthy, chairman of the Exchange Committee on Trade School, read the following report:

To the Builders' and Traders' Exchange:

GENTLEMEN.—Your committee to whom was assigned the work of investigating into the feasibility of establishing a trade school under the control and direction of the Exchange, respectfully submit the following report:

We have, to some extent, examined into the workings of several schools for "Manual Training and Technical Instruction," and have not been able to find any in the country that contains even approximately the specific form of instruction which the committee assumed it was desired to establish in an exclusively trade school, excepting, perhaps, the school of Colonel Auchmuty, of New York City.

Assuming, as the committee has, that it was the intention of the Exchange to institute a school for direct instruction in the several trades constituting the membership thereof, we herewith submit a plan for your consideration:

1. That a committee of one be appointed by and from each specific trade in the Exchange. Said committee, together with a committee of three from the Exchange at large, to be appointed by the president of the Exchange upon the recommendation of the board of directors of the Exchange, shall constitute the board of directory for the trade school.

The president of this Exchange shall be ex-officio chairman of the trade school board of directory, and shall exercise the same power in connection therewith which he does as presiding officer of the Exchange.

3. None but members of this Exchange shall be eligible to appointment on the board of directors for trade schools.

4. The several committees shall have charge of the specific work of their particular trade in the school, and shall from time to time submit to the general board for consideration such plans and methods as may, in their judgment, seem best for the fullest instruction in their particular trade. They will not have the power to introduce or adopt into the school any plan or method of instruction that has not first been submitted to the general board and approved by them.

5. The membership of the board of directory for the trade school shall at all times be under the control of the Exchange, and appointments thereon approved by the directors of the Exchange.

6. Removals from or addition to the several committees may be made at any time by the directors of the Exchange, after due notice of such removal or appointment has been given the specific trades by the Exchange.

7. The board of directory for the trade schools, after being duly constituted as herein set forth, shall, in the absence of any specific action to the contrary, have full power to act for, and represent, the Exchange in all matters pertaining to the trade school.

8. The board of directory for the trade school shall, as soon as may be found practical, purchase or lease, in the name of and for the Exchange, such buildings as in their judgment will be suitable for the school, and equip the same with such tools and appliances as may be found necessary on the recommendation of the several committees from the different trades. Said building, tools and appliances to be the exclusive property of this Exchange, and be at all times subject to the direction and control of the Exchange.

9. The board of directory for the trade schools shall have power to appoint one general secretary, or superintendent for the school, and also one skilled and intelligent mechanic as teacher in each trade department, said appointments (except the secretary) to be made on the recommendation of the several trades, and be subject to removal by the board of directory at any time.

They shall also have power to appoint such other help as may seem necessary in their judgment to keep the school in good and proper condition, but the corps of professional assistants must not exceed the limit here laid down, except through the specific authority of the Exchange.

10. The salary of the superintendent shall not exceed the sum of \$1,200 per year, and the teachers shall only be paid such sums as first-class mechanics in their respective lines could earn working at their trade.

11. That details of instruction and appliances be promulgated by the several trade committees, and be by them submitted to the board of directory for action before they can be adopted.

Your committee have approximately estimated the expense of conducting such a school as is here proposed for the term of one year, and herewith submit

their figures on the basis of beginning with six (6) trade departments (stone cutting, brick and stone masonry, carpentry, plumbing, painting and glazing, plastering):

For rent of building, salary of superintendent, salary of six (mechanic) teachers, tools and appliances, salary of janitor, stationery expenses, printing, etc., a total of about \$10,000.

We would respectfully urge upon the Exchange the necessity of immediate action on the basis of this report, or some other plan which may suggest itself, to the end that work may be commenced in a practical manner.

J. G. MCCARTHY, Chairman.

D. V. PURINGTON,

GEORGE TAPPER,

WILLIAM GOLDBE,

F. V. GINDELE,

Special Committee on Trade Schools.

Mr. Purington called attention to the fact that the committee mentioned would cover every trade represented in the Exchange and would be unwieldy and more than required at present.

Mr. McCarthy said that if adopted the report would stand for the future law in the matter; that at first the six trades mentioned would only be established.

On motion, the report was received.

Mr. Gindele stated that the first matter to be considered was whether the association wished a trade school.

Mr. Molding said that the question of expense should not be considered, and moved the adoption of the report.

Mr. Purington said that at least half of the necessary money could be raised by voluntary subscription in this meeting.

Mr. McCarthy said that he hoped that no hasty action would be taken and a lot of resolutions passed and then dropped; that the report of the committee should be carefully considered, and then when finally decided it would receive the full support of every member.

It was suggested by Mr. Freeman that the report be printed and sent to every member.

A resolution proposed by Mr. Kimbell, amended by Mr. Alsip and Mr. Gindele, was then passed, to the effect that it was the sense of the meeting that a trade school be established under the auspices of the Exchange; that the secretary be instructed to print and mail copies of the report to members; that the Exchange be asked to vote from the funds in the treasury the sum of \$5,000 for the support of the school, and that subscription blanks be inclosed with the report to enable members to make voluntary subscriptions.

Mr. Purington moved that the secretary be authorized to take subscriptions at this meeting to show the attitude of the members present toward the trade school.

A question being raised regarding the constitutional law governing the voting of money from the treasury, it was explained that this was done by the board of directors and could be ordered by the members. Mr. McCarthy started the subscription ball rolling by subscribing \$500. The chair appointed as tellers to collect subscriptions Messrs. Purington and McCarthy. The secretary announced at the conclusion that the subscriptions amounted to exactly \$2,000.

This was ordered to be added to the report; the matter was placed in the hands of the trade school committee, and the meeting adjourned to 2 o'clock three weeks from date—May 17.

A Canadian Architects' Registration Bill.

ABOUT a year ago the architects of the Province of Ontario, Canada, formed an association. One of the first measures adopted for the elevation of the profession was a bill for the registration of architects, to be submitted to the Ontario legislature for passage. This bill was approved by the association at its annual convention on November 20, 1889, and placed in charge of a committee for presentation to the legislature. Upon comparison, the act as passed, which is given below, differs in many respects from the original draft passed upon by the association, withholding several of the privileges asked for. Being passed, as a government measure without committee, the association representatives had no opportunity for securing a hearing upon it item by item as with a private bill. The act is given in full, that it may be compared with the bills now in the hands of the state associations for passage by state legislatures.

THE ONTARIO ARCHITECTS' ACT.

Whereas it is deemed expedient for the better protection of the public interests in the erection of public and private buildings in the Province of Ontario, and in order to enable persons requiring professional aid in architecture to distinguish between qualified and unqualified architects, and to insure a standard of efficiency in the persons practicing the profession of architecture in the province, and for the furtherance and advancement of the art of architecture;

Therefore her majesty, by and with the advice and consent of the legislative assembly of the Province of Ontario, enacts as follows:

1. This act may be cited as "The Ontario Architects' Act."

2. All persons who shall cause their names to be registered under the provisions of this act, shall be, and are hereby incorporated under the name and style of "The Ontario Association of Architects," hereinafter referred to as "The Association."

3. The Ontario Association of Architects shall be a body corporate by the name aforesaid, having a perpetual succession and a common seal, with power to acquire, hold and dispose of personal and real estate, for the purpose of this act, and to sue and be sued, in the manner usual with such corporations.

4. Every person registered under the provisions of this act, shall be a member of the said association.

5. There shall be a council of management of the said association, to be appointed in the manner provided for in this act, and hereinafter referred to as "The Council."

6. (1) The council shall be composed of nine persons, who shall in the first instance be appointed by the lieutenant-governor in council within one month after the passing of this act, and shall be British subjects, both residing and practicing the profession of architecture within the said province for at least ten years before the passing of this act. The members of said council so appointed shall meet in the city of Toronto, in the county of York, for the purpose of organization, within one month after appointment, at such time and place as may be directed by proclamation in the Ontario Gazette.

(2) Any five members of the council shall form a quorum.

7. The members of the council so appointed by the lieutenant-governor in council, shall hold office for the following terms respectively: the first three names mentioned, for the term of three years; the second three names mentioned,

for the term of two years; the third and last three names mentioned, for the term of one year.

8. All subsequent members of the council shall be elected by ballot, in such manner as may be provided for by the by-laws of the association, at the annual meeting of said association, or at a special meeting called for that purpose; and the member, or members, obtaining the greatest number of votes shall be declared elected.

9. No person shall be eligible for election to the council, or qualified to fill any vacancy thereon, or to vote for any member thereof, unless duly qualified under the provisions of this act and the by-laws of the association.

10. All elected members of the council shall hold office for the term of three years, except as hereinafter provided, and five shall form a quorum.

11. (1) In case of the resignation or death of any member or members of the council, not exceeding four, the other members of the council shall have power to fill all vacancies so caused, until the time of the holding of the next annual meeting, provided said annual meeting is not to be held within a period of three months of the occurring of such vacancy or vacancies.

(2) In case of the resignation or death of five or more members of the council, the president or vice-president of the association, or in case of their, or either of their default for a period of ten days, any five members in good standing shall have power to call a special meeting of the association upon a notice of not less than ten days, for the purpose of filling the vacancies so caused.

(3) In case of an election to fill the vacancies referred to in sub-sections 1 and 2, the member receiving the greater number of votes shall be considered the member elected to fill the vacancy which will require the longer time to expire, and so on until the vacancies are filled.

12. In case of any doubt or dispute as to who has or have been elected a member or members of the council, or as to the legality of the election of any member or members of the council, it shall be lawful for the other duly elected members to be, and they are hereby constituted a committee to hold an inquiry and decide who, if any, is, or are, the legally elected member or members of the council, and the person, or persons, if any, whom they decide to have elected shall be and be deemed to be the member, or members legally elected, and if the election is found to have been illegal, the said committee shall have power to order a new election.

13. Meetings of the association and the council shall be at such times and places as may be fixed by the by-laws of the association or council respectively; and in the absence of any rule or regulation as to the summoning of meetings of the association, or of the council, it shall be lawful for the president, or in the event of his absence or death, for the registrar to summon the same at such time and place as to such officer seems fit, by circular letter to be mailed to each member.

14. In the event of the absence of the president from any meeting, either of the vice-presidents, or in their absence some other member to be chosen from among the members present, shall act as president.

15. All questions submitted to the association, or the council, shall be decided by a majority of the members present, not being less than five in number in case of the council, and twenty in case of the association.

16. At all meetings the president for the time being shall have only a casting vote.

17. There shall be paid to the members of the council such fees for attendance, and such reasonable traveling expenses as may be fixed by by-law passed by the association at the annual meeting.

18. The council shall annually elect from among its members a president and two vice-presidents, and shall appoint a registrar, treasurer, solicitor and such other officers as may be necessary for the working of this act, who shall hold office during the pleasure of the council, and who shall, as well as being officers of the council, hold the like position as officers of the association.

19. The council shall have power to fix by by-law the salaries or fees to be paid to such officers, and to the board of examiners hereinafter appointed.

20. The council shall have power and authority:

(1) To appoint an examiner, or examiners, for the purpose of ascertaining and reporting upon the qualification, (a) Of all persons who shall present themselves for admission and enrollment as students at any of the matriculation, preliminary, intermediate or final examinations.

(2) To make all necessary rules, regulations and by-laws respecting the admission and registration of students, the periods and conditions of study, and the enrollments of architects as members of the association and all matters relating to the discipline and honor of the profession.

(3) To regulate and fix the annual admission fees payable by architects and students, and to make all rules, regulations and by-laws necessary for the proper working or carrying out of the provisions of this act.

(4) To enact by-laws as to the terms upon which it will receive the matriculation or other certificates of colleges and other institutions not in the Province of Ontario.

21. Any student who has matriculated in arts in any university in her majesty's dominions, or in the Ontario School of Practical Science, shall not be required to pass the preliminary examination.

22. (1) Any person practicing the profession of architecture within this province, on the coming into force of this act, may become a member of the association, by causing his name to be registered with the registrar of the association within three months from the appointment of such registrar, and by paying to the registrar such fees as may be by-law or otherwise be made payable in that behalf.

(2) In case any such person as aforesaid omits to be registered within said period of three months, through absence, illness or inadvertence, such person may, at the discretion of the council, be admitted to enrollment as an architect.

23. Any other person who applies for admission to registration as an architect after the coming into force of this act, shall not be less than twenty-one years of age, and shall have served as a student not less than five years with a principal or principals entitled to register under this act, or with any other principal or principals approved by the council, and have passed such qualifying examinations as may be required by this act.

24. (1) All students desirous of entering the profession of architecture shall be presented by a member of the council, and shall cause their full names to be entered with the registrar, and shall pay such fees, and submit to such examinations as shall be necessary in that behalf; provided that any person who, before the passing of this act, was entered as a student for a shorter term than five years, but not less than three years, with a principal or principals qualified to be registered under this act, or with any other principal or principals approved by the council, shall, on serving the full term of his indenture and passing the examinations prescribed by the council, be entitled to register under this act.

(2) Notice and evidence of existing studentship shall be given to the registrar within six months after the passing of this act, and shall be accompanied with such fee as the council shall from time to time direct, and with properly executed articles of indenture for the said term.

(3) Any person who has graduated from the Ontario School of Practical Science shall be required to serve only three years as a student, one of which three years may be served during the vacations of such school.

(4) Upon and after the passing of this act, students shall serve such term as is required to be served by the provisions of this act, under indenture, to a registered architect, which indenture and any assignment thereof with affidavit of execution thereto attached, shall be filed with the registrar upon payment of such fee as the council may by regulation direct.

25. From and after the first day of July, 1890, no person shall be entitled to take or use the name or title of "Registered Architect," either alone or in combination with any other word or words, or any name, title, or description, implying that he is registered under this act, unless he be so registered. Any person, who, after the above date, not being registered under this act, takes or uses any such name, title, or description, as aforesaid, shall be liable, on summary conviction, to a fine not exceeding \$25 for the first offense, and not exceeding \$100 for each subsequent offense.

26. The registrar of the council shall, in every year, cause to be printed, published, and kept for inspection at his office, free of charge, under the direction of the council, a correct register of the names, in alphabetical order according to the surnames, with the respective residences, in the form set forth in schedule A to this act, or to the like effect, of all persons appearing on the general register on the first day of January in every year, and such register shall be called "The Architects' Register," and a copy of such register for the time being purporting to be so printed and published as aforesaid, shall be evidence in all courts, and

before all justices of the peace and others, that the persons therein specified are registered according to the provisions of this act; provided always, that in case of any person whose name does not appear in such copy, a certified copy under the hand of the registrar of the council, of the entry of the name of such person in the register, shall be evidence that such person is registered under the provisions of this act.

27. If the registrar shall willfully make, or cause to be made, any falsification in any matters relating to the register, he shall be deemed to be guilty of a misdemeanor, and shall, on conviction thereof, be imprisoned for a term not exceeding twelve months.

28. Any person who willfully procures, or attempts to procure registration under this act by making, or producing, or causing to be produced, or made any false or fraudulent representation, or declaration, either verbally or in writing, that he is entitled to such registration, shall be deemed guilty of a misdemeanor, and shall, on conviction thereof, be sentenced to imprisonment for any term not exceeding twelve months.

29. There shall be paid to every registered architect summoned to attend any court, civil or criminal, for the purpose of giving evidence in his professional capacity, or in consequence of professional services rendered by him as an architect, for each day he so attends, in addition to his traveling expenses (if any), and to be taxed and paid in the manner by law provided with regard to the payment of witnesses attending such court, the same fee or allowance as is payable to provincial land surveyors.

30. (1) All fees payable under this act may be recovered as ordinary debts due to the association, and all penalties under this act may be recovered and enforced before one or more justices of the peace in manner directed by the Revised Statutes of Canada, chapter 178, entitled the "Summary Convictions Act," and any act amending the same.

(2) Any sum or sums of money arising from conviction and recovery of penalties as aforesaid, shall be paid immediately upon the recovery thereof by the convicting magistrate to the registrar of the council.

(3) Any person may be prosecutor or complainant under this act, and the council may allot such portion of the penalties as may be expedient toward the payment of such prosecutor.

31. Subject to the other provisions of this act, all notices and documents required by or for the purposes of this act to be sent, may be sent by post, and shall be deemed to have been received at the time when the letter containing the same would be delivered in the ordinary course of the mail, and in proving such sending it shall be sufficient to prove that the letter containing the notice or document was prepaid and properly addressed and put in the post. Such notices and documents may be in writing, or in print, or partly in writing and partly in print, and when sent to the council or other authorities shall be deemed to be properly addressed if addressed to the said bodies or authorities, or to some officer of the council or authority at the principal place of business of the council or authority, and when sent to a person registered under this act, shall be deemed to be properly addressed if addressed to him according to his address registered in the register of the association.

32. All moneys arising from fees payable on registration or the annual renewal fees, or from the sale of copies of the register, or otherwise, shall be paid to the registrar of the council, and by him paid over to the treasurer, to be applied in accordance with such regulations as may be made by the council for defraying the expenses of registration and the other expenses of the execution of this act, and subject thereto toward the support of museums, libraries or lectureships, or for other public purposes connected with the profession of architecture, or toward the promotion of learning and education in connection with architecture.

(2) The council shall have power to invest any sum not expended as above in such securities as shall be approved by the government of the Dominion of Canada, or of the Province of Ontario, in the name of any three of their number appointed as trustees, and any income derived from such invested sums shall be added to and considered as part of the ordinary income of the association.

(3) The association may also use surplus funds or invested capital for the rental or purchase of land or premises, or for the building of premises to serve as offices, examination halls, libraries, museums, or for any other public purpose connected with architecture.

33. The registrar and treasurer of the council shall enter in books to be kept for that purpose, a true account of all sums of money by them, or either of them, received and paid under this act, and such account shall be audited and submitted to the council at such time, or times, as the council may require.

34. It shall be the duty of the registrar to keep the register in accordance with the provisions of this act, and the by-laws, orders and regulations of the council.

SCHEDULE A.—SECTION 26.

A. D. 1890.

Date of Registration.	Name.	Title or Distinction (if any).	Residence.
1890. July 1st.	A. B.	Toronto University.....	Toronto.
1891. Aug. 1st.	C. D.		London.
	E. F.		Ottawa.
	G. H.		Toronto.
	I. J.		Hamilton.

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.

A meeting of the Executive Committee will be held at New York on Friday, May 16, for the purpose of receiving the ballots upon the admission of several new members and other business.

CHICAGO ARCHITECTURAL SKETCH CLUB.

On April 21 the club met to listen to a paper on architectural design in fireproof construction by Architect John W. Root. That gentleman explained that not having time to prepare the contemplated paper, he had arranged a substitute which would probably give much more pleasure. This was the reading of a poem upon "A Romanesque Doorway," written by Architect Henry Van Brunt, of Kansas City. Mr. Root also sent to the club rooms a large number of valuable illustrated works and portfolios of etchings and photographs illustrative of the epoch and style of which the poem treats. These were spread upon tables, and after the reading of the poem the members occupied an hour or more in their inspection. The poem is a remarkable production, and, while written with no thought of giving it any publicity except with a few friends, it was the general verdict that the inspiration received from it and the clear insight it gave to the ecclesiastical art period from the tenth century to the middle ages would place it among the most valuable of the architectural writings of American authors. A hearty vote of thanks was tendered Mr. Root, in which the author of the poem was included, for the evening's pleasure, Mr. Root being asked to convey the same to Mr. Van Brunt.

At the meeting, April 28, Mr. Morse, secretary of the Chicago Lantern Slide Club, exhibited about two hundred exchange slides from the New York Club. Beside the club members a large number

of ladies was present. These lantern exhibitions have become quite a feature with the club, and the kindness of the Lantern Slide Club is amply appreciated by the members and friends who spend many delightful evenings before the lantern.

Mr. J. G. McCarthy, on May 5, read a paper upon "Specifications" to a well attended meeting of the club (printed on page 59). In the discussion which followed in answer to questions, it developed that the best finish for woods was oil or varnish and "main strength and elbow grease;" that varnish and shellac have no affinity and one should not be applied over the other. In eighty-five samples of ground colors analyzed, from twenty-five to fifty per cent of pyrites was found. In specifying glass in small sizes specify single thickness, as no double glass was made in small lights. American plate glass was as good as French; it was hard to tell the difference, and one was apt to get the former anyway. English crown plate was clearer than other plate; though not used much of late years it was admirable for residence use. Old varnish, such as English copal, and "elbow grease" was the best finish ever made, and varnish at \$1.40 a gallon was as good as at \$4. The finishes now placed on the market by leading houses were reliable if properly applied. On floors not less than three coats of varnish or shellac should be applied. "Don't say 'rubbed down,' say 'rubbed to a cabinet finish' when writing specifications."

After a unanimous vote of thanks had been tendered that gentleman the meeting adjourned.

The competition drawings for "an artist's house by the sea, with interior sketch of studio rendered in sepia" were received and will prove the best competition of the year both in number of competitors and in the execution of the drawings.

It should be noted that in the publication of the paper upon water-color study as applied to architecture, published in the April number, the author's name, Mr. W. G. Williamson, was omitted. Of course it was a typographical error, as due credit should have been given its author for so excellent a paper on water-color study.

KANSAS ASSOCIATION OF ARCHITECTS.

The Kansas Association of Architects met at the Copeland Hotel, Topeka, pursuant to a call, on April 7. The meeting was called to order at 5 P.M. by the president, W. R. Parsons. H. M. Hadley was elected secretary *pro tem*.

The minutes of the last two meetings were read by the secretary. No objections being offered they stand approved.

The following resolution was offered by J. G. Haskell, and adopted:

Resolved, That the by-laws be and are hereby amended so as to read, "One-third of the members in good standing and resident of the State of Kansas at the time of the meeting, shall constitute a quorum."

There were twenty members present.

There are twenty-six members in good standing in the association.

On motion, the association proceeded to elect officers for the ensuing year, and the following officers were elected: President, J. G. Haskell; vice-president, J. C. Holland; secretary, H. M. Hadley; treasurer, Seymour Davis.

The following resolution was offered by J. G. Haskell, and adopted:

Resolved, That the executive committee are hereby instructed to make such revisions of the constitution and by-laws of this association as will bring it into harmony with those of the American Institute of Architects, and report their action to this body at next meeting for final action.

At the conclusion of business the association adjourned to meet June 17, 1890, at the Copeland Hotel, Topeka.

Our Illustrations.

The Denver Athletic Club; Varian & Sterner, architects.

Timmerman hotel and theater Chicago Illinois; Jul De Horvath, architect.

Residence of Dr. L. R. Williams, Chicago; Maher & Corwin, architects.

Residence for T. D. McNeeley, St. Joseph, Mo.; Eckel & Mann, architects.

Residence of Mr. J. W. McAlister, St. Joseph, Mo.; Eckel & Mann, architects.

Design for Baptist church, Aberdeen, Miss.; Varian & Sterner, architects, Denver, Col.

Sketch, residence of Mrs. John C. Coonley, Lake Shore Drive, Chicago; Irving K. Pond and Allen B. Pond, architects.

Toronto Architectural Sketch Club, competition for a country railway station; first place, Ernest Wilby; second place, A. H. Gregg.

PHOTOGRAPHURE PLATES.

(Issued only to subscribers for the Photographure edition.)

Residence of Mr. August Fiedler, Chicago; August Fiedler, architect.

Residence of Mr. Edward H. Valentine, Chicago; Burnham & Root, architects.

Residence of Mr. George S. Willits, Chicago; William R. Emerson, architect, Boston.

Interior view, Calvary Presbyterian Church, Cleveland, Ohio; C. F. Schweinfurth, architect.

View in hall, summer residence of Hon. M. A. Hanna, Cleveland, Ohio; C. F. Schweinfurth, architect.

Residence of Mr. Albert H. Olmsted, Hartford, Conn.; McKim, Mead & White, architects, New York.

View in dining room, summer residence of Hon. M. A. Hanna, Cleveland, Ohio; C. F. Schweinfurth, architect.

Building Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, May 10, 1890.

Clearing house returns, railway traffic statistics, iron, coal and lumber market reports, and general trade and manufacturing indications all justify the conclusion that business is expanding and upon a solid basis. This expansion is certainly a healthful one, and that is worth knowing. The builders in all sections of the country are overcrowded with work. More or less business has been held back on account of the labor agitations, but now that that emergency is past, manufacturers have nothing to fear, and are pushing forward with activity and confidence. The manufacturing interests in all branches are not only well supplied with work, but are crowded. A great many machinery-making concerns have been obliged, within the past month or so, to refuse additional orders. The manufacturers of building material have been able to execute all the orders they have thus far taken, with promptness. The iron trade is quite active. During the first four months of the year prices receded gradually, but during the past few days symptoms of a reaction have appeared, and this has had the effect of inducing tardy buyers to come forward. The lumber trade is active, and prices on the whole are somewhat more satisfactory than last year. Industrial activity is as marked a feature throughout the South and Southwest, this year, as last, if not more so.

Synopsis of Building News.

Baltimore, Md.—Architect Henry Brauns has prepared plans for a brick and granite power house for the Baltimore Traction Company; size 210 by 260; estimated cost \$25,000.

Chicago.—The workmen in the building trades, after three years spent in endeavor to figure the net losses sustained by them in the strike of 1887, have signified that they have about regained what they then lost in the prospect of steady work for the season, and, as is the manner of these strangely organized beings, decided to strike again. This time the strike has not extended beyond the carpenters. The remains of the union, under much the same leadership as that which controlled their action three years ago, some time in January sent a demand to the Carpenters' and Builders' Association, which, in general terms, intimated that if they had any sense, they would make a contract with the union similar to that between the bricklayers and their employers. The date given was April 1, and, receiving no reply from the association, they declared a strike. At this time small in number, the union, in the absence of proper police protection to those who thought more of the welfare of their families than the specious arguments of doubtful agitators, succeeded in "persuading" the unprotected workmen to stop work. A spirit of fear rather than fraternal feeling brought large additions to the union's membership. In all respects the strike was the duplicate of that of three years ago, except that the union clamored for arbitration. This seemingly reasonable proposition was not entertained by the Carpenters' and Builders' Association, which numbers about two-thirds of the employing carpenters of the city, on the ground that they did not wish to transact business with the union, and, therefore, while arbitration was just between contending parties, they had nothing to arbitrate.

The Carpenters' and Builders' Association still holds this position, each member hiring such men as he can, and the work of the city progressing slowly but with so little interruption, except through the terrorism excited by members of the union in unprotected districts, that neither architects nor owners seem to be inconvenienced more than the ordinary break-down of a brick wagon or the delay of a material contractor would ordinarily entail. Meanwhile the contractors whom the association has refused membership and others formed a rival association, called the "Boss Carpenters," as their constitution intimates, for the betterment of their trade "and for the settlement of differences between its members and the journeymen carpenters," with the direct purpose of making any sort of bargain possible with the union and the hope of in this way obtaining workmen and stepping into the shoes of the other contractors. How effective this will be the future will tell, though it is not probable that work will be taken out of the hands of old and tried contractors and given to men before unknown, for prices which of necessity must be largely in excess of the original contract. The union, composed of every man that makes application, without regard to his skill, demanded 40 cents an hour and to work eight hours, and a great deal of sympathy has been wasted on them both by the public and in the newspapers by those who believe in an eight-hour day. The fact is that neither wages nor hours have figured in the present strike. The master carpenters have been paying 40 cents and over to competent men and for three years most of them have been working eight hours, the association formally declaring some two months ago that because the masons were working eight hours it was not expedient for carpenters to work longer time.

The reasons for not wishing to do business with the Carpenters' Union, which the latter calls "recognition," are many; but probably the greatest lies in the example constantly presented by the Master Masons' Association, and the effect of arbitration as demonstrated in their case. They arbitrated their differences with the Bricklayers' Union three years ago, and there is a binding contract between them and a permanent arbitration committee to settle differences. The result is that the union practically owns every mason contractor, every trowel, every brick and mortar board and every bricklayer in Chicago the moment any of these agents are employed in the erection of a building. Their rule is absolute, and it costs \$40 for a bricklayer to take up a trowel, that sum having to be paid into or guaranteed to the union before he can commence work, this rule holding good whether he belongs to a union elsewhere or not. The steward on a job is the ruler of the contractor. Let the latter be ten minutes late in coming to the workmen with their money and he can be and often is fined \$50, which must be paid before that contractor can continue business. These, the union holds, are not among the questions for the arbitration committee to settle. In fact, it is hard to find out exactly in what those questions consist; and this is the "arbitration" proposed to the master carpenters, and which they have refused to even contemplate. The new Boss Carpenters' Association, after asking the Carpenters' and Builders' Association to join them, have, according to programme, "arbitrated" with the union and settled on the union's terms, the union giving them permission to do business, provided they employ only union members, pay them such wages for such hours as they designate and do not take sub-contracts from the members of the old association. The union will now proclaim a great victory and the press of the country will record it.

For this reason the facts are given in detail, and they may be summed up in the statement that the reputable carpenter contractors of the city are continuing business, attending to their work, hiring such men as present themselves, the only question asked being in regard to capability to perform, and being more successful each day in securing men willing to work, and in protecting them from the persuasive influences of gangs of strikers. The union's fight was for "recognition" by the Carpenters' and Builders' Association. They as a union have been entirely ignored by its members, and upon making a bargain with a new association which they, the union, is strongly suspected with having assisted in organizing, certainly with many members in the new organization, they now declare the strike off and proclaim a victory.

In the architect's offices there has never been so much new work "talked of," so many sketches made with no results; and while this may be satisfactory from a financial standpoint, an architect always prefers to see the building erected. Whether this uncertain state of things has anything to do with the unsettled state of labor, is a question, but it is much more probable that it mainly results from speculation in regard to the demand produced by the prospective World's Fair.

Architect O. W. Marble: For S. Stern, a three-story store and flat building on State street near Twenty-fifth, pressed brick, galvanized iron and stone. For George Cook, a three-story residence on Grand boulevard and Forty-second street, steam heat, bathrooms, mantels, stained, plate and beveled glass; also

getting out plans for a three-story residence to be erected at Woodlawn, St. Lawrence marble front, hot water heating, mantels, etc.; cost \$12,000. For O. W. Marble et al., seven three-story and basement residences to be built on the South Side, stone fronts, furnaces, bathrooms, mantels, hardwood finish, etc.; cost \$70,000. For H. C. Van Schaack, a three-story residence to be erected at 2306 Calumet avenue; rindrop, brown stone front, hot water heating, etc.; cost \$25,000.

Architect M. E. Bell is preparing plans for a propagating house, size 100 by 220 feet, to cost \$15,000, to be erected in Lincoln Park. It will be constructed of stone, brick and iron, and will contain heating apparatus for palm house, etc. The basement will be used for storage purposes.

Architect J. J. Kohn is making plans for six three-story residences to cost \$8,000 each, to be erected on Shields avenue between Thirty-first and Thirty-second streets, for N. Jacobson. St. Louis pressed brick and Bedford stone fronts, furnaces, wood mantels, bathrooms, stained, plate and beveled glass.

Architect N. D. Little is getting out plans for a residence to be built on Ellis avenue near Forty-fifth street. Brick and stone, furnace, mantels, stained, plate and beveled glass, etc.

Architect G. W. Maher: For A. F. Shuman, three two-story dwellings, hardwood finish, mantels, bathrooms, stained, plate and beveled glass, furnaces, etc.; cost \$15,000. Making plans.

Architects Lamson & Newman: For J. W. Jones, a two-story residence on Vernon avenue near Forty-fifth street. Stone front, copper and slate roof, furnace, mantels, etc.; cost \$10,000. For D. S. Thompson, a two-story residence on Rhodes avenue near Forty-third street. It will have a beautiful carved stone front, stained, plate and beveled glass, furnace, mantels, etc.

Architect Robert Rae: For James A. Parish, seventeen two and three story dwellings on Berkeley avenue between Forty-fourth and Forty-fifth streets. Stone fronts, mantels, bathrooms, stained glass, furnaces, etc. Finishing plans.

Architect J. S. Woollacott: James C. Thomas, three two-story and cellar dwellings, on Forty-second street near Drexel boulevard, stone fronts, furnaces, mantels, stained glass, etc.; making plans. For Mr. Carroll, a three-story store and flat building on Fullerton avenue, pressed brick and stone front, bathrooms, closets, mantels, stained glass; cost \$15,000; preparing plans. For the same owner, a three-story dwelling on Fullerton avenue, furnace, mantels, stained glass, etc.

Architects Beers & Lane: For O. French at Evanston, a two-story frame residence, furnace, bathroom, mantels, stained glass, etc.; making plans.

Architect J. E. O. Pridmore: For J. W. James, a three-story store and flat building on Forty-third street, Bedford stone and Tiffany pressed brick front, copper bays, mantels, stained glass, etc.; cost \$11,000. For F. H. Winston, a four-story store and flat building on Clark street near Chicago avenue. Tiffany pressed brick and stone with copper bays, etc.; cost \$14,000; making plans. For Shaw & Coates, three two-story dwellings on Ellis avenue near Forty-fourth street, stone fronts, furnaces, mantels, stained glass, etc.; cost \$20,000; preparing plans. Also making sketches in conjunction with J. W. Morrison for a three-story hotel, size 100 by 200 feet, to be built at Kearney, Nebraska, steam heat, elevators, electric light, to be fireproof, etc.; cost \$100,000.

Architect L. H. Heinz: For F. Schraum, a two-story flat building on School and Fifty-third streets; pressed brick and stone; bathrooms, mantels, stained glass, etc. For J. Haehnle, a three-story addition to building on Twenty-first and Wood streets.

Architect Swen Linderth: For William J. Bell, nine two-story dwellings at Auburn Park; frame, stone basements; mantels, stained glass, bathrooms; cost \$25,000; preparing plans. Also making plans for three-story flat building, to be built on Erie street near Ashland avenue.

Architect F. L. Fry is preparing plans for Methodist Church, to be erected at Hermosa; frame, stone foundation; furnace, stained glass, opera chairs, etc.

Architect R. T. Newberry: For C. W. Lasher, a three-story residence, to be built on Wellington avenue, Lake View; Colorado peachblow stone front; steam heat; stained, plate and beveled glass, etc.; cost \$25,000. For N. L. Hansen, on Drake street, a block of three dwellings; bathrooms, closets, mantels, etc. For Mrs. Soubra, a three-story dwelling on Sixteenth street and Michigan avenue; stone front; steam heat, bathrooms, closets, mantels, etc.

Architect Wesley A. Arnold: For E. C. Baker, a two-story residence at Oak Park; frame, stone basement; hot water heating; bathroom, mantels, stained glass, etc.; cost \$8,000. For D. R. Niver, a two-story residence at Evanston; frame, stone foundation; hot water heating, mantels, bathrooms, stained glass, etc.; cost \$10,000; preparing plans.

Architects Frederick Baumann and J. K. Cady are preparing plans for an eight-story office building, size 44 by 101 feet, to cost about \$100,000, to be erected at 123 and 125 La Salle street. It will have a handsomely designed front of pressed brick and terra-cotta; steam heat, elevators, electric light, etc. Also making plans for a two-story frame residence, to be erected at Winnetka, for H. V. Mann; furnace, mantels, etc. Also getting out plans for thirty stores and flats to cost about \$200,000, to be erected on the West Side.

Architect C. H. McAfee: For P. J. McGinnis, a three-story residence to cost \$15,000, to be built on Diversey avenue near Lincoln Park; Dell Rapids granite front, hot water heating, etc.

Architects Schaub & Berlin: For Q. Rigenieri, a four-story flat building, corner Franklin and Hill street; pressed brick and brown stone, bathrooms, mantels, stained glass. Also making plans for a three-story flat building, to be built on Webster avenue; stone front, bathrooms, closets, etc.

Architects Griesser & Maritzen: For the Gottfried Brewing Company, on Archer avenue and Seward street, brewery plant, to cost \$250,000; making plans. For the Becker Brewing Company, on Dudley street, a complete plant, to brew 50,000 barrels a year. For Gerhard Lang's Park Brewery, Buffalo, New York, a two-story office building, to cost \$50,000; a 400,000 bushel elevator, malt house, malt kiln, brew house, etc., iron construction, cost \$500,000. Also just finishing up the American Brewing Company's establishment on North Ashland and Clybourn place, at a cost of \$400,000. For Metzheimer, Mack & Company, at Denver, Colorado, a 250,000 bushel elevator, ice house, malt house and brew house, to make 100,000 barrels a year; cost \$300,000; making plans. Also getting out plans for a Turner Hall, to be erected on Blue Island avenue and Paulina street. For the C. Haehnle & Co. Brewing Company, at Jackson, Michigan, a brew house, storage house, ice machine house, boiler house, etc.; cost \$50,000; making plans.

Architects Adler & Sullivan are preparing plans for remodeling the Grand Opera House in Milwaukee. Also drawing plans for a \$300,000 hotel, to be erected at Salt Lake City.

Architect Charles S. Frost is getting out plans for the American Bank Note building, to be erected corner of Michigan avenue and Madison street.

Architect J. H. Huber: For John Norton, a four-story store and flat building, corner of Chestnut and State; Bedford stone front, steam heat, etc.; cost \$30,000; making plans. For P. Bonnet, a four-story store and flat building on Elm and State; stone front; cost \$16,000.

Architects Flanders & Zimmerman: Preparing plans for a three-story store and flat building on Thirty-fifth and State; pressed brick, stone and terra cotta; cost \$15,000. Also working on plans for a four-story apartment building, to be erected on Calumet avenue near Twenty-fifth street; steam heat, mantels, bathrooms, etc.; cost \$15,000. Also just commenced work on residence on Ashland avenue near Polk street, for O. H. Oliver.

Architects Howe & Shelton: For S. Schwarzschild, a two-story flat building, at 3515 Stanton avenue; pressed brick and brown stone, bathrooms, mantels, stained glass. For the same owner, at 3517 Stanton avenue, a two-story dwelling; furnace, mantels, bathroom, stained glass, etc.; making plans.

Architect Robert Rae: For Joseph Wells, a two-story frame residence to be erected at Ravenswood. Furnace, bathroom, mantels, etc.; cost about \$10,000. For G. S. Swift, eight two and three story dwellings to be erected on Berkeley avenue between Forty-fourth and Forty-fifth streets. Furnaces, mantels, bathrooms, etc.; cost about \$50,000. Also just sent out plans for a bottling establishment to be erected at Seattle, Wash.

Architect Otto H. Matz: For Eureka Tobacco Works, five-story brick addition, 20 by 150 feet, North Clark and Maple streets; cost \$10,000. For Rudolph Weber, 31 Washington street, additional story and remodeling building; two boilers, steam heating, Edison electric plant, two Hale elevators, new iron front, interior antique oak finish, etc.; cost \$35,000. For W. McGushin, three-story and basement flat building, Wabash avenue; pressed brick, brownstone front, stained glass, etc.; cost \$10,000. For Merchants' National Bank Building, La Salle street, remodeling; \$5,000.

Cincinnati, Ohio.—Reported by Lawrence Mendenhall:

Interviews with contractors in several branches develop no uneasiness as regards strikes; and unless lightning strikes unexpectedly (as it generally does), all the trades will be well employed. I never saw more favorable indications for a profitable season. Although others may think differently, I believe in allowing the laborers to work their own ruin by acceding to ALL their requests. Charge increased wages to the owner when bid is made. This will make building come too high, which in turn will stop it, thus throwing the mechanic out of employment.

Architect Gustave W. Drach: For L. A. Strobel, a residence; materials, frame and shingles, slate roof, stained glass, pine finish, plumbing, gas fixtures, etc.; cost \$4,000. For Mr. William Brothers, a residence; materials, frame and shingles, pine finish, blinds, slate roof, wood mantels, furnace, plumbing, gas, stained glass, etc.; cost \$4,500.

Architect A. O. Elzner is preparing plans for remodeling the residence of Adolph J. Seasongood, Esq., banker. His time is well employed on sketches not ready to report.

Architect William Martin Aiken has prepared plans for a residence for F. Jelke, Jr., Fifth and Main streets; materials, brick and frame, slate roof, stained glass, hardwood finish, wood mantels.

Architects Crapsey & Brown: For the Methodist Episcopal Church, Price Hill, city (J. C. Harper, Esq.), a church of stone and shingles, to cost \$8,000; Jas. Harwood & Son, contractors. For A. R. White, Jr., Wyoming, Ohio, a residence; materials, frame, slate roof, stained glass, wood mantels, plumbing, hardwood finish, furnace, etc.; cost \$8,000. For Robert B. Burnam, Richmond, Kentucky, a residence; materials, pressed brick, electric bells, slate roof, hardwood finish, blinds, plumbing, mantels, stained glass, etc.; cost \$7,000. For Methodist Episcopal Church, at Morristown, Tennessee, a school and dormitory building; material, brick, slate roof, pine finish, steam heating, etc.; cost \$25,000. This firm has its hands full with church plans, some of which have been reported.

Architect S. S. Godley: For Mr. E. F. Rychen, Price Hill, a residence; materials, brick, hardwood finish, wood mantels, stained glass, plumbing, gas fixtures, laundry fixtures, slate roof, electric bells, etc.; cost \$10,000. For M. M. White, Third and Walnut streets, a store; materials, brick, stone, elevators, iron, metal roof, etc.; cost \$14,000.

Architects G. & A. Brink: For Edward Hendricks, a store and flat building; materials, iron, brick, pine finish, wood mantels, plumbing, laundry fixtures, etc.; cost \$11,000. For Mrs. M. Boerger, city, a tenement house; materials, brick, stone trimmings, iron mantels, plumbing, gas fixtures, tin roof, etc.; cost \$5,000.

Architects Reig & Marty: For Ulrich Pauzer, a tenement house; materials, brick, tin roof, grates, iron mantels, plumbing, blinds, etc.; cost \$6,000.

Architect W. W. Franklin: For Mrs. Ellen Hayes, residence; materials, pressed brick, hardwood finish, wood mantels, furnace, stained glass, plumbing, gas, blinds, slate roof, etc.; cost \$5,500. He is also drawing plans for Mr. B. Weiss, 234 W. Fourth street, city.

Architect J. W. McLaughlin is busy on the drawings for the Young Men's Christian Association building, on Mabley & Carew building, and on alterations and additions to Mr. J. R. Carew's residence, each of which will be very complete in details and improvements.

Architects S. Hannaford & Sons report plans for the rebuilding of the Nevada building, belonging to Jas. M. Glenn, Esq.; materials, pressed and stock brick, iron, elevators, plumbing, etc.; cost not given.

Architect George F. Vogel: For Charles Ellerharste, Pine street, Bellevue, Kentucky, a residence; materials, pressed brick, stone, terra cotta, hardwood finish, mantels, stained glass, laundry fixtures, plumbing, slate roof, etc.; cost \$7,000.

Architects Des Jardins & Hayward: For Mr. Charles F. Seaman, a residence; materials, frame and shingles, pine finish, wood mantels, plumbing, laundry, stained glass, etc.; cost \$5,000.

Architect W. S. Robinson: For F. C. Grote, a residence; materials, brick, frame and shingling, pine finish, iron and wood mantels, plumbing, laundry, stained glass, slate roof, etc.; cost \$6,000.

Architect Emil F. Baude: For Mr. J. H. Twachtman, a residence; materials, brick, pine finish, blinds, tin roof, plumbing, gas, wood mantels, etc.; cost \$6,000.

Cleveland, Ohio.—Much building is in progress here, but labor troubles put all at sea as to the outlook just now.

Architect Clarence O. Arey: For the Case School of Applied Science, a three-story school building; fireproof; steam heat; size 92 by 160 feet; cost \$23,000.

Architects Blackburn & Daniels: For M. B. Clark, a three-story flat building, size 52 by 76 feet; brick and stone; cost \$15,645.

Architect F. C. Bate: For E. S. Isom, a two-story double dwelling, size 28 by 51 feet; brick; cost \$4,500.

Architect S. R. Badgley: For Mary E. Richards, a two-story dwelling, size 32 by 48 feet; frame; cost \$6,500.

Architects Cudell & Richardson: For the Montefiore Jewish Home, addition of a three-story home, size 45 by 76 feet; brick and stone; cost \$20,000.

Architects Coburn & Barnum: For the Bohemian Missionary Board, a two-story Bible School, size 40 by 64 feet; frame; cost \$7,000. Also for Margarette Oerl, a two-story frame dwelling, size 24 by 55 feet; cost \$4,500.

Architect W. H. Dunn: For the Board of Education, a three-story schoolhouse, size 120 by 150 feet; brick and stone; cost \$75,000. And for the same, a two-story schoolhouse, size 115 by 150 feet; brick and stone; cost \$49,000.

Architect John Eisenmann: For Dr. Erasmus Cushing, a four-story store and warehouse block, size 32 by 104 feet; brick and stone; cost \$35,000.

Architect G. F. Hammond: For L. A. Gleason, alterations to dwelling; cost \$6,000.

Architect T. W. Hardek: For C. E. Crawford, a two-story frame dwelling, size 34 by 58 feet; cost \$6,500.

Architect B. F. Vandevelde: For Pletcher Bros., a two-story store and dwelling; cost \$8,000. Also for A. Zedler, a two-story store and dwelling, size 38 by 60 feet; cost \$6,500.

Architects' names not reported: For the Barckes Wire Nail Company, a one-story brick factory, size 76 by 390 feet; cost \$16,000. Also a 73 by 297-foot factory house; cost \$9,000. For the Cleveland Gaslight & Coke Company, a two-story retort house, size 74 by 108 feet; cost \$5,000. For C. Stocke, a three-story store and hall building; cost \$11,000. For E. A. Cass, a two-story frame dwelling, size 27 by 44 feet; cost \$5,000. For Ignatius College, a four-story alteration and addition; cost \$25,000. For Anton Sacha, a two-story store and dwelling, 40 by 60 feet; cost \$5,000. There were 149 permits granted in April for alterations and additions, \$204,695; 296 for wood and frame, \$311,793; 15 for brick and stone, \$245,577.

Denver, Col.—Architects Huddart & Jacobson: For J. E. White, a two-story stone residence, size 46 by 71 feet; cost \$13,000. For A. L. Parson, a three-story brick and stone hotel, size 50 by 100 feet; cost \$27,000. For W. H. Malony, a three-story block, size 40 by 65 feet, stone and brick; cost \$18,000. For C. Beotchers, a three-story residence, size 60 by 80 feet; brick and stone; cost \$41,000. For Murry & Pierson, the Arcade Building, three stories, stone, size 40 by 110 feet; cost \$38,000.

Architect Robert S. Roeschlaub: For St. Peters Episcopal Church, Pueblo, stone church building, rectory and parish house; will cost \$80,000. For State of Colorado, normal school, Greeley; pressed brick, stone and terra-cotta; two stories and basement; cost \$35,000. For the University of Denver, a lava stone observatory building.

Architect L. M. Wood: For Isaac E. Blake and Charles H. Smith, a six-story office and store building, pressed brick and granite; cost \$250,000. For Charles Wheeler, two-story brick terrace; cost \$10,000. For Charles Wheeler, office and store building, three stories, brick; cost \$25,000. For Mrs. M. D. Wood, terrace, two stories, brick; cost \$10,000.

Architect Franklin Goodnow: For George Barrett, dwelling, two stories, of pressed brick; cost \$6,000. For R. S. Mainday, two-story, pressed brick dwelling; cost \$10,000.

Architects Varian & Sterner: For S. L. Holzman, two-story residence; cost \$25,000.

Detroit, Mich.—Architects Scott, Kamper & Scott: For the Michigan Stove Company, a seven-story addition, size 60 by 140 feet, brick with tin roof; cost \$35,000. For Charles S. Richter, alterations of café; cost \$5,000. For the

Detroit Electrical Works, a three-story factory, size 120 by 150 feet, brick and stone; cost \$30,000.

Architects Mason & Rice: For A. L. Stevens, a three-story stone residence, size 70 by 60 feet; cost \$51,000.

Architect P. J. Deitrich: For H. A. Rickel, two-story double brick residence, size 40 by 60 feet; cost \$5,500.

Architects Malcomson & Higginbotham: For R. Bell, a two-story double brick dwelling, size 36 by 56 feet; cost \$6,000.

Architect Hy J. Kill: For Nathan Wolfe, six two-story dwellings, size 100 by 90 feet, brick; cost \$12,000.

Architects M. L. Smith & Son: For M. M. Fisher, a three-story residence, size 48 by 76 feet, pressed brick and stone, slate roof; cost \$20,000.

Architects A. C. Varney & Co: For Parke, Davis & Co., three-story brick factory and barn, size 60 by 200 feet; cost \$12,000. For the Hunt Chair Manufactory, a three-story brick factory, size 50 by 120 feet; cost \$10,000. For the Wolverine Specialty Manufacturing Company, a three-story engine house, size 50 by 100 feet, brick; cost \$10,000. For the Dailey Preserving Company, three-story brick manufactory, size 220 by 145 feet; cost \$10,000.

Architects Donaldson & Meier: For C. H. Haberkorn, a three-story brick store, size 36 by 60 feet; cost \$6,000.

Architect Gordon W. Lloyd: For David W. Gitney, Jr., a three-story brick residence, size 50 by 120 feet, Sioux Falls granite; cost \$60,000. For St. Mary's hospital, a four story addition, size 72 by 162, brick and stone; cost \$50,000.

Architect George H. Edbrooke: For Mrs. E. Hammond, a brick and stone residence; cost \$50,000.

Architects Hess & Rassman: For the Detroit *Daily Abend Post*, a four-story block, size 135 by 100 feet, pressed brick and stone; cost \$40,000.

Duluth, Minn.—Architect E. S. Radcliffe has prepared plans for a \$30,000 store and office building for W. E. Woodbridge.

Architect Palmer has completed plans for the Central High School, size 281 by 160 feet, red sandstone with terra-cotta trimmings.

Elkhart, Ind.—The Gillett Memorial Chapel, by Architects Bullard & Bullard, of Springfield, is being constructed of Grafton limestone with trimmings of Whitney granite. The stone work will be rock faced, broken range work, the walls on the interior face being same work, less rugged and bold. The tower-like belfry will be filled with a chime of bells. The door frames and doors will be of copper-bronzed iron work, also the window frames. Floors of tile, plain in center, and a narrow border along the walls. Warmed with an air furnace; cost \$12,000.

Fredonia, N. Y.—Architect E. A. Curtis reports: Plenty of work in prospect if labor market gets firmly established. For Fredonia, New York, a town hall and opera house, three-stories, size 64 by 174 feet; brick and stone, slate roof; steam heated; cost \$40,000. For Village of Friendship, New York, a two-story brick schoolhouse, size 67 by 73 feet; cost \$20,000. For Mr. Theodore Reuting, Titusville, Pennsylvania, a two-story store, size 54 by 80 feet; brick and stone; cost \$12,000. For The Titusville Iron Works, a one-story machine shop, size 44 by 100 feet; brick and iron; cost \$18,000. For R. G. Lamberton, of Franklin, Pennsylvania, alterations and additions to residence; cost \$10,000. Also, for John O. McCalmot, a two-story frame residence, size 56 by 60 feet; cost \$6,000.

Grand Rapids, Mich.—Architect S. J. Osgood: For Dr. A. B. Botsford, a business block, red brick and stone; estimated cost \$35,000.

Architect W. G. Robinson: For A. J. Brown, a brick and stone business block; cost \$20,000.

Knoxville, Tenn.—Architect George F. Barber reports the following residences to be erected this season: For H. B. Lindsay; cost \$5,500. For H. H. Kincaid; cost \$4,500. For J. C. White; cost \$4,500. For W. L. Haworth; cost \$3,500. For T. J. Eggleston; cost \$3,500. Also, for W. Weiss, of Beaumont, Texas, a \$7,500 residence.

Little Rock, Ark.—Architect, C. L. Thompson: For W. H. Ragland, a brick veneered residence; cost \$10,000.

Architect Fred J. H. Rickon is preparing plans for a five-story store and apartment building, size 100 by 133 feet, to be erected here at a cost of \$50,000. Also, for M. Cohn, a two-story frame residence; cost \$2,500.

The Masons will erect a new temple at the corner of Main and Fifth streets, to cost \$75,000. No plans have been decided on yet. The building committee is Major John D. Adams, J. A. Henry, George Dodge and George H. Meade.

Murfreesboro, Tenn.—Architect George F. Barber: For J. H. Nelson, a \$15,000 residence. Also for W. B. Earthman, residence; cost \$8,000.

Oil City, Pa.—Architect E. A. Curtis: For The Oil City Boiler Works, a two-story machine shop, size 119 by 64 feet, brick with slate roof; cost \$24,000. For The First National Bank, a four-story bank, store and office block, size 75 by 83 feet, brick and terra-cotta, tin roof; steam heated; cost \$42,000.

Omaha, Neb.—Architect Sidney Smith: For J. A. Bevan, a three-story tenement block, size 46 by 132 feet; cost \$30,000. For I. C. Schuwend, three-story store and office, size 25 by 75 feet; cost \$8,000. For A. Donnaghu, a two-story frame residence, size 26 by 56 feet; cost \$5,000. For I. H. Parrooth, a two-story frame residence, 26 by 60 feet; cost \$3,500.

Pittsburgh, Pa.—Architects Bickel & Brennan: For Mr. John, a four-story hotel, size 28 by 70 feet, brick and stone; estimated cost \$15,000. For Mr. Reuben Rutter, a brick residence; cost \$6,000; contract not let.

Architect J. E. Obitz: For Theodore Weiss, a three-story brick store; cost \$6,000. For Mr. George Schmidt, a double brick house, pressed brick front with stone trimmings; cost \$6,000 each.

Architects Longfellow, Alden & Harlow: For Mr. John T. Wilson, two brick houses with all modern improvements; cost about \$22,000.

Rochester, N. Y.—Architects Jay Fay and O. W. Dryer have prepared plans for a Students' Home to be built by the German Baptist Educational Association; it will be a stone and brick building, four stories, size 60 by 145 feet; arranged to accommodate one hundred students; fitted up with gymnasium and all latest improvements in lavatories, laundries, etc.; cost \$35,000. Also plans for a stone and brick block of two stores and four flats, for George J. Hurtyburger, size 40 by 75 feet, three stories; cost \$12,000. Also plans for a brick block of two stores and six flats, to be built on West avenue, for Rev. J. A. Daley, to be 27 by 60 feet, five stories; cost \$10,000. And alterations of a brick building into a block of six stores and nine flats, for Rev. J. A. Daley; to be four stories, 66 by 50 feet; cost \$10,000. Plans for a frame store for Mrs. Yetta Finklestein; cost \$5,000. For Mr. O. C. Dryer, a stone and frame dwelling, to be built on Brunswick street; cost \$6,000. For Mr. Jay Fay, a stone and frame dwelling on Brunswick street; cost about \$6,500. For Jay Fay and O. W. Dryer, two stone and frame dwellings on Oxford street; to cost \$6,500 each. Also on Oxford street, a stone and frame dwelling for Charles Dryer; cost \$6,000.

Architects Rogers, Sturges & Stern have made drawings for a double frame house for A. C. Schaffer; cost \$5,000. Store and office building at Dansville, New York, for Wm. Cramer, to be of stone, brick and galvanized iron; cost \$10,000. Frame house for M. J. Gustello; cost about \$3,500.

Architect Thomas Nolan has let contracts for a stone and brick manufacturing building, to be built on North Water street, for the Rochester Power Co.; cost about \$23,000. A sanitarium, to be built at Warsaw, New York, special attention being given to the various baths; to cost about \$25,000.

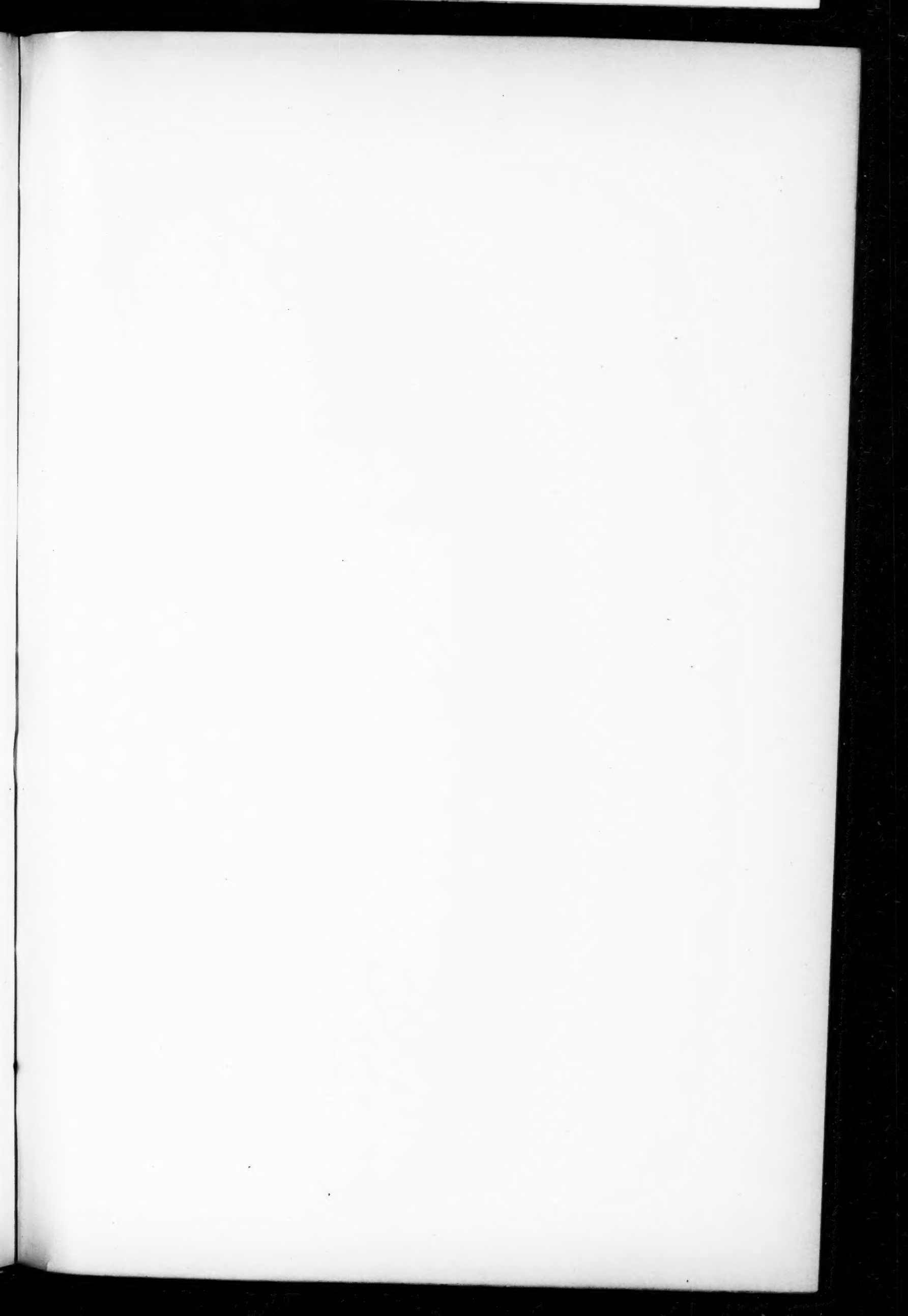
Architect Wm. C. Walker has made drawings for a block of five stores and twelve flats, to be built on South St. Paul street for S. N. Oothout; to be of brick and stone, four stories; cost \$20,000. Also an apartment building, just completed, for S. N. Oothout; cost \$35,000. For E. J. Chapman, a frame dwelling, to cost about \$5,000. A stone and brick dwelling, to cost \$15,000. And another to cost \$12,000; both to be fitted up in best manner, hardwood finish, electric work, steam heating, etc.

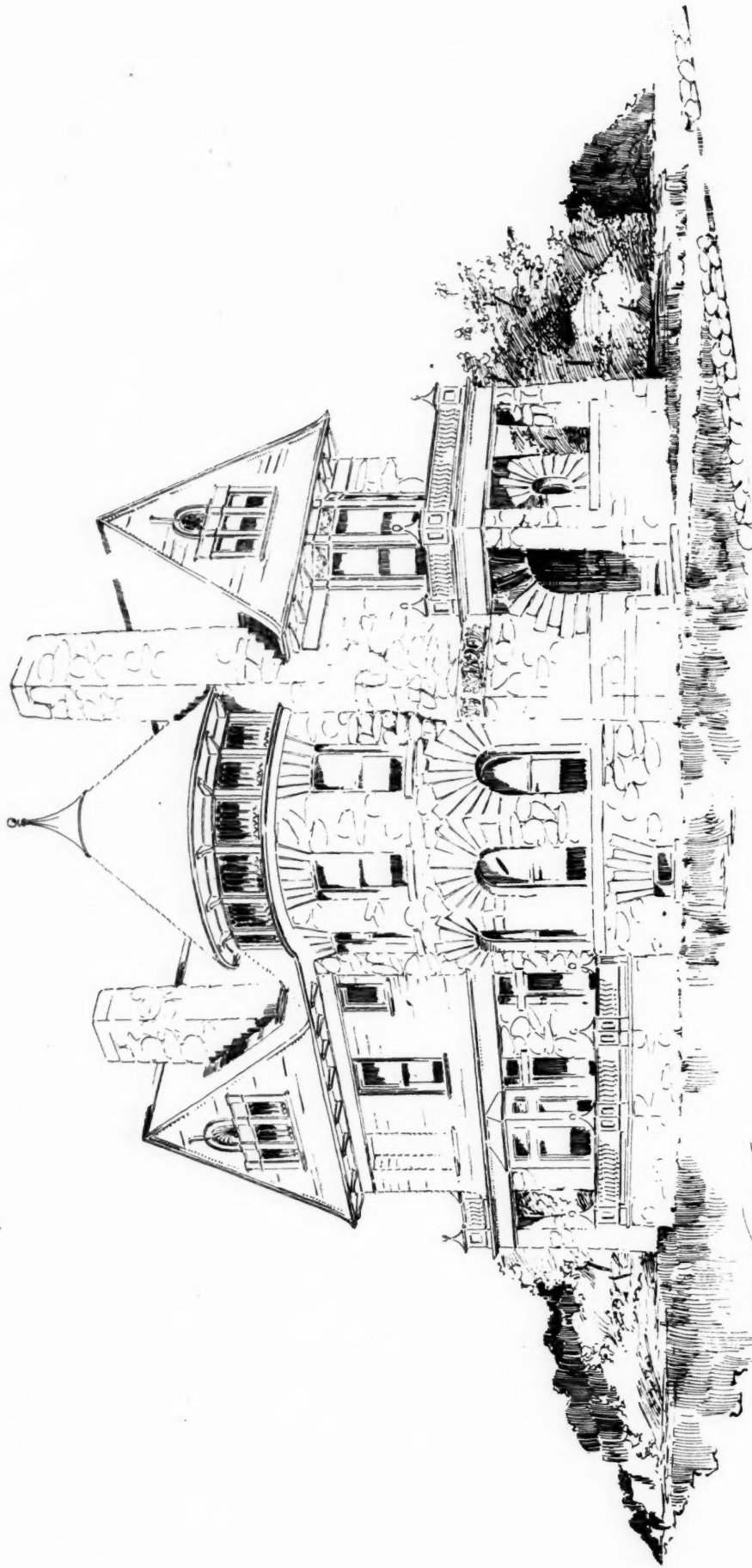
Spokane Falls, Wash.—Architects Gunther & Weeks have prepared plans for a \$30,000 brick and stone business block.

Tacoma, Wash.—Architects Clement & Co. have prepared plans for a \$6,000 school building.

Toledo, Ohio.—Architects Bacon & Huber: For Charles E. Kaufman, a three-story business building, brick and stone; cost \$10,000.

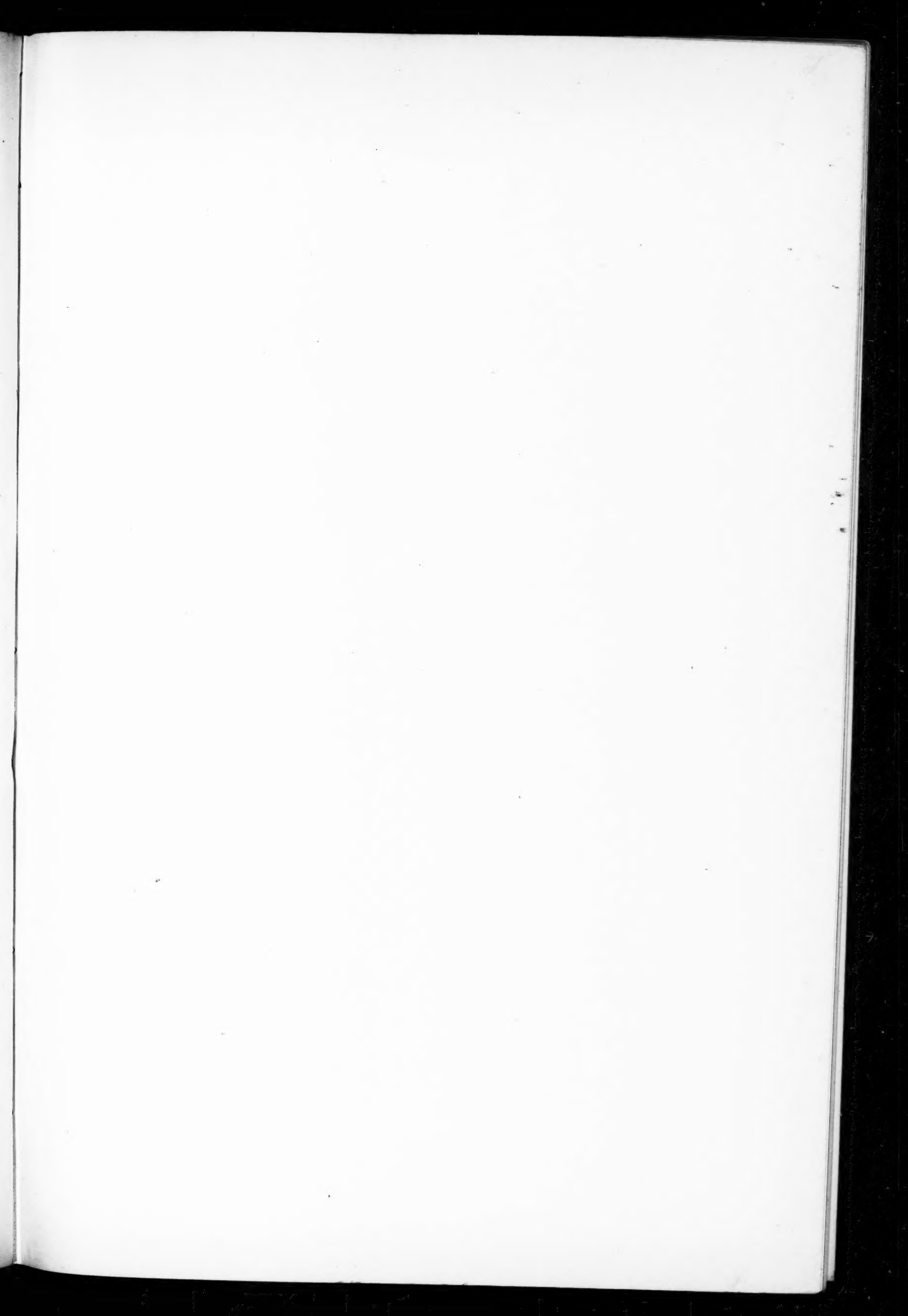
Architects E. O. Fallis & Co: For M. Bartlett, a four-story brick and stone mercantile building; cost \$15,000.

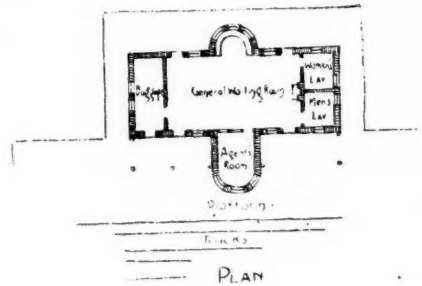
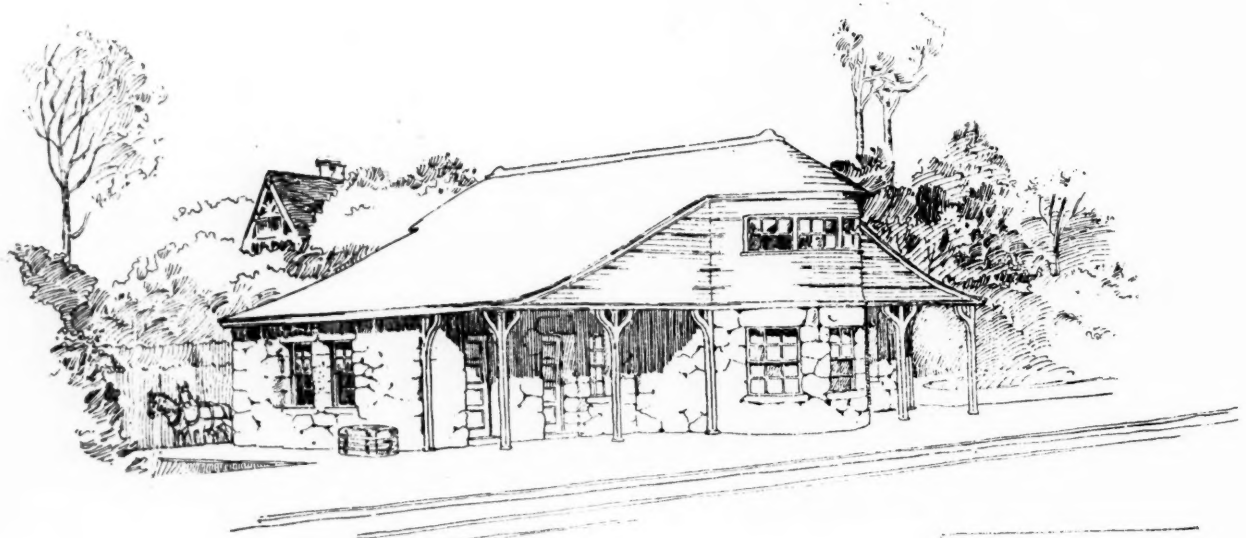




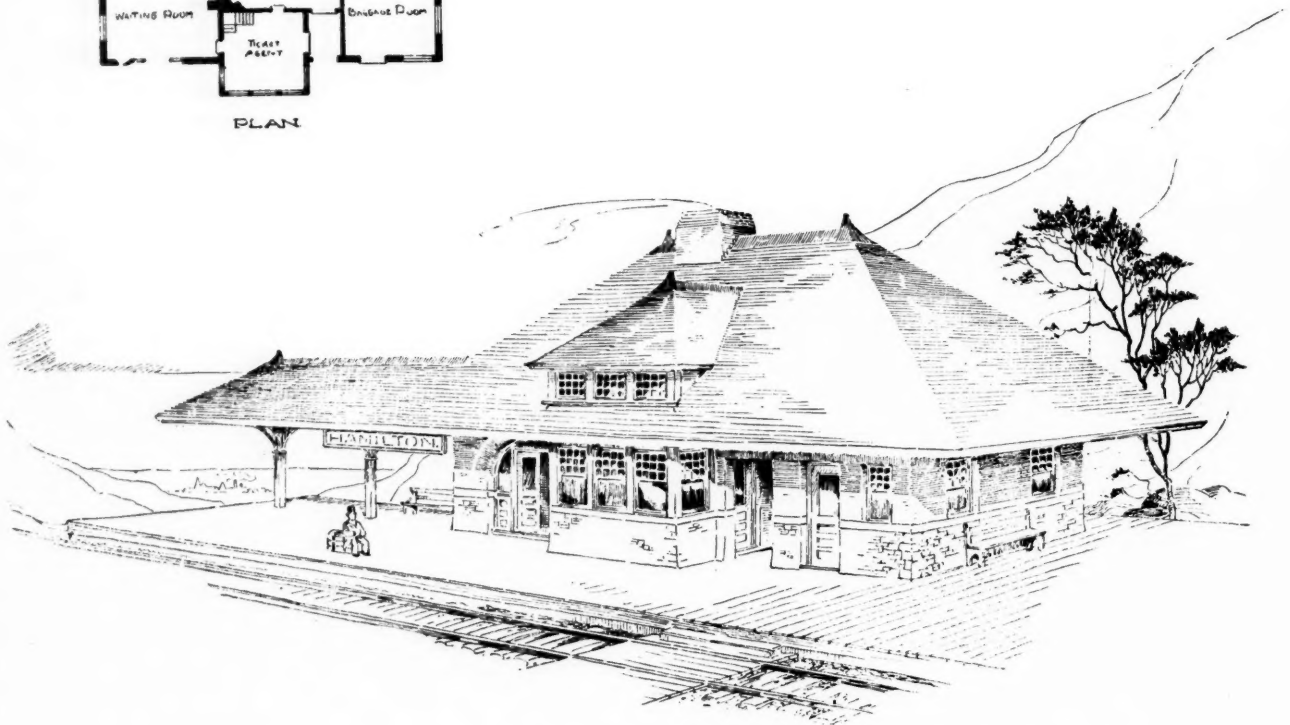
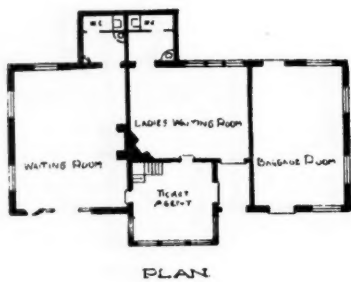
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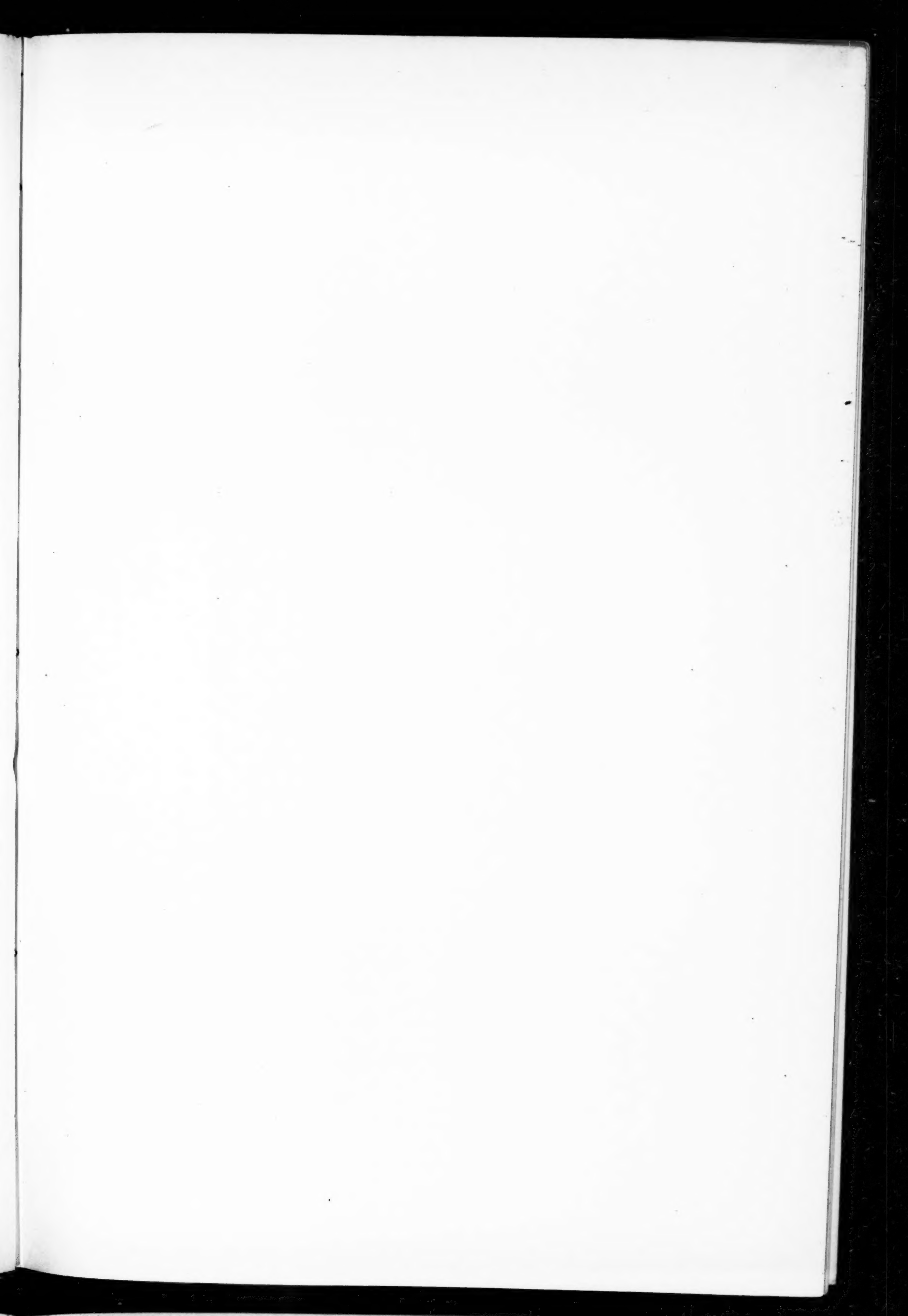


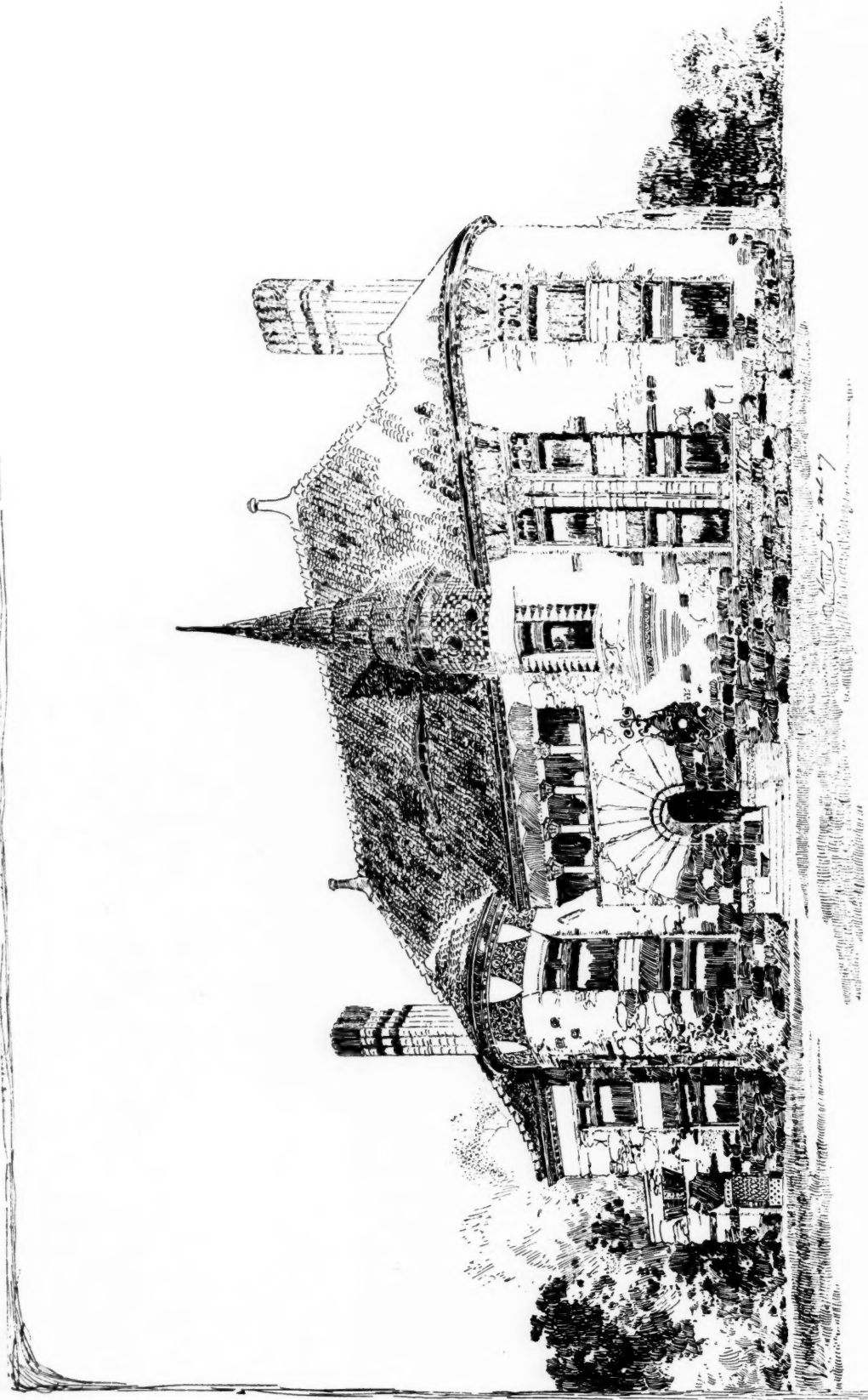
SECOND PLACE—A. H. GREGG.



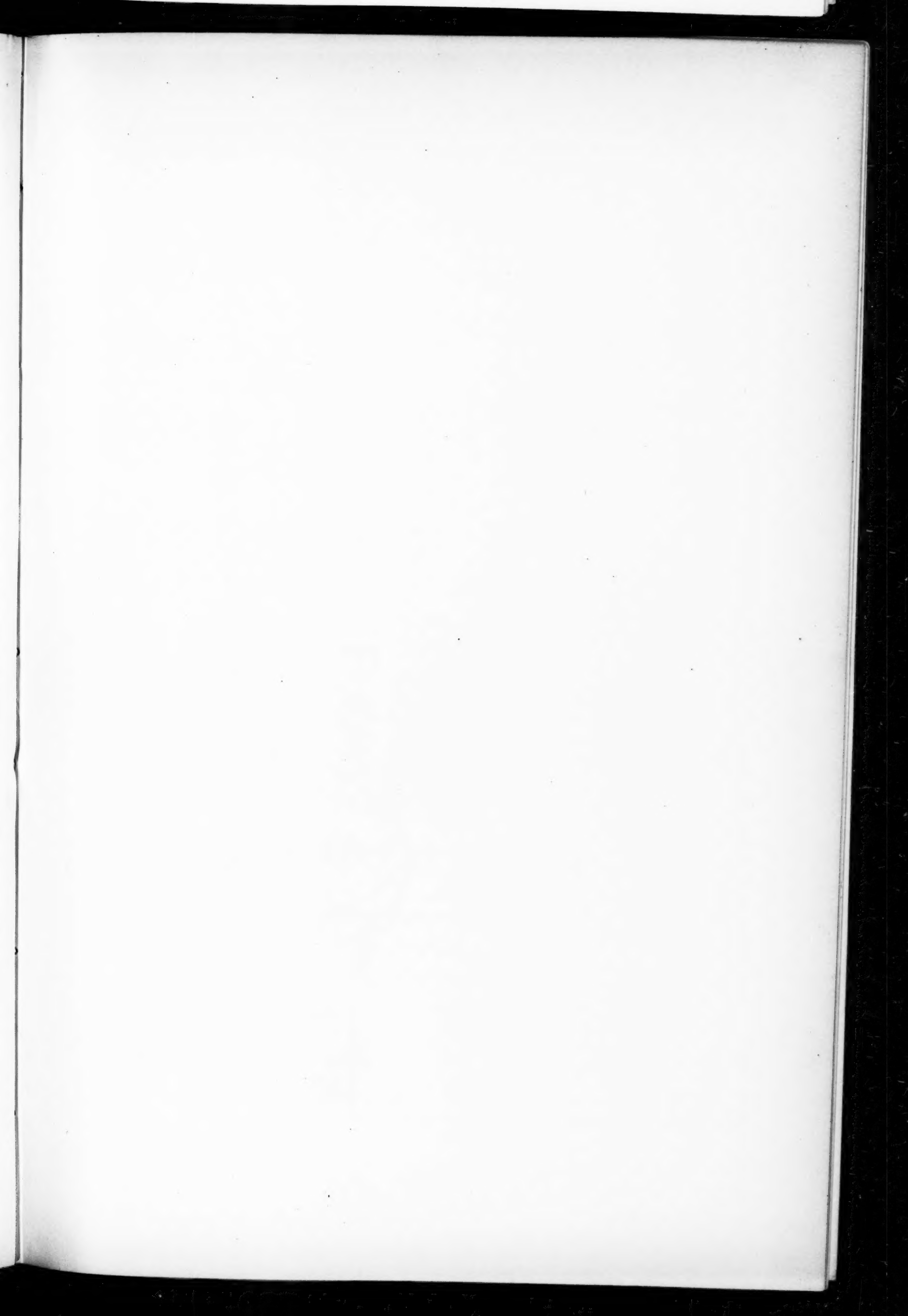
FIRST PLACE—ERNEST WILBY.

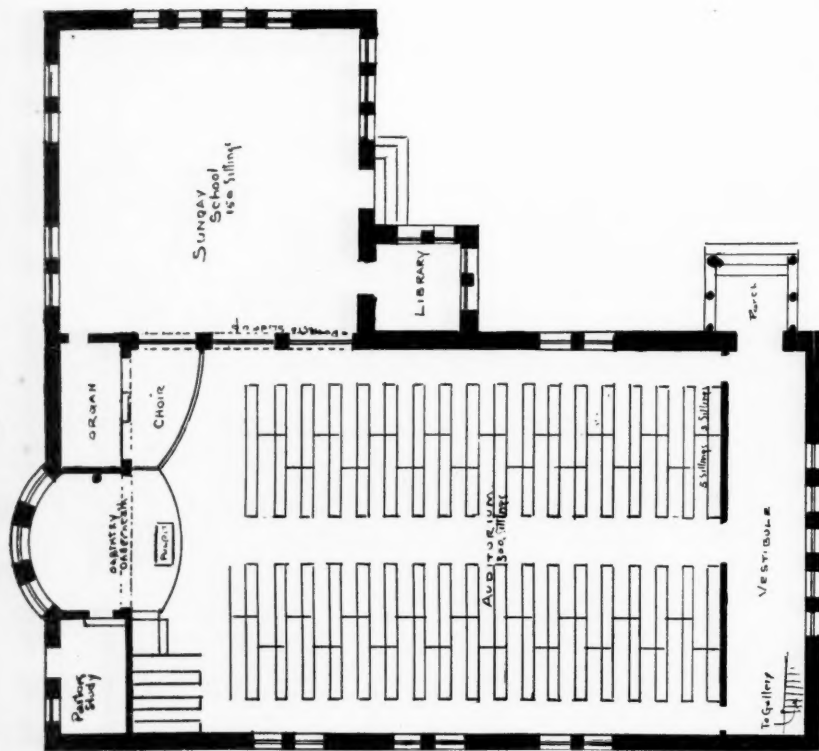
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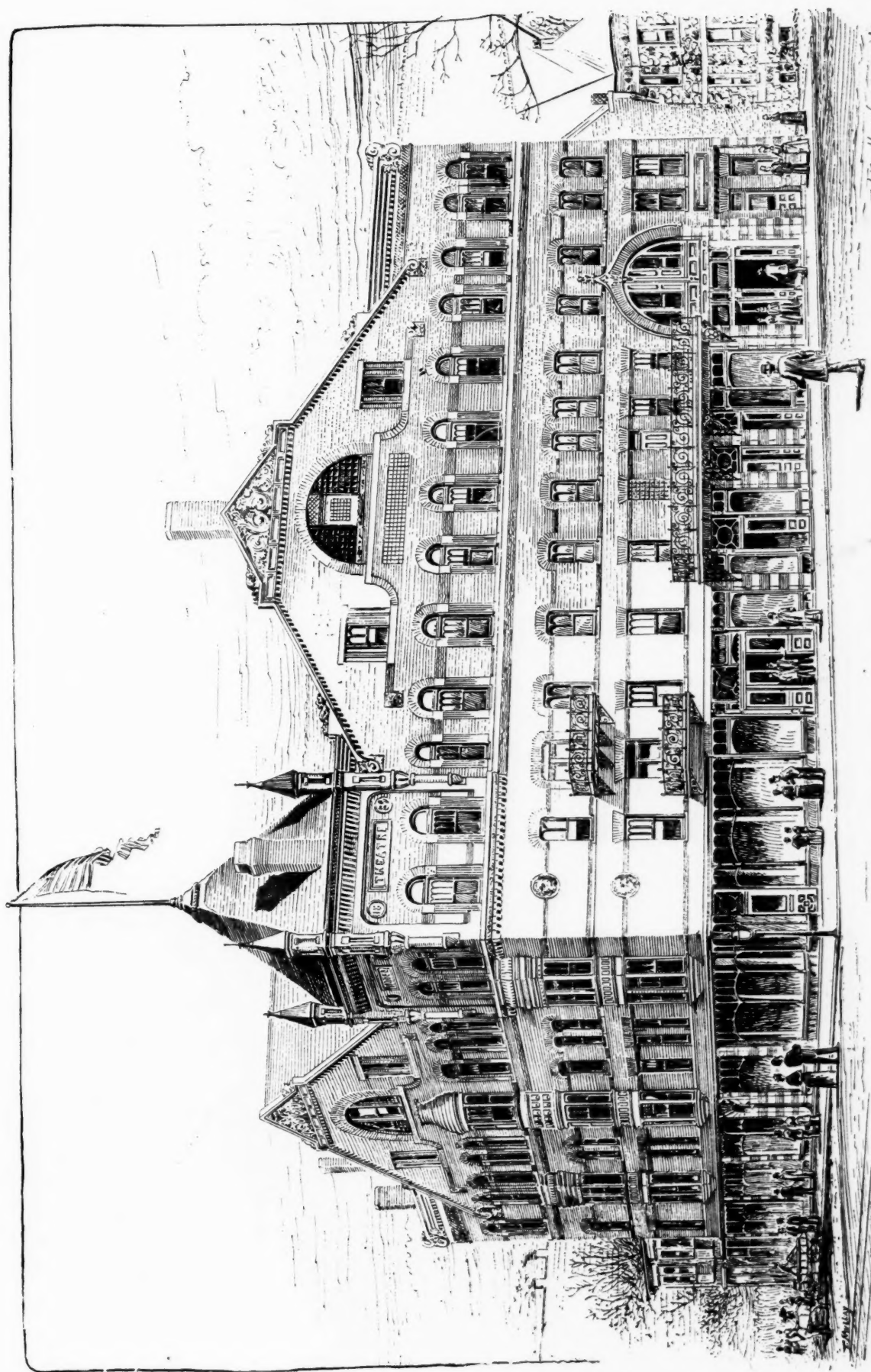


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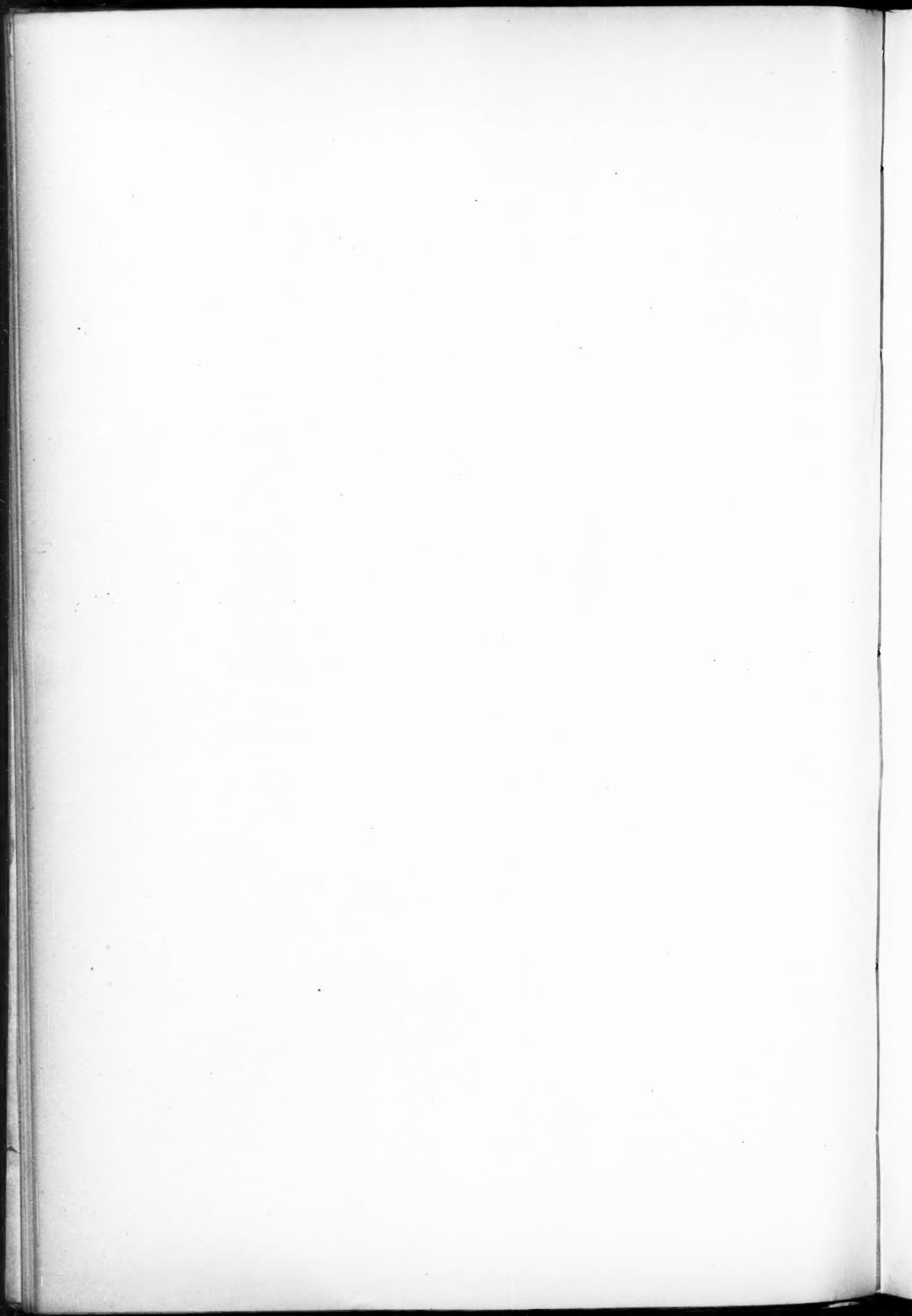


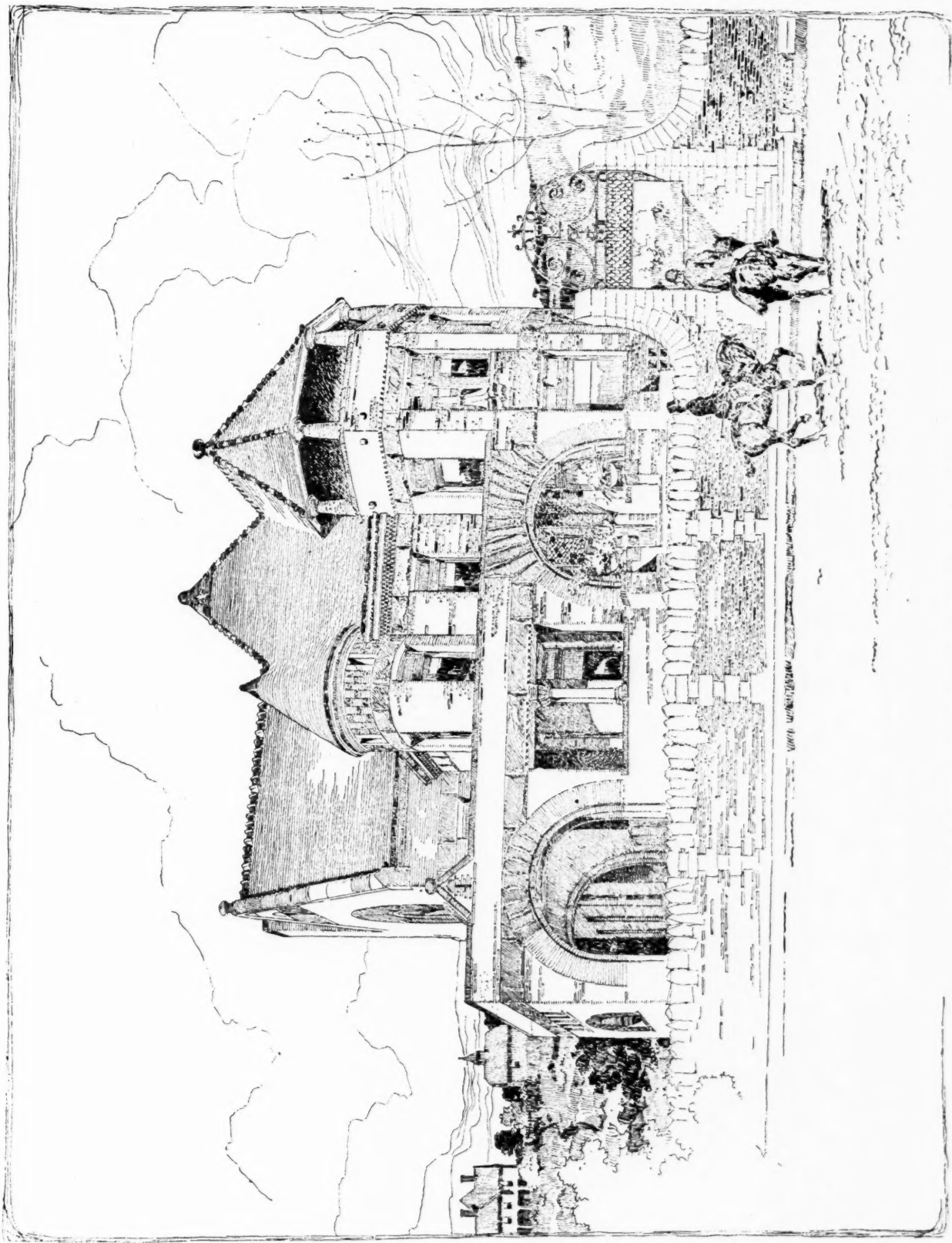
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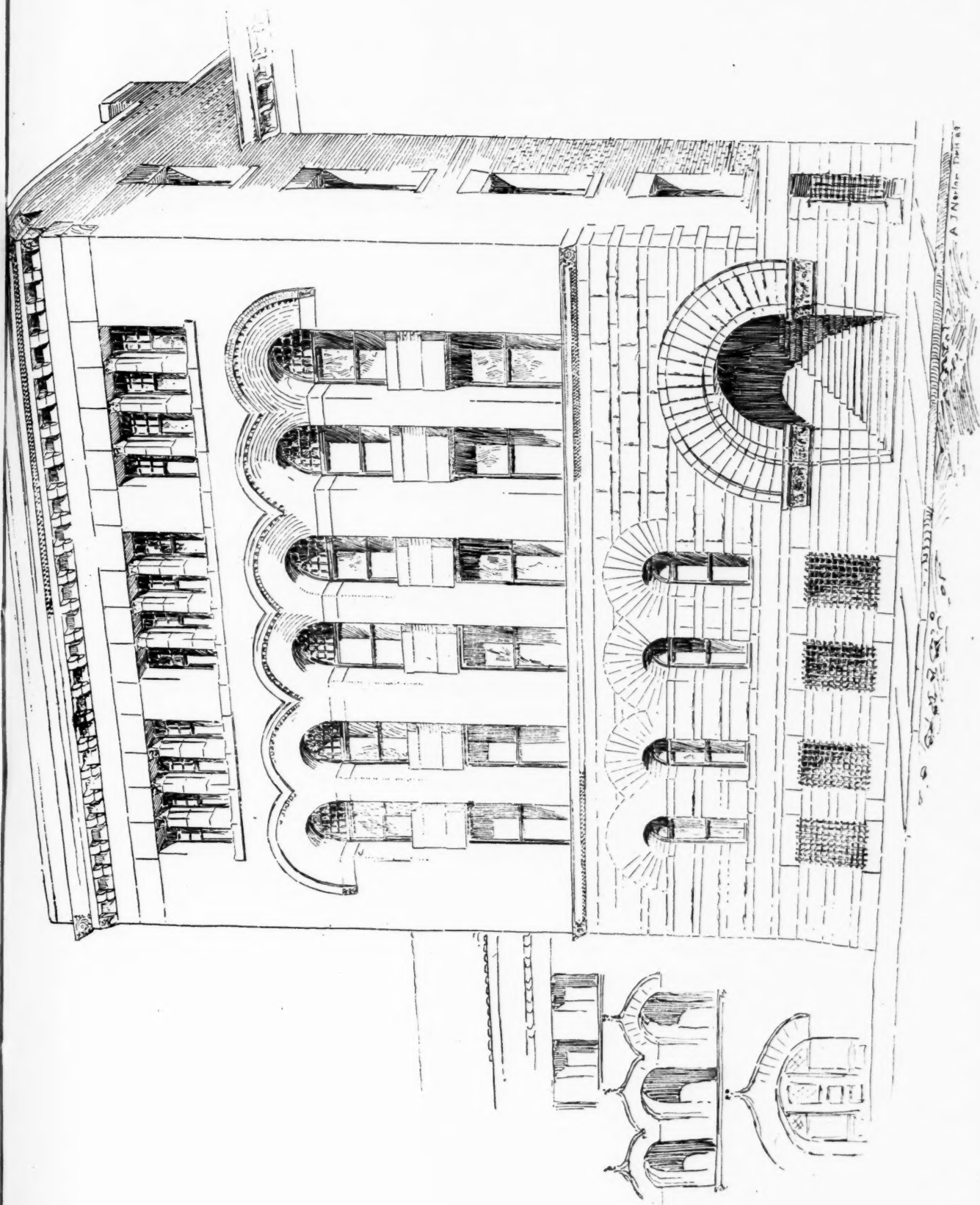
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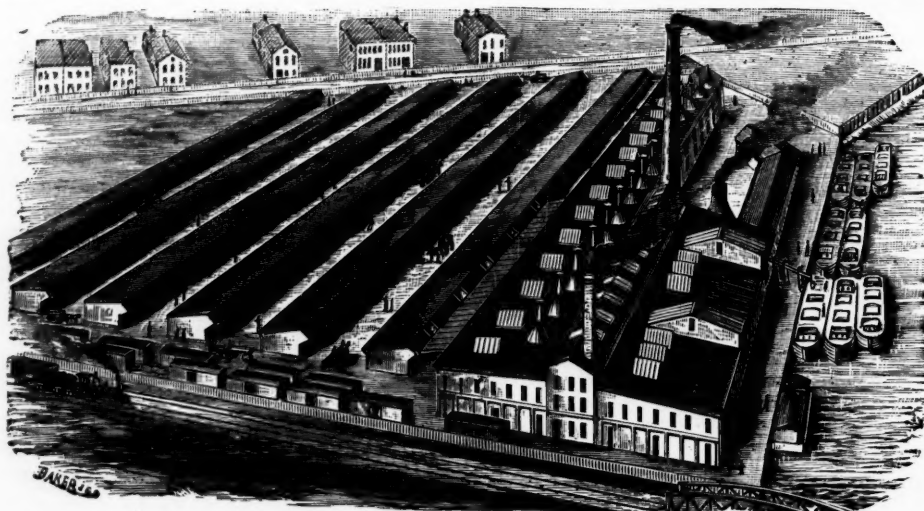
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