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The Inland Architect at the Paris Exposition.

Our representative at the Paris Exposition writes, under date of April 18, that "few of the goods are unpacked, and the catalogues are not yet published. Many details of arrangement of groups and classes will not be completed until June 1." Visitors to the Exposition will find THE INLAND ARCHITECT on file in Group II, United States Section. The Exposition was formally opened by President Carnot on May 6. All the principal nations are represented except Germany, and the exhibitors number about thirty thousand. While most of the departments are incomplete, the American department is farthest behind. The Exhibition buildings cover about 3,000,000 square feet of ground, and the architectural and decorative features are said to surpass those of any structure ever erected for a similar purpose.

A Prospect of Formation of Many New Exchanges.

At the urgent invitation of builders throughout different cities of the country asking for help and direction in the proper formation and management of local exchanges, Secretary Sayward, of the National Association of Builders, will devote a large part of the summer in complying with these requests. Since the annual convention of the National Association at Philadelphia, there has been a growing interest manifested by builders in many cities where exchanges have not previously existed, and when the next convention meets at St. Paul, in February, 1890, the number of prosperous exchanges will be largely increased.

A Social Club for New York Builders.

The long talked of Building Trades' Club of New York City has been organized and will serve in purpose and conduct as a model for builders in other cities. The object, as outlined, is a social club to foster friendly relations between builders and to increase social acquaintance. The officers elected are: President, Marc Eidlitz; first vice-president, John J. Tucker; treasurer, Samuel I. Acken; secretary, H. W. Redfield; trustees, Charles A. Cowen, Henry A. Maurer, A. S. Dickinson, William H. J. Hurst, James B. Mulry, Louis Weber, John J. Roberts, Nathan Peck and Charles Andruss. It is probable that the annual convention of the National Association of Builders in 1890 will be held in New York City, and this club will actively prepare for the reception and entertainment of the delegates. Each city might with profit have such a club, but a local exchange is a good club in itself, and should fill all general requirements.

Proposed Convention of Representative Art Societies.

For some time past the project of an art congress or a convention of fine art societies has been agitated, led by Mr. Arthur B. Turnure, editor of the *Art Age* of New York. As far as preliminaries go the movement has been successful, and enlisted the sympathies as well as the coöperation of the leading art society people in the principal cities of the United States. That it is time art matters in this country took definite shape no one will for a moment doubt, and that this project is probably the best that can be devised to lead to the necessary concentration, no one will deny. There is, however, much to be done even in procuring from this initial movement that impetus that will make art in this country national, where, heretofore, it has

been merely local. As far as we can see, and our main information comes through the columns of the *Art Age*, the movement in New York, Cincinnati and Chicago is supported and urged on by art patrons rather than by the artists themselves. In part this may be proper, and even necessary. In New York City artists have the recognition and support of the people, and sustain an equality in social relations. There, too, they have the encouragement of such men as Mr. Henry G. Marquand and Mr. Richard M. Hunt, to whom the artists and the cause of art in this country owe a debt, which, in its present and future value is beyond all computation. At a recent meeting, which, through the kindness of Mr. Marquand, was held at his residence, attended by representatives of the leading art societies, a committee on organization for New York City was appointed. This committee consists of Messrs. T. B. Clark, chairman of the New York Art Club; Arthur B. Turnure; Eastman Johnson, chairman Art Committee, Union League Club; Joseph Lauber, secretary Salmagundi Club; William H. Russell; and J. G. Brown, president of the American Water-color Society. These gentlemen make a strong committee and represent strong societies, but it would be refreshing to see the name of "John Smith, the artist," in the list. In Cincinnati the matter is in the hands of the active young men of the Architectural Club.

Why an Art Convention Would Benefit Art in Chicago.

In Chicago the situation is, perhaps, less in the hands of the artists themselves than elsewhere. The Art Institute has for its president a gentleman of culture and of business ability, and who has the confidence of the artists, who hope that through him it will some time emerge from its position as a business concern into that of the representative of artists and art. The Chicago Society of Artists is an association of artists, and though its influence is not to be compared with that of the Art Institute, its membership represents art in its true sense. The change that came over the commercial growth of this country with the close of the war was so rapid that art was lost sight of; in Chicago, in the rebuilding after the great fire, it was ignored. As it is proposed to hold this congress in Chicago it may have the effect of elevating art to where it was during the life of the old Academy of Design, and place Chicago artists again upon the plane from which they have been deposed by those, who, without true art culture, but with an ambition to shine as art connoisseurs, gave more value to a badly painted sketch from a goose pasture in Brittany than the grandest American battle piece or painting of a Rocky Mountain peak. If the proposed convention does nothing beyond awakening the American people to the fact that America contains better artists and better subjects for art than any foreign country, and that American art has a future and a glory that will add new fame to our republic, it will have done much, and its projectors will deserve the thanks of every American.

A Bill Passed to License Architects in Texas.

Texas is the first state to pass a legislative act which calls for the examination and licensing of architects and the general regulation of the practice of architecture. The bill (a draft of which was printed in our March number, page 45) was formulated by the Texas State Association of Architects at its last annual convention, and was passed in the legislature without material change. The provisions of the act are not as rigid as the architects would have them in some particulars, but it is a signal step in the direction of the establishment of architecture as a profession in the United States, and the improvement of the standing of practitioners. An examining commission, styled the "Board of Architects of the State of Texas," will be appointed by the governor, consisting of three practicing architects, which will serve as examiners of applicants and grant licenses. Architects from outside the state can compete for work without license. The bill as passed is much shorter and more general in its provisions that that formulated by the Western Association, but the Texas State Association deserves the commendation of every association in the country for thus establishing a precedent that will doubtless be followed by the legislatures of the other states, especially if industriously urged, as it has been in this case.

Why Architects Should Have Designs Published.

Many architects are disinclined to have their designs published, feeling that they get no pecuniary returns from so doing. While there are other considerations that we think should be sufficient to lead architects to furnish creditable drawings of their best work for publication, our observation, which is supported by that of other architectural publishers, is that it is not unusual for an architect to get several buildings from the publication of a single design. A recent case has come to our attention in which an architect whose design for a building was published a few months ago in THE INLAND ARCHITECT, secured as the direct result of that publication, orders for a similar building from Rochester, Denver, and Seattle.

Another Disreputable City Hall Competition.

St. Louis is about to expend "not more than one million dollars" on a new city hall, and the city council go fishing for gudgeons in the same old way by offering as a bait $5,000 for the adopted plan, "the same to become the property of the city." Of course, with this extremely liberal offer, "plans and specifications" can be procured. Probably $500 would purchase them just as readily, for the architect who will submit plans will expect to get paid out of the contracts anyway, as he knows his recompense should be $50,000. We have not seen the "code" which the mayor's advertisement speaks of, but it will probably be a bid for lottery architects to submit plans, and leave the council to select the plan and the architect that will admit of the largest steal in the way of contracts, with no regard for the utility of the building so long as it costs more than the estimate, and a large slice of the bill of extras goes into the pockets of the interested aldermen. Of course, St. Louis would not copy Chicago, but it would benefit those of her citizens who are honest and have influence to make a pilgrimage to Chicago and look at that useless libel upon modern architecture called the city hall, and examine into the history of the competition which procured the plans, and the way the contracts were let and carried out. They would find that, according to the advertisement, the present competition is based upon the same general plan, and the chances are that the results would be infinitely worse. However, it is not too late to remedy the matter. With the Missouri state association representing the architects, and influential citizens representing the interests of the people, a proper competition code that will be favorable to reputable architects can be adopted. It is not too much to say that on the present plan no architect that can be trusted, either for professional ability or honesty, will have anything to do with submitting plans for a city hall for St. Louis.

Romanesque Architecture.*

CHAPTER IV.

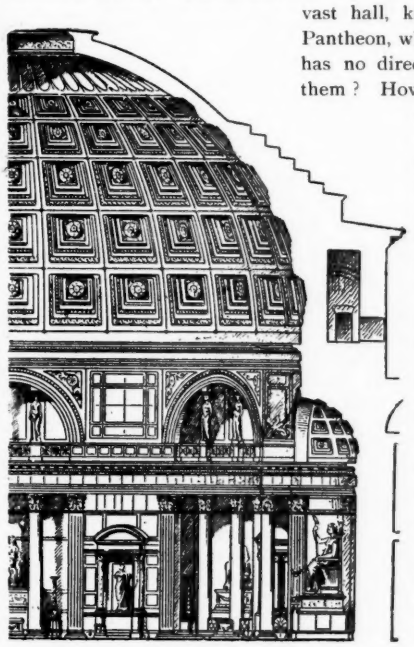
THE PANTHEON AT ROME AND THE PALACE OF SARVISTAN (PERSIA).

BEFORE taking up again the chronological order, which so much facilitates the study of the great epochs, in the history of architecture, it is well to turn backward to analyze one of the most beautiful works of the Roman architects, the Pantheon at Rome, which must be considered the most perfect of the round temples. Such an analysis would throw light on the imitations, which builders made of it, both in the East and West, in the centuries that followed. It would help us to understand the transformations that they have subjected this admirable type to; that after many attempts they could arrive at the perfect cupola, a point of departure for a system of vaulting, the application of which produced such grand and beautiful works of art in the middle ages.

It is necessary to look much further back, to the fourth century before Christ, to find among the Persians, if not the original, at least one of the oldest applications of the circular cupola built upon square foundations.

From the time of the Republic, the Romans had erected small buildings on the circular plan, covered with hemispherical vaults of concrete. It is thus that the cella of the temple of Vesta is constructed at Tivoli, but from the commencement of the empire this kind of structure developed in a manner till then unknown.

Agrippa built the first of these magnificent baths in the ninth district of Rome. Did he also have erected on the circular plan that vast hall, known by the name of Pantheon, which joins the baths, but has no direct communication with them? However it may be, Dion affirms that Agrippa completed the Pantheon in the year of Rome 729; that is twenty-four years before the Christian era. But this completion only concerns the portico, erected later in front of the door of the rotunda, as is proven by the inscription that can still be read on its frieze. Whether Agrippa built the Pantheon, or only had it decorated, the interior, with marble in a style of the highest order and the exterior with a portico of gray granite and white marble, it is easy to see, and it is important for us to notice that the construction of this hall and its decoration were two distinct parts.



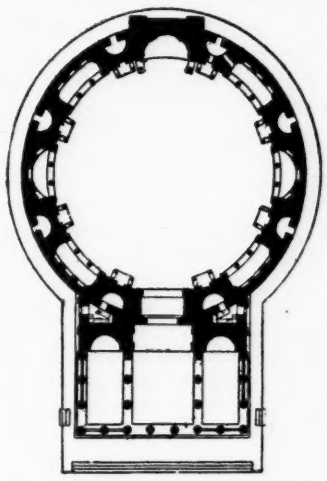
LONGITUDINAL SECTION, PANTHEON, ROME.

Thus enriched by the efforts of Agrippa, the rotunda was dedicated to Jupiter the Avenger. The diameter is 142 feet 8½ inches, and the circular wall which carries the dome is about 17 feet thick, that is, about one-seventh of the diameter of the interior circle. From the pavement to the summit of the dome it is 146 feet. The diameter is thus nearly equal to the interior height of the whole edifice. The circular wall is not solid. Beside the door of entrance there are seven grand niches hollowed out in it, four rectangular and three semi-circular.

Between these recesses eight niches are arranged in a half circle on the ground floor, and, on a level with the spring of the dome, sixteen others would have opened directly on the outside, had they not been filled in by a thin wall.

There could not be a better construction viewed from the point of durability and solidity. It is entirely faced with large brick, with a filling of rubble in the walls, according to the Roman method, with string courses of marble.

The remispherical dome which crowns the recessed circular wall of the edifice is built of bricks and rubble. The bricks, hidden in the thickness of the wall, take the place of the ribs of the vault, and are lightened of their burden by five rows of caissons in the interior.



PLAN OF PANTHEON, ROME.

The circular wall, owing to the recesses left in its thickness, is merely a series of relieving arches, carrying all their weight on sixteen principal piers.

It is altogether a system of construction which imposes laws on architecture before the architect can think of the decoration of the work.

As an absolute, intimate alliance between the construction and the decorative garment it received, does not exist, as in the Greek edifices, it is easily recognized at the first, that the purely decorative part was not built with the body of the construction; for that decoration, accomplished afterward, was only composed of veneering, which did not contribute to the solidity of the structure.

The Pantheon is justly numbered among the *chefs-d'œuvre* of Roman architecture. It was built by the architect Valerius of Ostia. We have noted before the colossal dimensions of this vast hall, and the decoration which was applied to it after its construction. The attic, originally ornamented with pilasters, which have been replaced with the Caryatides of Diogenes, surmounted the columns. A small cornice separated this attic from the cupola, which rose in one sweep to the circular opening, 28 feet 6 inches across, from which falls a flood of light. This single shaft of light, glistening on the caissons of the cupola, and leaving the grand niches in mysterious shadow, the impressive regularity of the arrangement and the beauty of the material, give to the solemn edifice an extremely majestic aspect.

The palace of Sarvistan, constructed in the fourth century before Christ, rises at the end of a desert plain, traversed by the old caravan road leading to Chiraz, to Darabgherd and to Bender Abbas.

The walls of the building are built of rubblestone, laid in a large quantity of mortar. In the interior they were covered with a coating of plaster. The cupola and the ribbed vaults are still nearly all standing, as well as the walls, in spite of frequent earthquakes. They are built of brick, rough but very strong, owing to the quality of the clay, which has become extremely hard by burning.

The building spreads out around an ornamented hall, the predominant character of which is implied outside by a high cupola, and inside by the vast proportions of the construction and the size of the bays made in the center of the sides. Two entrances open onto the exterior gallery, the first, situated in the general axis of the building, is preceded by a porch composed of three dissimilar bays; the second opens directly from a vestibule communicating with a porch and vaulted room.

"The most interesting part of the building, and that which merits the most careful study, is without doubt the grand hall and the ensemble of the vault which surmounts it.

"The dome, built entirely of brick, is of an ovoid form. It rests on four corbels uniting the angles, and on four pendentives, which unite the base of the cupola with the corbels and the vertical faces of the walls. This whole is sustained on four great elliptical arches, in the center and at the back of which are doors.

DETAIL OF CONSTRUCTION.
CUPOLA OF PANTHEON, ROME.

"The vast pile of Sarvistan is of very simple aspect. However, it is of the highest interest, for its study throws light on an entirely new period in the history of the cupola, resting on pendentives, of which St. Sophia offers us one of the most celebrated examples."*

* "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.

* From "Antique Art of Persia," by Marcel Dieulafoy.

CHAPTER V.

TRANSFORMATION OF CIVIL BASILICAS—ORIENTATION OF THE BASILICAS AND CHRISTIAN CHURCHES.

From the first years of the fourth century, after the promulgation of the celebrated edict of Milan, in 313, by which Constantine proclaimed Christianity the religion of the empire, Christian architects understood the advantages that they could find in the civil basilicas, admirably arranged for containing a large number, and before constructing entirely new temples for their religion, they appropriated the different parts of the old edifices that were at their disposal for the exercises of the new worship.

Since by the apostolic constitution the church represented the bark of St. Peter, the central avenue of the basilica became the nave (from navis, a ship).

The balustrades or walls of support divided the nave into two parts.

At the foot of the nave was the pronaos, a space reserved for the neophytes and a certain class of penitents; that is, for all those members of the Christian community who, only being able to attend part of the service, left the church before the communion.

Farther up across the transept was the choir, a space surrounded by a low partition, in which were arranged the desks, where the deacons read the holy scripture. In this place were the choristers, musicians, assistants and the numerous acolytes who, with them, composed the lower order of the clergy of the basilica.

At the extremity of the nave, in the center of the chalcidica, or transept, was the place for the altar, the holy of holies, the place for the deacons and sub-deacons. The transept gave to the plan of the basilica the form of the letter T, or tau, a figure for which the Christians had a special predilection, because the tau had the form of the cross.

The altar was placed midway between the triumphal arch opening into the nave and the hemicycle, or apse, built in the wall at the back.

The hemicycle, or apse, which had formerly been the tribunal, became the place for the ordained priests. That is why we find it designated under the name of presbyterium. A circular bench followed the line of the wall at the back, and was broken in the middle by a higher seat, called the consistorium. The highest place, the suggestus, was that of the bishop, or the priest who represented him.

The lateral galleries or side aisles held the congregation.

One of the constitutions of the close of the first century, attributed to St. Clement, indicated that the priest should look toward the east while blessing the host. This rule appears to have determined the arrangement of the church, as it can still be seen in St. Peter of the Vatican, and in St. John of the Lateran, their façades turning toward the east. The priest officiates behind the altar, facing the congregation, the men on his right, that is, to the south; the women on his left, that is, to the north. The side aisles, right and left, were designated by the words australis and septentrionalis.

In the fifth century the opposite orientation was preferred. The basilicas faced the west, so as to conform to the rule that the priest should turn his back on the congregation. In that way the right, that is, the southern side of the church became the right side of the priest. But singularly enough the right and left of the altar remained as before, the right to the north the left to the south. For it had always been understood that the side of the gospel should be at the right of the altar, and the side of the epistles should be at the left, that is, the gospel appeared to the congregation at the *left* turned toward the altar.

In this way confusion arises in the minds of some authors. Not being able to understand that the position of the church was different from that of the altar, they placed the right of the church to the north. The same inversion took place in the seats of the faithful. The Basilica of "St. Apollinaris the New," at Ravenna, a building of the sixth century, which has its façade toward the west, furnishes a proof of this.

The principal decoration of this beautiful edifice consists of an immense frieze, where male and female saints are represented in mosaic. The female saints, which ought to have been looked upon by women, occupied the north wall of the church, while the southern one was occupied by male ones. Thus the men were on the north side, that is, the side of the gospel; and the women were on the south side, that is, on the side of the epistle. It was the result of the false interpretation, mentioned in the preceding paragraph, that this order was changed, in the following centuries.

CHAPTER VI.

APSE—BASILICAS WITH THREE DIVISIONS—NAVE AND SIDE AISLES—FAÇADES—BAPTISTRY—LANTERN—BELFRY—DEPENDENT BUILDINGS OF THE BASILICA.

In the earliest times of the Christian Church the use of the apse was changed. It ceased to be the presbyterium, to become the martyrium, that is, the place where reposed the body of the patron saint of the basilica, or the relics to which the special worship of the place was addressed. It was thus, before the year 500, in the original church of St. Martin of Tours, and this custom spread in the following centuries.

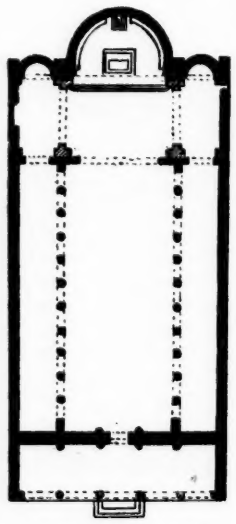
The primitive apse had no other light than that which it received from the nave or the transept. Transformed into the martyrium it not only had windows cut in it, but, according to certain authors, it was entirely open to the day, sometimes even to its base, so as to be put in communication with a low gallery that surrounded it, showing, at this period of antiquity, that is, in the fifth century, that sort of arrangement so characteristic of the apse of modern churches.

At the commencement of the sixth century, basilicas were constructed, according to methods of the time, in what might be called three divisions, because the nave and side aisles were considered as so many churches, each having its particular patron. One can easily believe that this idea was suggested to the builders of the Christian temples by the temple of the Capitoline Jupiter at Rome, which contained in its triple cella, three sanctuaries at once, one dedicated to Jupiter, that on the left to Juno, and on the right to Minerva.

The side aisles, as well as the nave, had their altars and their apses, always smaller than that of the center. In archæology they are called absidioles.

The plan of St. Peter, in Vincoli, at Rome, built somewhere near the first years of the fifth century, shows this characteristic arrangement, which was so often imitated by the builders of the middle ages.

The dependent buildings of the sanctuary were low constructions, supported against the walls of the apse of the basilica and placed in communication with it by the entrance, which fills the same office as the modern sacristy. The names of the adjoining buildings have changed according to their time and place. Their place was ordinarily against the wall in the back, at the side of the apse or against the apse.



PLAN OF BASILICA OF SANTO PIETRO IN VINCULIS, ROME.

The nave and the side aisles, forming the body of the basilica, were the parts which changed the least. However, liturgic necessities, or oftener, lack of resources, caused to be introduced into the naves and side aisles arrangements which appear to have had a certain generality. One of the most marked changes was the replacement of columns by piers. A change we find more general the farther away we go from antiquity, for the ruins of ancient buildings, despoiled for centuries, had now no more columns to furnish.

In the northern countries of Europe, columns of stone or marble had never been numerous as in Italy, and it was necessary to import them, at great expense. When Charlemagne erected the Basilica at Aix la Chapelle, he was obliged to send to Ravenna for columns and marbles, with which to decorate his new church.

In Italy, the side aisles were dark, but it was not the same in all countries, for they were lighted when the arrangement of the place permitted. Ordinarily the side aisles were flanked by narrow buildings, divided into rooms, called cubicula, which communicated with the church by the large doors, or else these chambers were equivalent to those which they also called oratories, because they contained an apse. The devotees gave themselves up in them to devotion and prayer; privileged persons were buried in them or else they were the dwelling places of a certain order of people.

Not all the churches built from the first centuries of the Christian era were provided with side aisles, for it is certain that many basilicas were erected, composed of a single nave, as the greater part of the rural parishes built during the barbarian epoch.

This is the kind of edifice which the authors of the time of Charlemagne and his successors designated under the name of capella (chapel), and the name of chapel was given to all the country churches

even the parish ones, for a long time. Nearly everything that remains of the old religious buildings of the Gauls pertains to chapels of this kind.

The façade of the basilica generally indicated the section of the building, marking at the base the width of the central hall and of the side aisles, profiled by two buttresses, between which the nave mounted, crowned by a pediment.

The doors were three in number, sometimes five corresponding to the three or five divisions of the interior. That in the center was higher than the others, and to all was applied the adjective *regiæ*, royal. They were closed by folding doors of wood, richly carved, or of bronze, and provided in the interior with a *portière* of precious stuff.

Above the doors in the façade were windows, and in the tympanum of the pediment opened a round window, where can be seen the original of the rose windows, lighting the nave of the cathedrals.

The tympanum and the frame of the windows were often ornamented with mosaics.

Before the doors extended a large portico, closed at both ends, which does not appear to have any particular name in the Latin churches. The Greeks called it narthex, of which ferula is the equivalent. But the name which was most employed in western Europe is porticus, from whence comes porch.

It was in this porch that those who could not take part in all the services stationed themselves to await the moment when they could enter the church.

In the interior of the church, behind the façade, was the pronaos, shut in often by a simple balustrade. In certain basilicas, however, it took a more monumental aspect, because it was formed by a colonnade across the foot of the nave, and surmounted by a gallery, as in St. Agnes, outside the walls. This arrangement was little used, except in two-storied basilicas. Then the gallery established a communication between the upper galleries and the two sides.

During the first triumphal centuries of the Christian religion, in which baptism was one of the most important ceremonies, it was the rule that this sacrament should be administered by immersion in an edifice separated from the basilica.

St. Sylvester had constructed, in the fourth century, near the basilica of St. John of the Lateran, which he had received from Constantine, an octagonal baptistry, magnificently decorated, and consecrated to St. John the Baptist, who was the saint to whom were dedicated nearly all of such edifices.

Baptistries were constructed in different forms, round or octagonal, and often on a square plan, divided on each face, or only on three, by a small apse, making the figure of a trefoil or quatrefoil. The central square was crowned with a ribbed arch, or with a little cupola, and the absidioles had quarter-spherical vaults.

In the middle of the baptistry was built a basin that they either filled with water or which was fed by a spring. They often used tubs of marble, granite or porphyry taken from the Roman baths, but oftener the baptismal basin, which could contain several persons, was formed of flags of stone or marble, made fast in the excavation by cement, which formed the bottom.

The absidioles were destined to receive the altars at which mass was said so as to give the communion to the neophytes after baptism.

From the eighth century the usages relative to the ceremony of baptism were changed. Baptism was permitted inside Christian basilicas, and from that time the baptismal basin was placed on the left side aisles, the side where the gospel was read.

From the end of the fifth century a great number of churches presented an arrangement which one does not find in the basilicas of Italy, but which brings to mind that of several churches of Central Syria, of Constantinople and of Greece.

A cupola or a tower rose above the transept, and was called by the writers of the Merovingian epoch the turris or chief tower.

The transept was divided into three parts by two walls, each pierced by a great arcade containing the colonnades or arcades of the nave. The *altarium* was transformed thus into a square space between the opening of the apse, the triumphal arch of the nave and the two lateral arches. Owing to the supports of the four walls it was possible to raise the construction above the roof of the nave and the arms of the transept. Pierced by windows on all sides, it had the appearance of a square, polygonal or round lantern, at the summit of which was the roof covering the altar.

The lantern tower shed over the whole sanctuary a flood of light, and could be seen from a distance as the highest part of the church. To give it more effect it was often crowned with a campanile of gilded wood, an elegant structure, which was composed of several recessed arcades, ordinarily of three stories, from whence comes the epithet *tristega* applied to campaniles.

Without wishing to discuss the origin of bells we should say that their use in Christian worship is not mentioned before the sixth century, and that bells used in the Merovingian epoch must have resembled, in dimension, those used still in schools and market places. It was in the second half of the eighth century that bells acquired such a considerable size that it became necessary to build edifices in which to hang them.

The first belfry of which we have any mention is that of St. Peter of the Vatican.

The first belfries were round in form and always small in size, as shown by the Greek and Byzantine towers, proving the bells which they contained to have been small. These bells were hung in the top of the tower in an open arched space covered by a roof. The rest of the construction was solid, without other openings than the loop holes which lighted the stairs.

Belfries were very often separated from the body of the church. In Italy a great number of churches of all times of the middle ages had their bell towers separated from them by quite a distance.

The plan of St. Gall indicates two round towers systematically placed at the front of the church and communicating with the portico. The legend which accompanies this plan shows that these towers were not destined to receive bells, but were observatories or oratories dedicated to angels, one to St. Michael and the other to St. Gabriel.

In the earliest times towers under the patronage of St. Michael existed in front of basilicas, and surely were not for bells. One in the form of a cross existed in the seventh century at the entrance of the monastery of St. Maur.

Force of habit made them apply the round form to the belfries even in the twelfth century, like that of St. Theodore, of Uzes, which dates from this epoch. Those examples are rare, however, and it appears certain that from the tenth century the square plan was preferred.

Besides the great bell which announced services to people at a distance, they continued to regulate the religious services of the clergy by small bells. In the ninth century, they were placed in the campaniles which crowned the domes.

The building adjoining the Latin basilicas were from the start an important feature, which could not help gaining in importance. It is proper to remark that if the civil or secular basilica was open on all sides to the most frequented parts of the town, the sacred basilica, on the contrary, was removed as much as possible from the public street, and there was at least one court built before the basilica of the size of the façade. This court, surrounded by porticos, which corresponded to the porch of entry, constituted the atrium.

The rich basilicas of the earliest times had an outer inclosure which preceded the atrium. Such was the façade, turned toward the Saone, of a basilica erected at Lyons about 460, by Bishop Patien. It was the period when they were not economical of columns. The two exterior inclosures of the basilica of Lyons each form a triple porch and all the supports are of columns of marble from the Pyrenees. Later, marble was reserved for the interiors and altars. Since the seventh century authors have not spoken of the magnificence of the exterior porticos, which goes to prove that they henceforth built them in a much more simple manner.

Under the side porches, the atrium often afforded cells, which served for the lodges of monks, dwellers in the basilica or for the best recommended of the invalids who came there to seek a cure.

In the midst of the atrium was ordinarily either a vase from whence flowed a stream of water, or a cistern or well. It was there, before continuing into the basilica, that the faithful made their ablutions, of which the holy water at the entrance of a church is a reminiscence.

It was at a very early period that the atrium lost its importance and its monumental aspect. It was only a little court without a portico, surrounded with buildings or walls. This change was owing to two circumstances. All the community had become Christians and the class of neophytes had disappeared. Then discipline had softened in regard to sinners, and as great culprits were the only ones excluded from the communion, troops of penitents ceased to be seen kneeling before the approach of the basilica awaiting the day of reconciliation.

Eventually the extension of the monastic institutions, and regard for those who served them, necessitated the enlargement of the buildings connected with the church.

At the end of the sixth century a greater part of the Christian basilicas had been changed into institutions of religious communities,

often so large that they contained hundreds of people. Later, under the second dynasty, a government imitating those of the monasteries, the government of the canons was imposed by the national council on the clergy of the cathedrals and all the great basilicas. Buildings necessary to the common life of those pious congregations were erected at one side of the church, and it was found convenient to arrange them around a square court. It was into this that the quadruple porch, now grown quite useless as the façade, was changed, under the name of cloister, and remained so during the middle ages.

(To be continued.)

Architecture in its Relation to Landscape.*

BY H. H. STATHAM.

IT may perhaps be thought that some excuse is required for introducing the subject of architecture and landscape into the applied art section of this society, and that it is not exactly evident where the "applied art" comes in. My view of it is this, that just as in decorative art there is, in regard to detail, a meeting ground between nature and artificial form, a point at which, on the one hand, natural detail has been so far artificialized, or conventionalized (as the usual term is) as to make it harmonize with man's artificial design and manufacture, while on the other hand purely artificial details may be arranged so as to blend with the design derived from natural forms; so, if we compare nature as a whole, apart from detail, with architecture, which is the blending of all detail in the one great and master decorative art, there comes in, on a larger scale, the same question—how are these two elements, the artificial and the natural, to be blended so that each shall assist the other—that the architecture shall add a new beauty and expression to the landscape, and the landscape shall not detract from or interfere with the effect of the architecture. In other words, if we wish to keep in mind the nomenclature proper to this section, how are we to deal with architecture as "applied" to landscape?

I consider the subject, however, as including town architecture as well as country architecture. There is town scenery as well as country scenery. After we have considered the design of a single building as a whole, we next come to the consideration of its grouping with other buildings, and their mutual effect on each other. Then we generalize further, withdrawing our attention from special buildings to consider the whole scenic effect produced by a group, by a square, and even in certain cases by a whole town seen comprehensively from a distant standpoint. Thus town architecture, viewed *en masse*, becomes in itself a form of landscape effect, and I need hardly remind you that one of the most accomplished water-color artists of the day has for some years devoted his chief efforts to the painting of what may be called London scenery, with the result that his works are generally among the most interesting and romantic in effect among the "landscapes" of any exhibition in which they may be found. From this formation of artificial landscape in towns we pass to the closer connection of architecture with natural scenery in the case of buildings placed in the open country. Here, again, we proceed from the more formal and artificial architecture, which contrasts with the landscape, to that more picturesque (as it is called) and less artificial architecture which seems to partake itself of the character of nature, and to become part of the scenery. This last is more especially the case with old buildings, and those of an unpretentious character; village churches and cottages, which in the course of years or generations have been slowly harmonized, by the coloring of time, into unity with the landscape. But when new building is to be done on a large scale and with ample means, the transition from architecture to nature may be carried out, through the treatment of the grounds and surroundings, in a very complete manner; connecting the house by architectural terraces and steps, first with a formally designed garden, in itself more or less architectural in its symmetrical character, then with plantations not symmetrical, like the garden, in detail, but symmetrical in the general arrangement of their masses as in reference to the more ornamental grounds, while further out they gradually die away into the natural wildness of the surrounding scenery. A familiar example of an attempt at this blending of the house with the landscape is Hampton Court, with its classical garden front, its symmetrically arranged flower garden and lawns and radiating walks, and its canal and avenue in the Home Park; but it is only partially and incompletely carried out, and on one side the Thames puts an abrupt stop to the composition. In the few instances where this kind of scenic design on a great scale can be carried out, the style of architecture of the house itself may be almost anything you please, provided it is good in itself, since the ground can be manipulated to suit it. But except in these few cases where great resources are at command, such as are seldom realized except in the case of a few royal palaces here and there, the architectural style of the building itself, as well as its position, should be considered in reference to the landscape; the consideration of style being mainly a matter of sentiment, that of position a matter of what painters call composition. The practical considerations in selecting a site for a house are, of course, intentionally left out of consideration here; they are most important, but do not come into this subject; it is only necessary to keep behind all considerations as to the picturesque character of a site, the mental reservation—provided always that the sanitary conditions are satisfactory.

The subject is a difficult one to illustrate adequately. I propose here to offer a few general suggestions as to the treatment of town and country architecture, partly illustrated by some sketches on the walls, and then to pass in review a series of photographs from actual scenes, which will, to a certain extent, illustrate these suggestions, though necessarily in a somewhat incomplete manner, inasmuch as photographers do not select their subjects or their points of view with any such intention.

To take first the architectural effects of cities. There are two great distinctions between ancient and modern cities, architecturally considered. First, the ancient practice of building a city within definitely marked boundary walls has been discontinued, and the city, as such, has lost its unity and defined character; it is now no more than a tract of land irregularly covered with buildings. Consequently, the chance of actually designing a city for effect, planning it as a whole from the beginning, is never to be thought of now; Wren had a chance after the burning of London, but the authorities were too much for him. There is no doubt, however, that the deliberate laying out of a large city as an architectural design might result in some splendid architectural effects. I may take as an instance Liverpool, which has climbed and extended itself irregularly and piecemeal along the floor and up the sides of a theater of gently sloping hills, with the river flowing across the chord of the arc. If this city could be begun again, and built in semicircular terraces height above height up the sides of the "theater," it would be, or could be made, one of the most magnificent architectural spectacles from the river that has ever been seen. It is probable that some effect of this kind was realized in such cities as ancient Babylon; but such effects belong essentially to despotism. In a modern town there are too many independent interests to be consulted, and such unity of design is impossible. Bath, however, may be named as an example of a city in which a considerable portion was planned and laid out for effect under the direction of one architect, Wood, and with the result that it is one of the most dignified and stately cities of second-rate dimensions; owing, of course, something to its beautiful site. In Edinburgh it may be said that the site has done everything and the architects next to nothing; there are few really good buildings there, and they do not much affect the general aspect of the city; the advantages of site, for picturesque effect, being such that the worst architecture could hardly have spoiled it, though the finest might add something to it. The other modern distinction is that whereas evidently the ancient routes of streets were mostly determined either by the configuration of the site or by existing landmarks of property, in modern days we lay out the new streets according to deliberate forethought. We cannot lay out a whole town according to a set plan, but we can and do lay out its new streets deliberately, and one result of this is that whereas the old streets had generally curved lines, the modern ones are nearly all straight; a matter which has given rise to much criticism of late. It has been rather too hastily assumed that all streets look better if curved or winding. All streets which are composed, as the great majority are, of buildings of varying height and design, are better so, no doubt; but where it is an object to produce an effect of palatial stateliness, streets running in a straight line, and with buildings symmetrically designed on a preconceived scheme, have their value in the effects of a town. It is a treatment monotonous, no doubt, for general use, as Harley street and Cromwell road testify too well; but when used in moderation, and in connection with buildings of a sumptuous and stately character (for that is imperative) it is capable of very fine effect. In streets of irregular buildings it is argued (by utilitarian people) that there would be something absurd in deliberately laying out a new street on irregular lines for the sake of effect. So long as it is not done to the extent of injuring the convenience of the buildings, I do not see that it is more absurd than laying out garden walks in curves for effect, which is done every day. The object of the garden walks is a practical one—they are for people to get about from one part to another; the streets are only the same thing on a larger scale; the picturesque and the practical may be deliberately provided for in the one case as well as in the other. Shaftesbury avenue has been laid out in curves, and if the new buildings flanking it were not unfortunately (so far) such poor specimens, it would be in the way to be a picturesque street, with no harm to anyone that I know of. It will at any rate be impossible to make it as soul-deadening as Victoria street or Cromwell road.

The question of straight or crooked depends a little on what you have got to see at the end of your street. If you have a great building or monument to close a straight vista, then you had better have the vista. This subject of centralizing buildings and streets and squares on an axis, so as to seem part of a thought-out design, is made a good deal of in France, and much neglected here. It has even been urged, by those who think most about the subject, that this centralizing is a vanity and a fallacy. It is said that St. Paul's, for instance, has a finer effect from standing askew to the top of Ludgate hill, than it would have if it faced Ludgate hill centrally. I am inclined to think so, too, but that is because Ludgate hill is only—Ludgate hill. If it were a broad avenue of stately columnar buildings of similar type to St. Paul's architecture, perhaps combined with an avenue of trees, I think you would want St. Paul's to face it centrally. Take the case of St. Peter's, with its artificially planned colonnades and fountains symmetrically arranged in front of the façade; you could not possibly propose in that case to set the building obliquely to the *place* in front of it. But as, in the case of St. Paul's, we have only a narrow street of miscellaneous shops leading to it, that is *infra dig.*, and it was better the cathedral should ignore it. The one is the architectural effect, the other the picturesque. I do not know that the one is better than the other, but they are different, and you cannot have both together; you must have one or the other. In London we are always just missing the architectural treatment, by carelessness or blundering, without getting the picturesque one. Thus we put the Albert Memorial just nearly enough on the axis of the Albert Hall to look as if it was meant

* Paper read before the Society of Arts, London, England, April 9, 1889.

to be centralized but had been set out wrong. We have made Constitution hill a straight vista with a monumental arch at the end, as if it formed a piece of symmetrical architectural planning, and when we come out at the arch we find it cuts into the shoulder of a curve and leads nowhere. Now, I think that in the most important squares and streets of a large city, especially of a capital, symmetrical laying out and centralizing of the principal streets and open spaces and buildings is quite in place; it is an element of stateliness which is proper to such a situation, and the importance and value of which has been much underrated by modern critics.

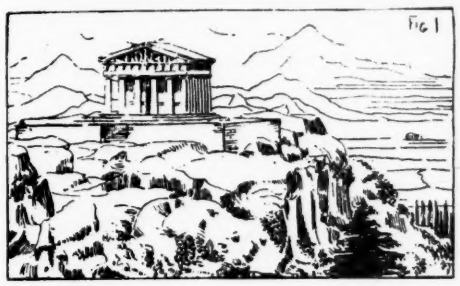


FIG 1

Of course, one cannot overlook, in this connection, the curious fact of the total disregard of symmetry which the Athenians showed in the placing of their very symmetrical buildings in and about the Acropolis, even building the small Niké Temple by the gate slightly crooked to the gate. This proves that they were indifferent as to symmetrical relations of their buildings, in this case, at least, and that they did not regard the Acropolis architecture as a whole, but as so many independent buildings placed where they were most convenient. I do not think that there was a calculated effort, on principle, to avoid symmetry in placing the temples. They were built at different times and for different objects, and were not thought of in connection with each other.

The combination of foliage with architecture in cities is a source of beautiful effect, and I will call attention to one or two examples later on of the increased effect given to city buildings by an admixture of foliage in the scene. I may refer again to Edinburgh in this connection, and notice the fine effect of the high buildings on the Old Town side, as seen from Princes street. In London we may remark the picturesque effect of the foreign offices as seen from the suspension bridge over St. James' park water, rising over the mass of trees, with the water in the foreground; a London picture which would be worth painting; I never saw a picture of it yet. It is worth while, also, to keep an eye on vistas into the surrounding country from the city. At the end of one of the longest, straightest, and dullest streets in London, for instance, which the cab-drivers call "Gower" street, but which is properly pronounced *Gore* street, there is to be seen, on a certain number of days in the year, more or less (according to the state of the London atmosphere), a vision of a distant hill, like the Delectable Mountains in the "Pilgrim's Progress," filling up the space between the two rows of houses with its faint distant green and purplish tones. This is Hampstead hill which (though few people in London know it) stands at its highest point just on the line of Gower street, and sends a glimmer of nature down the street. I should be sorry, indeed, to see even the best new building block out that little incident. Of similar value, in a rather different way, would be the opening a view of the Mall and the trees into Charing cross, if commissioners of works ever allow us to have it done. Before quitting this question of architectural landscapes in towns, let me name one splendid effect in London, also little known, namely, the view of the Victoria Tower from what is called the Little Cloister at Westminster. As an architectural picture this view of the great tower, seen looking up from the confined little cloister yard with its prim arcade and railings for the foreground, is really sublime, and if Mr. Herbert Marshall's attention were directed to it, we might hope to see it illustrated in a manner worthy of the occasion.


FIG 2

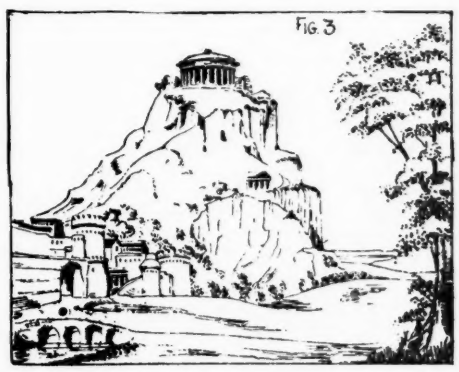


FIG 3

Coming now to the country, and the combination of architecture with natural scenery, it has been said that this may be considered under two heads, the character or sentiment of the building as compared with that of the landscape, and its position as a matter of composition. The former relation is one exceedingly difficult to define or to reason about. The harmony of a building with the landscape depends on so many considerations of detail and, even of association, that it seems almost impossible to frame any principle which shall meet or explain all cases; it is a matter to be felt rather than reasoned about. It has been said that Greek architecture is specially unsuited to wild and rocky sites, yet the Greeks planted their masterpieces of architecture on the Acropolis rock, and there is the sketch of Cockerell's restoration of the Temple of Jupiter at Ægina (Fig. 1), on a platform on a rocky site, and not looking, I think, out of keeping with its position, though it might look so without the platform; I have introduced that in order to connect it with the rocky ground. The Doric temples of Pæstum are on a level plain; and Linton's large painting of them, No. 1029 in the National Gallery, rather goes to prove that they are not very well adapted for pictorial treatment, at all events, on such a site. On the other hand, both Claude and Gaspar Poussin, and other landscape painters of that school, love to combine their classic ruins or temples with foliage and with quiet and pastoral landscapes, as shown in some of the sketches in *Liber Veritatis* (Fig. 2); and the two elements seem to harmonize beautifully. It must be observed, however, that Claude never uses the sterner forms of Doric architecture, of which, in fact, he knew nothing; he painted the remains of Roman Classic architecture as he saw them combined with Italian scenery. Turner, in such paintings as "Dido building Carthage," and others, where a quasi-Classic architecture is introduced (quite an anachronism, by the way, as he introdcues Italian Renaissance architecture into very ancient classic legend), is fond of the rounded masses of foliage of the stone pine, in contrast with the straight lines of his architecture. On the whole, it may, perhaps, besaid that Doric architecture harmonizes best with wild and rocky scenery, and that the lighter and more graceful forms of Greek architecture harmonize best with more pastoral and wooded scenery; though there here rises up in my memory Mr. Poynter's picture of the "Visit to Æsculapius," with the great white Doric columns shimmering through a mass of foliage; but that we may say is detail—neither the whole building nor the whole landscape are seen. There is another sketch from the *Liber Veritatis*, in which Claude has placed a smaller circular temple on the very top of a rock (Fig. 3), and placed his castellated architecture at the base. Here the castle seems to defend the entrance to the town, and the temple is placed safely aloft; but I should like it better if the hill were rounded and clothed in trees rather than a bare rock. I have made a sketch (Fig. 4), copying Claude's composition precisely, but reversing the style of the buildings, and placing the castle at the top of the rock, to try the effect; it gives an absolutely different sentiment to the view at once, and, at all events, illustrates the important effect which the architecture introduced has upon the expression of a landscape. In other drawings Claude adopts the system of placing the castellated buildings on the high and not on the low ground; and these sketches illustrate another habit of his, that of introducing a castle or tower to give greater effect, by contrast, to his graceful Classic architecture; a hint as to the value of plain spaces in a building in giving emphasis to the more decorative portion.

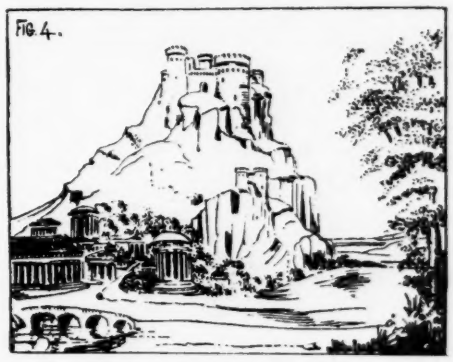


FIG 4.

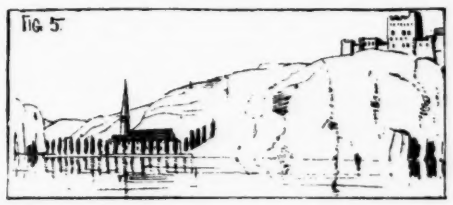


FIG 5

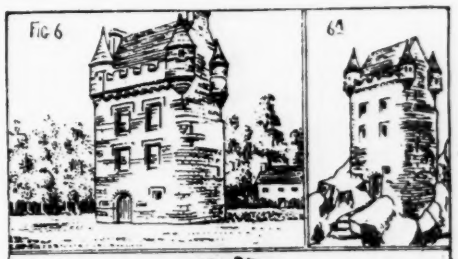


FIG 6


FIG 7

Generally speaking, I think we may conclude, in spite of occasional exceptions, that a stern and severe landscape demands a massive

and severe style of architecture, a quieter and more wooded landscape, a graceful and delicate style of architecture; and mountainous ground and a lofty position demand powerful buildings, of comparatively horizontal character, while a low level landscape permits and demands buildings of a less severe style, and with lofty vertical features to contrast with the lines of the landscape. A spire on a hill is completely out of place; there is an instinctive feeling of insecurity; on a low level it is the expression of an attempt to rise, an inspiration, which on the height is uncalled for. A characteristic illustration of this is shown in a view which I found in an old sketch-book in the Institute of Architects' Library (Fig. 5), where the remains of the castle are seen on the hill, the village with its trees and church spire clustering at the base. A square Scotch castle rising from a level lawn, like the sketch of Udny Castle (Fig. 6; it is all built up with modern additions now), looks curiously out of place. Where, as at 6A, or as at Borthwick (Fig. 7), the castle is led up to by a precipitous ascent, its stern rock-like machicolated towers seem in keeping with their position; and the full wildness and sternness is reached when a castle is, as it were, toothed into crags and precipices, so that you can hardly say where the rock ends and the building commences. A remarkable example of castellated effect of a somewhat different kind is shown (Fig. 8) in Turner's sketch of the Chateau d'Amboise *(Liber Studiorum)* where the great bastions founded on the lower level seem to stand on guard beneath the habitable chateau on the top.

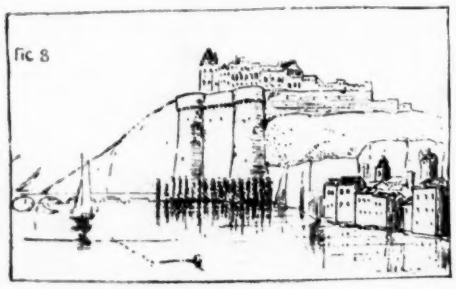


Fig 8

A rounded and wooded hill, equally with a bare and precipitous one, seems to require a repose and solidity of form in any buildings placed upon its summit. Turner repeatedly shows his predilection for this effect, as in the sketch here from his "Kilgarron Castle" (Fig. 9). Everyone, I think, will agree that if, for the compact and square-proportioned masses of castle, you were to substitute a thin and spire-like building, the feeling of the whole composition would be destroyed. A similar effect is shown in the pile of square-lined buildings of Cintra, with a dome as the only prominent feature, clustered on the top of a wooded hill. It may be observed that this effect of building of a rather solid and horizontal character, rising above undulating masses of foliage, is nearly always pleasing; one or two other examples will be shown further on; but, on the other hand, Gothic architecture, at all events in its more ornate and be-spired and be-pinnacled examples, is out of place among trees and woods, in spite of various rhapsodies of the poets on the subject. For combination with foliage we want level lines and broad masses, which is the reason Classic and Italian architecture generally goes well with a wooded landscape; Gothic architecture of the later period is the architecture of towns rather than of country; its multitudinous detail, which in a city supplies an element of richness and variety of detail, in the country only seems attempting to compete with the infinite detail of nature; and its varied skyline does not present sufficient contrast with the equally varied skyline or silhouette presented by trees. The early Cistercian monastery churches, nearly always placed in wooded valleys, were of a broad and simple type of architecture with little decorative detail, and their expression of repose, and the broad simplicity of their architectural design, harmonize admirably with their situation. Such Gothic as Henry VII's chapel, on the other hand, is essentially city architecture. So, also, are the French cathedrals of the middle Gothic period, with their forests of stone scaffolding in the shape of flying buttresses; in an open country they would be intrusive and pretentious; in a city, with houses piled up all round their base, they seem the natural expression of the crowded and intricate life of the city. Our simpler English Gothic has in many of its examples an expression of repose and reserve which fits it for the very different position which most English cathedrals occupy, in the midst of an inclosed lawn or "close," instead of being packed up amid heaps of house architecture piled in irregular masses almost against their very walls, as is often the case with continental cathedrals. I remember being much struck, when I first saw Salisbury Cathedral, with the remarkable fitness of the building to its site; its graceful and elegant design, all complete in nearly the same period of architecture, and, therefore, with a unity of style and expression which most of our cathedrals have not, rising from a base of level lawn giving admirable contrast and effect to the vertical and pyramidal lines of the building. Hence I was much interested to find, only a few days ago, in the charming letters of Motley the historian, which have just been published, a record of a similar impression to that I have referred to about Salisbury Cathedral, which is worth quotation here:


Fig. 9

> This was the first specimen of English Gothic I was to see, and as I walked thither my head was full of the Continental Gothic, which as yet was all I knew. I thought of the Cathedral of Cologne, of Vienna, of Rouen, of strange unfinished, unfinishable buildings, built according to no plan, or rather, according to a dozen different ones, and rising helter-skelter from the midst of a multitude of old, sharp-gabled, red-tiled, ten-story houses, all looking as if built in the time of the Crusaders. The idea of a Gothic cathedral was associated in my mind with hundreds of tumble-down hovels, booths and shops, mixed grotesquely here and there with a magnificent palace of half a dozen centuries * * * so that on the whole, when I came to look on Salisbury Cathedral I was most ridiculously half disappointed.
>
> It was my own fault or my own stupidity. The church is of beautiful proportions, of the most beautiful (at any rate the most regular) of the Gothic styles (namely, the early English), is built of a fine colored stone, which looks as fresh as if of yesterday, and with its light and graceful and very high spire, its long lancet-headed windows, its massive walls and stately buttresses, is certainly one of the finest cathedrals I know. Influenced by the associations I have mentioned, I thought the whole scene at first too tidy, too notable, too house-wifish; but, as I said before, this was only my own dullness; on second thoughts, I acknowledged to myself that filth and poverty and ugliness were not necessary concomitants of a cathedral, and I confessed that I had rarely seen a more lovely picture than this same church presents. The scene is so softly and sweetly English. The stately and graceful cathedral with its green and smooth shaven lawn in front, the surrounding elm trees in their magnificently massive foliage; the tidy cottages half covered with honeysuckles and rosebushes, the hawthorn hedges, and the green meadows with their sleek cattle (to say nothing of the macadamized turnpike and the new hotel), altogether make up a scene purely and exclusively English, and, perhaps, after all as pleasing a one as you can find anywhere.—*Motley's Correspondence*, Vol. I, pages 59 and 60.

It is worth note that Repton, who had such an immense reputation as a landscape gardener in the early part of this century, and whose wholesale method of "treating" ancient mansions and parks, so as to get new effects out of them, is rather satirically referred to in Jane Austen's best novel,* evidently had a strong impression as to the fine effect of broad solid masses of building, rising out of equally broad but undulating masses of trees. Two of his sketches for effects of this kind are given; one is Bayham Abbey (Fig. 10), the other a composition; the idea is the same in both cases—to have square battlemented buildings rising from among undulating masses of trees. Repton may have done many foolish things, probably did, but in his liking for this particular effect he has, at any rate, the sanction of Milton—

> "Straight mine eye hath caught new pleasures,
> While the landscape round it measures;
> * * * *
> Towers and battlements it sees,
> Bosomed high in tufted trees."—

an expression which exactly gives Repton's pet ideal.

What was true about Salisbury and its level lawns is true about spire architecture and level country on a more extended scale. Spires, as before observed, are out of place on a hill, and they are not very effective beneath a hill, and this seems to have been tacitly felt by spire-builders. In mountainous landscapes we generally find that spires, if introduced, are mere little picturesque timber and shingle affairs, toy spires; not work of a monumental type. It is on an expanse of flat country that a spire, or a tall tower with a spire or lantern termination, enjoys its true honors. Lincolnshire, most of which is as flat as a plate, is a remarkable district in exemplifying this. There the spires seem to vie with each other in height and slenderness of proportion, as if there was a game of brag between the builders (as there very likely was) whose spire should rise highest and be seen farthest. On such a coast "Boston stump," as it is irreverently called, was a thing worth building; its whole height can tell for many miles inward and seaward, in a district where the land is as flat as the sea; on a higher and more undulating coast half its value would have been lost. Lincoln Cathedral, on the other hand, standing on the top of the only eminence for many miles round, requires no spires; it may have been intended to have spires, but it is much better suited to its site without them, and perhaps it is the lofty and exposed situation which prevented their being carried out, nature in this case imposing her own law of esthetic. Peterborough Cathedral, which stands low in a level country, suffers very much for want of a central spire, and I have always regretted that the Archbishop of Canterbury's brilliant and cleverly-worded judgment on the Peterborough restoration dispute should have summed-up by dismissing Mr. Pearson's proposed new spire with costs; the spire would have been an effective and legitimate completion to the building and a great addition to the landscape. As it is, Peterborough Cathedral has no means of asserting itself in the landscape; you have to look for it, and have some difficulty in finding it.

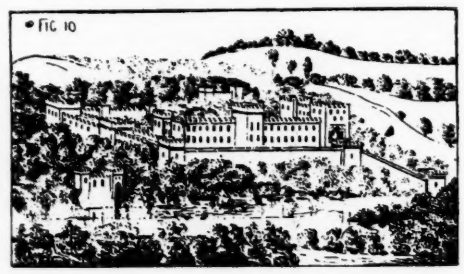
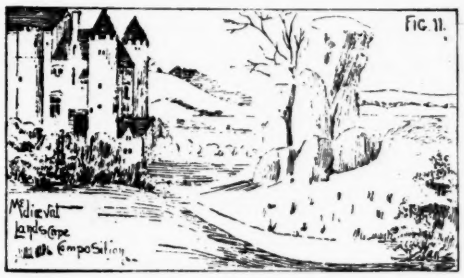


Fig 10

The combination of water with architecture is often a source of beautiful effect; in fact, there is such an enchantment in the reflection of buildings in calm water that it may almost be said that the poorest and most commonplace architecture will have a charm under such circumstances. That is half the secret of the extraordinary charm of Venice; it is not only the peculiar picturesqueness and richness of her architecture, but the having it framed amid the glancing lights and reflections of water, one effect of which, sometimes overlooked, is in the double lighting of the architecture, from above and below. This combination of architecture with still water

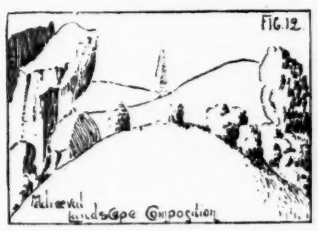
* "Mansfield Park;" chapter VI.

gives a great added beauty to many of the French Renaissance chateaux, with their moats and often with a partially encircling river or canal reflecting their turrets; also, it need hardly be added, to many of the Dutch country houses and towns. In a town, unfortunately, there is always a certain difficulty in keeping artificial water clean and wholesome; but if that were surmounted (and it can be with a little care and cost), I have often thought something might be attempted in this way to give new brightness and variety of effect in cities. An audacious proposition was made a few years ago, to make the whole of Trafalgar square, between the roadways, a basin of water. One would wish to see a better national gallery façade to reflect in it; but with a really fine façade there the effect would be splendid if properly done. However, no doubt this is, as people say in another place, "outside the region of practical politics." In regard to the combination of architecture with water in the shape of either lake scenery or on a seaside site, the two conditions seem to demand a special and very different treatment. A lake is usually surrounded by high hills, in relation with which vertical features are out of place or are thrown away; and, except in violent weather, a lake secluded by the hills round the bases of which it is formed suggests an idea of repose of effect; and both this feeling and the level expanse of the lake water, seem to me to suggest an idea of level building, of repose combined with grace of structure. A building close on the sea, on the other hand, should above all things suggest the idea of massiveness and stability; rock-like surfaces of wall against which the salt-laden sea wind may beat in vain. Longfellow has summed up in an admirable stanza the expression of the stability of a lighthouse against the storm:



"The startled waves leap over it; the storm
Smites it with all the scourges of the rain,
And steadily against its solid form
Press the great shoulders of the hurricane."

In the two last lines you almost feel the tremor of the building under the pressure of the wind. A lighthouse is a special building for a specially exposed site, of course, but what I mean to suggest is that seaside architecture should have something of the lighthouse character about it; it should seem like a bastion against the winds and waves. Some of the new school of American architects have realized this exceedingly well in designs for seaside houses. It is an odd contrast to this theory, certainly, that, as a rule, what are called watering places, in England, especially, are more gimcrack in their architecture than any other class of towns, probably because they are largely composed of lodging houses run up for commercial reasons, and occupied by no permanent tenants. In the old unsophisticated portions of seaside villages it is curious what a tendency the cottages and smaller houses have to assume a character that reminds one vaguely of boats, so that in railway traveling I have fancied I could tell when we were nearing the sea by this boat-like character of the cottages, with a much larger employment of wood, especially of tarred wood, overlapping like the planking of a clinker-built boat. It is quite certain that a cottage in the neighborhood of the sea will usually have a totally different expression and character from that of a cottage in an inland agricultural district.



In regard to composition in the placing of architecture in landscape, this cannot, of course, be carried out with the same choice and decision as in a picture, because we cannot in a real landscape impose any special point of view on the spectator; as Shenstone the poet discovered when he created an artificial distance in front of his house. This was done by planting trees at the margin of an open glade in lines approaching each other so as to create a false perspective; a break was made in the line of trees halfway, by a recess on each side of the glade, on the further side of which trees were planted of a much more slight and delicate character, and a dwarf summer-house filled up the end of the vista, painted in delicate and subdued tones to look distant. The Nemesis that overtook Shenstone was that the Lytteltons, who had the adjoining estate of Hagley, entertained their visitors by bringing them to the boundary line to look at Shenstone's perspective from the small end. We may, however, consider our buildings in regard to their effect on the landscape to some extent, without sinking into this kind of bathos. It is of some interest to see how painters like to have buildings placed in their landscape, and some examples in the National Gallery and elsewhere are suggestive in this way. I may call attention first to two sketches (Figs. 11, 12) which are taken from medieval illuminated manuscripts the only two instances I could find, in turning over many examples, of direct attempt at landscape effect in work of this type. In the smaller one the care with which the spire is planted just at the junction of two slopes of hill is to be noticed. The earlier Italian painters are delightfully naive sometimes in the way in which they arrange these things; for instance, in Pinturicchio's series of the "Story of Griselda," in one of which (No. 912, National Gallery) a long wooded hill which runs across the picture is abruptly cut off on each side and a trench left in the middle, to give room to place a triumphal arch on the lower level in the center of the picture.

(*To be continued.*)

Punishing a Railroad for Reducing Freight Rates.

ACCORDING to the Chicago *Tribune*, of April 18, it seems that Senator Cullom and a majority of the members of the senate committee on interstate commerce intend to spare no brain labor in devising a scheme to punish the Grand Trunk railroad for reducing freight rates on Illinois and western products to the seaboard. The senate committee is soon to meet in New York, and, after consultation with the Wall street holders of chromo stocks in the American trunk lines, will try to arrange some plan that will force the Grand Trunk railroad to put up freight rates on western farmers on traffic between Chicago and the seaboard or else abandon the western carrying business altogether. If the Grand Trunk insists on giving western farmers low rates and competing with the American trunk lines, it is proposed to shut it out entirely from doing business in this country.

Senator Cullom and his associates are greatly mistaken if they think there is a popular prejudice in the West against the Grand Trunk railroad because it is a Canadian corporation and a part of its through line between Chicago and the seaboard runs over Canadian soil. Patriotism does not require that a Canadian corporation shall be forbidden to compete with New York and Pennsylvania roads and punished for making low rates to western producers. It is true that in taking freight 1,000 miles from Chicago to New York the Grand Trunk carries it for about 200 miles through Canada after crossing the Detroit river and then, crossing at Niagara Falls, brings it back to American soil to be forwarded to the seaboard over American roads. If American freight is carried a longer distance through Canada it is only to reach the markets of Boston. These circumstances, however, are immaterial. The Grand Trunk may be owned by Britishers, as is the case with the Illinois Central and other American roads (the stocks and bonds of half the roads in this country are largely held in England, Holland and Germany), but the western people are interested, nevertheless, in having this Canadian road free to compete and make the best rates for American traffic it can. The Grand Trunk has saved the people of the West during the winter months from the exactions of an extortionate combine between the Wall street trunk roads. Lake competition keeps rates near a reasonable level in the summer, but the allied Wall street lines would recoup themselves as soon as the lakes were closed and levy on the western traffic for all it would stand if it were not for the competition of the Grand Trunk. It is most fortunate that this Canadian road has kept out of the Wall street pools and given the American public lower rates than the allied Wall street lines would willingly permit.

Without such rates to the seaboard it would be impossible for western farmers to keep a footing in the grain markets of Europe against the competition of the Indian and Australian colonies. Low export rates are imperatively necessary to permit the shipment of American produce abroad and prevent an adverse balance of trade. It is of vastly more importance to western interests that all roads, Canadian or domestic, should be left free to compete and make as low rates as they please, than that a scheme should be adopted to insure the Wall street pooled lines fat dividends on fictitious capital.

Senator Cullom seems to think it his duty to represent the interests of the speculative patriots who manipulate stocks in Wall street and want to squeeze all they can out of western traffic. The trunk line pool may be manipulated by Wall street "gentlemen," but they are a rapacious set, nevertheless, and want all the feathers they can strip from the western geese. Free competition against the trunk line combine is welcome, even if it comes from a Canadian road.

A Mammoth Manufacturing Plant.

IT is proposed to erect in Chicago, on the south side of Polk street, between the river and Beach street, a mammoth fireproof manufacturing and business building, to be called the Hercules, a perspective view of which is published among the photogravure plates in this number. It will have floor space divided to suit tenants, and supply power, steam and electricity. Its length will be 497 feet, depth 372 feet. The height of the building will be 120 feet, and the tower, which will be 208 feet high, will have a frontage of 84 feet and a depth of 112 feet. The total cubical contents of the building will be 22,610,000 cubic feet, the valuable area 1,261,090 square feet and the total area of the ground occupied 1,465,510 square feet or 33.64 acres.

The building will consist of a skeleton of steel fireproofed, and walls of stone, brick and terra-cotta. The floors and supports will be in strength up to the highest warehouse standard.

It will be equipped with 2,000-horse power, contain twenty-eight elevators for freight and passengers, nine large fireproof stairways, light and air abundant everywhere and every provision possible for safety, health, comfort and the transaction of business.

On the river front there will be wharfage for the largest vessels and about half-a-mile of railroad sidings in the basement connecting with all railroads.

The purpose of the building is to supply much needed power and other facilities and advantages for manufacturing near the center of the city and adjacent to the freight depots. When completed it will probably be the largest and most complete building of its class in the world. It is designed by W. L. B. Jenney, architect and engineer, of Chicago.

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.—A. J. Bloor, 18 Broadway, New York, secretary.

WESTERN ASSOCIATION OF ARCHITECTS.—Sixth annual convention will be held November 20, 1889, at St. Paul and Minneapolis. Normand S. Patton, Chicago, secretary.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Second annual convention will be held the second Tuesday in February, 1890, at St. Paul. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the second Monday after the first Tuesday of every month. Annual meeting, October, 1889. O. J. Pierce, Chicago, secretary.

WESTERN NEW YORK STATE ASSOCIATION OF ARCHITECTS meets second Tuesdays of October, February and June of each year. Annual meeting in October, at Syracuse. W. W. Carlin, Buffalo, secretary.

WESTERN PENNSYLVANIA STATE ASSOCIATION OF ARCHITECTS.—Headquarters at Pittsburgh.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at Kansas City on the second Tuesday in January, 1890. James Oliver Hogg, Kansas City, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA.—Annual meeting, second Wednesday of February, 1890.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Topeka on the third Tuesday of January, 1890. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—Annual meeting, second Thursday in October. John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting, third Thursday in August, 1889, at Dayton. F. J. Otter, Dayton, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets quarterly. Annual meeting, third Thursday in February, 1890, at Nashville. W. C. Smith, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at San Antonio on the third Tuesday of January, 1890. W. W. Larmour, Waco, secretary.

KENTUCKY STATE ASSOCIATION OF ARCHITECTS meets at Louisville first Thursday in each month. O. C. Wehle, Louisville, secretary.

LOUISIANA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in May, August, November and February. Annual meeting in February. W. C. Williams, New Orleans, secretary.

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1889. G. M. D. Knox, secretary.

NEBRASKA STATE ASSOCIATION OF ARCHITECTS meets first Wednesdays in January, April, July and October in each year. F. M. Ellis, Omaha, secretary.

WISCONSIN STATE ASSOCIATION OF ARCHITECTS meets first Monday of each month. Annual meeting, first Monday after first Sunday in January. Howard Russell, Milwaukee, secretary.

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. H. L. Campbell, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday at the club's headquarters, Art Institute. C. A. Kessell, secretary. Annual meeting, November, 1889.

ARCHITECTS' AND ENGINEERS' SOCIETY OF OREGON.—Cleveland Rockwell, secretary, Portland.

ARKANSAS SOCIETY OF ENGINEERS, ARCHITECTS AND SURVEYORS.—Second annual meeting, November, 1889, at Little Rock. A. G. Gibb, secretary.

MICHIGAN STATE ASSOCIATION OF ARCHITECTS meets at Detroit on the first Thursday of each month. J. S. Rogers, secretary, Detroit.

EDINBURGH ARCHITECTURAL ASSOCIATION.

On Saturday, March 23, the members of the Edinburgh Architectural Association, along with a large contingent from the Glasgow Architectural Association, paid a visit to Mid-Calder House, and also to the Old Parish Church, which, through the kindness of Lord Torphichen and the Rev. Mr. Gardiner were respectively thrown open for viewing. The party was conducted over the house by Mr. J. Harrison, who sketched the history of the Sandilands family, so long connected with the house and the locality. The various apartments were examined, chief of which being that in which history relates John Knox to have dispensed the sacrament of the Lord's Supper openly for the first time, in conformity to the practice of the Reformed Church in Scotland. Among other portraits, the room contains a famous one of John Knox, and also one, well known, of Mary Queen of Scots. Leaving the house, the party was next conducted over the Old Parish Church adjoining by Mr. Hippolyte J. Blanc. He explained that though the church now presented an edifice comprising choir and transepts, yet the only part of the original was the choir, the transepts having been added about thirty years ago. In introducing the subject of their visit, Mr. Blanc referred to the characteristic features of Scotch ecclesiastical architecture of the period, and illustrated it by well-known examples. From studying the details of the edifice it might be concluded, Mr. Blanc showed, that the church was a foundation of about the middle of the fifteenth century; the documentary evidence showed that in 1542 Peter Sandilands, then pastor of Calder Comitis, having laid the foundations of the "queir and revestrie of the Paroche Kirk of Calder," took an obligation from his nephew and grandnephew to carry on and complete the fabric according to certain specified dimensions and style; and further, to build a nave at the west end with a steeple between it and the choir, and a "closter" on the north side of the choir, the roof of the choir to be of stone, groined in the same manner as that of "Sanct Anthonis Yle, in Sanct Gelis Kirk." Whether from lack of funds or some other cause, all that was carried of the scheme was the choir, and even that part never had the roof completed in the manner specified. Mr. Blanc described the plan originally built as being a simple parallelogram about 70 feet long by 23 feet wide, having a polygonal termination at the east end. Abutting upon the east end is the vestry, which seems to have been provided for by the founder to inclose the family vault which is underneath. Externally the south front is divided into two wide bays with heavy buttresses, which latter are also repeated on the angles of the apse, though not on the north side. The lighting is by means of large four-light windows, each occupying nearly the whole surface of each bay on the south side only, the mullions in each case branching out into the pear-shaped loop tracery so characteristic of Scottish ecclesiastical architecture of this period. Mr. Blanc went over the various architectural details of the building, pointing out their peculiarities, and also the several decorative features whereon were represented the arms of the Sandilands, Douglases and Stewarts, whose families are connected. At the close Mr. Blanc explained the terminology of the district, and the connection with it of the family of Sandilands.

THE ARCHITECTS' CLUB OF ST. LOUIS.

Some fifteen St. Louis architects met last month and formed a club, which will be known as the Architects' Club of St. Louis. The following constitution and by-laws were adopted:

CONSTITUTION.

SECTION 1. The name of this association shall be The Architects' Club of St. Louis.

SEC. 2. The objects of this Club are to promote the artistic, scientific and practical efficiency of its members and to cultivate and encourage the study of art.

SEC. 3. The Club shall consist of active and honorary members.

SEC. 4. Any person practicing architecture in the city of St. Louis shall be eligible for membership.

SEC. 5. The officers shall consist of an executive committee of three, elected at each annual meeting.

SEC. 6. The annual meeting shall be held on the second Tuesday of April in each year.

SEC. 7. This constitution may be amended at an annual meeting by a vote of a majority of the active members.

BY-LAWS.

ARTICLE 1. Regular meetings shall be held on the second Tuesday of each month and be presided over by a chairman appointed for that meeting by the Executive Committee.

ART. 2. At each regular meeting there shall be served a lunch costing about $1 per plate, the expense of same to be defrayed from the treasury of the Club.

ART. 3. The Executive Committee shall elect from their members a chairman, secretary and a treasurer. The chairman shall preside at the annual and all Executive Committee meetings. The secretary shall keep minutes of all meetings and conduct all correspondence, subject to the control of the Executive Committee. The treasurer shall collect all funds of the Club and disburse the same on the order of the secretary when countersigned by the chairman of the Executive Committee.

ART. 4. The Executive Committee shall have charge of all the business and interests of the Club, arrange the place of meetings and the programmes, issue calls for special meetings, etc.

ART. 5. Candidates for membership shall be proposed by the Executive Committee at a regular meeting and be voted upon at the following regular meeting. Two negative votes shall reject.

ART. 6. Dues for active members shall be one dollar and a half ($1.50) per month, payable in advance.

ART. 7. These by-laws can be amended at any regular meeting by a vote of a majority of the active members.

The officers elected for the year are: President, P. P. Furber; secretary, L. C. Bulkley; treasurer, A. F. Rosenheim.

CINCINNATI ARCHITECTURAL CLUB.

A sketch club that should prove extremely beneficial to the draftsmen of Cincinnati took definite shape in January in the formation of the Cincinnati Architectural Club, and comfortable quarters were rented and furnished at 298 Vine street. The following club competitions have taken place:

January 3.—Wrought-iron door-knocker. *Requirements*—Pen and ink perspective sketch on 15 by 20 paper. Scale, half full size.

January 17.—Gargoyle. *Requirements*—Side elevation only on 15 by 20 paper, pen and ink work. Scale, 3 inches equal 1 foot.

January 31.—Gothic window. *Requirements*—Style to be in English decorated period, window to be 8 feet wide, pen and ink drawing, 15 by 20 paper. Scale, ½ inch equal 1 foot.

February 14.—Oriel window. *Requirements*—Pen and ink rendering of perspective, 15 by 20 paper. Scale, ½ inch equal 1 foot.

February 28.—Front of city residence for 20-foot lot. *Requirements*—Building to be 3 stories high, perspective sketch or elevation in pen and ink rendering. Style, optional. Scale, ¼ inch equal 1 foot.

March 14.—Baptismal font. *Requirements*—Perspective and plan in pen and ink rendering on 15 by 20 paper. Material, optional. Scale, 1½ inches equal 1 foot.

March 28.—Pen and ink rendering from photograph to be issued.

April 11.—Mortuary chapel. *Requirements*—Style, Romanesque; paper to be all 20 by 30, two sheets wanted, one to contain plan and two elevations drawn to ⅛ inch scale. This sheet to be filled in pen and ink rendering, no shading and no brushwork on elevations. A second sheet with perspective to ¼ inch scale and rendered at will.

April 25.—Menu cards for C. A. C. banquet.

The officers are: President, G. W. E. Field; vice-president, G. W. Stone; secretary, H. C. Carrel; treasurer, Arthur Stedman. The initiation fee is $1, and the annual dues $12.

CHICAGO BUILDERS' AND TRADERS' EXCHANGE.

A special meeting of the Exchange was held on April 29 in respect to the death of Mr. J. B. Sullivan. The following preamble and resolution was adopted as the expression of the Exchange:

The Builders' and Traders' Exchange of Chicago, in special meeting assembled, while humbly bowing to the will of the Divine Creator, deeply deplores the loss of one of its oldest and most respected members and former director, Mr.

J. B. Sullivan, who was called from his labors on earth Saturday, April 27, to appear before the grand tribunal in the world above, a transition which all mankind must sooner or later experience.

A gentleman of the highest order, a true friend, esteemed by all who knew him, noted for his liberality, honest dealings and unswerving integrity, Mr. Sullivan was one of the first to become a member of this Exchange, and from that time to the day of his death has participated actively in everything which tended to elevate and improve the Exchange in every way possible. The library of the Builders' and Traders' Exchange contains priceless volumes donated by him for the instruction and good of his fellow men.

In the death of Mr. Sullivan this Exchange has sustained a severe blow, and it unites with his sorrowing family and large circle of friends in sincerely mourning his sudden demise, relying on the wisdom of our Heavenly Father in thus depriving us of one we held most dear. Therefore, be it

Resolved, That this Exchange tender its heartfelt sympathy to them in this their hour of sorrow.

Resolved, That the secretary be directed to spread a copy of this feeble expression of this association on the records of the Exchange and furnish the family of the deceased with a copy of the same.

Resolved, That the president appoint a sufficient number of the members to act as pall-bearers.

In accordance with the resolution the following were appointed pall-bearers: George Tapper, W. A. Wells, C. A. Moses, M. Benner, George C. Prussing, T. E. Courtney, James John, M. Madden, Frank C. Schoenthaller, M. Campbell, D. V. Purington.

The funeral services were held at the Church of the Holy Name, and the interment at Calvary Cemetery, a large number of the membership of the Exchange attending.

WESTERN ASSOCIATION OF ARCHITECTS.

The board of directors of the Western Association of Architects will meet in Chicago at 2 P.M., Monday, May 20. All communications to the board should be sent to Secretary Patton before that date. The principal business will probably be the counting of consolidation ballots.

BUFFALO SOCIETY OF ARCHITECTS.

The present officers of the Buffalo Society of Architects are: President, E. B. Green; secretary, H. L. Campbell; treasurer, R. A. Bethune; first vice-president, G. J. Metzger; second vice-president, W. S. Wicks.

ARCHITECTS AND ENGINEERS SOCIETY OF PORTLAND, OREGON.

A meeting of the architects and engineers of Portland, Oregon, was held in that city, January 5, and an association formed. Its membership will consist of practicing architects and civil engineers. The officers are: President, Cleveland Rockwell, C. E.; secretary, R. A. Habersham, C. E.; treasurer, Justice Krumbein, architect.

THE SKETCH CLUB OF NEW YORK.

A sketch club, presumably of draftsmen, has been organized in New York City, under the title of The Sketch Club of New York. The secretary may be addressed at No. 57 Broadway.

ARCHITECTURAL LEAGUE OF NEW YORK.

The regular meeting and dinner of the League was held on Monday, May 6, at Morello's, 4 West Twenty-ninth street.

Through the courtesy of Mr. H. J. Hardenbergh the "Dakota" apartment house was opened for inspection in the afternoon from 4 to 6 o'clock. Mr. C. A. Rich read a paper on "A Run Through Spain."

The Executive Committee announced that they had leased the second floor of the house No. 47 West Forty-second street as rooms for the League.

The House Committee, in accordance with suggestions received from the Executive Committee, desired to ask from the members of the League such subscriptions to the fitting and furnishing of the rooms of the League as the members are willing to make. Subscriptions to take the form of furniture, hangings, rugs, books, professional periodicals, framed pictures, drawings, etc. Anyone desiring to make such gifts are directed to send a list of them to any member of the committee at his earliest convenience.

The new members elected since March 1, 1889, are G. Bonanno, E. F. Caldwell, Stockton B. Colt, W. W. Kent, Francis C. Lathrop, N. C. Mellen, Albert Parfitt, W. B. Van Ingen, Herbert J. Westell, George E. Wood.

Mosaics.

MR. MYRON H. CHURCH, architect, of Chicago, has opened an office at 711 Royal Insurance Building.

MR. A. J. BLOOR, the genial secretary of the American Institute of Architects, who has been for the past two months at the Bermudas, expects to return shortly, his health being greatly benefited.

ON May 6, Mr. T. E. Kilburn, of the firm of Ellerker & Kelburn, of Melbourne, Australia, passed through Chicago on his way to England. Mr. Kelburn expects to remain in England several months.

THE official report of the third annual convention of the National Association of Builders has been received from Secretary Sayward. The volume contains 210 pages of printed matter, and is well printed. It is the complete verbatim report of the Philadelphia convention.

PROFESSOR W. EISEN, of Chicago, is filling commissions from architects and others for his high-class etchings on pearwood. The pearwood is imported in thin sheets, on which Professor Eisen burns his designs with heated needles, the shades of color depending on the degree and depth of the burning. The instinct of an artist and a skillful hand to execute are shown in the professor's work. The pictures produced have the mellow richness of etchings in sepia. The surface of the wood after being etched is finished with a fine varnish, so that dust and dirt are as easily removed as from glass. The professor is at work on several interiors, etching on the panels and other woodwork, pictures and designs appropriate to the different rooms. This treatment is very effective and is less expensive than wood carving, the price being $5 a square foot for designs not excessively elaborate. In some cases designs are furnished by architects, and in others the professor works from his own designs. Professor Eisen may be addressed at 1047 North Halsted street.

THE interior of the new building erected by the Murphy Varnish Company, of Newark, from the plans of J. H. Lindsay, architect, has just been completed by finishing the decoration and placing the stained glass. This work has been executed by Messrs. J. & R. Lamb, of New York, the color scheme having been carried out by Mr. F. S. Lamb. The glass has been done in venetian and opalescent, the general treatment being a rich arrangement of delicate tones of color and jeweled work. The most elaborate part of the work is in the president's office and in the large staircase window. In the latter, the date of the establishment of the company and the monogram of the firm have been artistically introduced in connection with ribbons and foliated work.

R. W. MAXTON, for many years identified with the building business, and now secretary of the Bruschke Furniture Company, will in future have his office at 43 Van Buren street, where this company will have a full line of wood mantels, tiles and grates. This firm stands among the first for fine interior mill work, wood mantels and cabinet work. They are now putting up a large apartment building of twenty flats on the corner of Thirtieth street and Indiana avenue, and have also the contracts for erecting the Berkshire and the Devonshire apartment buildings. Max Meyer's residence, 2009 Prairie avenue, is just being completed by the same firm, who had the whole building under contract. They have also completed another residence by the same architects (Burnham & Root), together with several others.

Our Illustrations.

Houser Building, St. Louis, Mo.; Charles K. Ramsey, architect.

Residence for Judge Jamieson, Lake View, Ill.; J. L. Silsbee, architect, Chicago.

Residence of James V. Ridgway, Hinsdale, Ill.; Patton & Fisher, architects, Chicago.

House for Mr. Allan, Montreal, Canada; Rotch & Tilden, architects, Boston, Mass.

House for Mr. Chamberlain, Chester, N. Y.; E. G. W. Dietrich, architect, New York.

Residence at Williamsport, Pa., for Mrs. James M. Camble; Albert W. Dilks, architect, Philadelphia.

Residence of John W. Langley, Ann Arbor, Mich., additions and alterations by Irving K. Pond and Allen B. Pond, architects, Chicago.

Design for an entrance to a city house, awarded first place in St. Louis Architectural League competition, designed by J. W. Longfellow.

School at Park Side, Hyde Park, Ill.; M. L. Beers, architect, Chicago. Its exterior is pressed brick, with cutstone and terra-cotta trimmings, galvanized iron cornice, slate roof and tin deck. The size of the building in width is 84 feet, and in depth 77 feet 6 inches; height from the ground line to the top of main cornice 40 feet. The building contains four schoolrooms on each floor, wardrobes, retiring rooms and principal's office. The basement is divided into fuel, furnace, recreation and dry-closet rooms. The interior of the building is finished in selected sycamore, with hardwood floors. There are only four rooms and halls finished at present, and the cost of the building to date is about $32,000. The building is planned for four brick set furnaces, and ventilated by means of large flues with stack heaters at the base of each. The entrances are finished in selected red oak. All glass in the entrance doors, and in the doors between the schoolrooms and halls is of polished plate. The staircases have maple treads.

PHOTOGRAVURE PLATES.

(Issued only to subscribers for Photogravure edition.)

The Hercules Building, Chicago; W. L. B. Jenney, architect. Full description elsewhere in this number.

Six full page plates of the court house and jail buildings at Pittsburgh, Pa., the late H. H. Richardson, architect. The views shown are as follows: Court house, perspective view of exterior, on Grant and Diamond streets, looking east; rear view of court house with jail in foreground, taken from Convent Hill, looking west; main entrance to court house on Grant street; bridge between court house and jail, across Ross street; interior of court house; approach to grand staircase from vestibule; upper main landing of grand staircase, showing arches.

Business Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, May 8, 1889.

So far as a summary can be approximately made of building operations this year, the indications are that more building is under way than at this time last year. In some cities and small towns there is less. Taking the country all through, it seems a safe conclusion to arrive at that more work is being done. In country districts, especially, there is greater activity. Small manufacturing towns are taking up, and in agricultural localities a great deal of work is under way. Railroad building is not being pushed as rapidly as last year, but there is an abundance of time yet, and good authorities predict a very active summer and fall. The dullness in the iron trade is very marked. Lumbering operations, so far this year, show that the distribution of lumber of all kinds is fully up to last year, and that prices are a little higher, taking all kinds into account. In some sections of the country there is a probability of a drouth, and low water prevails. Fires are anticipated, and lumbermen are somewhat apprehensive of a scarcity of logs. Builders and contractors who have a large amount of work on hand are buying stocks liberally lest some unforeseen event or accident may create a

scarcity. The lumber trade is holding its own in all markets. Poplar is scarce and advancing. Hardwoods are in excellent demand for interior finish. Throughout the South the mills are very generally well engaged. In the North there is but little complaint of inactivity. The demand for all kinds of building material is strong. Manufacturers of supplies have contracts ahead for from three to six months. There is an abundance of money for building operations, and investments are doing well. There is no boom in real estate, and none likely. Manufacturers in a good many cities are obliged to select sites in the suburbs on account of the crowded condition of the cities. The price for manufacturing sites even in suburban localities has advanced. Steel and wire nails are in good demand throughout the West, but in the East trade is sluggish and prices are low. Manufacturers of gas fixtures enter the season with an abundance of stocks. All kinds of material for interior decoration and finishing are in abundant supply. Sash, doors and blinds rule low because of the heavy stocks which manufacturers have maintained, and all attempts at hardening prices prove ineffectual. Financially and commercially the coming eight months are certainly as bright as could be expected. There is no scarcity of money in ordinary business channels, but outside of ordinary channels there is a need of money which may result disastrously to those immediately concerned. The expanding needs of the country call for a more satisfactory monetary system than we possess. Commercial failures continue at about an even rate. The agricultural conditions of the country are all favorable, and large crops are promised in all sections. But few labor strikes are threatened, and it is probable that no serious conflicts with labor will occur till the contemplated enforcement of the eight-hour rule next spring.

Synopsis of Building News.

Allegheny City, Pa.—Architect F. C. Sauer has prepared plans for a pressed brick building, trimmed with granite, for Mrs. M. Sauer; cost $10,000. Also for a double brick and stone trimmed dwelling for R. C. Musgrove; cost $9,000.

Carthage, Ill.—Architect Geo. W. Payne has prepared plans for a two-story, ten-room schoolhouse, 60 by 82 feet; construction brick; cost $80,000.

Charleston, S. C.—There were 191 permits granted in the city during 1888, aggregating an estimated expenditure of $416,720. They were for twelve stores, three warehouses, one school building, twenty public buildings and 154 dwellings. In addition to the new buildings additions and alterations were made to 141 old buildings at an aggregate cost of $98,855, making a total expenditure in buildings of $545,585.

Chicago, Ill.—Architect A. H. Hettich: For Alfred Schirmer, two-story residence, 25 by 44 feet; brick, front basement cutstone; above basement French tile, cutstone trimmings; inside finish cypress and hardwoods; mantels, furnace heat, etc.; cost $6,000. For P. K. Ryan, Chicago Lawn, two-story and attic frame residence, 26 by 25 feet; cost $2,500.

Architect T. V. Wadskier has plans for a $16,000 residence.

Architects Fromann & Jensen: For G. Ammon, two-story and attic residence, 25 by 61 feet; cost $10,000.

Warren Springer will build an eight-story and basement warehouse on Canal street; pressed brick, stone and iron; cost $50,000.

Architect S. S. Beman, Pullman Building: For George M. Pullman, two-story basement and attic house, 60 by 70 feet; pressed brick, steam heat, hardwood; cost $30,000.

Architect D. J. Warren: For Dunlap Smith, four-story and basement store and flat building, 57 by 100 feet; pressed brick and stone; cost $26,000. For Mr. Olinger, store and flat building, 150 by 155 feet; cutstone basement, brick above, hardwood finish; cost $30,000.

Architect H. W. Heuhl: For Mrs. Roberts, four-story store and flat building; pressed brick and stone; cost $50,000.

Architect Jno. Addison: For M. Flint, four-story apartment building, 42 by 128 feet; cost 40,000.

Architect John Long: For Brackett & Barrett, Rochester, Ind., three-story hotel, 90 by 165 feet; brick and stone; cost $40,000. For F. G. & C. E. Springer, eight two-story and basement houses, 40 by 192 feet; cost $24,000.

Architect H. S. Jaffray: For F. W. Smith, two-story and basement residence at Hyde Park; cost $5,000. For W. F. Pfuderer, two-story and basement residence; cost $5,000.

Architect C. C. Miller: For Gen. Fitz Simons, two-story dwelling, 40 by 80 feet; cost $40,000. For Butler Lowry, three dwellings, Lawndale; cost $8,000.

Architect Oscar Cobb: For Masonic Temple Company, at Duluth, five-story theater, 75 by 150 feet, brick and granite, fireproof, steam, elevators; cost $150,000.

Architect L. Masters: For T. J. Leonard, three three-story store buildings, 62 by 60 feet; cost $14,000. Three-story flat building, 55 by 45 feet; cost $10,000. Two-story flat building, 50 by 40 feet; cost $8,000. Three-story flat block, 52 by 50 feet; cost $6,500.

Architect J. E. Scheller: For E. S. Neben, San Jose, Cal., frame residence, 40 by 50 feet, slate roof, electric work, speaking tubes, steam heat, hardwood, interior finish; first-class sanitary work; cost $12,000. For C. W. Knapp, row of three-story buildings, 65 by 60 feet, pressed brick and terra-cotta trimmings; gravel roof, stained glass, electric work, etc.; cost $15,000. For C. Kahler, two-story flat building, 25 by 60 feet, brick with Bedford stone trimmings, gravel roof, electric work, furnace heat; cost $4,500. For Jacob Kramer, five detached stone houses, front trimmed with Bedford and Mitchell green sandstone, double plate and stained glass, electric work, steam and furnace heat, hardwood finish and everything modern and first-class; cost $35,000.

Architects Dewey & Newberry: For C. P. Coggeshall, two-story flat building, brick front with stone trimmings, galvanized iron bay, etc.; cost $4,500. For C. C. Collins, two-story and basement addition to residence, bowling alley in the basement, library first floor, art gallery second floor; library trimmed in oxidized silver; cost $10,000.

Architect W. D. Cowles: For Seth Riford, four two-story flat buildings; cost $20,000; two-story house, 21 by 45 feet; cost $15,500. For Barry Bros., three two-story houses, 58 by 70 feet; cost $16,000.

Architect George Beaumont: For T. E. Mathews, Ravenswood, two-story frame dwelling, 25 by 42 feet; cost $2,300. For H. W. Myers, two-story and basement store and flat building, 62 by 64 feet, brick, stone basement; cost $18,000. For W. J. Meyers, store and flat building, 125 by 60 feet, brick and stone; cost $30,000. For E. D. Adcock, two-story and basement dwelling, 25 by 80 feet, brick and stone, modern construction; cost $6,000. For Dr. Stewart, Mansfield, Ohio, two-story and basement dwelling, 22 by 60 feet; brick and stone; cost $6,000.

Architects Edbrooke & Burnham: For H. E. R. Wood, Hyde Park, frame dwelling on stone foundation, 28 by 45 feet; cost $5,000. For J. B. Countryman, two-story store and office building, 50 by 80 feet; cost $15,000.

Architect C. J. Warren: For the Walsh estate, three two-story and attic houses, 60 by 70 feet; cost $20,000.

Architect C. M. Palmer: For Potter Palmer, two four-story dwellings, 46 by 70 feet; cost $24,000. For same, house, 27 by 70 feet; cost $12,000. For Mrs. N. Palmer, four-story dwelling on Lake Shore Drive, 45 by 80 feet; cost $35,000. For Mr. Fisher, two-story and basement dwelling; buff sandstone, hardwood finish, furnace heat and modern conveniences; cost $11,000. For D. P. Stewart, three-story residence, 25 by 70 feet; buffstone, hardwood interior, furnace heat, etc.; cost $12,000.

Architect J. Huber: For P. Peterson, two-story, basement and attic residence, 25 by 62 feet; cost $6,000.

Architect C. A. Weary: For D. Louis, three-story store and flat building, 26 by 85 feet; cost $11,000. For J. L. Campbell, four two-story and cellar houses, 72 by 38 feet; cost $13,000. For H. L. Childs, two three-story and cellar and flat buildings, 51 by 75 feet; cost $20,000. For John Eiszner, two-story and cellar residence, 30 by 60 feet; cost $17,000. For J. L. Campbell, six four-story and cellar store and flat buildings, 82 by 125 feet; cost $60,000. For A. W. Eaton, two-story and cellar house; cost $8,500. For E. J. Lewis, two three-story flat buildings, 48 by 60 feet; cost $14,500. For Mrs. M. J. Frawley, two two-story and cellar flat buildings; cost $12,000.

Architects Ostling Bros.: For O. Neilson, four-story and basement flat building, 28 by 78 feet; cost $12,000. For C. Hultgren, four-story and basement flat building, 25 by 52 feet; cost $9,000.

Architect T. N. Bell: For First Baptist society, Englewood, church building, 98 by 128 feet, stone exterior, steam heat, etc.; cost $40,000. For S. Hoffman, three-story store and flat building, 25 by 50 feet; cost $8,000. For K. H. Bell, frame residence; cost $4,000.

Architect William Stripplemann: For Vanderhost & Campbell, three four-story store and flat buildings, 62 by 50 feet, brick and stone, steam heat, etc.; cost $20,000. For H. J. Vanderhost, two-story and basement building, 25 by 100 feet, brick and terra-cotta, hardwood interior finish, steam heat, etc.; cost $16,000. For D. Zemonski, three-story and basement store and flat building; cost $10,000.

Architects John Wolcott & Son: For Park Avenue M. E. society, church, 57 by 120 feet, brownstone, furnace and steam heat; cost $40,000. For J. C. Barker, three three-story dwellings, 50 by 70 feet; cost $15,000. For Emil Jerke, three-story flat building, 23 by 70 feet; cost $10,000. Masonic Hall, Joliet, Ill., four stories, 30 by 110 feet, limestone exterior, steam heat, etc.; cost $50,000.

Architect G. W. Maker: For Horace Phillips, Seattle, W. T., dwelling. For E. Kendrick, Buffalo, N. Y., frame dwelling; cost $6,000.

Architects Wilson, Marble & Lamson: For Mrs. J. H. Chambers, two three-story and basement dwellings, 50 by 68 feet; stone fronts; cost $30,000. For Thomas Scoven, two two-story flat buildings, 22 by 68 feet; cost $9,000. For W. H. Pruyn, four three-story and basement dwellings, 20 by 70 feet; cost $36,000.

Architects Schaub & Berlin: For John Peters, two-story store and flat building, 41 by 76 feet; cost $7,000.

Architects Flanders & Zimmerman: For E. M. Horton, two-story flat building, 25 by 60 feet; cost $7,000.

Architect John J. Kouhn: For Charles Jacob, three-story flat building; stone front; modern improvements; cost $10,000.

Architect A. L. Schellenger: For J. Richardson, frame residence; oak interior; cost $5,000.

Architects Charpie & Fry: For J. M. Allen, ten brick cottages; cost $14,000.

Architects Cole & Dahlgren: For Joseph Farndrich, three-story flat building, 22 by 70 feet; cost $6,000. Four frame dwellings; cost $15,000.

Architect G. O. Gurnsey: For K. & E. McDonald, alterations to residence; cost $20,000.

Architect W. L. B. Jenney is engaged on plans for a sixteen-story office building, to be erected south of Van Buren street, between Dearborn street and Third avenue. It will have two fronts of similar design, one on Dearborn street and the other on Third avenue. The interior will be entirely of rolled steel, with brick, terra-cotta and fireproof partitions. The exterior will be of granite, pressed brick and glass. The first floor will be constructed for stores, the upper floors for offices.

Mr. Jenney has just closed the contracts for a five-story addition to the Union League Club House, to cost $40,000.

Architect Myers: For T. Demaris, Hyde Park, three-story flat building, 25 by 55 feet; St. Louis pressed brick, trimmed with Dunleith variegated sandstone; cost $5,000. For F. C. Hieronimus, Hyde Park, two-story residence, 33 by 76 feet; brick and stone; hollow walls throughout; hardwood interior; steam heat and first-class modern conveniences; cost $10,000.

Cincinnati, Ohio.—Reported by Lawrence Mendenhall:

Cincinnati goes along at a pace highly satisfactory, making substantial progress architecturally, and the season will close with many fine structures, added to those already built. One pleasing condition of things is the fact that our people, except those "too awfully too-too," have patronized home talent. When talent is appreciated, it acts as an incentive to do good work. The demolition of the buildings, to make way for the addition to the City Hall, is going rapidly along, while the main building is beginning to show up in grand style.

The wife of Architect James W. McLaughlin has been honored by having a full-sized bust sculptured by Mr. Mundhenk, of our city. It is full of expression, and a good likeness of a lady who is a worthy helpmate of a master architect.

Messrs. Crapsey & Brown have more work than they care to report now, but among other plans on the boards are the following: For J. B. Beall, of Hamilton, Ohio, a frame house of ten rooms, with modern improvements, costing $3,500.

For Mt. Sterling, Kentucky, an opera house of pressed brick, three stories high, occupying 60 by 100 feet. It will contain all modern improvements, and cost $12,000.

At Carlisle, Kentucky, they will build for the Carlisle Christian Church, a church edifice of brick, small but complete, to cost $5,000.

Mr. A. C. Nash, the architect, has completed the plans for the new Good Samaritan Hospital which the Sisters of Charity propose erecting, along with a chapel, on the site of the old one on Lock street. There will be an entrance by a cut on a level with the street leading to an elevator, by which the patient can be carried to the upper floor. The chapel will be three stories high, and will be located between Emery's building and the old building, and back of the chapel the four-story new hospital will be erected. On the first floor there will be several new wards, operating-rooms in front, pay-patient rooms, sewing and packing rooms, rooms for laundry, engine and boiler, and on Baum street a large smoking-room, with four large fireplaces. The main building will be divided by a corridor. On the second story there will be bath and kitchen rooms, a surgical ward and chapel. Connection will be established to the old pavilion, and between there will be an apartment for the administration of anæsthetics. The third story will contain an operating-room, large medical ward and rooms for pay patients. The roof of the chapel comes to the fourth floor, which will contain a dormitory for the Sisters and operating-rooms.

Architect Louis Picket reports the following: For C. H. Curtis, a pressed brick store building, with flats above store; iron front, plate glass, pine finish and tin roof; cost $4,500.

Also, for Mrs. Maggie Bender, a store and flat building, of pressed brick, slate roof, terra-cotta, etc.; cost $7,000.

Rieg & Marty report a brick town hall and engine house at St. Bernard, Ohio, size 60 by 82; brick, stone trimmings; two stories and tower; stable fittings, mansard roof; cost $15,000. Also additions and alterations to a Catholic schoolhouse; cost $7,000.

W. W. Franklin is drawing plans for H. P. Sherrick, Avondale, Ohio, for a frame residence of twelve rooms, with modern improvements; cost $8,000. Busy on other plans.

William Stanton Robinson has drawn plans for Mr. George E. Scott, Price Hill, city, for a frame dwelling of twelve rooms; pine finish, wood mantels, stained glass, slate roof, laundry fixtures, etc.; cost $4,000.

Thornton Fitzhugh, architect, reports the following: For L. G. Johnston, Glendale, Ohio, a frame residence of eight rooms, pine finish; mantels, slate roof. For J. J. Burchenal, Esq., of same place, a residence of similar size and style. For O. F. Moore, Delhi, Ohio, a frame residence with plastered gables, slate roof, containing ten rooms. Office building for the King Powder Company, at King's Mill, Ohio; frame and shingle, one story, four rooms, shingle roof. Mr. Fitzhugh's patient, painstaking work is telling on him in the shape of plenty of plans.

Emil F. Baude, architect, is preparing plans for a large stable for a Mr. Peter Schaller; stone trimmings, brick, hardwood finish, stable fittings, tin roof and all modern improvements in stable construction; cost $7,000. Also a residence for F. Kane, Riverside, Ohio; frame, slate roof, pine finish, iron mantels, plumbing and other conveniences; cost $3,500.

S. S. Godley, architect, is busy on plans for H. A. Mental & Bro., city, for a store and flat building; brick, tin roof, bathroom and laundry outfits, pine finish, mantels, etc.; cost $4,500.

John H. Ball, architect, has drawn plans for a Mr. T. B. Collier, Avondale, Ohio; stone, slate roof, tiling, hardwood finish and mantels, stained glass, electric work, etc.; cost $10,000.

Columbus, Ind.—Architect C. F. Spunell: For T. A. Thompson, two-story dwelling, 35 by 60 feet, frame shingle roof, iron cornice, bathroom, mantels, grates, wainscoting, softwood finish; cost $3,500. For Mrs. E. T. Brevort, two-story frame residence, 30 by 40 feet, wood mantels, wainscoting, grates, stained

glass, etc.; cost $3,000. For German Lutheran society, at Seymour, Ind., church edifice, one-story, 45 by 85 feet; brick and stone, slate roof, iron columns, galvanized iron cornice, wood altars, frescoing, cathedral glass, pipe organ, ash finish and wainscoting and all modern church improvements; cost $15,000.

Detroit, Mich.—Architects M. L. Smith & Son: For Hutton Bros. & Co., two-story factory building, 50 by 80 feet; brick, tin roof; cost $3,200. For Wm. C. Claxton, three two-story dwellings, 26 by 40 feet; frame, shingle roof; cost $4,800. For Dr. Clawson, one-story hall building, 41 by 90 feet; brick, gravel roof; cost $5,000. For M. A. Edwards, two-story dwelling, 30 by 48 feet; brick, with stone trimmings, slate roof; cost $5,000.

Architect Geo. Meyers: For Mr. Williams, three-story double dwelling, 33 by 42 feet; brick, with stone trimmings, gravel roof; cost $4,500. For Michigan Steel Co., one-story foundry building, 135 by 150 feet; cost $8,000.

Architect A. C. Varney: For Robert Donaldson, two-story dwelling, 32 by 67 feet; brick, with stone trimmings, slate roof; cost $8,000. For same party, two-story double dwelling, 42 by 58 feet; cost $6,000. For A. C. Varney, two-story dwelling, 25 by 48 feet; brick, with stone trimming, slate roof; cost $4,000. For G. W. Pack, two-story double dwelling, 40 by 58 feet; brick, with stone trimming, slate roof; cost $6,500. For L. Depew, two-story dwelling, 26 by 64 feet; brick, with stone trimming, slate roof; cost $5,500. For same party, two-story dwelling, 26 by 63 feet; frame, slate roof; cost $6,000. For Dr. C. J. Lundy, three-story office block, 22½ by 78 feet; brick, with stone trimmings, gravel roof; cost $8,500.

Architects Hess & Roseman: For the Evans estate, three-story dwelling, 22½ by 65 feet; brick, with stone trimmings, gravel roof; cost $5,500. For same, one-story hall and saloon, 40 by 58 feet; brick, gravel roof; cost $6,000. For Clarke estate, three-story hotel, 58 by 162 feet; frame, gravel roof; cost $12,000. For Kershmer & Dixon, two-story dwelling, 27 by 50 feet; brick, slate roof; cost $5,000. For Alex. S. Kinner, two three-story dwellings, 40 by 56 feet; brick, gravel roof; cost $8,000.

Architects Spier & Rohns: For Mt. Hope society, church building, 51 by 59 feet; frame, shingle roof; cost $7,000. Two-story dwelling, 33 by 68 feet; brick, with stone trimmings, slate roof; cost $7,000.

Architect Henry Englebert: For Polish R. C. society, church building, 98 by 138 feet; brick, slate roof; cost $40,000. For block of four stores, three stories, 105 by 38 feet; brick, gravel roof; cost $8,000.

Architects Mason & Rice have completed the plans for the First Presbyterian church; it will be 88 by 165 feet, of the Romanesque style of architecture and constructed of brownstone; the cost will be about $80,000. Also plans for the remodeling of the First National Bank at a cost of $6,000; a story will be added to the rear part of the building for the Michigan Mutual Life Insurance Company and a new vestibule of marble, hardwood and plate glass placed in the front of the bank. Also completed, the plans for Mrs. Ellen Hammond's new block of stores and offices; it will be six stories and contain four stores on the first floor, the upper floors being devoted to offices; cost about $65,000. Also finished drawings for an $8,000 double residence for James Hanley; a stone residence for Rev. Fr. Ryan, Amherstburg, Ont., to cost $6,000; an $8,000 frame residence for Y. F. Blake, Grand Rapids; a $40,000 residence for D. W. Minshall, and a $30,000 residence for Joseph Strong, Terre Haute, Ind.

Architects Van Leven & Preston are making plans for a three-story brick and stone parish schoolhouse for St. Mary's Church society, Jackson, to cost $10,000, and a two-story residence for E. H. Brown, West Superior, Wis., to cost $3,500.

Architect Albert E. French has finished plans for a $4,000 brick engine house for the Monroe water works.

Byron Morton will build a $2,000 addition to his residence, 162 Lafayette avenue.

John M. Cattel will erect two two-story frame dwellings, to cost $4,700.

Nutt & Clark will soon begin the erection of a block of brick stores and flats, to cost $8,000.

Dubuque, Iowa.—Architects Heer & Sons have prepared the plans for a two-story and basement brick school building, 60 by 32 and 34 by 32 feet in size, to cost $5,000.

Architect E. Hyde: Plans for new Julien Hotel, 94 by 113 feet; five stories, brick and stone, all modern hotel equipments; cost $100,000. For power building, five stories, 34 by 113 feet, brick and stone, for wholesale purposes; cost $15,000. For W. Francis, of Independence, Iowa, two-story and attic frame residence; cost $12,000.

Architect F. D. Hyde: For B. M. Harger, alterations and additions to residence, common brick, shingle roof; wood mantels, plate and stained glass, gas fixtures, electric work, furnace heat, bath and laundry outfit, hard and soft wood finish, etc.; cost $4,000.

Duluth, Minn.—The prospect for a very active building season is very flattering. Work will be begun or continued on a number of expensive buildings which will carry up the aggregated expenditure of the season to a high figure. Among them may be named the new union depot on which $150,000 will be expended; on the Henderson Building which will cost $225,000 when completed, $50,000 will be expended; $200,000 on the Chamber of Commerce. Among the costly buildings that are sure to go up this season may be named the Boeing Building, to cost $40,000; the Sutphin Building, to cost $25,000; a Catholic seminary, to cost $50,000; the Lincoln school building, to cost $50,000; two railroad freight depots, to cost $50,000, not to name several others approximating these figures.

The M. E. Church society has purchased a site and will at once erect a $3,000 church building.

Architect O. G. Trophogen is preparing plans for a block of brick stores for Munger & Markell, to be erected on the site of the opera house recently burned. Also has prepared plans for a five-story building for H. P. Wieland to cost about $40,000. The first story will be built of brownstone and plate glass, while the upper stories will be of red pressed brick with terra-cotta and brownstone trimmings. Also has prepared plans for the New London town hall (bids now being taken), frame, 26 by 52 feet; cost $10,000. Preparing plans for addition to city "lock-up," to cost $3,500.

M. J. Davis will erect an $8,000 residence; plans already prepared.

Plans have been prepared for a block of seven large stores to be erected by a Minneapolis party. It will have a frontage of 170 feet and be two stories high, built of brick and cost $25,000.

F. D. Day will erect a two-story business building. It will be 25 by 60 feet in size and cost $10,000.

Captain C. S. Baker has let the contract for erecting a two-story brick residence on Twentieth street between Fifth and Sixth avenues east for $12,000.

The Presbyterian Church society has raised $15,000 toward the erection of their church edifice and as soon as $25,000 is raised will commence the work of building.

Architect McMillan has returned from Chicago, bringing with him the plans for the Masonic Temple and Opera House. The building will be six stories high, the first three stories built of brown sandstone, and those above with red pressed brick with sandstone trimmings. Iron fretwork and stained glass will be used in profusion in the decoration.

Fredonia, N. Y.—Architects Curtis & Archer report: Office building, fireproof, brick and terra-cotta, four stories, iron beams and staircase, hollow tile floors, electric light, asphalt roof, 60 by 120; to cost $75,000; for National Transit Company, Oil City, Pa. Schoolhouse, brick, two stories and basement, slate roof, galvanized iron cornice, eight rooms, blackboard, etc., to cost $12,000. Residence, frame, two stories, bathroom outfit, outside, wood cornice, pine finish, wood mantels; $3,000; for William H. Terrant, Mayville, N. Y. Residence, frame, two stories, pine finish; $2,500; for S. W. Reynolds, Forrestville, N. Y. Residence, remodeling of, O. T. Schombloom, Bradford, Pa.

Grand Island, Neb.—Architect H. T. J. Fuehrman: For F. T. Marsh, business block, 44 by 100 feet; common ornamental and enameled brick, with stone and terra-cotta; tin roof; galvanized iron cornice; architectural iron work; plate and stained glass; iron beams and columns; iron store fronts; English tiling; elevators, etc.; cost $150,000. For P. Dumpley, three-story hotel building, 66 by 66 feet; pressed and ornamental and enameled brick and terra-cotta; galvanized iron work; iron beams and columns and stairs; annunciators; bathroom outfits; boiler; dumb waiters; passenger elevator, frescoing; plate and ornamental glass; grates; hardwood finish; steam heat; laundry fixtures; wood mantels; marble work and tiling; office fixtures and railings; plumbing; ranges; French and German tiling, and modern improvements; cost $15,000.

Hutchinson, Kan.—Architect A. B. Howitt: For S. H. Sidlinger, residence, brick and stone, shingle roof, architectural iron work, plate and cathedral glass, wood mantels, grates, marble work and tiling, electric work, bath outfit, sanitary plumbing, softwood finish, etc.; cost $3,500.

Kansas City, Mo.—The building boom may be said to be now on. All the architects are busy, and permits are being taken out by the score daily. The prospect is that this will be a phenomenal year in building.

Architects Hogg & Rose have prepared plans for a $25,000 residence for Jas. Fairweather. Also plans for a $20,000 Presbyterian church building; brick and stone, slate roof, galvanized iron cornice, ornamental glass, furnace heat, etc. Also three-story frame building for George Hoffman; cost $3,000. Bank building at Hannibal, Mo.; brick, cutstone, terra-cotta, steam heat, plate glass, safes, vaults and all modern conveniences; cost $14,000. For John Blumgrist, Wyandotte, Kan., $9,000 livery stable.

Architects James & James are engaged on plans for a $250,000 building for the Board of Trade at Toronto, Canada; seven stories, sixty apartments, Romanesque style, brick, cutstone, architectural iron, slate roof, steam heat, all modern improvements. Also for a depot for the K. C. & I. Rapid Transit Company; cost $7,500; flat roof covered with composition, stove heat, etc.

Architect Harry Kemp has prepared plans for a $12,000 residence for R. W. Hocker; two stories, modern style, brick and cutstone material, architectural iron, gable roof covered with slate, wood cornices, wood mantels, furnace heat, plate and ornamental glass, annunciators, electric bells, interior decorations, etc.; already under way.

Architect M. Hughes has prepared plans for a $3,000 brick store and dwelling for D. Kilby. Also modern residence for Noonan Bros., contractors. Preparing plans for seven-story store and office building for John McLeavy; brick, cutstone, terra-cotta, iron beams, ornamental iron work, plate glass, steam heat, passenger and freight elevators, electric work, etc.; cost $75,000.

Architect F. C. Grum has prepared plans for a three-story store building for N. T. Price & Co.; brick, cutstone, terra-cotta, architectural iron, flat composition roof, plate glass; cost $6,000. Also an apartment building for O. B. Gunn; five stories, fifty-six rooms, 43 by 120, brick, cutstone and terra-cotta, architectural iron, flat composition roof, wood mantels, tile work, steam heat, plate glass, gas fixtures, annunciators, electric apparatus, dumb waiters, passenger and freight elevators, frescoing and all modern improvements.

Architect Jas. Bannon has prepared plans for a $28,000 residence for Jas. H. Ogelby; brick, terra-cotta and cutstone, flat slate roof, wood cornices, ornamental iron, wood mantels, furnace heat, stained glass and all modern improvements.

Architects Vrydagh & Shepard have prepared plans for a $10,000 M. E. church building, 80 by 130 feet; Gothic style, cutstone, marble steps, wainscoting, etc., hot air heat, art glass, electric light, interior decorations, church fixtures.

Architect J. C. Stewart has finished plans for a $35,000 Catholic church; brick, cutstone, slate roof, copper cornices, steam heat, art glass, church fixtures. Also drawing plans for an $18,000 residence for B. McMecham; brick, cutstone, flat composition roof, marble mantels, furnace heat, plate glass and modern improvements.

Architects Resch & Braecklin have prepared plans for a $110,000 eight-story hotel building for M. Geist; Romanesque style, brick, cutstone and terra-cotta, architectural iron, flat composition roof, wood and slate mantels, marble work and steps, tile work in floors, steam heat, plate, stained and ornamental glass, electric light, electric bells, dumb waiters, passenger and freight elevators, fireproofing, counters and office railings. Also made plans and let contracts for $4,500, for a store for G. T. Harwood; brick and cutstone, composition roof, plate glass. Also for $12,000 a store and tenement for Mrs. L. C. Dunley; brick, composition roof, architectural iron, plate glass. Also a $7,000 store for Julius Herald; three stories, eighteen rooms, Queen Anne style, brick, cutstone and terra-cotta, architectural iron, composition roof, stove heat, plate glass. Also store and tenement for Mrs. Luck; cost $9,500; three stories, sixteen rooms, brick and cutstone, terra-cotta, architectural iron, flat composition roof, wood mantels, plate, stained and ornamental glass. Also family hotel for Chas. A. Mueller; cost $65,000; five stories, twelve rooms, classic style, brick and cutstone, terra-cotta, architectural iron, flat composition roof, stone cornices, wood mantels, marble work, steam heat, plate glass, electric light, dumb waiters, passenger hydraulic elevators, fireproofing, counters and office railings. Also drawing plans for two houses; cost $4,000; for Bellan & Foster; brick and cutstone, slate roof, wood mantels, furnace heat, etc.

Little Rock, Ark.—Architect C. L. Thompson has prepared plans for a brick veneered two-story residence, 40 by 70 feet, for Dr. C. Watkins; cost $6,000. For Mrs. M. L. Turner, two-story brick veneered residence, 40 by 70 feet; cost $4,500.

Madison, Wis.—Architect O. J. Williams: For Mrs. L. Meredith, two-story residence, 26 by 50 feet; frame; shingle roof; wood mantels; grates; gas fixtures; bath, etc.; cost $3,000. For Mrs. E. C. De Moe, similar residence; cost $2,500.

Oshkosh, Wis.—Architect Waters is preparing plans for a number of buildings at the Waupaca Soldiers' Home, which will be constructed during the summer. Among them will be a Soldiers' Home proper in the shape of a hotel, built of wood, and costing in the neighborhood of $10,000.

Pittsburgh, Pa.—The strike among the building trades that is now on will seriously interfere, if not wholly destroy the promise of a healthy building season. Already its influence is being felt in the stoppage of sketches for projected buildings and plans under way.

Architects Bickel & Brennan report: Plans for eight brick dwellings, at a cost of $18,000.

Architects Longfellow, Alden & Harlow have completed plans for the Braddock First M. E. Church society, of church building. It will be built of buff fire brick; cost about $22,000.

Architect F. C. Sauer has prepared plans for brick residence, with stone trimmings, for Thomas Lynch, at Greensburgh, costing $12,000. Three-story business block, brick, for Mrs. Joseph Haber, at McKeesport; cost $18,000. Pressed brick dwelling, with granite sills, for Mrs. Margaret Sauer; cost $9,500. Pressed brick dwelling, with granite sills, for D. F. McAfee, at Edgewood station, P. R. R.; cost $9,000. Brick double dwelling, with stone trimmings, for Robert C. Musgrove, Alleghany; cost $9,000. Frame Church of the Sacred Heart, at Dawson, Westmoreland county.

Architect J. T. Steen has prepared plans for ten brick dwellings to be erected on the property of the Protestant Orphan Asylum, six will be three stories and four two stories. Will be attractive and supplied with all modern conveniences. Also plans for twenty three-story houses, for J. S. Brown and others; brick and terra-cotta façades. Also store and flat building for Miss J. Magee.

Architect W. S. Fraser has made plans for three brick dwellings, for Captain Vandergrift.

Architect F. C. Sauer has prepared plans for the following buildings: Parish residence for St. Michael's R. C. Church; cost $28,000. Business block for Mrs. Joseph Haber; cost $8,000. Two brick dwellings for Mr. Joseph P. Urben; cost $6,000. Brick dwelling for Joseph Dillon, McKeesport, Pa.; cost $6,200. Brick dwelling for J. T. Biddle, Baum's Grove; cost $2,950. Double brick dwelling for Messrs. Coyle & Stevenson. Frame church at West Newton, B. & O. R. R., for Rev. Wertz; cost $2,200. Frame dwelling for Leslie Gloninger. Two frame dwellings for William Brigge. Also, frame dwelling for William Griffith.

San Antonio, Tex.—Architect Alf. Giles has prepared plans for a residence for C. Ogden; brick, terra-cotta, stone and architectural iron work; wood and marble mantels, tile flooring, annunciators, electric work, dumb waiters, speaking tubes, etc. For Mrs. Francis Vance, two-story residence, 60 by 65 feet; brick, cutstone and terra-cotta trimmings; tin roof, ornamental iron work, wood and marble mantels, hardwood finish, plate glass and all modern improvements; cost $10,000. For Mr. Joske, two-story residence, 50 by 70 feet; brick, with cutstone and terra-cotta trimmings, tin roof, wood and marble mantels, hardwood finish, tile floors, etc.

Architect A. F. Beckman: Plans for a M. E. church, cutstone; cost $6,000.

Architect G. R. Gordon: For B. Wright, three-story residence; cutstone, with terra-cotta trimmings, architectural iron work, wood and slate mantels, dumb waiters, electric work, annunciators, etc.; cost $14,000. For Hass & Openheimer, store addition, brick and cutstone; cost $12,000.

Architect G. W. Lewis: For Halff Bros., store addition; brick and stone, composition roof; cost $16,000.

THE INLAND ARCHITECT AND NEWS RECORD.

Vol. XIII. ADVERTISERS' TRADE DEPARTMENT. No. 5

Prepared Paint.

The Sherwin-Williams paint, prepared, is not a mixture put upon the market for the mere purpose of enriching the men who make it. It is made and sold to paint buildings with. It was made at the first with some understanding of the building material it was intended to cover; with some knowledge of the conditions of exposure to which it would be subjected; with a definite knowledge that it must be a preservative; with a clear conception of its service as a decorative element. With these objects in view, was it possible to use any but the best materials, the completest facilities, the highest order of talent, in its production? Is it possible that, with such good objects to attain at the commencement, and a phenomenally successful experience of nearly twenty years, during which time this product has constantly tended toward a higher state of perfection in all points of its adaptation to architectural uses, this paint is unworthy of the architect's consideration? Would it be policy for a company of honorable gentlemen, who have spent the most fruitful years of their lives in producing, perfecting, and marketing standard goods, who have made their products famous for excellence all over the continent, to sully their fair reputation by letting the quality decline? It would not. Such men have all the emulation for progress and perfection in their business that architects do in their profession. A good prepared paint is a decidedly important article for architects to seriously consider, and to include in their specifications. The Sherwin-Williams paint has advantages which will commend it.

Trade Notes.

MESSRS. HEALY & MILLET are about to begin the frescoing of the Calvary Baptist Church, of Kansas City, Missouri, the stained glass of which they are also executing.

THE Peerless Brick Company of Philadelphia issued a four-card souvenir during the session of the third annual convention of the National Builders, just closed, in that city. It is a beautiful piece of typography, most artistically designed, and a credit to the company.

POTTS & ASCHE, plumbers, of Chicago, have secured the contract for the entire plumbing work of the Auditorium Building. The lavatory and toilet apparatus, closet, etc., will be furnished by the J. L. Mott Iron Works of New York and Chicago. This is one of the largest plumbing jobs awarded in this country, and the Mott goods will be used throughout.

WE call the attention of our readers to the "Boda Finish," illustrated on back page of cover. This invention has been lately introduced into Chicago, and is attracting much attention. It accomplishes in an easy and simple manner the difficult task of fastening interior finish to the walls without the use of nails. It is certainly a useful invention, and we predict that our readers will hear more of the Boda Finish in the near future.

THE contract for the entire frescoing and stained glass of the Auditorium Building has been awarded to Messrs. Healy & Millet, of Chicago. This is probably the largest order of its kind ever placed in this country, and the execution of the work will occupy a large number of men for fully six months. The preparation of the drawings will in itself occupy a number of experienced draftsmen, as it is intended to spare no efforts to make this work thoroughly in harmony with the strong characteristic of the building itself.

J. A. DUNKLE and S. F. Dunkle of Steelton, Pa., and J. B. Ewing of Harrisburg, Pa., have bought the entire plant and good-will of the Star Steam Heater Company, of Mount Joy, Pa., including the exclusive control of the patents. Large and commodious shops will at once be built at East End, Harrisburg, Pa., according to new plans especially adapted for their business. Three departments, namely, boiler making, machine and foundry, will be fully fitted out with the best machinery. It is expected that the new shops will be completed some time during July, when they will immediately be occupied. Meanwhile operations have begun at the old shops in Mount Joy, where work is being pushed to its utmost to supply the demand. The address of the firm is Star Steam Heater Company, Harrisburg, Pa., or Mount Joy, Pa., until after August 1. H. H. Lindemuth, the patentee, has connected himself with the new company and will give the boilers his supervision.

A NEW "finish" for furniture, earthenware, stucco, in and out door woodwork—new, comparatively, to this country, is fast gaining a place in the material market, namely, "Aspinall's Enamel," manufactured by Aspinall & Co., of Peckham, London, England. This enamel is prepared in all colors and tints, is easily applied and produces the most satisfactory results. It will stand boiling water and climatic effects without perceptible change. It is worthy of investigation by architects, contractors and owners, as it presents interesting possibilities.

THE Barstow Stove Company, New York, Boston and Providence, Rhode Island, has issued a neat pamphlet, descriptive and illustrative of their well-known furnaces and stoves, heaters and ranges. The Barstow furnace, especially the iron furnace, has several peculiar features which on presentation necessarily attract attention; among them may be stated the lowness of altitude, fitting them for low cellar construction; large and deep ash pits, vapor pans, dust flues, sift grates, etc. The numerous testimonials that are a part of the pamphlet from prominent men who have had experience with this furnace in its use, attest that in addition to being an excellent heater, it is a very economical one.

UNQUESTIONABLY slate should be utilized in the covering and ornamenting of buildings more than it is, and there is a strong probability that in the near future it will be. Already there is a considerable forward movement in this direction in many parts of the country, and the time cannot long be deferred when, rather than the exception, its use will be the rule. Probably one of the best slates for roofing purposes on the market is known as the product of the York and Peachbottom Manufacturing Company, of York, Pennsylvania, and architects who may desire to introduce slate into their practice would do well to investigate the claims. It is vouched for by the supervising architect at Washington, D.C.

WE have just received from Hulbert Fence and Wire Company, St. Louis, Missouri, their twelfth annual catalogue. It is a handsomely illustrated pocket edition, and contains the newest designs for fencing modern residence, cemetery or public grounds, as well as the cheapest farm fencings, with factory prices and freight rates to all parts of the United States. There are designs for ornate steel lattice, and tabulated prices for estimating the cost of office, bank, elevator and window guard work of wire or lattice. This company, among the most extensive manufacturers in their line, attribute their wonderful success to superior products, low prices and a liberal use of printers' ink, and can refer with pride to fences and ornate work adorning the finest hotels, cemeteries and private residences in every state and territory. They will cheerfully mail catalogues to all who write and mention that they are readers of this paper.

MR. SAMUEL CABOT, of Boston, Massachusetts, the inventor and manufacturer of the creosote wood preserving stains, has issued a beautiful brochure entitled, "From East to West," containing twenty-five perspective views of attractive modern first-class country and suburban residences, the product of as many leading architects scattered over the eastern states. The views are in imitation of water-color painting, and will be preserved by many architects for "suggestions" in kindred work. The object of the pamphlet is for a reminder of the excellence of the creosote stains and their adaptability to architectural work of the character indicated; also of the "preservative" for brickwork, another specialty of the Cabot manufacture, as each of these articles have been used in beautifying the buildings shown, and that implies that their utility and excellence is indorsed by the architects whose names accompany the several perspectives.

PROPOSALS.

COLORADO STATE CAPITOL.

PROPOSALS FOR ROLLED BEAMS AND COMPOUND GIRDERS FOR THE COLORADO STATE CAPITOL BUILDING.

Sealed proposals for furnishing rolled floor beams and compound girders, in place, will be received by the secretary of the board of capitol managers until 1 P.M., mountain time, on Saturday, June 1, 1889, and then opened by the board.

The beams and girders are to be put in place in the building, as required, and properly fastened according to the plans and specifications, which are to be seen in the office of the superintendent, P. Gumry, at the capitol grounds, Denver, Col. The work of setting the first floor beams can be commenced as soon as the contract is signed.

The approximate quantities are: First floor beams, 115 tons; second floor beams, 109 tons; third floor beams, 99 tons; compound girders, 23 tons. Total, 346 tons, not including fish and angle plates, bolts, tie-rods, etc.

Proposals to be indorsed, "Proposals for Floor Beams and Compound Girders," and addressed to the secretary of the Board of Capitol Managers, postoffice box 2291, Denver, Col., or delivered at the office of the board, 44 Barclay Block, 1755 Larimer street.

By order of the board,

DONALD W. CAMPBELL, Secretary.

DENVER, Col., April 23, 1889.

TO CONTRACTORS.

OFFICE OF THE EXECUTIVE COMMITTEE OF THE BOARD OF COMMISSIONERS, CUYAHOGA COUNTY SOLDIERS' AND SAILORS' MONUMENT, CLEVELAND, Ohio, April 29, 1889.

Sealed proposals will be received by the executive committee until 12 o'clock M., of Monday, May 20, 1889, from bronze founders actually engaged in the business, for the bronze castings and other work pertaining thereto to wholly complete and set in place on the site selected in Cleveland, Ohio, when the committee directs, a group of Infantry soldiers called the "At Short Range," composed of nine figures, each about 7 feet 6 inches, mounted on a base or plinth 7 feet by 19 feet. Also a piece of artillery.

Bids to be indorsed "Proposals for Bronze Statuary," and addressed to the care of Levi F. Bauder, secretary of the Board of Commissioners, Wick Block, Cleveland, Ohio.

The plaster models can be seen at the studio on Rockwell street, Cleveland, in rear of City Hall, where a member of the committee will give any additional information if desired, or by addressing Levi T. Scofield, architect, 22 Case Building, Cleveland, Ohio.

Each bid to be accompanied with a written guarantee, signed by two responsible sureties. The Commissioners reserve the right to reject any or all bids, to accept or decline to close a contract as in their discretion they shall deem it their duty to do. The time for completion and delivery of castings mounted must be stated, and will be considered in awarding the contract. Bids will only be received for first-class standard statuary bronze and first-class workmanship.

Payments will be made monthly, retaining ten per cent until the contract is completed.

WM. J. GLEASON, Chairman.
JAMES BARNETT,
JAMES HAYR,
J. B. MOLYNEAUX,
LEVI T. SCOFIELD,
Executive Committee.

COLORADO STATE CAPITOL.

PROPOSALS FOR CAST-IRON COLUMNS FOR THE COLORADO STATE CAPITOL BUILDING.

Sealed proposals for furnishing 122 cast-iron columns, complete, in place, will be received by the secretary of the Board of Capitol Managers until 1 P.M., mountain time, on Monday, July 1, 1889, and then opened by the Board.

The columns are to be put in place in the building as required, and properly set according to the plans and specifications, which are to be seen in the office of the superintendent, P. Gumry, at the Capitol grounds, Denver, Colorado. These columns will weigh, when complete, with bases, capitals, lugs, etc., about 210 tons, more or less, but bidders must make their own calculations.

All proposals must be accompanied by a small sample casting, showing the quality of material and workmanship that the bidder proposes to furnish, and with a certified check on a responsible bank for the sum of $1,000 as a guarantee that the bidder will enter into contract to furnish and erect the columns at the prices bid, if the contract is awarded to him.

Proposals to be indorsed "Proposals for Cast-Iron Columns," and addressed to the Secretary of the Board of Capitol Managers, P. O. box 2291, Denver, Colorado, or delivered at the office of the Board, 44 Barclay Block, 1755 Larimer street.

By order of the Board.

DONALD W. CAMPBELL, Secretary.

Denver, Colorado, May 4, 1889.

RESIDENCE FOR JUDGE JAMIESON, LAKE VIEW, ILL.

J. L. SILSBEE, ARCHITECT, CHICAGO.

DESIGN FOR AN ENTRANCE TO A CITY HOUSE.

Awarded First Place, St. Louis Architectural League Competition.

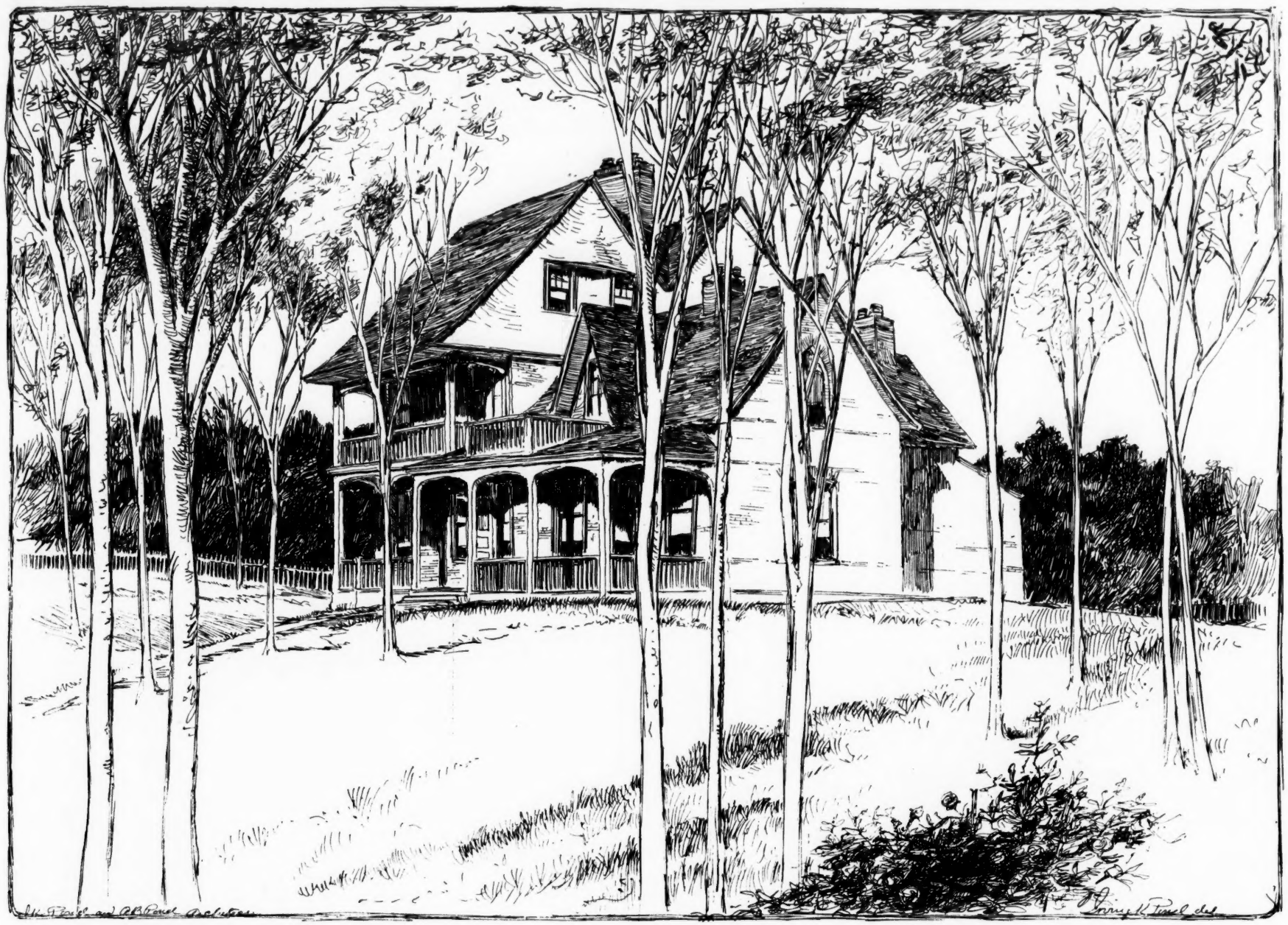
DESIGNED BY J. W. LONGFELLOW.

SCHOOL AT PARK SIDE, ILL.

M. L. BEERS, ARCHITECT, CHICAGO.

SCHOOL AT PARK SIDE, ILL.

M. L. Beers, Architect, Chicago.



RESIDENCE OF JOHN W. LANGLEY, ANN ARBOR, MICH.

ADDITIONS AND ALTERATIONS BY IRVING K. POND AND ALLEN B. POND, ARCHITECTS, CHICAGO.

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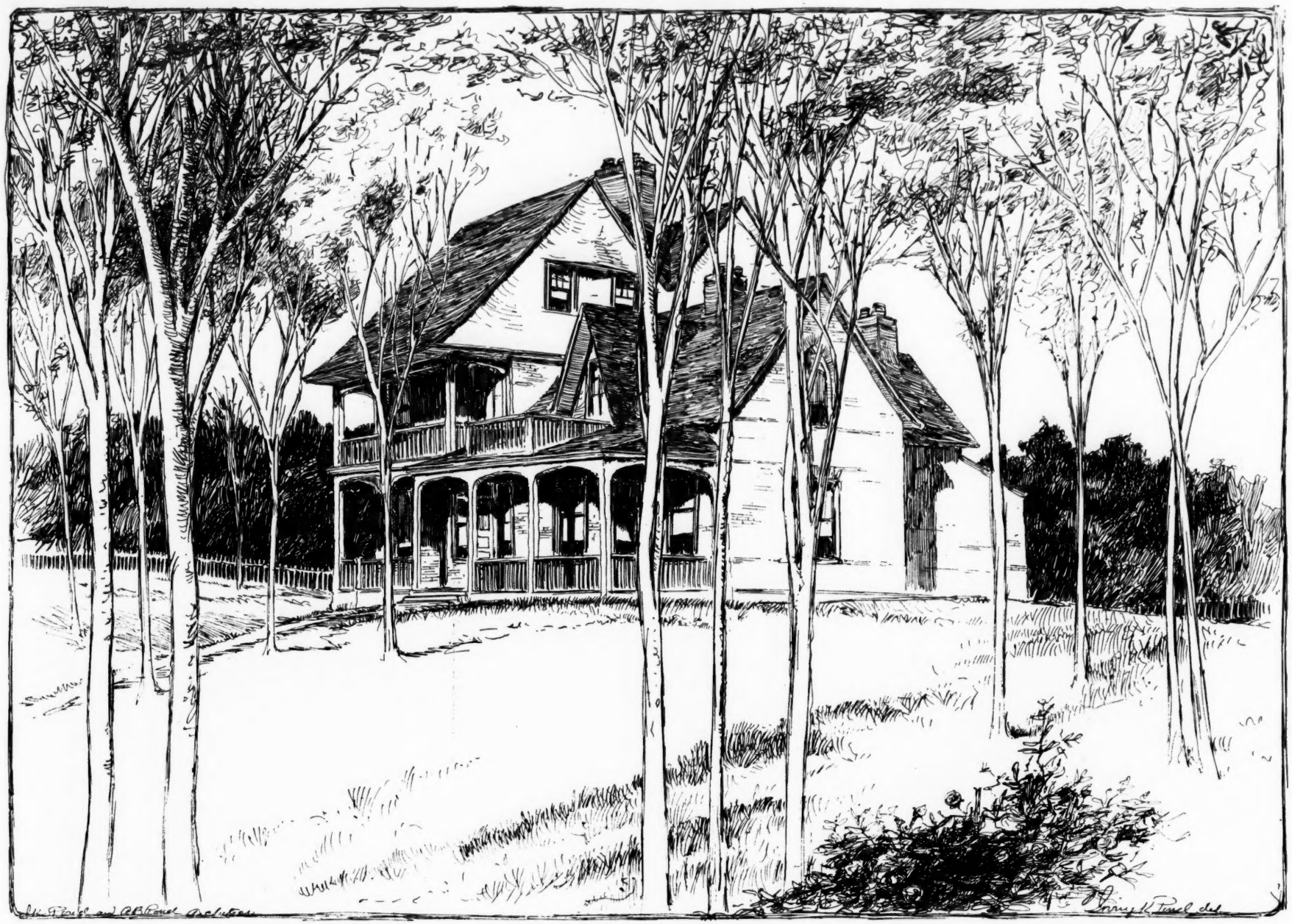

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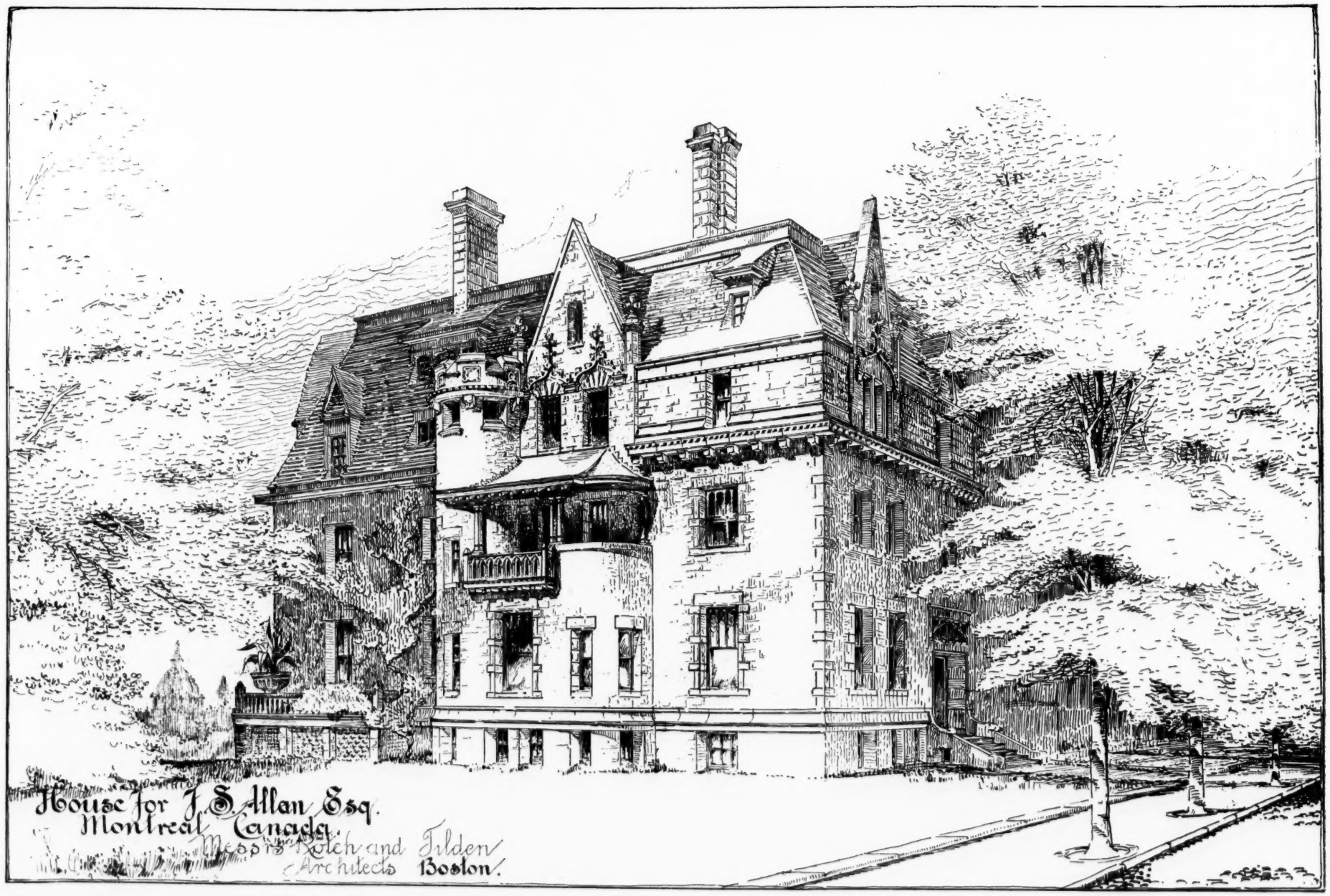
RESIDENCE OF JOHN W. LANGLEY, ANN ARBOR, MICH.

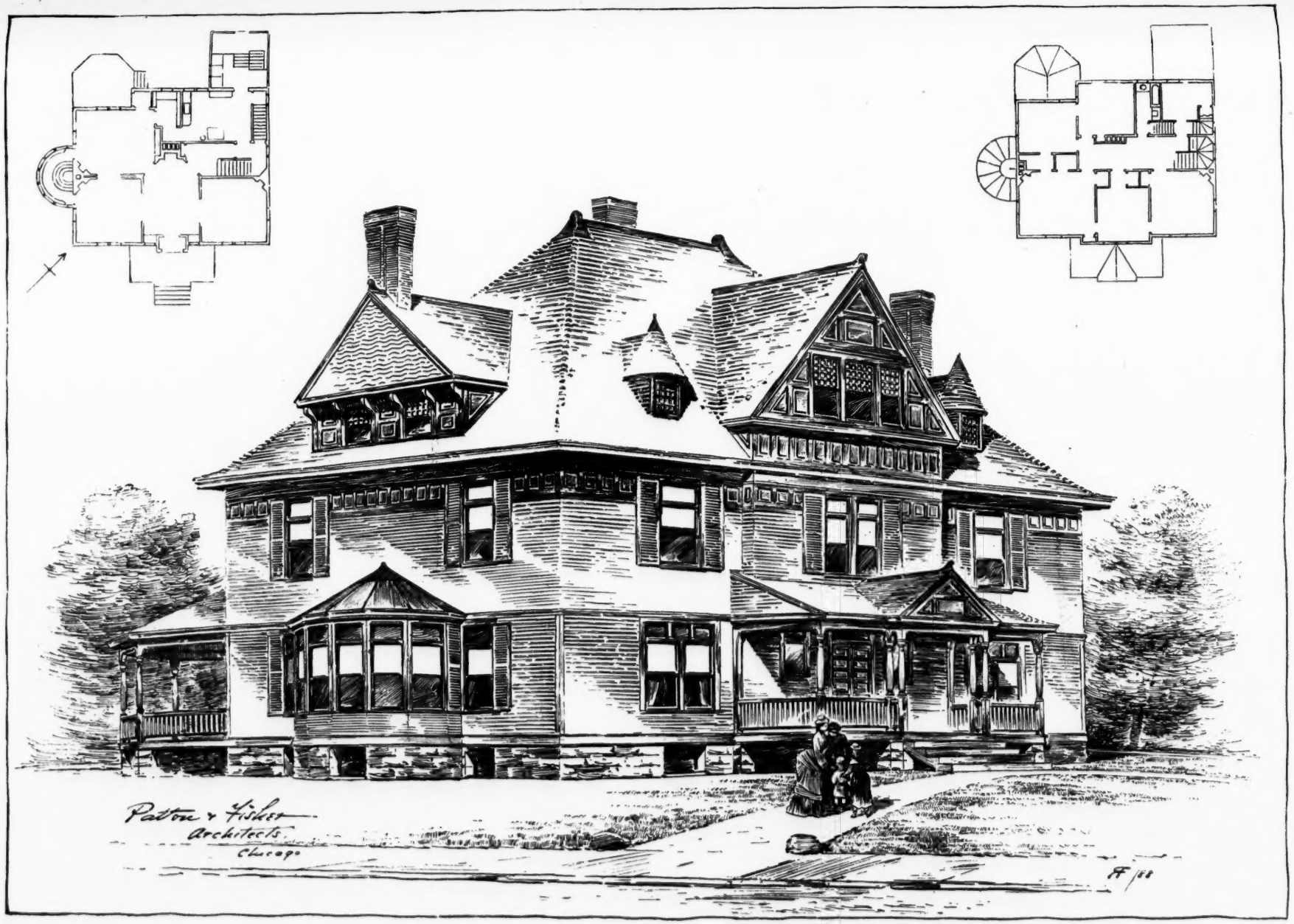
ADDITIONS AND ALTERATIONS BY IRVING K. POND AND ALLEN B. POND, ARCHITECTS, CHICAGO.

RESIDENCE
AT WILLIAMSPORT, PA
FOR MRS JAS M. CAMBLE

ALBERT W. DILKS · ARCHITECT ·
1021 CHESTNUT ST · PHILA · PA.



House for J. S. Allan Esq.
Montreal Canada.
Messrs Rotch and Tilden
Architects Boston.

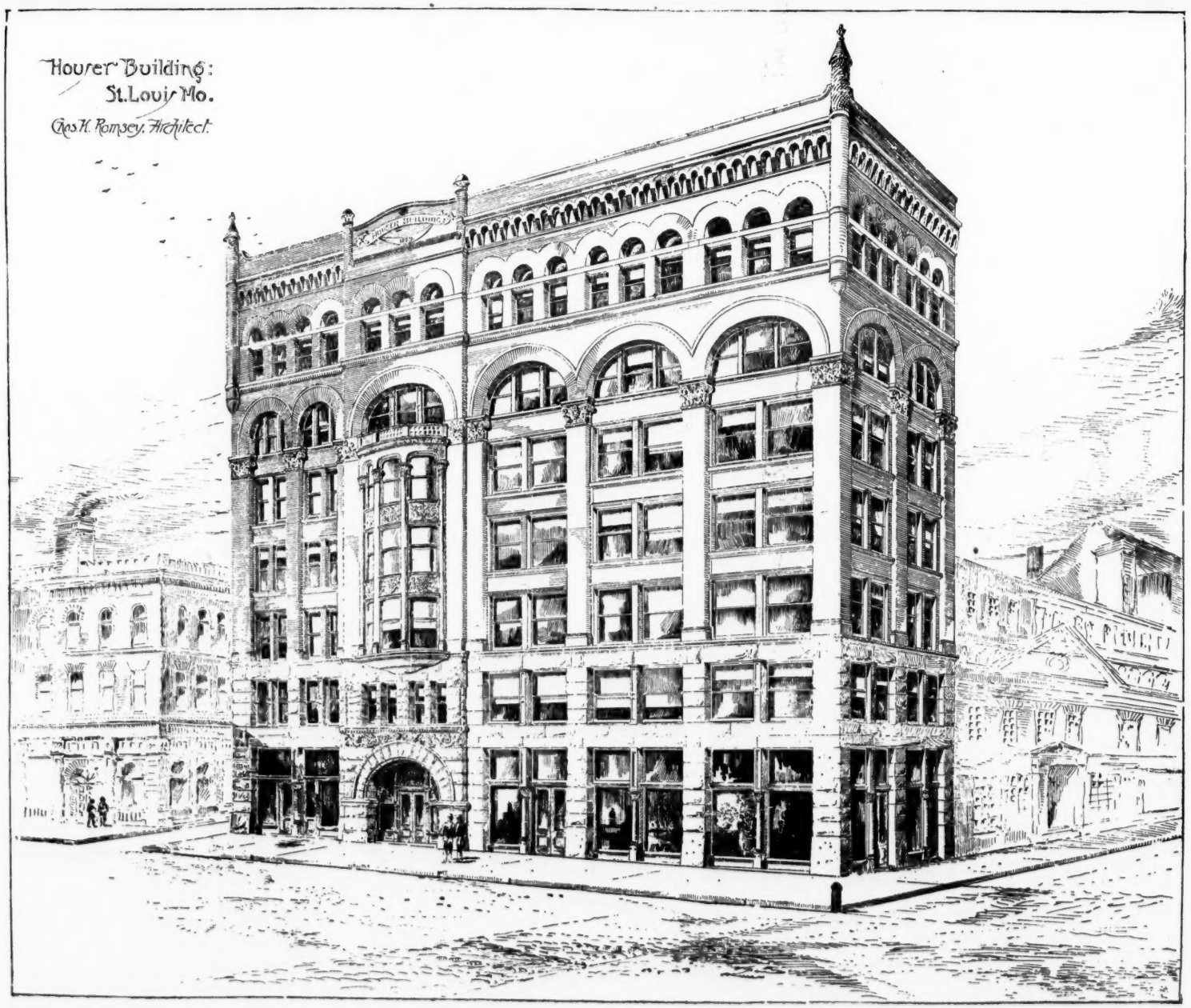


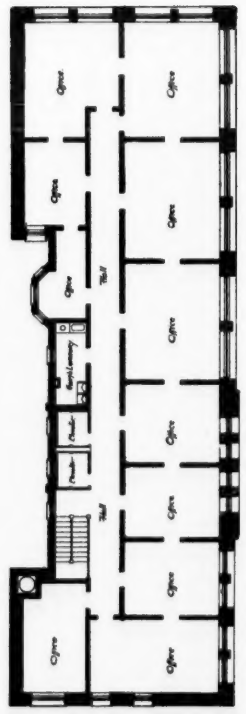
RESIDENCE OF JAMES V. RIDGWAY, HINSDALE, ILL.

PATTON & FISHER, ARCHITECTS, CHICAGO.

Houser Building:
St. Louis Mo.

Chas H. Romsey, Architect.





Second Floor Plan

HOUSE FOR MR. CHAMBERLAIN, CHESTER, NEW YORK.

E. G. W. DIETRICH, ARCHITECT, NEW YORK.