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To Architects and Draughtsmen.

ARCHITECTS requiring draughtsmen are invited to correspond with or call upon us, as we have the addresses of quite a number of draughtsmen who are seeking employment. It can also be borne in mind, by both architects and draughtsmen, that we proffer them the use of our office as a medium of communication, and all inquiries will receive prompt attention.

FREQUENT expression has come to us from architects throughout the West in regard to the formation of a Western association of architects. It is suggested that a meeting of the profession be held some time in the fall to take the preliminary steps in such an organization; and in order to form some definite idea of what can be expected from the architects at that time, we invite each member of the profession in the West to send his name to us for *immediate* record. This need not be regarded as a promise, but rather as an indorsement of the movement. We shall also be glad to receive farther comments from those architects who believe, with those already heard from, that the time has come when an active association of ideas and exchange of professional courtesies should be made between Western architects. It is a fact, the truth of which needs no argument, that no profession ever did succeed, in a large sense, that pursued a guerilla mode of existence, and did not combine in social and more or less professional association. It should be distinctly understood that this invitation is extended to every architect in the West, and should have no purely local significance.

A CIRCULAR letter to the architectural profession, and of great interest to the public at large, for the improvement of the American systems of architectural competition, has been prepared by the Architectural Association of Des Moines, with the hope of turning earnest thought toward this subject. The circular says:

As at present carried on in the United States, architectural competitions demand the attention of the Postoffice department in its efforts to suppress the various lottery systems throughout the country.

The only just system of conducting competitions, which is rapidly extending from France and Belgium to all civilized countries, is based upon advancing human welfare. To illustrate: A city of 20,000 is in need of a City Hall. This is a subject of interest not to this one city alone, not to merely 20,000 people (much less a little handful of architects), but every city of that grade is concerned in some improvement being made in this class of building.

It is made of first importance, therefore, that *advance* be made. Rewards in money are offered, fully adequate to repay any architect whose study shall prove of universal value. The local building is made secondary. The practice is even being introduced of a second, close competition, to finally solve the design to be executed—the first competition, for advance, being open to all the architects of the world. Where but one competition is undertaken, it is frequently the third in rank that is awarded execution. All designs of worth, but not producing any real advance, can justly claim no pay. They are fully rewarded by ranking such studies in the order of merit. One-half the number of judges are named by the competitors themselves, while the other half represents the local authorities, but always includes professional talent of the highest grade, as the local Engineer of Construction, and in France the Architect of the Department. The value of such a system may be understood when it is known that it is producing, at the present moment, a progress so rapid, work cannot be executed ere it is again surpassed by competitive design. At the national yearly exhibits designs of international importance are awarded medals, and extend their influence even to America.

The Architectural Association of Des Moines asks your thoughtful consideration of this subject, for it demands prompt and concerted action.

Respectfully,

E. H. TAYLOR, Secretary.

The first paragraph in the circular speaks volumes, and is a reiteration in another form of what we have repeatedly said in regard to so-called competitions. It is only those who have never responded to invitations to submit competitive plans, with working drawings, etc., on the stereotyped plan of "all designs subject to approval by the board of commissioners," "any and all plans can be rejected," "the plans to become the property of the board," "two hundred dollars to the successful architect," etc. etc., who will fail to appreciate it in its fullest significance. The suggestion contained in the circular, that it is well to copy the mode of procedure in regard to plans and methods of competition from our foreign brothers, is an important one, and in the new impetus which architecture in America has received in the past few years we hope will be included some of the customs of the old-world architects, as well as their thoughts and creations. No architect who respects his profession will enter into these lottery schemes, and they cannot until competitions are honorably conducted and the judges of them are sure to be the highest architectural authorities to be secured, and not the general public, who of necessity are unable to judge in the faintest degree of what true architecture consists. As it

now is, not even in the majority of cases are they able to realize why an architect "should charge for a few drawings," the same work, aside from the professional skill involved, having cost the architect hundreds of dollars for office work. The time has come when architects should answer this call and take concerted action on this question that is daily growing, and not only damaging our profession as a profession, but ruining the architecture of the country.

A DECISION has just been rendered in the Superior Court of this city which is of considerable interest to the building public, and especially to architects, as it is said to be the first case of the kind ever tried in this state. The decision given would seem to settle the question of the liability of architects for defects in the construction of a house which is under his supervision. As the law now exists, an owner or builder who employs an architect to construct a building has no redress for imperfections in the building, in case the architect accepts it as a compliance with the terms of the contract. The case in point was that of a lady who employed an architect to construct for her a building in this city. When completed she complained that the work was imperfectly done, but, against her protest, she was compelled to pay the contractor the amount due on his contract. She then brought suit, and, having clearly established her allegations, was awarded a verdict. The case on both sides was represented by able legal counsel, and was closely contested.

HOW soon the time will come when electric lighting will be substituted for gas in lighting the streets of Chicago, it is impossible to form even a conjecture. We have quite recently had an ample demonstration that the manufacture of gas is quite as susceptible of great improvement as has been that of electricity, and it is barely possible that with two such powerful agents coming into close competition for supremacy, the illuminating power of gas is capable of still further improvement, and that, too, without very materially increasing its cost. Gas companies who have millions of dollars invested in their plants are not likely to relinquish the prestige they have so long held to any other illuminating agency without a fierce struggle, and with still further improvements in the processes by which gas is manufactured they may be able to hold fast to that which they consider "a good thing," for many years to come. A case in point is furnished, as an illustration, in the prosperous town of Chesterfield, England, the streets of which, until within a short time, have been lit by the electric light, originally by the Brush dynamo machine; and arc lamps, which give a powerful light, were alone employed. Subsequently the incandescent system of electric lighting was introduced. Now the town has returned to the use of the original illuminant—coal-gas. Some two or three years ago the corporation of the town paid the gas company 24s. 4d. per lamp per annum for cleaning, lighting and extinguishing the lamps; the gas company then sought to raise the price per lamp to 28s. This advance led to the system of electric lighting. The electric light company refused to renew its contract at the old rate, and then the gas company agreed to charge 21s. per annum per lamp, and to supply the gas at 3s. per 1,000 cubic feet, as against 4s. 3d., the old rate. This tender was accepted. One of the speakers said he thought "the introduction of electricity had done a considerable amount of good. It had done good to electric light companies, to gas companies and to the town council. It had shown electric light companies that their theory of arc lighting for all streets would not do, that there must be smaller lights. It had taught gas companies that they could not put down their foot so firmly and say, "You shall not take any

other light." It had taught local authorities that they had means in their own hands of competing with gas companies if the latter would not be reasonable in their charges." This shows that in one case at least the electric light company have failed to compete with gas, and that gas in England can be furnished at a minimum price.

IN the foregoing statement of a fact it is not our intention to be understood as opposing gas companies or favoring the electric lighting system, one as against the other. The progress of electric lighting is not and has not been so great in itself as in the growing favor with which it has been received by the public. The fact that the corporation of a single town in England has returned to the use of coal-gas as an illuminator by no means settles the problem of the cheapest and best means of lighting our cities. At this time there is going on at Wimbledon, England, an important and interesting series of experiments in street electric lighting. The sole object of these experiments is to determine the best method of illuminating streets in towns and cities, and of distributing light by electricity,—cost, of course, forming an important factor in the consideration. An English paper says that to this end the experiments, which will extend over some weeks, will be very exhaustive, the intention being to test every appropriate system. An engine and dynamo machine have been placed in position, and an ample supply of electricity is thus provided. Between one-and-half and two miles of streets are already lighted, overhead wires and incandescent or glow lamps, as they are now more correctly and euphoniously termed, being used. Besides a variety of lamps it is intended to try various modes of distributing light by means of shades and reflectors. The experiments are not under the control of anyone connected with any electric light system or company, but are carried out in a perfectly independent manner, and in their results are likely to prove of considerable public value in tending to solve the problem of economical and efficient street lighting by electricity. We shall take pains to announce the result of these experiments as soon as they are completed and the official report is made thereon.

THE rapid growth and extension of Chicago in all directions is something which not only surprises all strangers who visit the city, but is in itself marvelous. The great question which is now pressing itself upon public attention is the enormous travel that demands quick transit from one extreme of the city to the other. For miles all around three sides of this wonderful city there has sprung up within the past decade little suburban villas, which contain in the aggregate a large proportion of Chicago's business people. Thousands of homes of Chicago people lie north, west and south of the city proper, beyond the reach of horse-cars, to reach which the only means provided is by steam-cars. These bordering along the lines of the railroads, do not entirely meet the full measure of the want felt, but something else, more convenient, cheaper, and which will traverse the routes more frequently, is desired. The whole problem of speedy carriage will in the end result in either underground or elevated railroads. The efforts to secure a new road for the central part of Hyde Park, lying too far from the Illinois Central on the east or the Rock Island railroads on the west to get the benefits of their facilities, are meeting with the almost unanimous favor of the residents and property-owners. It is not unreasonable to suppose that if such facilities were afforded it would add immensely to the population of Hyde Park and increase the value of realty in that direction to the extent of millions of dollars. To the west, and especially to the north, where a still more beautiful, extensive and healthful section is awaiting a better transporta-

tion system, the same remark will apply. The experiment of elevated railroads in New York has met with such unprecedented success that Boston has at last adopted that scheme, while Brooklyn has opened one of its leading avenues to steam. The time is not very distant when Chicago will have to consider what means shall be adopted to render transit from one extreme point to the other not only expeditious, but safe, pleasant and desirable.

A CHICAGO engineer has invented, or discovered, what he claims to be an "effectual means" of disposing of sewer gas. The paper that makes this announcement says that the device, which it refers to at length, is not patented, but that "the inventor regards it with especial pride," and further adds that "many experienced engineers who have looked at it are satisfied of its merit." It is claimed that this new method possesses the advantage of consuming the air polluted by sewer gas entirely, and that the cost is merely nominal in putting it up, and virtually nothing afterward, as the combustible element of the gas offsets the trifling loss of steam. But this is not all. The inventor also claims for his machine the merits of a smoke burner! That is quite enough. It would take a good deal of figuring to tell just how many buildings there are in this city that need—badly need—just such a contrivance as this, and the inventor, if he does not know it, is hereby advised to get his device patented, form a company for its manufacture and sale, and hereafter quit the drudgery attending work in an engine-room, and cultivate a taste more æsthetical, which he can soon afford to do, provided his machine is what he claims for it, and the paper in question says it is.

THE raid going on upon the walnut timber in this country for the purpose of exporting it to England and the continent, largely to the former, is by no means a new thing. English capitalists have been for more than a half-score of years invading the walnut-growing sections of the West, and through their representatives buying up all the desirable walnut timber they can find to purchase. The buzz-saw, directed by foreign capital, has been busy in the woods where walnut abounds for a number of years past, and the depletion of many sections of the country where, in former years, this valuable timber was found in its stately growth in the greatest abundance, is a matter of regret. In the states of Ohio, Indiana and Iowa this timber has now become so scarce that it commands a fabulous price, and even for the stumpage extraordinary prices are paid. The truth is, that a company of English capitalists, with whom a wealthy combination in Indianapolis is coöperating, have been for some time quietly getting possession of all the black-walnut timber it has been possible to buy, and are now shipping it to England. This company has had buyers out all through the states mentioned, and wherever they could find a farmer who would sell his walnut timber they have bought it, but at a price, in many instances, far below its value. In many cases the farmers have disposed of their trees at prices far below their value, and it has only been recently that they have become aware of the scheme that is to take out of the country the most of the remaining black-walnut timber in it. The consequence is, that all the walnut the company now buy costs them double the price they were paying a few months ago. We happen to know a farm in Rush county, Indiana, where there is a plant of twenty acres of walnut timber of nearly fifty years' growth. The farm is owned by an English gentleman, in whose family it has been for many years, and the same company to whom allusion is made would despoil his farm of this splendid growth of walnut if he were so impecunious as to let them

have it. Money, however, in his day and generation, will not be able to purchase it, so that the time is probably quite remote when any of the walnut from this splendid farm will reach England.

Fireproof Theatres.

FOR some time past rumors have been circulated that another theatre was in contemplation, the project having its origin with some Eastern parties, and the premises selected for conversion into a theatre being buildings north of Madison street on Wabash avenue. Announcements have already been made that the premises to be thus converted to "light comedy and variety purposes" is to be completed and ready for occupancy by October 1, and "promises to be first-class in every detail." Without having seen any of the plans of the proposed structure,—if such a theatre is carried out, it is most important it should be thoroughly fire-resisting. Any theatre that may be hereafter constructed in Chicago should be built from the ground up in a manner which will entitle it a thoroughly "fire-proof structure" in all the details that such a term can possibly imply. It is simply absurd to undertake, even at "a cost of \$50,000," to erect such a building in the locality named by reconstructing the buildings already standing, and which were built shortly after the great fire for purposes wholly of a commercial character. In recent issues of the *Building and Engineering Times* (London, Eng.) a series of exceedingly valuable and interesting articles have appeared on "Theatre Planning and Construction," written by James George Buckle, A.R.I.B.A., and Ernest A. G. Woodrow, A.R.I.B.A., which have already run through some fifteen or sixteen issues of that journal. It is probable that when the series is finished they will be given to the public in book form, as it is just such a book as this, written on a subject which so deeply concerns the public, and by gentlemen of such wide repute in their profession, as will prove of almost inestimable value to theatrical architects and builders. In the first eleven articles of the series the effort has been correctly and successfully made to give an accurate description of the numerous requirements calling for special provision in a theatre. The nature of a satisfactory site, the disposition of the several exits, the general arrangements of the auditorium, seating accommodation, public rooms and conveniences on the several tiers, the requirements of the administrative offices, the stage and its appurtenances, including the dressing-rooms and workshops, have all been carefully considered. In every respect the nature of the work carried on in the several parts of a theatre are fully described, so that all these matters are made plain even to the lay readers. In article twelve of the series the authors enter upon the consideration of "fire-resisting materials," and hold that in building a theatre the primary object should be to construct it in such a manner as to render it practically fire-resisting. Whatever may be said about all the theatres heretofore built in this city, it cannot be said that there is a single one that is practically fire-proof. The arrangements in some of them for speedy exit in case of fire are perhaps the best that can be devised, since hardly any one of them was constructed on the wisest and safest principles in the first place. It is certainly time, since Chicago has now reached the growth of a great and growing metropolis, that any and all theatres constructed in the future should fulfill to the letter, not theoretically but practically, the absolute requirements of a thoroughly fireproof structure. "Hitherto," says the paper, "it has been the fate of all theatres to 'die by fire,' but there is no reason why, with present constructive resources, this should continue to be the case in the future." In considering the best method to adopt in order to secure immunity from fire, many matters call for special attention other than the incombustible nature of the materials used in constructing a theatre. To the ordinary observer a building may appear to possess all those conditions opposed to the spread of a conflagration, and yet in reality be a very hazardous risk from a fireman's point of view. It has been demonstrated beyond the point of controversy that iron and stone, both indestructible in themselves, are in combination the least desirable form of so called fireproof construction. This was clearly demonstrated in the Chicago fire of 1871.

Practical firemen will bear out the testimony of Chief Shaw, of the London Fire Brigade, that stone is the most unreliable of all materials. From the result of careful observation made at many fires, he found that "bricks were uninjured; wood was seriously damaged, but only partially consumed; iron was fractured, and consequently rendered worthless, and that stone was shattered into fragments and totally destroyed." In two large public buildings which were destroyed by fire, the utter worthlessness of stone and iron for resisting even moderately high temperatures, such as 600° or 700° Fah., was exemplified in a startling manner, and in both cases the comparative safety of wood and the absolute safety of brick were clearly proven. The writers say:

"The first essential necessary to the production of a fire-resisting theatre, having regard to the materials used, is to divide it vertically and

horizontally into as many separate fire-resisting compartments as practicable, so that any single division could be burnt out without the fire spreading to other parts. This was pointed out by Saunders in his work on theatres, published in 1790, yet it is not till 1884 that the principle is at all insisted upon; but even now the system is but seldom practiced to its full extent, as advocated in these papers. It is also desirable to keep the theatre as low as possible, for the reasons pointed out in previous articles, and likewise because of the difficulty experienced in controlling fires breaking out in large buildings. It has been asserted on reliable authority that 216,000 cubic feet is 'the largest cubical capacity which can be protected with reasonable hope of success.' This is the cube of 60, and about the size of an ordinary auditorium, which should be so constructed as to be easily shut off from stage, dressing-rooms and entrance corridors. The walls and floors of the whole building must be so built, and of such materials, that if the contents of any separate division should be accidentally fired, the whole may be absolutely consumed without calcining, melting or otherwise destroying the walls or floors, and without communicating the fire to other parts of the building."

What material to use in order to acquire such conditions is a question not easily answered, seeing that even now much confusion of ideas exists as to what really is a fire-resisting material. Stone is not fire-resisting. Iron expands and contracts when exposed to changes of temperature. Whether used in the form of columns or girders, it becomes distorted when subjected to excessive heat. It will succumb under its superincumbent weight in every conflagration where it is exposed. Cast-iron in construction will crack when subjected to sudden changes from heat to cold. Yet this is one of the materials regarded as fire-proof, irrespective of the manner in which it is used. The conclusion arrived at is, that a fire-resisting material should be a bad conductor of heat, and withstand a temperature of 2,000° Fah. without weakening. Combustible materials are invariably bad conductors of heat, whilst non-combustibles are generally good conductors. In the first class may be included all kinds of timbers, and in the second class metals generally. There are also other materials used in building, which vary considerably as regards conductivity according to their density and chemical constituents. These include stones, bricks, terra-cotta, cement, glass, etc. The heat-conducting power of various materials is of considerable importance to the architect. Observation and experience has shown that the most dense bodies are the best conductors of heat, and that the conducting power decreases as the density becomes less. Thus metals are regarded as the best conductors; then stones, and next hard woods. This is the general rule; but there are exceptions, and the metals themselves show this in a remarkable degree. Platinum, for instance, is about two and a half times heavier than copper, bulk for bulk; yet the power of conduction is as 898 in copper and 381 in platinum. The comparative facility afforded by some of the building materials for transmitting heat is as follows:

Slate	1,000	Firebrick	620
Lead	5,210	Asphalt	451
Flagstone	1,110	Oak	336
Portland stone	750	Lath and plaster	225
Brick (average)	660	Cement	200

The authors of the paper in question therefore hold that whilst designing a theatre, or any building subject to more than ordinary risk of fire, it is desirable to select the materials with due regard to their position and powers of conduction, and thus adapt each material to the part it has to take in the building, whether as a structural part, minor detail, or mere fitting. Although it will be difficult to make every part fire-proof, an endeavor should be made to introduce the least possible amount of material likely to feed the flames in the event of a fire. With good sound brick walls, real division of the several parts by walls of similar materials, and an entire absence of matchboarded partitions, the risks attendant on the theatrical business need no longer give cause for alarm. The finishings of the floors, lobbies, etc., should be in tiles or marble mosaics. Terra-cotta, plaster or cement should be used for the decorations and internal architectural features and details in lieu of thin veneers of wood and canvas, which latter, it is hoped, are theatrical embellishments of the past. It cannot but be hoped that if such a theatre is built on Wabash avenue it will meet these requirements. It must not be forgotten at the outset that a theatre can never be a cheap building as compared with other buildings of equal size. Cheap construction is the paramount evil in all theatres making no pretense to fireproof construction, and where the principal materials internally are matched boarding and canvas.

MESSRS. MESKER & BRO., of St. Louis, have recently closed contracts for the following: 20,000 square feet of skylights on the St. Louis Exposition and Music Hall building; galvanized iron cornice, tin and skylight work on Pope's theatre; and one carload of galvanized iron cornice for U. S. Army and Navy hospital buildings at Hot Springs, Ark.; one carload for block of store buildings at Weatherford, Tex.; one carload for store buildings at Mexico, Mo., and one carload for Sisters of Good Shepherd buildings at New Orleans, La.

Lamps and Gas-Fixtures.

BY FRANCIS LE BARON.

THE press and the pulpit claim to be the great civilizers of mankind, but those who *light* the world do more for its morality and advancement than pulpit and press together. It may seem a strange paradox to assert that the morality of a community may be measured by its lamps and gas-fixtures; but look at it fairly for a moment and the paradox is seen to be a truth,—the more lamps and gas-fixtures, the more light; the more light, the greater the morality. As good drainage drives away disease, so plenty of light drives away crime. The best protection of bank, or store, or office, against robbery is a gas-jet. Once it was iron doors, iron shutters, ponderous locks, and chains, and bars, and bolts; now it is plate-glass and light. The thief fears the policeman's "bull's-eye" more than his club. Are not the lightgivers more effective than the preachers? In the grand poetry of David's Psalms we read of God being "clothed with light as with a garment"; now, the more we possess of this garment, the more like God shall we become. Goethe cried with his last breath, "*Light, more light!*" as if with illuminated vision he saw in that supreme moment that the curse of the world lay in its darkness.

It is a vast stride in the world's civilization from a farthing tallow-dip, with its flickering flame that no amount of snuffing can brighten, that only makes darkness visible, to a cut-glass chandelier, with its radiant ranks of stars, its long, graceful prisms flashing myriad iridescent tints till the whole shining mass seems like a suspended shower of jewels.

Seventy years have not passed since gay, splendid Paris was lighted by tallow-candles, and the legend is, that when the allies occupied the city after the fall of Napoleon, night after night the streets and theatres were in total darkness because the Cossacks would eat the candles, climbing the lamp-posts and robbing the theatres for the sake of the toothsome morsels.

"The streets of London," says Macaulay, "which now afford to the artisan, during the whole night, a secure, a convenient, and a brilliantly-lighted walk, were, a hundred and fifty years ago, so dark after sunset that he would not have been able to see his hand, so ill paved that he would have run constant risk of breaking his neck, and so ill watched that he would have been in imminent danger of being knocked down and plundered of his small earnings."

The streets of London were left in profound darkness, and thieves and robbers plied their trade with impunity till the last year of the reign of Charles II. In this year, according to Macaulay, an ingenious projector named Edward Heming, obtained letters patent conveying to him for a term of years the exclusive right of lighting up London. He undertook, for a moderate consideration, to place a light before every tenth door on moonless nights, from Michaelmas to Lady Day, and from six to twelve of the clock. Those who now see the capital all the year round, from dusk to dawn, blazing with a splendor compared with which the illuminations for La Hogue and Blenheim would have looked pale, may perhaps smile to think of Heming's lanterns, which glimmered feebly before one house in ten during a small part of one night in three. But such was not the feeling of his contemporaries. His scheme was enthusiastically applauded and furiously attacked. The friends of improvement extolled him as the greatest of all the benefactors of his city. What, they asked, were the boasted inventions of Archimedes when compared with the achievement of the man who had turned the nocturnal shades into noonday? In spite of these eloquent eulogies, the cause of darkness was not left undefended. There were fools in that age who opposed the introduction of what was called the new light as strenuously as fools in our age have opposed the introduction of vaccination and railroads, as strenuously as the fools of an age anterior to the dawn of history doubtless opposed the introduction of the plough and of alphabetical writing. Many years after the date of Heming's patent there were extensive districts in which no lamp was seen.

If the streets were in darkness, the houses were also in darkness, and the sick and dying had no gleam of light to comfort them, for, by a law of William the Conqueror, every man was obliged to rake out his fire and put out his light when the curfew-bell rang. This curfew (*couvre-feu*) peal sounded at eight o'clock, and from that hour till morning the household was in darkness. Now every house must have its gas supply, and every room its array of beautiful gas-fixtures, ready, at the touch of a button, to flood us with light from blush of sunset till glow of morning if we desire it. Oh, what wonder was it if the passing generation was a profaner one than the present! Fifty years ago there was no gas, no electric lighting, no matches, even. The tinderbox held our only hope of light or fire, and of course it was a necessary article in every household. It contained a mass of tinder, a flint and a piece of steel, which had to be struck rapidly by the flint, sending down upon the tinder a shower of sparks which finally caught, but the fingers often suffered, and were bruised and bleeding before the fire was kindled. Oh, impatient mortal, when the head of the match, scratched on the boot-sole, flies sputtering away,—think of the old tinderbox, and don't say "d—n!"

A pine-knot was the first illuminator; then came lamps and candles, the lamps and candelabra often most beautiful in form. The antique lamp,—oldest of all forms, found in Etruscan tombs and in Egyptian sepulchres, more graceful than anything we devise in this day,—was in form like an egg divided lengthwise, the handle at the larger end, the smaller end being pinched into a beak for the wick. The lamp that one can buy today in Athens, made of brass, or bronze, or silver,—sometimes called the Roman lamp (for the Romans copied the Greek forms),—consists of a stem with branches, and from each branch hangs by delicate chains a lamp of this antique pattern. The astral and solar lamps, which did good work in their day, have been pushed aside, but the flat and round-wicked lamps, in some form, the French "Carcel" and the German student-lamp still hold their own, and are a rest and refreshment to tired eyes strained and wearied by attempting to read or work by bad gas. But since coal breathed out its soul in flame for the benefit of man, lamps have hung their diminished heads, and candles have dwindled into an aristocracy, as representing the first families among illuminators. The Egyptian lamp forms were full of grace, yet weird and strange as its architecture. In a description of Belshazzar's feast are the following lines:

"The ineffable beauty that dwells in the face
Of the Sphinx wore a soft and mysterious grace,
Dim even amid the full flood of light poured
From the thousand high-clustering lamps on the board,—
Those lamps, each a serpent of jewels and gold,
That seemed to hiss forth the fierce flame as it rolled."

To the ancient nations fire was sacred: the Persians and Chaldeans worshipped it; by the Arab, the enemy who came within the light of his fire was treated as a friend; the household fire on the hearthstone of the ancient Briton was never extinguished so long as the family remained; the Greeks and Romans counted fire as a peculiar possession of the gods, and their fable tells how Prometheus was bound to a rock, with a vulture always tearing at his vitals as a punishment for stealing fire from heaven and bringing it to men. But we have changed all that. In this age our Prometheus marches boldly up to Olympus, takes Jupiter by the collar (if gods wear collars) and marches him down to earth, exhibits him in all our cities, binds him in the cities' streets, and forces him to use his thunderbolts as illuminators. We dine, read Puck, and go to the theatre, and the lightning, imprisoned and veiled, serves to light us, and has become the slave of our convenience. Edison has triumphed over Olympus, and Jove's thunderbolts are now sold out at a profit by a dividend-paying company. Is not this an advance on the pine-knot and the resin-torch?

The Emperor Nero was fond of a peculiar kind of illumination,—he fancied a Christian rolled in resin, and lighted at one end to give brilliancy to his games and gladiatorial contests. The Christian served for a wick, and this wicked show greatly delighted the wicked Nero, but this style of candle soon went out of fashion. Aladdin's lamp was a very noted one, but who would not prefer to own Edison's incandescent?

As people grow to love light rather than darkness, they get to liking beautiful forms for their lightbearers, rather than ugly ones. Before the London World's Fair, gas-fixtures were an abomination; they had no grace, no elegance, no beauty; they were hideous masses of bronze or gilt loaded down with ugly details that were called "ornaments." But these forms soon died out, killed by their own gracelessness, and at the time of the Paris Exposition gas-fixtures had acquired grace and elegance of form, and were beautiful. They have been improving from that day to this. Today there is nothing more pleasing or interesting in industrial art than a fine display of gas-fixtures. The cry in Bagdad was, "New lamps for old!" when Aladdin lost his wonderful lamp, and all his riches took wings and flew away. "New lamps for old" may well be cried in Chicago streets today, so beautiful and attractive are the new forms in this branch of art. Let anyone who has an Aladdin's lamp give it a good rub, fill his purse with money, and spend an hour or two among the gas-fixtures. No pleasanter way to pass a morning can be devised than to spend it in the beautiful parlors that are fitted up to display these artistic forms. We advise all ladies who enjoy beautiful art to visit these parlors, and change their old fixtures for new. In these showrooms, bright as gardens of Aladdin, one finds metals wrought into a thousand graceful forms, glass globes and shades bright and radiant as the petals of flowers, jewels flashing in every color of the rainbow, and cut-glass more brilliant than jewels. Mr. E. Baggot, one of our oldest "Apostles of light," shows a chandelier of Persian pattern. The center is in most classic and elegant vase-form, exquisitely wrought in delicate tracery that covers the whole surface. This vase carries six branches with the light. The whole is in antique brass. A fixture of wrought iron, with ruby-glass center, has great beauty; the ruby-glass vase is covered with delicate wrought-iron work, and a light within shows it off to great advantage. The elegant designs in richly polished brass, with trimmings of oxidized silver, are much to be admired. They are among the newest patterns shown, and have true artistic merit.

A lantern of antique brass, holding a richly jeweled globe, makes one think by contrast of the lanterns Diogenes lighted in the streets of Athens in broad daylight in his search for an honest man, but this one puts you into so pleasant a frame of mind that you think all men honest. In a richly furnished room nothing could be more beautiful than one of these chandeliers of hammered Cyprus copper and polished brass. The design is light and elegant, the dull red glow of the copper fascinates one, and the novelty of the combination is very attractive. Here is one composed of crowns of polished brass with rows on rows of crystal balls, cut and uncut. Another of antique brass holds a vase of alabaster, and the globes are of cut glass. Still another is made entirely of oxidized silver, set with ruby jewels. The globes and shades are infinite in form and color. It is like a floral display. Some very brilliant ones are surrounded with wreaths of fruit or flowers in very high relief and in the natural colors.

In the art parlors of the Corboy, Wingrave & McNaughtan Co., recently opened, there are also displayed some very beautiful gas-fixtures. One style of chandelier, in burnished gold, has a drop-light, the large glass shade of which is covered with a cuirass of gold openwork (foliage pattern), with birds and butterflies flitting over it; nothing could be prettier. There are also some elegant hall lanterns to be seen here, the sides of beveled glass framed in antique brass of very fine design. The aristocratic candle is again asserting itself and coming into fashion after a long rest. Fixtures of all kinds bristle with white porcelain "candles," and the effect is more pleasing and more natural than that of most imitations. They make a fine show on brackets of beaten brass, with five lights, and if a beveled mirror doubles the number of lights the effect is much more beautiful. We noticed a graceful toilet fixture, the pendant, holding two "candles," dropped from a bracket placed at any desired height on the wall. A hall sconce of brass, very elegantly wrought, and holding three "candles," was noticeable for its great artistic merit. But all housekeepers cannot fail to be delighted with this company's display of andirons and fenders; of brass stands with onyx tops; of painted card-receivers in antique brass and gold, of the most quaint and charming patterns; and with the great variety and beauty of the hand-painted shades exhibited here. Some of these are painted with pansies and are as lovely as bowls of the fresh and brilliant flowers. Some bear branches of hawthorn, and are as gay as spring itself. There is also a fine collection here of small beveled mirrors in many shapes, framed in brass and silver. An oddity in the way of gas-fixtures is a hall lantern in the shape of a drum. The drum-heads are of beveled glass, the rim is of beautiful openwork brasswork. We recommend it to some music lover. The globes here are of infinite variety, Bohemian, jeweled, cut and colored in every variety of tint. The crystal chandeliers, always in fashion, always beautiful, are just one blaze of indescent color, with cut-glass shades and cut-glass prisms and drops. Some of them are of the corona pattern, and are like fountains of light. These art parlors are divided into four compartments, each compartment rich in rare and novel designs, a most delightful place to spend a morning.

The Archer & Pancoast Manufacturing Co., H. G. Willard, manager, has not yet opened its warerooms on Wabash avenue. The windows are covered with white chalk, which shuts out curious glances like a fog, but the sound of preparation is heard within, and the manager promises to display his treasures to the public about the middle of the present month. The factory of this company is in New York, with salesrooms in New York, Boston and Chicago. The display, when in readiness, will doubtless be rare and artistic.

We recall some old-time gas-fixtures whose patterns were effective and not without merit. For newel-posts there were bronzed knights, on foot or on horseback, with golden bugles lifted high, whose tunes were sung in tongues of golden fire; and there were bracket-lights of elephant heads, with huge ear-flaps and eyes of wise scrutiny, blowing from their lifted trunks a small fountain of light; and flowers, single and in clusters, virginal white Easter lilies, golden crocuses, purple pansies, whose stamens were shoots of flame.

In the windows of the W. C. Vosburgh Manufacturing Co.'s spacious and attractive store may be seen many attractive things. You cannot help stopping, as you pass, to gaze in at the new and fanciful designs, where use and beauty unite so gracefully. One curious lamp cannot fail to attract attention. It is a stork's leg and claw in polished gold, supporting a very handsome lamp. This can be moved about the room, and used at any point desired. In their showrooms one sees many artistic designs and much fine work of their own manufacture. There are gold and jewels galore, there are beaten brass, and Cyprus copper, and antique gold, and oxidized silver, all combined in new and charming designs that will add beauty to every dining-room, and parlor, and hall, and library in which they are placed. For very little gold one can purchase here much brass, and silver, and gold, and bronze, beaten into elegant shapes, which will fill the house with a flood of light. If you want the splendid glitter, the changing, rainbow grace of cut-glass, you will find it here, and if you

would make your parlor into a flower-garden, here you buy shades and globes glowing with every color and shade and tint under the sun.

Last, but not least, we ask you to look at the vast and unique display at the store of H. M. Wilmarth & Bro. This is an old standby and a well-known house, and their art parlors always reward one for a visit. Here we find some wonderful Persian work, the lights carried on gold spirals, which have a most charming effect. The chasing is handwork, the form that of a Persian pipe. One chandelier shows the rich, dull red of beaten Cyprus copper in contrast with gold-brass, the cups suspended above the burners being of brass lined with the deep-toned copper, a very beautiful combination. A crystal chandelier, entirely of cut-glass, pure and splendid, fit for ballroom or drawing room, makes all metallic lustres dim. It carries twelve burners, and a cut-glass ball at the bottom of the chandelier regulates the light of all. I found here one of the most striking and beautiful ornaments for hall or parlor that I have seen. It is an oxidized silver sconce with a beveled plate-glass mirror; a branch of foliage in oxidized silver crosses the mirror, and in front are five small burners covered with ruby-glass globes, about an inch and a half or two inches in diameter, and looking like a cluster of splendid chimes, or some unknown celestial fruit fit for the gods, or, perhaps, a spray, broken from Aladdin's lantern. The mirror repeats this wonderful fruit cluster with very fine effect. And so our morning stroll ends, and tomorrow we go "to fresh fields and pastures new."

Acoustics of the Convention Hall.

THE arrangements for holding the musical festival in the Exposition building this year were more extensive and perfect than ever before attempted in Chicago. The management, profiting by the experience of the past, where these concerts had been partial failures, because of the lack of proper acoustic arrangements, engaged architects Adler and Sullivan with the view of making the hall, as far as the nature of the building would permit, perfect in this respect, as well as to seat the vast audience with ease and safety. The architects, realizing that it was useless to make the hall as extensive as heretofore, incorporated a section of the great building, 150 by 400 feet, and, by an ingenious arrangement of inclines, distributed the seats so that all gave a perfect view of the stage. The different aisles are reached by tunnels leading from doors marked and painted each in a peculiar color corresponding to the color of the tickets, so that no mistake can be made in seating the vast audience. The total number of seats, as reported to the Republican National Convention committee, is 9,180; while the seats for sale, exclusive of the chorus, orchestra, escorts, gallery, etc., number 6,827. But it is the acoustic arrangement that is most important, and at the concert was most noticeable. At either end were placed immense sounding boards, that above the singers being 120 by 150 feet, and so adjusted that the sound waves were kept down and swept out over the vast auditorium, while the immense amount of timber in the ceiling, so laid as to cut off all chance of speaking below and to take up the slightest sound, and coöperating with the sounding-boards, gave a pure, clear quality to the sound that made every word distinct. The effect was most clearly noticed by the audience when the words of the director, with his back to the audience, were often clearly heard when only intended for the ear of those nearest him. This wonderful triumph in acoustic science was noticed in the Republican convention, which also used this hall, showing that in the hands of experts a building can be made perfect in this respect.

Important Test of Flat Hollow-Tile Arches.

THE following record of tests made to determine the strength of hollow tile arches will be of interest to many of our readers:

The tests were made with the tiles of the Wight Fireproofing Company set in the first floor of the new Chamber of Commerce building. A section of floor measuring 14 by 17 feet was prepared for the occasion by finishing it with 2 by 3 inch strips laid over the same, imbedded in concrete 3 inches thick and covered with a pine floor 1 1/4 inches thick. This was loaded as follows: First, cases of dry goods from Marshall Field & Co's warehouse of aggregate weight of 1,350 pounds; second, a safe weighing 4,000 pounds, set directly upon the floor without the intervention of planks or any other distributing medium; next, timber weighing 2,700 pounds, making a total of eight thousand and fifty (8,050) pounds, almost all of which was, however, concentrated on one-half of the prepared space. The safe was then rolled to and fro, and the dry goods boxes raised to a height of four feet above the floor and repeatedly thrown down upon the floor. Careful observations made of the under side of the arches revealed no cracks or springs in any of the mortar joints.

The next test was made upon a piece of floor, the arches of which had not yet been covered with concrete. An area of 8 feet 2 inches by 5 feet 3 inches was covered with a bed of sand. Upon this were piled 3,096 bricks, weighing 13,158 pounds, making a load of 307 pounds per square foot. A safe weighing 4,000 pounds was then rolled back and forth past this brick pile, over planks bedded on sand. The sand had been removed from over the iron beams so that the weight of the safe was entirely over the arches. No appreciable effect was produced upon the arches.

These tests were made on the afternoon of Thursday, June 5, in the presence of Architect W. W. Boyington, the Building Committee of the Chamber of Commerce, Mr. John Pashley, Architect S. V. Shipman, Architect P. B. Wight and Architect D. Adler.

On the following day these tests were continued with a view to determining the ultimate strength of the arches: First a 6-inch arch of 3 feet 8 inch span and 2 feet long, the beams supporting held together by tie rods, was covered with a bed of sand and then loaded with 5,181

pounds of pig iron without producing any effect upon the arch. This was equivalent to a load of 706 pounds per square foot. It was impossible to continue this test to the breaking point of the arch because of the impracticability of handling more iron in the place where the test was being made.

The second test was made upon a 9-inch arch of 4 feet clear span. Upon an area of 3 1/2 by 4 feet was made a bed of sand upon which were piled bricks up to a weight of 3,162 pounds in such a manner that none of the load came directly upon iron beams. Upon this brick was piled, 8,186 pounds of iron, making a total load of 11,347 pounds or 810 pounds per square foot of arch. As the supply of iron was then exhausted the continuance of the experiment to the destruction of the arch was postponed to a future day.

These last tests were made in the presence of Architect P. B. Wight, Architect D. Adler and the editor of this journal.

These are the first practical tests that have been made of the form of the flat arches made of fireproof hollow tile now in use and will be valuable to architects, especially in the construction of fireproof warehouses.

In the first two tests the arches were subjected to strains approximating as nearly as possible the heaviest usage floors can be subjected to in the ordinary case of warehouses. The last two experiments went farther than this and were intended to determine as nearly as possible the strain required to break down and destroy the arches.

As these tests were made under the supervision of those who rank among the first architectural authorities of the West, they are thoroughly reliable.

Our Illustrations.

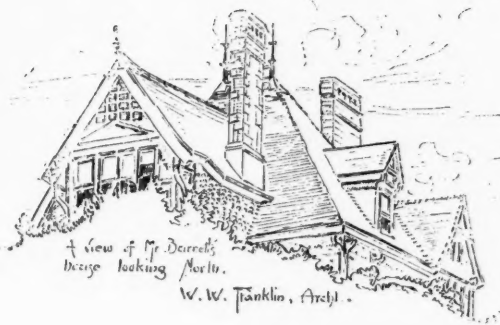
Page 65, fragments of Cincinnati architecture, a collection of bits and views gathered and sketched by James Brite.

Page 67, perspective view and plan of cottage by architect G. H. Blanden, of Springfield, Mass., and perspective view and plan of cottage by architect George W. Bird, Des Moines, Iowa.

The St. Paul Chamber of Commerce Building, by architects Carpenter & Teltz, a description of which was unavoidably omitted from the May issue, is 50 by 130 feet, six stories in height with basement. The construction will be of Chicago Anderson pressed brick, with granite and Frontenac stone trimmings. The style of design is Gothic Renaissance. The Chamber of Commerce has an appropriate meeting hall on the second story, and the rest of the building will be offices, excepting the first story, which is divided into stores. The basement is arranged for a restaurant. The construction of the building is in piers and large openings so that it is at once substantial and well lighted. The two principal stories have floors of iron filled in with brick arches to render them fireproof; all upper stories resting on iron girders, which act also as ties to strengthen the structure; the hall partitions are of brick and form fire walls to top of roof; stairways are of iron and all necessary precaution is taken to make the building as fireproof as possible. The building will be heated by steam and have Hale's improved hydraulic elevators. For general convenience and comfort the plans show all that could be desired. The total cost of the structure will be \$100,000.

Supplement, front elevation and interior view of the Open Board of Trade building, Chicago, by architects Wheelock and Clay. The building has a frontage of 100 feet on Pacific avenue, a depth of 105 feet, and is six stories high. The front is of Anderson pressed brick, brown Northwestern terra cotta and brownstone. The first two stories of the main part are occupied by the Board of Trade room, which is a magnificent and well lighted hall entered directly from the street, the dimensions being 85 by 107 feet. There are iron columns supporting the upper floors and connected by arches. The finish of the walls is plaster, the center covered by a skylight 50 by 85 feet. Above the glass is a series of balconies, one on each floor, giving access to the offices above, of which there are some twenty on each floor, or eighty-three in all, the sizes ranging from 12 by 22 feet to 24 by 22 feet. There are two of Crane Bros. steam elevators reaching from a southerly arcade which passes from one end of the building to the other, and likely in coming time to connect the main building on Pacific avenue with a rear extension, the corporation having a lease of the whole ground running through to Clark street. This arcade will also be the means of connecting the trading room, if at any time it is required, with any of the adjacent buildings. Each office above is connected with the board-room with speaking tubes, and the elevators which reach the upper story are not only connected with this arcade, but they open immediately upon the board-room, making the offices very desirable for those who deal upon the board. The building is heated by steam, Baker, Smith & Co's systems of indirect and direct heating and ventilation being used. The court is covered by a large skylight (Hayes' patent), giving perfect light to the offices opening on the balconies. The design of the architects, to make this building not only perfectly adapted to the uses of the open board, but a model in arrangement for organizations of this character, is admirably carried out. The cost of the structure is about \$150,000.

THE application of electricity to so many useful things is one of the wonderful features of a wonderful age. The manufacture, not to speak of the use, of apparatus and machinery for the use of electricity in the business of the world has grown within a year into an industrial interest of great magnitude. The Detroit Electrical Works, of Detroit, Michigan, for instance, employs eighty hands in the manufacture of electric bells, fire alarms, burglar alarms, hotel and house annunciators, electro-mercurial fire alarms, telegraph and telephone supplies, cashboy calls, etc.; all of which have become important auxiliaries in the transaction of business. Almost every day something new is added to the list of electric appliances, and the company above named is prepared to manufacture anything in this line. The reader who is as yet not fully informed concerning the utility of any of the articles mentioned should write to Mr. Wm. H. McKinlock, secretary of the Detroit Electrical Works, for descriptive circulars.



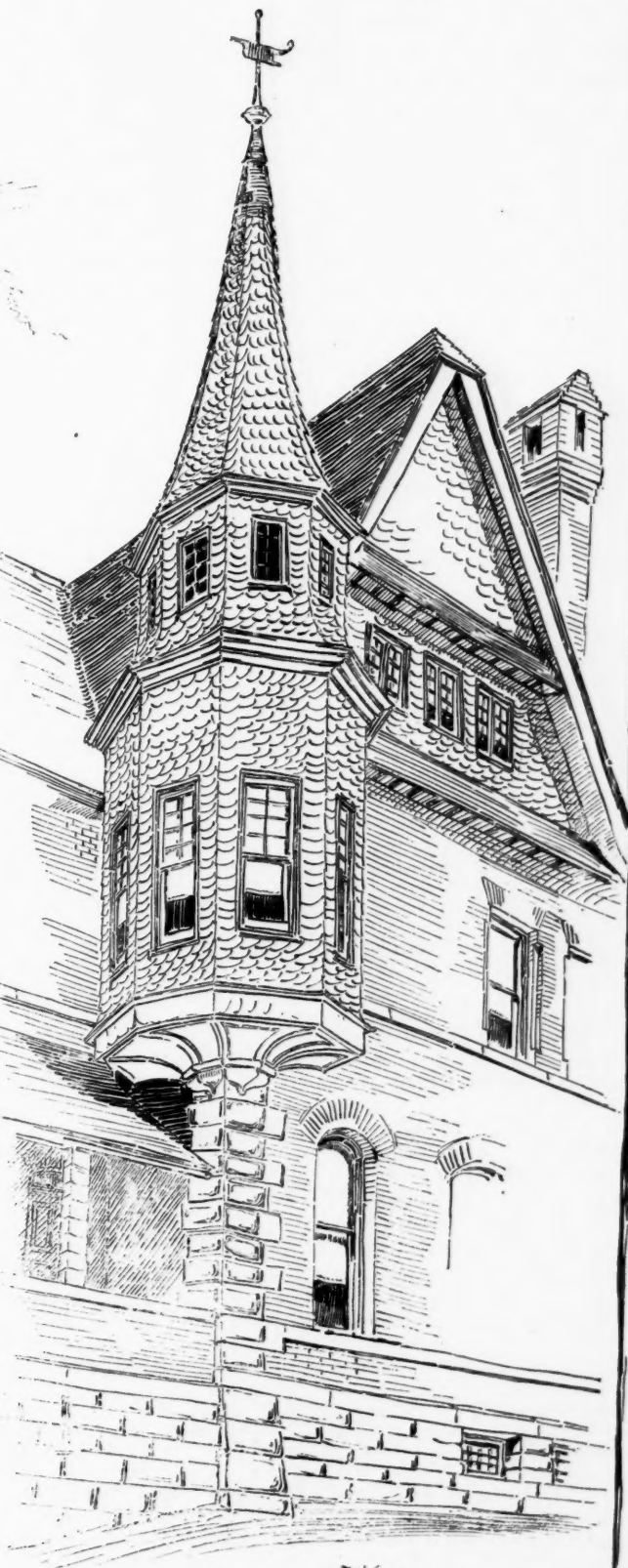
A view of Mr. Darrell's house looking North.
W. W. Franklin, Archt.



The Bellin house from the City.
Mr. J. W. Bellin, Archt.



Ap. Entrance now on Sycamore St.
Mr. L. B. Biddlemeyer, Archt.



from a house on W. Auburn.
L. J. Plympton, Archt.

Some picturesque old about Cincinnati.
J. H. Hest.

California Redwood.

THERE has lately come to the Eastern lumber market a wood that for richness of color, the facility with which it can be worked, and on account of its durability, will become one of the most important species of lumber used in the construction of houses. This is the redwood of California. The tree has often been described, its gigantic growth being itself a marvel even to the lumberman who has felled the largest monarchs of our pine-tree forests. For many years the wood has been in common use in California, and its resistance to the effects of the weather there is remarkable; and though it has yet to be tested in this climate, there is no reason for doubt of its adaptability to all purposes of building here. In a beautifully illustrated and well written work on this subject published by the California Redwood Company, of San Francisco, a full description of the home of the redwood and the methods employed in preparing it for market is given; and when it is understood that the lumbermen consider trees of four feet diameter too small for cutting, some idea of the average size of these trees is obtained. As the freightage of lumber is at present considerable, the redwood must of necessity remain more expensive than common pine, but its fine grain and rich natural color will give it a value that will place it in the first rank of ornamental or finishing woods. Large quantities have already been used around Chicago for shingles and weatherboarding, while for trimming it has the color and polish of mahogany. It seems that the field of furniture manufacture would receive a valuable addition from this source, and indeed all workers in wood should examine and test the redwood for effects that can only now be surmised. The fact that it neither warps, shrinks nor checks, would seem to bear out this idea, and as the base of the tree works readily into a beautiful veneer it cannot long be ignored by furniture makers. The largest mills are located on Humboldt bay. The machinery used is made especially for this trade, the ordinary outfit of a Michigan or Wisconsin mill being equal to that of a match factory compared with the huge saws, carriages and derricks, the latter being absolutely necessary for the handling of the immense logs, some of them ten feet in diameter. This wood is said to be "practically fire-proof"; that is, it does not burn easily, so that the woodsman clears out the underbrush with fire which leaves the trees uninjured. It is important that architects should examine carefully into the merits of this beautiful wood and give to their clients the benefit of their investigations.

Lumber Notes.

LOGS average \$10 per 1000 feet at Stillwater, Minn.

THE longevity of redwood railroad ties is said to be over eleven years.

IN the United States there are 36 varieties of oak and thirty-four of pine.

MINNEAPOLIS has been receiving large amounts of lumber, the bulk of which came from Wisconsin.

CULLMAN county, Alabama, has nine new sawmills, which are turning out large quantities of lumber.

HEMLOCK is favorably considered for railroad ties, more for its property of holding spikes than for its durability.

THE best of hickory used in the arts, where toughness is required, is obtained from North Carolina and East Tennessee.

EMILE DESMIT, of Moss Point, Miss., one of the largest lumber and mill owners in the South, failed recently for \$400,000.

LUMBER shipments from Milwaukee are reported to be in excess of three millions of feet per week; the receipts less than half that quantity.

HEAVY rainstorms in the Northwest have raised many of the small streams to a stage that will enable the lumbermen to get out all of their logs.

ALL the indications are that there will be at least 300,000,000 feet of lumber consumed in Minneapolis and St. Paul, including the space intervening, during the year 1884.

WORK on the great union depot in Minneapolis is being commenced in earnest this week. It will be one of the finest depots west of Chicago. The great viaduct is complete and all approaches done.

SEVERAL hardwoods are gradually coming into use which, a few years ago, were never used for finishing. Beech is one of them, which is being used considerably for school and church furniture.

THE extent of the operations of the Ontonagon Diamond Match Company may be partially understood when it is realized that that concern harvested about 30,000,000 feet of logs at their camps during the winter just closed.

THE *Southern Lumberman* says that the lumber business in the South is satisfactory; no serious depression at any point, while at some places it verges upon a boom, and but little speculative feeling exhibited, except in the matter of Southern timbered lands.

SOME time ago a pine-tree in Chester county, South Carolina, was blown down. One limb of it was sawed up, and turned out four hundred and seventy feet of lumber. The butt end of the tree was so large that it could not be moved by a team of six mules.

A BILL to permit the erection of a dam across the Mississippi at St. Cloud has passed the House and is now before the Senate without objection. By the erection of this dam it is expected that an enormous water-power will be created at East St. Cloud and a grand lumber manufacturing center be built up soon.

THE lumbermen of Duluth have commenced improving the St. Louis river from Thompson to Oneota, over the great falls of the river. A large force is at work blasting, and building wing dams to facilitate log driving. It is said to be one of the heaviest pieces of stream improving ever indulged in anywhere, and will cost a very large sum of money.

SAWDUST as a substitute for sand in mortar for house-plastering is attracting considerable attention. It is claimed that mortar made of sawdust is more porous than the ordinary kind, and consequently the face of the wall composed of it is warmer; that it is a non-conductor of sound and dampness, and that it overcomes the echo in churches and halls.

THE millmen of the Chippewa river, after spending a mint of money in planing-mills, piling grounds, etc., with the purpose of shipping over the railroads, have, because of a change of railroad policy, decided to resume rafting, and it is estimated that the amount of lumber thus rafted to and distributed from points below Davenport will not be far from 200,000,000 feet. This will no doubt benefit the price of lumber in the Northwest, as it will leave that market and come into competition with that of Chicago, and will again revive the planing-mill industry that suffered through the deflection three years ago.

THE New Orleans correspondent of the *Lumber Trade Journal*, referring to the contemplated Exposition at New Orleans, says: "I know of no exhibit from the South that will so clearly show one of its vast resources than that of its forest products. Lumbermen have begun selecting samples for exhibition. For size of trees, peculiarities of grain, and different varieties of timber, the exhibition promises to be well worthy of examination, and it is trusted that the effects on the many lumbermen of your section who are expected to visit us will influence at no late day the introduction of Western energy, skill and enterprise in the development of the lumber industries of this section."

A CORRESPONDENT of the *Southern Lumberman* writes: "I have made mention heretofore of the fine poplar, ash, oak and hickory on the mountain benches from Cumberland Gap to the Tennessee river, and would like now to call attention to some other trees that grow in great abundance here that are not generally quoted in the lumber markets. First among these is the cucumber-tree, that grows plentifully and to enormous size. The wood resembles, in some respects, yellow poplar, but after being seasoned shrinks and swells less on exposure to the weather than any other. It is particularly adapted for wooden pumps, works easily, and is durable. It will also make excellent box-boards and siding; and I see no reason why it should not supersede poplar for ceiling, etc. It can be found in sufficient quantities to make it an object, should the demands of the trade require it."

Architectural and Building Notes.

THE new cotton factory at Summerdale, Lake View, will soon be completed, and will give employment to about 300 men.

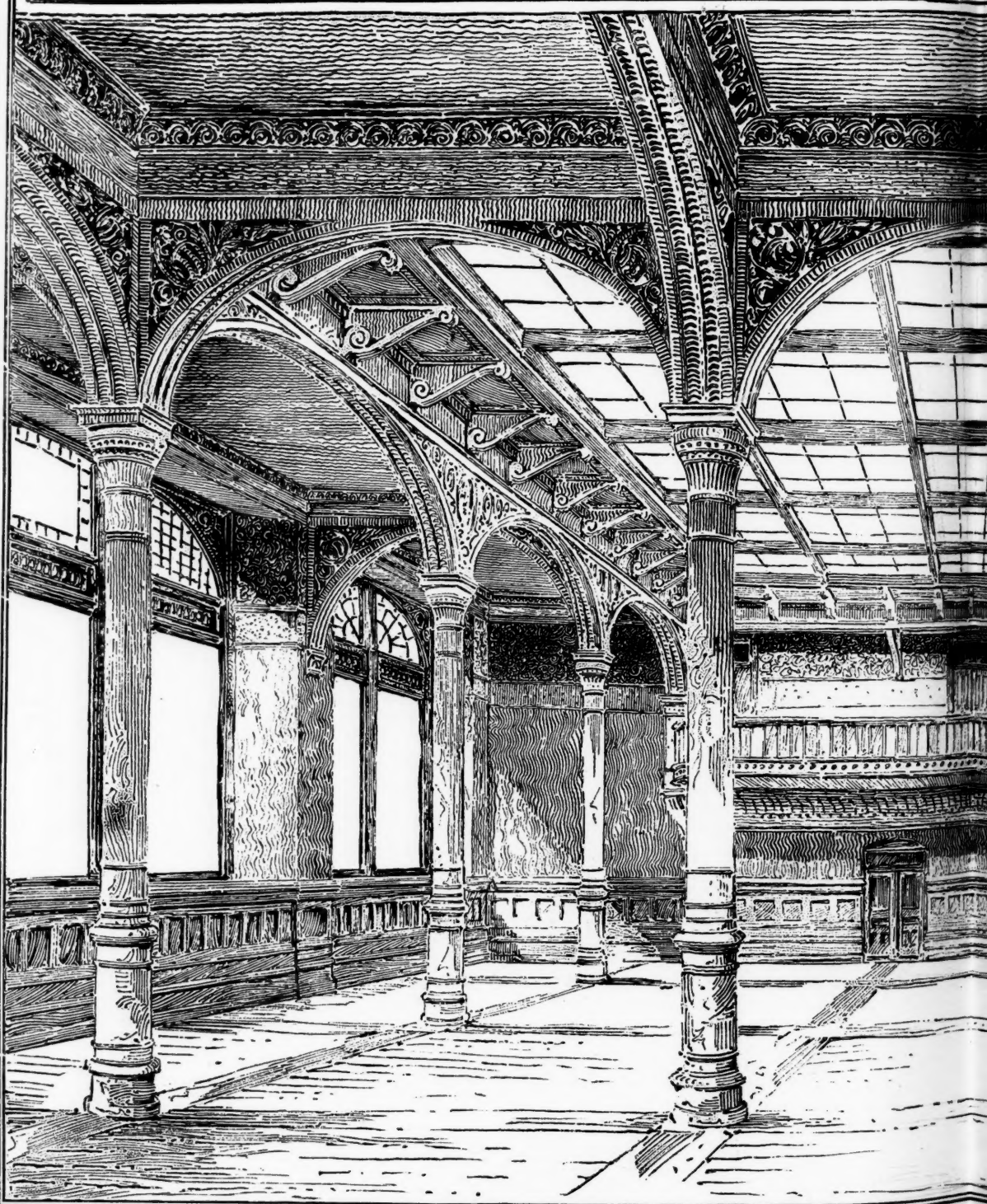
ARCHITECT W. A. FURBER has prepared plans for the McNeil office building, which will be a thoroughly fireproof structure, built of pressed brick and terra-cotta ornamentation. It will be nine stories and basement in height, located opposite the Grand Pacific, fifty feet facing on Clark street and 214 on Jackson. The cost will be about \$200,000. At present there is an uncertainty how soon it will be erected.

THE first meeting of the Indiana Chapter of A. I. A. was held last month, at which officers were elected, and constitution and by laws adopted. The chapter numbers nine members: E. J. Hodgson, C. A. Wallingford, J. H. and A. H. Stem, of Indianapolis, J. W. Reid, Evansville, and Charles Eppinghausen, Terre Haute, All Fellows and B. H. Enos, Chas. Muller and F. A. Voydes, of Indianapolis, Associates. Mr. Wallingford was elected president.

THE panorama of the Battle of Gettysburg, open daily from 7:30 o'clock in the morning until 11 o'clock in the evening, has during the past month been constantly crowded with visitors, the Musical Festival, Convention, Decoration Day, etc., bringing large numbers of visitors to the city. The peculiar form of the building always excites inquiry, and the fame of the great work of art it contains has made it the most attractive feature to the sightseer in the whole city. The building is a credit to the architects, Messrs. Bauer & Hill, and is thoroughly safe and convenient. Electric lights are used, which, beside the superior quality of light produced, renders the building absolutely safe from fire.

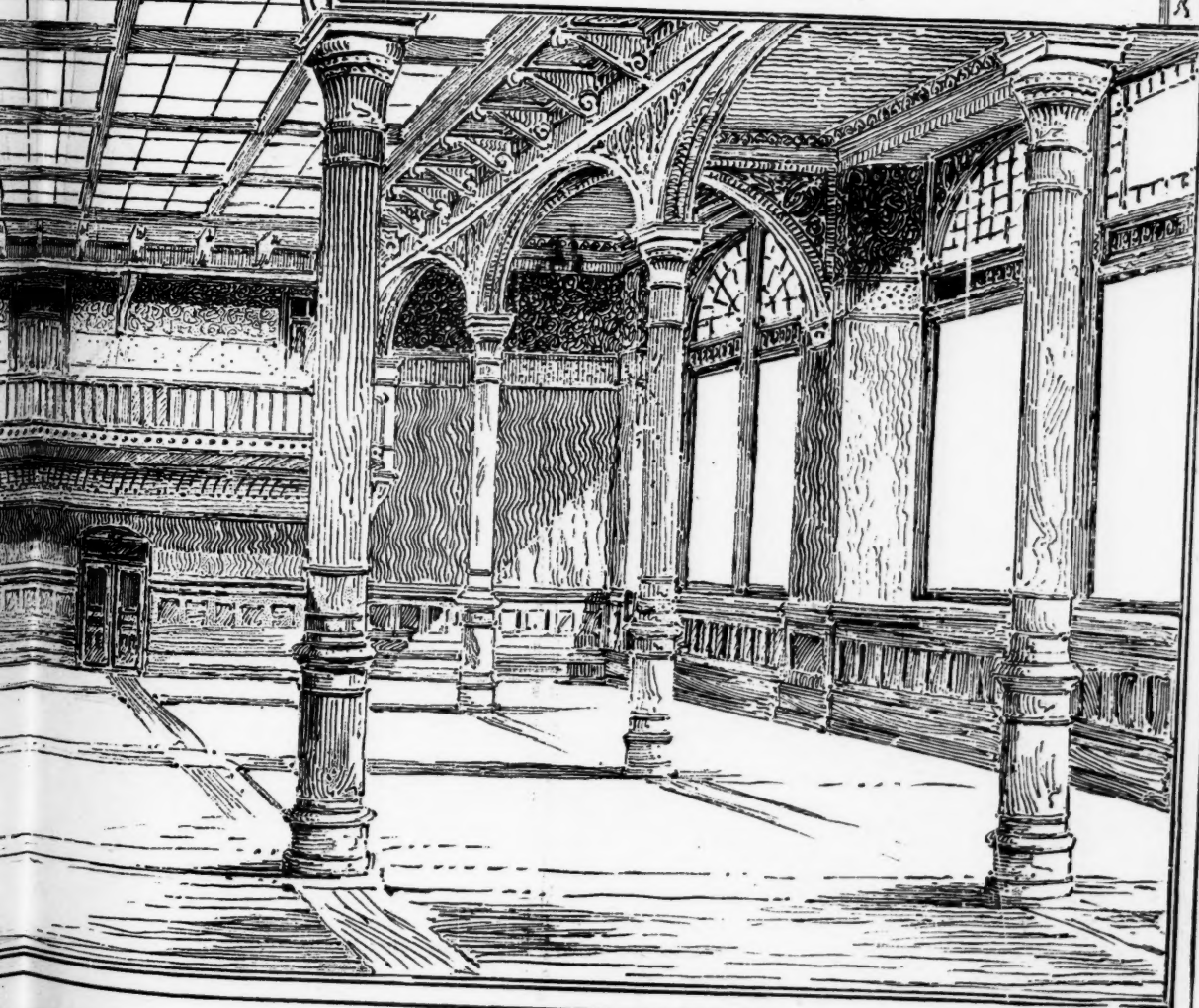
ARCHITECTS ADLER & SULLIVAN are preparing plans for a six-story store building for Martin Ryerson. The building will stand on one of the best lots now vacant on the south side. It is 701 by 70, fronting on Randolph street and cornering on the alley between State and Washington streets opposite the Central Music Hall. The front will be of brown stone and the lighting will be exceptionally perfect and the building, besides receiving light from three sides, will have large windows. As is Mr. Ryerson's well known custom, this building will lack in no essential to make it a perfectly substantial structure. This firm is also preparing to construct for A. F. Troescher, of New York, a store building on the east side of Market street, between Madison and Monroe. It will be six stories and basement in height, 80 by 90 feet. The walls will be of brown stone, pressed brick and terra cotta. These architects have in hand a theatre building for Jonathan Clark, the prominent contractor, that, though not large, will contain some wholly new and admirable features. The walls and proscenium arch will be of brick, and wire lath will be largely used. The galleries are so arranged as to dispense with all the objectionable iron supports which interrupt the line of sight. The arrangement of boxes and balcony is such as to admit of a perfect view of the stage from all points, while the acoustic properties receive special attention. The front of the theatre is arranged for a general parlor, ladies' parlor and dressing-rooms. The entrances to the gallery are on either side of the front, with no connection with the main part of the house. While not entirely fireproof, the arrangement of this theatre promises reasonable safety and comfort to audiences.

CHICAGO OPEN BOARD OF
* * *
WHEELLOCK & CLAY ARCHITECTS. TR

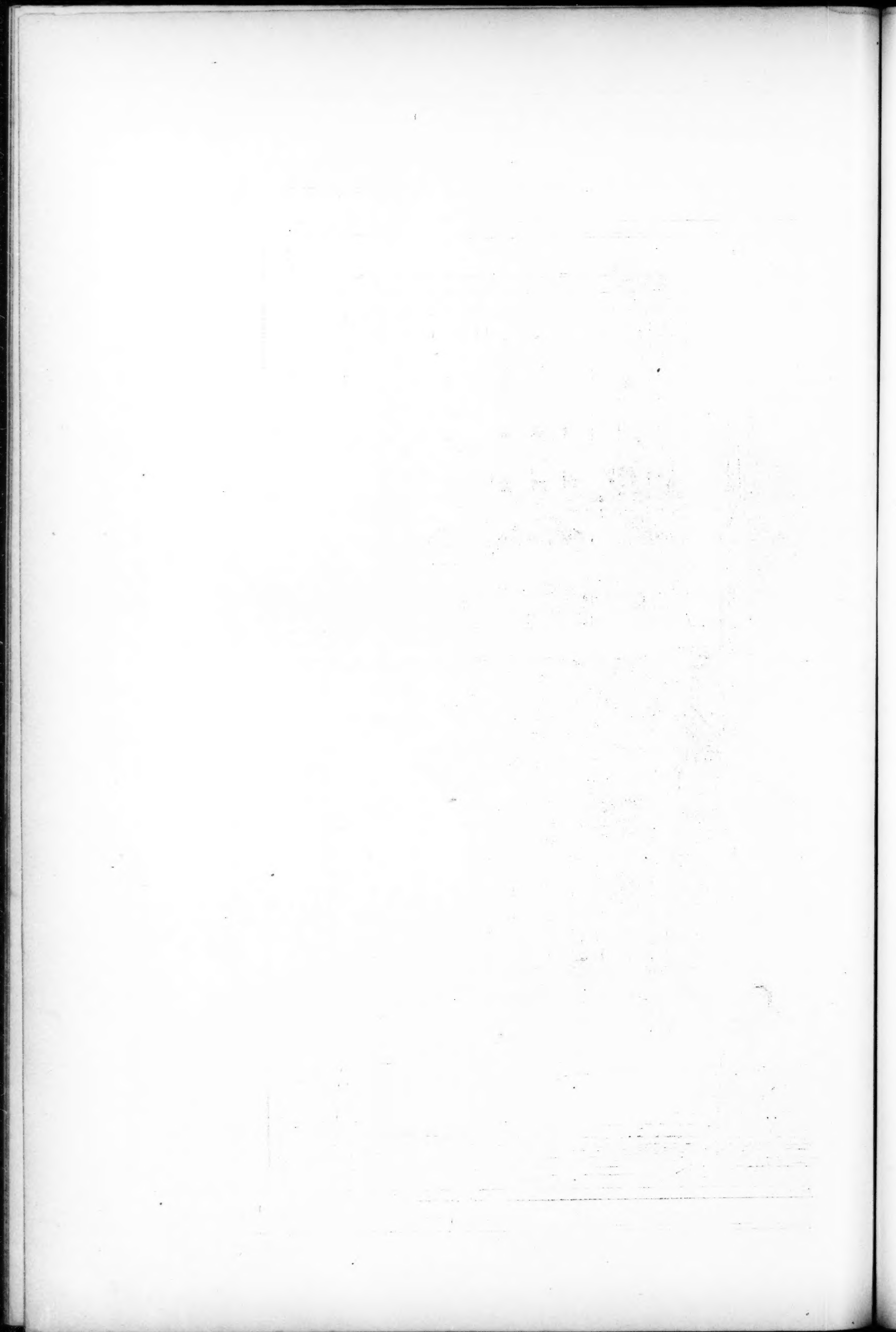


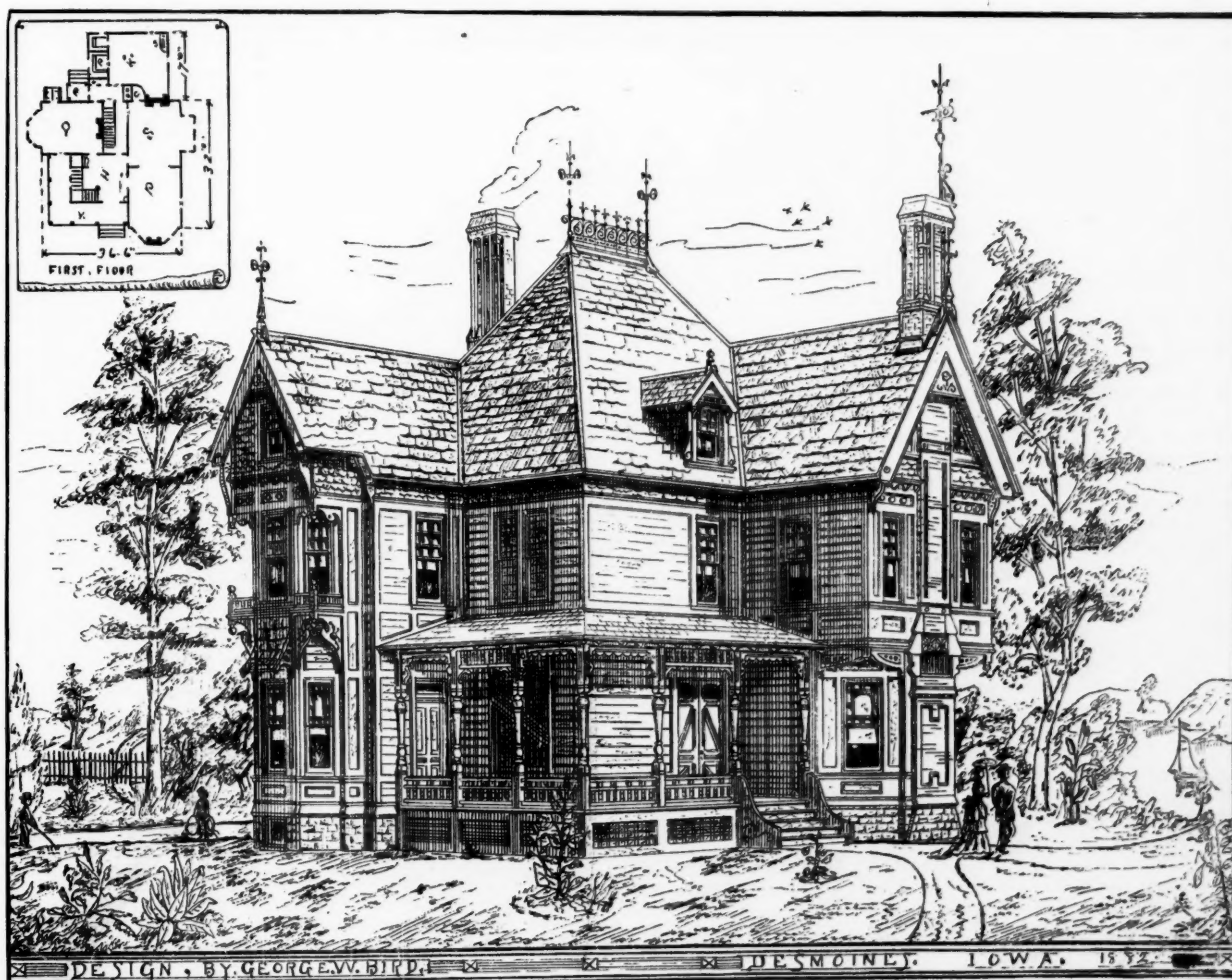
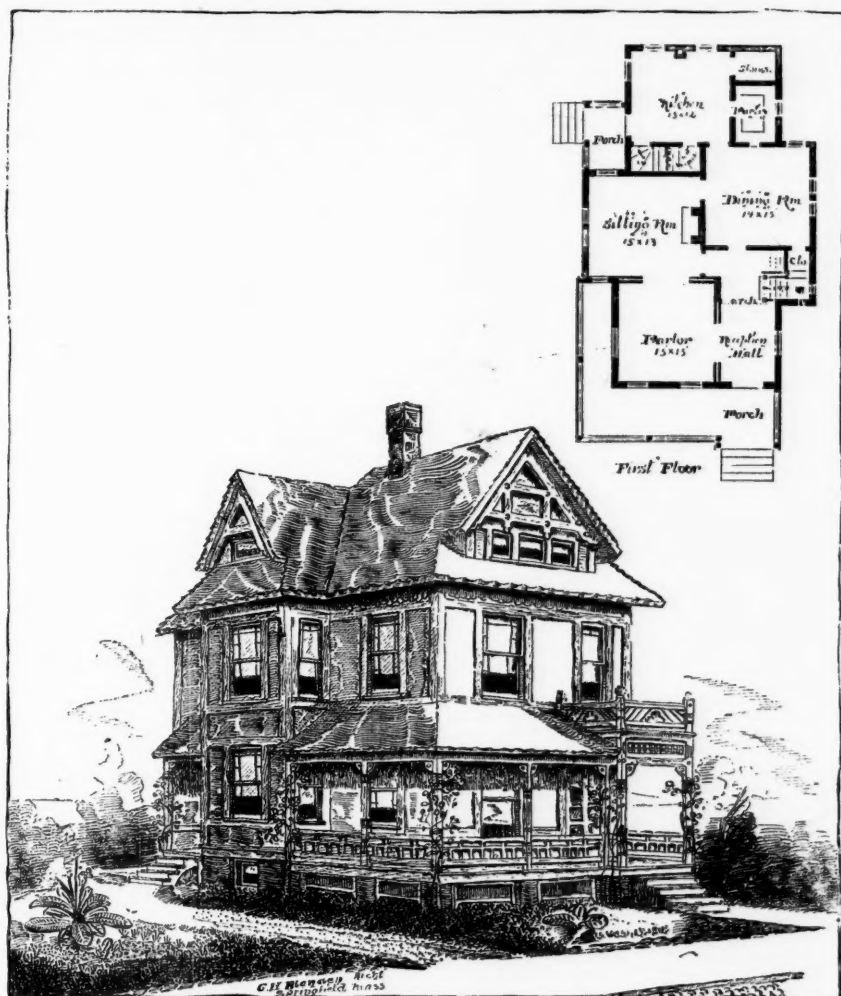
Paul. C. Santrup. Del.

OF
GRAND.



PUB. BY THE INLAND
ARCHITECT AND BUILDER





Mosaics.

MR. WILLIAM HAYDEN (late with A. H. Andrews & Co.) has opened a store of office furniture and fittings at 193 Wabash avenue, and is the sole agent in the West for the celebrated "Cutler" desk.

A MAGAZINE base-burning boiler that is fast coming into prominence because of its scientific construction and practical utility is called the "Champion." It is especially adapted to heating houses, and is made entirely of wrought iron. It is easily controlled and its tubes are arranged so as to be easily accessible. Baker, Smith & Co., Chicago, are the manufacturers.

ARCHITECTS looking for veneers will find them exhibited in many varieties and applied in many different ways at 52 La Salle street, where the Western agency of Spurr's patent papered veneers is located. The process of spreading the veneer on paper, and applying it effectually to the finest moulding, cornice or wall, is worthy of examination, as it evidently has many points of superiority over other veneers.

A LARGE number of prominent buildings erected in New York, Boston and Philadelphia during the past seven years, besides a number of prominent buildings in Albany, N. Y., and Cleveland, O., have used the patent concrete illuminating tiling, to say nothing of its use in many buildings in this city. As a tiling for covering all openings in sidewalks, or for floor, roof or sky lights, or for any purpose where an illuminating tiling may be required, it certainly occupies a foremost and deservedly prominent place. It is durable and pleasant to the eye, and has stood the most severe tests. The main office of the company is 24 Lakeside Building, Chicago, Ill.

THE propriety of using Roman and Venetian marble tiles is being brought to the notice of Chicago architects by Messrs. Carretti & Hogan. Some excellent samples of each style of work is shown, made from imported marbles, the plain mosaic work of the Roman method of floor tiling and the brighter-colored marbles of the Venetian, for wall-panel, mantel, hearth or ceiling decoration, show that this work is produced not as an imitation but a true reproduction of the lasting mosaics found in Italian architecture. The selection of marbles was made in Italy, and though costly their adaptability to special designs, together with their beauty and permanency, will lead to their use in the better class of public and private buildings.

THE demand for ironwork for buildings has so rapidly increased in the West that new firms are being constantly organized, and those long in the business are obliged to materially increase their facilities. One of the oldest and most creditably known, located in Chicago, is that of Clark, Raffin & Co. They have recently built a four-story brick building, 50 by 70 feet, to be used as a machine, fitting, blacksmith and pattern shop, and also contain the offices, and the old foundry adjoining has been torn down and a new foundry building, 100 by 100, takes its place. Their facilities for the production of all descriptions of wrought or cast iron material for building construction are of the best, and their capacity ample for supplying their large trade.

THE following circular letter will be of interest to those interested in the fireproofing of buildings:

We take pleasure in notifying the architectural profession, our patrons and friends, that we have removed our office from No. 32 Metropolitan Block to our Fireproof Office Building, No. 1545 Clark, corner of Sixteenth street, and desire to call the attention of all interested to the fact that we are now better prepared to transact business with dispatch than we have ever been before. Our new location will afford us increased facilities for handling our material, as we intend to keep our yard stored with a stock of various sizes of tile; having a special railroad switch into our premises, we shall be able to receive and ship material without any delays. Within the past thirty days we have doubled the capacity of our factory at Ottawa, Illinois, by erecting new buildings, machinery and kilns, and feel confident that we can fill all orders and complete all contracts that may be entrusted to us with satisfaction and dispatch. We solicit a continuance of past favors, and ask a personal inspection of our new office building, which we have erected entirely of Hollow Tile, as an evidence of the value of this material in the construction and fireproofing of buildings.

PIONEER FIREPROOF CONSTRUCTION COMPANY,
By E. V. JOHNSON, General Manager.

Personal Notes.

PAUL C. LAUTRUP, the popular architectural designer, has removed to room 96, Ashland Block.

THE Real-Estate and Renting Agent's Association gave an exceedingly pleasant inaugural lunch recently to celebrate the opening of their new rooms at 159 and 161 La Salle street, when nearly one hundred members and guests assembled. The noon-call meeting, which was suspended during the alterations, has been resumed.

ARCHITECTS E. J. HODGSON, C. A. WALLINGFORD and J. H. and A. H. STEM, of Indianapolis, Ind., have entered into copartnership, thus forming one of the strongest firms of the kind in the West. Their rooms are said to be very spacious, elegant and complete. Their business embraces a large number of fine buildings in nearly every state of the Union.

ARCHITECT HARRY LAWRIE has had plans for his estate of matrimony drawn for several years, the general details having been arranged before leaving his native country, Scotland; Miss Ellen Webster acting the part of consulting architect on that occasion. Last week the interested parties met, and decided to begin carrying out the plans at once, and in the presence of the Rev. J. H. Worcester, of the Sixth Presbyterian church, the contract was signed. Plans that have received the mature consideration of three years, and that were so important as to draw the interested parties from one country to another, must now surely be carried out successfully and prove a lasting joy to the architects. May their completion prove them infinitely more satisfactory than the most beautifully drawn perspective.

IN the death of architect William M. Crosbie, at Cleveland, Ohio, on the 1st inst., the profession loses one of its most promising representatives. Mr. Crosbie moved from Atlanta, Canada, to Cleveland about six years ago, and although but twenty-seven years of age at the time of his death, had attained considerable celebrity as an architectural sculptor and designer. He has left, on some of the finest buildings in various cities of the North and Northwest, many evidences of his artistic abilities.

Among the buildings which illustrate his skill as sculptor and designer are the Lake Shore & Michigan Southern railroad building, and Nickel Plate depot in Cleveland, the new city buildings at Winnipeg, Manitoba, and fine business blocks in Buffalo, Pittsburgh and other cities. He was engaged on some fine buildings when fatally prostrated by typhoid fever.

Correspondence.

DES MOINES, IOWA, May 23, 1884.

To the Editor of the Inland Architect and Builder:

You may be interested to learn of the formation in this city of "The Architectural Association of Des Moines." Its regular meetings occur fortnightly. Its active membership is composed of practicing architects. Draughtsmen may join as associates, with all privileges except voting and holding office. The annual fee required of associates is to be used in procuring periodicals for the benefit of all. By recording their names on the list of the association's guests, engineers and others become honorary members.

The officers are: Pres., J. S. Blake; Sec. and Treas., E. H. Taylor.

As expressed in the constitution, the object of the association comprehends the broad field of "uniting all directly or indirectly interested in architecture; mutual improvement; elevating the standard and increasing the usefulness of architecture; disseminating and perfecting architectural knowledge and correcting unprofessional practices."

Respectfully, E. H. TAYLOR, SEC'Y.

We congratulate the architects of Des Moines upon this action, indicating as it does the advanced stage of the profession in Iowa. The broad spirit shown in making their association the center of all classes interested in the art of construction is also most commendable, as they make exclusion begin only where it should, where the action of applicants is unprofessional. We expect much, hope much from this association, both in its effect on Iowa architecture and in setting so good an example to the profession generally.—[Ed.]

New Publications.

HINTS AND PRACTICAL INFORMATION FOR CABINET-MAKERS, UP-HOLSTERERS AND FURNITURE MEN GENERALLY, together with a description of all kinds of finishing, with full directions therefor, varnishes, polishes, stains for wood, dyes for wood, gilding and silvering, receipts for the factory, lacquers, metals, marbles, etc., pictures, engravings, etc., miscellaneous. Published by the Industrial Publication Company, New York, 1884.

This book (of which the price is not stated), contains 128 pages of practical hints, suggestions and directions for use in the furniture shop, and should be an invaluable handbook to the worker in finished woods. The compiler begins with constructive cabinetmaking, and from practical remarks and designs for cabinet work, framing, veneering, etc., he proceeds to the many different departments of varnishing, filling, giving special directions for handling different woods, giving special directions how to mix the different varnishes, and, in fact, the work is full of valuable hints.

OUR HOMES, HOW TO HEAT AND VENTILATE THEM. Published by the SMITH & ANTHONY STOVE COMPANY, 52 and 54 Union street, Boston, Mass.

This elegant little pamphlet volume goes beyond the province of trade circulars, and clearly and intelligently discusses the subject of heating and ventilation from a sanitary standpoint, showing the necessity of houses being supplied with air with all the purity and freshness of that of a south wind in springtime, and that by apparatus that can be effectually controlled. It also shows how intimate are the relations between heating and ventilation, and that aside from the hygienic, the phase of perfect utility is one of the important components of a perfectly heated apartment, and that the success or failure of apparatus depends largely upon the knowledge of the manufacturer upon this point. The book is well written and typographically creditable, frequent illustrations of residences giving a pleasing variety to the pages and apt description of the text. The pamphlet is a valuable addition to trade literature, and should be examined by those in search of information upon the subject of heating.

Inventive Genius in Building.

- 297,449. Fire-proof Building. Gustavus W. Rader, New York, N. Y.
- 297,465. Door-Securer. Wm. Starrett, North Manchester, Ind.
- 297,485. Lumber-Rack. Joseph Amis Aycock, Whitesburg, Ga.
- 297,491. Constructing and Fastening Tiles. Walter Booth, Tarrytown, N. Y.
- 297,499-500. Fastening for Meeting-Rails of Sashes. Louis J. Church, Washington, D. C.
- 297,530. Metallic Shingle. John Mott, New York, N. Y.
- 298,347. Compound Water-cock and Sewer-gas Cut-off. William Cahoon, Jr., Chicago, Ill.
- 298,405. Derrick. Adam Reitz, St. Louis, Mo.
- 298,417. Sandstone-Crandall. Ferdinand Shueddig, St. Louis, Mo.
- 298,418. Manufacture of Bricks made of Glass. Francis H. Shaw, Newark, N. J.
- 298,452. Cistern for Water-closets. John Demarest, New York, N. Y.
- 298,463. Roofing-bracket. Alfred Guedle, Canal Dover, O.
- 298,522. Cold and Fireproof Storage Building. Benjamin E. Valentine, Brooklyn, N. Y.
- 298,528. Lathe for Turning Polygonal Forms. Ludwig Wisse, New York, N. Y.
- 298,580. Machine for Casting Plumbers' Traps. Charles E. Heiss, Chicago, Ill.
- 298,757. Fireproof Fabric. Henry W. Johns, New York, N. Y.
- 298,700. Portable Building. Joseph Sanford Simmons and Robert Marion Simmons, Belton, S. C.
- 298,701. Builders' Scaffolding. Daniel W. Spooner, Minneapolis, Minn.
- 298,804. Adjustable Support for Watercloset Basins. Henry Cory Weeden, Boston, Mass.
- 298,805. Flushing-Apparatus for Closets and Urinals. Henry C. Weeden, Boston, Mass.
- 298,834. Draughtsman's Adjustable Curve Ruler. Frank Winthrop Davenport, Providence, R. I.
- 298,850. Tile-Machine. Francis M., Maxwell G., Milo J. and Marcus L. Harris, Covington, Ind.
- 298,860. Blind-slat Operator. William H. Keeran, Auburn, Ind.
- 298,888. Border-Light for Theatres. John T. Prededy, Carson, Nev.
- 298,921. Decorative Tile. Savillon Van Campen, Jersey City, N. J.
- 298,970. Eaves-Trough Hanger. Henry John Hoepfner, Athens, O.

Synopsis of Building News.

Achison, Kan.—Architect H. B. Prudden reports the outlook good, and in addition to a large amount of small work in his office, plans for the following just finished or under way: For Hon. James N. Burnes, M.C., hotel, four stories, brick, tin roof, 100 by 150 feet, cost \$40,000; First National Bank, three stories, cut stone, tin roof, tile floors, 25 by 90 feet, cost not yet known; Crookham & Nealey, contractors. Mayor C. C. Burnes, store building, two stories, pressed brick and cut stone, 45 by 150 feet, cost \$10,000; Henry Luth, contractor. Hon. H. P. Waggener, residence, cut stone, slate roof, 50 by 72 feet, cost \$30,000. D. E. Farnsworth, two-story frame residence, 30 by 45 feet, cost \$4,000; John F. Wright, contractor. John Brown, two-story brick residence, 28 by 40 feet, cost \$2,500; Jacob Spatz, contractor. Dr. Shulze, two-story frame residence, 32 by 52 feet; John T. Wright, contractor. Frank Howard, two-story and attic brick residence, 34 by 50 feet; cost \$4,700; John T. Wright, contractor. Chas. E. Styles, two-story brick and stone residence, 40 by 46 feet; cost \$5,200; John T. Wright, contractor. David Sear, two-story brick residence, 40 by 58 feet; contract not let above foundation. J. C. Fox, two-story and basement, 45 by 60 feet; projected.

Buffalo, N. Y.—The Builders' Association having declined to raise the wages of stone-masons and bricklayers from \$3 to \$3.50 per day, as demanded by the Union, five hundred men refused to go to work on the morning of the 26th ult. At a meeting of the builders it was decided to firmly oppose the strike. In view of the Wall-street excitement, it was thought money would be close, and the fact that there was comparatively little building and the difficulty experienced by many of the members in finding work for the men in their employ, they considered \$3 a day was full enough pay for stonemasons and bricklayers. The members of the Union who are out of work are to receive \$7 a week each, pending their return to labor; but while their Union (No. 36) is said to be one of the strongest in the country, with \$4,000 in its treasury, the indications are that its members will have to live on \$7 a week a long time—much longer than the \$4,000 will last—if they refuse to work until the builders accede to their demand.

Chicago, Ill.—The building season is so far advanced that definite statement can be made of the situation. There is to all appearances more building in progress than during the year previous, though there are now signs of a falling off in projected building. Last year several months were lost in the spring through the strike of bricklayers, and as a consequence much building was left over or indefinitely laid aside. This year all went well until a month ago, when the failure of some dishonest speculators in New York affected the confidence of capitalists; and though slight, its influence can be seen in the falling off in the architects' offices, though not as yet in the list of building permits. It would not be surprising if the building interest would be affected by the presidential contest, almost all forms of business being affected last week by the presence of the convention.

There have been no buildings of extraordinary size projected during the past month that have any certainty of completion, aside from those noted in previous issues, except a large factory building for Bidler Bros. by architect J. J. Flanders, to cost \$150,000; the McNeil office building by architect W. A. Furber, to be erected on the corner of Clark and Jackson streets, to cost \$200,000; the immediate erection of the Durand office building, plans of which were prepared by architect Randolph some months ago, and the Ryerson building, which will equal those already erected for that gentleman from plans by architects Adler and Sullivan, the cost of which will probably be considerably over \$100,000.

In looking over the building field, it is apparent that the building of small cottages in the outskirts is on the increase. They are built by large real-estate firms and are readily sold before they are completed.

In accordance with the move noted some months ago, West Madison street is undergoing a rapid change. Within two weeks as many as twenty frame buildings have been torn down or removed to make room for substantial buildings, and the time is near when the old frame buildings will all vanish and the street present a vastly improved appearance.

The tearing up of streets continues for paving, laying gas-pipes and telegraph cables. The Mutual Union Telegraph have applied for a permit to place their wires under the streets, and it is said that this is done by the Western Union Company, but that they fear to make the move in their own name, fearing that other cities will oblige them to go under ground also. It is beginning to be a matter of regret by all interested, as well as the public, that large sewers were not built years ago for the accommodation of these "underground interests."

At a recent meeting of the Board of Real Estate Managers of the Board of Trade building, all the members present, it was decided to reject all bids offered for putting in the stained glass in the skylight of the new building.

Architects Adler and Sullivan are very busy with plans which cover almost all classes of building, but many are not in a condition to report. Besides the Ryerson building noted elsewhere, they have plans for a factory building for Scoville & Towne. It will be five stories, 175 by 150, constructed of brick and iron, with solid wood floors. The arrangement of plans will admit over sixty-five per cent of light. Also plans of a factory building, running through from Third avenue to Dearborn street near Van Buren, for B. & S. Shoemaker, 50 by 70 feet, five stories high. The construction will be brick and iron. Also the following residences: For R. Robel, two-story and mansard, Greenstone pressed brick and terra cotta, to cost \$18,000. For Mrs. Anna McCormick, on Michigan avenue near Eighteenth street, two stories, basement and mansard, 25 feet front, brownstone, pressed brick and terra cotta, cost \$12,000. For Mr. Straus, on Wabash avenue near Twenty-fourth street, a double house, three stories and mansard, 42 feet front, brownstone and pressed brick, cost \$20,000.

Architects Saxe and Barfield are building a three-story brick residence at 251 South Halsted street for Mr. Scholza, 66 by 25, cost about \$7,000. Also three suburban residences, one for Mr. Farley and two for Q. Ball. The style of architecture is Queen Anne. They are each 32 feet wide and 52 feet deep, and are nicely finished. Also plans for a brick residence for supervisor John McNeal, in Lake View, for about \$8,000. Plans also in preparation for a private residence for Mr. Goodwillie, which will cost \$6,000.

Architect Schock is building a house for Geo. M. Davis at Austin. It is Colonial in style and has created considerable attention, various people visiting it each day, there being many novel features. It is three stories, with a cellar, Artesian-well stone in the basement, the upper part is stone, cost will be about \$7,500. Also have in progress plans for a house for J. J. Walser, cost about \$5,000. Also one for W. F. Hayward, three stories, built of brick, stone and terra-cotta ornamentation in the Colonial style, cost about \$4,000, to be built at Rogers Park. Also making plans for J. H. Gilman at Ottawa, Ill., for a frame house, 48 by 48, three stories high, Queen Anne in style, cost \$5,500. Also alterations for W. H. Hintz, of Elgin, Ill. Also remodeling the Purington block, which will be changed in the Grand Union Hotel. They are going to add two more stories and put in all modern improvements, and make it a first-class hotel of about 200 rooms; the improvement will cost about \$50,000; the building is owned by Wm. B. Giles. Also at Austin, the Masonic Hall clubrooms and Park Hotel for Mr. Giles. The walls are of pressed brick with stores underneath, seven stories high, cost \$20,000. Also a residence in progress for Wm. B. Baker, on the northeast corner of Prairie avenue and Gano street, 32 by 60, cellars and three stories, built of brownstone and Trenton pressed brick, cost about \$13,000. Also an addition and alterations on H. L. Dahl's residence on La Salle avenue near north avenue, costing \$1,200. Also a house in progress on Warren avenue between Leavitt street and Oakley, two stories and basement, pressed brick front, 21 by 42, cost \$4,200.

Architect J. M. Van Osdel has under construction for Henry Memory, on the southeast corner of Pacific avenue and Van Buren street, an office building 30 by 100 feet, six stories and basement, trimmed with Wyoming Valley bluestone, to cost \$60,000. Also the following: A factory on the corner of Pearson and Wells streets for the American Meter Co., 50 by 75 feet, two stories and basement, to cost \$8,000; for George D. Drake, on West Jackson street, near Laughlin, a brick dwelling-house, 25 by 50 feet, three stories and basement, to cost \$8,000; for John Sollitt, on West Jackson street, near Laughlin, a dwelling-house, 27 by 63 feet, two stories, mansard roof and basement, to be of Anderson pressed brick, trimmed with McArthur brownstone, to cost about \$12,000; a flat for Victor Walter, 25 by 65 feet, three stories and basement of pressed brick with brownstone trimmings, to cost about \$7,500; for Dr. Brown, on northwest corner of Madison and Canal streets, a building 60 by 66 feet, six stories and basement, to be of St. Louis pressed brick, trimmed with Bedford stone, to cost \$42,000; two houses for Mr. Maynard, on the corner of Adams street and Oakley, each three stories and basement, 18 by 65 feet, of Indiana pressed brick and brownstone trimmings, to cost \$6,500 each; for C. P. Carter, on the corner of Thirty-first street and Prairie avenue, a block of buildings, 74 by 137 feet, three stories and basement, to cost \$45,000. He is finishing, also, the Parker building on Sherman street, which will cost \$100,000.

Architect Jean A. Wierzbieniec is building on West Monroe street, near Throop, for Mr. A. Plamondon, a two-story double residence, 50 by 76 feet, with Lamont stone front, porches and granite columns capped with marble, hip roof covered with slate, interior finish of hardwood, with gault and bronze trimmings, to cost about \$25,000; also for J.

H. Ward, a building 60 by 90 feet, three-story flats, pressed brick and stone trimmings, to cost about \$20,000; and for J. Johnson, on Milwaukee avenue, one 45 by 75 feet, stone front, four stories, for stores and flats, to cost about \$18,000.

Architect Miller is building four houses for Alburn and Hubert on Park avenue, 75 feet front, two stories high and cellar, stone fronts, and will cost about \$25,000. Also a flat of buildings on Leavitt street, for Mrs. Prewett, of Anderson pressed brick, moulded and ornamental front, cost about \$6,000. Also a house for W. E. Burt, on the corner of Monroe and Lincoln streets, Queen Anne style, sharp roof, pressed brick front, 48 feet front, by about 70 deep, three stories and basement, \$22,000. Also for S. Wise, two houses, 37 feet front, two stories high and cellar, built of pressed brick, stone trimmings and very handsome, cost about \$10,000.

Architect T. V. Wadskier has planned for R. W. Prendergast a \$7,000 dwelling at 7 Boston street. For the Chicago West Division Railway Company, \$40,000 brick stables have been planned at Ogden and Oakley avenues. Also plans for a large store on the corner of Market and Adams streets, for C. A. Blair and C. M. Henderson. It will be built of Anderson pressed brick, with brownstone trimmings. It is six stories and basement, 96 by 123, with the exception of about 50 feet, which is about 170 feet deep, and will cost about \$160,000 to \$165,000. It will contain all the modern improvements.

Architect S. S. Beman is building three houses on Michigan avenue near Sixteenth street, for Addison Ballard. They are 18 by about 80 feet deep, three stories and attic and basement, built of pressed brick and brownstone. The principal features of these houses is a large hall in the center and large galleries around it. A large dome or cupola in the center lights the hall, cost about \$30,000. Also residence for Mr. Morrison next to above-mentioned houses, built of pressed brick and brownstone trimmings, about 22 by 70, two stories and attic, cost about \$12,000. Also for Wm. H. Murray, on Prairie avenue near Nineteenth street, 35 by 70, of Philadelphia brick and brownstone, three stories and basement, cost \$32,000. Also the plans for Rosalie Music Hall, for the Rosalie Music Company at South Park, are prepared. It will be 60 by 100, two stories. First story of brick. The upper part will be constructed of timber, Colonial style. The building will be quite picturesque and will contain stores underneath. Also eight houses at South Park, ranging from \$3,000 to \$10,000.

Architect P. J. Pierce has reconstructed the store interior for C. Jevne & Co., recently burned out. The interior of the store, it is said, will be the finest west of New York. It is a large double store on Madison between Clark and Dearborn streets, and is handsomely fitted up with oak and cherry fixtures, and contains large mirrors on either side, which line the walls for a distance with French plate-glass. The store contains separate apartments neatly arranged, there being one allotted for cigars, one for butter, for coffees, as well as wines, etc. Also ten houses commenced some time since for the National Life Insurance Company, of Maine, are under process of construction, and approaching completion, on the corner of Vincennes avenue and Oak street.

Architects Bauer and Hill are building a \$60,000 block of seven stores and twelve flats. The front on Thirty-first street will be 118 feet, on Cottage Grove avenue, 97 feet. The fronts will be of Anderson pressed brick, with brownstone for the base and Burlington stone trimmings for the upper part, and terra-cotta panels. Also several other buildings in contemplation.

Architect Harry Firth is building a brick building, 120 by 60, for the Metropolitan Gas Co., on Forty-second street, near the lake. Although it is built rather cheap, it is a handsome structure, cost about \$30,000. Other buildings in contemplation.

Architect H. Rehboldt reports, for H. Wedemeyer, three-story double flats, brownstone front, 40 by 80 feet, cost \$23,000, nearly finished. J. Walter, contractor. E. Jaeger, one-and-a-half-story frame cottage, 25 by 56 feet, cost \$4,000, nearly finished. J. H. Muller, contractor. Dr. W. Doepp, three-story stores with flats, brick front, 30 by 90 feet, cost \$19,000; Cook & McLain, four-story stores with flats, brick, 50 by 61 feet, cost \$22,000. A. A. Stevens & Co., contractors; W. Reiley, two-story addition, brick, 23 by 40 feet, cost \$3,500. T. White, contractor; Ed. Fitzgibbon, three-story brick store with flats, 24 by 76 feet, cost \$8,000. G. Lehman, contractor; W. H. Davis, six dwellings, brick, each 98.6 by 59 feet, cost \$27,000. A. A. Stevens & Co., contractors; Jos. Davoli, one-and-a-half-story frame cottage, 27 by 45 feet, cost \$5,000; Dav. Wylie, three-story warehouse, 100 by 150 feet, cost \$15,000. G. Schmidt, contractor; P. McLaughlin, three-story brick dwelling, 22 by 70 feet, cost \$5,000; N. Davis, three-story brick addition, 34 by 80 feet, cost \$7,500. W. Pound, contractor; Aug. Wadrich, three-story brick store with flats, 23.6 by 86 feet, cost \$7,000. Ch. Gulzow, contractor; Ed. Marlow, three two-story brick dwellings, each 22 by 44 feet, cost \$6,500. G. Kessler, contractor; Otto Desauer, frame cottage, 32 by 50 feet, cost \$3,100. Albert Schneider, contractor; H. Welge, barn, 25 by 35 feet, cost \$3,200. Ch. Thiele, contractor.

Architects Edbrooke & Burnham, for John B. Kirk, Evanston, Ill., residence, 45 by 100 feet, two-story and attic, cellar walls of stone, first story of pressed brick and greenstone trimmings, second story pressed brick and timber, high slate roof with handsome gables and dormers, interior finish of hardwoods, cost \$30,000, plans being completed; J. L. Campbell, five houses on Dekalb street, pressed brick front, brownstone trimmings, to cost \$3,000 each; F. C. Pennington, residence, on Drexel boulevard near Fortieth street, 25 by 60 feet, Anderson pressed brick front, two-story and cellar, cost \$6,000; plans completed.

Architect Julius H. Huber has let the contract for a four-story flat building for Philip Steinmuller, 25 by 70 feet, at No. 505 North Clark street. The front will be of bluestone, swelled above the first story, plate-glass windows, seven rooms in each flat, elevator in the rear, and French roof. It will cost \$12,000. He is building for George Schmidt two houses on Bellevue place, 17 by 70 feet each, two stories and attic, with bluestone fronts, to cost \$7,500 each; three-story flat building, with pressed-brick front and stone trimmings, on Ontario street, near La Salle avenue, for F. W. Huxmann, to cost \$11,000. Plans are being made for two houses, 16 by 39 feet, on State street, near Walton place, for John Willens. The fronts will be of pressed brick, terra cotta and bluestone. They will cost \$8,000. He is erecting a two-story and basement flat building and a barn for J. Becker, on Larrabee street, near Webster. The front of the house will be of pressed brick with stone trimmings, and will cost \$8,000. A three-story flat building, 24 by 56 feet, pressed-brick front, terra-cotta trimmings, and stained-glass windows, for Joseph Moeschbaecker, at No. 307 Rush street, to cost \$8,000. A residence for B. Webber, at Rose Hill, 28 by 50 feet, with high stone basement, pressed-brick front, and 60 feet of greenhouse, to cost \$8,000; also a cottage for the same person at Ravenswood, irregular in shape, 28 by 50 feet, to cost \$2,300. A memorial chapel at Manistee, Mich., 26 by 40 feet, for R. M. Cherry, to cost \$3,000.

Architect Halberg is building for Mr. Schroeder, at Ravenswood, a frame residence of one and one-half stories with brick basement, with three cupolas, balcony and veranda, supported with moulded columns. It contains eight rooms with a large cellar below, all finished in select pine oil; cost about \$2,500. Also a fine residence on Grand boulevard and Thirty-first street, of pressed brick front and double verandas and dormer windows and Swiss roof. The inside is finished with hard woods. It is 78 by 50, and valued at about \$10,000. In connection with this, a barn, 50 by 55, is to be built. Also for L. L. Colburn, a bay front of Anderson pressed brick, with ornamentation and brownstone terra cotta. Also a barn for Ames & Frost, 28 by 50, in addition to a factory they have just completed. It is built, and cost \$3,000. For E. L. Allen, a dwelling-house, 50 by 25, on Jackson street, near Ashland avenue, built of Indiana pressed brick, with stone basement, containing two stories, laundry and cellar; one room and attic in upper part finished in hard woods; cost about \$6,500. Also for Mr. Hill, on Dearborn avenue near Erie street, 29 by 60, eight-room flat and basement.

Architect Akerman is building three houses for Dr. Baxter, on the corner of Aberdeen and Monroe streets. They are to be built of brick with brownstone trimmings and Mansard roof covered with slate, 30 by 77, 78 by 62, two are two stories and attic, one three stories; cost about \$30,000. Also one at 14 Pine street for Mrs. C. B. Fern, 35 by 64, of Anderson pressed brick, cut stone trimmings; cost about \$5,000, two stories and cellar; some other work in progress.

Architect Alfred Smith is building a block of dwelling-houses for John M. Dowling, on Pearson street east of the drive, three-story and basement. They have green stone basement, walls of Anderson pressed brick with terra-cotta and brownstone trimmings, 60 by 80 feet, and will cost about \$35,000. Also a block of flats for Wm. Hoyt, on the corner of Pine and Indiana streets, 100 feet front, four-story and basement, built of brick with stone trimmings; cost \$40,000. Also a store on Van Buren street near Wood, 25 by 70 feet, for Mark J. Forsyth, brick with stone front; cost \$10,000. Also three flats, 22 by 70 feet, built of Anderson pressed brick and stone trimmings, on Elizabeth street near Madison; cost about \$9,000. Also a block of dwellings for same party on the same street corner of Randolph, 180 feet front; cost \$55,000. Also a house in Oak park for B. L. Pease. The first story is of brick, the remainder frame; cost about \$8,000. A dwelling-house for W. D. Messenger on West Jackson street near Ashland avenue, 25 by 64 feet, built of pressed brick, greenstone basement and brownstone trimmings; cost \$8,000.

Architects Treat & Foltz have let contracts on house for Mrs. Barber, on Delaware Place, three stories and basement, 25 by 50 feet, to cost about \$8,000. They made, also, for E. J. Lehmann, the plans for a block of brick stores and flats, three stories, 46 by 68 feet, stone front, at 885 and 887 North Clark street, to cost \$12,000; Bodner Bros., contractors.

Architect L. B. Dixon is preparing plans for a two-story, basement and attic residence, Queen Anne style, for Mr. Albert R. Bremer, on Greenwood avenue, near Fifth street. Basement will be of stone, superstructure frame; bay window on south front, and piazza with southeast exposure; interior will be finished in cherry and oak; the cost, including all modern improvements, about \$12,000. He planned, also, for C. J. Hess, two dwellings, at Prairie avenue and Thirtieth street, each 25 by 75 feet, block stone basements, oriel windows in two upper stories, slate peaked roofs, hardwood finish, and each to cost \$12,000; Joseph Phillips and the Campbells, contractors. Also a fine house for H. J. Miller, on Calumet avenue near Thirty-first street; brick and brownstone, hardwood finish, cost \$12,000; Fox & Hawes, builders. For S. A. Clark, residence on Thirty-first street, near Calumet avenue; Elmer Bros. and Brown & Wood, builders. On his boards are plans for two stores with flats above, on West Madison street, near Western avenue, 40 by 75 feet, to cost \$12,000.

Architect Norman S. Patton has planned, for P. McEwan, brick store and flats, to cost \$12,000, at 89 and 91 West Madison street.

Architect Moore is building for Wm. Ripley, on the corner of Washington and Leavitt streets, a residence 40 by 60, two stories and cellar, with sharp roof, front and sides greenstone and Anderson pressed brick, basement of artesian stone; cost \$20,000. Also have plans in preparation for Mr. S. P. Munger, for a residence, 24 by 56, two stories and basement, on Loomis street, between Adams and Jackson. It is to be of Indiana brick with brownstone trimmings, cost about \$5,000.

Mr. Moore and J. C. Laine also have plans for the Maverick bank building, in St. Antonio, Texas, 60 by 100, four stories and basement; it will be built of brick, limestone trimmings, and mansard roof, and clock tower. There will be an iron veranda extending around the entire building on the street fronts. Also for L. H. Davis, of Davis and Requea, insurance men, a building for store and flats, stores underneath with flat of eight rooms, on Wabash avenue near Sixteenth street; it is 50 by 80, three stories and basement, limestone front, and will cost about \$20,000.

Architect Fred Baumann is building three three-story brick houses on Park avenue and Wood street for John Featherstone, the prominent iron manufacturer. The basement and first story is of stone, and the remainder of pressed brick. The three houses have a dome in the center of the front. Also plans for two houses on Wood street, each of which has a square bay window in front from the basement to the top. Also three other houses for Mr. Featherstone. Each house has a bay window fronting on Washington street. The bay windows stand on a stone column, and are made of stone. The bay windows are framed from the top of the column to the top of the bay with wood. The corners are decorated with wood columns, and the roof has a fancy railing of cast iron. Other houses in progress.

Architect Edward Baumann is building for A. McNally, on North Park avenue north of Garfield avenue, two dwelling-houses, three stories and basement, of brick with limestone front, 46 by 60 feet; cost about \$15,000. Also a dwelling-house for M. Ullic, on La Salle avenue north of Schiller street, 22 by 70 feet, of brick, brownstone front; cost about \$7,000.

Architect M. L. Beers is building a cottage for Mrs. E. A. Page on Madison avenue, between Sixty-fourth and Sixty-fifth streets, at Wood Lawn; cost about \$2,500. Also a residence for Dr. Chas. F. Stewart, on Oglesby avenue between Sixty-fourth and Sixty-fifth streets, at Wood Lawn. This house is finished in butternut, gumwood and Georgia pine. It is 27 by 46 feet, two stories and attic and cellar; cost \$5,000. Also a residence for Miss M. E. Spain. This is to be built on the corner of Lincoln and Everett streets at Wood Lawn, and will be 30 by 50 feet, two stories, attic and cellar, and will cost \$5,000. Also a residence for Mrs. C. E. Lain, to be built on the corner of Fifty-seventh street and Madison avenue. It is rather peculiar in construction. The style is Colonial, with a large hall running through east and west with a large wood fireplace in each end. The house has a parlor, sitting-room and large hall in the second story, and will be finished in birch, red oak and clear pine. It will be two stories and attic in height, 37 by 49 feet, and will cost about \$7,000. Also a residence being built on Greenwood avenue near Fifth street for S. E. Williamson, 36 by 48 feet, two stories, attic and cellar in height, to be finished in Georgia pine and clear pine; cost about \$6,000. Also a residence on Forty-seventh street between Greenwood avenue and Egendale avenue, to be built for Mrs. J. E. Osburn. The size of the house will be 30 by 46 feet, two stories, attic and cellar. The first and second stories will be finished throughout with birch and red oak, including the servants' room and all halls; cost about \$5,500. Also a school-house containing four rooms, to be built at Seneca, Ill. The plan includes all modern improvements; the best heating and ventilation, and the most perfect system of lighting; cost will be about \$12,000. Also superintending a schoolhouse that is being erected at Naperville, Ill.

Architect Cleveland is building a residence for F. T. Cochrane, on the corner of Twenty-eighth and State streets, for stores and flats, three-story and basement, 55½ by 62½, pressed brick front, cost about \$16,000.

Architect Flanders has just let a contract for Mr. Foss' building on Monroe street, opposite Jefferson Park, a block of flats, three stories in height, cost \$7,000. Also a large and handsome building on the corner of West Washington, Union and Waldo place, for Beidler Brothers. The building possesses unexcelled facilities for obtaining a full amount of light, and will be used for the purposes of a wholesale store. It has a frontage of 168 feet upon West Washington street and Waldo place, 150 on Union street. The building will be five stories in height; the first story will be brick piers and iron columns, and above the first story on Washington and Union streets the building will be faced with St. Louis pressed brick, and will be built in the finest style, it being the intention of the owners to lease it out for wholesale grocery purposes, or as a business house of some other character. The facilities of the building would offer superior advantages for handling freight, it being situated upon three different streets, and will be superior to any similar building on the south side. It will contain four elevators upon Washington street for passengers, and four more upon Waldo, to be used exclusively for freight. It will be substantially built, equal to any first-class house in the city; cost \$150,000.

Architect Colton is building a residence for Chas. K. Miller, on the north side near Schiller street. It is three stories and basement, of pressed brick, brownstone trimmings, 35 by 70 feet, with barn connected; cost \$20,000. Several others in contemplation.

Architect Arend is building a synagogue on the north side, on Rush street. It is 54 by 112 feet, built of brick, stone basement with a high tower in the center, and is very tasty in design.

Architects Furst & Rudolph are building for L. W. Fick, a dwelling-house on the southeast corner of Ashland avenue and Congress street, stone front, two stories, basement and attic, 40 by 60 feet; cost about \$25,000. Also a dwelling-house for N. Russ, on the northeast corner of Ashland avenue and York streets, built of Milwaukee pressed brick and Bedford stone trimming, 40 by 60 feet, two stories, basement and attic; cost \$30,000. Also in connection with this a barn, to cost \$4,000. Also a brick block of two flats, brownstone trimming, for Wm. H. Flemming, on Sangamon street near Van Buren street, 50 by 73 feet; cost about \$18,000. A residence on North Dearborn avenue for L. Sturckow, three stories and basement, 25 by 72 feet, of pressed brick, brownstone front; cost \$20,000. Also finishing an office for the Adams & Westlake Manufacturing Company, in their building on the corner of Ontario and Market streets; cost \$8,000. Also a flat on Sangamon street near Madison, 20 by 64 feet, three stories and cellar; cost \$9,000. Also a brick block of flats, two stories, 48 by 60 feet, on South Dearborn street near Twenty-third, for Mrs. C. Muhle; cost \$13,000. Also a brick store, flats above, for J. J. Kreer, 25 by 65 feet, on the corner of Market and Oak streets, three stories and basement; cost \$8,000. Also a factory building of four stories for B. D. & W. N. Eisen-drath, on Sangamon street; cost \$11,000. Also for M. Campbell, a two-story brick residence with basement and brownstone trimmings, 24 by 54 feet, on Ashland avenue near Congress street; cost about \$10,000. Also for Mr. Wolf, on Wabash avenue near Thirty-third street, pressed brick, brownstone trimmings, two stories and cellar, 50 by 72 feet; cost about \$18,000.

Carthage, Ill.—Architect G. W. Payne reports unfavorable condition, but improving, and in addition to sundry small work of his office, or on the boards, was a remodeled farmhouse for H. M. Walker, two-story frame, filled with brick, 36 by 59 feet, cost \$5,000; completed; McCohn & Payne, contractors. The Western Creamery Association, of Osceola, Iowa, have just completed a creamery at Carthage, cost \$6,000, with capacity to make 1,200 pounds butter daily.

Cincinnati, O.—A joint meeting of the courthouse trustees, county officers and county commissioners, was held on the 21st ult., for the purpose of inspecting the plans of architect McLaughlin, for the reconstruction of the courthouse destroyed by the great mob. The plans were approved after a few changes. The principal change from the old structure contemplates the doing away with the rotunda, and in its place having another story erected, covering one-half of the building. In this addition the circuit-room and jury-rooms will be located. The reconstruction will be completed in the course of one and a half years. The outer walls will remain, at least such as will be deemed safe by experts, and as much of the old material utilized as possible.

Architect S. E. Des Jardens: For Geo. W. Hardacre, three frame houses in block, cost \$8,000; under way; Rice & McMillan, contractors. L. F. Weimer, frame

house, cost \$4,500; H. A. Smith, four-story brick and cut stone, 25 by 80 feet, cost \$14,000; Wm. H. Stewart's Sons, contractors. John L. Whetstone, four-story brick factory building, 82 by 56 feet, cost \$14,500; Jos. Griffith & Sons, contractors. John L. Whetstone, four-story brick 140 by 56 feet; projected. F. C. Cross, frame dwelling, cost about \$8,000. H. T. Eddy, brick dwelling, cost about \$8,000. J. L. Irvine, brick dwelling, at Richmond, Ky., cost about \$12,000. J. W. Barton, two-story brick, northwest corner Summit and McMillan streets; cost \$16,000. J. W. and F. G. Robinson, two-story brick, Richmond street, between Mound and John, cost \$4,000. J. G. Spicker, three-story brick, Michaels street, near Neave, cost \$5,000. J. W. Sibley, two-story brick, Francis, east side Gilbert avenue, north of Morris street, cost \$3,000. H. Rothkopf, three-story brick, north side Poplar street, near Freeman, cost \$4,500. L. Burger, three-story brick, southeast corner of Clark and Freeman, cost \$2,800. Chas. Barnes, three two-story bricks, north side Elder street, between Third and Fourth, cost \$5,000. Ed. Hoffman, two-and-a-half-story frame, north side Warner street, west of Ravine, cost \$2,000. L. Voight, two-story frame, south side Winker street, near Kemper lane, cost \$2,000. J. G. Rodemaker, three-story brick, Eighth and Burns streets, cost \$8,000. F. Bill, two-story brick, Storrs, between Burns and Neave, cost \$3,500. Chas. Gleaser, two-and-a-half-story brick, south side Molitor, near Vine, cost \$3,500. W. E. Stevens, two-story frame, west side Willow, between Colerain avenue and Eastern avenue, cost \$3,000. Harwood & Sons, three-story brick, north side Seventh street, between Baymiller and Freeman, cost \$6,700. W. H. Stewart & Sons, three-story brick, No. 283 Vine street, cost \$4,500. Mrs. J. Cottman, two-story frame, west side Price street, between Slack and Boas, cost \$1,800. Jno. Feller, two-story brick, No. 116 Calhoun street, cost \$1,500. Jno. Feller, two-story brick, west side Dallas street, near Molitor, cost \$2,800. John Myers, two two-story bricks, east side Chatham street, between Locust and McMillan streets, cost \$4,000. F. and D. Kallendorf, two-story brick, No. 442 Linn street, cost \$4,500. Geo. Hauer, two-story brick, Browne street, opposite Brighton House, cost \$4,000.

The more important building permits of late date include the following: Hy. Kueckheimer, three-and-a-half-story brick, south side Providence, between Fifteenth and Fourteenth streets; cost \$4,000. Fred Otte, two-and-a-half-story brick, Price avenue, west of Matson's Place; cost \$5,000. Jas. Griffith & Son, repair two-story brick, No. 202 Fourth street; cost \$3,000. J. Eichbusch, two-story brick, 40 Jones street; cost \$2,000. Hy. Harris, two-and-a-half-story brick, east side Considine, near Warsaw pike; cost \$3,500. Hy. Weiman, two-story brick, 1177 Vine street; cost \$4,000. Bettman & Bloom, repair four-story brick, 116 West Third street; cost \$5,000. Geo. Pott, three-story brick, north side Gest, between C. H. & D. R. R. and State avenue; cost \$6,500. A. Hiener, two-story brick, northeast corner Fourth avenue and Jane street; cost \$5,000. Augusta Kuchenmeister, four-story brick, east side Gilbert avenue, near Sixth street; cost \$3,000. M. E. Dibble, seven-story stone front, corner Patterson alley and Main street; cost \$30,000. D. H. Lyons, three-story brick, 418 Seventh street; cost \$5,000. A. Reely & Son, four-story brick, north side Findlay, between Central avenue and Canal; cost \$5,000. James Griffith & Sons, two-and-a-half-story frame, east side of Loth, between Vine and Walnut streets; cost \$2,500. James M. Glen, four-story brick, 173 Broadway; cost \$5,000. Miller & Ronne, two-story brick, 51 Peete street; cost \$2,500.

Architect Geo. W. Rapp reports business good, and outlook favorable, and the following under way: For Christian Moerline, six-story and basement brick store building, on corner Pearl and Race streets, terra-cotta and freestone trimmings, front open, with iron columns between large windows, 48 by 64 feet, cost \$25,000. The Thos. Kirby heirs, remodeling brick building at cost of \$6,275. Julius Balke, Sr., opera house and store building, at Bellevue, Ky., large hall and stage for theatrical performances, two smaller halls for lodge purposes, of dark Newport brick and ironstone fronts, 56 by 90 feet, cost \$25,000.

Cleveland, O.—An active movement in favor of the erection of a large exposition building and music hall combined, with board of trade rooms in upper story, enlists the co-operation of the leading business men, and the zeal with which the enterprise is inaugurated presages the speedy completion of a building that will be among the largest and best of the kind in the country.

The Cleveland Storage Company will in a few days begin the erection of a magnificent storehouse on Scranton avenue. The walls will be of brick, and built very thick. The length of the building will be 110 feet and its width 175 feet. It will be used for storage of all kinds of merchandise.

Columbus, O.—The directors of the Board of Trade, at a meeting on the 22d ult., requested Senator Sherman and Congressman Converse to do all in their power to secure the passage of the bill, prepared by the latter, making an additional appropriation of \$150,000 to increase the size of the government building at Columbus. The building as planned and under way is deemed entirely inadequate for the needs of the place.

Denver, Col.—Architect Wm. Quayle, the People's Tabernacle, 50 by 80 feet, Blake street, cost \$7,000.

Architect R. S. Roaschub, for Mrs. S. S. Tallant, two-story brick dwelling, 24 by 56 feet, on Curtis street, cost \$4,500.

Architect E. P. Brink, for L. Alkire, two-story brick dwelling on Broadway, cost \$10,000.

Architect E. Anthony, for Richard Sopris, two-story brick double dwelling, 46 by 50 feet, on Stout street, cost \$7,000.

Architect F. E. Edbrooke, for W. B. Daniels, four-story stone-front business block, 25 by 125 feet, on Lawrence street, cost \$20,000.

Architects Varian & Sterner, for Geo. W. Timmerman, two-story business block, 50 by 125 feet, on Champa street, cost \$13,000.

Architect Fred A. Hale, for Westminster Presbyterian church, South Tenth street, cost \$5,000.

Detroit, Mich.—Architects are generally resting from the rush of a busy spring, but a few are still engaged on plans for buildings yet to be erected. Contractors were said to be generally idle by a leading architect, who thought that most of the building for the season was very nearly completed. A slight pick up in business next week, however, would not surprise him.

Another architect had finished all his larger contracts, but was still at work on quite a number of unpretentious dwelling-houses. This kind of work he thought was plentiful among all the architects. He had several matters on the tapis which he was compelled to keep quiet for a day or two, but if the reporter would call after that lapse of time he would perhaps have several good "building items."

Howard & Northwood are making extensive alterations and improvements on the malthouse on Grand River avenue, near the railroad crossing. The changes will cost \$12,000.

Among the important building permits issued are the following: Durst & Wood, two-story frame dwelling, to cost \$2,000; Walter Beckwith, two-story brick horse-shoe shop, at 102 Brush street, to cost \$2,000; John La More, two-story frame dwelling, at 54 Pitcher street, to cost \$3,000; A. J. Collins, two-story dwelling at 297 Harrison avenue, to cost \$2,000; W. H. Pocock, three-story brick dwelling on Lafayette avenue, to cost \$6,000; Julius Wilke, three two-story frame dwellings on Wabash avenue and Howard street, to cost \$3,500; Daniel Sullivan, block of two three-story brick stores and hall on Michigan avenue, to cost \$9,000; Leo Scheible, two frame dwellings on Abbott street, to cost \$3,400; C. K. Secor, frame dwelling, corner Ferry and St. Aubin avenue, to cost \$7,500; Wuesteward & Bro., brick store, on Russell street, to cost \$4,100; Jones & Co., brick addition of two stories, to cost \$3,500; the Detroit Sanitarium, third story to brick building on West Fort street, to cost \$5,000.

Architects Donaldson & Meier are at work on a number of small store buildings and residences. A better business for some time past is reported, with a good prospect for all classes of buildings next fall.

Architect A. C. Varney reported work commenced on handsome building of Butler & Chope on Randolph street, and that Abraham Lapham was putting up a \$6,000 residence on Bagg street near Cass. He says a false impression prevails about the price of brick, but he wants the people to know that the brickyards have a large amount of brick on hand, and that contracts can be made just as cheap now as in the spring.

Additional building permits: John Beattie, three-story brick store at 288 Grand River avenue, cost \$5,000; F. S. Claxton, two-story brick store at 181 and 183 St. Aubin avenue, cost \$2,100; W. G. Vinton & Co., two-story brick barn, \$2,800; Richard Rogatzky, two-story brick store at 716 Michigan avenue, cost \$4,000; Abraham Lapham, three-story brick dwelling at 181 Bagg street, cost \$4,400; Gordon W. Lloyd, two-story brick car-work office on Foundry street, cost \$2,000; Gordon W. Lloyd, three-story brick dwelling at 546 Woodward avenue, cost \$18,000; Clement Lafferty, six frame cottages on Howard street, cost \$4,950; W. D. Smith, two-story brick dwelling at 89 Warren avenue, cost \$6,000; Richard W. Dean, two one-story frame dwellings, cost \$2,800; Robert Barrie, three-story brick store at 479 Grand River avenue, cost \$4,500; Spitzley Bros., three-story brick dwelling at 272 Malcomb street, cost \$2,200.

Dubuque, Iowa.—Architect F. D. Hyde, for Dubuque Natatorium Co., one-story brick, 42 by 100 feet, cost \$4,000; under way. W. W. Woodworth, brick business

block, one-story temporarily, 30 by 114 feet; under way. C. C. Crowell, of Charles City, Iowa, two-story frame cottage, cost \$3,500; plans not completed. M. A. Flanagan, of Fort Benton, M. T., two-story brick residence, cost \$6,000; plans sent out. B. S. Richards, Rock Rapids, Iowa, two-story and basement, bank and store building, brick, tin roof, 50 by 68 feet, cost \$8,000; plans sent out. Geo. F. Eggert, of Ackley, Iowa, two-story brick veneered residence, to cost \$3,000; making plans.

Elkhart, Ind.—Architects N. Weaver & Son report the outlook for building as not flattering, and the following under way: For Elkhart Opera House Company, three-story brick, composition and metal roof, 83 by 165 feet, cost \$50,000. J. A. Cook, two-story brick store building, 44 by 80 feet, cost \$10,000; N. Weaver, contractor. S. S. Strong, brick residence, cost \$10,000; N. Weaver, contractor. F. W. Miller, frame residence, cost \$6,000; Wm. Barger, contractor. Hal Davenport, frame residence, cost \$2,000; N. Weaver, contractor. N. Weaver, frame residence, cost \$3,000. D. S. Simonon, brick store rooms, 21 by 75 feet, cost \$4,000; M. Wertz, contractor. Andrew Hay, brick residence, cost \$3,500; S. Daub, contractor. High school brick building, cost \$20,000; S. Daub, contractor. Projected: Waterworks for Elkhart Water Co.

Grand Rapids, Mich.—Architect Sidney J. Osgood: For L. G. Maron, block of stores, brick, three stories, 132 by 113 feet, cost \$25,000 (under way); for the same, block of stores, 110 by 70 feet, two and three stories, cost \$15,000; also for same, a tenement house, cost \$2,500. City Hall at Adrian, Mich., brick and stone, two and three stories, slate roof, iron cornice, 53 by 81 feet, cost \$16,000.

Illinois Corporations.—The following corporations were licensed recently by the Secretary of State: The Mitchell Foundry Company of East St. Louis; capital \$10,000; incorporators, Charles A. Mitchell, Henry A. Alexander and Ira C. Terry. The Rockford Twist Drill and Bit Company; capital \$75,000; incorporators, James P. Thompson, Harry W. Thompson and Robert H. Tinker. The Contracting Plasterers' Association, of Chicago; without capital stock; for mutual benefit; incorporators, William H. Dorothy, Joseph Eastman and William H. Pigott. A certificate was filed to record an increase of the capital stock of the Union Brass Manufacturing Company, at Chicago, to \$250,000; also of the National Warehouse Company, at Chicago, to \$125,000. The Soper Lumber Company, of Chicago, has increased its capital stock to \$350,000.

The Belvidere Brick and Tile Company, at Belvidere; capital stock, \$3,500; incorporators, A. J. Thompson, William Eyre, J. C. Longear and A. O. Williams. The Trenton Tile Manufacturing Company, at Trenton, Clinton County; capital stock, \$5,000; incorporators, M. Ginzel, Adam Ewing, Jr., Joseph Hanke, H. H. Crea, F. Leonard and John Burton. The Northwestern Brick Company, of Chicago; capital stock, \$25,000; incorporators, August Dresel, John Felke and Henry Sebelin.

Indianapolis, Ind.—Architects Hodgson, Wallingford & Stem report a fair amount of work, but business not so good this year as last, and builders taking contracts at close figures. For H. N. Norton, frame residence, cost \$6,000. For Wm. Tucker, frame residence, \$6,000; two frame churches, cost \$5,000. For Charles Snyder, frame residence, cost \$3,000; under way; J. Behrman, contractor. For Ben. Walcott, brick and frame residence, cost \$7,000; under way; J. N. Corcoran, contractor. For Dr. Baker, frame residence, cost \$5,000. For Wm. F. Stiltz, frame residence, cost \$5,000. For H. Ohr, frame residence, cost \$2,000. For W. T. Fenton, block of brick residences, cost \$12,000. For F. R. Judson, frame residence, cost \$4,000. For E. Vansickle, frame residence, cost \$4,000. For M. Gold, of Vincennes, Indiana, frame residence, cost \$5,000; under way; Joseph Hammond, contractor.

Joliet, Ill.—Architect Julian Barnes reports the present condition fair, the outlook not flattering. For Levi Shaffner, two-story frame residence, tin and shingle roof, 32 by 57 feet, cost \$6,000, foundation laid; G. White, contractor. Charles Thayer, two-story frame residence, tin and shingle roof, 34 by 48 feet, cost \$4,000, foundation laid; S. B. Pease, contractor. James C. Zarley, two-story frame residence, 30 by 36 feet, cost \$2,000; Julian Barnes, contractor. W. G. Andrews, two-story frame residence, 28 by 47 feet, cost \$3,000. E. Talbot, two-story frame residence, 32 by 48 feet, cost \$2,500. Samuel Shuffler, two-story frame residence, 30 by 45 feet, cost \$2,800 (under way); Julian Barnes, contractor.

Kansas City, Mo.—Architect F. B. Hamilton reports business very good, and plans for Ariel Meinrath, for three-story brick warehouse, 24 by 105 feet, cost 6,000; now letting contracts. L. A. Allen, two-story brick residence, 35 by 56 feet, cost \$7,000, foundation being laid. D. B. McMechan, two-story brick dwelling, 28 by 50 feet, cost \$6,500. Wimbush, Powell & Co., four-story brick publishing house, 42 by 60 feet, cost \$12,000. G. B. Shaw & Co., two-story bank building for town in Kansas, 25 by 50 feet, cost \$4,000.

Milwaukee, Wis.—Weather has been favorable for building operations, and the opportunity has been improved to do a great deal of improvement. The buildings erected exceed the number built in any former year, although the new ones are not especially conspicuous for architectural prominence or cost. Among the important building permits recently issued we note the following: A dwelling-house for C. Zierman, on Thirteenth street, to cost \$2,000; a frame building for W. Richter, on Chestnut street, to cost \$4,000; a double dwelling for Mr. Harnett, on Broadway, to cost \$5,000; a brick factory for H. Riedeberg, on Menominee street, cost \$7,000; a brick building for Geo. H. Watkins, on Biddle street, corner of Jefferson, cost \$20,000; a frame dwelling for Mr. Ordway, on Astor and Knapp streets, to cost \$4,500; a brick veneered building for J. L. Larson, on Oregon street, to cost \$8,000; a dwelling for Fred Ehrh, on Walnut street, cost \$2,000; a factory for F. Roth, on Seventh street, cost \$2,000; two frame dwellings for William Wood, on Knapp street, to cost \$7,000; a dwelling for Charles Knorr, on Racine street, to cost \$2,500.

A dwelling, costing \$3,000, for Otto Schorse, on Twenty-first street, lots 22 and 23, block 4, second ward. A store, costing \$4,300, for M. Kunybeil, on lot 20, block 207, corner of Fourteenth and State streets, second ward. A store for H. H. Hackenthal, costing \$6,895, on lot 1, block 47, corner of National and Third avenues, eighth ward. Three frame cottages, costing \$3,500, on lot 1, block 13, Orchard street, twelfth ward. A brick factory, costing \$4,500, for L. Frank & Son, on lots 10 and 11, block 151, Market street, first ward. A brick-veneered dwelling, costing \$7,000, for Wm. Thwaites, on lots 4 and 5, block 138, Van Buren street, first ward.

Minneapolis, Minn.—Architect Jas. H. Record reports more building going on at the present time than ever before, and plans for Eugene A. Merrill, two-story, attic and basement building, brick, faced with St. Louis pressed brick and trimmed with Ohio sandstone, slate roof, hardwood finish inside, Gothic and Queen Anne style, 52 by 96 feet, cost about \$20,000, contract not let.

Kerridge & Son bought three lots in Oak Lake addition, and will build a residence, a series of greenhouses, and will plant one lot to flowers. B. Aaronson is to build a brick block, with a frontage of 60 feet, on Central avenue, adjoining the building recently erected by Mr. De Laittre. The block will be of brick and is to contain three stories. Mr. De Laittre is constructing a three-story hotel building on the same side of the street. Building Inspector Pardee is ready to issue permits, and has accorded to J. O. Bredding the right to erect a double brick veneered tenement on Second avenue south and Fourteenth street, to cost \$7,000. C. F. Powell is to build an \$8,000 house between Tenth and Eleventh avenues south, on Fifth street, in the east division. The street-car company has commenced to build a new barn for the extension of a line to penetrate the region about the Milwaukee shops and below the fair grounds. The barn will be 106 by 180 feet, two stories high, besides a storeroom 36 by 180 feet. The improvement will cost \$22,000. Eastern parties are negotiating for a site on Thirty-third avenue, between Twenty-seventh and Twenty-eighth streets south, on which to build a plow factory. Hill & Lindley are to build a four-story business block, 44 by 130, on First avenue north, between Third and Fourth streets, at a cost of \$20,000. W. S. Pattee has commenced the excavation for a block of stores on Third street, between Eleventh and Twelfth avenues south. Central avenue is enjoying a good-sized business boom this season, an unprecedented number of substantial business blocks being in progress or prospect of erection. In addition to those already under way, mention of which has already been made, A. H. Ives & Co. contemplate the erection of a three-story brick block with a frontage of 66 feet, on the site now occupied by three forlorn shanties just below the University avenue corner. The building will cost between \$15,000 and \$20,000, and work is to be begun in September. On the opposite side of the avenue, on the site now occupied by Hawes & Williams' shoe store, J. S. Lane will, this season, put up a three-story brick block.

Minnetonka, Minn.—A number of excellent hotels have been erected on the shores of Lake Minnetonka, the largest of which, Hotel Lafayette (at Minnetonka Beach), one of the finest and largest summer-resort hotels in the world, beautifully situated on the shores of this lake, and hitherto the objective point for thousands of our summer tourists from the South, East and West, is gaining in popularity each season, as its attractions become more widely known. The house is capable of accommodating nine hundred guests, and is supplied with all the conveniences and comforts of the modern hotel. An elegant line of steamers, with accommodations for over five thousand people, have been established on Lake Minnetonka, and a plentiful supply of sail and row boats will be found at all the landings. Some of the swiftest yachts in the country are numbered among this fleet.

New Orleans, Miss.—The main building of the world's industrial and cotton centennial exposition at New Orleans, now being constructed, is in many respects the most remarkable edifice ever erected in this country. The only larger structure in the world intended for the display of natural and industrial products, mechanical appliances, etc., is the Crystal Palace at Sydenham, England. Many of the principal architects of the north and south engaged in the competition for the plan of this building, and a number of elaborate and excellent designs were presented for the examination of the exposition management. After very careful consideration of all the details of each design, the plan prepared by Mr. G. M. Torgerson, of Meridian, Miss., was selected as affording the most complete and economical arrangement for exhibition purposes. Considerable surprise was occasioned by this choice. It was wholly unexpected that an architect in a little Mississippi town would gain a victory over men who had furnished designs for some of the chief buildings on the continent. Mr. Torgerson was highly recommended by Mr. G. W. Cable, and is a Swede, thoroughly educated and experienced in all the branches of his profession. A few years ago he located at Oxford, and has so revolutionized the architecture of the place that there are few handsomer cities anywhere. In his plan for this great exhibition building, Mr. Torgerson has sought to secure one vast unbroken level for the display in the most compact and ornate form. In this respect he has succeeded so admirably as to call forth commendatory expressions from the projectors of all former American expositions. He has produced the largest single room, every portion of which can be seen from any point without obstruction, of which there is any knowledge. The building is 1,378 feet long by 905 feet wide, covering thirty-three acres, or eleven acres more than the main building of the Philadelphia centennial exposition of 1876. There are 1,656,300 square feet of floor space, including the gallery. The reader may form a better impression of the vast dimensions of the structure by imagining three ordinary city squares, or blocks, one way, and five the other, covered by a solid roof. And if he chooses to allow his fancy to carry him still further, he can picture a monster panorama of the world's industry, extending before his vision uninterrupted by a single object. The roof, which is being made in Cincinnati, will cover 1,000,000 square feet. The active commercial rivalry of the different sections is aptly shown by the distribution of contracts for the materials. The window sash comes from Milwaukee, Wis. The glazing will be done by St. Louis parties. Four thousand kegs of nails are being shipped from Wheeling, W. Va. Nine million feet of Mississippi lumber will be consumed. A massive and magnificent group in bronze, typical of America, to be placed over the main entrance, is being made at Canton, Ohio; also a statue of Washington and Columbus, and coat-of-arms of all the states, which will appear in medallion form as part of the exterior ornamentation. Exquisitely modeled cornices are being made at New Orleans. The building will be 60 feet high with a tower 115 feet high, and the architect has been unusually fortunate in rendering the exterior exceedingly unique and attractive. A platform will be erected on the tower, reached by elevators, from which visitors may have an exceptionally fine view of the city of New Orleans, the exposition grounds, the Mississippi river, and the surrounding country. There will be one line of gallery extending around the entire circumference of the building, to which visitors will be carried by twenty steam and hydraulic elevators, representing all the manufacturers of those conveyances in this country. The music hall, situated in the center of the building, will be 364 feet wide, and will comfortably seat 11,000 persons. The platform is being built for 600 musicians. To light the building with incandescent lamps will require 15,000 lights and 1,800 horsepower. To light with the arc system will require 700 lamps and 700 horsepower to operate the dynamo. The total steam required for lighting and for machinery hall will be at least 3,000 horsepower. In this estimate is included the power for five arc lights of 36,000 candle power each, which will light the grounds. These are the largest single lamps ever constructed. The building will be in complete readiness for the reception of articles intended for exhibition by the middle of August.

Ottumwa, Iowa.—Architect Edward Clark says not many building projects are contemplated, but anticipates a building boom in about sixty days. Plans for Jno. Fullen, of Agency City, Iowa, two-story brick and stone residence, 28 by 54 feet, cost \$2,500. For Daniel Stearns, at Garden Grove, Iowa, two-story frame residence, lined with brick, stone foundation, cost \$4,500.

St. Louis, Mo.—W. P. Mullen's new residence on Dayton street near Glasgow avenue, Architect C. K. Ramsey, three stories and billiardroom attic, will be finished with terra cotta; estimated cost \$10,000. D. B. Gould's house on Washington avenue between Eighth and Ninth streets, will be six stories, 60 by 75 feet, front terra-cotta joinings, footing and center of columns Missouri granite; building will be 90 feet high.

The new Marine Hospital, now in course of erection, and for the building of which the sum of \$35,000 was appropriated, consists of three frame one-story pavilion wards radiating from the new executive building. The north ward is 70 feet long, the center ward 136 feet long, and the south ward 100 feet long, with an ample supply of windows for the admission of light and air. All around each ward is a covered porch, where the patients may walk during convalescence. The rear of the two outer wards forms a sort of quadrangle, in which are the lavatories and smoking-room. The hospital stands on an eminence in the center of seventeen acres, and commands a view of the Mississippi and the undulating prairie lands across the river.

St. Paul, Minn.—The *Pioneer Press* of the 25th ult. contained a cut of the new University Coliseum, used during that week for the first time for the university commencement exercises. It was planned and built under the direction of architect L. S. Buffington, of Minneapolis, and is described as follows: The structure has been built with more reference to its internal arrangement than its architectural beauty. It nevertheless is a striking one, and its capacity and admirable arrangement is likely to be a surprise to the thousands of people who may visit it during the coming month. It is now practically completed, and the painters are putting on the outside finishing. In form the building is on the inside almost egg-shaped, and measures 165 by 154 feet. The main roof is carried on a truss which spans a distance of 111 feet—wider than Washington or Hennepin avenue. It is fifty-five feet and a half from the outside of the sounding-board to the front of the two tiers of galleries. The building is framed, but it has been arranged with fifty-six doors, ample exits, and wide, easy staircases. The stage is six feet high, and for the festival will be arranged with a pyramid of seats. The square portion of the building shown in the cut contains the dressing-rooms in the rear of the stage and great sounding-board. This portion of the building contains four floors, and from a rear balcony on this part of the building a commanding view is secured of the city and the falls of St. Anthony. The building is to be seated with movable chairs, and lighted with the electric lights. Although built of wood, the Coliseum has been constructed with unusual strength, with a view to the accommodation of great crowds of people.

After many months of deliberation the courthouse commission agreed upon plans for the new building, and, as the need for additional room for officers and records is very pressing, it is thought the work of building will be commenced at once, and vigorously prosecuted until completed. The plans of architect E. P. Bassford, of St. Paul, were, after mature consideration, adopted. They provide for a building 232 feet on Fourth street by 144 on Wabasha street. Its cost is estimated at \$300,000.

Rumors that work had been stopped on several of the handsome houses on Summit avenue are incorrect. In one or two instances a short suspension was rendered necessary to perfect plans.

Important building permits were issued as follows: W. F. Davidson, for a six-story brick block, 85 by 100 feet, on the east side of Wabasha street, between Third and Fourth streets, cost \$30,000. J. M. Wild, three-story brick, 50 by 66 feet, on south side of Seventh, between Bradley street and Manitoba railway; cost \$14,600; C. Herrmeyer, two-story brick store, 30 by 60 feet, on Seventh street, to cost \$2,000. John Weber, two-story frame dwelling, 20 by 46 feet, on Selby avenue, to cost \$2,200. William F. Davidson, six-story brick and stone business block, 85 by 100 feet, on Wabasha street, to cost \$30,000. J. M. Wild, three-story brick block, 50 by 66 feet, on Seventh street, to cost \$14,600. A. L. Longellier, two-story frame dwelling, 20 by 47 feet, on west side of Irvine park, to cost \$2,000. Patrick Butler, three-story brick veneered double dwelling, on College avenue, to cost \$5,000. J. E. Strehlin, three-story brick double store and dwelling, 24 by 81½ feet, on south side of Dayton avenue, to cost \$7,235. E. Bouthe, two-story brick veneered building, 20 by 50 feet, on east side of Robert, between Twelfth and Thirteenth streets, \$2,000. John Nelson, two-story frame dwelling, 29 by 42 feet, on east side of Robert, between University and Sherburne, \$2,700.

Architect W. H. Castner reports a healthy condition and prospects fair, and the following buildings under way: For P. Schliemann, two three-story brick store and tenement building, 46 by 64 feet; cost \$12,000; Lettan & Weinke, contractors. For P. R. McDonnell, three two-story brick store and tenement buildings, 72 by 40 feet; cost \$12,000; Powers, Wheeler & Matteson, contractors. For Geo. Rochat, two three-story brick store and tenement building, 48 by 70 feet; cost \$13,000; Lauer Bros., contractors. For Capt. E. C. Bowen, frame, 40 by 60 feet; cost \$5,000; D. D. Doyle, contractor. For C. A. Esterley, double frame tenement, 40 by 42 feet; cost \$5,000; J. J. McGeehan, contractor. For P. Hall, frame dwelling, 22 by 42 feet; cost \$2,000; P. Hall, builder. For W. H. Castner, frame dwelling, 22 by 39 feet; cost \$2,000; J. J. McGeehan, contractor; and bank at Baldwin, Wisconsin, projected; one-story brick, 22 by 36 feet; cost \$2,300. For Commodore Davidson, on Wabasha street; cost \$30,000. For J. M. Wild,

building on Seventh street; cost \$14,000. For Abbie L. Smith, two-story brick veneered dwelling on Olive street; cost \$5,000. For C. D. Gillilan, three-story brick double dwelling on Grove street; cost \$7,413.

Streator, Ill.—Architect F. S. Allen reports the outlook better than ever before, that over \$1,000,000 will be put into buildings in this locality this year, and the following buildings under way: For Jas. Sexton, two-story frame residence, 40 by 55 feet, cost \$4,000; Robert Myer, contractor. Henry Baker, three-story brick store, 25 by 100 feet, cost \$6,000; Sol. Egbert, contractor. M. E. church, two-story frame parsonage, 28 by 50 feet, cost \$2,000. Fred Richards, two-story frame residence, 34 by 66 feet, cost \$5,000. Rev. H. A. O'Kelly, brick and stone church, 57 by 122 feet, cost \$20,000; Mulfor, Lukins & Co., contractors. Samuel Dickennay, two-story frame school building, 26 by 40 feet, cost \$2,000. Peter Melloson, five-story stone stores, 60 by 100 feet, cost \$15,000. I. I. & I. R. R. Co., two-story frame depot and general offices, 26 by 84 feet, cost \$4,000; J. H. Cradock, contractor. Rev. M. J. Eagan, stone and brick church, 47 by 100 feet, cost \$8,000; Wise & Wolf, contractors. F. Holmes, two-story frame residence, 32 by 50 feet, cost \$3,500. Fred W. Lukins, three-story stone residence, 53 by 78 feet, cost \$12,000.

Topeka, Kas.—An active season for contractors is reported, and a great demand for masons, carpenters and laborers. The following important permits were recently issued: E. Bennett and son, two-story brick stable, on West Eighth avenue, to cost \$5,000. Kansas Publishing house, three-story brick and stone addition, 50 by 100 feet, and 38 by 30 feet, on Eighth avenue, to cost \$9,000.

Architect H. M. Hadley reports business good, never knew it better, and plans for J. R. & Jacob Mulvane, for remodeling of large brick building now occupied by A. T. & S. F. railroad company offices, 25 by 115 feet, will be heated by steam, will have hydraulic elevator and all modern improvements, three stories and basement, to cost \$15,000. For J. A. Hutchinson, two-story frame residence, 30 by 55 feet, to cost \$3,500; stable for same, to cost \$1,800. For A. M. E. Church, stone building, one story and basement, in Romanesque style, 60 by 100 feet, cost \$16,000; out for bids. For F. H. Leadley, two frame residences, 35 by 60 feet and 25 by 45 feet respectively, cost \$4,250; F. L. Stevenson, contractor.

Architects Haskell & Wood report business good, and plans for the following: T. Dwight Thacher, printing house, cost \$10,000. For T. B. Sweet, residence, cost \$4,500. For Judge Chandler, Independence, Kansas, residence, cost \$5,000. For F. A. Head, Clay Center, Kansas, residence, cost \$10,000. For hotel, Prescott, Arizona, cost \$40,000. Congregational church, Valley Falls, Kansas, cost \$4,000. For M. E. Church, Wichita, Kansas, cost \$20,000. For Banker, Holton, Kansas, residence, cost \$5,000.

PROPOSALS.

POSTOFFICE.

[At Sorel, P. Q.
DEPARTMENT OF PUBLIC WORKS,
OTTAWA, May 14, 1884.]

Sealed tenders, addressed to the undersigned, and endorsed "Tender for Postoffice, etc., Sorel, Que.," will be received at this office until Monday, the 23d day of June next, inclusive, for the erection of Postoffice, etc., at Sorel, Quebec.

Plans and specifications can be seen at the Department of Public Works, Ottawa, and at the Custom House, Sorel, on and after Monday, the 2d day of June next.

Tenders must be made on the printed forms supplied.

Each tender must be accompanied by an accepted bank check, made payable to the order of the Honorable the Minister of Public Works, equal to five per cent. of the amount of tender, which will be forfeited if the party decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the check will be returned.

The Department will not be bound to accept the lowest or any tender.

By order,
F. H. ENNIS, Secretary.

MARBLE FLOOR TILING AND MARBLE MANTELS WITH HEARTHES.

[At Montgomery, Ala.]

OFFICE OF SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., May 28, 1884.

Sealed proposals will be received at this office until 2 P. M. on the 18th day of June, 1884, for furnishing and laying all the marble floor tiling and furnishing and setting in place, complete, the marble mantels with hearths and the hearths and fire slips for wood mantels required for the Courthouse, Postoffice, etc., building at Montgomery, Ala., in accordance with drawings and specification, copies of which, and any additional information, may be had on application at this office or the office of the superintendent.

Bids must be accompanied by a certified check, and those received after the time of opening will not be considered.

M. E. BELL, Supervising Architect.

TO CONTRACTORS.

Plans and specifications for building at the Iowa Institution for the Deaf and Dumb can be seen at the office of the Superintendent on and after June 5, 1884. Sealed proposals for working in accordance with same will be received up to noon of June 18, 1884. Right to reject any or all bids reserved.

For further information address

H. C. HAMMOND,
Superintendent Inst. D. and D.,
Council Bluffs, Iowa.

STEAM HEATING APPARATUS.

[At Kansas City, Mo.]

OFFICE OF SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., May 20, 1884.

Sealed proposals will be received at this office until 2 P. M. on the 24th day of June, 1884, for supplying and putting in place, complete, in the Custom House and Postoffice building at Kansas City, Mo., a low temperature return circulation steam heating apparatus, in accordance with drawings and specification, copies of which, and any additional information, may be had on application to this office or the office of the superintendent.

Bids must be accompanied by a certified check, and those received after the time of opening will not be considered.

M. E. BELL, Supervising Architect.

IRONWORK.

[At Peoria Ill.]

OFFICE OF SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., May 31, 1884.

Sealed proposals will be received at this office until 2 P. M. on the 23d day of June, 1884, for furnishing and putting in place, complete, the iron beams and columns required for the Postoffice, Courthouse, etc., building at Peoria, Ill., in accordance with drawings and specification, which, with any additional information, may be obtained at this office or the office of the local superintendent.

Bids must be accompanied by a certified check, and those received after the time of opening will not be considered.

M. E. BELL, Supervising Architect.

A Decorative Exhibit.

THE fine building recently erected for Messrs. Healy & Millet, at 223 and 225 Wabash avenue, was thrown open for inspection on the 31st ult. The main floor is devoted to showrooms with a private office in the rear. The different departments of this firm's work, ranging through all the varieties of stained glass, artistic furniture, wood mantels, papier mache and other relief work, tapestries, wall-paper, frescoing, etc., were each handsomely presented. The most striking exhibit was of course the stained glass, in the manipulation of which these gentlemen are thorough masters. Some of the designs shown were a pleasing surprise, their originality and freedom of design carrying the thoughts beyond the present to the future, that seems, after thousands of years of stained-glass making, to be but beginning. Wood mantels were also exhibited in various artistic designs, and some old and rare tapestries were hung on the walls, forming a pleasing background. The studio,—a veritable artist's "den," with its sketches, easels, walls hung with bits of bric-a-brac, old armor, etc.,—is an attractive corner; in fact, for a showroom devoted to trade, the artist's hand is present everywhere to a remarkable degree. The arrangement will remain for public inspection and visitors will be sure of a cordial reception.

THE Pioneer Fireproof Construction Company will remove from their present offices into their own structure on Twelfth street. The building they are now rapidly completing is a thorough departure from anything before constructed, entirely built of fireproof materials, and will be fully described in a future number. The company have made this move in order to have greater facilities for handling their business, secure storage room and railroad connection direct with their factory, at Ottawa, Ill.

JOINERS' WORK AND WOOD FLOORING.

[At Cincinnati, Ohio.]

OFFICE OF SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., May 27, 1884.

Sealed proposals will be received at this office until 2 P. M. on the 8th day of July, 1884, for furnishing and fixing in place, complete, all the joiners' work and wood flooring required for the Custom House and Postoffice building at Cincinnati, Ohio, in accordance with drawings and specification, which may be seen, and any additional information obtained, at this office or the office of the local superintendent.

Bids must be accompanied by a certified check, and those received after the time of opening will not be considered.

M. E. BELL, Supervising Architect.

IRON AND SLATE WORK OF STAIRS.

[At Kansas City, Mo.]

OFFICE OF SUPERVISING ARCHITECT,
TREASURY DEPARTMENT,
WASHINGTON, D. C., June 5, 1884.

Sealed proposals will be received at this office until 2 P. M. on the 20th day of June, 1884, for furnishing and fixing in place, complete, the iron and slate work of stairways required for the Custom House and Postoffice building at Kansas City, Mo., in accordance with the drawings and specification, copies of which, and any additional information, may be had on application at this office, or the office of the local superintendent of the building.

Bids must be accompanied by a certified check, and those received after the time of opening will not be considered.

M. E. BELL, Supervising Architect.

For other proposals see page XI.

EDWIN A. JACKSON & BRO.

77 BEEKMAN ST., NEW YORK.

Heat-Saving and Ventilating —GRATE.—

WASHINGTON, D. C., March 29, 1883.

GENTLEMEN:—I take pleasure in saying that the three ventilating grates of your make, which I have had in use the past winter, have given perfect satisfaction.

They have fully met your recommendation and come up to my expectations. They keep the rooms in which I use them supplied with a full supply of fresh air, creating a complete ventilation. This air being heated as it passes through the air chamber, pours into the room through the perforations at the top of the grate, bringing a supply of heat which, I think, more than doubles the radiating power of the fire itself.

The one whose operation I have observed personally most closely is in my study, a room about 18 by 28 feet in dimensions, which it keeps thoroughly warm and well ventilated.

Yours truly,
STANLEY MATTHEWS.

St. Paul, Minn., Nov. 17, 1883.

MESSRS. E. A. JACKSON & BRO., New York. Dear Sirs: Your patent "Ventilating Grate," of the Oliver pattern, has fully met my expectations. To all the delights of an open fire it certainly adds the double advantage of economy of heat and perfect ventilation. Until our very cold weather I have been able to heat comfortably a large double room downstairs, and a good-sized room in second story with it, and with no greater expenditure of fuel than necessary for a common grate.

Yours very truly,

CHARLES E. LEE, M.D.

E. A. JACKSON & BRO., New York. Gents: The grate purchased of you is placed in a sitting-room 18 feet square, and opening from it on the north by double doors is the parlor, 16 feet square, and on the south by double doors opens the dining-room, 14 feet by 16 feet, with eleven windows in the three rooms, extending from the sills or floor, 8 feet high, with ceilings 10 feet high, and all three rooms, with the canal coal in the grate, are nicely warmed and most perfectly ventilated by that one grate.

Very truly yours,

F. A. BENHAM, M.D.

SEND FOR DESCRIPTIVE CIRCULARS, CATALOGUES AND ADDITIONAL REPORTS.

