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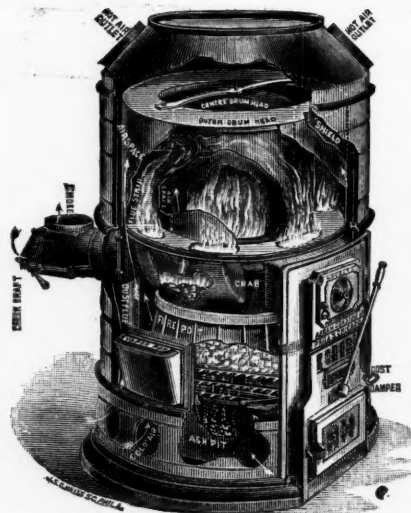
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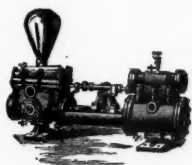
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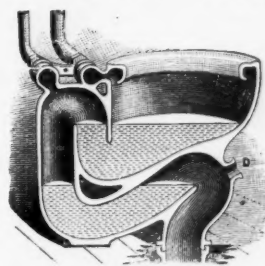
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Carpenter.....	3 00	2 50	2 00@3 50	9 hrs. 30c. h. up.	2 50	2 00@2 50	3 00@4 50	3 50	3 00	2 75	1 75	3 00	2 50	3 75	2 25	2 75	2 50	3 50	2 50	3 50	
Cabinetmaker.....	3 00	3 00	3 00	3 00	3 00	2 00@2 50	3 00	3 00	3 00	2 00	2 00	3 00	2 50	2 50	2 50	2 50	3 00	2 50	2 50	2 00	
Finisher.....	3 00	3 00	3 00	3 00	3 00	2 00@2 50	3 00	3 00	3 00	2 00	2 00	3 00	2 50	2 50	2 50	2 50	3 00	2 50	2 50	1 75	
Gasfitter.....	3 00	3 00	3 00	3 00	3 00	2 00@2 50	3 00	3 00	3 00	2 00	2 00	3 00	2 50	2 50	2 50	2 50	3 00	2 50	2 50	1 75	
Laborer.....	1 25	1 25	1 25	2 50@3 00	1 50	1 50@1 75	1 50	1 50	1 50	1 00	1 00	1 50	1 50	1 25	1 25	1 25	1 50	1 50	1 25	1 25	
Painter.....	2 50	2 50	2 50	2 25@2 50	2 50	2 25@3 00	2 50	2 50	2 50	2 00	2 00	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50	1 75	
Glazier.....	3 00	3 00	3 00	3 00	3 00	2 25@3 00	3 00	3 00	3 00	2 00	2 00	3 00	2 50	2 50	2 50	2 50	3 00	2 50	2 50	1 75	
Plasterer.....	12c. y	3 00	3 00	8 hrs. 3 50	3 50	3 50	3 50	3 00	4 00	4 00	3 00	4 00	3 50	3 50	3 50	3 50	3 00	4 00	3 50	2 25	
Plumber.....	3 50	3 50	3 50	3 50@4 00	3 50	3 50	3 00	4 00	4 00	4 00	3 00	4 00	3 50	3 50	3 50	3 50	3 00	4 00	3 50	2 00	
Stonemason.....	4 00	3 00	3 00	4 00@4 50	3 50	3 50	3 25	3 00	4 00	4 00	3 00	4 00	3 50	3 50	3 50	3 50	3 00	4 00	3 50	2 00	
Carver.....	5 00	5 00	5 00	4 50@5 00	5 00	5 00	5 00	5 00	4 00	4 00	3 00	5 00	4 00	4 00	4 00	4 00	3 00	4 00	3 00	3 00	
Stonemason.....	3 50	3 50	3 50	3 75@4 00	3 50	3 00@3 50	3 00	2 75	4 00	4 00	3 00	5 00	3 50	3 50	3 50	3 50	3 00	4 00	3 00	3 00	
Stonesetter.....	3 00	3 00	3 00	3 75@4 00	3 50	3 00@3 50	3 00	2 75	4 00	4 00	3 00	5 00	3 50	3 50	3 50	3 50	3 00	4 00	3 00	3 00	
Roof (Tin).....	3 75	3 75	3 75	2 75	2 75	2 50	2 50	2 50	3 00	3 00	2 50	3 00	3 00	2 75	2 75	2 75	2 50	3 00	2 50	1 50	
Slater.....	3 00	3 00	3 00	3 00	3 25	2 50	2 50	2 50	3 00	3 00	2 50	3 00	3 00	2 75	2 75	2 75	2 50	3 00	2 50	1 75	
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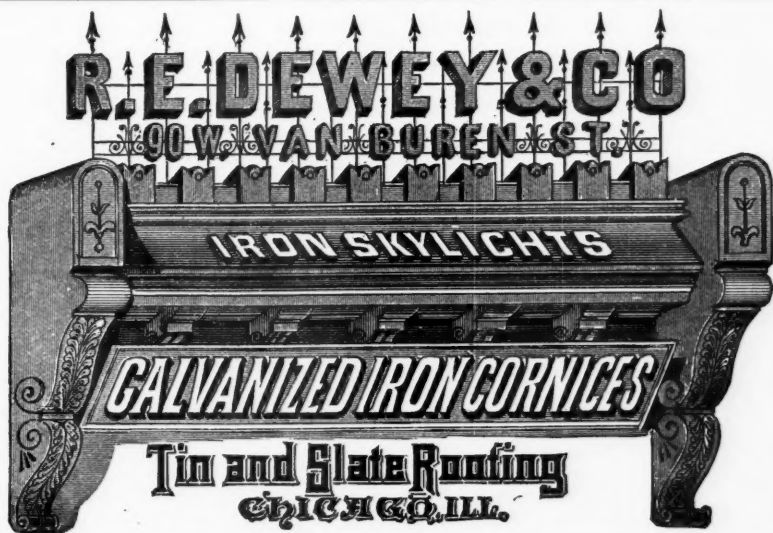


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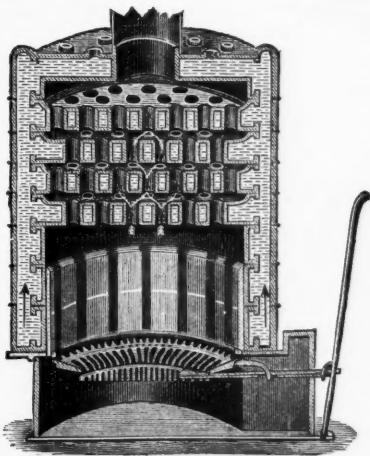
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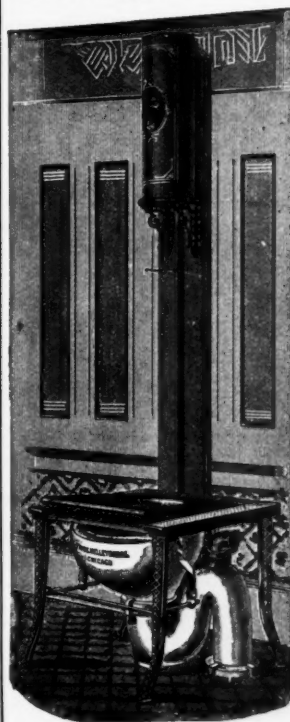
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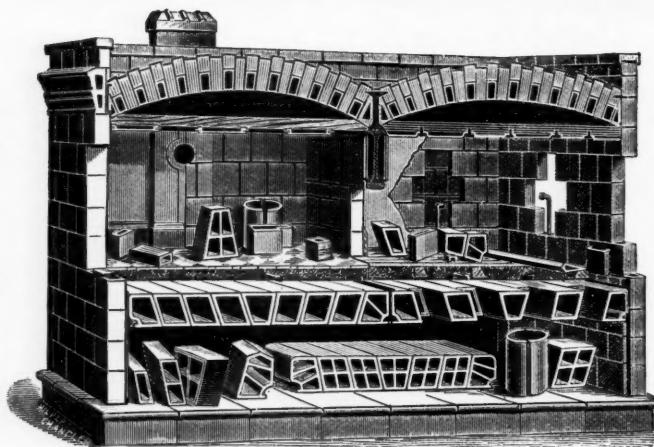
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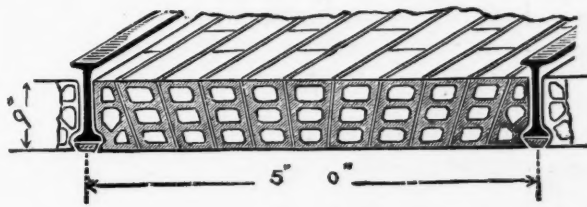
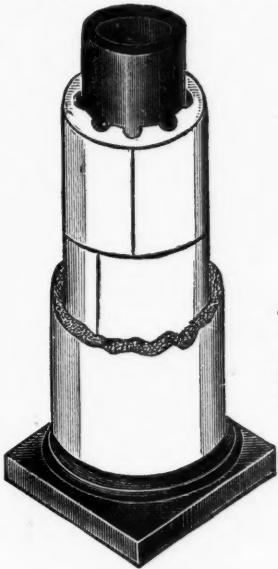
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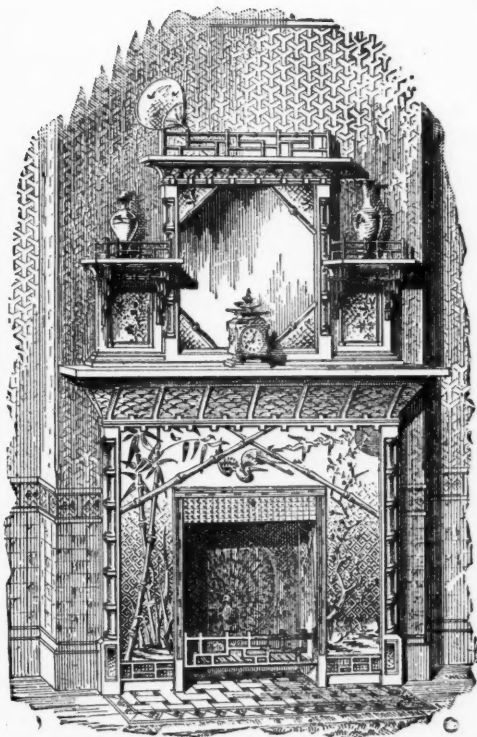
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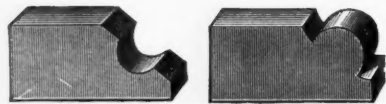
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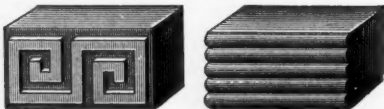
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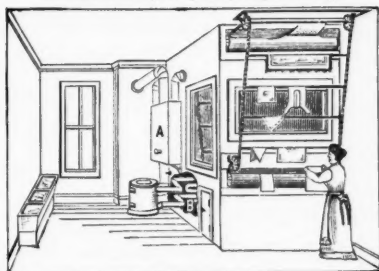
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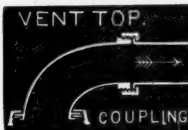
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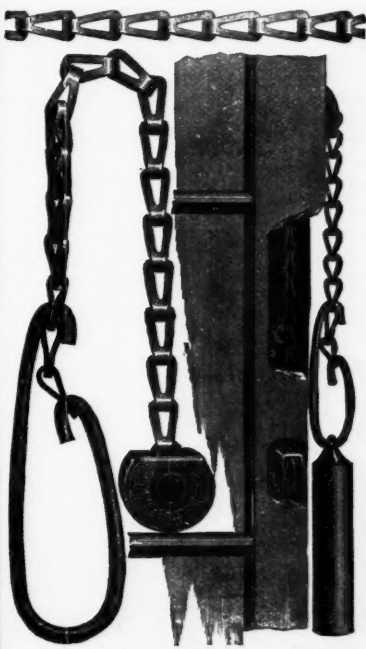
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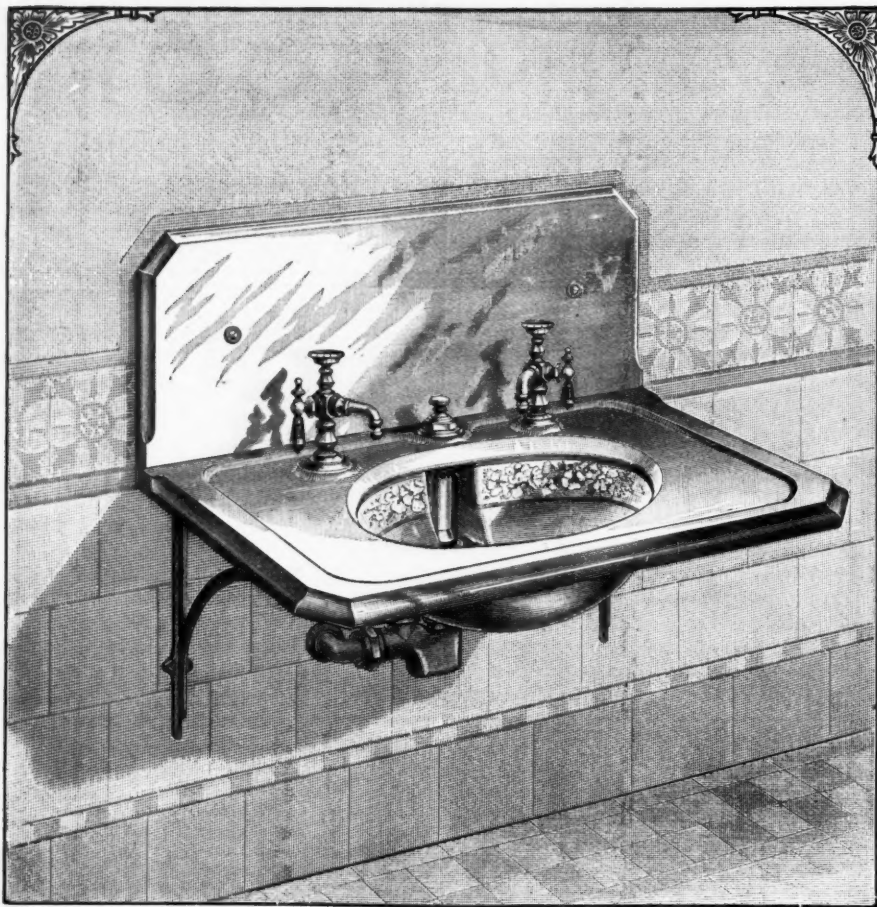


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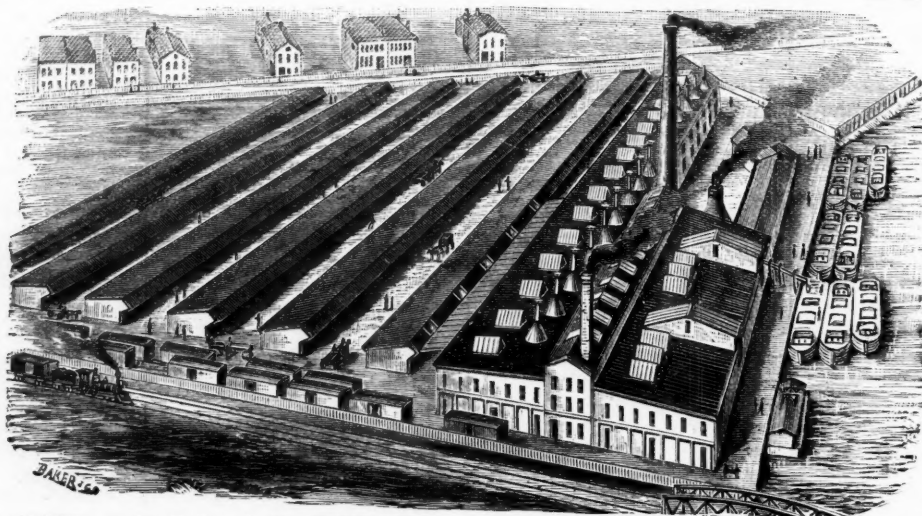
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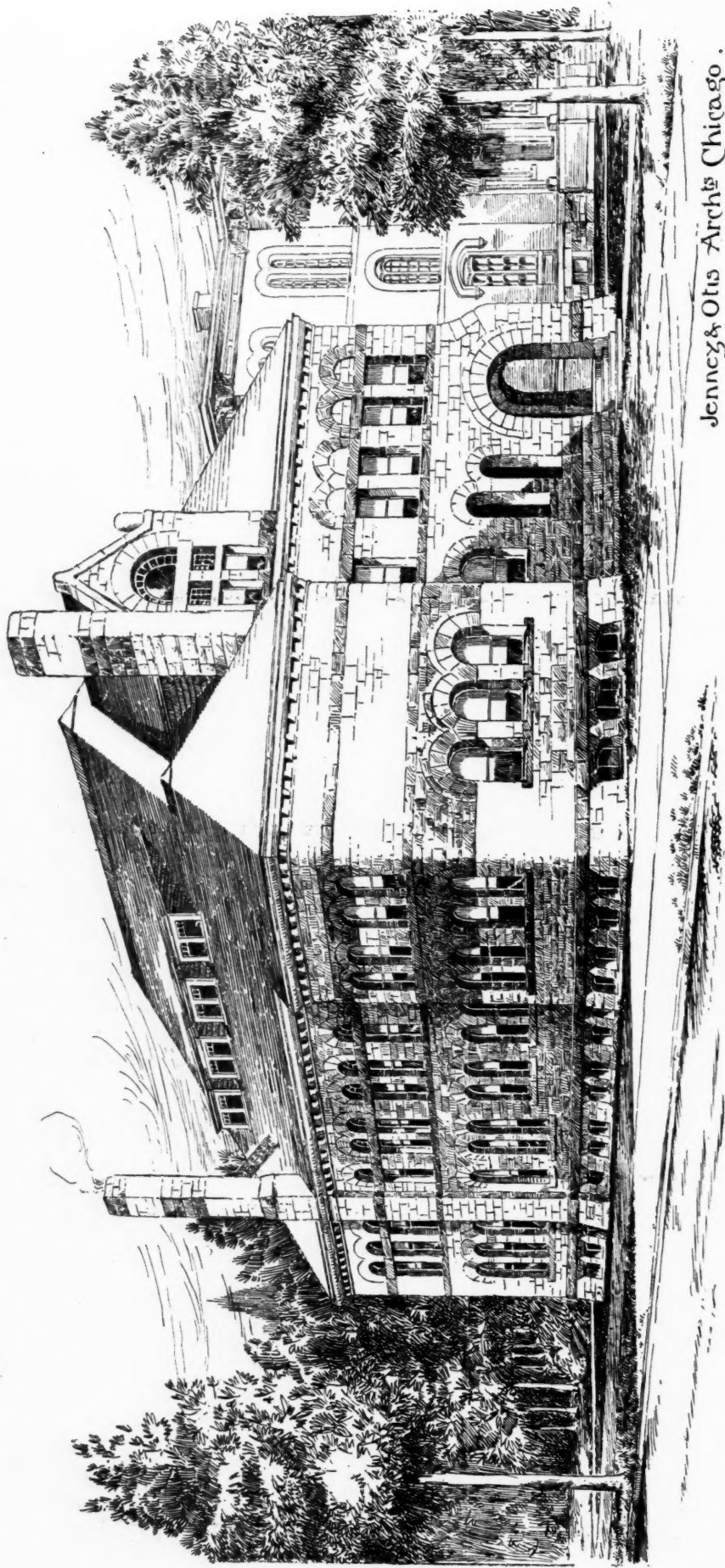
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THE next convention of the Western Association of Architects will be held in Cincinnati, on Wednesday, November 16. In certain respects this convention is of unusual significance and interest. Whatever was ephemeral in the enthusiasm which gave birth to the association has now passed away. Whatever men there are likely to relapse into indifference, will have by that time reached the point of greatest indifference. In other words, the association will be in a position to show its real strength and weakness. Of its real success there can be as little doubt as of the necessity for its existence. But how rapidly it will grow in power, to accomplish those objects for which it was formed, is the question, and to this no individual member of the association can be indifferent. In no respect is the present status of the architectural profession in America satisfactory. We are, perhaps, as well off here as anywhere else; but compared with what should be the status and public recognition of a "learned" profession, we are not well off.

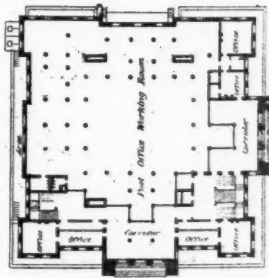
THAT this position should be equally high with that of the law or medicine no one may question. But if architects are to attain this height, it must be through such coöperation and association as will first elevate each individual to deserve the place, and second, command public recognition of the high standard thus obtained. The association is, therefore, valuable where it aims in these directions, and it succeeds as these aims are realized. That this is the view of the officers is evinced by their action in relation to the next convention. They are sending circulars to each member, impressing him with the importance of the convention, and with the true aims of the association. Circulars are also addressed to each member, and to each chairman of standing committees, calling upon them for full and carefully considered reports. The profession at large is addressed by them, stating the objects of the association and calling for coöperation. It is the intention of the officers to make a notable collection of photographs, drawings, prints, etc., illustrating the executed work of American architects during the last ten years; and to accomplish this, each member has been invited to contribute, and all of the leading men of the American Institute as well. The exhibition is intended to be very comprehensive, and is to be for the purpose of showing buildings rather than drawings. In all respects the convention promises to be notable.

THE Association of Ohio Architects will hold its semi-annual meeting at Cleveland, on Thursday, July 21. This will be the first meeting the association has held at Cleveland, and should not only prove of great interest to the architects of that city, but be attended by every member throughout the state. The measures that will come before the convention will be of vital importance to the entire building interest of the state, much attention having been given since the last meeting to the work of securing proper legislative acts, not only for the government of the architectural profession, but for general conducting of contract work. The committees upon statutory revision, and the proper licensing of architects, will report the progress made in this direction with the last legislature, and that upon lien laws will also report progress. As a full support is necessary to aid the committee in securing proper legislation, which will not only largely benefit the entire profession, but the public at large, no architect can afford to be absent from this meeting, where valuable assistance can be given in regard to future plans. As the coming convention of the Western Association will be held at Cincinnati, the state association

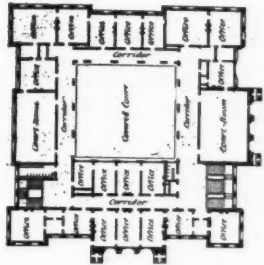
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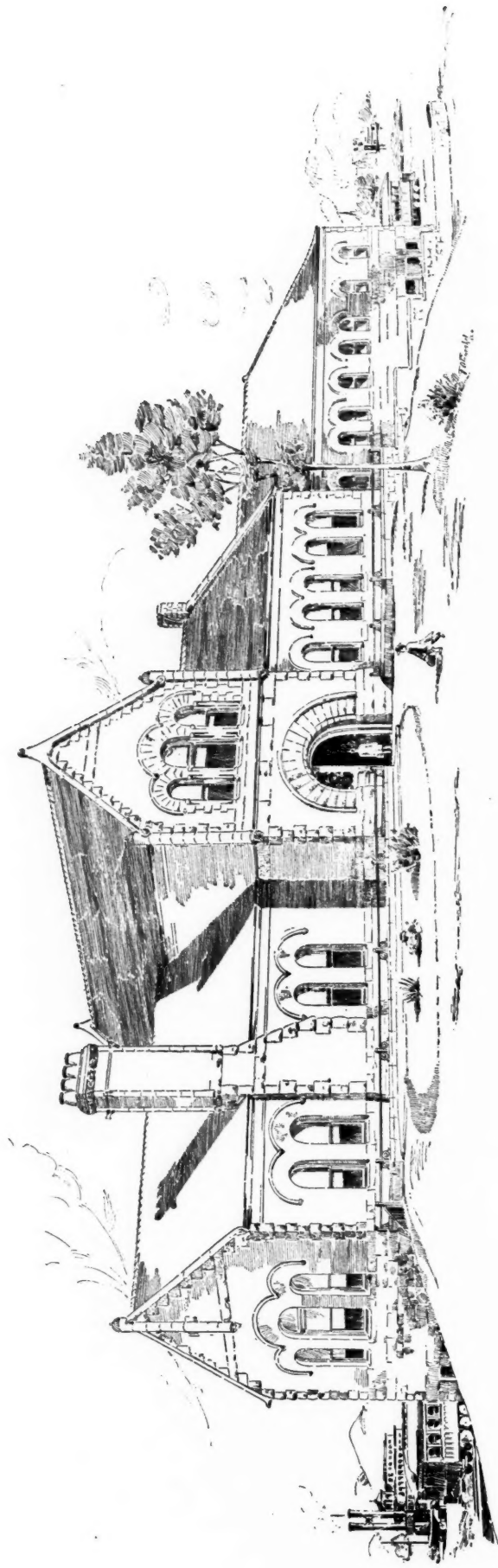


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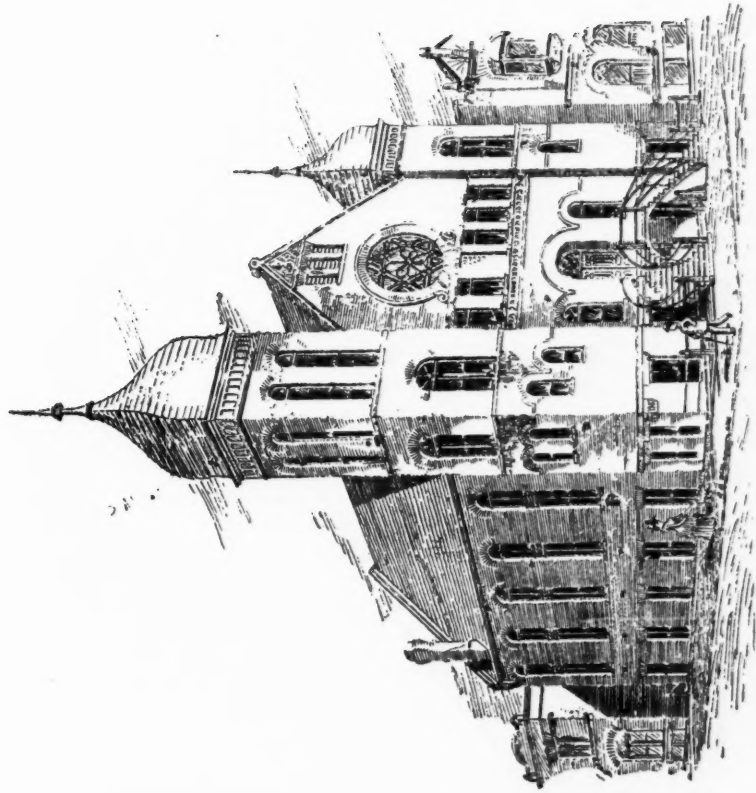
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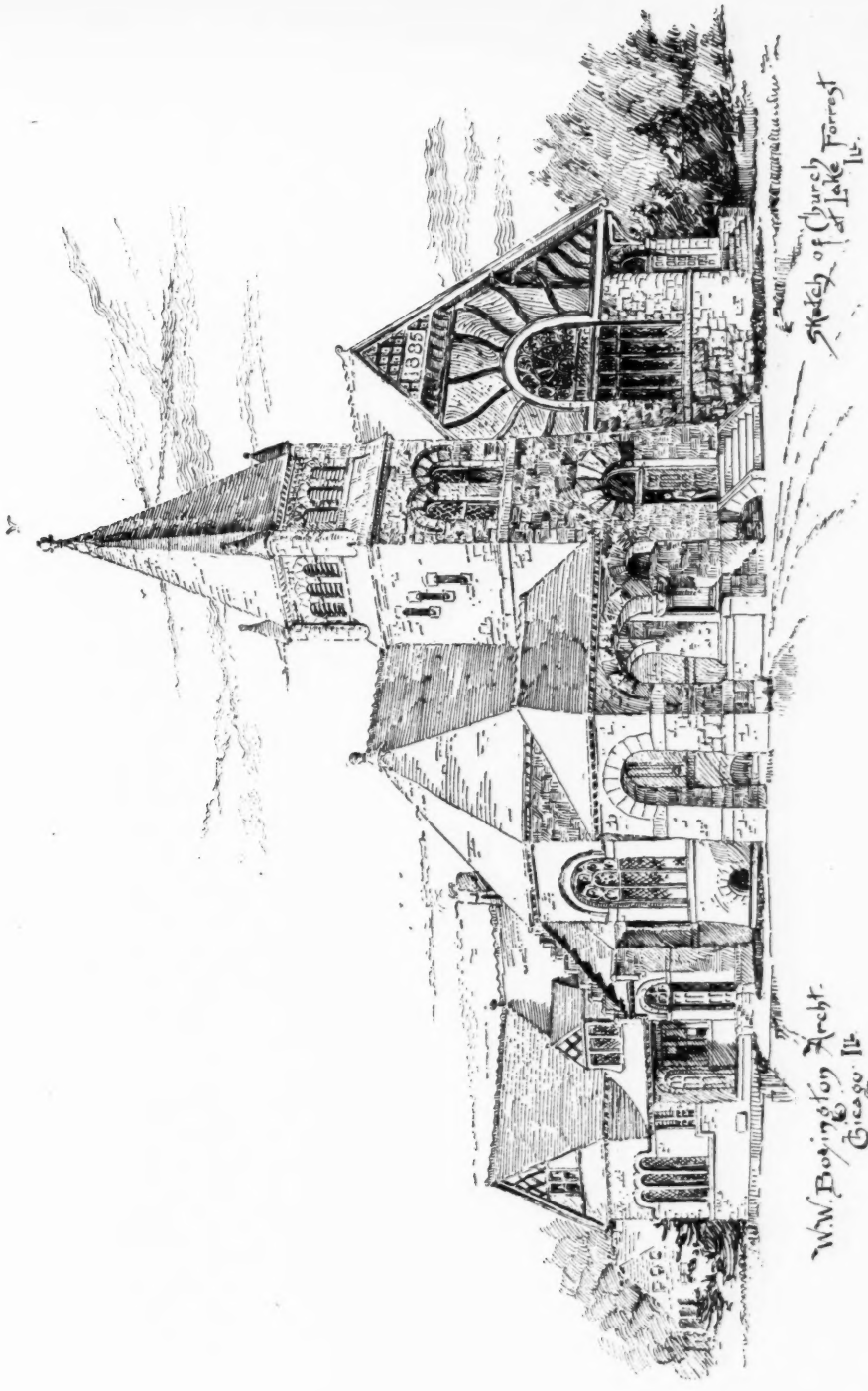


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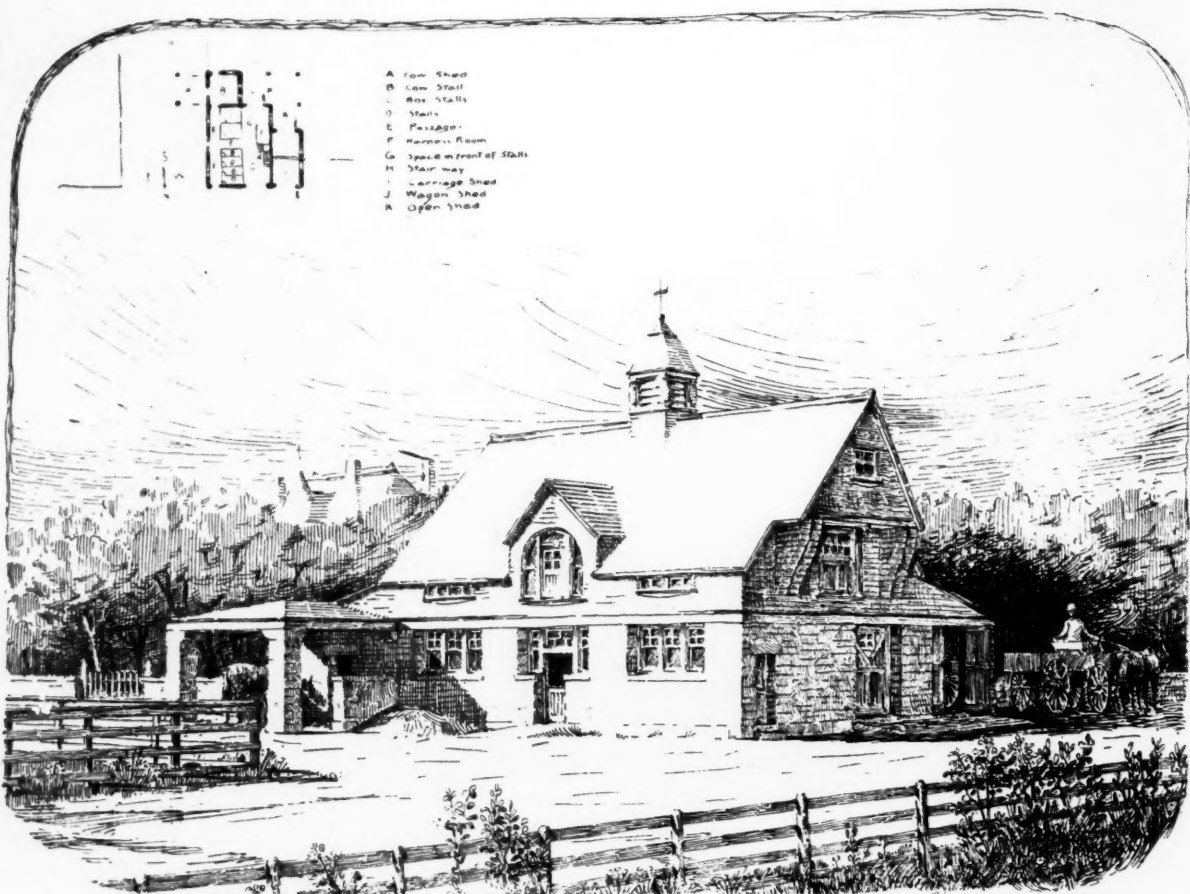


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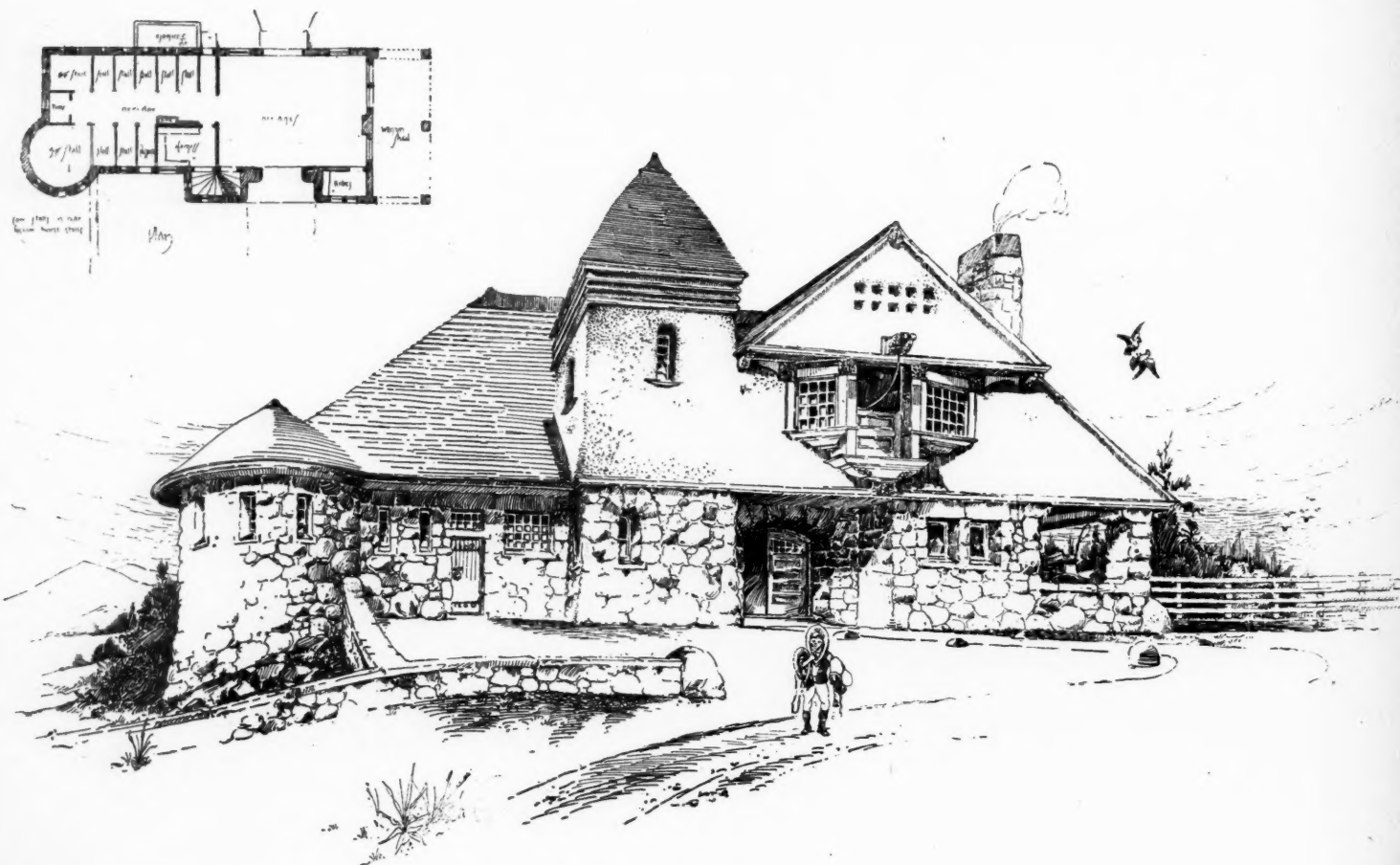
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will be interested in making it in every way successful. This should not be left for the individual architects or even the Cincinnati chapter to bear the responsibility of, but ways and means should be fully discussed by the state association, and the report of the Committee on Entertainment, which was appointed for this purpose at the last annual meeting, given substantial indorsement.

WHILE the work of the arbitration committee of the Master Masons' Association and the Bricklayers' Union of Chicago, is in progress, the entire attention of the building interest seems to be directed to the result, as if this would bring about the final settlement, and the eradication of all unjust assumption on the part of unions in the building trades, and the instant resumption of business. So concentrated has been the popular mind upon this point that the fact is overlooked that, while the bricklayers are an important factor, the most important, perhaps, in the building trades, they are but a part of the whole. The carpenters' union is as unjust in its demands as that of the bricklayers, but lacks their strength and has a stronger and more united association to oppose. In fact all unions in Chicago have copied after that of the bricklayers, and are only inferior to them in strength. When an agreement is reached by this arbitration committee, general action should be taken by the Central Council of the Building Trades before a general resumption of work is attempted. Unless that council can publish to the world that the arbitrary demands of trades' unions have become inoperative in Chicago, and that there is now a certainty that the measures taken will place the entire building interest in such a position that strikes and lockouts will no more be resorted to; that building will in the future be free from the interruptions common in the past, there will be no healthy revival of building this year. It is not a settlement of differences between masons and bricklayers that the public has demanded, and it is not this settlement that will bring about the revival of business that is so anxiously looked for by all interested, but it is the permanent victory of justice and personal freedom over brute force and unwarranted interference with the business of others by improperly conducted unions. Half measures will not do, an "agree to disagree" policy will not do; but now, while business is suspended, and so much time and money has been spent in so just a cause, no half measure should be for a moment countenanced. The work of the Central Council of the Building Trades of Chicago begins when the masons' arbitration committee makes its report.

AS we go to press the arbitration committee, composed of five members of the Master Masons' and Builders' Association of Chicago, and five from the union bricklayers and stone masons, with Judge M. F. Tuley as umpire, makes its report, which we print in full in this issue. From an arbitration standpoint no fault can be found with the rulings of the umpire, and as an entirety the report will for a long time stand as a precedent in all disputes in the building trades. We are, however, not prepared to fully concur in the policy of the master masons' association in appointing the arbitration committee from its own body before the matter had been disposed of by the Central Council of the Building Trades. That body was organized for this work on a broad plan, by which not only the arbitrary rules of the existing union of bricklayers might be eradicated, but in all other unions in the building trades in Chicago. Recognizing that, beside the particular evils in each union which needed their attention, greater harmony and greater facility for work might be attained, the entire work should be carried out on one plan. For instance, in the matter of hours. While eight hours might be conceded to bricklayers if their interests

alone were considered, this committee would look to the interests of the other trades, and decide on a number of hours that would best suit the majority. Because in the building trades it is more or less inconvenient for different trades to work different hours, the bricklayers having now agreed on eight as a working day, others will have to conform to it. Thus the bricklaying trade, considering its own interest alone, sets the pace for all. A majority of carpenters, both contractors and workmen, would rather work nine or ten hours, but their work is so connected with that of the masons that this is hardly practicable. Two points in the ruling seem thoroughly wrong. The report seems to concede to the workman a right to not only still have a voice in, but to control the apprenticeship question, and it also seems to limit the employer to the hiring of members of the union. If this is the spirit of the agreement it is wholly wrong, and the principle of individual liberty, which has been so nobly fought for up to the present time, seems to be in danger of being thoroughly ignored. It may yet be necessary for owners and architects to teach contractors and workmen alike, that to them a principle means something more than a "glittering generality."

INDIANA is to have a soldiers' monument, which, if the present intention is carried out, should surpass any similar work in the United States. The legislature has passed a bill appropriating \$200,000, to be expended in its design and erection, and the G. A. R. posts have appropriated \$25,000 additional. A committee to carry out the provisions of the bill has been appointed, composed of George J. Langsdale, of Greencastle, chairman, George W. Johnston and D. M. Ransdell, of Indianapolis, and S. P. Voiles, of Salem. J. F. Gookins, of Chicago, an artist of considerable repute, has been asked to act with the committee in the capacity of secretary. The general plan of the committee is to advertise for designs, with the privilege of accepting one or rejecting all; pay \$1,000 to the design accepted, and \$500 for second choice. The monument is to occupy a circular park in the center of the city of Indianapolis. Anxious as we are to see public attention turning to the consideration of monumental art, we do not desire in any way to discourage so laudable an enterprise, but must say at the start that their method of obtaining a design is no worse and no better than the general competition plan that is pursued, with very slight variation, by public officers throughout this country. There is no variety in the results obtained however. They are always the worst possible.

IN conversation with one of the committee, a statement was made which shows how a committee like this one, and composed of able, intelligent and honest men, are restricted by the law under which public works are executed. He said, in effect, "The law calls for a competition, but we know that artists of repute will not design for nothing, or go into a lottery scheme in which the chances of success are so small. We may, however, get from some young and ambitious designer such an one as will suit us. We do not expect this, however, and we are at liberty to, and probably will, throw aside all the designs offered, and employ one of the half dozen leading designers in the country to carry out the work." No stronger comment upon the value placed upon designing talent by the average legislator can be found than in the offer of \$1,000 (which is usually the minimum prize) for designs calling for the expenditure of from a quarter to half a million of money. The price of brick, stone and mortar is easily estimated, but because talent cannot be piled up and measured it is consequently the least considered element, even in the erection of a work purely devoted to the expression of a sentiment.

The Disposal of Sewage of Isolated Country Houses.*

BY WILLIAM PAUL GERHARD, C.E., CONSULTING ENGINEER FOR SANITARY WORKS.

[Continued.]

IN the following I shall dwell more at length upon the disposal of sewage by subsurface irrigation, for, in my judgment, this is the most available system for the disposal of liquid and semi-liquid wastes of isolated country houses. The system has long ago attracted public attention, and has, in recent years, been taken up by the foremost sanitary engineers, for more than any other method, it promises the entirely successful solution of the problem of sewage disposal for isolated houses. It certainly recommends itself, owing to the peculiar facilities for disposing of sewage *without creating an offense to sight or smell*, for it is only too well known that open or surface irrigation becomes, in many cases, exceedingly objectionable in close contiguity to mansions or dwellings.

The origin of the subsurface irrigation system is usually attributed to the Rev. Henry Moule, Vicar of Fordington, the inventor of the earth closet. He looked upon it as the best solution of the slopwater disposal question for cottages which adopted the earth-closet system. But according to Mr. Edwin Chadwick, subsurface irrigation had previously been tried independently and systematically on a large scale by M. Charpentier, a French vine-grower, near Bordeaux. Mr. Chadwick states that the results which the latter obtained with vines and fruits, as well as with market-garden produce, were most satisfactory. The system would probably never have grown to its present popularity had it not been for Mr. Rogers Field, Mem. Inst. C. E., who, recognizing the desirability of intermittent action, invented his automatic flush tank, which he applied successfully to the disposal of liquid household wastes. His first experiments were made at some laborers' cottages, belonging to his own estate at Sheffield, in Essex. Since then the system has been adapted to all possible conditions, and has given such satisfaction that it is now considered admirably suited to isolated houses not in reach of a sewer, but having sufficient porous or well-drained ground about them, with favorable lay of the land. Col. Geo. E. Waring, Jr., was the first to try the system in this country, about fifteen years ago. Finding that it worked satisfactorily in the case of his own residence in Newport, R. I., then not in reach of a sewer, he adopted it afterward with success for the disposal of sewage of cottages and suburban residences, and on a larger scale for the purification of sewage at the women's reformatory prison at Sherburne, Mass., the Keystone Hotel, at Bryn Mawr, Pa., and at Lenox, Mass., for the sewage of the whole village. Since a number of years the system has been extensively applied by many sanitary and landscape engineers, and by a few progressive architects, for the disposal of sewage of isolated country houses or institutions not within reach of sewers, but liberally supplied with water and plumbing appliances.

The system is based upon the well-known fact that the aerated layers of soil next to the surface, the subsurface as it were, possess in a high degree the power of destroying organic substances buried in them, by nitrification and oxidation, aided during a part of the year by vegetation, and assisted at all times by minute organisms or bacteria. The latter play an important part in the round of changes in Nature. "They are," says Tyndall, "by no means purely useless or purely mischievous in the economy of nature. They are only noxious when out of their proper place. They exercise a useful and valuable function as the burners and consumers of dead matter, animal and vegetable, reducing such matter with a rapidity otherwise unattainable to innocent carbonic acid and water. Furthermore, they are not all alike, and it is only restricted classes of them that are really dangerous to man. One difference in their habits is worthy of special reference here. Air, or rather the oxygen of the air, which is absolutely necessary to the support of the bacteria of putrefaction, is, according to Pasteur, absolutely deadly to the vibrios which provoke butyric acid fermentation."

I lay particular stress upon the importance of distributing the sewage close to the surface of the soil, at a depth not exceeding 10 or 12 inches. Aeration is a *conditio sine qua non* of the whole system. At greater depths oxidation and purification become very much slower, until they finally cease altogether. The *subsoil* is not able to effect a complete purification of sewage, as the oxidizing influence of the atmosphere does not so freely reach it. It is the layer of earth next to the surface, the *subsurface*, which acts on the sewage. Hence the name of the system is derived, and it is an error, committed quite frequently, and to which I have more than once called attention, to call the system "subsoil" irrigation.

We see, then, that only where sewage is distributed close to the surface, where sufficient oxygen attaches to the particles of the soil, are the organic matters in it taken up as nourishment by the roots of plants, and

reduced and destroyed by the bacteria in the soil. The liquid sewage, freed of its coarser impurities, soaks away into the porous ground, and thus becomes still more clarified by filtration, so that when removed by deep under-drains, it is generally found to be quite clear, colorless, free of taste or smell. By arranging an *intermittent* discharge, the upper layers of the soil are enabled to take up oxygen during intervals between discharges, and to prepare for the next volume of sewage, while the ground is prevented from becoming saturated, wet and swampy.

There is a radical difference between such a system and a loose or leaching cesspool. With the latter the area of soil used for purification is quite small as compared with the former, where the surface can be chosen in proportion to the amount of sewage to be disposed of, which is not a feasible thing to do with a cesspool. We all know that even in the case of a leaching cesspool, newly built and first put to use, some purification of the sewage which oozes out at its pores is accomplished by mechanical filtration. After some use, however, its pores clog up, and the soil around the cesspool becomes saturated with sewage matter, undergoing, in the absence of oxygen, a very slow process of decomposition. The sewage soaks away unpurified, polluting springs and wells, and the unwholesome gases generated taint the ground air, and, being given off at the surface, frequently enter our houses. It is for these reasons that all sanitarians look upon a leaching cesspool as a nuisance and a standing danger to health.

Briefly described, the subsurface irrigation system consists of two parts: *First*—An absolutely tight receptacle, or sewage tank for liquid household wastes, including the contents of water-closets. *Second*—A network of common distribution drain tiles, laid a few inches below the surface of the ground, with *open joints*, so as to permit the liquid to ooze out at numerous points. This network of pipes, buried in the ground, constitutes the irrigation field.

As stated heretofore, it is an important condition to insure the successful working of the system, that the discharge of sewage from the sewage tank to the irrigation field be *intermittent*, and that, instead of a constant, dribbling stream from the tank, there be a powerful rush of sewage in a large volume, so as to secure an even distribution and the perfect filling up of all pipes. It is, to say the least, desirable that the discharge should not occur more frequently than *once a day*, that is, every twenty-four hours, and the size of the tank should be governed hereby.

The soil of the field should, preferably, be gravelly and porous. All tight clay soils, and ground liable to dampness, should be properly under-drained by deep land drains. The sub-irrigation field should not be located too near a house, wherever there is abundance of land favorably located, permitting the sewage to flow away by gravity. As a matter of precaution, it is well that some attention should be paid, in locating the irrigation field, to the direction of the prevailing winds, although as a matter of fact, a properly working irrigation field is quite inodorous. So much is this the case that the tiles may be, and in practice often are, laid under the well-kept lawns adjoining summer residences, without ever causing an offense. Another precaution to be observed where the water supply of a country house is derived from wells or springs, is, that the field should not be located near them.

The preparation of the subsurface of the field is accomplished in the following manner: Common unglazed agricultural tiles, two inches inside diameter and one foot in length, are laid about 8 or 10 inches below the surface on continuous boards, or, better, in gutters of earthenware, laid accurately in the trenches at the uniform grade required. Should the tiles ever clog up, it thus becomes an easy task to take them up, to clean them and to relay them in the gutters, an operation readily performed by a common laborer. It is quite important that there should be between the tiles at each joint, a space of about $\frac{1}{4}$ inch to facilitate the oozing out of the sewage. Small earthen caps about 3 inches long are placed over the ends of tiles at each joint to protect it from dirt or earth falling from above. It is not necessary to give to the absorption tiles a greater fall than about 2 or 3 inches per 100 feet, for if laid at too steep a grade the sewage would rush to the lowest level and saturate that part of the irrigation field. It should be noted that much of the success of the system depends upon the accuracy with which the distribution tiles are laid. They should branch out from the bottom of the main carrying conduit, and special T or Y branches are manufactured for this purpose. The main drain should be laid at least 2 feet deep, and the 2-inch branches should be cemented until they strike the proper depth of 8 or 10 inches. The main drain conducting the sewage from the flush tank to the irrigation field should be 4 inches in diameter, except in the case of large institutions, when the size of the flush tank often requires a 6-inch main conduit. It can be laid with as much fall as the layout of the land will require, but where it approaches the absorption field its fall should be limited to 4 or 6 inches in 100 feet, to prevent the sewage from running to the lower part of the field, overcharging the lower lines of drains. The distance between the lines should

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average about 5 feet. The ramification and general layout of the lines will depend on the contour lines of the land. In the case of level ground the lines may be parallel to each other.

The number of feet of tiles which it is necessary to lay will depend upon the quantity of sewage delivered each day. It will vary, moreover, for like quantities of sewage, with the general character and porosity of the soil of the absorption field. Wherever the soil consists of a heavy clay or is liable to be wet or swampy, it is absolutely necessary to thoroughly underdrain the field by a complete system of agricultural tiles, laid at a depth of from 4 to 5 feet, removing and discharging the purified sewage as well as any excess of soil moisture.

The flush tank is usually built of hard-burnt brick, laid in hydraulic cement mortar, and made perfectly water tight.

An important and most necessary precaution to prevent the clogging of the siphon, which empties the tank, or of the distribution tiles, is to build in connection with the flush tank, and between the house and the latter, an intercepting chamber or grease trap, intended to intercept all solids, undissolved paper and fatty waste matters from the kitchen. Such a chamber is, in a certain sense, a cesspool, although it differs from the ordinary objectionable device of this kind in having its liquid contents frequently changed, and in being built of small size. Its emptying and cleaning must, of course, by no means be neglected. Much of the solid matter and paper, etc., is reduced by maceration and decomposition, and flows dissolved by water into the liquid sewage chamber. The overflow pipe connecting both must dip well below the surface of the water level in the first chamber to prevent scum or grease from overflowing into the flush tank. The flush tank proper should, generally, be built circular in shape, and of a size to hold one day's volume of sewage. The liquid wastes from the household are retained in this tank until it is filled, when its whole contents are suddenly delivered into the main drain, and thence into the irrigation tiles, whereby all the rows of tiles are *uniformly* charged, and the whole of the absorption field is brought into use each time the tank is emptied. If the sewage is discharged suddenly in a large volume, it oozes out, not only at the bottom, but also at the sides and top of each joint. The purification begins at once. The clarified liquid soaks away into the ground, the impurities being retained by the earth, where they are quickly destroyed. Air enters the pores of the soil and prepares it for future use, while the tank is gradually filling for the next discharge.

The interval required between two consecutive discharges, the exact proportion between capacity of tank and size of house, between size of tank and number of feet of drain tiles, etc., are details requiring judgment, skill and experience, and which must be left to be determined in each individual case separately.

To discharge the flush tank, recourse may be had to various mechanical appliances. The simplest arrangement, but one that requires daily attendance and some manual labor, is to place a gate valve at the outlet pipe leading from the bottom of the tank, which valve is opened or closed by hand whenever the tank becomes filled. This arrangement may answer for smaller country houses, in which the amount of water used is limited, being usually pumped into the tank by hand. An *automatic* device is preferable in many respects. This may be either a tumbler or tilting tank, or one of several siphon devices now in the market. I have, so far, found none better nor cheaper than the annular siphon, as devised by Mr. Rogers Field, C. E. If space would permit, I should illustrate and describe the manner in which I usually arrange it, but this is not possible.

[To be continued.]

Life and Works of Jean Francois Millet.*

BY WALTER CRANSTON LARNED.

THERE is a spot on Normandy's coast where the high scarred cliffs tower over the sea, and the waves beat with never-ceasing roar at their feet. In one of the valleys among these giant cliffs nestles the little hamlet of Gruchy. Should one approach it by sea, it would seem inaccessible, so forbidding is the aspect of the rocky shore. Nor would man be tempted to land there, for it could hardly be thought that subsistence might be found in so wild and desolate a region. Nevertheless the mighty cliffs uphold pleasant farms, and many a French peasant has lived there year after year tilling the soil, and finding no unkindly response to his labor in the harvest time. Moreover when the storms came huge masses of seaweed were cast upon the shore, and herein was wealth to those who dared brave the danger of plucking it from the fierce waves and carrying it up the steep precipices to the farms above. Among these farmers dwelling at Gruchy, was Jean Louis Nicolas Millet, who was the father of the immortal painter. He was a simple man and gentle, of the purest life, and greatly respected by the neighbors. He loved nature in all her forms and would show the little Francois, with glowing words, the beauty of flower, tree and field. Indeed this tall peasant, with his flowing black hair and soft eyes, was a real poet, though he died unknown except for the immortality lent by his greater son. He lived in one of those long, low houses,

with a great thatched roof, which have become associated with the peasantry of France through the pictures of Millet. The windows are few and small, with clumsy wooden shutters. The green vines climb lovingly over the low, gray walls and up on to the matted roof, and the barnyard fowls cluster familiarly about the door whose threshold is but a single step above the earth. Some trees lean over it as though glad to give it freely their grateful shade. Near by is the barnyard and the barn with stacks of hay, among which stand the cattle. It seems a pleasure of plenty, and the house itself, though humble, is strong and solid, quite able to shelter the Millets of many generations. Truly it is a family homestead, and Millet, the father, is a patriarch meet to rank with those of the Jewish time. He is the head of his house, and to his home, after the Sunday mass, come the family and near friends. How he loves to receive them, and with what genial, gentle hospitality does he share with them such simple fare as he may chance to have. It is lovely to imagine the tall, powerful poet-farmer beside his lowly hearth, surrounded by those of his race, and those who loved him, all looking up to him with respect and affection, partaking of his kindly bounty, and more than all, softened and purified by the gentle air of peace and love he spreads about him.

These Millets, though they lived humbly, had gentle blood in their veins. The mother was of a noble family, by name Du Perron, and Millet's great uncle was an abbe, who had the high spirit which marks all the members of his family. He nearly lost his life at the time of the Revolution, because he would not take the oath to support the Constitution, for he thought it contrary to his allegiance to Rome. They took his living away and he worked in the fields, supporting himself and educating in part, at least, the children of the Millet family. But the most noteworthy figure in this family group, is that of the old grandmother, Louise Jumelin. Here indeed is a character commanding wonder and admiration, and to her powerful influence, never lost in all his life, must be largely attributed much of the peculiar genius of Millet. For she trained little Francois. She was to him a mother, because alas! his own mother, being young and strong, must toil all day in the field, while the grandmother, old, feeble in frame, but vigorous in mind and most tender at heart, may sit within and gather the little ones about her knee. She was an intensely religious woman, of as simple and pure a character as ever graced any church in any age. The ideal of her life was to be as one of the saints whose pictures hang over the shrines in the old church; but she never felt she had attained to any goodness, for her humility made all her good works seem to her as naught. Her charity and alms-giving were without limit save the limit of her means. No poor wayfarer was ever turned from the door of the Millet homestead. All were welcome to such shelter and food as the family itself had. How often must Millet have seen the poor beggar, the weary wanderer seated by the chimney corner, warmed by the fire and comforted by the homely food. He learned there never to turn his back upon any poor man, and never to close the door of his house or his heart upon those who called for help. She also, with his uncle, the abbe, taught him to love and reverence the Bible as the inspired word of God, so that in after years he says he found in that book his inspiration, and the source of all power he ever had or hoped to have. It is pleasant to linger with this simple household, full of toil, and rich only in good works. In the summer time they all labor according to the strength of each, in the fields, helping themselves so far as they may, hoping that God may bless them in the harvest. Then comes the bleak winter with its storms. But they do not rest from their labors. They gather within the home, and the men weave baskets while the women spin. At this season poetry and song gladden and charm them, for while they work they tell again and again the weird tales and fables whose mysteries had thrilled their ancestors in the hours of night, and then they gladly sang the carols and roundelays whose notes had echoed year after year about the hearthstones of their fathers. There is one more picture in this poem of an artist's childhood which the eye lingers upon fondly. It is early morning in the summer, and the dew yet sprinkles diamonds among the cobwebs in the grass; a tall farmer steps from the Millet door and strides over the fields, with his hoe and spade on his shoulder. By his side, perhaps holding his horny hand, runs merrily along a bright boy, with deep, dark eyes and long, black hair. He runs merrily for he goes to the fields he loves, though he goes there even at that tender age to bear his part in the common toil which earns their bread. As they go, the elder Millet, himself almost a poet, almost an artist, and quite a revered patriarch, points out to the enthusiastic boy, all glowing and trembling with artistic feeling and poetic imagination, the ever fresh beauties of the familiar scene. At times he will pause that the boy may the better see the living beauty of some tree or flower, or the wondrous light and shadow which the rising sun strews over the meadow and the hillside. And perhaps the father will say, as he often did, that these beauties should be painted just as they then appeared to his eyes that loved them, little dreaming that the eager boy who drank in his words would put upon the canvas that yellow sunshine, and those cool shadows, with a fervor and a power which no modern artist has equaled, and which none can hope to equal who do not love them as he did. It would seem that the hard lot of these peasants, condemning even the children to daily labor, would have crushed out this poetry, and that these delicate artist's dreams would have been rudely buried beneath the clods the dreamer daily turned. But no, the inspiration was too strong; and even as a boy in the fields Millet found time to sketch, and with eagerness he portrayed all that met his eye and touched his heart. And the father and proud mother and grandmother saw at last that the sketches were good and the lad was born an artist. They showed the designs to a painter at Cherbourg and he said it was impossible young Millet could have made them alone. When the truth was told him, he said the boy would be a great painter. Then the parents, always ready to follow the guiding hand of Providence divine, devoted their child at once to his art.

So at the age of eighteen Millet's peasant life ends, and he goes to study his beloved art with the old painter Mouchet, at Cherbourg.

There is nothing noteworthy in his life at Cherbourg. He soon exhausts the resources of the little place, and far outstrips the humble painter

*Lecture delivered before the Art Institute of Chicago, February 8, 1887.

who was his teacher. The astonished city fathers vote him a pension, though but a niggardly one, in order that he may go to Paris and complete his studies.

In the month of January, 1837, the brave but heavy-hearted young man left the land of his youth, and with his scanty luggage, in which his grandmother has not forgotten to put a Bible, he found his way to Paris, the El Dorado of young artists. He was sad and full of foreboding, and homesickness almost conquered him. At last he finds his way to the Louvre. The world of art stands open before him and he may roam at will among its loveliest scenes, hand-in-hand with those greatest ones who have best unfolded the mysteries of beauty. Straightway he falls in love with Michael Angelo, that giant artist whom more than any other Millet resembles; but Fra Angelico, the gentle painter monk, also steals sweetly over his heart. Nicholas Poussin, too, with his weird landscapes, wins his love. Enraptured with these he hates those who are their opposites. Watteau and Boucher he despises and calls their pictures marionette shows. At last he enters the studio of Delaroche, then at the zenith of his fame. This was not because he admired Delaroche, for he thought his pictures theatrical, but because there was no other artist in Paris of sufficient reputation to be his master—perhaps no other who could teach him anything. And now must be described one of the most striking scenes in the life of any artist. A young peasant has just come from Normandy. So uncouth is his appearance that the city-bred pupils of the famous Delaroche call him "the man of the woods." He stands in the studio beside him who is even now painting the great Hemicycle, the picture whereon he hopes to rest his fame. But he does not bend in awe-struck admiration before the master's work. He sees so far beyond its utmost limits that his eye will scarce bear to rest upon it at all. Of all the artist's pupils, who cluster about, none understands this strange, wild peasant, as with bright eye and long, raven hair, he stands alone among them, impatient of the artificial restraints under which they and their master work. He cares not for the master, however great, but with sturdy independence paints in his own way. Some ridicule and stand by jeering at his work. Stung by the criticism, the dauntless youth retorts, as he looks upon the picture of Delaroche and the pupils about him: "Do you think I concern myself about your honey and butter figures?" What astonishment, almost fear, must have filled the studio as these haughty words echoed through it. At last, Delaroche, overcome with wonder, and feeling that there was something here that he did not understand, says to him: "Go your own way; you are so new to me that I wish to have nothing to say to you." He leaves the studio, and though Delaroche afterward requested him to return and study there without paying him anything, he never came back for any considerable time again.

Now comes that sad period which all artists of genius must pass through, but which lasted, alas, the greater part of his life with Millet. He must turn his pictures into bread. None will buy the work his genius impels him to paint, and so he paints in the manner of Watteau and Boucher, which he despises, and sells his pictures for twenty francs that he may not starve. He returns to Gruchy and paints a portrait of his father which is accepted at the salon in 1840, but attracts no attention. Then he paints portraits for a while at thirty francs apiece. In these earlier times he paints Bacchantes and many allegorical and nude subjects; also a temptation of St. Anthony. His "Oedipus taken from the tree," was a picture of great power in drawing, but little thought. But though his pictures from the nude were beautiful, he never painted an impure or unhealthy thought. These pictures were sold, and having gotten together nine hundred francs he returned to Paris, where he heard someone say: "Millet, who paints only naked women." This wounded him to the quick, and from that moment he resolved to paint from the nude no more, but to depict those rustic scenes which he loved, at whatever cost of ease and comfort of living. Millet was at this time an extremely handsome man. His eyes were dark, and flashed out from deep recesses, under straight black brows. His face was surrounded by masses of wavy black hair, and a dark beard. His nose was delicate, a little aquiline, and with a peculiar, high-arched nostril, which might well quiver with disdain or expand with sensibility as he drew the deep breath of heartfelt admiration. He had the physique of the peasant who lives in the open air, and at the same time that royal carriage which belongs only to kings of the earth, whether in the realms of government or of art.

Two wonderful things came to Millet at this period of his life. One was the intense love and admiration of the critic Sensier, called "the last of the enthusiasts," and the other was the revelation to him that he was called to portray the scenes of peasant life, those plain and homely scenes which he loved, and in the midst of which his strange boyhood had been passed. As Sensier justly says, the farm peasant represented to Millet human nature. He found in him the strongest traces of the real nature of man, and the most truthful representation of the labors and sorrows of humanity. In seeing the peasant family at work in the fields, with anxious soul and resigned attitude, with gesture slow and sad, one will turn again toward Millet, and he who has understood him will say to himself: "There is a painter who gives life to the humble, a poet who exalts grandeur unobserved, a man of goodness who encourages and consoles."

At this time the cholera came to Paris, and Millet and Jacques left the city and went to the little hamlet of Barbizon, near the forest of Fontainebleau. Here begins the greatness of Millet's career. He was living amidst rocks and cliffs, grand old trees and verdant fields, and he was poor—very poor—and like the peasant he painted, he himself worked in the garden at Barbizon with all the toil of the farmer, that he might support his wife and little ones. Here he learned to make "the trivial become sublime." While so laboring, and therefore filled with warmest sympathy for the tillers of the soil, he made a masterly series of sketches of the peasant life, which in power and truth is quite comparable to Holbein. It was here that the inspiration came upon him to paint that wondrous picture of the sower, though the peasant who was its subject belonged not to sunny Barbizon but to the storm-swept coast of Cherbourg and Gruchy. So powerful was the impulse to paint it that the artist did not perceive until after it was done, that his canvas was too small, and would not contain

the figure, full of vastness and mystery, to which his genius had given birth. He must paint it again upon a larger canvas.

"The Sower" was exhibited at the salon of 1850-51, and called forth a long and almost rapturous criticism from Theophile Gautier. Indeed, this picture, so full of grandeur and mystery, could not fail to make a stir as it hung among the soft, smooth and vapid paintings then so much the fashion in France. He exhibited at the same salon "The Binders," a picture whose poetry and simplicity places it nearly upon an equality with "The Sower." The subjects chosen by Millet were almost always sad; if not deeply sad they were at least pensive, and never gay. Millet said there was no gayety in labor, though much grandeur, true humanity and great poetry, and to him the highest joy was calm, silence, rest. Man's normal condition seemed to him fatigue. Hence he gave to the laborer at his noonday rest an utter abandon, a most entire and absolute relaxation of every muscle in his toil-worn frame, as though the whole soul were given up to the luxury of not working. But how if there be no soul? If perchance long years of hard toil, day after day digging up and turning over the clods of the earth, have made almost a clod of what might have been a man? What then will his noonday rest be like? Alas the truth of such a life is terrible, and Millet tells it without fear. In the "Man with the Hoe" and the "Vineyard Worker Resting," the whole story appears. These peasants scarcely seem men at all, but rather some baleful product of the black ground, some horrid shape of darkness, ignorance and terror. The open, panting mouth and fallen jaw, the half-closed eyes, the matted hair belong rather to one of the lower animals than to man. They have not intelligence enough to enjoy their brief time of rest. They stop work because they must, and iron necessity will make them work again as soon as the relaxed muscles may once more be stiffened to their task.

These haunting and terrible pictures really frightened the Parisians, and the "Man With the Hoe," especially, called forth a storm of indignation. It is no wonder, for, as Millet himself says, art was at this time an accomplishment, and not the conscience of society as it was in the middle ages. The voluptuous Parisians looked for unvalued female beauty, and for scenes of Arcadian poetry, wherein rambled Phyllis and Corydon, and lo, the grimy peasant, the gaunt specter from the bowels of the earth confronts him with brutish, lowering brow. His dream of Arcadia is rudely shattered, and with shuddering he fears this savage may indeed exist in the fields of France, and he is the more indignant the more the unwelcome truth forces itself upon him. Yet Millet gave to these laborers their due meed of power. They are neither helpless nor complaining. There is a vastness of strength in their solid frames. During sixty years of their lives they will be able to force their bread from the hard earth. They will ask and receive no aid. Their defiance, if it be defiance, is all unconscious, and the guilty conscience, of wicked Paris put into their open, gaping mouths the words of menace and danger, which their own torpid brains would never have prompted. In 1855, at the Universal Exposition, he exhibited a lovely picture called the "Grafter." It is a young peasant, who bends over a stock wherein he is ingrafting a tender cutting. Beside him stands his strong and comely wife, holding in her arms their little child. She watches him with affectionate interest, and even the infant looks at him eagerly as though already seeking to grasp the mystery of the labor. Behind them is the long, low wall of their cottage, bathed in yellow sunshine, and warmly nestling under the wing of the thick, thatched roof. Some trees throw a grateful shadow over them. There is in the whole scene, not only the sunshine of summer, and the cool shade of green trees, but that tender sunshine of domestic love, that thought of peaceful shelter from the fierce heat of life, in the calm shade of a happy home. So does the inward and spiritual always pervade the outward and material in Millet's pictures. More exquisite and touching still is his wonderful picture called the "Potato Planters," now belonging to Mr. Quincy A. Shaw, who lives near Boston. Words can hardly describe the poetry, pathos and rich beauty of this picture. And yet, the scene is so simple. Behold! Two peasants working in the field—the man and his wife. He carefully lifts the earth with his clumsy hoe, and holds it up while she throws in the little broken fragments of potatoes. Both are bending over in their toil and their faces are not fully seen, but earnestness, faith, hope and strength appear in every line of the two strong young figures. There is tenderness, too, for he is laboring for her and their child, and she is helping the man she loves. And yonder on the left, under a green willow tree, sleeps their little baby, with none to guard its infant slumber, save the old donkey who seems almost to sleep, too, in the shade, with his long, nodding ears hanging over the sleeping child. Far away and all around them stretches a sunlit plain, fairly alive with sunshine, and here and there rises the smoke from some distant hamlet. Perhaps one of the cottages is the dear though humble home of this loving family. The whole coloring is vivid. The sunlight seems to have penetrated everything, so that it makes even the hard labor radiant. The landscape is equal in power and truth to the figures. It cannot be told which is the more fascinating, the outward beauty of the scene, with its thought of the bountifulness of nature and the goodness of God, or the sweet meaning of the poem of love and labor sung by the simple peasants and their innocent babe.

The "Grafter" was sold to the artist, Rousseau, at this time a warm friend of Millet, for four thousand francs, and this absurd sum for such a picture pleased the artist much, even brightened his whole life for a while. But only artists, and a very few with the true artistic feeling, understood his pictures at all. Hence they did not sell; and in the year 1856 Millet found himself in the very extremity of poverty. He knew not where his bread was to come from, or with what to light his fire. Yet he remains silent, uncomplaining, and works on in all truth and patience. Some of his greatest works were born in this time of suffering. Millet is one more striking proof of the truth that there is no greatness in man without suffering and toil. As Tennyson in sadness produced "In Memoriam," and as Longfellow wrote his greatest poems after suffering the agony his wife's death caused him; as Milton in his blindness produced "Paradise Lost," and Scott, in pain and sorrow, wrote "Ivanhoe," so did Millet from the depths of poverty, hunger and cold, bring forth the choicest, the

immortal treasures of modern art. At this time he painted the "Angelus" and the "Gleaners," and the mysterious pictures of the shepherd's life. Perhaps nowhere is the weirdness and mystery of Millet's genius more notable than in these shepherd scenes. He seemed to grasp the deepest possible meaning of the solitary shepherd's life. Sensier well says that to Millet "the shepherd is not a countryman, made like the laborer or other worker in the fields; he is an enigmatical person, a mysterious being; he lives alone, his sole companions his dog and his flock. From Easter to Martinmas he sleeps in the open air, in a movable hut, which makes him the nightly guardian of his flock. In winter he goes over the wet ground to find the least spear of vegetation; in spring he helps the ewes when they bring forth lambs, and cares for them. He is the guide, the friend, the physician of the flock. Moreover he is contemplative. He searches the stars, watches the sky and predicts the weather. All atmospheric life is familiar to him." Millet's moonlight picture, of the shepherd at the fold with his sheep, is wonderful. So also is the "Shepherd Bringing Home his Flock at Sunset," which is one of his greatest works. There is not in these pictures much of the careless, happy spirit of Virgil's shepherds, though Millet loved the Georgics, but rather do they tell of the thoughtful care of the pastor, uneasy about his flock of ruminants, the human, real spirit, which modern art loves to describe. Many great pictures were produced by the master at this time, yet, in 1859, his "Death and the Woodcutter" was actually refused admission at the salon, and in 1861 three of his pictures which were exhibited, were severely criticised by some, although by others likened to the frescoes of the old Florentines. Gerome said of him: "He is a Jupiter in sabots." But if it had not been for the enthusiastic praise of his friends, and the artists who understood him he would have been tempted almost to doubt the truth of his art, so fierce was the storm of adverse criticism. He was treated almost as a criminal at the bar, and while his artist soul was racked by this torture, his domestic life was borne down by the weight of bitter poverty, and the pain of failing health, which the strain upon his nerves had caused. Nevertheless he stands like a rock, which winter's rudest storms may never shake. His resolute, defiant attitude is well shown in a photograph taken at this time, of which Sensier says: "He is on foot, erect, in sabots, his back turned toward a wall, his head raised, his body straight and proud, his leg advanced like one who weighs himself well, with hat in hand, hair thrown back and his glance as if fixed upon something threatening. One might take him for one of those enthusiastic peasants, victims of our civil wars, who, conquered, looked upon death without growing pale." Indeed he looks in this picture like a peasant chief about to be shot. But though he remained resolute and defiant, he kept silent. He did not storm and rage, neither did he complain, unless in private talk with his friends, but calmly awaited the time when the truth of his art should vindicate him.

[To be continued.]

National Association of Master Plumbers.

THE fifth annual convention of the National Association of Master Plumbers of the United States of America was held at the Grand Pacific Hotel on Tuesday, Wednesday and Thursday, June 21, 22 and 23, 1887.

The convention was called to order at 10:30 o'clock A.M., Tuesday, June 21, in the ladies' ordinary of the Grand Pacific Hotel. Mr. James Allison, of Cincinnati, president, in the chair; Mr. John Trainor, of Baltimore, vice-president, and Mr. Thomas McNeil, of Cincinnati, secretary.

The delegates were welcomed by Mr. Andrew Young, of Chicago, in the name of the Association of Master Plumbers of Chicago, whose guests the visitors were during their stay. Forty-one cities and twenty-one states were represented by 164 delegates.

Mr. William Harkness, Jr., of Philadelphia, offered the following, and moved that it be referred to the appropriate committee, which was agreed to:

PHILADELPHIA, June 10, 1887.—At a meeting of the Master Plumbers' Association of the city of Philadelphia, held on the above date, the following resolution was adopted: *Resolved*, That the Master Plumbers' Association of the city of Philadelphia request the National Association of Master Plumbers, in convention at Chicago, to insist that the plumbers of the country be classed as dealers by the manufacturers of terra-cotta pipe.

The report of the Executive Committee showed that four meetings had been held during the year. At these the strike among the journeymen in New York was considered; the traveling expenses of Executive Committee were ordered paid; the action of the authorities in Washington, D. C., in regard to local plumbing and drainage regulations, was acted upon.

The following resolution was passed by the Executive Committee:

Resolved, That the National Association, through its executive head, appoint a member of this organization in every city and town in the United States, under its jurisdiction, for the purpose of keeping a record of all dealers or manufacturers or master plumbers violating any of the protective resolutions of this association, said committee to report to the chairman of protection.

The following recommendations were offered by the Executive Committee:

Resolved, That the National Association of Master Plumbers approve of the course pursued by the New York Master Plumbers' Association in the long strike with the journeymen plumbers of New York against the boys of America being permitted to learn the plumbing trade, and reaffirm the declaration of principles of the National Association of Builders, as follows:

"That the absolute personal independence of the individual to work or not to work, to employ or not to employ, is a fundamental principle, which should never be questioned or assailed; that upon it depends the security of our whole social fabric and business prosperity, and that employers and workmen should be equally interested in its defense and preservation. While upholding this principle as an essential safeguard for all concerned, this association would appeal to employers in the building trade to recognize that there are many opportunities for good in associations of workmen, and while condemning and opposing improper action upon their part, they should aid and assist them in all just and honorable purposes; and that while upon fundamental principles it would be useless to arbitrate, there are still many points upon which conferences and arbitrations are perfectly right and proper, and that upon such points it is a manifest duty to take advantage of the opportunities afforded by associations to confer together, to the end that strikes, lockouts, and other disturbances, may be prevented.

"When such conferences are entered into, care should be taken to state clearly in advance that this fundamental principle must be maintained, and that such conferences should only be competent to report results in the form of resolutions of recommendation

to the individuals composing the various organizations participating, avoiding all forms of dictatorial authority.

"That a uniform system to apprenticeship should be adopted by the various mechanical trades; that manual training schools should be established as part of the public school system, and that trade night schools should be organized by the various local trade organizations for the benefit and improvement of apprentices.

"3. This association earnestly recommends all its affiliated associations to secure, as soon as possible, the adoption of a system of payment by the hour for all labor performed, other than piecework or salary work, and to obtain the cooperation of associations of workmen in just and equitable arrangement."

The report of the Executive Committee, as well as the resolution submitted by Mr. Harkness, was referred to a special committee of five on resolutions.

The report of this committee, submitted by Mr. Hopkins, was as follows:

1. By the Philadelphia delegation, requesting that master plumbers throughout the country shall be recognized as dealers by the manufacturers of terra-cotta pipe, amended so as to read "master plumbers of the national association," and, "also, by the manufacturers of plumbing material."

2. By the president, recommending a paid board of officers.

3. By the president, recommending local organizations to provide for the education of the coming plumber by the establishment of trade schools, reading rooms, lectures, etc.

4. By the president, recommending that contracts for plumbing work be made direct with the owner or architect.

5. By the executive committee, approving of the action of the New York master plumbers in their "battle for the boys."

6. By the executive committee, reaffirming the declaration of principles adopted by the National Association of Builders.

7. By the executive committee, recommending the appointment of a committee for the purpose of establishing purchasing agencies to supply goods at the lowest market rates to members of this association.

8. By the executive committee, recommending the appointment of a member of this association in every city and town for the purpose of keeping a record of all dealers, manufacturers and master plumbers violating any of the protection resolutions of this association.

The report was fully discussed and adopted, with the following amendment: In Sec. 1, "all plumbers' materials" was substituted for "terra-cotta pipe."

President Allison made an eloquent and able address, covering the past and outlining the future work of the association.

The reports of vice-presidents in charge of state organization and local associations were received. These reports show the plumbers to be well organized, and the consideration of state laws governing sanitation, the teaching of the plumbing trade and the insistence by master plumbers upon the preservation of all individual rights to be general. New York has just ended a contest with unions lasting ten months, showing that plumbers are strong advocates of American liberty as against imported and un-American interference with the lawful rights of the individual.

Mr. John J. Weaver, of New York, read a valuable essay on "Trades' schools, and technical education in their relations to the plumbers of the future."

On motion, the essay received the unqualified indorsement of the National Association, with instructions to local associations to put its recommendations into practical effect.

A great deal of time was given to the discussion of the apprenticeship question, and the report of that committee, as finally adopted, is as follows:

CHICAGO, June 21, 1887.

To the President, Officers and Members of the National Association of Master Plumbers.

GENTLEMEN,—Your apprenticeship committee herewith submit for your consideration the following rules and regulations in reference to apprentices, and request they be recommended for adoption by the various local organizations:

1. The term of apprenticeship at the plumbing trade shall be five years.

2. No boy shall be taken to learn the trade until he has attained the age of 16 years.

3. Each employer shall be required to make a return to the apprenticeship committee of a list of the boys in his employ who are apprentices, with their ages, places of residence, time of commencing at the trade, etc., and a general record of each boy.

4. The secretary of the apprenticeship committee will keep an apprentices' record, in which will be recorded the name, address and age of every apprentice, with date of commencing and discontinuing work with each employer.

5. For each apprentice so recorded the secretary shall issue an apprentice certificate to be sent to his (the boy's) employer to be retained by him so long as the apprentice is in his employ. When the apprentice takes service in another shop the certificate is given to his new employer to be filled in with the date of commencement (of service) and so on until the certificate shows that the proper time has been served.

6. Any boy wishing to learn the plumbing trade will be required to send his name and address to the secretary of the apprenticeship committee, who will notify the applicant when to appear before the committee for examination. Each applicant must have a letter of recommendation from a member of the Master Plumbers' association.

7. A beginner at the trade will be required to work six months on probation, at the end of which he shall appear before the committee for re-examination, and if found worthy his certificate shall be issued, he shall be recognized as a regular apprentice, and the time already spent at the trade shall be allowed on his certificate.

8. When the five years shall have been served, the apprentice shall be presented by the association with a diploma, showing the date of service and signed by the president of the association and by the apprenticeship committee.

9. Boys having a diploma from any trade school shall be allowed a deduction of the last year from the term of apprenticeship.

10. It shall be the duty of each employer when he finds it necessary to dispense with the services of any apprentice to report to the secretary the name of such apprentice at least one week before laying him off.

11. It shall also be the duty of the members of this association to apply to the committee when in need of apprentices.

12. No boy shall be allowed to join any trade or labor organization during his term of apprenticeship under penalty of forfeiture of his certificate.

13. If a master plumber is compelled to discharge an apprentice for want of work, it should be his duty to find him employment with another who has work for him and can teach him the trade.

Respectfully submitted,

WM. HARKNESS, Jr., of Philadelphia, Chairman.
J. F. McCONNELL, of Baltimore.
J. J. HAMLIN, of Chicago.

Apprenticeship Committee.

The Executive Committee of the Manufacturers Association of Metal Workers of the United States, Messrs. N. O. Nelson, E. C. Worchester, and W. T. Doyle, met the committee of the National Association. They stated that while in full accord with the association they deemed the modification of the Baltimore resolutions to allow them to sell goods to some of their customers at an agreed price.

The committee claimed that the life of the plumbing business depended upon the strict observance of the resolutions.*

*The Baltimore resolutions prohibit any manufacturer to sell goods to any other than a properly licensed plumber.

That the manufacturer should not sell at retail, and that the committee believed that when the consumer bought goods and hired any plumber he pleased to fit them up it fostered an irresponsible class of plumbers, and entailed a loss to the legitimate plumber.

The result was that the committee did not modify the resolutions, and the manufacturers agreed to abide by the resolutions.

Mr. Weaver submitted a resolution, asking the Executive Committee to consider the feasibility of altering the constitution so as to admit Canadian associations, but it was voted down.

The election of officers resulted as follows: President, John Byrns, of New York; first vice-president, John Traynor, of Baltimore; recording secretary, Henry G. Gabay, of New York; treasurer, Mortimer J. Lyons, of Brooklyn; corresponding secretary, Walter T. Hudson, of Brooklyn; financial secretary, Enoch Remick, of Philadelphia; sergeant-at-arms, David J. Collins, St. Louis; executive committee, Col. George D. Scott, New York; E. J. Hannan, Washington; Jeremiah Sheehan, St. Louis; William Harkness, Jr., Philadelphia; Rupert Coleman, Chicago.

The committee occupied three days, ending with a banquet at the Grand Pacific, at which about four hundred delegates and guests were present. Many wives and daughters of delegates were in attendance, and took part in the magnificent and varied entertainment provided for the visitors by the association. The weather was exceptionally fine, and assisted in making enjoyable one of the most interesting and well-conducted conventions ever held in Chicago.

The National Association will meet next year at Boston, Mass.

The Chicago Builders' and Traders' Exchange.*

At a meeting of the Master Masons' and Builders' Association, June 29, by a vote of 41 to 30, it was decided to appoint an arbitration committee, with instructions to stand firmly by the code of principles of the association, and to require their recognition by the bricklayers before proceeding in any way with the work of meeting the union with a view to settle the existing trouble. When this point was reached, and the code of principles fully concurred in by the bricklayers, the committee was instructed to proceed, with full power to act in effecting a settlement.

The committee appointed is composed of Joseph Downey, George C. Prussing, George Tapper, William O'Brien and Charles W. Gindele.

The members of the Arbitration Committee of the bricklayers union are A. E. Vorkeller, John Pearson, P. J. Meinter, C. J. Lindgren and Fred Rebusch.

Upon the appointment of the Arbitration Committee by the master masons, the following correspondence took place between that association and the president of the union:

A. E. Vorkeller, President United Order of American Bricklayers and Stone-masons.

SIR.—Chicago Master Masons' and Builders' Association has this day appointed a standing committee of arbitration of five of its members, with full power to act for and in behalf of this organization in settlement of any and all differences existing. You have been informed of the platform and code of principles adopted by this body. On these it stands. All other questions may properly be arbitrated. Please inform this body whether your committee has been appointed with full power to bind your organization by joint action with us. If so, our committee is ready, and shall be pleased to meet your committee at the earliest time convenient for the selection of an umpire and arrangement of preliminaries. The Arbitration Committee appointed by this association consists of Messrs. George C. Prussing, George Tapper, William O'Brien, Charles W. Gindele and Joseph Downey. Respectfully,
JOSEPH DOWNEY, President.
H. MUELLER, Secretary.

In reply to this communication, President Vorkeller sent to President Downey the following acceptance of the proposition:

JOSEPH DOWNEY, President.
DEAR SIR.—Your communication notifying me that your association has appointed a committee of five to meet a like committee from our organization for the purpose of settling, if possible, the present lockout, is at hand. In reply will say that we await your convenience, and will hold ourselves in readiness to meet your committee at any time and place you may appoint. Yours respectfully,
A. E. VORKELLER, President.

The time and place of meeting was fixed by President Downey in a note to President Vorkeller, as follows:

A. E. Vorkeller, President.
SIR.—Your communication received, and would say in reply that our committee will meet your committee at 10 o'clock tomorrow morning at the Grand Pacific Hotel. Respectfully,
JOSEPH DOWNEY, President.

The committees met as appointed, June 30, the first business done being the selection of an umpire, having the casting vote in case of a disagreement. After three days' conference, and the selection of a number who declined to serve, the joint committee, July 2, decided upon Judge Murray F. Tuley, chief justice of the Circuit Court of Illinois, and a man of undoubted judicial ability.

THE ARBITRATION COMMITTEE'S REPORT.

After being in session nearly a week the arbitration committee, July 8, adopted the following report:

To the Union of the United Order of American Bricklayers and Stone Masons, and to the Master Masons' and Builders' Association of Chicago.—The joint committee of arbitration, composed of an arbitration committee of five from each of your organizations, with Judge M. F. Tuley, unanimously selected as umpire, have concluded their labors and respectfully report:

That recognizing the fact that organizations of employees and employers, like these from which this committee originated, do exist and have become important factors in our industrial society, and that they will, in all probability, continue to exist, we do not attempt to determine whether the motives or basis of either organization was right or wrong. They appear to be a necessity arising out of the present conditions of society, and while such combinations keep "from violence or show of violence," no great danger need be apprehended. Nor did we attempt to determine which organization was to blame for the present paralyzed condition of the building industry of this great city. We recognized the fact that the two organizations between which there should be many "bonds of sympathy and good feeling" were carrying on a bitter war with each other, by which many thousands of men were deprived of work, much suffering and privation brought upon innocent parties, and immense pecuniary losses daily sustained, and we determined, if possible, to reconcile the differences and place the relations of the two organizations upon a basis by which strikes, lockouts, and other like disturbances might in future be avoided.

* Continued from May Intermediate News Number, page 69, Vol. IX, No. 7, and June Number, page 87, Vol. 9, No. 8, as a complete record to date of the important measures taken by the building interest of Chicago in the direction of a permanent settlement of labor disturbance and the eradication of disturbing elements.

We discussed the relations of the contractor and the workmen, and found much in which they had a common or joint interest, and were mutually concerned. We endeavored to discuss and settle each trouble and grievance in a conciliatory spirit, not in way of compromise, to give and take, but in a spirit of fair play and upon just and equitable principles.

We found that the main cause of trouble was in the separate organizations endeavoring to lay down arbitrary rules for the regulation of matters which were of joint interest and concern, and which should be regulated only by both organizations by some species of joint action. We therefore determined upon and submit herewith a project for the institution of a joint standing committee for that purpose. The article herewith submitted provides for such a standing committee, to be elected annually in the month of January, defining its powers and duties, we request shall be incorporated into the constitutions of each association.

This joint committee will be constructed of an arbitration committee of five members from each organization (the president of each being one of the five) and an umpire, who is neither a working mechanic nor an employer of mechanics, to be chosen by the two committees. This joint committee is given power to hear and determine all grievances of the members of one organization against members of the other, and of one organization against the other. To determine and fix all working rules governing employer and employee such as:

1. The minimum rate of wages per hour.
 2. The number of hours of work per day.
 3. Uniform pay day.
 4. The time of starting and quitting work.
 5. The rate to be paid for night and Sunday work, and questions of like nature.
- And it is also given power to determine what number of apprentices should be enrolled so as to afford all boys desiring to learn the trade an opportunity to do so without overcrowding, so as not to cause the coming workman to be unskilled in his art or the supply of labor to grossly exceed the demand therefor. It is also given exclusive power to determine all subjects to which both organizations may be interested, and which may be brought before it by the action of either organization or the president thereof.

It becomes necessary in order that all questions and grievances which the committee has settled, to make the constitution and by-laws of the organization conform thereto, and to powers given to future joint arbitration committees, that some changes should be made in such constitution and by-laws.

The adoption by the Master Masons' and Builders' Association of the article for the joint committee, recommended, together with some slight changes in the constitution, will be sufficient.

The United Order of American Bricklayers and Stone Masons will be necessitated to make changes in its constitution and by-laws to make the same consistent with and to conform to the spirit and intent of the powers and duties conferred on the joint committee; and among other things the officer heretofore known as the walking delegate is to be known hereafter as the collector, and all the objectionable duties and powers of the officer have been done away with.

The steward will remain guardian of the men's interests and mediator for them; his arbitrary powers are taken away.

The interests of the members of the union are protected by the foreman being required to be a member of the union, but he is restored to his position as the employee of the contractor, and, while so employed, is not subject to the rules of the union.

The eight-hour day has been conceded to the workmen. It is in accordance with the state and, we believe, in accord with the spirit and progress of the age.

The question of pay day, whether on Saturday or on Monday, was not considered a question of vital importance, but, it being one of the questions left to the umpire, he decided that, inasmuch as Tuesday has been the pay day with the principal contractors in the trade of this city for more than twenty years last past, and, as experience in other trades and occupations has demonstrated that the pay day of Monday or Tuesday has worked more beneficially to the workmen and their families than the Saturday pay day, and, inasmuch as contractors ought not to be required to change the pay day in the midst of the working season, having, pre-umably, made their pecuniary arrangements to meet the Tuesday pay day, he would name Tuesday as the regular pay day until the same should, if desired hereafter, be changed by the joint committee on arbitration.

We have settled the differences between the two organizations, while every inch of the ground has been fought over, yet having the task assigned us we in good faith determined to do everything that was fair, just and honorable to accomplish our object. We feel we have succeeded without compromising the honor, the rights or the dignity of other organizations, and hope that we have succeeded in establishing a basis upon which all future troubles may be settled and probably be prevented. We respectfully ask your adoption of this report, and the article as to the joint arbitration committee by immediate action, to the end that work may be commenced on Monday next, it being agreed that neither organization shall be bound by its action if the other should refuse to take similar action.

A. E. VORKELLER,
P. J. MINNITER,
JOHN PEARSON,
THEODORE DRIEBACH,
CHARLES J. LINDGREN,
GEORGE C. PRUSSING,
JOSEPH DOWNEY,
GEORGE TAPPER,
WILLIAM O'BRIEN,
CHARLES W. GINDELE,
M. F. TULEY, Umpire.

Arbitration Committee for the U. O. A. B. and S. M. Association.

Arbitration Committee for the Master Masons' and Builders' Association.

The report was submitted to a full meeting of the union, July 8, and was ratified by the assembled workmen, July 9. The Master Masons' Association held a meeting and likewise ratified the decision of the arbitration committee.

An important bill, presented to the Minnesota Senate by Senator Whiteman, was for a state school of manual training and industry at Duluth. Senator Whiteman, according to the *St. Paul Globe*, made an eloquent plea for it, and argued that it was an institution much needed, and as Duluth had so far asked for nothing, the state might consent to allow the Zenith City to have one institution, but his reasons failed, because every other senator wants a state institution, too.

A CHANNEL has been cut through from Lake Ballona, Los Angeles county, Cal., to the ocean, but further work toward making a harbor of the lake has been suspended until the arrival of piles, which are daily expected. Large suction pipes have been laid from the lake over the hill into a deep valley, where a steam dredger will be set to work, and the debris conveyed by suction pipes and be used as filling for the road, which has been graded for five miles toward Los Angeles.

THE Chicago Laundry Dryer Company manufacture a laundry drying stove, the heat of which is utilized in a drying closet attached. The simplicity of the thing is its chief recommendation, as well as its size, for dwellings and flats. Its capability for doing the work of a laundry in the most complete manner; boiling clothes; furnishing hot water; heating sadirons, and drying clothes at the same time, and at a comparatively small cost, is its peculiarity. While this stove is perfectly adapted to hotels and public institutions, the attention of the manufacturers has been given, up to the present time, mainly, to sizes for apartment houses and dwellings, in numbers of which, both in Chicago and New York, they have met with general approbation. The attention of architects and builders is invited to this new laundry device, and all questions in regard to it will be cheerfully answered by the manufacturers.

Association Notes.

CHICAGO ARCHITECTURAL SKETCH CLUB.

At the regular meeting of the club, June 20, the decision of the competition adjudicating committee was announced regarding the country stable competition. In this "Horsey" (W. B. Mundie) received first place; "Chic" (O. C. Christian) second place; "Horseshoe" (C. B. Schaefer) third place. Mr. Jenney's choice for third place was an imitation sketch submitted by T. Hazelton.

The remainder of the evening was devoted to the reading of an interesting paper by F. L. Linden, on "Interior Decoration," and its discussion. The club have inaugurated a series of sketching trips, that which will prove most memorable to those who participated, being a trip to the beautiful suburb of Riverside on the Des Plaines river on Sunday, June 19. Eleven of the leading members took an early train, which met with an accident before the city limits were reached, colliding with a freight train. The car in front and that behind the one occupied by the draftsmen were made into kindling-wood, but they escaped with a few scratches and a bad shaking up. The scene, as described by one of the number, was "interesting." Open windows were in demand for a few seconds. Mr. Williamson jumped out and landed upon a man who had been killed a moment before. He found that, in his hurry to escape, he had gathered up the sketching blocks, camp stools, coats, etc., that happened to be nearest, but on examination not one article belonged to him. After some anxiety regarding the safety of different members of the club, and a roll call to which all answered, the wrecked car was entered and the sketching blocks, etc., that had been left were secured. The time of waiting for another train was spent in sketching the wreck, several very graphic drawings being made, and if lines were somewhat uncertain, showing a slight nervousness on the part of the artist, it is no reflection upon the bravery of the sketchers. The only damage reported was a broken umbrella, and it is understood that the C. B. & Q. Company, upon whose line the accident occurred, promptly sent the owner five dollars to replace it. The rest of the day was pleasantly spent in sketching. The party was added to by two members who missed the train, one of whom took a later train, and the other walked out. This made the fatal number thirteen, and the superstitious may thus account for the accident. The club is to be congratulated upon their narrow escape. The loss of a dozen of the best draftsmen in Chicago would have been serious in these days when thorough, all-round draftsmen are so hard to find.

KANSAS CITY ARCHITECTURAL SKETCH CLUB.

The club has now twenty-four active members, an increase of eight, and three applications. The Kansas City Society of Architects have given the club the use of their rooms. Semi-monthly meetings are held, and art is aided by a liberal spread of refreshments in making each meeting attractive. The club contemplates an exhibit of architectural drawings upon the occasion of Missouri state association convention, to be held in Kansas City, January next. The club is now a permanent success, and will be a factor in the architectural progress of the city.

Our Illustrations.

- Residence at Aurora; Alfred Smith, architect, Chicago.
- Synagogue, Chicago; Wm. Strippelman & Co., architects.
- Church at Lake Forest, Ill.; W. W. Boyington, architect, Chicago.
- United States court house, postoffice, etc., Louisville, Ky.; M. E. Bell, supervising architect.
- Union Depot, Leavenworth, Kansas; Henry Ives Cobb and Chas. S. Frost, architects, Chicago.
- Building for the Dakota Loan and Trust Company, Watertown, Dak.; W. L. Dow, architect, Sioux Falls.
- Study for proposed addition, Ann Arbor High School, Ann Arbor, Mich.; Jenney & Otis, architects, Chicago.
- Stable Competition, Chicago Architectural Sketch Club: First place; W. B. Mundie; second place, C. O. Christian.

PHOTOGRAPHURE PLATES.

(Issued only to subscribers for the Photographure edition.)

- Robinson Terrace, Detroit, Mich.; Wm. Scott & Co., architects.
- Residence of E. Reese, Baltimore, Md.; H. P. Wilson, architect.
- Residence of Hon. H. P. Denman, Washington, D. C.; Fuller & Wheeler, architects, Albany, N. Y.
- Residence for Edward E. Ayer, corner State street and Palmer place, Chicago; Burnham & Root, architects. Walls are of Lake Geneva cobble stones, split and laid irregularly; roof is of red tile.
- La Salle Avenue Baptist Church, Chicago; S. S. Beman, architect; frontage 75 feet, depth 140 feet, front of Bedford store. The front is chiefly occupied by parlors, in the rear of which is the main audience room; Sunday-school above parlors; cost, furnished, \$36,000.

Correspondence.

Editors Inland Architect:

CHICAGO, June 17, 1887.

The uniform beauty of your advertising pages has always been a source of pleasure to us, and upon receipt of each publication we have specially noted the general excellence of your paper. We cannot, therefore, complain of any failure upon your part, but we have a grievance, and crave your columns to state it. We refer to the advertisement of the Illinois Terra Cotta Lumber Company, occupying page No. 7 of the May issue, in which they gave as one of their references the Pullman Building,

Chicago, which they claim is "among the buildings in which the above has been used," referring to their complete system of fireproofing buildings. That this is quite a misleading statement and one well calculated to deceive the uninformed, the following copy of letter from Architect Beman will clearly show:

S. S. BEMAN, ARCHITECT, PULLMAN BUILDING,
CHICAGO, June 19, 1885.

E. V. Johnson, Esq., Manager Pioneer Fireproof Construction Company, Chicago.

DEAR SIR.—In the Pullman Building and elsewhere I have used large quantities of your material for partitions, floor arches and the outside and party walls of dwelling houses. Your materials have always given satisfaction, and I have to thank you for your prompt and energetic manner of executing the contracts under my direction.

Yours truly,
S. S. BEMAN.

The total amount of our contract for fireproofing the Pullman Building was \$50,927, and the work consisted of all fire-clay, hollow tile floor arches, suspended ceilings, roof and column covering, and the entire fireproof partitions of the building, excepting perhaps half a dozen short walls in the attic stories, which were put in place by workmen in the employ of the Pullman company some time after our entire contract had been settled and paid for, porous tiles being used for this purpose and only for this purpose in any portion of the building. We have been in the business of fireproofing in Chicago for the past fifteen years, and have not yet found it necessary or expedient to claim the merits of others as our own, and we do not propose to allow other parties that privilege at our expense without at least a faint protest. Very truly yours,

PIONEER FIREPROOF CONSTRUCTION COMPANY,
Per E. V. JOHNSON, Manager.

Mosaics.

A new management now has control of the *Lumber Trade Journal* of Chicago that promises to make it one of the strongest trade journals in the country. The incorporators are George W. Hotchkiss, one of the best known and able writers upon lumber topics in the country; Walter C. Wright, a young man of great promise as a journalist, and already so well-known and popular among lumbermen as to hold the office of secretary of the National Association of Lumber Dealers; E. J. Hotchkiss and W. W. Hoyle. The field occupied by the *Lumber Trade Journal* is one difficult to fill, but the requirements of which are recognized by its able managers, whose peculiar talents and practical knowledge will place it beyond competition in its particular province.

SOME system of constant artificial ventilation for sewers is, in the opinion of some of the most competent authorities, absolutely necessary, if we would be thoroughly rid of the deadly pest of sewer gas. Alanson Sibley, for ten years a member of the Detroit Board of Sewer Commissioners, advocates for this purpose a furnace and chimney of strong draft, at the mouth of the main sewer, to create a constant suction of the gases away from the houses and into a consuming chamber in the furnace. Mr. Holbrook, of the Sanitary Exhaust Ventilator Company, of Chicago, was not far wrong in a statement made, which may yet become a fact, that every street corner gas lamp could be made to serve as a sewer ventilator, and that without disturbing the production of light.

ONE of the most important and appreciated additions to the railway facilities of the West, is the new line of the Wisconsin Central Railway Company from Chicago to St. Paul. Aside from its advantages as a through route, its rendering accessible the lake region of northern Illinois and southern Wisconsin, is making this road well known and popular. Hundreds of Chicago people, who have no time for long vacations, are this year taking advantage of the direct route of this road to these lakes, where rest and recuperation are secured fishing in their waters, and resting in the groves that surround their banks. One of the most beautiful of the many fishing resorts is at Antioch, two hours' ride from the city, and a day spent among the network of lakes which surround the town, will make the visitor long to "go again," and remember the "Wisconsin Central."

THE largest contract for hollow tile fireproofing ever let for a Chicago building has just been secured by the Illinois Terra-Cotta Lumber Company, of Chicago. Their bid represents the lowest figures in a close competition and approximates \$156,000. The specifications call for porous hollow tile partitions, floors, column casings and a special tile for covering ten large trusses in the auditorium. Beside this all brick walls will be fired with porous hollow tile, the outside walls to prevent dampness and those about the auditorium to deaden sound. This company having now under way, beside minor work, the large contract for the partitions, firing and column casings of the Rookery, and the double sound proof 2½ inch hollow tile partitions for an Indiana insane hospital, have been obliged to materially enlarge its plant, and now, though one of the latest in the field for fireproof contracting, are doing a rapidly increasing business in the furnishing of porous hollow tile for the protection of all parts of a structure against fire.

COLORADO has become famous for its marvelous gold and silver production, for its picturesque scenery, and its delightful climate. Its mining towns and camps, its massive mountains, with their beautiful green-verdured valleys, lofty snow-capped peaks and awe-inspiring cañons, together with its hot and cold mineral springs and baths, and its healthful climate, are attracting, in greater numbers each year, tourists, invalids, pleasure and business seekers from all parts of the world. The journey from Chicago, Peoria or St. Louis and other Chicago, Burlington & Quincy R. R. stations to Denver (the great distributing point for Colorado), if made over the Burlington Route (C. B. & Q. R. R.), will be as pleasant and gratifying as it is possible for a railroad trip to be. At all principal ticket offices will be found on sale, during the tourist season, round-trip tickets, via this popular route, at low rates to Denver, Colorado Springs and Pueblo, Colorado. When ready to start, call on your nearest ticket agent, or address Paul Morton, general passenger and ticket agent C. B. & Q. R. R., Chicago, Ill.

Business Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, Ill., July 1, 1887.

The volume of business transacted throughout the country during the first half of this year would, if it could be approximated, perhaps exceed the first half of last year by 25 per cent. This estimate is not an excessive one if we content ourselves with the available statistics from railroad, financial, and commercial quarters. Building operations, especially in a score or more of the larger cities are in excess of this. Building material has not advanced, while real estate and labor directly engaged in building have advanced, taking the comparison in any given number of cities. Iron, steel, lumber, nails, builders' hardware, stone, slate, cement, glass, gas fixtures, plumbers' supplies, have each and all gyrated around centers of very little diameters. Practically speaking, building material, taking it all in all, has not advanced within six or eight months. Exceptions can be found, as in the case of bricks in some markets, but when cost is averaged up there is a remarkable uniformity exhibited.

The probabilities are that future fluctuations will be more insignificant. There are those who pretend to believe that the country is approaching an era of higher prices, but when all the surrounding conditions and tendencies and agencies are studied, it is found that the probabilities are on the side of regularity. Whatever latent evil tendencies there are will be corrected by counter tendencies. Whatever of injustice there is in the relations of organized labor to capital will be corrected by stronger agencies than capital can organize, though the cure may not be immediate. The great controlling factors are pointing to enlarging operations. The building trades come in behind the railroad interests. There is assured activity for the next twelve months. Within the past six months programmes have been mapped out by capitalists and inventors which have reference to operations from twelve to eighteen months ahead. High authorities in architecture, building, and in finance have been consulted with reference to the wisdom of expending large sums of money in house building enterprises, and the conclusions arrived at are that house building offers the safest and best opportunities for surplus capital. Railroad opportunities are not so abundant as a few years ago, and the rank and file are afraid of them. Manufacturing is not yielding the comfortable dividends and margins it did years ago, except in certain directions. House building has paid well, besides securing the reward of appreciating values. Hence the growing interest exhibited in house building and in real estate operations. The builders throughout the United States have done well, and see no reason for apprehending an early termination of the activity. Architects have been favored with liberal clients. The industrial condition is sound. Railroad construction activity is general. Earnings are increasing. Locomotive builders have more work in hand than for years. The car builders have been forced to decline large orders and work overtime in some cases to meet their customers' wants. The bridge builders have three to four months' work on hand, and are crowding the structural mills with large orders. Nail makers are desperate over the black outlook for nails, despite the heavy demand sustained by activity in building. The lumber trade has been encouraged during the past six months by a demand which kept supplies at a low level, and prices firmer than a year ago. Agricultural implement makers and wood working machinery manufacturers have closed a good half year and have made ample preparations for another. The legitimate requirements of the country are extraordinary, and there is no occasion for depression. A more conservative management is observable in all trade channels. Enterprise is more intelligent. There is more cool calculation. Commercial failures do not increase in proportion to the increase in the volume of business. Railroad managers are wiping out their most pressing indebtedness, and the manufacturing world is borrowing less money, and paying less interest on what it does owe. These are some of the favorable features of the situation at the opening of the half year, and with wisdom and patience no unfavorable causes will be generated.

Synopsis of Building News.

Abilene, Kan.—Architects Hopkins & Holland, of Topeka, report: Jail and Sheriff's residence, 50 by 75 feet; cost, \$30,000.

Alpena, Mich.—Architect D. P. Clark, of West Bay City, has made plans for finishing the office of the Churchill House, to cost about \$1,000.

Alto, Ind.—Architect Clint F. Smith, of Kokomo, reports: For school board, brick and stone school house, 25 by 50 feet, slate roof; cost, \$2,500; projected.

Birmingham, Ala.—Architects Sutcliffe, Armstrong & Willett report: Building boom is at hand, but material is scarce, and help the same, and on large jobs money is a little hard to get. We have many plans accepted, but it is hard to get owners to start work. For Painter & Thompson, six-story brick and stone business block, 50 by 100 feet; cost, \$40,000; under way; Leonard, McPoland & Nalls, contractors. For F. H. Whitney, four-story brick business block, 50 by 80 feet; cost, \$20,000; projected; plans made and accepted. For Bessmer Printing Co., four-story business block, 50 by 102 feet; brick and stone; cost, \$25,000; projected; plans made and accepted. For Carolina Real Estate Co., Charleston Block, Bessmer, three and four stories, brick, 300 by 80 feet; cost, \$90,000; under way; McCrossin Bros. & Thomas, contractors. For Third Avenue Hotel Co., six-story hotel, 100 by 140 feet; cost, \$120,000; projected; plans made and accepted. For R. T. Armstrong, six-story brick, stone and terra-cotta building, 40 by 100 feet; cost, \$34,000; projected; plans made and accepted. For Carolina Real Estate Co., twenty-two-story frame houses, 30 by 40 feet; cost, \$20,000; under way, day work. For Natchez Land and Improvement Co., ten two-story frame houses, 30 by 40 feet; cost, \$10,000; Westernbrook Bros., builders. For Carolina Real Estate Co., two-story brick row, 30 by 70 feet; cost, \$2,000; under way. Also, two-story brick store and residence, 20 by 70 feet; cost, \$3,000; under way; McCrossin Bros. & Thomas, builders. For E. D. Phillips, one-story frame store and dwelling, 25 by 70 feet; cost, \$2,000; J. E. King, builder. For Carolina Co., two-story frame store and dwelling, 50 by 30 feet; cost, \$1,600; J. E. King, builder. For J. W. Happy, two-story frame residence, 60 by 48 feet; cost, \$3,000; under way; J. S. Memory, builder. For Wm. Berney, three one-story frame dwellings, 40 by 54 feet; cost, \$1,200; each under way; Thos. Packer, builder. For G. C. Ball, two-story frame dwelling, 50 by 75 feet; cost, \$5,000; under way. For Armstrong & Wallace, one-story frame dwelling, 34 by 84 feet; cost, \$3,500; under way. East Lake Baptist Church, one-story frame, 60 by 95 feet; cost, \$7,000; under way. For Ensley City Hotel, two-story frame building, 40 by 118 feet; cost, \$7,000; under way; Knighton & Edwards, builders.

Architects Chisolm & Green report: The present condition would indicate a very large amount of fine buildings for the coming year, and at present it is almost impossible to supply the demand for lumber, brick and other material, so great is the amount of building. For D. F. Constantine and R. J. Terry, three-story and basement brick, stone and terra-cotta building, 52 by 120 feet; cost, \$25,000; under way; Farrar & Crew, builders. For Amistown City Land Co., sixty 3 and 4-room frame cottages, 32 by 36 feet; cost, \$500 each; and fifty, 4, 6 and 8 rooms each, to from \$630 to \$1,200 each; under way. For J. H. Hewlett & Co., three-story brick hotel, 96 by 100 feet; cost, \$24,000; under way; Alex. Memory, builder. South Highlands Episcopal Church, brick and frame, 75 by 90 feet; cost, \$6,500; completing plans. Cahaba Valley Hotel, two-story frame, 75 by 150 feet; cost, \$6,000; completing plans. For Col. Codle, two-story frame club house; cost, \$4,000; completing plans. For J. C. McKleroy, two-story and basement stone and frame residence; cost, \$10,000; making plans. For J. C. Cobb, three-story brick hotel; cost, \$20,000; projected. For Leubetter & Co.,

three-story brick bank building; cost, \$50,000; projected. Also, two two-story frame dwellings; cost, \$3,000 each. Besides the above, are a number of less important buildings, costing from \$1,000 to \$5,000.

Boonville, Ind.—Architects Clark & Sauer, of Evansville, report: For C. C. Furguson, brick store building, 28 by 85 feet, tin roof; cost \$4,000.

Camden, Ark.—Architects Stewart & Carpenter, of El Paso, Texas, report: For H. W. Myar, three-story opera house, 105 by 134 feet, brick and stone, terra-cotta trimmings; cost \$60,000; under way; Chas. Fruin, of El Paso, Texas, builder.

Carmi, Ill.—Architects Clark & Sauer, of Evansville, Ind., report: For school board, brick addition, 42 by 70 feet, to old school building; cost \$6,000; projected. For North Storms, frame dwelling, 38 by 45 feet; cost \$2,500; projected.

Centralia, Ill.—Architect W. H. Milner, of Bloomington, reports: For S. L. Dwight, two-story frame dwelling, 36 by 52 feet; cost \$3,500; under way; W. White, builder. For B. Hausler, one-story frame cottage, 36 by 60 feet; cost \$1,500; projected.

Chattanooga, Tenn.—Architect R. H. Hunt reports: Have prepared work since January 1, 1887, to the amount of \$400,000, including houses of all descriptions, nine-tenths of which have been accepted, and are under way. Present outlook is bright, and expect my figures to run up high before the end of the season. Following is work of my office during last three weeks to June 25: For R. D. Peoples, seven three-story brick stores; cost \$24,000. For Peoples & Caldwell, two two-story brick stores; cost \$9,000. For Chas. D. Mitchell, four three-story frame flats; cost \$12,000. For R. L. Watkins, three two-story brick stores; cost \$10,000. Cottages costing from \$1,000 to \$1,900; total \$15,000. For M. M. Henderson, frame residence; cost \$3,500. For H. F. Rogers, frame residence; cost \$4,000.

Chicago.—At this writing the entire building interest is waiting to see what kind of a settlement comes through the arbitration committee. Business among architects, contractors and material men has been brisk or slack, according to the amount of out of town business in hand. The strength of the movement against trades unions has been that few firms do an exclusive city business and that out of town has increased largely through receiving special attention. In this particular the lookout in the city will result in good. The only permanent loss is to the journeymen, with whom a day cannot be recovered. It is generally conceded that it has been far better to sustain the immense loss of profit every concern has sustained than to be in a position of continued uncertainty. While nothing definite can be stated, the chances are that the settlement will soon be made, and that a rush of work will in a few weeks obliterate the marks of the greatest suspension of building through strikes that has ever occurred in this country.

Architects Flanders & Zimmerman report: For H. B. Peabody, four-story factory building, 40 by 90 feet, on Canal near Sixteenth street; pressed brick, stone trimmings, galvanized iron cornices, felt roof, skylights, freight elevator, steam heat and power; cost \$25,000; under way; A. Lanquist, mason. For C. E. Peacock, three-story addition, 40 by 55 feet, to brick and stone building, 445-7 State street; galvanized iron cornices, felt roof, skylights, stained glass, closets and bath, passenger elevator, iron channels, beams, etc., electric bells and speaking tubes; cost \$20,000; under way; A. Lanquist, mason; J. H. Blair, carpenter.

Architects Burnham & Root report: For C. W. Needham, two-story residence, 32 by 60 feet, 3647-9 Michigan avenue; pressed brick, brownstone trimmings, copper gutters, slate roof, skylights, stained glass, closets and bath, steam heat, hardwood finish and tiling, electric bells and speaking tubes, mantels, dumb waiters; cost \$15,000; Wm. Soeffker, mason; Edmunds & Hay, carpenters; building under way.

Architects Burling & Whitehouse report: For C. P. Caldwell, three-story residence, 50 by 44 feet, 3252 Wabash avenue; blue Bedford stone front; cost \$14,000; to be commenced at once; Lotz & Stinson, masons; G. A. Johnson, carpenter. For Mrs. Ellen M. Skinner, three two-story dwellings, 50 by 74 feet, 34 to 38 College place; pressed brick, brownstone trimmings; cost \$16,000; Alex. McIntosh, mason. For Father O'Brien, three-story and basement convent school building, 63 by 108 feet, on Belmont avenue, near Halsted street; red pressed brick, Lake Superior variegated brownstone; cost \$15,000; taking figures.

Architect W. G. Barkfield reports: For John Morris, six two-story houses, 20 by 65 feet, Vincennes avenue and Thirty-seventh street; St. Louis pressed brick, brown and Michigan sandstone; all modern improvements; cost \$27,000.

Architect H. B. Seeley reports: For A. L. Patterson, three-story stores and flats, 66 by 62 feet, on Cottage Grove avenue, near 37th street, Anderson pressed brick, Bedford stone trimmings, iron channels, beams, etc., felt roof, skylights, closets and baths, freight elevators, wood mantels, electric bells, speaking tubes; cost \$16,000; under way. For Gen. L. J. Wistor, three-story flats, 108 by 65 feet, first story stone, second and third brick, trimmed with copper, copper bays, felt roof, skylights, stained glass, closets and bath, hot air heat, freight elevators, hardwood finish and tiling, electric bells, speaking tubes, "Hess" grates; cost \$34,000; contract not let.

Architect H. H. Boyington reports: For J. W. Cochran, two-story stores and flats, 40 by 78 feet, 39, 33, 35 State street, brick, terra-cotta trimmings, closets, bath, skylights; cost \$10,000; under way; J. J. Rogan, mason; Ed. Spiering, carpenter.

Architect W. W. Boyington reports: For United States Express Company, two-story addition to building, 40 by 180 feet, 85 Washington street, brick and terra-cotta, iron channels, beams, etc., skylights, fireproofing, closets, passenger and freight elevators, steam heat and power, hardwood finish and tiling, wood mantels, electric light; cost \$70,000; under way; Robinson & Minor, masons; Thomas Clark & Son, carpenters.

Architect S. M. Randolph reports: For W. G. Gordon & Co., twenty-two-story dwellings, on Turner and Spaulding avenues, north of Ogden avenue, Anderson brick, Lemont stone, felt roofs, hot air heat, skylights, closets and baths, electric bells, speaking tubes, etc., mantels; cost \$70,000; contracts not let.

Architect L. G. Hallberg reports: For S. E. Gross & Co., three two-story frame cottages, 25 by 42 feet, at Calumet Heights; cost \$7,500; under way; Dan Duggan, mason; J. Departie, carpenter.

Cincinnati, O.—Reported by Mr. Lawrence Mendenhall:

The labor difficulties have been amicably adjusted, the tinnerns and cornice makers having at last won another victory for the bosses. The contractors and architects feel assured of a very fair fall business. In building circles it seems to be the feeling that the disastrous Fidelity bank failure will stimulate real estate purchases, which will cause building to take, as it were, a jump. May the predictions come true, "and long may she wave." The corner stone of our new Chamber of Commerce was laid June 11th, with very simple ceremonies, and day by day very substantial progress is being made.

Architect Charles Crapsey reports: Frame dwelling for W. J. Fitzgerald, to be erected on Kinney avenue, north Walnut Hills, to cost \$3,500; not let. Frame dwelling for M. D. Burke, Kennedy Heights, to cost \$4,500; let. Frame dwelling for Dr. Thad. A. Reamy, to be erected on Oak street; not let. Four stores and flats, 100 by 75 feet, for John Breen, to be located at Tusculum and Eastern avenues; brick; three stories; not let. In conjunction with Architect W. R. Brown, schoolhouse at Loveland, O., to cost \$12,000; and remodeling court house at Winchester, Ky., also building vaults for same. Three fancy frame cottages for Gen'l Shattuc's subdivision at Madisonville, O., to cost \$3,000 each; not let. Frame dwelling for Rev. Earl Cranston, to be erected in Avondale, to cost \$6,000; not let. Block of stores and flats for Parrish & Morey, at Hamilton, O. Stone and tile dwelling for Rev. W. E. Stevens, to cost \$6,000, and to be erected at Tusculum; not let. Frame dwelling for U. Engleman, Miamisburg, O., to cost \$6,000; not let. Also pressed brick dwelling in same town for Dr. T. B. Lyons; cost \$7,000; let. In conjunction with W. R. Brown, Baptist Church, at Franklin, O., to cost \$15,000; not let. Two frame dwellings on Melrose avenue, Walnut Hills, for Geo. Ebersole and H. K. Robb, to cost \$7,500; let. Frame dwelling for David Herr, Hartwell, O.; cost \$4,500; let.

The plans submitted by Architect H. E. Siter, for the main building of our Exposition, and those of Architect J. W. McLaughlin, for the canal building for the same project, in the eyes of the Building Committee and the Commissioners more fully meet the requirements than any of the others, and will probably be adopted.

Plans have been prepared by Architects Buddemeyer, Plympton & Trowbridge for a school building three stories high, containing eighteen classrooms—twelve 27 by 32 feet, and six 27 by 37 feet. The building will be 114 feet on Canal and 128 on Elm street. It will be constructed of stock brick, with freestone trimmings, as in the new schoolhouse on Chase street, Cincinnati. The basement will be nine feet high, and contain ample room for play-rooms, etc., and will be well ventilated and lighted. The roof will be tiled in the latest style of the art. The style of architecture will be the early free Italian Renaissance, a departure from the present plain and pointless character of school buildings in Cincinnati, and when completed, it will be an ornament to that part of the city. It is estimated to cost about \$50,000. The design has been individually examined by the Committee on Buildings of the Board of Education, and indorsed by each one of them. They also report: Brick and shingle dwelling for John Gates, twelve rooms,

thoroughly Queen Anne style, half finished in quartered oak, balance of interior to be finished in white pine; cost \$12,500, and will be located at Oak and Home streets, Walnut Hills; contract not let. Two-story stock brick dwelling, with plastered gables, for Chas. Whiteley, to be erected on Chase avenue, Cumminsville; to cost \$4,500; contract not let. Remodeling E. E. Wood's dwelling on Main avenue, Avondale, adding five rooms, etc.; cost \$4,000; contract not let; brick and frame stable, 22 by 30 feet, for Chas. Donhoff, Hamilton Pike, Twenty-fifth Ward. Making plans for S. W. Smith, for an iron and stone store building, to be erected on south side of Sixth street, between Race and Elm streets, and six-story brick printing warehouse for Cohen & Co., to cost \$19,000, and to be located on Longworth between Race and Elm streets.

Architect S. E. Des Jardins reports: Stone dwelling, containing fifteen rooms, massive stonework, hardwood finish, for Hon. Chas. W. Baker, to be erected on Reading Road, near Oak street. Ten-room fancy frame dwelling, for Alfred White, to be erected in Avondale; cost \$8,000. Frame dwelling for W. S. Green, Middleport, O.; cost \$4,500. Remodeling J. S. Blymyer's dwelling at Mansfield, O.; remodeling frame dwelling at Madisonville, O., for W. C. Rodgers; remodeling brick dwelling for Mrs. May Williams, East Walnut Hills; building addition to W. Rawson's dwelling at Westwood, O.; physicians office for Dr. Johnstone, Danville, Ky., to cost \$5,000, and making sketch for a colored Baptist church, to be erected at Richmond and Mound streets, to cost \$15,000. He is also superintending the erection of W. W. Watt's fine dwelling at Richmond, Ky.

Architect W. R. Brown reports: Seven-story stock brick factory for S. W. Frost, 32 by 75 feet, to cost \$15,000, in conjunction with Architect Chas. Crapey; schoolhouse at Loveland, O., to cost \$12,000; Baptist church at Franklin, O., brick with freestone trimmings; cost \$12,000. Dwelling for Dr. T. B. Lyons, Miamisburg, O.; remodeling court house, at Winchester, Ky.; cost \$15,000. Block of stores and flats for Parrish & Morey, Hamilton, O., and dwelling at Miamisburg, O.; cost \$8,000. He has other work in hand.

Architect Gustave W. Drach is engaged on plans for a county infirmary, to be erected at Rising Sun, Ind. Has about completed the erection of a handsome frame dwelling for John Auell, in Clifton; also a dwelling for A. Nulsen in same suburb. He is making sketches for a number of buildings.

Architect J. B. Steinkamp reports: Thos. Emery Son's four-story flat, freestone front, to be erected at 340 West Fifth street, to cost \$18,000. Herman Tapke, two and a half-story dwelling, to cost \$9,000; contract let. Four-story flat for G. Kuhlman, 61 Woodward street; contract let. Also four-story store and flat on Court street, for Thos. Emery's Sons.

Architect Emil G. Reuckert reports: Four-story brick flat and store for Louis Langhorn, to be erected at the corner of Liberty and Dudley streets, to cost \$12,000. Two and a half-story frame dwelling for Chas. Eschenbach, on Eastern avenue, to cost \$3,500. Two and a half-story brick dwelling for Geo. W. Schneider, on Borden street, Cumminsville, to cost \$3,000. Two two and a half-story brick dwellings for Weber & Geis, on Euclid avenue, Coryville, to cost \$3,500 each. Two and a half-story brick dwelling for J. H. Gentrup, to be located on Ludlow avenue, Clifton, to cost \$9,000; also brick stable for same, extra from above price, and two and a half-story brick dwelling for Wm. C. Kennett, on Dayton street, near Linn, to cost \$6,500.

Architect H. E. Siter has removed his office from Lincoln's Inn Court building, to the United States building, S. E. corner Third and Walnut streets. This was his first building here, and all the offices are well lighted and arranged. Mr. Siter reports: Third National Bank, stone front, 40 by 100 feet, offices above; skylight 22 by 58 feet; building lighted from center and both ends; cost, when complete, with vaults, about \$70,000. Warehouse on Broadway, brick and stone, to cost \$8,000. Making improvements at 134 and 136 W. Seventh street, for Abe Furst and Longworth estate, remodeling old buildings into stores and flats. Stone and frame dwelling for Chas. Fleischman, to be erected on Walnut Hills; cost, \$20,000; also, stable for same, to cost \$5,000. He is busy on other work.

Architect W. W. Franklin, Glenn building, S. W. corner Race and Fifth streets, reports: Two and a half-story pressed brick dwellings for H. H. Tatem, hardwood finish, first story; to be erected in Hartwell, Ohio, to cost \$10,000. Remodeling Episcopal Church, Hartwell, to cost \$3,500. Remodeling Charles Stewart's dwelling in Clifton, to cost \$3,000. Making sketches for a two and a half-story pressed brick dwelling, hardwood finish, for Abe Steinau.

Architects G. & A. Brink, 339 Wade street, are engaged on plans for a tenement house, to be built on Cutter street, near Wade, for Mr. Henry Hoberg; cost, \$6,000. Dwelling house for Mr. Henry Mueller, Ninth street, between Baymiller and Freeman avenue; cost, \$7,000.

Architect Jas. W. McLaughlin, Johnston building, is engaged on plans for the First National Bank building, which is to occupy the site of their old quarters, corner of Walnut and Third streets. This building will be six stories high, with basement. The first story will be red Missouri granite, above that pressed brick with brownstone trimmings. The first floor will be used by the bank, the other stories above for offices, while the basement will be used for brokers and insurance companies. Very little wood will be used in the building, and will be as near fireproof as possible to build it. The walls are very massive, with foundation of Indiana flat rock. The cost of this building will be over \$100,000.

Coldwater, Mich.—Architect M. H. Parker reports: No strikes here, all mechanics busy, wages about the same as last year. Have plans under way for two-story brick school building, 56 by 80 feet; cost \$8,000. Accepted design for branch county court house, 104 by 87 feet, two-story brick, with stone trimmings, metallic shingle and slate roof, fireproof vaults; cost \$40,000.

Coleridge, Neb.—Architects Martin & Batwell, of Sioux City, Iowa, report: For E. E. Shumley, residence; cost not estimated.

Deatur, Ill.—Architect W. H. Milner, of Bloomington, reports: For P. Loeb, one-story and basement stone and frame cottage, 57 by 85 feet, all modern improvements; cost \$15,000; projected.

De Kalb, Ill.—Architect Geo. F. Barber reports: Present condition moderate; outlook good. Have under way and projected, three frame residences, to cost \$2,000, \$1,800, and \$2,000; Barber & Boardman, builders.

Detroit, Mich.—Present condition and outlook very good.

Architect Blackwell reports: For Herman Eckner, two-story store and dwelling, 26 by 72 feet, brick, stone trimmings; cost \$6,000; August Dorsch, builder.

Architect W. G. Malcomson reports: For Fred Chambe, addition to three-story brick, 60 by 20 feet; cost, \$7,000; P. D. Talon, carpenter; Joe Dietz, mason. For Davenport estate, block of two-story stores, 60 by 100 feet, brick, stone trimmings; cost \$28,000; under way; Tapping & Fisher, masons; Henry George & Son, carpenters.

Architects Donaldson & Meier report: For Jacob Mann, three-story factory building, 30 by 44 feet, brick; cost \$7,000; M. Blay & Sons, builders. For H. C. Wisner, three-story brick and stone building, 40 by 53 feet, slate roof; cost \$8,200; W. H. Tranes, builder.

Architect W. E. Brown reports: For Brush Estate, block of two three-story stores, 40 by 80 feet, brick, stone trimmings; cost \$12,000; Daniel Lane, mason; Henry George & Son, carpenters.

Architects Mason & Rice report: For Tower Bros., five-story creamery and factory building, 60 by 100 feet; cost \$20,000; day work. For A. G. Boynton, three-story dwelling, 26 by 72 feet, brick, stone trimmings, slate roof; cost \$6,500.

Architects Hess & Raseman report: For C. H. Bull, one-story addition to office building; cost \$11,000; Dean Bros., masons, Spitzley Bros., carpenters.

Architect G. W. Lloyd reports: For C. A. Kent, one-story addition to brick store; cost \$5,000; A. Chapaton, mason; R. Hillson, carpenter.

Architects Spier & Rohns report: For Fred Mueller, two-story store and dwelling, 24 by 44 feet, brick, stone trimmings; cost \$3,000; Swartz & Son, builders.

Architects Scott & Co. report: For Oren Scotten, two-story frame dwelling, 26 by 48 feet, slate roof; cost \$5,000; Jaynes & Son, builders.

Architect Peter Diedrich, Jr., reports: For J. V. Lisse, two-story frame dwelling, 30 by 50 feet; cost \$3,000; Diedrich Bros., builders. For J. C. Posselins, three-story double store, 50 by 100 feet, brick; cost \$8,000; M. Blay & Son, builders.

M. Scholl is building a two-story brick double dwelling, 40 by 56 feet, for Jacob Darinstarten, to cost \$5,000.

Cope Bros. are to build a three-story factory, 60 by 68 feet; cost \$5,000; not let.

Building permits were issued during the month of June for new buildings, to cost \$297,045; for alterations, etc., to cost \$105,270; total, \$402,315.

Duluth, Minn.—Architect J. J. Egan, of Chicago, Ill., reports: For Spaulding Hotel Company, seven-story hotel building, 150 by 115 feet, pressed brick, brownstone trimmings, galvanized iron cornices, felt roof, skylights, fireproofing, stained glass, closets and baths, passenger and freight elevators, steam heat and power, iron channels, beams, etc., hardwood finish and tiling, electric bells, speaking tubes, wood or marble mantels; cost \$350,000; under way; Hennessy, Agnew & Cox, of St. Paul, contractors.

Evansville, Ind.—Architects Clark & Sauer report: Business good up to present, but prospects not very flattering. For Wm. Heilman, three-story brick store building, 60 by 100 feet, tin roof; cost \$13,000; under way; Chas. P. Stoltz, builder. For Clint Stacer, brick carriage house and stable, 26 by 40 feet, slate roof; cost \$3,000; under way; P. Q. Elliott, builder. For Wm. A. Heilman, three-story brick store building, 20 by 70 feet, tin roof; cost \$3,500; under way; Adam Weikel and Chas. P. Stoltz, builders.

Fayette, Ia.—Architect F. D. Hyde, of Dubuque, reports: For Upper Iowa University, three-story brick and frame dining hall, 36 by 60 feet; cost \$7,000; under way.

Gibson City, Ill.—Architect W. H. Milner, of Bloomington, reports: For John Burt, three-story and basement hotel, 70 by 90 feet; cost \$20,000; projected.

Greenville, Pa.—Architects Kannengeiser & Kling, of Youngstown, Ohio, report: For N. E. Tillotson, two-story frame, 36 by 46 feet, slate roof; cost \$5,000; plans under way.

Hamilton, Ont.—Architect James Balfour reports: Trade good, with good prospects. All the architects and builders are busy. For William Southam, brick and stone dwelling; cost \$7,000; under way; James Hossack, builder. For Samuel Baker, alterations to dwelling; cost \$6,000; under way; James Hossack, builder. For Shedden Company, brick and stone warehouse; cost \$4,000; under way; W. I. McDonald, builder. For James G. Davis, two-story brick and stone dwelling; cost \$7,000; under way; W. I. McDonald, builder. For W. I. Kingdon, two brick and stone dwellings; cost \$5,000; James Mercer, builder. For Adam Clark, brick and stone dwelling; cost \$4,500; Howard Bros., builders. For Y. M. C. A., brick and stone building; cost \$20,000; ready for figures; also several less important dwellings, ranging from \$2,000 to \$3,000.

Hancock, Mich.—Architect J. B. Sweatt, of Marquette, reports: For Edward Ryan, two-story brick addition, 56 by 100 feet, tin roof; cost \$3,000. Also two-story brick building, 82 by 96 feet, tin roof; cost \$12,000; J. B. Sweatt, builder.

Hawthorne, Ill.—Architects Glark & Sauer, of Evansville, Ind., report: For the school board, frame school building, 30 by 56 feet; cost \$2,000; projected.

Iowa Falls, Ia.—Architect F. D. Hyde, of Dubuque, reports: Addition 40 by 60 feet to stone Congregational Church building; cost \$40,000; under way.

Knoxville, Tenn.—Architects Beaver & Hoffmeister report: Outlook for building not so encouraging as we would wish; buildings mostly small. For Thos. H. Hicks, two double brick tenements, 34 by 38 feet; cost \$7,000; under way; R. Jones, builder. For A. David, two-story brick residence, 28 by 42 feet, slate roof; cost \$6,000; projected. For M. L. Patterson, three-story brick store; projected. For J. B. Minnis, two-story brick store; projected. Also several less important buildings, ranging from \$1,800 to \$3,500.

[Continue on page XIV.]

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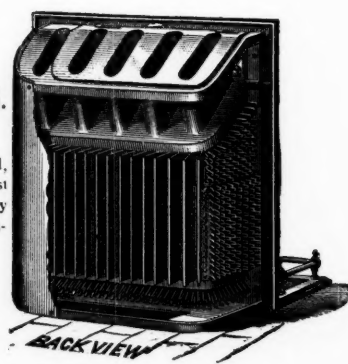
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SEND FOR CIRCULAR.

[Continued from page 100.]

Kokomo, Ind.—Present outlook fair. A large number of small dwellings are to be built soon, also two large factories will be commenced at once.

Architect Clint F. Smith reports: For city of Kokomo, school building, 70 by 78 feet, brick, stone and terra-cotta, slate roof; cost \$10,000; projected. For John Leach, frame dwelling, slate roof; cost \$2,500. For Will Hazeltine, frame dwelling, slate roof; cost \$2,000.

The following are from plans of Architect James F. Alexander, of Lafayette: For S. Davis & Son, three-story brick, stone and terra-cotta business block, 22 by 80 feet; cost \$7,000; under way; G. W. McGowan, builder. For Bell & Purdum, three-story brick, stone and terra-cotta business block, 22 by 100 feet; cost \$7,000; under way; Louis Goodwine, builder. For Dixon & Co., three-story brick, stone and terra-cotta business block, 44 by 100 feet; cost \$12,000; under way; John Sipe, builder. For Henry Syter, three-story brick, stone and terra-cotta business block, 22 by 80 feet; cost \$5,000; under way; Thomas Mason, builder.

Joseph Boyer is building a brick and stone factory building, to cost \$10,000, for the Kokomo Straw Board Works.

N. McAllister is building three frame buildings, to cost \$10,000, for the Kokomo Glass Works.

Lake Linden, Mich.—Architect J. B. Sweatt, of Marquette, reports: For Neuman & Freese, two-story brick building, 50 by 100 feet; cost \$12,000; projected; contracts are not let.

Lemars, Iowa.—Architects Martin & Batwell, of Sioux City, report: For Union Hotel Co., three-story and basement brick hotel building; cost \$40,000.

Little Rock, Ark.—Architect F. J. Rickon reports: For Little Rock Electric Light Co., new building, 60 by 70 feet, at foot of Cumberland street; estimated cost \$6,000.

The Opera House is to be entirely remodeled, under the management of Mr. Thomas.

Lyons, Kan.—Architect L. M. Wood, of Topeka, reports: For Lasley, Godshalk & Co., block of stores; cost \$35,000. For D. M. Bell, store; cost \$8,000. For Electric Light Co., block of stores; cost \$18,000. For G. A. R. Hall, building; cost \$12,000. Masonic Temple; cost \$28,000. Contracts on above buildings are not let.

Manhattan, Kan.—Architects Hopkins & Holland, of Topeka, report: For L. R. Elliott, residence, to cost \$7,000; projected.

Mankato, Kan.—Architects Hadley & Cooper, of Topeka, report: For J. P. Fair, two-story frame dwelling, 29 by 50 feet; cost \$3,500; under way.

Mapleton, Ia.—Architects Martin & Batwell, of Sioux City, report: For Dr. F. Griffin, brick block and Masonic hall; cost not estimated.

Marquette, Mich.—J. B. Sweatt reports: Present outlook for building in the upper peninsula of Michigan is encouraging. For G. W. Hager, three-story frame residence, 38 by 50 feet; cost \$10,000; under way; J. B. Sweatt, builder. For J. M. Case, three-story frame residence, 40 by 60 feet; cost \$13,000; under way; J. B. Sweatt, builder. For Thos. Jory, two-story frame dwelling, 27 by 36 feet; cost \$2,000; under way; J. B. Sweatt, builder. For Mrs. E. Bremtin, three-story building, 60 by 90 feet; cost \$30,000; under way; J. B. Sweatt, builder. For P. Werner, two-story frame, 24 by 40 feet; cost \$4,000; under way; P. F. Kelly, builder. "Clifton House," three-story brick, 47 by 120 feet, tin roof; cost \$20,000; under way; J. B. Sweatt, builder.

Mason, Mich.—Architect D. P. Clark, of West Bay City, reports: For S. J. P. Smead, two-story frame residence, 35 by 65 feet; cost \$6,000.

Millbank, Dak.—Architects Martin & Batwell, of Sioux City, Iowa, report: County jail building; cost \$10,000; Diebold Safe and Lock Company, contractors.

Morristown, Tenn.—Architects Beaver & Hoffmeister, of Knoxville, report: For J. C. Mathews, two-story brick store, 50 by 150 feet; cost \$7,000; projected.

Mount Vernon, Ind.—Architects Clark & Sauer, of Evansville, report: For A. Wassern, frame dwelling, 36 by 52 feet, slate roof; cost \$2,000; under way.

Negaunee, Mich.—Architect J. B. Sweatt, of Marquette, reports: Three-story brick high school building, 136 by 85 feet, metallic roof; cost \$35,000; contract let July 8.

New Castle, Ind.—S. H. Elliott, contractor and builder, reports: Present condition, good; outlook, reasonably good. Have one gas well, and boring for more. For J. W. Maxim, two-story frame dwelling, 42 by 51 feet; also stable, 26 by 34 feet; cost \$7,300; nearly completed; S. H. Elliott, builder. For F. R. Vaughan, two-story frame dwelling, 32 by 60 feet; cost \$4,500; S. H. Elliott, builder. For Benj. Allen, two-story brick residence, 44 by 49 feet; cost \$6,000; S. H. Elliott, builder.

New Corporations.—The St. Joseph Pressed Brick Company, of St. Joseph, Mo., has been incorporated; capital stock, \$10,000; Carroll Connett, Chas. B. Chase, Geo. C. Hull, G. W. Morris and others, incorporators. The Forest City Dry Pressed Brick Company, of Wichita, Kan., has been incorporated. Capital stock, \$100,000. Wm. Mathewson, O. Martinson, Amos Aspey, Robert M. Platt and others, incorporators. The Wetmore & Morse Granite Company, Chicago; capital stock, \$150,000; incorporators, W. H. Wetmore, W. W. Stewart, F. C. Wetmore. The American Terra Cotta and Ceramic Company, of Chicago, has been incorporated; capital stock, \$100,000; Chauncey H. Miller, Charles E. Piper and Matt Thome, incorporators. The Chicago Automatic Boiler Company, of Chicago, has been incorporated; capital stock, \$15,000; G. A. Colby, William S. Armour and M. C. Armour, 185 Dearborn street, incorporators. The Graydon Safety Car Heating Company, of Indianapolis, has been incorporated; capital stock, \$100,000; William M. and Andrew Graydon and Charles Austin, incorporators. The Kellogg Oil, Paint and Varnish Company, of Buffalo, N. Y., has been incorporated; capital stock, \$50,000; Spencer Kellogg, Sidney McDougall and Wm. H. Van Vliet, Jr., incorporators. The Dunlap Manufacturing Company, of Chicago, has been incorporated; capital stock, \$15,000; John S. Dunlap, J. P. Black and C. L. Boney, 175 Dearborn street, incorporators. The Hope Ventilator Company of Kansas City, Mo., has been incorporated; capital stock, \$10,000; John A. Duncan, William Masters, John T. Hope and Luke J. Hope, incorporators. The Chicago Brass Hardware Company, of Chicago, has been incorporated; capital stock, \$5,000; Frank S. Terry, Don C. Peck and Robert P. Bates, 95 Washington street, incorporators. The O'Brien Patent Safety Scaffold Company, of Philadelphia, has been incorporated; capital stock, \$100,000; John E. Stevenson, 3508 Barrington street, incorporator. The Shackleton Car Heating and Ventilating Company, of New York, has been incorporated; capital stock, \$100,000; Geo. W. Dithridge, Robert M. Cushman, 60 Liberty street, and Charles M. Reynolds, incorporators. The Western Brass Manufacturing Company, of Cincinnati, has been incorporated; capital stock, \$5,000; James Stout, W. A. Lyons, Richard R. Daly and others, incorporators. The Zarley Stone Company, of Joliet, Ill., has been incorporated; capital stock, \$4,000; James O. Zarley, Edward Baker and John H. Lawler, incorporators. The Empire State Heating and Power Company, of New York, has been incorporated; capital stock, \$100,000; John R. McNulty, Martin B. Brown, David Rutsky, 60 Broadway, Jacob F. D. Solis and others, incorporators. The Gilson Asphaltum Company, of St. Louis, Mo., has been incorporated; capital stock, \$25,000; Chas. O. Baxter, 115 Pine street; Henry E. Nafiz and Chas. Ottmann, incorporators.

Newmarket, Tenn.—Architects Beaver & Hoffmeister, of Knoxville, report: For Geo. Long, two-story and attic country hotel, 65 by 42 feet; cost not estimated; under way; day work.

Normal, Ill.—Architect W. H. Milner, of Bloomington, reports: For J. E. Baker, one-story frame dwelling, 35 by 50 feet; cost \$3,000; Thos. Garrett, builder.

North Manchester, Ind.—Walter Laidlow, Jr., slate roofer, reports the following work under way and projected: Lawrence Mills & Co., three-story bank and office building, 21 by 100 feet, brick and stone, terra-cotta trimmings, tin and slate roof; cost \$8,000; projected; contract not let. L. J. Nofziger & Son, two-story brick store building, 24 by 156 feet, galvanized iron cornice, tin and slate roof; cost \$5,000; M. Baker, mason; J. D. Spurgeon, carpenter. A. E. Stewart, two-story brick dwelling, slate roof; cost \$3,500; roof on; J. D. Spurgeon, carpenter. Dr. M. O. Lower, two-story brick dwelling, stone trimmings, slate roof; cost \$4,000; under way.

Mr. Laidlow says "there will be considerable building here this season; several small dwellings and a number of stores, besides those under way, are talked of."

Oak Park, Ill.—Architects Patton & Fisher, Chicago, report: For Jas. W. Scoville, extension of water works consisting of a two-story office building, 31 by 35 feet, and a one-story machine shop, 25 by 136 feet, estimated cost \$8,000; work commenced.

Oconto, Wis.—Architects Martin & Batwell, of Sioux City, Iowa, report: For Oconto county jail building, to cost \$14,000; Diebold, Safe & Lock Co., contractors.

Ogden, Utah.—Architects Patton & Fisher, of Chicago, Illinois, are preparing plans for the New West Education Commission for a school house, 70 by 70 feet, estimated cost \$12,000.

Omaha, Neb.—Architects McDonald & Ogilvy report: We have a great many small houses in prospect, also some larger tenements. For A. H. Fitch, three-story brick and iron stores and flats, 50 by 100 feet; cost \$15,000; under way; Chas. W. Partridge, builder. For Ira Van Camp, three two-story and basement brick and frame dwellings, 66 by 36 feet; cost \$12,000; projected. For Miss Helen Jones, double two-story frame tenement, 40 by 40 feet; cost \$4,000; under way; Chas. W. Partridge, builder. For W. C. Burnam, two-story frame dwelling, 24 by 40 feet; cost \$2,000; under way; Thos. Cunningham, builder. For R. W. Gibson, two-story frame residence, 30 by 46 feet; cost \$4,000; under way; also several smaller dwellings ranging from \$1,500 to \$3,000; projected and under way.

Peoria, Ill.—Architect W. H. Milner, of Bloomington, reports: For W. G. Baldwin, two-story frame residence, 42 by 58 feet; cost \$8,000. W. H. Coleman, builder.

Salina, Kan.—Architect L. M. Wood, of Topeka, reports: For Wm. Berg, residence; cost, \$6,500.

Salt Lake City, Utah.—Architect R. Kletting reports: For L. C. Karrick, two-story brick store, 27 by 50 feet; cost, \$3,000; plans under way.

Sheffield, Ala.—Architect Wm. S. Hull reports: Present condition of building very good. There is about \$350,000 in residences and stores under construction and contract, and about \$1,300,000 in industrial plants under construction. For Mobile Real Estate Co., three-story brick building, 50 by 80 feet, tin roof, cost \$9,000. J. E. Warner, builder. For B. Wolf & Bro., two-story brick, 25 by 80 feet, tin roof; cost, \$3,600; under way; J. H. Moslage & Co., builders. For J. Woog, three-story and basement stone front building, 50 by 120 feet; cost, \$18,000. Basement in.

Sibley, Ia.—Architects Martin & Batwell, of Sioux City, report: For Pioneer Agricultural Society, amphitheater, stands, pavilions, etc; cost not estimated.

Sioux City, Iowa.—Architects Martin & Batwell report: For Abel Anderson, three-story cutstone and pressed brick building; cost not estimated. For F. F. Beck, frame dwelling, to cost \$8,000.

Standish, Mich.—Architect D. P. Clark, of West Bay City, reports: One-story frame school house, 62 by 96 feet; cost, \$4,500; contract let about June 20.

Streator, Ill.—Architect W. H. Milner, of Bloomington, reports: For Wm. Graeser, two one-story cottages, 25 by 40; cost \$1,000 each; projected.

Stillwater, Minn.—Architects Burling & Whitehouse, of Chicago, Ill., report: For Hon. D. M. Salim, Union Depot, building brick and variegated brown-stone; cost, \$25,000.

Suwannee City, Fla.—Architects Beaver & Hoffmeister, of Knoxville, Tenn., report: For Otis A. Miller, three-story frame hotel; cost \$20,000; under way; day work.

Topeka, Kan.—Architects Hadley & Cooper report: Outlook good, plenty of work. For State Normal School, three-story and basement brick and stone building, 80 by 85 feet, slate and tin roof; cost \$26,200; foundation commenced; John Hammond, contractor. For Masonic Society, three-story and basement brick and stone building, 50 by 100 feet, tin roof; cost \$20,000; contract not let. For M. Snottinger, two-story frame dwelling, 20 by 50 feet; cost \$3,500; under way; F. L. Stevenson, builder. Also preparing plans for a \$2,000 frame dwelling for Geo. F. Parmelee, of St. Louis.

Architects Hopkins & Holland report: For H. P. Throop, four-story and basement hotel building, 100 by 150 feet; cost \$75,000; to be known as "Hotel Throop"; building under way. Odd Fellows' Hall, to cost \$25,000; under way. For A. L. Allen, residence, to cost \$5,000; under way. For H. K. Rowley, residence, to cost \$10,000; under way.

Architect L. M. Wood reports: Outlook very good. State Fair buildings, to cost \$100,000. For Samuel Hopkins, residence; cost \$7,000.

Toronto, Ont.—As a final settlement of the recent labor troubles, which have stopped a large amount of building, much of it for this year, the master masons and bricklayers have signed an agreement, to be in force for three years. In other trades, the carpenters, plasterers and lathers are still out.

West Bay City, Mich.—Architect D. P. Clark reports: For J. F. Norton, two-story brick veneered store building, 50 by 60 feet; cost \$4,500; nearly completed. For P. R. T. Krusch, two-story brick store, 25 by 75 feet; cost \$3,500. For Bay City Opera House Co., two-story and basement Public Library building, 41 by 70 feet; cost \$7,000. Also a number of smaller buildings, ranging from \$1,000 to \$2,500 in cost.

West Branch, Mich.—Architect D. P. Clark, of West Bay City, reports: One-story brick and frame schoolhouse, 100 by 60 feet; cost \$5,000.

Williamsville, Kan.—Architect W. H. Milner, of Bloomington, Ill., reports: For Christian Church Society, frame church, 40 by 70 feet; cost \$2,000; John W. Evans & Son, of Bloomington, builders.

Winfield, Kan.—Architect L. M. Wood, of Topeka, reports: For F. P. Baker, residence; cost \$5,000; contract not let.

Woodstock, Ont.—Architects Cuthbertson & Fowler report: Outlook, fair. For Congregational Society, stone church, 59 by 98 feet; cost \$15,000; under way; Beckerton & Co., builders. For J. F. O'Neil, extension to O'Neil Opera House, 40 by 60 feet, brick; cost \$10,000; under way; Beckerton & Co., builders. For W. L. McKay, two-story frame dwelling, 26 by 30 feet; cost \$3,500; under way; Large & Bowen, builders. Two-story brick public school building, 35 by 70 feet; cost \$4,000; under way; Beckerton & Co., builders. For James Scott, three-story brick dwelling, 35 by 55 feet; cost \$7,500; under way; Geo. Clarkson, builder. For W. H. Millman, two three-story brick dwellings, 34 by 58 feet; cost \$10,000; projected. Also several less important buildings.

Youngstown, O.—Architects Kannengeiser & Kling report: Church of Immaculate Conception, brick and stone building, 60 by 140 feet, slate roof; cost \$25,000; plans under way.

PROPOSALS.

BOARD OF TRADE.

Sealed proposals will be received at this office until 12 o'clock noon, July 15, 1887, for the construction of the Board of Trade building at Columbus, Ohio.

Copies of the specifications and drawings can be seen at the office of Elah Terrell & Co., architects, Columbus, O.

Bids for any part of the building must be accompanied by a certified check of \$500, and for the whole building \$5,000. Bids will be received for separate parts or for the building complete. The directors reserve the right to reject any or all bids.

For the directors.
CHARLES G. LORD, Secretary.

CITY HALL.

Sealed proposals will be received by the undersigned committee on city hall, for the construction of a City Hall building, on the corner of Third and Hampshire streets, in the city of Quincy, Illinois, as per plans and specifications made by the architect, Harvey Chatten, which will be seen on file in the city office.

Bids will be received up to July 15, 1887, and such bids opened by said committee at 2 o'clock p.m. of said day.

Each proposal must be accompanied by a good and sufficient bond of five thousand dollars, payable to the city of Quincy, Illinois. The committee reserves the right to reject any and all bids.

H. SWIMMER, } Committee on
E. H. OSBORN, } City Hall.
JOHN H. FISHER, }

CITY HALL.

Sealed proposals will be received by the undersigned until 11 o'clock a.m., July 30, 1887, for the construction of the superstructure of the City Hall building, in accordance with the plans and specifications on file in the office of the board of public works.

Bids to be made upon printed blanks furnished by the board, and to be accompanied by a certified check in the sum of one thousand dollars, as an evidence of good faith. The board reserves the right to reject any or all bids, and to waive all defects.

ST. A. D. BALCOMBE,
Chairman Board of Public Works, Omaha, Neb.

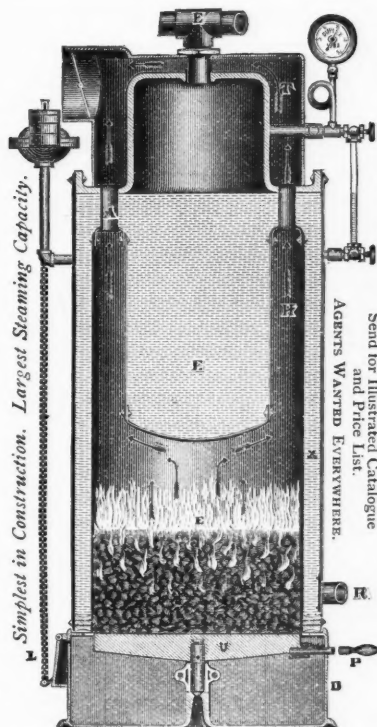
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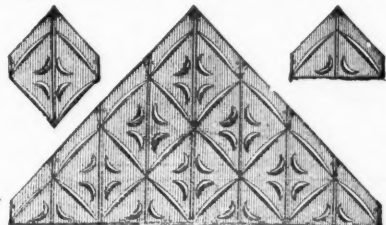


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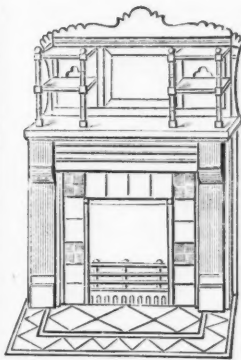
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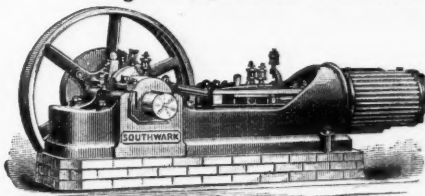
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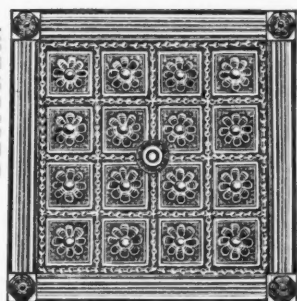
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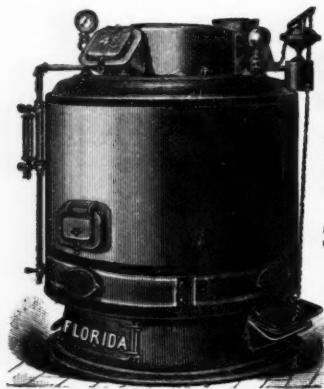
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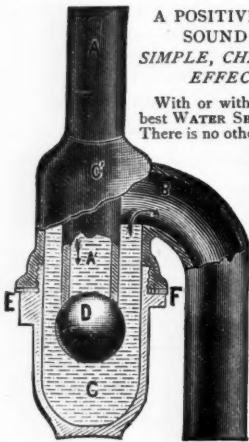
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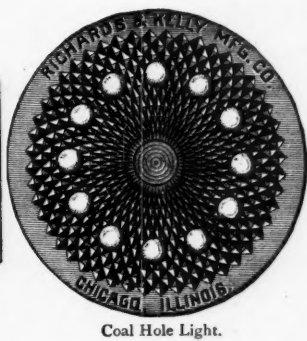
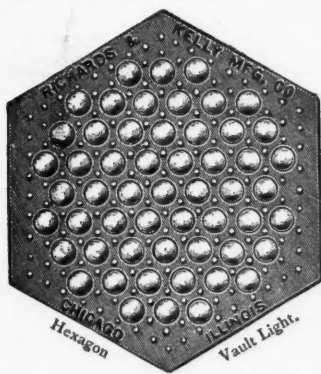
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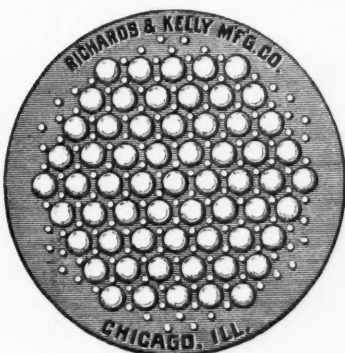
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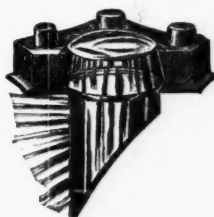
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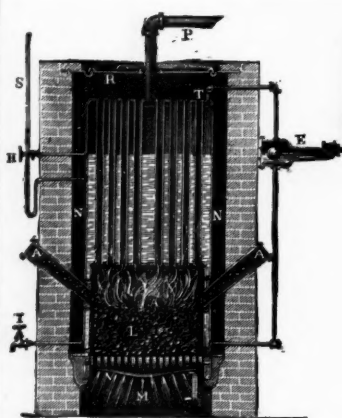
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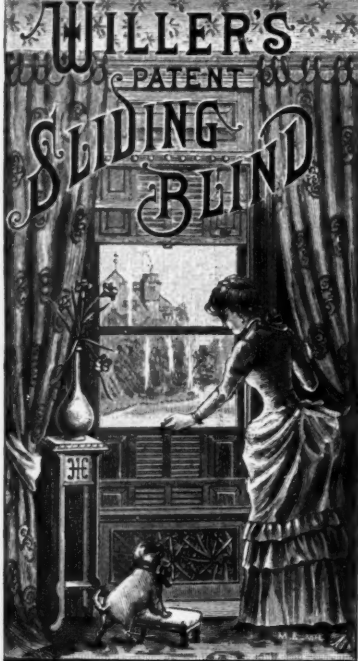
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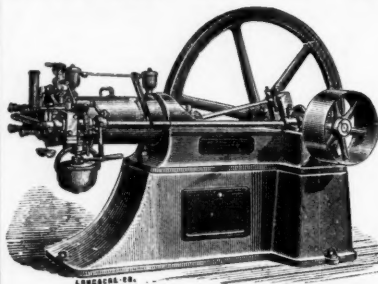
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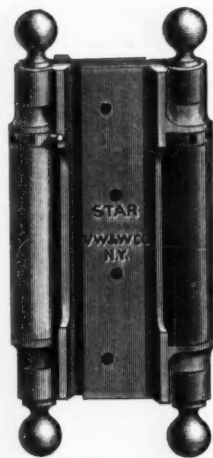
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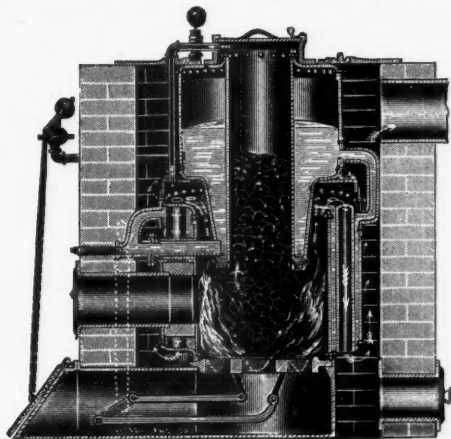
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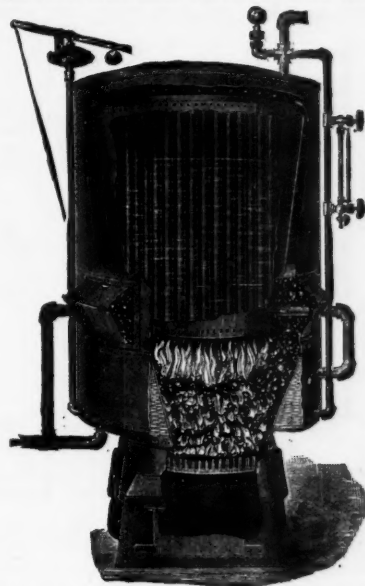
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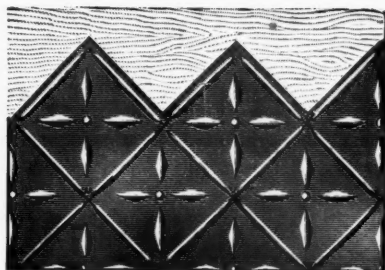
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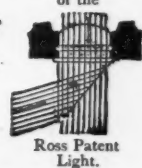
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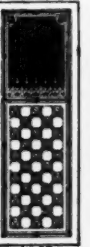
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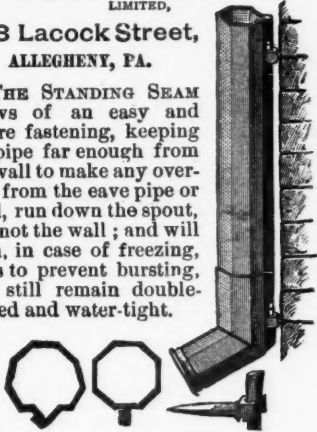
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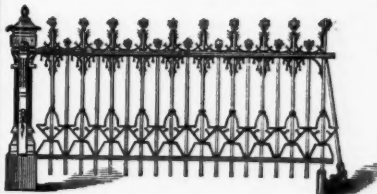
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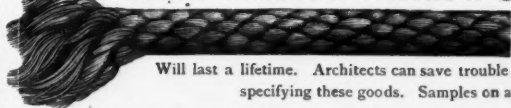
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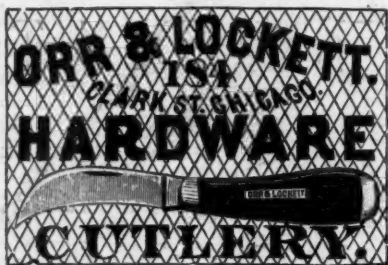
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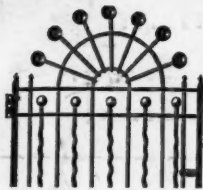
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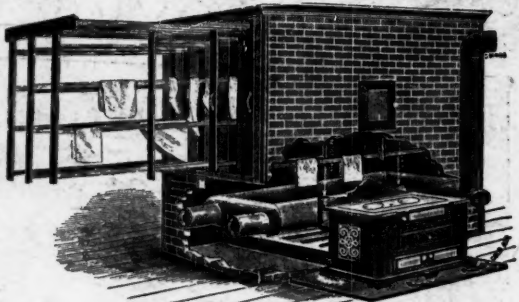
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