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THE INLAND ARCHITECT AND BUILDER

A Monthly Journal Devoted to

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IN THE WEST.

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Architects and Builders throughout the West will confer a great favor on the Editor of this Journal by sending him news pertaining to the craft in their section of the country, particularly items of new buildings.

THE INLAND ARCHITECT AND BUILDER will spare no endeavor to furnish valuable news and information to those interested, professionally or incidentally, in the planning, building, decorating and furnishing of homes or commercial or public structures. A variety of attractive illustrations will be presented in each number, the best of engraving and printing contributing to their production.

THE INLAND ARCHITECT AND BUILDER has a larger circulation in the West than any building journal in the country. Advertising rates are very reasonable, and will be made known on application. We take pleasure in directing attention to the high character of our advertisements.

SUBSCRIBERS SWINDLED.

Numerous letters have come to us from New York, Boston, Baltimore, Philadelphia, Albany, St. Louis, Topeka, Denver, and many other points East and West, complaining that the writers had subscribed for THE INLAND ARCHITECT AND BUILDER and not received it. Investigation shows that a swindler named W. H. Gault has been personating in the East and West R. C. McLean, editor of this paper, and he has harvested a large number of subscriptions. Gault is rather under medium height, has light complexion, and a peculiar, one-sided appearance of the mouth. In St. Louis a number of subscriptions have been taken by a fraud signing himself W. H. Barker, agent. He is described as being about forty-five or fifty years old, some six feet tall, and with grayish hair and beard, and a smart talker. These men are impostors, and are wholly unauthorized to represent us in any way. Subscribers should insist on canvassers showing satisfactory credentials from this office or from responsible subscription or news companies. If circumstances are suspicious, send subscription direct to this office.

THE Seventh Annual Convention of the American Institute of Architects, held at Providence and Newport on the 29th, 30th and 31st ultimo, appears to have been an unusually interesting meeting. The attending members were the guests of the Rhode Island Chapter, who performed their part so well, supported by the citizens, who threw open their houses to the inspection of the visitors, as to make the occasion a memorable one. The convention assembled at 10 A.M., on the 29th, in the rooms of the Art Club of Providence, where the president, Thos. U. Walter, delivered the annual address. The rooms were hung with designs contributed by the members, many of which were of a very high order. The privilege of studying and comparing these designs constitutes one of the great benefits that accrue from these meetings. Some of these designs were contributed by absentees, members who never or rarely attend—a misfortune as only by such gatherings can be learned what others are doing, and that “the world moves.” The most important business of the convention was a change in the by-laws, so as to admit, with proper qualifications, an unlimited number of “Fellows,” believing that the influence for good of the Institute will be increased thereby. The afternoon of the first day was devoted to an inspection of the interesting architecture of Providence. In the evening session, Prof. Lauza, of the Institute of Technology, Boston, read a paper on the strength of materials, from actual tests, and gave numerous illustrations. An important result of these tests—made at his Institute last winter—shows the fact that large pieces of timber, say of twelve or fourteen inches high, are not homogeneous, and give results that are materially less than those derived from small pieces, say two inches high, of clear material, and that a co-efficient of safety of ten (10), as usually used, is not too great.

AFTER the morning session, the convention adjourned to Rocky Point, where the members were initiated into the mysteries of a regular “Rhode Island clambake,” provided by the Rhode Island Chapter. At 3 P.M. the party embarked for Newport, where the evening session was held. Here, again, the hospitality of the citizens afforded the members the opportunity of inspecting interesting buildings, old and new. Indeed, it may be said, a notable feature of this meeting was the exceptional opportunity for studying remarkable buildings, not only at Providence and Newport, but, also, in the neighboring cities of Boston and New York, which were visited in going or returning, and which cannot fail to be of lasting benefit to those who were so fortunate as to have attended on this occasion. It is to be regretted the Western members take so little interest in these meetings. For the last two years Chicago has been represented by a single architect, W. L. B. Jenney. The question of how to interest the Western members, and induce them to attend the next convention, was frequently discussed, both at Providence and Newport, and the architectural journals and the members of the Institute were requested to do all they can to enlarge the sphere of influence of the Institute. It is worthy of remark, the greater part of the attendance was from the older members of the profession, who feel (experience has taught them) they cannot afford to neglect these conventions. Architecture is a study so much beyond the capacity of one man, that a reunion, conducted by Mr. Walter, assisted by some of the most eminent practitioners, amidst numerous notable examples of ingenuity and skill, cannot be otherwise than of paramount benefit to every architect, and could the lukewarm ones be induced to attend once, they never again would neglect the privilege.

THE interest manifested by the public in the alleged poisonous qualities of what is known as "water-gas" over that produced from coal, has led to considerable discussion by the press. While we would not be considered as championing this new rival to coal-gas, we must confess the arguments adduced in opposition to its adoption seem to us as frivolous as they are absurd. The great evil charged against water-gas is the quantity of carbonic oxide it carries (25 to 30 per cent), one per cent of which, it is asserted, when mixed with common air will produce death. As three per cent of coal-gas, according to the best authorities, will produce exactly the same result, we fail to see the force of the argument against water-gas on the ground of its life-destroying quality, unless it is possible for a man to be more effectually killed by one process than another. Again: If carbonic oxide was the only hidden danger in illuminating gases, ignoring the fact they are made to be combusted, not inhaled, there would be some show of reason in this opposition to water-gas; but, besides others, there are the hydrocarbons, and that terribly explosive compound "marsh-gas" of which coal-gas is shown by analysis to contain double the quantity than that of water-gas, and statistics prove by far the greatest number of accidents, in the utilization of illuminating gas, arise from explosions through the leakage in pipes and meters, while the deaths from suffocation rarely, if ever, occur from such causes, but are the result of gross negligence or ignorance on the part of the victims. We apprehend the real issue in this controversy, wherein the public are most concerned, is not which of the two, water or coal-gas, is the more poisonous, since both, under the same conditions, are equally dangerous, both destroyers of human life,—but which of them is the better for public use in point of economy and illuminating power. If, as is claimed for it, the water-gas has more than double the illuminating power, growing out of the very presence of the large proportion of carbonic oxide in it, and can be manufactured and furnished at a much lower cost than coal-gas, besides being less deleterious on the atmosphere of a room by its perfect combustion, as shown in the non-tarnishing of picture-frames, silverware, etc., then it promises to be the gas of the future until some other better gas or popular illuminator is discovered. Certainly if no other objection can be urged against water-gas than its alleged poisonous nature, that objection must fall before the fact that over twenty European cities and towns have been lighted for years with gas made from wood, which wood-gas contains a larger percentage of carbonic oxide than water-gas does, and there is no record of the question of any special danger being raised where these wood-gases have been and are still being used.

THE question of constructing fire-proof buildings is what may be termed a mooted question, since it is very generally admitted that many representatives of this type of buildings are only approximately fire-proof—that under a severe ordeal they would fail in upholding their pretensions. The growing tendency in all large cities to economize space by the erection of many-storied buildings, particularly in the business centers, is forcing this question upon the earnest attention of architects, contractors and builders, as such structures, if they are not made reasonably secure against fire, are a standing menace to life and property surrounding them. In a recent issue of the *Popular Science Monthly*, Mr. Wm. E. Ward, in discussing this subject, presents some interesting facts and formulas which he conceives to be favorable to an infallible method of fire-proof construction and are well worth perusal. He advocates the combination of iron with béton, or artificial stone, and alleges it has been demonstrated

that if iron is well protected by a heavy clothing of béton, its integrity can be depended upon in almost any emergency, while greater strength is added to its proportions by the combination. As the bulk of the components of béton abounds in inexhaustible quantities, always obtainable at a moderate cost, viz, Portland cement, clean beach-sand and crushed blue-stone, and requires no particular skill to compound it, only a knowledge of the proportions, and its plastic nature before setting, admits of its being molded into the reproduction of any stone used in masonry, or in stucco, it would seem as if its great strength and fire-resisting qualities, in combination with iron, together with the simplicity of its utilization, furnishes the need of the hour. In the construction of a building under this formula Mr. Ward says the following facts appear to be established by a line of experiments: 1. That a system of iron beams reinforced with béton can be made to sustain weights many times greater than the iron beams can bear without reinforcing. 2. That floors and roofs can be economically made of béton reinforced with iron rods, capable of sustaining heavier loads with a less number of supporting beams than any other system of flooring and roofing, of equal cost, now in use. 3. That the system of reinforced beams and béton floors affords advantages for a more perfect method of heating buildings uniformly than by the steam or hot-water system. 4. That the sanitary requirements of complete ventilation are plainly within the reach of this system of construction. 5. That it affords a perfect defense against the interior destruction of buildings by fire.

NOW that the streets of the city are being generally overhauled and new pavements are being laid, would it not be well for the board of public works to abolish that outrageous system of corner catch basins that have made the corners of streets both unsightly and dangerous for the past twenty or thirty years? Many have been the protests against the system but still it has been practiced. The fact was pointed out by an intelligent citizen when the city grade was first established, that the placing of catch basins in the centers of blocks would drain the streets fully as well, would cost no more, and yet preserve high and level corners to the streets. On the boulevards recently constructed this is done with good results, and even if extra sewers should have to be built, the city should see that it is done before the streets are repaired and thus do away with the present system of dangerous holes and unsightly wooden aprons at every street crossing.

ARCHITECTS in Chicago and throughout the West have been of late years exceedingly busy men; and while this state of things is agreeable from a financial standpoint, still it has not allowed architects to become acquainted and fraternize. Prominent architects with whom we have conversed regret this unsociability, and think that an informal meeting might take place some time during the winter months between the architects of the West. We have long thought some such meeting would result in much permanent good to the fraternity, both individually and as a whole, and cordially invite consultation and correspondence with architects regarding the project.

A DECISION has just been rendered by Judge Van Brunt of the Court of Common Pleas, of New York, which sounds a note of warning to negligent and reckless landlords. A suit for damages for injury to furniture by the falling of a building was brought in the Marine Court, and the jury awarded the plaintiff \$420 damages; but an order of the general term of the Marine Court reversed the judgment en-

tered upon the verdict. An appeal was taken by the plaintiff to the Court of Common Pleas, as above, where Judge Van Brunt reversed the order of the general term and affirmed the verdict, giving the plaintiff his \$420 damages. This would imply that owners of buildings would be liable, under similar circumstances, for other damages, such as injury to persons and loss of life, and if liable for defective buildings, why not for defective approaches, sidewalks, etc., pertaining to premises?

Architecture.

LECTURES DELIVERED AT THE UNIVERSITY OF CHICAGO.

BY W. L. B. JENNEY, ARCHITECT.

PART VI.—EGYPT (CONCLUDED).

WITH the commencement of the Middle empire Thebes became the capital. The first Theban kingdom was ruled by the eleventh and twelfth dynasties.

The twelfth dynasty is represented by the rock-cut tombs of Beni-Hassan, that are particularly interesting to the architect. These tombs may have been originally built for habitations. Among the Moguls of India the fashion always was, says Fergusson, for a king to build his own sepulcher and use it as a pleasure-palace during his life. It was only after his death that it became the tomb and monument of its founder.

One of the tombs at Beni-Hassan possesses a portico of two pillars, in architecture so like the order afterward employed by the Greeks, as to be aptly named the proto-Doric order.

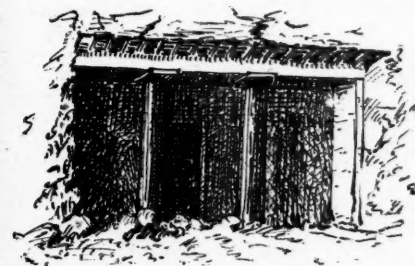


Fig. 1. Tomb at Beni-Hassan.

Fergusson concludes that if the examples at Beni-Hassan are not considered sufficient to settle the question, it will be difficult to refuse the evidence of this one taken from the southern temple at Karnac (Fig. 2), built in the age of Thothmose III and Amenophis III, say 1600 years before Christ, or 1000 years before the earliest Grecian example known. In this instance the abacus is separated from the shaft; there is a bold echinus and a beaded necking, in fact all the members of the Grecian order, only wanting the elegance which the Greeks added to it.

Mr. Falkner enumerated as still existing in eight different buildings, ranging from the third cataract to lower Egypt, twenty-seven proto-Doric columns.

Is there nothing new under the sun? The Greeks derived their Doric order from the Egyptians; from where did the Egyptians receive it? Violet le Duc thinks it originated with them, and that the stone architecture of the Egyptians was derived from earlier work constructed of reeds and clay.

There grows in Egypt, in great abundance in the marshes, a tall reed with a stiff stem of triangular section, known as the papyrus. (Some fine specimens of this plant are grown in the conservatories of our city parks.)

The early Egyptians made an ingenious use of these papyrus stalks in the construction of their houses. True, none of these buildings have existed for many centuries, still a careful analysis of the pictures on the walls of the temples and tombs, and a comparison of these with existing buildings gives the strongest probabilities in favor of the theories of Viollet-Leduc. These houses were not capacious, for the Egyptians lived mostly in the open air, and they scarcely remained in their dwellings except to sleep. (See "Habitations of Man," by Viollet-Leduc.)

After the plan of the house had been marked out on the ground, bundles of reeds were prepared, fastened together by bands, forming posts. Four of these posts were larger than the others and were placed at the four external angles of the building (illustration, Fig. 3), other bundles of reeds are

placed as posts in both the external and internal faces of the walls and tied across the thickness of the wall by bands of rushes. Clay is now prepared and mixed wet, with straw or rushes, and filled in between the rows of posts, and pounded hard, forming the walls of the building. When the wall is raised to the level of the tops of the posts, a sort of trellis-

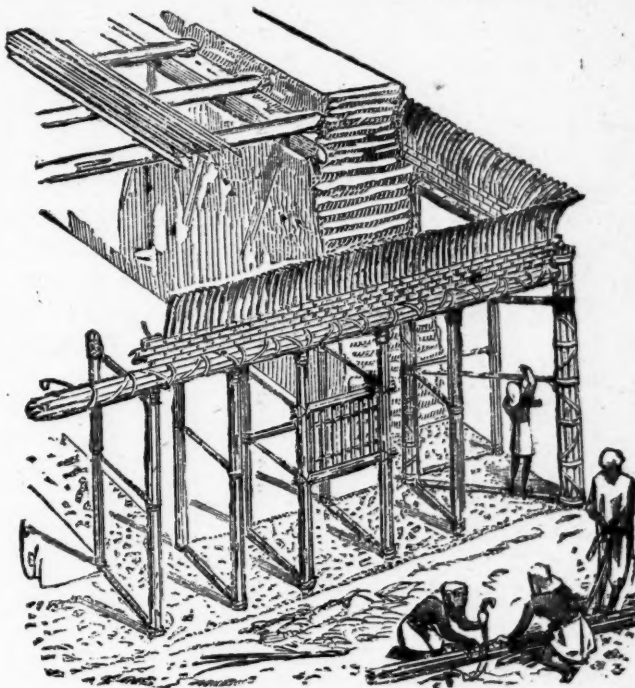


Fig. 3. Building of Primitive Egyptian House. (From Viollet-Leduc.)

work of reeds, Fig. 4, prepared in advance, is placed for a cornice. The close walls are carried up behind, pressing forward the vertical reeds. The flat roof is formed of timbers, as shown in Fig. 3, and covered with well-pounded clay. The building, when completed, will have the appearance of Fig. 5. The characteristic features of the architecture of this

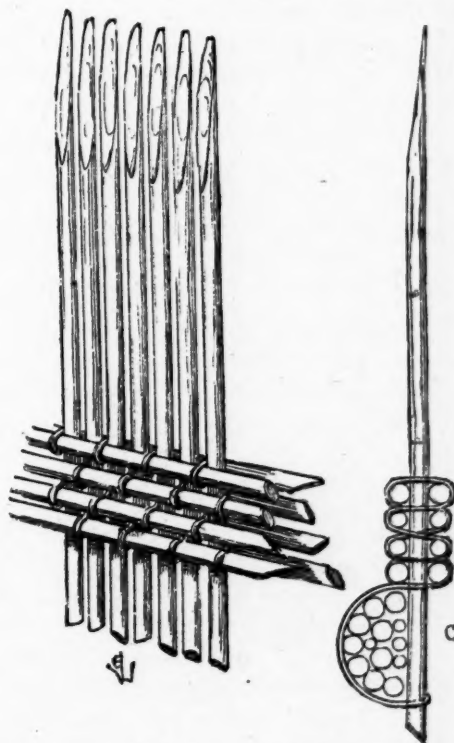


Fig. 4. Structure of Cornice with Reeds. (From Viollet-Leduc.)

primitive house, such as the rolls at the external angles, the cornice and flat roof, were preserved to the last.

CONCLUSION.

The more one studies Egyptian archæology, the more one is impressed with the great antiquity, the immense resources of this wonderful people, the power of the rulers and of the priesthood, the mammoth dimensions of the buildings and the high standard attained in all the building arts, and what is

most surprising, the earliest work of the sculptors, that of the time of the pyramid builders, being never equaled afterward. Menes, the first king 5000 B.C., the emperor Theodosius, the last, 381 A.D., over fifty-three centuries of duration in a single narrow river valley. From whence did they come? From whence did they derive this proficiency in the arts and

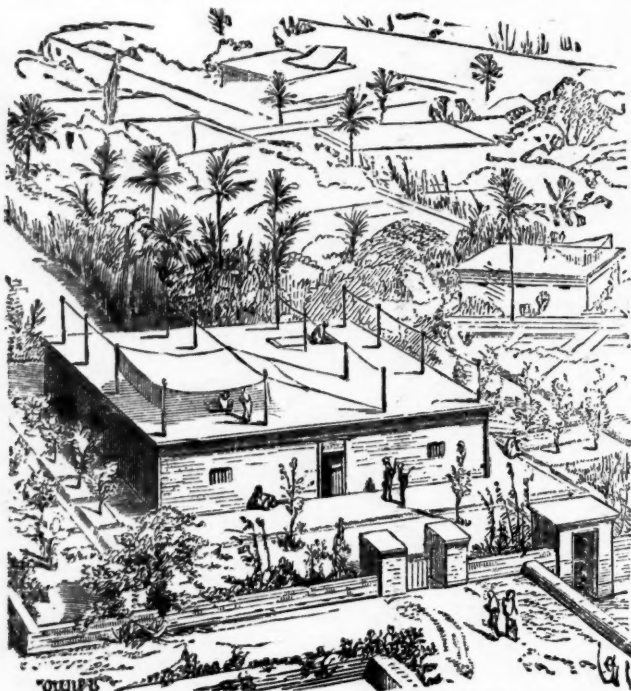


Fig. 5. Early Egyptian House. (From Viollet-Leduc.)

power of government, at such an early date, as to enable the king to build for his own exclusive use the largest edifice ever constructed? There is no ruler today who could build himself such a tomb without causing a revolution and losing his throne.

Their early religion is no less wonderful—preserve the mummy 3000 years, and then an everlasting life of health and happiness. Whence such bold ideas? Six or seven thousand years ago, and that among the most conservative race ever known, a race represented in modern times by the Chinese.

We can ask these questions and many more, but there is much yet to be learned in Egypt and the East before they can be answered. Still the obscurity in which the past is hidden is slowly penetrated by advancing science and the enterprise and self-sacrifice of the explorer. The sites of ancient cities, long buried in the débris of their own ruins, are being dug over, the earth sifted and the smallest jewel or fragment of a terra-cotta tablet is found and preserved.

The public takes much interest in all new finds, and the names of great explorers are household words. In truth, today reputations are made with the pick and the shovel but little inferior to those of the sword.

Art Notes.

THE lecture-rooms of the Union Park Congregational Church have been remodeled and frescoed. The designs are simple and the colors subdued, yet so extremely harmonious that a cheerful effect is given to the interior. The bible and infant-class rooms are divided from the lecture-room by glass partitions, and are also tastefully and harmoniously treated, and it is not surprising that the congregation are somewhat enthusiastic regarding it. H. J. Milligan has done many finer frescos, but seldom one where the pleasing effect and the comments of visitors are so general.

THE examination of some recent frescoes in private residences by Chicago artists and conversation with those well informed develop the fact that while there is much costly work being done in this line, the highest prices go to those artists imported from the East and the poorest class of work secured. Indeed the prevailing sentiment among the artists of New York seems to be "good enough for Chicago," while here the artist is expected to produce his best work for the minimum figure. In brief, the Chicago artist is expected to do a thousand-dollar fresco for five hundred dollars, while the Eastern artist charges and gets a thousand dollars for a fresco that the Chicago man, and in most cases a much superior artist, would be glad to do and get five hundred for. Chicago is too wealthy, too metropolitan, and too independent, to pay fifty per cent for the name of an importation. Her artists are the equals, if not the superiors, of any in the country, and there is no demand that they cannot meet if they only receive the proper compensation.

Art of Pure Color.

JOHN W. ROOT.

(Concluded.)

MEAGER as are the results so far obtained by these investigations into the physiological aspects of color, enough has been found to show its drift. It is that each color has a distinct emotional effect, which will be accurately determined, and that this effect is founded upon certain essential phenomena of preceding life, as in the case of red and yellow.

Science has also been busy with optics, regarded from its mathematical standpoint. As a result we have now many optical instruments, and will soon have infinitely more, both developed from present types, and those of entirely different form and purpose.

Take these two classes of facts from the scientific world, put them with the recognized development and possibilities of color in the world of art, and we have the last and perfected phase of this last and greatest art.

Knowing beforehand just what effect each color will have, as well as all its shades and tints, the artist will combine them into new idealized forms with beautiful results; but he will do more than this. The color art will take upon itself forms scarcely dreamed of, and will occupy a place in the lives of artists and art amateurs similar in all respects to that now held by music. What this means we can more fully understand if we analyze the pleasure derived from an orchestral performance. This we find, briefly, to be received from the inherent qualities of tone produced by different instruments; from the various degrees of loudness and softness, from rhythmic or melodic succession of tones, and from combinations of tones based upon mathematical laws.

In "quality" of tone we find a close analogy to color, simply of both the basis is mathematical. The quality of a violin is as susceptible of diagrammatic illustration as is a face or landscape; and this, with more refined instruments, is also true of colors. Both quality of tone and hue of color have certain definite emotional effect, the blast of a trumpet being no more thrilling than flaming crimson.

In music intensity of tone has its parallel in luminousness of color—a mezzo-tone upon a violin is only pure blue at low pitch. In both music and color rhythmic succession and varied combinations are equally feasible. Fancy, then, a group of optical instruments, each capable of producing a given color in all intensities and in larger or smaller masses; or fancy one composite instrument—like the organ—played by a single performer. There is no musical effect now produced by the orchestra which would not have an analogous color effect produced by these instruments, the only difference being that in one the avenues to the brain is the ear; in the other, the eye. These expressive art forms will demand color composers of the highest rank, whose creations will be as varied as have ever existed or can ever exist in music.

Such an artist will write arrangements of color upon a score, like the notes of music, and we will sit enchanted while a performer plays for us these symphonies. As in the great "Im Walde" symphony by Raff, we hear the twitter of birds, the sighing of trees and all mysterious music of the forest, so in this symphony we shall see the lifting of gray clouds, first rosy streaks of dawn—molten gold poured from the sky into lakes and brooks, and the final coming of Phœbus Apollo. In another symphony we shall see, as in Beethoven's "Eroica," the struggle of the human soul through mists of doubt, through depths of despair, into fullness of day and into greenness of fields and the bloom of flowers.

These symphonies, rondos, sonatas, all will be as crystallized and as infinitely full of purpose as any music now is, and will be played upon optical instruments as perfect as a grand piano, or even a full orchestra. This new art will absorb the full life and energies of future Beethovens and Michael Angelos, while green and callow children will struggle with some future "Maiden's Prayer," whose notes, instead of being wafted into the library to the great swearing of papa, will flash uncertainly and fitfully on the color-screen.

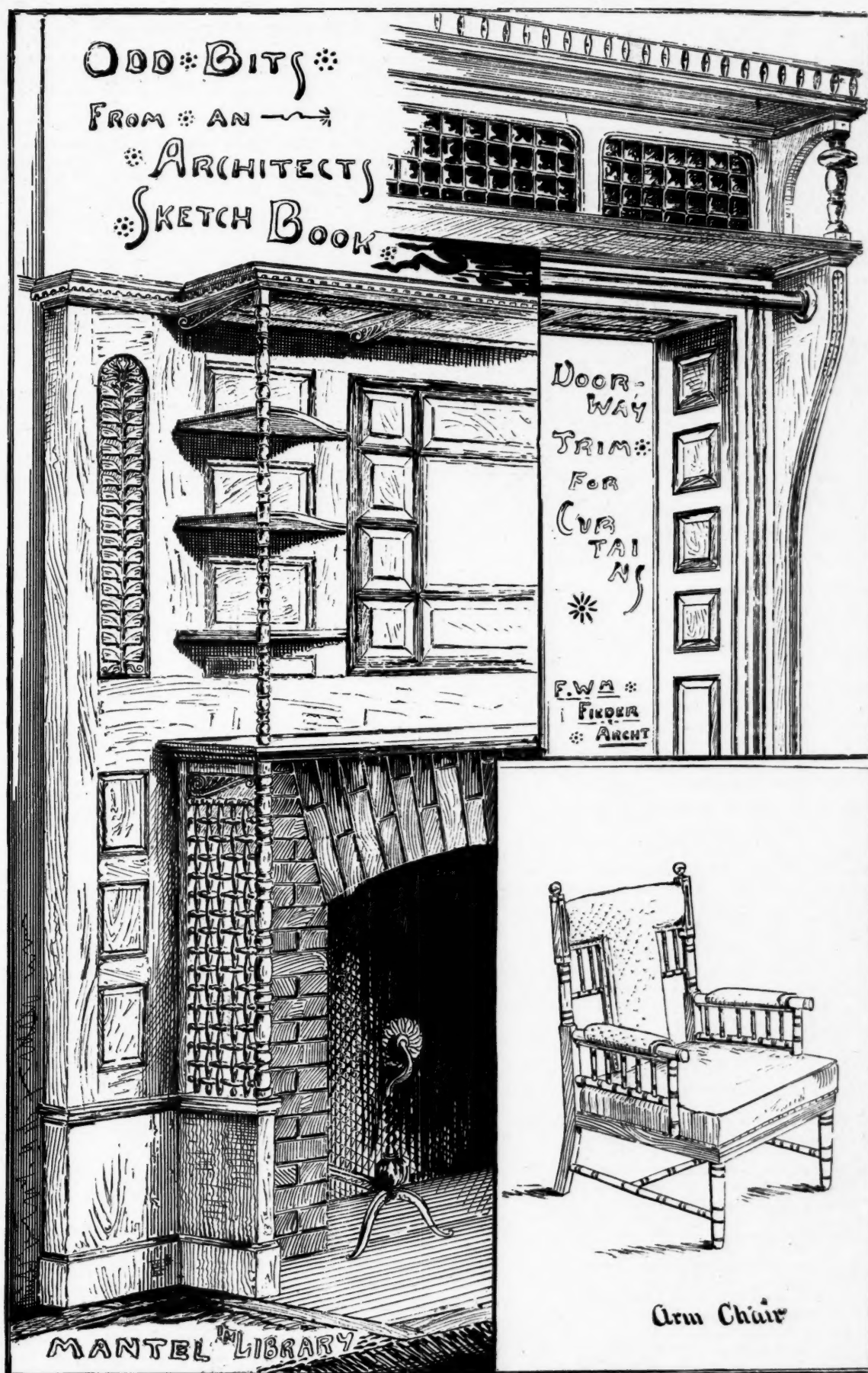
From music will the vocabulary of the art be borrowed, at least till it be grown old enough to have a speech of its own. Indeed it is at present difficult to allude to even the present condition of color without some such borrowing.

For this reason, for their emotional enthusiasm and vagaries, and for the gorgeousness of their attire, the first disciples of the new art will greatly delight the Philistine humorist. These disciples will, however, be only pioneers in a great tidal wave of art, which will force down all barriers and rise rapidly to the flood. With all these pioneers of the art I beg you have patience. They will gush most unduly, they will talk a strange jargon about unknown things, they will dress in strange garments, and have strange notions of morals and art.

Only wait, as does the long-suffering hearer of the "Battle of Prague." Out of this chaos of color the new art will arise as great as music itself. Then will come the complete unification of arts for which Wagner labored, when we may hear "Coriolanus" acted, while to the reds and yellow of brasses, the greens of oboes and flageolets, the violets of 'cellos and the blues of violins in Beethoven's overture, will be added that symphony of color which another Beethoven has written to the same theme.

INSTRUMENTS recorded in the Register's Office in New York city show that Henry A. Morgan, as President of the New York Times Association, has purchased from Orlando B. Potter all that portion of the party wall of the Times building which is erected upon the property formerly occupied by the World building for the sum of \$7,426, and that Mr. Potter is now to construct a building to be eleven stories high upon the property at Beekman and Nassau streets and Park Row. This is a heavy price for a few inches of wall.

A COMPANY of capitalists at Chattanooga, Tenn., will, at an early date, establish a large roofing factory at Chattanooga for the manufacture of twenty different styles of roofing.



A New Decorative Tiling.

One great trouble in the construction of office buildings has been to obtain absolutely durable and fire-proof finish for the interior. This has been especially true in relation to wainscotings and bases about the room. Cement has been used for this purpose made with a polished surface, but in Chicago this quickly becomes dirty and has to be painted. Tiles have also been used, but these are very costly and friable, so that to break off one of them is to underkey the tiles adjacent.

The objection to wood has been that in buildings subject to rough use, as in all classes of commercial buildings, the wood becomes scratched and the finish of it wears off, so that in a very short time all the freshness of the wood has departed, and the cost of refinishing is very considerable. Primarily to obviate these difficulties, the inventors of this method of producing architectural bases and wainscotings have designed to substitute metal for wood. The wainscotings are produced by tiles stamped out of metals, copper, galvanized iron, or other thin metal, and of any pattern desired, and the moulded bases and cap of wainscoting together with the architraves about the doors are made of thin metal drawn through a mould, and in such lengths as may be required. When copper is used the surfaces can be finished in whatever colors are desired, producing any effect from brass to the deepest colors of bronze. Both tiles and architraves are set in a backing of plaster of paris, and are so constructed that no special provision for fastening up is necessary, although in the case of moulding additional effect is gained by using ornamental nails of metal, which are driven through into the grounds, and the heads of which, being of various ornamental designs, add considerably to the beauty of the general effect.

The merits of this device are as follows: The bases, wainscoting and architraves so produced are absolutely indestructible. They retain their form perfectly because the soft plaster of paris back of them fills every conformation of the pattern and set in it so as to hold it rigidly in place. It is the most simple process to clean the finish so made, because all that is necessary is a little oil and cloth or else a hose and stream of water. A very artistic effect can be produced in the interior caused from the very great variety of color possible in the metals and the endless varieties combined in the mouldings and patterns of tile used. Although this scheme has been devised for office buildings, it presents many possibilities for private or domestic work as well.

Where the Forests Are.

ACCORDING to the *Industrial South*, the most important of timber regions stretch clear across southern Georgia and Alabama to the rivers that enter Mobile bay. The pine forests of Georgia cover an area of about 11,500,000 acres. North Carolina's wealth in forests is not confined to any one portion of the state, as bordering on the coast one of the extreme eastern counties has an area of forests amounting to ninety per cent of the entire boundary, while some of the western counties give an area of seventy and some sixty per cent of acreage in forest. An excellent authority states that not one-eighth of the forests of Louisiana have been felled, and estimates the timber-lands of the state at 15,000,000 acres. In the peninsula of Florida the yellow pine forests extend over three-fifths of the six counties of Putnam, Marion, Sumter, Polk, Hillsborough and Hernando, embracing 326,277 acres. The wood-lands of Mississippi and Arkansas contain an area of millions of acres. Dr. Loring, Commissioner of Agriculture, who has been attending the forestry congress just held at St. Paul, in an interview with a *Chicago Tribune* reporter, affords a further insight into the area of timber-lands, as well as his opinion as to the lasting qualities of the immense forests of the country, having fully studied the statistics presented. He said investigations recently made show the supply of pine in New Hampshire and Vermont is exhausted and that the spruce lumber, at the rate the cutting is now going on, will last in the former state but seven years, and in the latter but four; in the state of Maine the pine will last four years and spruce fifteen years; in South Carolina the pine forests will last fifty years at the present rate of cutting; in California 150 years; in Arkansas 300 years, in Pennsylvania fifteen years, in Georgia eighty years, in Louisiana 100 years, in North Carolina fifty years, in Wisconsin twenty years, in Michigan ten years, in Minnesota ten years, in Mississippi 150 years, in Alabama ninety years, in Florida thirty years, in Texas 250 years. That the exhausted forests in this list of states can be restored in time there is no doubt, and every means of cultivation and protection should be applied by the people and the government, both state and federal, each in accordance with its own jurisdiction. In addition to this the white pine of Minnesota is estimated at 6,100,000,000 feet, exclusive of isolated timber in birch lands and amid other hardwood growth. In Michigan the estimates for the lower peninsula cover 7,000,000,000 feet; in the Saginaw district, 8,000,000,000 on the streams flowing into Lake Huron, and 14,000,000,000 on those flowing into Lake Michigan. The upper peninsula contains 6,000,000,000 more, making 35,000,000,000 feet in the principal pine districts of Michigan. The great pine forests of Wisconsin are estimated to contain 41,000,000,000 feet of lumber, the largest proportion in the Chippewa and Wisconsin districts. They cover an area of 22,500,000 acres. The northern border of the pine area is less productive than the areas of lower latitudes. The cedar swamps of Wisconsin scattered through the pine belt are estimated to cover 1,365,000 acres, and to contain 62,800,000 posts, telegraph poles, and railroad ties. There are also large supplies of tamarack and spruce and valuable oak timber, especially in Dunn, Pierce, and St. Croix counties, and other hardwoods are abundant through the southern border of the wooded districts. The united area of the states south of Maryland and the Ohio river is more than 500,000,000 acres, containing nearly 400,000,000 acres of forest land.

PORTIÈRES of shella cloth are popular and well adapted for use in a room that is used a great deal. The material is so heavy that no lining is needed. It is alike on both sides.

Method of Obtaining Length of Rafters.

THE following table for obtaining the length of rafters is furnished by a correspondent in *Carpentry and Building*, which he claims is not only very simple, but mathematically correct. The word "pitch" means such a fractional part of the width of the building.

1-6 pitch.....	4 and 12 square.....	0.527046	rafter.....	1.054092	brace.
5-24 ".....	5 and 12 ".....	0.541666 2/3	".....	1.083333	"
1-4 ".....	6 and 12 ".....	0.559017	".....	1.118034	"
7-24 ".....	7 and 12 ".....	0.578852	".....	1.157704	"
1-3 ".....	8 and 12 ".....	0.60925	".....	1.201850	"
3-8 ".....	9 and 12 ".....	0.625	".....	1.25	"
5-12 ".....	10 and 12 ".....	0.6508541	".....	1.3017082	"
11-24 ".....	11 and 12 ".....	0.6782843	".....	1.3565686	"
1-2 ".....	12 and 12 ".....	0.7071068	".....	1.4142136	"

The first column indicates the pitch of the roof; the second gives the figures on the square that will cut the various pitches; the third gives the length of a rafter for a building one foot wide, and the fourth gives the length of braces for runs of the same proportion as the figures in the second column.

The manner of using the table is as follows: For any given pitch multiply the tabular number by the whole width of the building, and the product will be the length of the rafter in feet and decimals of a foot.

Example.—What is the length of a rafter of a building 18 feet wide at 1/3 pitch?

Solution.—0.600925 by 18=10.81665 feet, or 10 feet 9 13-16 inches.

Example.—What is the length of a brace having 40 by 48 inch run?

Solution.—40 by 48 inches is the same proportion as 10 by 12; hence, 1.3017082 by 48=62.482 inches, or 62 1/2 inches, always using the longest run for multiplier.

Example.—What is the length of a brace having 35 by 35 inch run?

Solution.—1.4142136 by 35=49.4974 inches, or 49 1/2 inches.

Hardening Soft Limestones.

ATTEMPTS have been occasionally made to give certain limestones greater hardness by the use of alkaline silicates, saturating the limestones with a solution of these salts, upon which they quickly become covered with a more or less perfectly impervious glazing, but the difficulty of securing the right proportions, leaving soluble salts and water in the stone, resulting in the disintegration of the stone, has caused the practice to meet with disfavor. To obviate this disadvantage, M. L. Kessler proposes, in a paper recently presented to the Academy of Sciences of France, to use the fluor-silicates of magnesium, aluminium, zinc and lead instead of the alkalies, in which case only insoluble salts would be formed throughout the stone and a more homogeneous material would be obtained. If great hardness is not aimed at, but only a granular marble-like surface, it will be sufficient to make a paste of water and the powder of the limestone, to let this dry on the stone, and then apply the silicate. By mixing this with the silicates of iron, copper, chromium, etc., the various colors of marbles may be imitated and the color would, as in the natural rock, be uniform through the whole stone. The materials are not more expensive than those of the old process.

Berlin's New Building Law.

ACCORDING to the *London Builder* there is greater activity in house-building in Berlin than has ever been known, an activity which has grown out of the rapid increase of population, 40,000 annually. Owing to abuses which have crept in, such as the diminution of courtyards, and increasing the number of buildings at the back as much as possible, the municipal authorities have coöperated with the chief of police in drawing up an amended code of regulations controlling all buildings and building operations in the German capital. The rules are, however, not to go into effect until next year. Among the new regulations is one providing that all basement dwelling-rooms must not be less than two-thirds above the level of the ground. Carpenters' and other workshops are henceforth to be limited to separate buildings. The new regulations will also require every floor above the second story to have two fire-proof flights of stairs (the present rule is that every dwelling must be accessible from one fire-proof staircase). Interior courtyards must have an area of at least sixty square metres, and the breadth must not be less than five metres, except in the case of corner houses. The maximum height will be 24 metres (about 70 feet), and no more than five floors are to be let out as dwellings in any one house. At present houses are being built over 27 metres high and with seven or eight stories.

THE Swart block, at Madison street bridge, is progressing rapidly, the work being above the street grade. On the river side heavy piling was necessary for a sated foundation. Upon this was placed dimension stone, but only to the level of the dockage where the brick commenced. The walls are two feet and the building will be of sufficient permanence, but for so important a structure too much wood has been introduced. Capings of hardwood are used in place of stone over the basement windows on the river front, and in other places where iron or stone is the better material, wood is used.

A FLOATING elevator has been placed in the harbor at Bordeaux, France, to unload vessels arriving with cargoes of grain. It contains apparatus for weighing, cleaning and sacking the grain. From the ship's hold it can weigh, clean and weigh again, put into sacks and reload into trucks, 150 tons of grain per hour. The elevator is placed on a barge which is propelled by a screw worked by a compound surface-condensing steam-engine that furnishes the power for all these operations.

Architectural Notes.

GOSHEN, Ind., is enjoying a very lively building boom—nothing like it for several years. Two large manufacturing shops and several large, fine residences are among the results, besides many less pretentious buildings.

ARCHITECT J. M. VAN OSDEL is building a factory on Canal street, south of Harrison, for E. H. Shirk, of Peru, Indiana. It will be 88 by 150 feet, five stories and basement in height, and built of pressed brick and Bedford stone trimmings. Cost, \$50,000.

THE new Board of Trade building is being pushed with remarkable activity, employing the labor of two hundred men. The walls are already up eighty-two feet, and will be carried up forty-four additional feet within six weeks, so as to be in readiness for the roof before the severe frosts set in.

ARCHITECT ION LEWIS has designed and under construction a fine house in Queen Anne style, for Samuel Bartlett, Esq., president of the Peoria board of trade. It is to be three stories high, finished throughout in hardwood, with windows of plate glass. The residence, with barn in the rear, will cost \$40,000.

ARCHITECTS TREAT & FOLTZ are erecting for Dr. Joseph A. Hunt, at No. 21 Dearborn Place, a very handsome house of unique design. The front is broken by gables, and the bays novel and artistic; cost, \$20,000. The same parties are building in Lake View, corner of Clark street and Deming Court, a three-story brick with stone trimmings, 28 by 68 feet, for R. A. Meiswinkel, at a cost of \$8,000.

ARCHITECT BEMAN's many large and important structures are well under way. The training school is progressing rapidly, the Washington park club-house is getting ready to roof, and sketches of the grand stand and stables have been submitted by him to the committee for approval. The mammoth foundations of the Pullman office building are laid and the walls of the first story well commenced.

MESSRS. O'BRIEN & BROS., painters and decorators, have the following work in hand: The painting and glazing of a block for the Greene estate, let by L. G. Quackenboss, architect; painting and decorating at H. B. Bryant's business college; painting a block for W. J. Quan, and the Exposition dining-room; and from Bauer & Hill, the architects, the contract for painting and decorating the Panorama building.

ARCHITECT RODATZ is building two marble-front houses for M. Clarkson at Indiana avenue and Forty-first street; also residence for M. Wm. Hudson; also rebuilding the First Presbyterian church of Englewood; a large residence for Col. Parker on Sixty-eighth street costing \$65,000; a residence for J. Jones, \$6,000, and a three-story store for Johnathan Clark, 25 by 75 feet, on Wabash avenue, near Sixteenth street.

ARCHITECTS BURLING & WHITEHOUSE have let the contracts for a four-story and basement warehouse for the National Tube Works. It is to be located on Clinton and Fulton streets, 148 by 150 feet. It will be built of brick, and cost about \$65,000. It will be known as the National Warehouse, the lower floor and basement to be occupied by the tube works, and the remainder to be rented for general warehouse purposes.

THE mason contracting firm of McGraw & Downey has dissolved, and now the business is carried on by Mr. Joseph Downey. Mr. Downey has, through his successful carrying out of large contracts, become favorably known throughout the West, and has a well earned reputation, both as a skillful contractor and an honest one, as many commissioners of public works and railway companies can testify. The business will be carried on without interruption by the change.

THE High School building at St. Paul, referred to in our last number, the designing being credited to architect D. W. Millard, of St. Paul, was designed and the plans were drawn by architect George P. Randall, one of Chicago's veteran architects, and the construction was placed under Mr. Millard's supervision by the board, who employed him for that purpose. Mr. Millard is a former pupil of architect Randall, and an estimable gentleman, and we make the correction in justice to both architects.

THE new west-side theatre located corner of Halsted and Jackson streets, being built for Messrs. Townsend, Wilcox & Harvey by architect Oscar Cobb, under the superintendence of Mr. Cook, the contractor, is well under way and will be finished by Christmas. It will possess many attractive architectural features, and as the decoration will probably be in the hands of a notable Chicago fresco artist and the scenic work by the well-known artist Frank B. Skiff this new theatre will be an ornament to the west side.

MR. T. H. TRAVER has designed and built for Mr. William Dickinson, at a cost of \$60,000, two elegant flat buildings on Division street, near the lake shore drive. They are called the Irving and the Bellville, are three stories and basement in height, pressed brick, and have a frontage of 120 feet by 80 deep. Stained glass and other ornamentation, including tiling, is largely used, and this, with the exceptionally well planned apartments, makes these flats handsome and elegant in the extreme. The buildings are ready for occupancy.

THE foundations for the open board building are commenced, and the architects, Wheelock & Clay, say the work will be pushed rapidly with the expectation of having it under roof before "snow flies." The general plan of the building is smaller to that of the C. B. & Q. offices, a large court in the center giving light to the offices from the interior as well as from outside. The skylight over this court is 60 by 50. The hall of the board on the first floor is 30 feet high, covering the whole area of the building except one side, in which there is an entresol floor. The design is simple and massive, and will cost when completed about \$135,000.

ARCHITECT F. L. CHARNLEY has let the contracts to Messrs. Parmley & Rawlins, for a building to be built on Market street, just north of Van

Buren. The building is to be seven stories and a basement, with a large vault under basement sidewalk. There will be two driveways from Market street, so wagons can drive in. The river front will have eight feet dockage. The building will be a heavy and substantial one, and will be erected in the best manner. The front will be of Anderson pressed brick. The dimensions of the building will be 94 by 160 feet, and will cost \$55,000, and has been leased to Dike & Minkler for warehouse purposes. He has also let contracts for a building for James J. Gore, corner State and Forty-seventh streets.

MR. J. H. FURBER is superintending the plans in Mr. Boyington's office for the new conservatories to be erected at Rose Hill cemetery. The buildings will cover 230 by 80 feet. In the center will be an ordinary pavilion thirty feet square carried up forty-four feet, with ornamental terminals. At each end will be harmonious pavilions reaching an altitude of thirty-three feet. Between these will be a system of low growing-houses. The group will be built almost entirely of glass, on a brick base three feet high. The pavilions will be supplied largely with cathedral glass in ornamental shapes and artistic positions. The expense will be \$25,000.

ARCHITECT W. W. BOYINGTON is building a handsome residence for W. S. Lacher, at Highland Park. It is Eastlake in style, the first story is of pressed brick with wood above. The first floor is arranged with large reception-room and parlor, with sitting-room and dining-room off, and library back. On the second floor are six sleeping-rooms. A high pitch roof and wide veranda around front and side ornament the structure. The villa will cost about \$12,000. This architect has forwarded plans for a three-story bank building at Helena, Montana. It is to be built with a basement of rough ashley work and pressed brick above. The first floor will contain the banking-rooms, etc., and the rest of the building will be used for offices. The cost will be about \$35,000.

ARCHITECT W. W. BOYINGTON has planned and designed a new palatial residence for ex-Alderman Chase, to be erected on the west side of Ashland avenue, between Adams and Monroe streets. It will be in the modern Gothic style, three stories and basement, 48 by 68 feet. The elevation will be ornately designed with a projecting tower rising fifty-six feet above grade, at the northeast corner. The main entrance will be ornamented with polished granite columns, and will have a bay twelve feet in width. The windows will be plate glass, with arched heads and stained glass transoms. To the left of the entrance central hall, ten feet wide, will be a reception-room 16 by 33 feet; back of the reception-room will be a library-room with circular bay light, and a sewing-room. Beyond these will be a dining-room 15 by 33 feet, to the right of which will be a complete system of culinary rooms. An elaborately carved staircase will ascend at a right angle with the entrance hall, in the rear of the parlor. The second floor will be devoted to sleeping-rooms, servants' rooms, linen-rooms, lavatory, etc. At the rear of the building will be erected a fine two-story brick barn and carriage house. Total cost, \$42,000.

THE new passenger station of the New York, Chicago & St. Louis (Nickel Plate) road, at Cleveland, just completed, is a pleasant departure from the old stereotyped depot of the past. It is what may be called "Americanized" Modern Gothic in design, built of pressed brick with Ohio sandstone trimmings, slate roof, etc. In plan it consists of a central or main building two stories high (containing waiting-rooms, ticket and other offices), and two wings (one for dining and lunch rooms, the other for baggage, express and telegraph offices) connected with main building by low, inclosed passage-ways. The trains are well sheltered by a wrought and cast iron open shed track-house, having four covered connections with main buildings. The entire structure is about 310 feet long, with an average width of 45 feet. The work has been well and thoroughly done, under the general supervision of Mr. J. A. Latcha, chief engineer, ably assisted by Mr. Louis Cowles, architect, and Mr. Charles E. Cole, superintendent of construction. The general contractors for the entire work were Messrs. Dantel & Meinicke. The stone and wood carving was done by Mr. William Crosbie, and the woodwork by Lattimer & Moore, to both of whom special credit is due for the beautiful effects and finish produced.

ARCHITECT L. G. QUACKENBOSS has just completed two modern residences, Nos. 3144 and 3146 Wabash avenue, for Mr. A. McIntosh. They are each four stories high, 25 by 75 feet, containing sixteen rooms and fourteen closets. The first floors comprise a vestibule, reception hall, grand staircase, rear hall, front and back parlors, dining-room, kitchen, butler's pantry, storerooms, etc. The fronts are of pressed brick with stone approaches. The interiors are finished in oak, walnut and cherry. Cost, with two barns at the rear, \$28,000. The same is also erecting on Ashland avenue, near Harrison street, a costly residence with stable, for Mr. P. L. Autin. The cellar will be faced with artesian blockstone, and the first and second stories with rock-faced bush-hammered greenstone. The interior will be finished in black-walnut throughout. The roof will be slated mansard. Also has let contracts for building of six flats for Messrs. Kinney & Kimball, as agents for the executors of the Harley Green estate, on Third-seventh court and Wabash avenue. It will be of pressed brick and stone fronts, having projecting bay-windows. Also is finishing two buildings on West Congress, near Loomis street, arranged as private residences, for L. A. Lango and C. Lichtenberger. They will have pressed brick fronts with stone base and trimmings. Also a three-story building, 25 by 70 feet, at 302 West Van Buren street for H. M. Barbour, arranged as a store with dwelling over. The front is of pressed brick with galvanized iron bay-windows and whitestone dressings; cost, \$12,500. Also just completed a costly barn at 2442 Michigan avenue for O. H. Roche, Esq., 46 by 40 feet. The front is of Anderson pressed brick with blockstone base and brownstone dressings—slate mansard roof. Also has completed drawings for several cottages, near Forty-third street, for W. B. and G. D. Holton, to cost about \$6,000, and is preparing the plans for a first-class residence at Garfield Park for J. Oliver, Esq.

Lumber Notes.

MAPLE lumber is being shipped east from Emmett county, Mich.

THE mills on Gray's harbor and Chehalis river, Wyoming territory, ship 1,000,000 feet of lumber per month.

THE Pearce Lumber Company, of New Jersey, last week purchased of the St. Louis & Iron Mountain Railroad Company 5,000 acres of finely timbered land, situated in Saline county, Arkansas.

THE *Wausau Review* says: The last log for mills below passed Wausau boom last Monday. In the neighborhood of 20,000,000 have been passed through for mills at Stevens Point and Port Edwards.

THE daily cut of the mills on Columbia river, Oregon, is 650,000 feet. About \$1,000 worth of logs are daily floated out of John Day's river. The mills of Astoria and vicinity daily cut \$150,000 worth of lumber.

THERE had at a late date been rafted in the Penobscot, Maine, 54,000,000 feet of logs, and 45,000,000 were in the booms. From the east branch 6,000,000 feet were yet to come, and 40,000,000 from the west branch.

THE cyclone in the vicinity of Hubbard lake, some time since, blew down 30,000,000 feet of timber, nearly all Norway, which will have to be lumbered next winter; 10,000,000 feet of this timber belonged to Fletcher, Pack & Co., of Alpena.

THE *Wausau Central* says: The Wisconsin is now at a fairly good driving stage below here, and this week Bosworth & Riley and the Woodenware company, both of Stevens Point, have started about 20,000,000 feet of logs for their place, with about forty men on the drive.

THE sawing capacity of the Oscoda Salt and Lumber Company's mill recently burned was 5,000,000 feet per month, and estimating the season as four months from the first of August, the aggregate manufacture of Oscoda for the year of 1883 is by this casualty lessened 20,000,000 feet.

THERE are needed for every mile of railroad 2,600 ties. Estimating the aggregate of railroad track in the United States at 110,000 miles, there are in use 286,000,000 ties. When we reflect that the average life of a tie is but from three to four years, it will be seen how great is the consumption of timber for this use alone.

PORT ARTHUR, ONTARIO, has suddenly become of considerable importance as a lumber market. Shipments have been large and active. It is mentioned that at that point one of 6,000,000 feet is being cut for a Winnipeg firm, to be used in building elevators in the Northwest. It is estimated that over 25,000,000 feet will be transhipped at Port Arthur this season.

THE *Menominee Herald* says: The mills on both sides of the Menominee river are sawing about 12,000,000 feet of lumber every six days; of this amount the Menominee mills cut about 6,250,000. The number of logs scaled up to May 31, this year, was 353,070; the amount of lumber cut to that date was 61,748,235 feet, and the logs averaged 175 feet each. At least 400,000,000 feet of lumber will be sawed this season. Ninety per cent of this lumber finds its way to the Chicago market.

MILLMEN generally will be interested in a new sandpapering machine which is one of the recent designs of the Cordesman & Egan Co., Cincinnati, Ohio, who manufacture it in different sizes, from 24 to 40 inches wide. They inform us that they are especially suitable for polishing doors, which can be passed through whole, and sandpapered in the smoothest manner. The machine is of massive proportions, and fitted with eight feed rolls, geared in train, and it being constructed especially with a view to convenience in operating, the drums being made of iron, turned perfectly true, the sandpaper has to be renewed but about half the number of times usually necessary, thus effecting a large saving of time and trouble.

THE *Bay City Lumberman's Gazette* states: The mills at Alpena have, as a rule, sold close up to the cut, and many have made large sales of lumber to be cut, the George Prentiss Lumber Co. having sold 5,000,000 feet ahead, Fletcher, Pack & Co. some 2,000,000 feet ahead, and others of the mills in like proportion. The entire cut for the season of W. H. & E. K. Potter's mill has been sold, and is being shipped as fast as cut; 5,000,000 feet having already been cut and shipped. The aggregate of timber available for this year's operations is:

New logs from all sources.....	184,000,000
Old logs left over.....	38,000,000
Total.....	222,000,000
To be carried over, estimated.....	70,000,000
Cut for 1883.....	152,000,000
Lumber carried over.....	40,000,000
Marketed and to be marketed.....	112,000,000

In the item "logs and lumber carried over," we refer to that which is to be carried over to the next season, and when the cut of W. H. & E. K. Potter, already marketed, and other sales and shipments already effected, are taken out, it will be seen that there is certainly no startling prospective lumber product to be thrown upon the market at Alpena.

Mosaics.

LAREDO, Texas, has awarded the contract for the erection of a \$37,250 city hall and market-house. The city council has ordered the issuance of \$75,000 bonds for this and other improvements, including a \$10,000 school-house and city hospital.

A PENNSYLVANIA firm is now erecting at Johnson city, Tenn., what is said to be the largest tannery in the world. The building will cover several acres, and the vats will be on an extensive scale. The supply of oak bark is said to be almost inexhaustible in that portion of Tennessee.

Personal Gossip.

HENRY I. COBB, of the firm of Cobb & Frost, has torn himself away for a few days. Much needed rest.

ARCHITECT FRANCIS M. WHITEHOUSE, of the firm of Burlington & Whitehouse, is vacating in the East. Report says he is fox-hunting.

CONTRACTOR ROGERS, of the firm of Rogers & Koch, who was reported injured a few weeks ago, is still on deck, and does not remember any serious accident of recent date. It was evidently another man.

ARCHITECT B. J. BARTLETT, of Des Moines, Iowa, has been in the city for two weeks, looking after the work commenced on the Lake Presbyterian church and Dr. Scott's residence, which he is building, and purchasing material for a number of churches.

ARCHITECT CHARLES B. COOK, of Winona, Minnesota, a representative of the young enterprising architects who are building the structures that will make the new Northwest beautiful in architectural design, was in the city last week. It is pleasant to meet these gentlemen, for their views are always entertaining.

ILLUSTRATIVE of the national reputation enjoyed by many Chicago architects, Mr. H. J. Kimball, proprietor of the Kimball House, at Atlanta, Georgia, lately burned, has come to Chicago for plans. On the recommendation of several prominent hotel men, architect W. W. Boyington was entrusted with the work of preparing designs. They will be prepared before Mr. Kimball's next visit, about the 25th inst.

THE office of Architect John M. Van Osdel has been refurbished and is neat and tasteful as can be, besides occupying more room. This veteran architect has occupied almost the same ground for upwards of fifty years, and seen the city grow and spread, aiding much in the building and the rebuilding. This newer office and younger hands at the drafting boards are too suggestive of the changes of time, but still indicative of well-earned rest after fifty years in service. May the veteran long remain with us to watch the growth of a city of which he may well be said to have laid the foundations.

Synopsis of Building News.

Attica, Ind.—The building situation and outlook has been and is better than in any previous year since 1861. A Building Association has had much to do with this prosperity. There is a strong probability that the shops of the C. G. and S. R. Y. railway will be located here.

Architect Geo. P. Pearson: John Sheridan, 20 by 80 feet; Jones, Durgin & Co., 23 by 65 feet; Zeigler & Sons, 25 by 80 feet; Peacock & Martin, 25 by 80 feet; S. Bernhart, 25 by 80 feet; F. Rohlfing, 30 by 65 feet; Bell, Millard, Little & Green, 40 by 80 feet, making eight business rooms in one block, two stories high, of brick with iron front, galvanized cornices and tin roof, aggregate cost \$25,000; Sims & Fidsels and G. P. Pearson, contractors. Z. Blunt, two-story brick 21 by 48 feet, tin roof, cost \$2,500; Sims & Fidsels contractors. J. B. Gunin, story and half frame dwelling, cost \$2,500; L. Shepherd, contractor. C. H. Todd, two-story frame, tin roof, cost \$2,500. All of the above are under way. Several other (eight) smaller houses are under way ranging in cost from \$500 to \$1,500. There are projected a two-story brick, 41 by 70 feet for the city, which will include fire department, mayor's office, hall and calaboose, to cost \$5,500, and a frame depot building for the C. & G. S. railway to cost \$2,500.

Cleveland, Ohio.—Present condition and outlook satisfactory. Architects Clarence & Co.: Bradford & Carter, four-story brick block, 66 by 120 feet, cost \$35,000; Thomas Lucas, contractor. E. J. Foster, three-story brick block, 100 by 100 feet, cost \$25,000; Jno. Scott, contractor. H. C. Wick, two-story double dwelling, stone, 60 by 75 feet, cost \$16,000; Harris & Grant, contractors. L. Lascelle, two double frame dwellings, cost \$6,000; A. F. Myers, contractor. (The above just finishing.) Coe Ridge schoolhouse, two-story brick, cost \$4,000. Geo. Presley, frame dwelling, cost \$7,000; A. Hartzell, contractor. Mrs. M. Thornton, frame dwelling, cost \$7,000; A. S. Morgan, contractor. C. V. LaVayea, frame dwelling, cost \$5,000; A. G. Marble, contractor. H. C. Ford, frame dwelling, cost \$3,000; Toote, contractor. Theo. W. Sterling, six small houses, cost \$5,000. The above are all under way. Mrs. Wyman and N. S. Mullen have each frame dwellings out for figures.

Cincinnati, Ohio.—Architects and builders all busy and the prospects good. There will be a fine architectural display at the exposition.

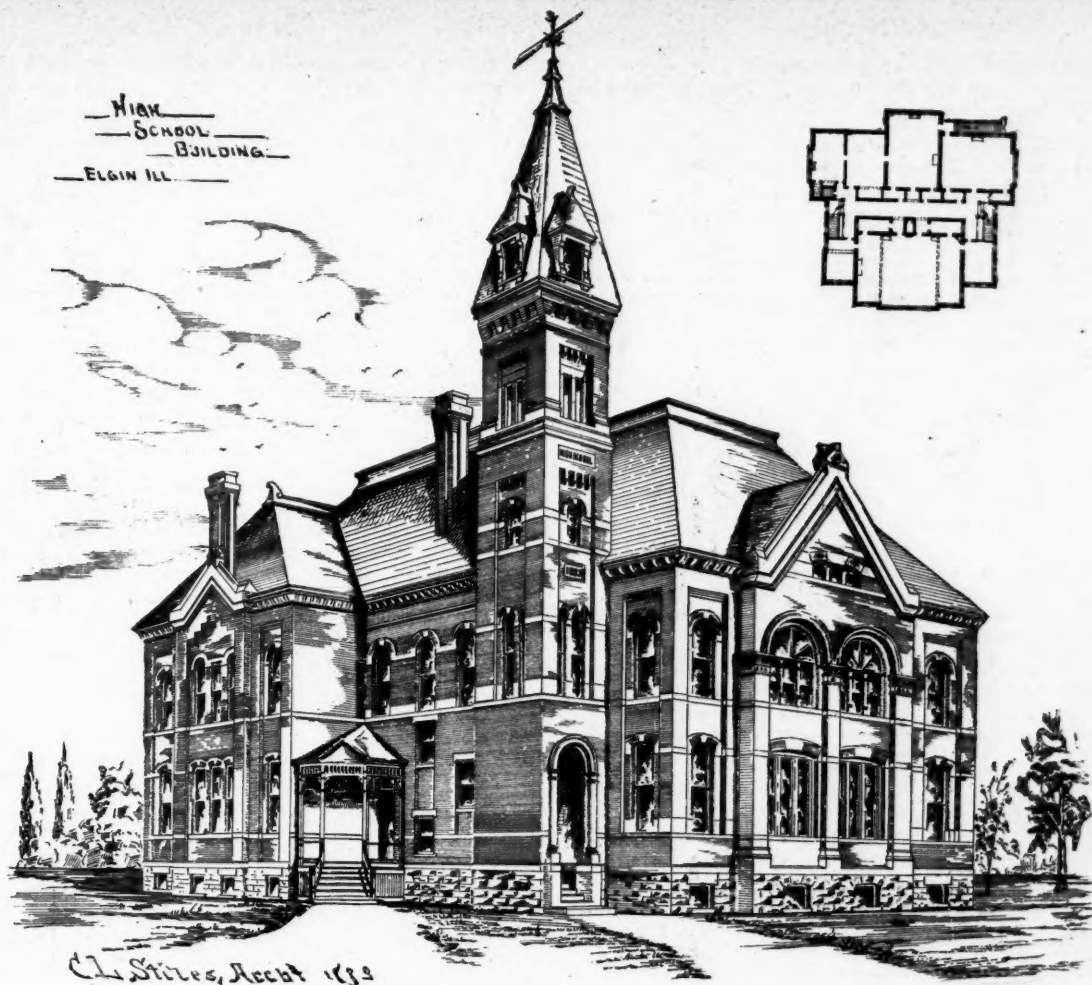
Architect Geo. W. Rapp: Mrs. M. Darnsont, three-story brick building on Vine street, tin roof and remodeling, cost \$15,100; Harig & Brugeman, contractors. Peter Scherr, three-story brick building, 50 by 80 feet, for stores and flats, corner of Liberty street and Central avenue, cost \$25,000; W. Miller, contractor. Chas. Wittstein, two-and-half story frame residence, tin roof, on Kemper Lane Walnut Hills, cost \$6,298; Griffith & Sons, contractors. Dr. Schneider, alterations on brick building, corner of Ninth and Vine streets, cost \$9,500. All the above under way. Alf. Schinill, two-and-half story frame residence, slate roof, to cost \$10,000, projected.

Architect E. Anderson: M. White, two six-story stores, 48 by 90 feet, pressed brick fronts. A. Street, large frame residence. Union Distilling Co., tower and rectifying houses. J. W. Coyer, Peoria, Ill., frame residence. Farmers National Bank, Ripley, Ohio, brick with stone and iron front, 18 by 60 feet, Jas. Gilliland & Co., owners. Munk & Roberts, Connorsville, Ind., furniture factory, 50 by 225 feet. G. Jelenko, Charleston, West Va., large brick dwelling. T. H. Heck, Augusta, Ky., brick residence. Miss A. E. Dick, Price's Hill, Ohio, double frame cottage, Geo. Christ, Ivanhoe, Ohio, four frame cottages. Frank W. Handy, Avondale, Ohio, Kindergarten building. Office building for Covington and Cincinnati Bridge Company, brick. All the above under way. W. Zinn, Delhi, Ohio, one brick and two frame dwellings, and Jas. Dalton, Avondale, Ohio, large double frame dwelling—projected.

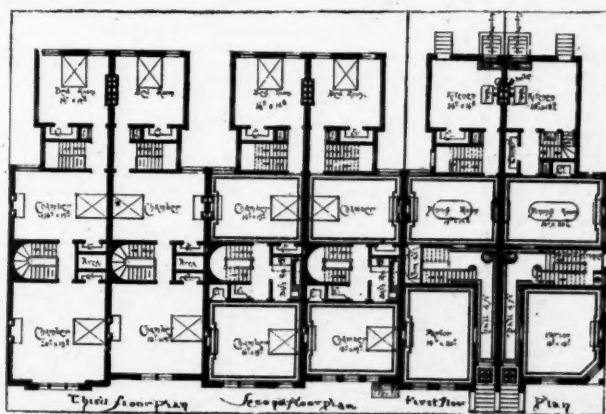
Chicago, Ill.—There is activity all along the building line. The ring of the trowel may be heard in every district of the city. The fair prices for material have induced many to commence building so as to have them completed by May 1, 1884, hence the outlook for autumn work is excellent.

Architect H. Rhewoldt: Jas. Roster, three-story brick, 27 by 72 feet, cost \$11,000; A. A. Stevens & Co., contractors. H. Fleutge, two-story brick, 35 by 52 feet, cost \$7,000. Mrs. E. Lardner, two-story brick, 22 by 50 feet, cost \$6,000. John Liversy, two-story cottage, 27 by 60 feet, cost \$6,000; W. Pollock, contractor. M. Schmitz, three-story brick, 22 by 52 feet, cost \$5,000; his own contractor. Wartelsky & Son, two-story brick, 24 by 70 feet, cost \$5,000; W. Goldie, contractor. Rebecca Quimby, two-story frame, 18 by 32 feet, cost \$9,000; C. R. Nicely, contractor. W. Griffith, three-story brick, 22 by 65 feet, cost \$7,500, his own contractor. S. Kohn, three-story brick, 24 by 60 feet, cost \$7,500; W. Goldie, contractor. P. Schmidt, two-story brick, 24 by 60 feet, cost \$5,500; same contractor. L. Kneidl, three-story brick, cost \$2,500; M. Schmitz, contractor. Chicago Varnish Company, two-story brick, 60 by 100 feet, cost \$10,000; F. Hansen, contractor. F. Kollman, three-story brick, 24 by 67 feet, cost \$12,000; A. A. Stevens & Co., contractors. D. Russ, two-story frame, 22 by 50 feet, cost \$3,000; own contractor. Mrs. E. Klander, two-story brick, cost \$11,000; Val. Lund, contractor. All the above are under construction. P. Hibbard, two-story frame, 26 by 48 feet, to cost \$3,500. E. Greenburg, three-story brick, to cost \$5,500, and H. Welge, three-story brick, to cost \$11,000, are projected.

Architect J. Otter: C. P. Holmberg, three-story and basement building 25 by 75 feet; Philadelphia pressed brick and stone front, cost \$12,000. J. A. Blomgren, three-story and basement, brick, 50 by 75 feet, cost \$18,000. R. Blomgren, three-story and basement, brick, 25 by 75 feet, cost \$9,000. J. A. Lend, three-story, Indiana pressed brick front, 50 by 100 feet, cost \$22,000. A. P. Shogan, two-story, brick, 47 by 100 feet, cost \$9,000. A. Morgan, three-story, brick, 30 by 40 feet, cost \$5,000. J. Junch, three-story,



SCHOOLHOUSE AT ELGIN, ILL.—C. L. Stiles, Architect.



RESIDENCE BLOCK, CINCINNATI, O.—G. W. RAPP, Architect.

brick, 22 by 65 feet, cost \$5,000. Mrs. B. Siegler, three-story, brick, 22 by 55 feet, cost \$5,000. C. Carlson, two-story and basement, brick, 25 by 45 feet, cost \$5,000. J. Nygren, two-story and cellar, brick, cost \$3,500. T. McNulty, two-story and basement, brick, 22 by 46 feet, cost \$6,000. A. Ness, two-story and basement, brick, cost \$6,000. James Kennelly, three-story and cellar, brick, 23 by 54 feet, cost \$5,000. O. J. Nelson, six story and cellar, 70 by 100 feet, brick, cost \$25,000. F. Bush, three-story and basement, 22 by 80 feet, cost \$2,000. A. Munson, three-story and basement, brick, 28 by 73 feet, cost \$8,000. A. Almer, three-story and cellar, brick, 42 by 52 feet, cost \$8,000. All under way except last four, which are projected.

Architect J. W. Ackerman: D. J. Simpson, two-story brick dwelling, 24 by 38 feet, slate mansard roof, and barn, 20 by 24 feet, cost \$5,500; J. McKinlay, contractor. Sam'l Simons, four buildings, two stories and cellar, 68 by 52 feet, cost \$9,000. H. W. Chase, two residences, stone fronts of Pennsylvania green stone, valce Bedford stone, 22 by 56 feet, cost \$1,000; J. C. Anderson, contractor. P. O'Callahan, two-story and cellar building, 27 by 62 feet, with slate mansard roof, cost \$6,500; G. E. Verlin, contractor. Thos. Scanlan, two-story and cellar building, 22 by 56 feet, cost \$5,000; J. McKinlay, contractor. — Sweeney, remodeling store building with two flats, cost \$3,500; J. M. Dumbley, contractor. (All in course of construction.) J. O'Callahan, three-story store building with basement, 25 by 60 feet, cost \$7,500 (projected).

Architect Geo. S. Spohr: A. Leibec, six two-story and basement dwellings, pressed brick fronts with stone trimmings, each 20 by 36 feet, cost \$20,000; Frederick & Clark, contractors. E. Harland, four four-story stone front houses, 65 by 45 feet, cost \$18,000. G. C. Koch, two-story basement and attic residence, pressed brick front, 35 by 70 feet, cost \$15,000. Mrs. C. Anderson, two-story and basement brick dwelling, 22 by 60 feet, cost \$5,000. Daniel O'Brien, three-story and basement building, 30 by 70 feet, cost \$10,000. J. Thong, two three-story and basement buildings, 50 by 70 feet, cost \$10,000. H. E. Keeler, three-story and basement building, 25 by 60 feet, cost \$5,000. Dr. Case, two three-story buildings, 50 by 60 feet, cost \$7,000.

Architect J. C. Cochrane: James H. Thompson, three-story and cellar residence, brick with stone trimmings, 24 by 64 feet, cost \$15,000 (by days work). O'Neil Bros., four-story and cellar warehouse, 48 by 130 feet, cost \$25,000; E. Y. Goebel, contractor (foundations of above being laid). Thos. Wilmarth, Ravenswood, two-story and attic, frame on brick foundations, irregular in shape, cost \$5,000 (about completed). E. Y. Moore, same place, similar residence, cost \$8,000 (contract not let). Cook County Hospital, additions, 90 by 116 feet, and two pavilions 50 by 90 feet each, all five stories, costing respectively \$150,000 and \$125,000 (the former about completed, the latter under roof); Geo. Messersmith, contractor. First Baptist church, Sepea, Ill., frame structure on stone foundation, in Queen Anne style, 48 by 170 feet (foundation in); J. H. Mason, contractor. Court-house, Marshall, Mo., brick with stone trimmings, 90 by 110 feet, cost \$60,000 (roof on); Volt & Co., of Rock Island, contractors. Court-house, Valparaiso, Ind., stone exterior, 88 by 118 feet, cost \$126,000 (foundations being laid); J. D. Wilson, Valparaiso, contractor. Almshouse, Crown Point, Ind., brick structure, 40 by 176 feet, cost \$16,000 (not let). Central Baptist church (city), brick with cellar, 75 by 100 feet, cost \$25,000 (contract not let). Warren & Co., Crown Point, Ind., two-story brick store, 27 by 90 feet (under roof); George Lee, Crown Point, contractor. Amos Adams, same place, two-story, brick veneered residence, 30 by 51 feet, cost \$7,000 (about completed); same contractor.

Architect Julius Huber: E. Huber, three-story store, pressed brick front, flat roof, 24 by 58 feet, cost \$7,400; Roessler & Winckler, contractors. Mall Bros., two-story frame store and dwelling, 30 by 70 feet, cost \$5,600; L. Huzog, contractor. School Board, Ravenswood, two-story frame schoolhouse, 26 by 48 feet, cost \$25,000; R. W. Gronow, contractor. J. L. Hathaway, coalshed, 350 by 250 feet, cost \$20,000; C. Taylor, contractor. Cross Creek Coal Co., shed, 150 by 500 feet, cost \$30,000; A. Day, contractor. Mrs. E. Weigle, two-story market building, pressed brick front, 50 by 160 feet, cost \$15,000; King & Demuth, contractors. The above are all in course of construction. C. W. White, block of eleven dwellings, two-story and basement, pressed brick front and cut stone, 60 by 200 feet, cost \$60,000. J. Becker, two-story, pressed brick building, 22 by 60 feet, cost \$8,000. J. Mosenbacher & Bro., two three-story flats, pressed brick fronts, 24 by 60 feet each, cost \$14,000. C. Weber, frame cottage, 30 by 55 feet, cost \$3,000. J. L. Hathaway, coalshed, 140 by 200 feet, cost \$6,000. J. Campbell, frame cottage, 22 by 45 feet, cost \$2,000, are projected.

Architect F. Kettnerich: N. Ernst, three flats, Ashler fronts, with French roofs in front, 22 by 50 feet, cost \$5,545; A. Harnowsky and T. Neff, contractors. B. Bierfeld, two-story and basement, 24½ by 75 feet, cost \$4,500; A. Halfin, contractor. T. Larr, six two-story and basement flats, 22 by 62 feet, cost \$4,430; C. Hupfer and W. Witt, contractors. Mrs. H. Lewis, store and three flats with basement, 24 by 60 feet, cost \$3,750; E. Holmes, contractor. Pats Gern, six three-story and basement flats, 22 by 60 feet, cost \$4,150; same contractor. Frank Coosnicka, four two-story and basement buildings, 21 by 30, 22 by 72, 21 by 64 and 21 by 62 feet, cost, respectively, \$5,675, \$5,150, \$4,800, \$4,725; his own contractor. J. Tetmeider, one-story and basement building, 22 by 45 feet, cost \$2,225. Projected by G. Winner, three story and basement flats, 22 by 66 feet, cost \$9,000. L. Lupp, two-story basement and attic building, 24½ by 85 feet, cost \$5,850. J. Kucin, two-story basement and attic building, 24 by 84 feet, cost \$6,550. B. Heinlein, two-story basement and attic building, 22 by 34 feet, cost \$2,750. F. Leitel, similar structure, 22 by 45 feet, cost \$3,200. P. Kennedy, one-story frame, 24 by 50 feet, cost \$3,220. W. Gilman, two two-story double houses, 40 by 45 feet, cost \$3,000. B. Barga, two-story store, 25 by 75 feet, cost \$4,650.

Architect H. Kley: F. Woelke, three-story and basement brick, 28 by 110 feet, cost \$14,000 (completed); Maier & Teckel, contractors. H. Wedekind, two-story and basement brick, 24 by 65 feet, cost \$5,000; E. Menshing, contractor. B. C. Legor, same, without basement, 25 by 60 feet, cost \$4,300; H. Tuehr, contractor. A. Burke, same, 22 by 46 feet, cost \$3,000; Rathen & Co., contractors. H. Knipp, same, and basement, 25 by 68 feet, cost \$5,000; H. Kirchhoff, contractor. C. Tokup, four-story and basement, 83 by 112 feet, cost \$12,000; P. Ott, contractor. L. Ohlendorf, four-story and basement, 52 by 76 feet, cost \$17,000; H. Luehr, contractor. L. Benson, three-story and basement, 25 by 78 feet, cost \$9,300; C. Back, contractor. M. W. Ford, three-story, minus basement, 45 by 80 feet, cost \$5,300; Maier & Teckel, contractors. F. Bartuska, three-story and basement, 26 by 120 feet, cost \$13,300; C. Betzel, contractor. Wolff & Tchiessel, three-story and basement, 50 by 70 feet, cost \$11,500; Menke & Co., contractors. G. Eggers, two-story building, 25 by 65 feet, cost \$4,300. F. Korthes, three-story and basement, 25 by 80 feet, cost \$9,500.

Architect S. P. Lane: M. Treistein, frame store, 69 by 116 feet, cost \$3,500. M. Cole, brick flat, 25 by 36 feet, cost \$2,000; Russell & O'Connell, contractors. M. Watkins, four two-story cottages, 25 by 42 feet; Meyer & Bros., contractors. M. Phelps, two-story residence, 32 by 46 feet, cost \$3,000. Mrs. Wood, two-story frame, 25 by 46 feet, cost \$2,200; J. Reuth, contractor. Church at Lake View, pressed brick, 80 by 50 feet, cost \$6,000. M. Schneider, frame cottage, 25 by 43 feet, cost \$2,000; MacKerlie & O'Toole, contractors. M. Dunlap, frame residence, 30 by 45 feet, cost \$3,300; M. Ellis, contractor. Mr. Hartung, frame store, 60 by 100 feet, cost \$5,500. Mr. Wheeler, frame residence, 30 by 50 feet, cost \$3,100. Mr. Rinder, frame dwelling, 25 by 50 feet, cost \$2,000. All the above under way except the church and Mr. Phelps' building, which have not yet been commenced.

Architect Hallberg is building a residence for Swain Nelson on Belden avenue. It is of Anderson pressed brick with stone basement. It will be three-story and basement, to cost \$40,000. Also a block of three houses for Kussel Bros. Anderson pressed brick front and side walls on Menominee street, two stories, attic and basement, 72 by 64 feet, cost \$15,000. Also residence for Mrs. Matilda Hale on Jackson street near Ashland avenue, brown stone front, three stories and basement. The front is handsomely designed, it will be 83 by 24 feet, to cost \$12,000.

Detroit, Mich.—The building status is good in this city and vicinity, and the outlook flattering.

Architects, Julius Hess & Co.: Kalkaska county courthouse, cost \$20,000; Dawson & Anderson, contractors. Sanilac county jail and sheriff's residence, cost \$12,000; Crarey & Krantz, contractors. Parke, Davis & Co., laboratory, cost \$15,000; Tapping & Fisher, contractors. Perrien Bros., alteration to flouring mill, cost \$5,000, by the day. Peter Fox, two residences, brick, cost \$14,000 and \$7,400; R. Helson and Spitzley Bros., contractors. John Blessed, residence, brick, cost \$5,300; W. J. Vinton, contractor. Evans estate, residence, brick, cost \$7,000; Spitzley Bros., contractors. W. S. Crane, residence, brick, cost \$8,250; Allen Holmes, contractor. E. W. Voigt, brewery, cost \$50,000; P. Dee, contractor. Same, stable, cost \$5,300; C. Stange, contractor. J. G. Dickinson, residence, brick, cost \$8,100; A. Holmes, contractor. W. S. Bramwell, residence, frame, cost \$3,700; H. George, contractor. Geo. Stark, residence, brick, cost \$4,100; Spitzley Bros., contractors. St. Paul's church, new spire, cost \$5,300, same contractors. F. Knebler, Sandusky, O., refrigerator, cost \$4,700; T. P. Tuite & Co., contractors. F. Horix, Akron, O., same, cost \$4,900, same contractors. All of the above under way or contracts let.

Architects, Mason & Rice: Julius Strelinger, three-story brick residence, 50 by 70 feet, cost \$9,000, by day-work. H. H. Taylor, two-story frame residence, 40 by 60 feet, cost \$6,000; H. George & Son, contractors. Methodist chapel, brick, 45 by 90 feet, cost

\$10,000; Dewey & Able, contractors. Frank B. Preston, frame residence, 40 by 60 feet, cost \$8,000; Spitzley Bros., contractors. Geo. L. Hommedieu, residence, brick, 45 by 60 feet, cost \$15,000; Nuppenaw & Clark, contractors. D. Carter, residence, brick, 50 by 80 feet, cost \$13,000; Gearing & Co., contractors. H. C. Parke, additions, brick, 40 by 50 feet, cost \$15,000; Teakle & Co., contractors. Mrs. D. Thompson, Home for Old Ladies, 60 by 100 feet, cost \$30,000; Gearing & Co., contractors. D. E. Rice, double residence, brick, 40 by 65 feet, cost \$5,600; W. Claxton, contractor. Union Yeast Co., brick store, 42 by 60 feet, cost \$7,000; M. Blay, contractor. Geo. L. Hitchcock, Farwell, Mich., frame residence, 45 by 75 feet, cost \$7,000; W. Claxton, contractor. Amherstburg, Ontario, town hall, brick, 50 by 80 feet, cost \$14,000. L. St. Aubin, frame residence, 30 by 50 feet, cost \$3,000; J. Brand, contractor. G. V. Northrup, block of stores, brick, 80 by 100 feet, cost \$15,000; H. George & Son, contractors. J. H. Haskall, frame, residence, 30 by 50 feet, cost \$3,000; J. Brand, contractor. M. McNamara, varnish factory, brick, 35 by 60 feet, cost \$7,000; Spitzley Bros., contractors. W. B. Morley, Marine City, frame residence, 50 by 70 feet, cost \$8,000. W. H. Jewell, residence, brick, 35 by 65 feet, cost \$5,000; George & Son, contractors. D. W. Fales, residence, brick, 40 by 70 feet, cost \$8,000. S. Pratt, boiler shop, brick, 150 by 180 feet, cost \$10,000; Spitzley Bros., contractors.

Port Wayne, Ind.—Architects and builders fairly busy and outlook for balance of the season satisfactory.

Architects J. F. Wing & Co.: Jas. M. Barrett, two-story brick residence, slate roof, 60 by 80 feet, cost \$10,000; under several contractors. O. S. Hanna, same character of residence, 35 by 57 feet, cost \$5,000; Fred Boister, contractor. Nirdlinger estate, opera-house, brick walls, slate roof, 35 by 57 feet, cost \$20,000 (projected). Mary C. Sturgis, two-story double tenement house, brick and slate roof, 58 by 48 feet, cost \$7,000; Charles French, contractor. German Reformed church, orphan asylum building, two-story brick with slate roof, 40 by 76 feet, cost \$10,000 (projected). School building, Angola, Ind., two stories, brick with slate roof, 67 by 86 feet, cost \$15,000; Wm. Myers, contractor. Two district schoolhouses, Abbot township, two stories and basement, brick with slate roof, 28 by 35 feet, cost \$2,500 each; H. W. Clark, contractor. Addition to Judge Lowry's residence, brick with tin roof, 16 by 24 feet, cost \$1,000; A. Grotholman, contractor. First Presbyterian church, Bluffton, Ind., brick with stone trimmings, transepts Sabbath-school rooms, 65 by 90 feet, cost \$9,000; H. W. Clark, contractor. Bliss hotel, same place, three-story brick, 58 by 88 feet, cost \$10,000 (by day's work). Moorman, Lewis & Diggs, Winchester, Ind., three three-story brick buildings. Masonic Hall in third story, 76 by 100 feet, cost \$20,000; Campfield & Gridley, contractors.

Frankfort, Ind.—The building outlook is good; present business active.

Architect J. W. Hammond: Samuel Castner, one-story frame cottage, 30 by 46 feet, cost \$1,800; A. A. Bayless, contractor (near completion). Geo. Malain, one-story frame cottage, cost \$1,000 (under way). T. Marshman, Jefferson, Ind., two-story dwelling, cost \$2,000 (projected). S. Boots, Montgomery Co., two-story dwelling, cost \$1,800 (under way). Wm. Freeze, Frankfort, Ind., two-story dwelling, cost \$2,500; L. H. Daniels, contractor (under way). E. H. Staley, story and a-half summer cottage, Lakeside, cost \$800 (completed). Cushwa Bros., three-story brick store building, 22 by 90 feet, cost \$5,000; U. M. Palmer, contractor. Thortown High school, three-story brick, cost \$1,400; G. L. Fatout, contractor.

Green Bay, Wis.—The building boom has not reached this locality, and business has been rather quiet.

Architect J. McDonnell: Courthouse, Delta Co., Mich., two stories and basement, basement stone, superstructure pressed brick with sandstone trimmings, slate roof, 60 by 75 feet, cost \$26,000; J. B. Sweatt, Chicago, contractor. Geo. W. Lamb, two-story frame residence, stone basement, 42 by 74 feet, cost \$5,200; Kendall Manufacturing Company contractors (just completed). Catholic Bishop, Young Ladies' Seminary building, three stories, brick with stone trimmings, 62 by 42 feet, cost \$5,700; done by day's work. Lutheran Society Church, superstructure wood, 34 by 64 feet, cost \$4,100; A. Green, contractor (just commenced). J. McDonnell, two-story dwelling, superstructure wood, 36 by 64 feet, cost \$4,500; done by day's work (just ready for plastering.)

Indianapolis, Ind.—Architect E. H. Ketcham: Plymouth Congregational Church, two stories, brick, tile roofing, theatrical in design, 65 by 130 feet, cost \$22,000; Junglaus & Schumacher, contractors (just up to second story). W. S. Garber, frame dwelling, cost \$3,000; same contractors (near completion). C. H. Walcott, frame dwelling, cost \$4,500; J. A. Buchanan, contractor (near completion); Christian Church, Bloomington, Ind., brick with slate roof, 48 by 92 feet, cost \$10,000 (receiving bids). J. H. Smart, Lafayette, Ind., nine-room dwelling, cost \$3,500 (drawings being made). Insane Asylum, Logansport, Ind., stone in detached buildings, cost \$400,000. Insane Asylum, Richmond, Ind., stone cottage system, cost \$400,000. Insane Asylum, Evansville, Ind., brick, radiating system, cost \$400,000. (Surveys are being made for above). Hendricks county courthouse and jail, steam heating, cost \$4,000 (opened for bids September 5). Public School, Richmond, Ind., brick, stone and terra cotta, cost \$22,000; Kelter & Beedle, contractors (under construction). Presbyterian Church, Vincennes, Ind., brick, stone and terra cotta, cost \$12,000 (projected). A. J. Thomas, city, two-story frame building, cost \$3,500; J. Callender contractor (under way). City of Indianapolis Hall, three stories, brick and stone, seating capacity of hall 6,000; 195 by 250 feet, cost \$200,000 (projected).

Joliet, Ill.—The present outlook for building is good but not quite up to last season's measure.

Architect H. Boelme: Geo. H. Munroe, two dwellings, cost \$5,000. St. Mary's Convent, brick with stone trimmings, cost \$20,000. F. H. McRoberts, dwelling, cost \$4,000. Dr. Chessman, dwelling, cost \$4,000. R. M. Brag, dwelling, Anderson pressed brick, terra cotta trimmings, cost \$12,000. City of Joliet, school building, cost \$15,000. German Lutheran Church, stone, cost \$14,000. J. McFadden, livery stable, cost \$5,500. T. W. Woodruff, brick office building, cost \$5,000. City of Joliet, engine house, cost \$1,000. H. C. Callan, remodeling residence, cost \$10,000. C. Sweiger, stone building, cost \$6,000. R. Walsh, stone building, cost \$4,000. Catholic Church, Lemont, frame, cost \$9,000. Convent schoolhouse, same place, stone, cost \$8,000. W. H. Chettencled, Plainfield, residence, cost \$4,000.

Architect O. Johnson: E. S. Monroe, three-story building, 67 by 120 feet, walls of stone, front of galvanized iron (very ornamental), tin roof, cost \$25,000; mason work by E. Erickson, other work by the day. J. E. Bush, three-story stone machine shop, galvanized iron front, 70 by 96 feet, cost \$10,000; mason work by P. Wenberg & Co.; other work by the day.

Kansas City, Mo.—Business is not up to the standard of earlier expectation but on the whole is satisfactory. While very few business buildings will be put up this season, a large number of dwellings are projected.

Architect Chas. H. Mansfield: H. Barnes and C. A. Brackett, four stories above basement, with brick walls trimmed with Warrensburg stone, tin roof; first story contains store, large dining-room, kitchen, and suite of four rooms with private bathroom; second and third stories contain four suites of four rooms, one suite of five rooms, and one suite of two rooms to each floor, also three private and two public bathrooms to each floor. Building is to be heated throughout by steam and provided with passenger elevator, cost \$50,000; done by day's work (walls up to the sidewalk, to be completed February 1, 1884.)

Architect S. E. Chamberlin: W. B. Goodkin, three-story brick store, cost \$3,500. C. J. Lee, two-story brick dwelling, cost \$2,500. D. Updegraff, three-story brick store, cost \$5,000. (Projected.)

Minneapolis, Minn.—Just at present there is a lull with the architects, but the outlook for the autumn is good.

Architects Geo. W. & F. D. Orff: Day Brothers, three four-story brick stores, 66 by 84 feet, cost \$33,000; Hazlin & Morse, contractors. Joseph Menard, two four-story stores, 50 by 104 feet, cost \$25,000. L. Tuillefee, contractor. Joseph Fall, four three-story brick stores, 83 by 60 feet, cost \$20,000; Hazlin & Morse, contractors. Lundie & Mendal, brick bank building with basement, 44 by 44 feet, cost \$8,000; W. W. Witmore, contractor. Same parties, two three-story brick store buildings, 44 by 75 feet, cost \$12,000; same contractor. Chas. Robinson, two-story brick veneered dwelling, 47 by 63 feet, cost \$15,000; by the day. J. C. Llafter, three two-story and basement brick veneered houses, 64 by 38 feet, cost \$12,500; B. F. Abbott, contractor. Jas. Patten, two double frame houses, 46 by 53 feet, cost \$10,000; S. C. Cutter, contractor. W. F. Brackett, two double and one single frame houses, 40 by 58 feet and 40 by 50 feet respectively, cost \$12,000; A. J. Warren, contractor. S. Rothschild, double frame house, 44 by 53 feet, cost \$5,500; by the day. H. Dennis, double frame house, 41 by 46 feet, cost \$5,000; Hazlin & Morse, architects. Chas. Johnson, double frame house, 40 by 46 feet, cost \$5,400. G. N. Warren, frame dwelling, 33 by 43 feet, cost \$8,800; B. F. Abbott, contractor. C. W. Weeks, frame dwelling, 33 by 47 feet, cost \$3,500; by the day. (All

the above now building). W. S. Benton, frame dwelling, 40 by 71 feet, cost \$10,000; B. Cooper, contractor. J. R. Purchas, brick laundry, four stories, 25 by 120 feet, cost \$20,000; Hazlin & Morse, contractors. (Above just completed.) J. M. Shaw, two-story brick dwelling, 55 by 76 feet, cost \$25,000. A. F. Foster, frame dwelling, 33 by 54 feet, cost \$4,000. (Projected.)

Architect C. F. Struck: Martin Ferrant, block of four stores, stone basement and brick superstructure, fronts St. Louis pressed brick and Ohio bluestone, 33 by 80 feet, to be used as stores and offices, cost \$18,000; various contractors (foundations in). John Bauman, three-story brick with stone basement, 23.6 by 100 feet, cost \$12,000; various contractors (ready for roof). John D. Myer, three-story brick, brownstone facing, 71 by 100 feet, cost \$21,000 (excavating not let).

Ottumwa, Ia.—Business quiet, but expectations are good.

Architect Ernst Koch: Chas. Sax, four-story brick building, with stone trimmings, tin roof, 44 by 132 feet, cost \$1,800 (Diedrich arch); Scott and Capell Bros., contractors. Manager Potter, C. B. & Q. railroad, four-story brick, with stone trimmings, 66 by 118 feet, cost \$22,000; various contractors. John Hausmann, three-story brick brewery, 90 by 110 feet, cost \$25,000; various contractors. Two-story and basement schoolhouse, slate roof and tower, 80 by 85 feet, cost \$26,800. E. Chambers, Albion, Ia., two-story frame residence, cost \$5,000. G. Creamer, same place, three-story brick hotel, 60 by 110 feet, cost \$22,000. (All the above under way.)

Architect Edward Clark: W. E. Chambers, one-story basement and mansard dwelling, brick, trimmed with stone, block brick and other ornamental brickwork, facing pressed brick, roof slate and trimmed with galvanized iron, will be fitted with gas, hot and cold water, bathroom, mantels, etc., area dimensions 38 by 54 feet, cost \$32,000; J. J. McDaniels, contractor. Dr. L. E. Rogers, two-story frame residence, nine rooms, 28 by 42 feet, cost \$2,400; Wm. Donaldson, contractor. Rev. B. E. S. Ely, two-story frame residence, 26 by 38 feet, cost \$2,100; J. Hall, contractor. (All in course of construction.)

St. Louis, Mo.—Architect E. Jansen: Klausman Brewing Co., brick malthouse, cost \$20,000; contract sublet.

Architect T. Rennich: A. M. McChesny, two-story brick dwelling, cost \$5,000; C. Gebhardt, contractor.

Architect E. Mortimer: W. N. Graves, two-story brick dwelling, cost \$7,000; C. Wehking, contractor.

Architect J. B. Legg: Famous Boot and Shoe Co., four-floor building, stone front, 60 by 150 feet, cost \$35,000; let separately (cellar dug). State Normal School building, three stories, brick, additions and changes, cost \$12,000 (joists on first story); J. C. Guston, contractor. Joplin public school, two-story brick, 72 by 85 feet, cost \$13,000 (first story up). Court-house, Cicely, Ill., two-story brick, 41 by 120 feet, cost \$12,000; taking bids. Public school, Murphysboro, two stories, eight rooms, 70 by 80 feet, cost \$10,000; taking bids. Academy of Music, Fort Smith, Ark., two stories, brick, 60 by 110 feet, cost \$18,000 (roof on). F. B. Meyers, two-story stone front store building, 58 by 120 feet, cost \$8,000 (cellar dug). Mrs. H. Bees, three-story stone building, flats, 60 by 90 feet, cost \$25,000 (just completed). Chas. P. Wise, three-story stone front residence, 50 by 65 feet, cost \$12,000 (plastering done). E. J. Hanson, four three-story stone front dwellings, 80 by 65 feet, cost \$16,000 (nearly finished). H. C. Ashley & Co., Helena, Montana, three-story brick, store and offices, 58 by 135 feet, cost \$28,000. R. S. Hale, same place, two-story brick store, 60 by 100 feet, cost \$14,000. B. H. Reaves, Joplin, Mo., two-story brick store, 45 by 60 feet, cost \$6,000 (cellar nearly done). A. S. Bridges, two-story brick and stone building, 35 by 60 feet, cost \$7,000 (roof on). W. W. Trigg, Brownsville, Mo., two-story brick building, 45 by 55 feet, cost \$5,500 (cellar dug). V. Miller, Centralia, Mo., two-story frame dwelling, 48 by 56 feet, cost \$6,000 (roof on).

Architect E. Mortimer: T. B. Moore, five two-story, seven-room houses, brick, cost \$11,300. Chas. Baur, stone front, ten-room house, cost \$6,200. J. T. Cole, stock brick house, cost \$2,500. The St. Louis Building Co., three houses, average \$8,500 (completed). All the others under way; J. V. Majors, contractor.

St. Paul, Minn.—Architects have some leisure; builders are hunting up more work, prospects flattering.

Architect H. Tieheme: C. E. Judd, two-story frame residence, cost \$2,350; D. D. Doyle, contractor. J. W. Enwright, two-story frame residence, cost \$2,600; B. J. Grimshaw, contractor. Dries & Koch, two three-story brick stores, cost \$13,000; D. D. Doyle, contractor. Brick church at Cold Springs, Minn., cost \$13,000; day labor. R. Price, three-story brick residence, cost \$10,000. Horace Pickett, three-story business block, Fergus Falls, Minn., cost \$33,000. Robert Jamison, Minneapolis, two-story brick residence, cost \$5,000. J. T. A. Williams, two-story frame boarding stable, cost \$7,000. B. Robbins, Merriam Park, two-story frame residence, cost \$3,800. Frame church, Brainerd, Minn., cost \$7,500. Richard Price, two-story brick building, cost \$7,225. (All the above under way.) Bishop Grace, Mortuary Chapel, Calvary Cemetery, cost \$3,000. P. V. Brown, three-story brick store, cost \$10,600. Geo. P. Metcalf, two-story frame residence, cost \$3,000. W. F. Wilson, same, cost \$3,000. Church, Belle Plaine, Minn., brick, cost \$7,000. Jas. Blaike, three double frame residences, cost \$12,000. W. L. Kelly, frame residence, cost \$4,000. Church at Oakdale, Minn., brick, cost \$8,000. (All above projected, and fourteen other brick and frame buildings under way and near completion, ranging from \$2,000 to \$35,000.)

Toledo, O.—Building rather brisk and outlook fair.

Architect A. B. Bacon: Carrington & Cummings, five-story and basement brick office building, 60 by 114 feet, cost \$65,000; E. Malone, contractor. Estate of E. Wullridge, four-story and basement wholesale building, brick, 60 by 75 feet, cost \$21,000. Mrs. J. B. Waite, two-story brick dwelling, cost \$7,000; J. V. Sunfleet, contractor. S. S. Laskey, two-story and basement brick dwelling, cost \$15,000; brick stable, cost \$3,000; H. J. Platfoot & Co., contractors. H. Tracy, two-story and basement brick dwelling, cost \$9,000; M. A. Stengenga, contractor. Secor, Davis & Brown, four-story addition to Burnett House, cost \$16,000; E. Malone, contractor. S. H. Morgan, two frame dwellings, cost \$6,000; C. Freund, contractor. C. L. Smith, frame dwelling, cost \$3,000; John Kernish, contractor. (All the above being finished or under way.) Keitt & Haruppe, four-story wholesale building, brick, 72 by 116 feet, cost \$23,000 (projected).

Winona, Minn.—Present condition good, but not so many buildings projected as earlier in the season. The outlook for 1884 is very encouraging.

Architects C. V. Maybury & Son: Schott & hren, three-story mill, frame and brick, 60 by 110 feet, cost \$10,000; Jno. Keenan, contractor. Frank Yourmans, two-and-half stories, frame residence, 37 by 50 feet, cost \$6,000. Mrs. A. Simpson, two-story frame residence, cost \$3,500. M. H. Cornwell, ditto, cost \$3,000. J. Jaltz, two-and-half stories, brick, cost \$3,500. S. Brammer, two-story frame, cost \$2,500; Rose & Larabee, contractors for above. Jno. Dobbs, two-story frame residence, cost \$3,500; Norman & Stellwanger, contractors. Jno. Latsch, two-and-half stories, brick residence, cost \$6,000; N. Mumck, contractor. W. M. Hulburt, two-story brick shop, cost \$6,000, and several others smaller dwellings ranging from \$2,000 to \$3,000. Court-house, Caledonia, Minn., stone, cost \$32,000. First Presbyterian Church, La Crosse, Wis., cost \$25,000. E. Thorsted, store building near La Crosse, cost \$6,000. School building, Owatonna, Minn., cost \$22,000. School building, Clark, D. T., cost \$5,000. Academy, Rochester, Minn., cost \$6,000. Block of three-story stores, Fairbault, Minn., cost \$12,000. Town hall, Tracy, Minn., cost \$8,000. (All the above under way.)

Not planned in the above office: Harvester Works, two and three stories, 50 by 140 feet, cost \$35,000. Railroad machine shops, 100 by 260 feet, two stories, cost \$25,000. Railroad freight depot, 40 by 260 feet, cost \$10,000. Water tower for city, 12 feet diameter and 225 feet high.

Kansas City, Mo.—Architect L. L. Levering: H. P. Stevenson, two-story brick residence, cost \$5,600; W. Everhart, contractor. J. C. Allendorph, two-story brick residence, cost \$4,600; J. F. Marks, contractor. J. F. Marks, two-story brick residence, cost \$5,500 (first two under way, last completed). J. B. Humphrey, two-story brick dwelling, cost \$5,650 (receiving bids). Christian church, Marshall, Mo., brick, with stone trimmings, 50 by 50 feet, cost \$13,000 (under way); E. J. Page, contractor. Besides the above there are under way and completed fourteen other brick and frame dwellings ranging from \$2,750 to \$3,700, aggregating in cost \$41,000. Among the projected buildings is a Stock Company Hotel, six stories high (368 rooms), walls of brick and terra cotta, at a cost of \$225,000.

Des Moines, Ia.—Architects B. J. Bartlett & Son: Presbyterian church, Greenfield, Ia., frame, to cost \$5,000 (plans just completed). Congregational church at Schuyler, Neb., frame, to cost \$4,000 (plans just completed). For R. G. Phelps, Missouri Valley Junction, a frame dwelling, to cost \$3,000. Residence for Rev. R. G. Scott, Forty-fourth and Winter streets, Chicago, frame, to cost \$3,000.

Winona, Minn.—Architect Chas. B. Cook: Court-house and jail at Huron, Dak., 80 by 115 feet, brick, with stone trimmings, cost \$50,000; John Vaughan, contractor. Court-house, Whitehall, Wis., brick, with stone trimmings, cost \$25,000; Kratz & Payer,

contractors. For Winona Harvester Works, building, 260 by 50, three stories; engine house, foundry and blacksmith shop, brick, cost \$65,000; John Lohse, contractor. Dwelling for Mrs. F. A. Smith, Winona, cost \$11,000; Kratz & Payer, contractors. Dwelling for J. Ford Pudor, Winona, cost \$8,000 (not contracted).

Minneapolis, Minn.—Architect Edwin S. Stebbins for S. P. Channell at Minneapolis, five brick stores, 120 by 65 feet. The foundations are in. Cost \$22,000. (Foundations in). County jail, Willmar, Minn., brick, steel lined cells, 40 by 60 feet, cost \$1,200, under way; Herzog & Co., contractors. Normal school, Madison, Dak., brick, three stories, cost \$20,000. A cottage at Winnetonka Lake for R. M. Warner, of Minneapolis, cost \$2,000.

Inventive Genius in Building.

- 282,517. Door-lock. J. Jonas Helsing, San Francisco, Cal.
- 282,563. Carpenter's bevel. Charles E. Overend, Portland, Oregon.
- 282,562. Lightning-rod. Theodor H. Patee, Greencastle, Ind.
- 282,574. Hinge. Alfred L. Scranton, Western Springs, Ill.
- 282,637. Hasp-lock. John C. Boggs, Auburn, Cal.
- 282,636. Rat-proof building. Joshua Hicks, Sandford, Ind.
- 282,641. Skylight. Peter H. Jackson, San Francisco, Cal.
- 282,716. Adjustable window-screen. George W. and William Gordon, Detroit, Mich.
- 282,726. Chimney-flue stopper. Jonathan R. Higgins, Lima, Ohio.
- 282,740. Fireplace. David S. Loe, Poorman, O.
- 282,763. Elevator. Edwin L. Parker and Samuel Peterson, Queensville, Ind.
- 282,835. Ventilator. Daniel B. Taylor, St. Louis, Mo.
- 282,807. Preserving and protecting piles. David H. Valentine, Brooklyn, N. Y.
- 282,813. Fireplace grate. Stewart Watt, Barnesville, O.
- 282,822. Smoke and flame outlet for buildings. Charles A. Willard, West De Pere, Wis.
- 282,831. Developing or tracing machine. Frank Aborn, Cleveland, O.
- 282,858. Spring-hinge. L. M. Devore, Freeport, Ill.
- 282,892. Fire-escape. Henry Hitchcock, Genesee, Mich.
- 282,905. Elevator-hatchway guard. Emerick Kiss, New York, N. Y.
- 282,928. Sash-holder. Frank L. Rosentreter, Cleveland, O.
- 282,961. Bench-clamp. Thomas Crispin, Detroit, Mich.
- 282,977. Combined register and ventilator. Abraham D. Gallentine, Marion, Ind.
- 282,993. Spring hinge. Henry P. Kochsmeier, Freeport, Ill.
- 283,008. Fire-escape ladder. Chas. T. Merritt, Hyde Park, Ill.
- 283,012. Securing slabs of veneering to buildings. Benjamin Morton and Arthur Tilley, Toronto, Ontario, Can.
- 283,038. Fire-escape. Isaac L. Stover, Centralia, Ill.
- 283,074. Manufacture of wrought iron. Lucius D. Chapin, Chicago, Ill.
- 283,105. Flushing-tank for water-closets, urinals, etc. Thos. Henderson, Nashville, Tenn.
- 283,110. Elevator safety-catch. Alexander C. Hope, Cartersville, Ind.
- 283,128. Lock-hinge. Egbert E. Masters, Woodland, Cal.
- 283,133. Fire-proof lining for boxes, safes, doors, shutters, vaults, etc. Luke H. Miller, Baltimore, Md.
- 283,134. Knob-attachment. William N. Mills, Truro, Nova Scotia, Canada.
- 283,158. Fire-escape. Peter Smith, Cato, Kans.
- 283,166. Insulated metallic roof. Henry C. Thomas, Rock View, N. Y.
- 283,172. Water-closet. Richard Walsh, Detroit, Mich.
- 283,184. Brick machine. William Woodward and Abel B. Woodward, Nashville, Tenn.
- 283,203. Cant-hook. Jesse Carpenter, Wyman, Mich.
- 283,208. Door-hanger. William Brown Cogger and Henry A. Hamlin, Minneapolis, Minn.
- 283,214. Builders' Scaffold or Mortar-Board. Samuel Dale, Boonesborough, Iowa.
- 283,277. Hinge. Alonzo L. Porter, Chicago, Ill.
- 283,279. Door-hanger. Edwin Prescott, Arlington, Mass.
- 283,300. Hydraulic Pile-driver. Joseph W. Surprenant and James E. Ferguson, Astoria, Oregon.
- 283,319. Bevel attachment for Hand-saw. Emanuel Andrews, Williamsport, Pa.
- 283,332. Skylight. John Ehrhardt, St. Louis, Mo.
- 283,357. Ratchet-wrench. John Williams Pruitt, Russellville, Ark.
- 283,358. Manufacture of Artificial Stone. Harriott H. Ravenel, Charleston, S. C.
- 283,365. Sash-fastener. Frederick Dudley, Eugene City, Oregon.
- 283,366. Brick-machine. James C. Anderson, Highland Park, Ill.
- 283,372. Machine for making Blind-slats. Joseph W. Brainard, Kent, O.
- 283,378. Pipe-wrench. Geo. W. Cook, Chicago, Ill.
- 283,379. Hammer. Geo. W. Cook, Chicago, Ill.
- 283,404. Weather-board Gauge. Jesse M. Keith, Maiden Rock, and Simeon R. Bolton, Trim Belle, Wis.
- 283,431. Elevator. Wilson R. Smith, Beloit, Wis.
- 283,502. Fastener for the meeting-rails of sashes. Philip Mathes, Idlewood, Pa.
- 283,517. Vault-cover fastening. Christian Hansen Ross, Chicago, Ill.
- 283,530. Fire-escape ladder. Geo. A. Swartz, Orangeville, Ill.
- 283,565. Brick-Pressing machine. George Carnell, Philadelphia, Pa.
- 283,580. Mechanism for raising lines to the upper parts of buildings. Geo. O. Daw, New York, N. Y.
- 283,592. Ornamenting surface of walls, ceilings, paper-hangings, etc. Gustave Giersberg and Richard Wirth, New York, N. Y.
- 283,617. Fire-escape. Handley B. Kimball and Cornelius S. Barrett, Charlotte, Mich.
- 273,650. Fire-escape. Madison M. Ormsby, David City, Neb.
- 283,675. Wrench. William J. Sherman, St. Augustine, Fla.
- 283,702. Fire-escape. Horace D. B. Cutler, Glenwood Mo.
- 283,719. Knob-attachment. John B. Morris, Cincinnati, O.
- 283,756. Steam-generator. Wm. Cooper, Chicago, Ill.
- 283,758. Brick-mould. Alexander F. Crowe, Emporia, Kan.
- 283,776. Lock. Frank Augustus Guthrie, Gallipolis, Ohio.
- 283,789. Fire-proof material for filling safes, doors, etc. George Kelly, Chicago, Ill.
- 283,802. Eaves-trough hanger. Clinton D. Hyre, Lexington, Ill.
- 283,908. Roof-scaffolding. Aaron R. Manly, San Jose, Cal.
- 283,913. Skylight. James McIntyre, Boston, Mass.
- 283,929. Machine for sawing stone. David Shortsleeve, Rutland, Vt.
- 283,941. Window-blind. Joseph Williams, San Jose, Cal.
- 283,946. Sash-balance. George Wilt Arnold, Knoxville, Ill.
- 283,968. Fire-escape. Henry B. Church, Grand Rapids, Mich.
- 283,996. Art of extinguishing fires. Charles Lyman Garfield, Albany, N. Y.
- 284,015. Wrench. Isaac Q. Holmes, Clarksville, Ark.
- 284,038. Sawing-machine. George McCoy, New Dungeness, Wash. Ter.
- 284,088. Fire-escape. John G. Thomas, Newark, Ohio.
- 284,106. Apparatus for utilizing the waste heat of stove-pipes and chimneys. Hiram M. Wheeler, Smithson, Ind.
- 10,377 (Reissue). Water-closet. George Milne and William H. Gants, San Francisco, Cal.

A WRITER claims that yellow pine, hard-finished in oil, is the rival in beauty of any wood that grows, not excepting the costliest hardwoods. It is susceptible of receiving and maintaining as high a degree of polish as any wood with which we are familiar, and as to durability, when thoroughly impregnated with oil, it may be said to be almost everlasting. In such a condition it is impervious to even hot grease and other substances that leave an ineffaceable stain upon white pine, maple, and various other woods. Flooring for use under carpets should be largely sap, and when exposed either for inside or outside use, should be as near all heart as possible. For inside trimmings, wainscoting or panel work, the curly variety is at least superior to either cherry or birdseye-maple.

WM. DODD, who recently took charge of the architectural work in the office of the chief engineer of the Northern Pacific Railway, at Portland, Oregon, is fully meeting the expectations of his friends in Chicago.

New Publications.

A SERIES OF RELIEF-DESIGNS, REPRESENTING ARCHITECTURAL AND SCULPTURAL ORNAMENTS AND THEIR HISTORICAL DEVELOPMENT. BY PROF. S. E. CLEAVES, Cornell University.

These lessons are arranged in a series to give,—first, simple elements; second, representative combination of elements in a complete design; third, a reproduction from memory; fourth, a combination of the same elements in original design; and fifth, the methods of drawing from objects and nature. The series consists of six books.

A SERIES OF ELEMENTARY MECHANICAL DRAWING. BY FRANK B. MORSE, of Massachusetts Institute of Technology.

This series contains a full description and illustration of the use of instruments, the conventional method of representing materials, and the method of projections. It includes the whole elementary mechanical course usually pursued in technical schools. The work commends itself to advanced students in public or other schools, and especially to young mechanics who have not the opportunity or time to take a course of lessons in mechanical drawing.

DIO LEWIS' MONTHLY. New York: CLARKE BROS.

This is the first issue of a new magazine by the well-known Dr. Dio Lewis. Its aim is to popularize sanitary science and to make the subject not only interesting but comprehensible by the everyday reader.

"STEEL SQUARE PROBLEMS," together with a large number of geometrical demonstrations of practical value to mechanics, illustrated by sixty engraved plates by Lucius D. Gould, author of "Carpenters and Builders' Assistant" and "American Stair-Builders' Guide." This, which is a revised and enlarged edition of a former work by the same name, gives explicit instructions for an easy solution of such problems as ascertaining the lengths and angles for cutting braces, rafters, etc., mitering hoppers of any number of sides, to any desired elevation; finding angles for and mitering polygons of any number of sides; mitering a raking to a level moulding by the use of the square and miter-box; finding distances to inaccessible objects; making widths of steps and risers for easy stairs, etc. Price \$1. Trade supplied by WM. T. COMSTOCK, 6 Astor Place, New York.

Our Illustrations.

Page 111, by Architect Clarence L. Stiles, schoolhouse at Elgin, Illinois.
Page 107, by Architect F. Wm. Fieder, bits of interiors. A mantel designed by Mr. Fieder and erected in the editorial rooms of "The Century" is a fine sample of mantel designing.

Page 111, by Architect George W. Rapp, Cincinnati, Ohio, a sketch of Mr. Conrad Windish's block of six dwellings, being erected on corner of Ohio avenue and Calhoun street, Cincinnati, Ohio. The building will be of pressed brick with Ohio Freestone trimmings, to cost \$40,000.

We have received a sample of Shepard's car and furniture polish for polishing hardwood surfaces. It is especially valuable because of its facility of application, as without the customary rubbing it gives to the surface of hard woods a perfect and permanent polish. It has been used for several years on the Wagner and Pullman cars, and its value as a polish for general use is testified to by many persons of prominence. The office of the manufacturers is at Room 2, 146 Monroe street.

An English Dollar.

SAVANNAH, GA., August 4, 1883.

To the Editors of the American Architect:

GENTLEMEN: A friend handed me an English coin, of which the enclosed sketches are free-hand copies, and asked for any information concerning them that I could give. Being unable to give him any information in the premises, I made a rough copy to send to you, thinking perhaps that you or some of your numerous correspondents could give the history of the coin. The owner has shown it to some English and Scotch gentlemen here, some of whom stoutly denied that there ever was an English dollar, until convinced to the contrary by an inspection of the silver piece.

Very truly yours,

JOHN J. NEVITT.

[The sketch shows a coin with head of George III on one side, and inscription: "GEORGIUS III, DEI GRATIA REX": and on the reverse, an oval band with a crown above it, encircling a figure of Britannia seated, with cornucopia and shield. On the upper part of the band is inscribed: "FIVE SHILLINGS," and at the bottom, in the same lettering, "DOLLAR." Around the whole is the inscription: "BANK OF ENGLAND, 1804." Some of our readers, more familiar with dollars than ourselves, may perhaps recognize this coin.—Eds. American Architect.

Although our subscription list does not date back to 1804, and we therefore are familiar with coins of more recent date, we have in our possession an English dollar, such as described by your correspondent, Mr. Nevitt. An English lady brought thirty of that date (1804), from England, in 1868, they being part of a legacy left by a deceased aunt, and had probably occupied a "stocking" for many years. We are pleased to thus be able to certify to the coinage of English dollars in 1804, and to the fact that though editing an architectural journal we have seen a silver dollar.—EDITOR INLAND ARCHITECT AND BUILDER.

OBITUARY.

Harry Fox.

THIS well-known gentleman died of apoplexy at Salt Lake City, September 5. Since 1852 he has been prominent in all public works, not only in Chicago, but throughout the Northwest, especially in railroad building and bridge construction. The funeral, which took place from Unity church, Chicago, on Monday the 10th inst., was attended by fully five hundred people, nearly all being personal friends of the deceased. The coffin, the lid covered with cut flowers, was in front of the platform, on which were several large pieces—a slab of roses, sent by the Iroquois Club; a broken column of roses on which was "F." and "C." (FitzSimons & Connell) "to Harry"; a wreath from Potter Palmer, an anchor, a basket, and a collection of cut flowers. The choir sang "One Sweetly Solemn Thought," and after the Rev. George Batchelor had read appropriate selections from the Bible he made a few remarks, speaking of the strength, generosity, courage, and tenderness of the deceased, and saying that he loved his work, putting his heart and conscience into it and doing it as a man ought, and thus served God. A prayer and another hymn—"Rest for the Tiring Hand"—ended the services. The remains were followed by nearly one hundred carriages to Rosehill, where they were buried.

A SHUTTER AND BLIND OPENER is a recent invention. A handle projecting from the window casing inside the room controls a bar that turns to the outside of the window and bears at its extreme end a cog-wheel, which is attached to the blind or shutter and is also joined by means of a slender steel rod to the slats. By simply turning the handle one may either open the slats or close the entire shutter.

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