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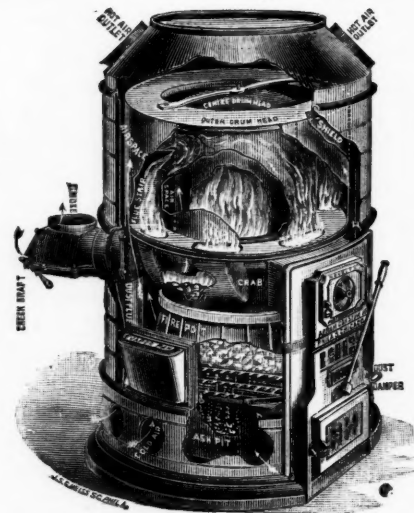
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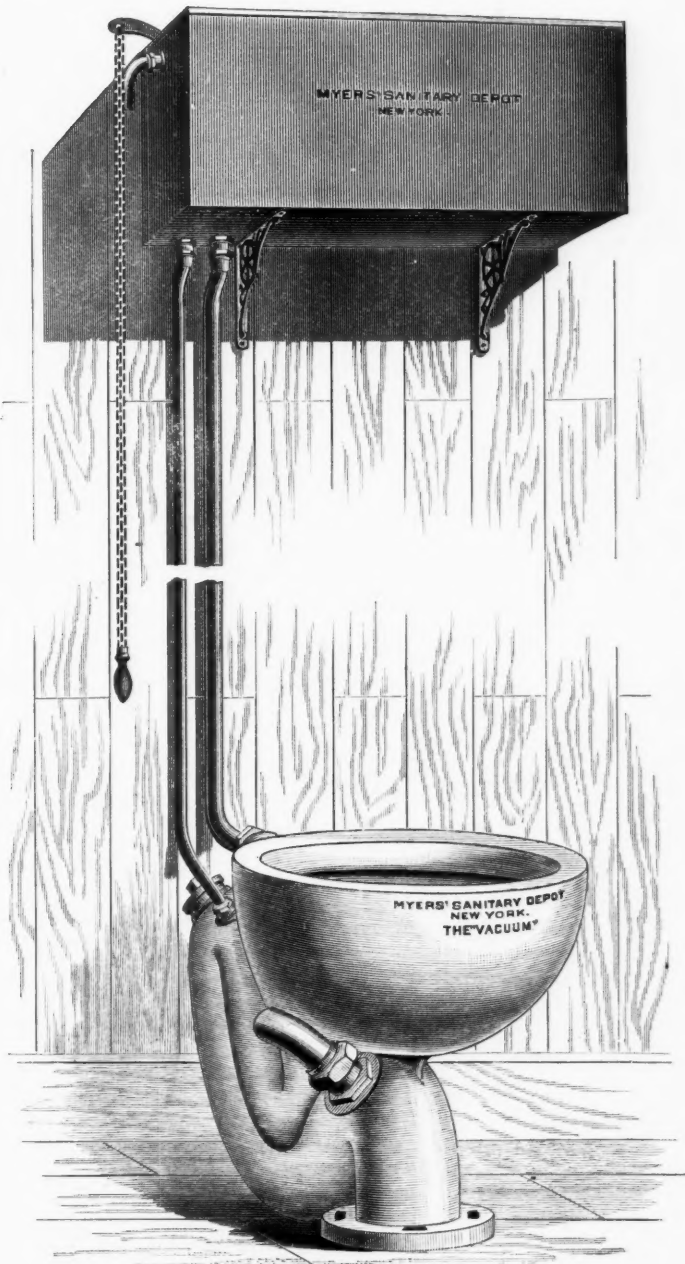


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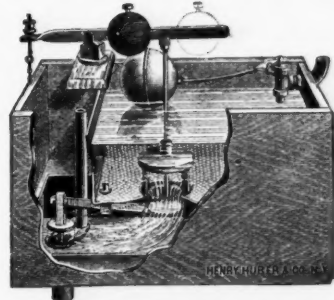
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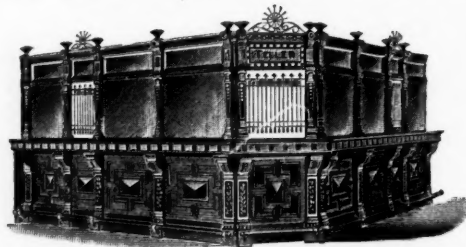
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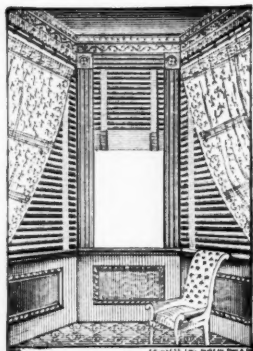
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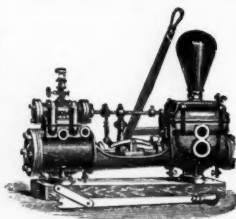
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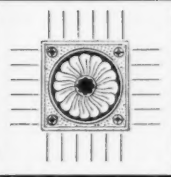
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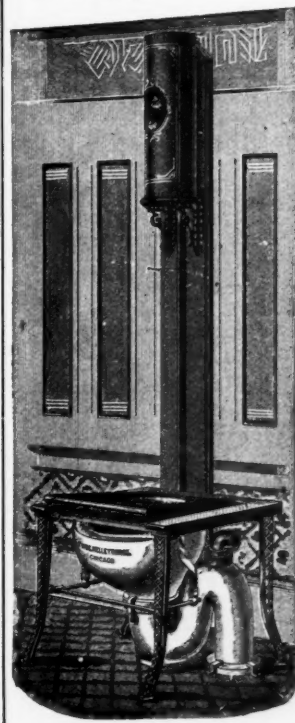
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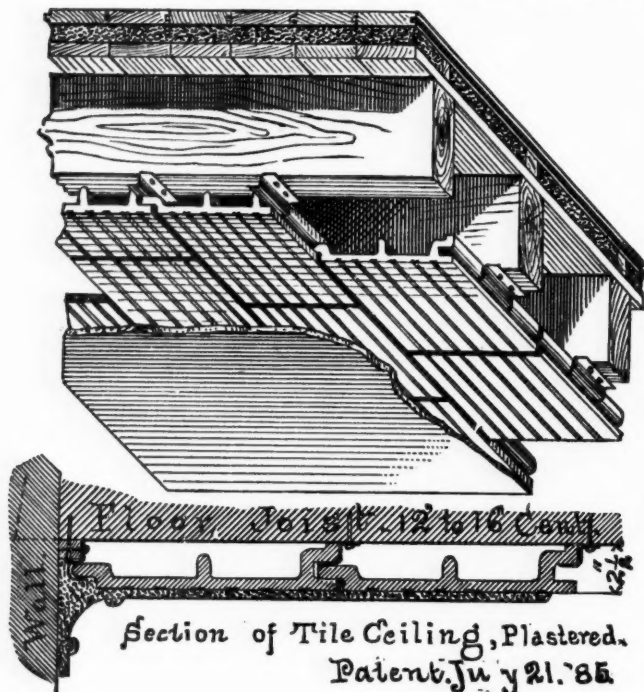
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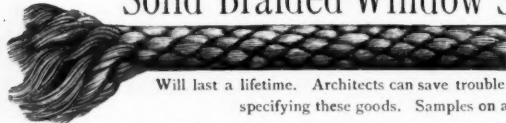
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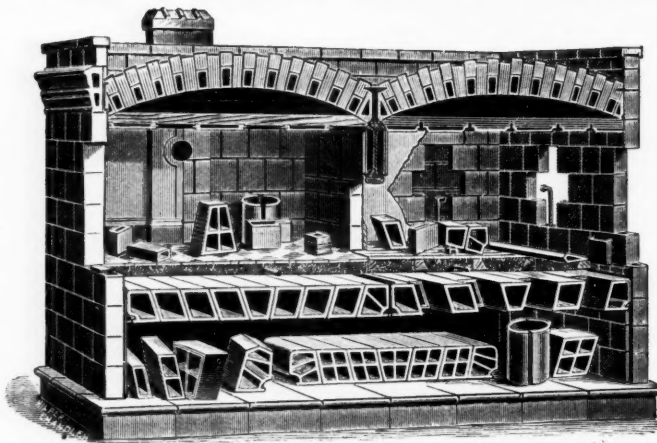
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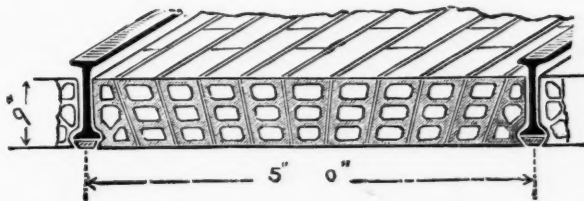
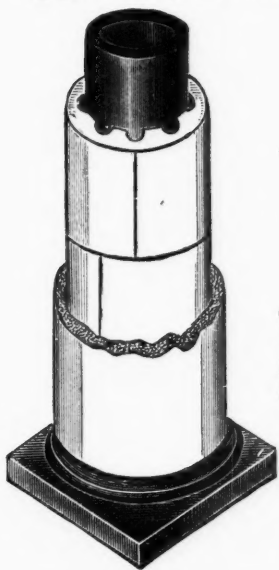
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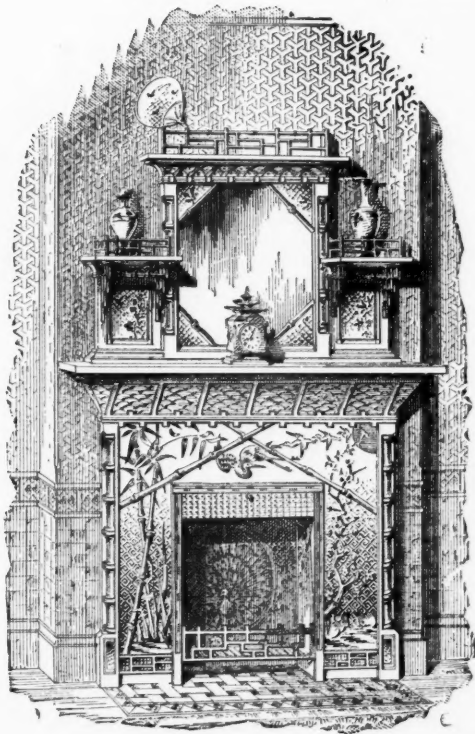
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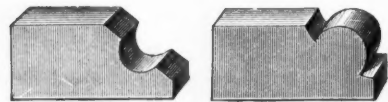
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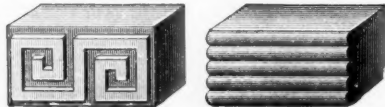
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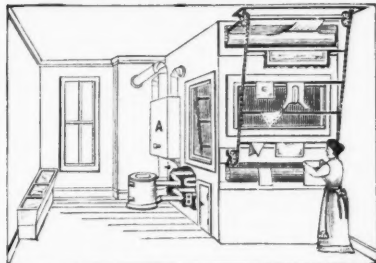
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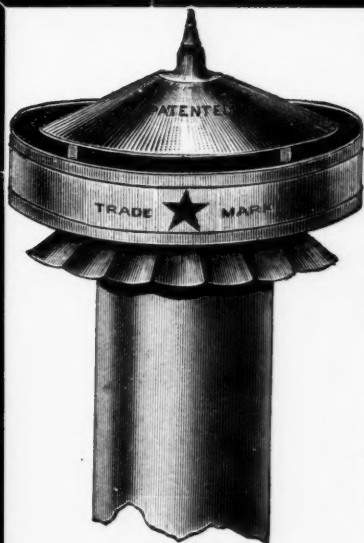
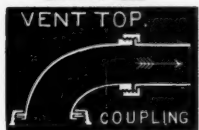
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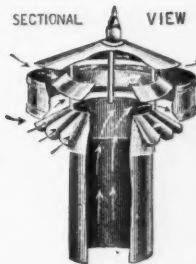
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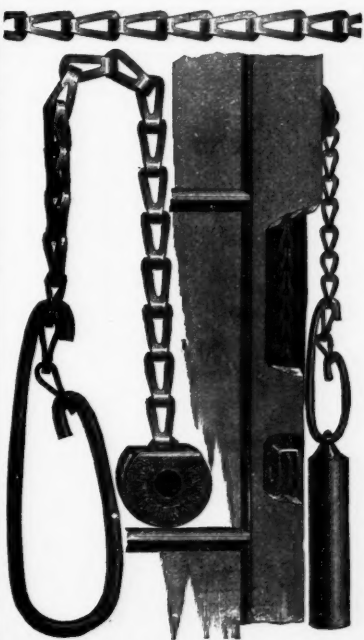
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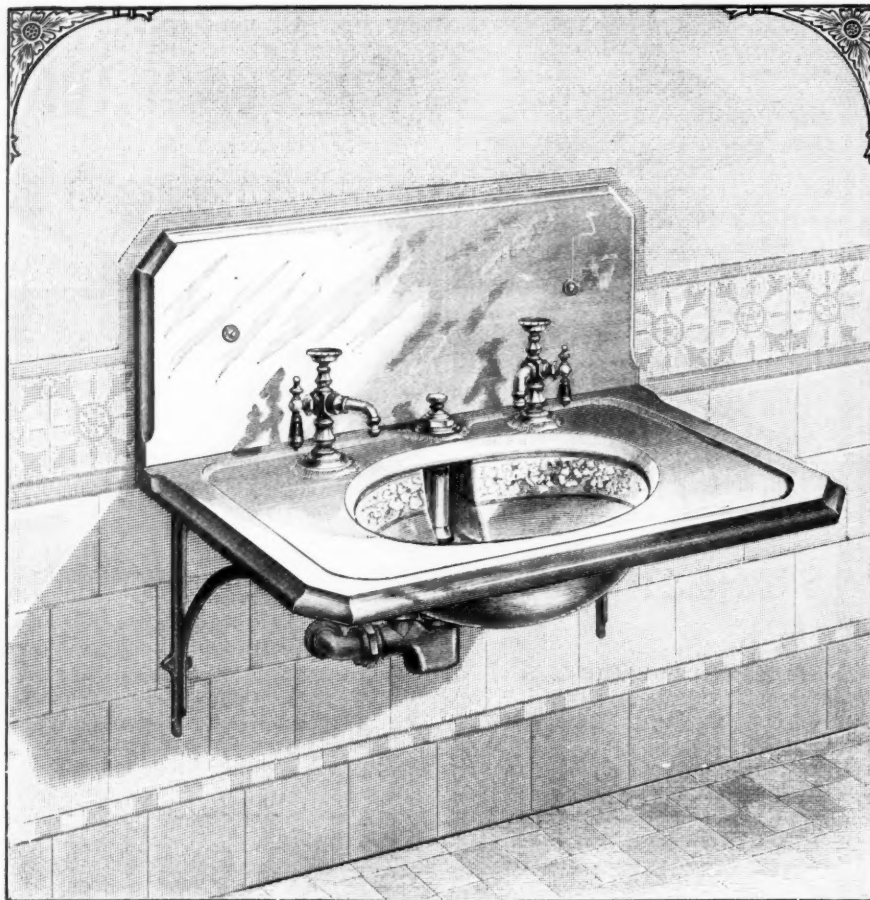


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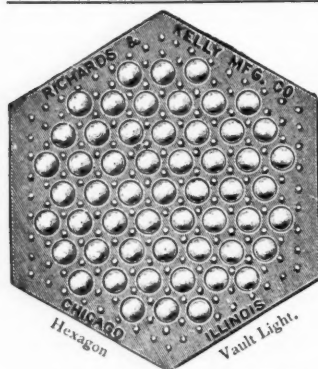
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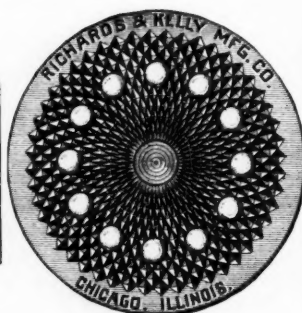
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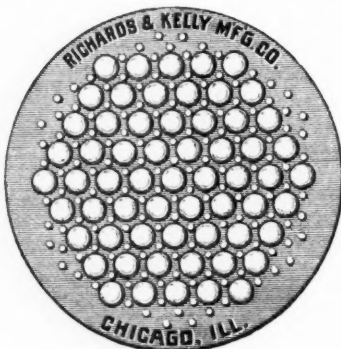
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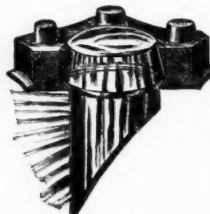
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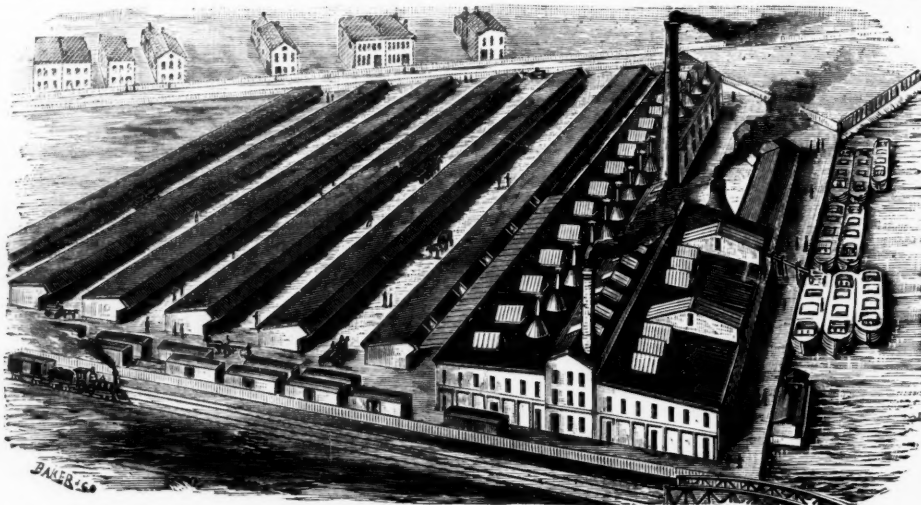
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Committee on Legal Decisions Relating to Building Interests—J. J. Kane, S. A. J. Preston, N. F. Clayton, Texas; Sidney Smith, G. L. Fisher, G. W. Field, Neb.; Sidney Osgood, L. D. Grosvenor, G. W. Lloyd, Mich.; L. H. Sullivan, C. L. Stiles, Wm. Holabird, Ill.; J. W. Reed, J. F. Wing, B. Vonegut, Ind.; J. W. Yost, E. O. Fallis, S. E. Des Jardines, Ohio; J. G. Haskell, E. T. Carr, C. B. Hopkins, Kansas; E. T. Mix, D. M. Harteau, A. C. Class, Wis.; W. F. Hackney, C. H. Lee, E. H. Taylor, Iowa; F. C. Bruce, A. M. McMurphy, T. H. Morgan, Ga.; Louise Bethune, W. W. Carlin, New York; J. S. Mathews, Wy. T.; A. E. Cobby, Dakota; J. F. Cook, Cal.; C. C. Helmers, A. Van Brunt, T. B. Annan, Mo.; H. Wolters, H. P. McDonald, H. L. Rowe, Ky.; G. W. Thompson, J. F. Baumann, Tenn.; L. S. Buffington, I. Hodgson, D. W. Millard, Minn.; C. C. Helmers, St. Louis, chairman.

THE American Institute of Architects will meet in Chicago October 19, 20 and 21. The Institute will be the guests of the Chicago Chapter A. I. A. and the Illinois State Association of Architects. Arrangements have been made by which the members will be welcomed by the Chicago architects, and the Leland Hotel, the most attractively situated hotel in the city, has been selected as the general headquarters. It is located on the corner of Jackson street and Michigan Boulevard, and overlooks the Lake Park and Lake Michigan. For the convention, the directors of the newly completed Art Institute have presented the use of their building. This contains a commodious lecture room, in which the convention will be held, and the ante-rooms will be fitted for the display of the large collection of drawings and photographs contributed by the leading architects of the country, which will form one of the special features of the meeting. This collection will be kept and shipped to Cincinnati, to be exhibited at the convention of the Western Association in November. In choosing the Art Institute for the convention, the committee in charge have shown great wisdom, it being most accessible and commodious, as well as appropriate. The Entertainment Committee have issued a programme of the convention (page 37), outlining the order of proceedings and the different forms of entertainment which have been provided. A larger attendance is expected than has been present at any convention of the Institute for many years, the growth of Chicago and its architectural development making a visit full of anticipation and interest, especially to eastern architects.

PRESIDENT BLAIR of the National Association of Builders, in accordance with the resolution adopted at the last meeting, recommending the appointment of a committee on uniform contracts, has appointed E. E. Scribner, of St. Paul, George C. Prussing and P. B. Wight, of Chicago, as a committee to represent the association. The resolution as introduced at the late convention by Mr. P. B. Wight, is as follows:

WHEREAS, It is desirable,

1. That all blank forms of contracts for building should be uniform throughout the United States;

2. That such forms of contract, with the conditions thereof, should be such as will give the builder, as well as the owner, the protection of his rights, such as even justice demands;

3. That whenever a proper form has been approved by this association, it is the duty of every builder and contractor to insist on its use in every case; and

WHEREAS, In a spirit of fairness the American Institute of Architects has framed such a form of contract as has seemed to it proper, and has asked its members to use it; and

WHEREAS, The Western Association of Architects has appointed a committee on uniform contracts and specifications to report at its next annual meeting; therefore,

Resolved, 1. That a committee of ten be appointed by the president to confer with the Board of Trustees of the American Institute of Architects, with a view to the adoption by this association of the form of contract adopted by the American Institute of Architects; or if the same should not be satisfactory to the committee, such a modification of it as would appear to them to deal justly with builders and contractors in general, as well as with the owners and architects.

2. That in case such a conference is had, the special committee of the Western Association of Architects on uniform contracts and Specifications be invited to join the same before taking further action.

3. That in case no further action is taken by the board of trustees of the American Institute of Architects, the special committee of the Western Association be asked to confer with this committee with the objects in view as expressed in this preamble and resolutions.

4. That the committee report such forms of contract as may be approved by the conference for adoption by this association at its next annual meeting.

This was referred with other resolutions to a committee who incorporated it in their report entitled, "Declaration of Principles," in the following form:

Fourth. That all blank forms of contracts for buildings should be uniform throughout the United States; that such forms of contract with the conditions thereof, should be such as will give the builder, as well as the owner the protection of his rights, such as justice demands; that whenever a proper form has been approved by this association after consultation with the American Institute of Architects and the Western Association of Architects, we recommend its use by every builder and contractor.

The American Institute of Architects has already made a move in this direction as well as the Western Association. The latter has appointed a standing committee on uniform contracts and specifications, this being the Executive Committees of the several (14) state associations. The work of

this committee being largely in collecting statistics, from which a report could be formulated and being imperative in the direction of consultation with the committee of the National Association of Builders, the latter committee will meet the Board of Directors of the Western Association when they convene in Chicago, October 18.

THE second annual report of the Commissioner of Labor, which has recently been issued from the department of the interior, is wholly devoted to the subject of convict labor. Chapters I, II and III of the first part are given to statistical tables, analyses of statistics and summaries of reports of recent state investigations. In Chapter IV are found Commissioner Wright's deductions and conclusions with regard to the advantages and disadvantages of the several systems in vogue or proposed, and his recommendation of the scheme which seems to him best in view of all considerations. The second part is devoted to a compilation of the laws of the states and territories with regard to the employment of convicts and to a very interesting collection of notes on the treatment and employment of criminals in various countries in ancient and modern times. Special value attaches to the latter chapter, as no previous work has attempted to cover the entire ground, and many of the sources from which the facts are drawn are inaccessible to the majority of readers. The tone of the report is conservative; though, if our recollection is not at fault, there has been a change, or at least a decided modification of the opinion of Mr. Wright in the matter of the burden which convict labor lays upon free labor in competition. As a result of his inquiries the commissioner recommends that the use of machinery in employment of convicts be discontinued, and that each convict be employed at hard labor on public account, that is, that the state is to furnish materials, tools and foremen and place the product upon the market, thus minimizing the product and doing away with the contractor. There are many considerations involved in this conclusion which limited space will not permit us to enter upon; but we are of the opinion that too great stress is laid upon the unfairness of the present competition, and that, while in some cases the competition is unfair, in many more the complaints rest upon small foundation of fact.

THE method of utilizing convict labor, proposed by Commissioner Wright, would leave a deficit in prison income to be made up by general taxation, under the assumption that such a tax would rest more evenly upon society as a whole than the quasi tax involved in utilizing convict labor in more highly productive competitive industry. While we doubt whether the commissioner's position in regard to the injurious effect of this competition will be fully sustained by a complete knowledge of the facts, yet we commend the work of the bureau as an honest effort to get at the truth. In addition to the honesty of the report, the portions which we have read are free from gross and unpardonable blunders, which cannot be said for the recent Illinois report (vid. "The Principle of the Boycott," page 448.) In the review of the various systems attention is directed both to the economic and to the administrative and reformatory bearings of each method; it being wisely recognized that purely economic considerations cannot be allowed to dictate a policy which may prove to be in opposition to other and higher ultimate considerations. Men are not sentenced to prison for economic (financial) reasons, and nothing can be more futile than an attempt to set up an economic standard as the test of the best system of prison management. It is important to settle in the first place upon the grounds for the punishment of criminals, whether by confinement or otherwise, and to hold this postulate in view

in the detailed consideration of every system. The grounds for such punishment are by implication suggested in the report, but might well have been stated more clearly and forcibly for the benefit of those who of themselves will give the subject no extended thought. Such a definite starting point makes the road more sure, and avoids much rubbish in fact and argument that cumber progress and hides the real end. We purpose taking up this point more fully at some future day.

OUR New York contemporary, *Building*, usually investigates before it offers an opinion or criticises. At least it gives that impression by the uniform correctness of the opinions offered. But the following extract from a recently published editorial would indicate that it has fallen into a somewhat common error with some journals, that of making hasty comment upon news contained in a press dispatch to a daily paper. In describing the means being employed to arrest the breaking up of the Chicago Custom House, a description in the main correct, as far as method is concerned, *Building*, however, says this:

As a further protest against Chicago building or building soil, the postoffice is now being riveted together lest it undergo disintegration. A sad combination of circumstances seem to be working its overthrow. The soil of Chicago, originally a swamp, forms but a poor foundation for such heavy structures, and then the building itself, being of poor materials, tends to aggravate the trouble.

Chicago, notwithstanding its bad soil and the difficulty against obtaining foundations, has erected some of the largest and costliest buildings on the continent; but a stranger looking at its city hall shorn of its cornices and belt courses, and the postoffice undergoing repairs, could not fail to draw inferences unfavorable to the constructive knowledge of Chicago builders.

The cracks on the walls of the Chicago Custom House are due to unequal settlements. This is not occasioned by inferior materials or workmanship (though some other defects in the building are) or to bad construction *per se*, but to the ignorance of the architect (?) who planned the foundation. As the soil was soft he reasoned that a continuous bed of concrete would float the building, and he laid a four-foot layer over the entire surface. If this thickness had been multiplied by four it is doubtful if the result would have been very different. The result was that each part of the building settled according to its weight. But all this has nothing to do with the "constructive knowledge of Chicago builders." The city hall was a county "job," and built of stone that was selected because it was a product of the county and not for its permanent qualities, a fact that is unfavorable to the county administration, and not at all to the builders, and only in a limited degree, if any, to the architect. That Chicago architects and builders also are the very opposite to the inference drawn from *Building's* remarks, is proven by the immense structures erected in the neighborhood of the custom house, that have settled but little more than if built upon rock, and then with perfect evenness. Chicago architects know that in a compressible soil each pier should have a foundation proportionate to its weight, and that each should carry its own weight and have nothing to do with that of its neighbor.

THE death of Mr. Alexander Stuart, of Peterhead, Scotland, lately announced, closes the career of one of the oldest and best known contractors in Scotland. Mr. Stuart was in his eightieth year and until twelve years ago was in active business. During the fifty years of his active life the most noted of his works was the erection in 1853 of the royal castle at Balmoral under the plans of Architect Smith and the superintendence of the queen's highland residence. Among other works are Ackergill castle, Balfour castle, Torrasay castle and Belladrum are of the finest country residences in the highlands. In the long list of public works erected by Mr. Stuart the greatest variety exists. The Naither Buckie harbor and the Corran Ferry lighthouse, under Architects D. & T. Stevenson of Edinburgh, and also the Holborn Head

lighthouse at Thurso. Several forts and batteries were also constructed under his direction, and numberless other works of the same character. The Ladysbridge Asylum and the county buildings under plans by Architects A. & W. Reid, of Elgin, were erected by him. While recovering his strength after a severe illness at Lochead, he conceived the idea of erecting a homeopathic sanitarium establishment at Crieff, which, with the coöperation of a prominent physician there, was carried out and is still a popular and notable institution. His life was a busy one and his name will go down to posterity among the great contractors of Scotland, who "built well." His brother James is in active practice as architect and contractor at St. Louis, and his nephew William is known to two continents as the patentee of the granolithic pavement.

IN the first annual report of Architect J. L. Smithmeyer, in charge of the new congressional library building, to the secretary of the interior, the testing of the ground for the foundations is of peculiar interest. For this purpose a testing machine was constructed to give an accurate test of the entire soil. The method employed consisted in constructing a car bearing the required weight in pig lead. This was placed in the foundation trenches upon iron rails, which rest upon four cast-iron pedestals, the latter being set four feet apart each way, each pedestal covering one foot of ground. Thus one fourth of the entire weight borne by the car rests upon each one of the pedestals, and the precise weight sustained by each square foot of ground is exactly determined. As several wells, the remains of an old brewery, etc., were found while making the excavations, these minute tests were extremely necessary, though the remainder of the soil seems to be composed of yellow clay and sand. The elaborate set of plans and preparatory work required and reported upon would indicate that the architect not only understands the problem but is paid for solving it.

THE Architectural League of New York has instituted a system of annual competitions, which are open to the draftsmen of the United States under twenty-five years of age. The programme for the first competition, which we print in another column, is very modest in its conditions and unambitious in its requirements, giving a subject incorporating equally the artistic and designing abilities of the draftsman. If the practical side of the subject seems a little remote, it may be all the better as tending to draw the designer's talent out of the beaten track of houses, flats, office buildings, etc. The league is deserving of the greatest amount of encouragement as well as a corresponding success. As a good example should be copied where practicable, why should not the Chicago Architectural Sketch Club organize a similar competition, and then perhaps the scheme might be carried further and the successful drawings in the two competitions be adjudicated upon by a competent committee for first place among American draftsmen.

VANDERBILT UNIVERSITY, at Nashville, Tennessee, has organized a department devoted to manual technology and highway engineering. These departments are thrown open free of charge, or, in connection with other departments, without charge. As one of the oldest and most progressive universities in the South, these departments will greatly add to its value and influence. That department devoted to highway engineering is especially noticeable, as the demand for more permanent highways, and streams properly and safely bridged is becoming a greater necessity each year, with little engineering talent to supply the constructive demand except that imported from the older European countries.

Architectural Partnerships.

BY L. H. G.

VERY successful architect has said: "The first principle in architecture is to get the business." A young man who had the benefit of an office education and the help which comes from the training of an architectural school, still felt himself lame in the matter of professional tact or business sagacity. He had it in mind that there were those of greater experience than he, who might help him if they would, and during the months which preceded his entrance to professional work on his own account he had a great many talks with one who took much interest in his future, and who was capable of giving good business advice to anyone. He said: "I believe that I could write a book which would be of great benefit to young architects, and may be to some of the older ones. My experience, as you know, has been large, and from my own standpoint I would say that I have been successful. I have done a large amount of business, and I believe that those who have intrusted their business to my care have been fairly well satisfied. A certain amount of professional tact and business sagacity are as necessary to the architect as to one who would handle the business of a store, or that of publishing or editing a newspaper, or doing any other kind of regular business. There are architects who are acquainted with the details of the profession, but yet who have no adequate ideas of business, and who are sure to pass through life in an unsatisfactory way. They will probably end their days in poverty. On the other hand, there are those who have the business capacity, and yet are largely devoid of professional capacity, and still are successful in business. It is pitiful to see a worthy architect, deficient in business qualities, waiting year after year for a comfortable business. It is galling and harassing to see one who is deficient in the professional qualities of an architect, but who is yet able, by the exercise of tact and business ability, to achieve success in a business way without the help of the professional considerations."

"Could you lay down any rules," said the young man, "for one just beginning in his work as an architect?"

"No, I do not believe that I could give you any rules. I do not believe much in rules under any circumstances. I could lay down a few general principles in an unsystematic way, which might help a young man, though to have it presented to me in this way, without previous thought or time for arrangement, my expressions must necessarily be somewhat unsystematic."

"What would you say to a young architect's taking a partner?"

"Well, I would say 'don't.' As you probably want reasons I will give them to you. In the first place, if I were to ask you why you wanted to take a partner you would probably not know your own reasons. You would probably give a reason, but it would not be the right one. As a general thing, the real reason for a young man's desire for a partner is to have some one to lean upon. Two young men will go together and lean upon each other. They lack confidence. They are timid, they want company. They want the support of each other. If the young man goes in partnership with an older one he operates to a disadvantage. He is in little better circumstances than if he were working in an office. The chances are that he will have to bear a large portion of the burden of responsibility, do most of the real work, and only get a small portion of the fees. An architect who has an established practice does not take a younger man in with him in a spirit of charity or consideration for the young gentleman. If he does it at all, it is for the purpose of relieving himself, or that he may get the benefits of the young man's energy and talent. If a young architect has the opportunity of entering into partnership with an older one with experience and a good business he need not be flattered by it. He must understand that it is a business operation all the way through, and that he will have to work for all he gets. The only way for a young man to conduct himself in a matter of this kind is to enter into partnership on even terms if he does it at all. I merely mention this as a contingency. Why, take my own case, and were I to say to you that I would like to have you enter into partnership with me, I would do it merely for the purpose of relieving myself of business cares and responsibilities, or of getting the benefits of your talents and fresh ideas as a young man, or for all of these reasons. And you would probably have to bear the brunt of the fight, and even then I would probably get the credit, if not the profit, for most of the work that was done. If the character of my work were improved my clients would not, in all probability, accept the facts in the case and recognize you in the matter. If for any reason our partnership were dissolved and you went into business by yourself, you would in all probability labor under about the same disadvantages as one who was making an entirely new start. I would be the one who was benefited by the association, providing there was a benefit. You would be playing second fiddle. You would be the fiddler behind the scene, I would get the applause. So if you must go in partnership with an older

architect, go in on equal terms if he really wants you, wishes to lighten his burdens, or wishes your help, you can go in on these terms as easily as any other.

"As to a partnership with one of your own experience and position there is absolutely no advantage in it. A young man entering into professional life is necessarily somewhat embarrassed, and when there is a pair of you it is all the worse. Your timidity is apparent. Then partners are not usually equally matched, in industry, tact and similar qualities, and are not equally liked by the public. Hence union does not prove as satisfactory or beneficial as expected."

"I believe that I prefer to enter upon my career alone," said the young man.

"That's right. After you have decided that you wish to do for yourself distinctly, that you wish to open an office as it is called, you should fix the exact time, neither too late nor too early with reference to the building year. The first of February is a good time. Then you do not have to burn coal all winter waiting for business. You open your office at a season when people are beginning to look around for an architect. It is discouraging to commence in the middle of a year, when most of the drawings have been made, when most of the people have got their work started, and you are liable to drag along toward the end of the building season without a great deal of benefit. In such a case you would have to struggle through the winter at a loss."

"I have not decided as yet in what city I will open my office."

"Ah, you have not? I did not know but that you would open your office here."

"No, I think I will go to the West. There are too many architects here, and I believe it would be better for me to go into a new city."

"Well, maybe that is right. You would probably get a start easier in some of the western cities than here. Your competition would not be so great in the matter of numbers or in the general ability of the profession. I would not attempt to lay down any principles as to the selection of a city geographically. Only this: I would say, select a large city, one with a hundred thousand inhabitants or more. The general business principles which would apply to one city would apply to all. Success is a mere matter of degree."

"Do you think the location of an office is a very important matter?"

"For a young man, indeed I do. Do not select any room because it is cheap, or because it is large or has a good light, or any such reason. Select a room that people can get to easily. Let it be in the heart of the city, where there is the largest amount of travel; a district surrounded by solid business. If you locate in an out of the way place, it would suggest that your ambition was defective, or that you had a slight distrust of your own acquirements. Get a room in the best block in town, even if it is a small one. All of the large rooms in such a block of this kind will usually be taken. People may understand that you took the small room because you could not get a larger one in that building. It is risky for a beginner to locate too near the office of a successful architect. The client who starts out in search of a plan for a house in the same way with that he would proceed in buying a new buggy or a horse, or something of that kind, would be most certain to go into the office of the older architect as well as your own. If he would get into the office of the older one first you would probably never see him. That gentleman's skill in handling a prospective client would in probability exceed yours. But if he were to go into your office knowing that there was another architect in the building, he would probably leave you, promising to call again. Possibly he would call, maybe he would not. If your's were the only office it might be that he would do business with you merely because he did not care to go any farther."

"If possible have a good, light, airy office. Let it look fresh, neat and clean, showing that its occupant is possessed of taste as well as learned and professional qualities. Let it have the appearance of being distinctly an architect's office. It is a good thing to place some of your drawings on the wall where people can see them. Frame some photographs of good buildings; hang them up for your own benefit as well as those who come into your office. Take care to avoid a quackish display. People are very quick to detect anything of this kind and to be affected by them. It is not unprofessional, however, to expose some of your books."

"It is well to have a part of your office separated by a railing or inclosure from the rest of the room. In that part you can do your work. If you want those who come in to be near you, you can ask them. At the same time you have the advantage of keeping them away if there is any reason for it. However, you must avoid giving offense to anyone. Maybe that you are working on a drawing or something that you do not want a caller to see. It may be possible that he would feel himself privileged to come inside of your inclosure and look at what you are doing. You have a catch or spring to latch your gate. As he undertakes to come in you can walk toward him, shake hands with him and ask him to sit down. Give him a chair on the outside. It is possible that he may take the hint. You

have treated him kindly, and he cannot directly accuse you, even in his own mind, of restraining him.

"In this connection you should remember that people who employ you do it because they want help in the business of building. They wish to be free from the care of that kind of work. They do not employ you as an artist alone, they wish your help in a business way. Remember this and conduct yourself accordingly. Be exact and punctual in all your habits. As you wish to succeed do not let your office be a lounging place for young men, or contractors, or politicians, or anyone excepting those who have business with you. The knowledge that you have regular business habits, that you attend to your business carefully, that there is no nonsense about you, will do more to establish you firmly than anything else. The fact that you do not have work to do which is not directly remunerative should not prevent you from being busy in your office at all times, and being there during all the business hours. It is a good thing to have the reputation of being busy, of being industrious. It is a good thing for your acquaintances to understand that when you are in your office you mean business, that they cannot stand around there and chatter and smoke, and act playful. There is no one but who will respect you more, and do more for you, for restraining anything of this kind, than they would if you gave them free license to do as they please."

"You should devote a part of your time to making acquaintances. Your name has to be known and be known favorably before you get a great deal of business. Your personal qualities may contribute largely to your success. However, you should not hand shake or harmonize unreservedly. Be very careful and not be too familiar. Familiarity or an overdesire to make acquaintances will do more harm than good. Never become so familiar as to lay all formality aside. The light, trivial, 'good fellow friendships' do not pay. I may again emphasize the fact that you must seek the respect of all those whom you meet and know. Your manner, even to the casual acquaintance, will do a great deal to effect this result."

"I might mention in a detailed way a great many more things in connection with your office and your personal deportment, but these things will come out from time to time as we consider other general matters. I have said all that I can at this time, but if you please we will have a talk about your first clients and others that come to you during the early months of your practice at some later day."

Mutual Destruction.

BY J. FREDERICK ELSOM.

IT is a fact, but nevertheless one that has escaped the attention of many that many substances and materials used in building are mutually destructive. Certain kinds of wood which, taken individually and separately, possess remarkable lasting and wearing properties, placed in positions of mutual contact rapidly deteriorate and maybe soon disintegrate and decay. In a farm fence two woods, cypress and walnut, each a timber justly celebrated for long wear and immunity from the destructive atmospheric influences, when placed together rotted very rapidly. The same was true with reference to cedar posts and cypress leaders and palings; at the point of contact decay set in at an early day and progressed very rapidly; and to prove that actual contact was the ultimate cause, the two were separated in a number of instances, in every one of which rotting ceased, and the wood remains perfectly sound save where they were in contact formerly.

With the growing scarcity of many valuable building woods, it becomes necessary to back and fill with varieties not formerly used. As a result there are many structures already tottering with decay that should have remained perfect and erect for many years yet, and that, too, when the timber is in out-of-the-way and isolated positions favorable to long life and usefulness.

Though the world of science is yet too young and weak to reconcile the two branches, architecture and chemistry, the time will come when the scarcity of building material in general, wood in particular, will necessitate chemical as well as architectural analyses before it will be deemed safe and expedient to place two untested woods or other substances together. All have seen the effects on timber exposed to gases emanating under certain processes of manufacture, and many have marveled at the permanency of some and fragility of others, when, as is often the case, conditions and surroundings being changed, the property of wood often changes correspondingly.

It is safe to state that no two varieties of wood possess the same essential chemical characteristics, and the instant one possessing much alkali is placed near another that may acid in its reaction, will invite rapid dissolution and decay. What is true with reference to wood applies with all the force to other materials used in structures. Two uprights, the main stay of a quite large country bridge, rotted off at the ends when bolted together with an iron bolt; new ones were placed in and fastened by wooden pins of the same variety, and ten years have elapsed and still they stand. In

the first instance beech, which is known to contain much acetate, was used, and the iron soon oxidized, transmitting the rot to the wood, and though the rest was perfectly sound about the splice soon rotted off, while in the latter case the same wood, I believe from the same tree, was used, but the wooden pins did not rust, and the joint remains firm and sound at this writing, and it is now nearly ten years since the renewal was made. Now, if a wood like ash or oak, having less acetate in its composition, had been used, instead of rotting and oxidizing it would have tended to preserve the iron, hence would last longer than if fastened with pins made of its own species of wood, or any other for that matter.

American Architecture of the Nineteenth Century.*

BY JOHN S. ROWE.

IN treating the subject it is not the intention of this paper to speak in detail of all work done either by builders or architects of this century, as this would be tedious and probably uninteresting, but after casually surveying the work, from the commencement of this century down to the new departure, as it is known to most of us, we will try and see what influence has been brought to bear to have produced this new departure or free composition and classic detail.

At the opening of this century the architects of England and America were divided into two camps, and professed to be followers either of Gothic or Renaissance architecture. The medievalist acknowledged certain principles of design, while the classicist accepted certain forms and formulas as efficacious and final. But by no means can the architecture which gives to America at this time, its architectural character, be considered the work of book-learned architects. It has been said by an author, who has contributed liberally to *Harper's Monthly*, "that the typical American house of this period, which is that period immediately after the Greek temple had spent its force, was the most vulgar habitation ever erected by man." This is due to the fact that the builders had lost the training in the forms and formulas which were considered as stock in trade by their predecessors and bequeathed to them from generation to generation.

This period, in which the builders tried to do "something American," extended from the commencement of the nineteenth century down to the building of Trinity Church by Upjohn in 1845, which dates the commencement of the Gothic revival in this country.

But it is evident that the New York City Hall and the Albany Academy, which were built in the period above mentioned, were by architects of culture, according to the standard of the time in which they were built.

In the works of Messrs. Upjohn, Cady, Eidlitz, Potter, Wither and Wright we see some good examples of Gothic, which follow the building of Trinity and bring us down to the new departure.

But before treating of the new departure let me mention that in Mr. Post's and Mr. Hunt's work we may find some good examples of American Renaissance. In the new departure we see three distinct influences; the English or Queen Anne, the American or Colonial, the French or Romanesque, with Byzantine detail.

What is Queen Anne? When did it originate? Where and under what influences? Who were its masters?

To the student who looks well into the subject, the Queen Anne and Georgian periods will almost appear like a mirage, in which he will see streets lined with tall red buildings, with tile roofs and long and narrow sash lines painted white, with outside green blinds, but if he seeks an academic answer, he will be told that the earlier work of Queen Anne was a feeble attempt to apply the Palladian rules designed for mansion houses built in marble to small brick buildings, and that later Queen Anne is but a craze. He will also be told by his academic professor that the English gradually developed the feudal castle into elegant and picturesque mansion houses of the Tudor kings, and that the Elizabethan architects carried this fanciful system of construction to its highest perfection, and that the building art which followed became debased, a few bright lights in Inigo Jones' and Wren's work remaining, and that the influence that William and Mary and Queen Anne exerted upon the world was stiff, starched and formal, and this same influence was visible in the buildings of that period. The Free Classic of the Georgian period followed, which was more refined, delicate and aristocratic, but lacking firmness and boldness in composition.

With the advent of Victorian Gothic, Free Classic passed into oblivion, to be resurrected again in the nineteenth century.

But Queen Anne, like all other styles, has its history.

For convenience we will divide Free Classic into three periods: Stuart or Jacobean; William and Mary and Anne, and Georgian period.

Two hundred years before the Medieval ecclesiastical style had died, giving place to Free Classic, which at first was rude, but though it did not attain the perfection it reached upon the continent, it gradually attained an academic system which produced some mansion houses of elegance and dignity.

The reign between Elizabeth and James I marked a domestic style of a mansion house after the type of Tudor Gothic, with an admixture of Renaissance of the time in which they were built. The Gothic feeling gradually fell out, and left the Renaissance of the Jacobean period. The streets of London, before the fire of 1666, had numerous examples of the Jacobean period.

The street fronts that often overhung in the streets were of wood and plaster construction, the timbers being either painted or carved, and rough-cast plastered between. Designers of today find in this period the oriel window of our late Queen Anne.

In Wren, who built nearly all the burnt district, including St. Paul's Cathedral, we find an architect who was a good constructor and no less artistic in his feeling, and boldly adapted the system of the Renaissance

to the requirement of the times, modifying his detail to meet the exigencies which arose. We find in his work, which extended to the eighteenth century, the lavish use of water-struck brick, with belts of molded and carved brick; also carved panels of the same material. The crow step gable was also in use at this time.

The second period was of one-fourth century's duration, one half in seventeenth century and the other half in eighteenth century.

The ascension to the throne of William and Mary once more brought England into closer relationship with the continent, thus engrafting into her home architecture foreign features. We see Flemish and Dutch influence in the high-stepped gables, with their wavy lines and broken pediments, terminating with volutes placed over doors and windows, become frequent during this period. The use of molded and carved brick was yet in use, and gave what beauty and elegance these buildings possess, but we see a gradual decline in the Free Renaissance, which gave to Wren's work so much life and vigor until, in the Georgian period, we see it no more. The publishing of Stewart's and Revett's antiquities was the cause for the attempt by many architects of the Georgian period to adopt the Doric porticoes and other Greek features to the domestic architecture. There was also a feeble revival of the Gothic in this period.

In the early part of the Victorian reign, the architects were discussing between the two rival schools, Classicism and Gothicism. The latter finally prevailed, and once more architecture was a living art, especially in ecclesiastical architecture, the mansion being the type of domestic architecture; but it did not so well express its function. It was in this transitory state when Parliament passed the "Elementary Education Act." This was an opportunity for the English architects to develop their latent energies. It was the desire that the school buildings should be simple in plan and construction, with but little architectural display, using the native red brick. Molded brick could now be obtained in abundance, the tax having been removed. Such was the beginning of modern Queen Anne.

Queen Anne architecture began in America immediately after the Centennial. It was there that the American architect saw in the exhibited terra-cotta a field for great expression in brick architecture; and as the result, America is not now behind in good examples of the Free Classic of Queen Anne.

It has been said by a recent writer on New York City architecture, that a city front to be Queen Anne may not necessarily have more than one feature, which is from the periods above mentioned:

For instance, a dormer or an oriel window is sufficient to give to a street front that quaint, picturesque and unobtrusive effect which is so characteristic of the style. The egg and dart molding is used very frequently, but a more judicious use of it is required than is seen in a street front in New York, where the author of the design thought so much of this molding that he placed three bands of it across his front, thus destroying its function.

The second influence exerted upon the "new departure" is that of our colonial work.

In considering colonial work we must keep in mind the differences in the starting point. For convenience the colonial work of the English colonies of North America may be divided into three periods, commencing with the first settlement and ending at the opening of the revolution.

The first period may be said to embrace nearly all of the seventeenth century. Here the effect aimed at is solidity and protection from the elements. The end walls and chimney were of random stone, laid up in mortar, composed of sand, shell lime and gravel; the sides and ends above plate were of oak framework, usually boarded crosswise. These boards were sometimes covered with stucco work, but usually with split shingles. In the second period or first quarter of the eighteenth century, we find all frame construction, the rough boarding being covered over with thick clapboards beaded on the lower edge. The roofs were covered with shingles, but of a better quality than before used.

Here brick takes the place of stone for chimney construction and the gambrel roof, which is an invention of the colonials, was used and highly developed in its stay of a century. It was an economizer of floor space, and with its highly developed dormers, became quite artistic. The window frames of this period were plank, with molded edges, also cap and sill were molded. The small square panes of glass, set in wide muntins, gave to the whole a pleasing effect. The gambrel roof, after a little, became modified into the hipped roof with a railing above the cornice, but in the earlier examples of this roof, instead of being hipped in all around, it was simply hipped around the lower part and terminating in a little gable end.

The commercial prosperity of the colonies, which is the commencement of the third period in which colonial work is divided, demanded a better class of buildings than before erected. We now see the hipped roof finely developed. The planning is simple, but the detail is delicate and refined, adding much richness to the interiors. Dutch tile is used to good advantage around fireplaces, being held in place by brass bands, giving a quaint and homelike appearance to the interior; this is also the period when brass hinges and latches were used. Much emphasis is given to the front door by means of a highly carved entablature, placed over door upon pilaster with Corinthian capitals; the muntins in transom were often curved or fenestrated.

The public buildings of this period were good examples of the Georgian period of Queen Anne. The position that the domestic architecture of America holds, is undoubtedly due to the influence that the colonial work has had upon the members of the profession.

We have now come to the third influence (the French) in our division of the "new departure."

In France many an aspirant of art culture has found material partially developed for a fascinating study. These examples may be found in the Romanesque and Byzantine works.

These aspirants not only imagined that they would have an influence upon the architecture of the "new departure," such influence as we see in Richardson's and Hunt's work, but that after mastering the symbols and signs of expression they would voice themselves in the principle that all

* Paper read before the Buffalo Architectural Sketch Club, March, 1887.

creative genius has to do is to stretch forth its hand to accomplish anything that their heaven-born instinct may impel them to.

Prof. Ware and his students are of the French school, which is to give massiveness and boldness to its structure. In Richardson's work we find a loose Romanesque worked up in the best Byzantine detail. Richardson was a large absorber and a skillful arranger; Trinity tower in his Boston church can be seen, by looking at a photograph of work in northern Spain, to have been taken from the cathedral of Salamanca.

Hunt also studied in France, but his designs (though being French in detail) are Anglo-Saxon in spirit.

What foreigners say of our American work is, there is boldness, thoroughness, directness of aim and a lack of conventionality which is extremely refreshing, though the lack of conventionality is open on the art side to criticism, but as to the structural points there can be no doubt as to the success obtained. Our fireproof system fares far ahead of England.

Richardson, in the Haward law school, has shown a vast amount of originality mixed with extreme breadth and boldness of treatment.

He possessed the ability to change Neo Grec so as to constitute a series of original conceptions.

Thus we have seen what were the influences that have brought about our "new departure in American architecture," which brings this paper on the nineteenth century architecture to a close.

Originality in American Architecture.*

BY GEORGE W. MAHER.

FROM want of travel and personal observation most of the information obtained by the speaker is from reading or hearsay, and as the subject embraces a large scope of architectural features, he is compelled to take but a general survey of the subject.

America is noted for its character of progress since first it was settled in modern times. To the present day the people's tendency has been toward that which is an improvement upon old European methods and forms.

The basis of thought and action has been practicability.

That which had hitherto been done before with much friction could be simplified, thus modern conveniences are of a higher standard here than elsewhere in the world.

The originality in American architecture rests to a great degree upon the basis of studying the necessities of labor and life, and meeting them without hesitancy or prejudice. To attempt to designate any particular style in the vast amount of designs seen from any one point of view in our large cities would be too great an undertaking for our limited time and space. That there is a character which distinguishes itself is evident from the fact that architecture in Boston is different from that in New York, and Chicago buildings have a different character from those in Cincinnati, and so on.

This peculiarity or originality in design arises from obvious local reasons; the exactions of an educated and active public are essential for any improvement in art. Thus was it in Athens in the time of Pericles, and also in Florence in the fifteenth century.

The architects were held in true paths by a dictating and appreciative public. In our large cities this long-wished-for tendency is beginning to be felt. As the newness wears off and an equilibrium of thought and action begin to predominate, finer tastes arise and a thirst for better things is a sure follower of education and wealth. This crystallization can be distinguished through the efforts put forth by the people to purify all things, to encourage that which is ennobling; when in an architectural sense the aim is for truth of expression and substantial ability in execution; where there is a less inclination to jump from one extreme to another for the mere sake of novelty.

We should not wonder that in the past there has been such a confusion in building; for in the first place the main aim of the people has been to better their condition financially, not seeking to a great extent after beauty nor encouraging art. This was not their aim nor education; they were the promoters of progress and were necessary to lay the rough foundation upon which the finer instincts could be built afterward.

In the second place, they did not have the means to employ real talent to erect their edifices, nor did genius wish to emigrate into such localities. To demonstrate these facts we need only to look back a few years at the condition (architecturally) then, and note the difference when compared with today, progress there is in every direction. The Western Association of Architects, Association of Draftsmen, architectural journals, attention paid to the fairness in competition, and so on, are mainly the fruits of an educated and appreciative public who have now the time to encourage the arts; and, if we turn our attention to buildings, is it not gratifying to note the improvement in the style of building erected today, compared with that erected a few years ago? Note the changes in residences, school buildings, churches, depots, office buildings, and if the comparison is truthfully made, originality can be claimed, for though there may be exceptions yet on the whole the improvement is clearly evident.

To examine this statement of originality intelligently, let us compare our ways of progress to those in Europe and see if we cannot trace the difference when pertaining to building. The ideas of Europeans are different from the Americans. They have their set ways and manners handed down from ancestry, which are hard to change radically; their architects are compelled to pass a rigid governmental examination before being allowed to practice; therefore, their buildings are studied to perfection in detail, but only after a prevailing style; the formulas are given; classical lines dictate; methods of construction are repeated; and, though the building may be above free criticism, yet there is that sameness to all of them which rarely dares to be original.

Viollet-Leduc, in his discourses on architecture, deprecates this fact, believing that an architect should be thoroughly acquainted with all the styles, yet points out that in designing he should not be influenced by any par-

ticular one of them, but should reason out his own designs to suit these various purposes.

In American architecture no such rules govern the architect; though familiar as he ought to be with historical architecture, epochs of the past do not imperatively prevent him from giving free course to his American ideas. He designs to the limit of his capacity, and though the result may be far from satisfactory at times, yet on the whole it is beneficial, for he submits his ideas to common reasoning, and of all virtues necessary to complete a substantial building in the nineteenth century common sense is not the least one. So, in comparing the different countries and their methods of progress and advancement, it can be truthfully claimed that there is as much chance of a national style forthcoming in this country as elsewhere in the world, and that its progress will be fast or slow according to the encouragement given by the people. For heathenish tributes, the temples of Greek origin are gone, and imposing churches of Catholic sway and Papal supremacy, the fruits of centuries, are part of the past. These promoters and encouragers of gorgeous art are gone, and in their stead the will of an enlightened public will be the dictator.

Let us turn our attention to the American residence and note the improvement made on this class of building during the past few years. What was it originally? Generally a structure boxy and meaningless in every detail; if a large building, perhaps a poor copy from some photograph of an edifice in Europe, a confused style where galvanized iron was used to excess and clumsily executed. What have we today? In most of our large cities a class of buildings can be seen which have no equal for interior arrangement, original to this class of buildings in every particular, for nowhere are the wants of comfort and practicability so sought after as here, and nowhere the world over are modern improvements so easily adapted as here; this, in fact, when carried to excess may be a fault instead of a virtue. The exterior of these buildings presents uniqueness. The façades are generally of rock-faced stone; the peculiarities are low and wide windows, short tapered columns, low overhanging roof balconies, large sweep of roof gabled, massive chimneys, carving finely wrought. The style leaves an idea of substantiality; no lie can be discerned in the material used or the manner of using it.

The late H. H. Richardson was the most prominent in placing this class of building on a substantial basis, and it is now receiving encouragement. The idea of massiveness, imposing centralization, of grouping novel ideas for comfort in the interior arrangement seem to be the motives most sought after. This style of building differs from European buildings of the same class in both plan and façade. The arrangement of rooms in European houses is on different principles, to accommodate the needs of a people who have different wants; original ways of planning to suit different national characteristics is only a natural law which the architect is bound to respect. To be sure, there are houses now being built on the European plan of arrangement, but whether they will prove satisfactory on the whole to republican ideas remains to be demonstrated; certainly the American residence is a model for comfort, and this impression seems to be universal.

As regards façade, the comparison is great, when drawn between American and European buildings of this class. That the Americans pay more attention to the outside is clearly evident, and if the design is poor it is owing to the inability of the architect. The façade of an European resident portrays a given style, Classic, Gothic, or transitional; they are built substantially and outlive our buildings generally.

The American resident differs in that no particular style is followed, but that free vent is given to the designer's fancy. As a whole for originality of façade, the American residence is superior. It portrays more tact, more variety in grouping, and though architectural blunders are seen, the idea conveyed is a newness of design which can be called originality.

Another class of resident buildings which is genuine to the American soil is the frame suburban house, sometimes called Old Colonial, though no particular name has yet received universal acknowledgment. This class of buildings was first encouraged on our eastern coast, New England. Coupled as it is with certain features belonging to the Queen Anne, there seems to be enough originality in it to convince most people of the progressiveness of this country.

It is not every architect who can grasp the idea, in fact there is much opposition to the shingle house as it is termed. If designed aright it presents a model for picturesqueness. Rock-faced base, porches plain and devoid of spindle work, gables pierced with windows having small lights, carving worked on solid wood, long sweep of roof pierced with short, massive chimneys, it tends to leave the impression of quietness of home rather than a dazed impression of grandeur. This is the right idea of a residence, to have it speak of its function. No building has genuine style which does not speak of the thought which first brought it into existence. Thus the true path toward an original style is to follow the dictation of necessity and then to improve upon detail. The interior of this class of building presents comfort in every form. Large, old-fashioned fireplaces, ease of stairs, nooks with settees; heavy oak beams leave the impression of solidity; low ceilings convey the idea of privacy; all contribute to make life a matter of ease. This style of building suits the taste of the better class of American people, and if encouraged aright will develop into a style that speaks of home and comfort.

The American school buildings contribute to our list which can be pointed to as being original in arrangement and façade. Of late years it has developed wonderfully, owing to the attention paid to such matters by the public. No models equal to them for convenience, light and ventilation can be found elsewhere. It has been owing to the dictation of the people mainly which has brought our school building to its present level of perfection. Hence the necessity of having an appreciative public to encourage any form of art. The true artist will be forthcoming.

Office buildings, a class necessary for the business enterprise of the American people, are original in almost every detail as regards arrangement, and, to a great extent, in elevation.

A celebrated writer, in speaking of the Romans, says, "He never felt in the dark, it was a sign of advanced state of civilization that he submit-

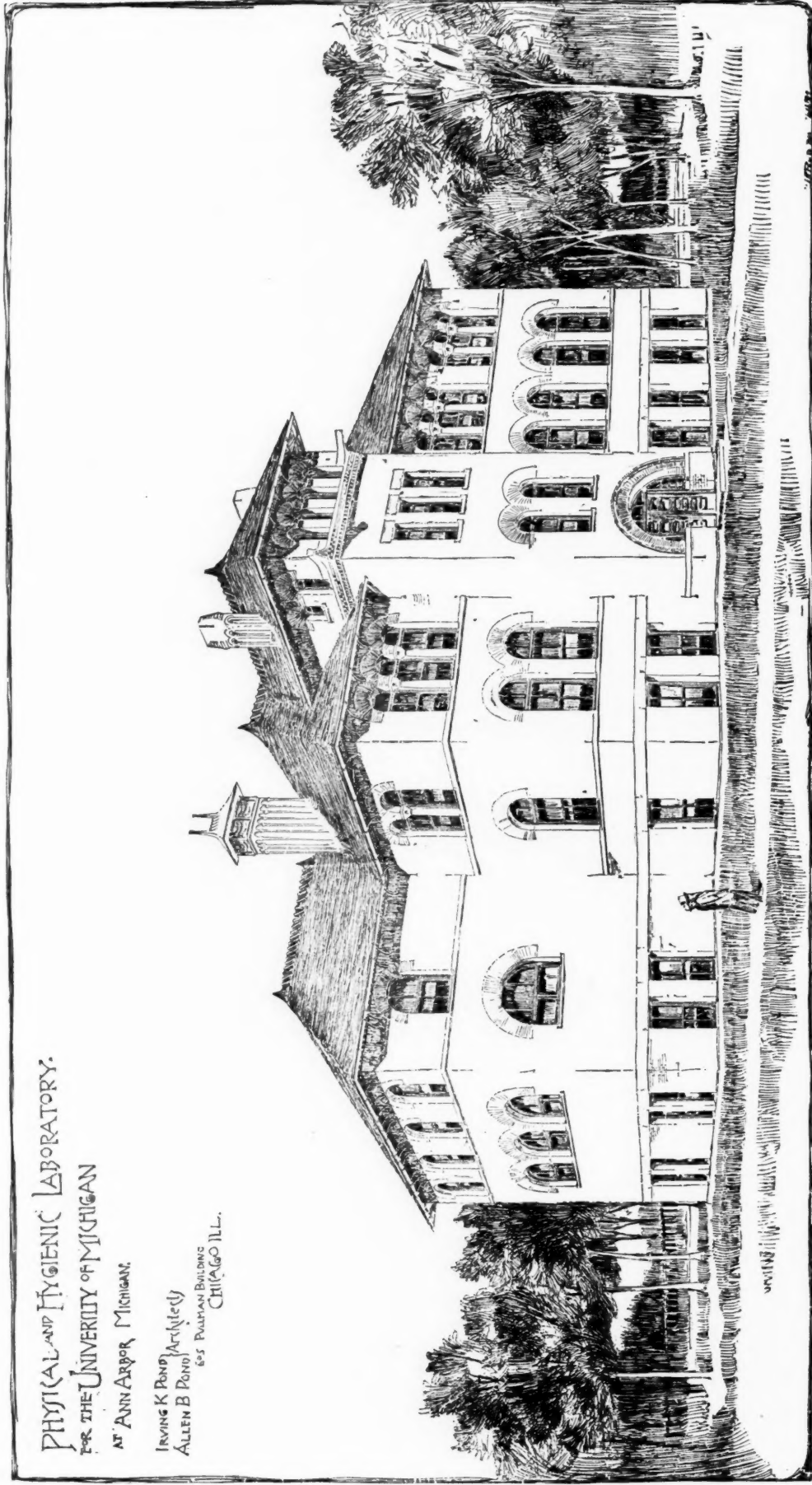
* Paper read before the Chicago Architectural Sketch Club, September 12, 1887.

PHYSICAL AND HYGIENIC LABORATORY.
FOR THE UNIVERSITY OF MICHIGAN

AT ANN ARBOR, MICHIGAN.

IRVING K. POND } Architects
ALLEN B. POND }

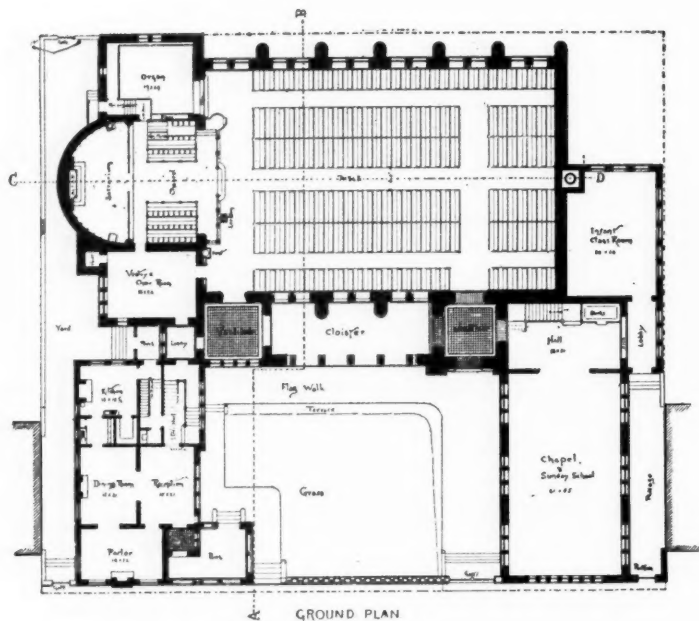
605 PALMER BUILDING
CHICAGO, ILL.



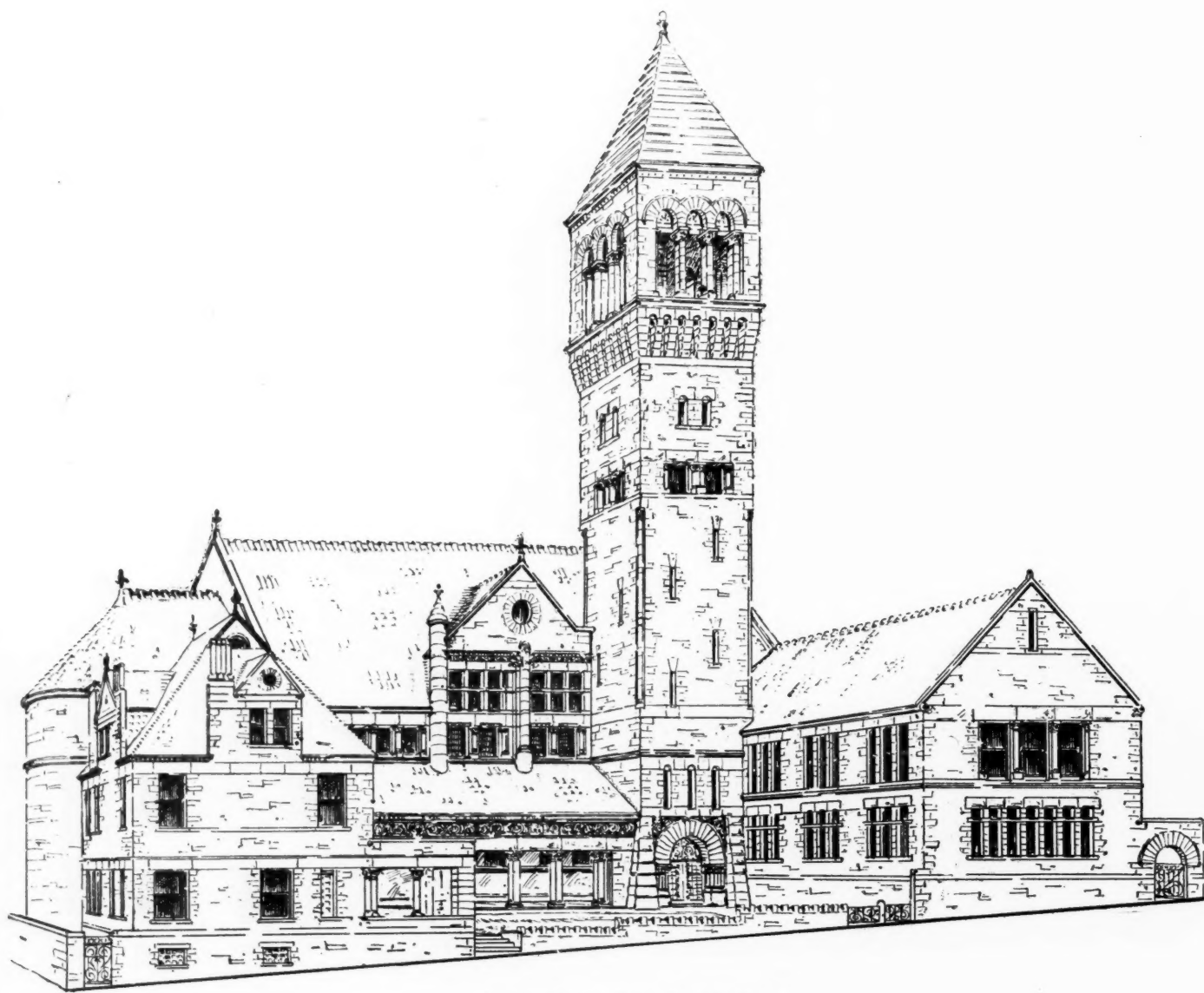


OLIVER WENDELL HOLMES HOSPITAL, HUDSON, WIS.

L. S. BUFFINGTON, ARCHITECT, MINNEAPOLIS, MINN.



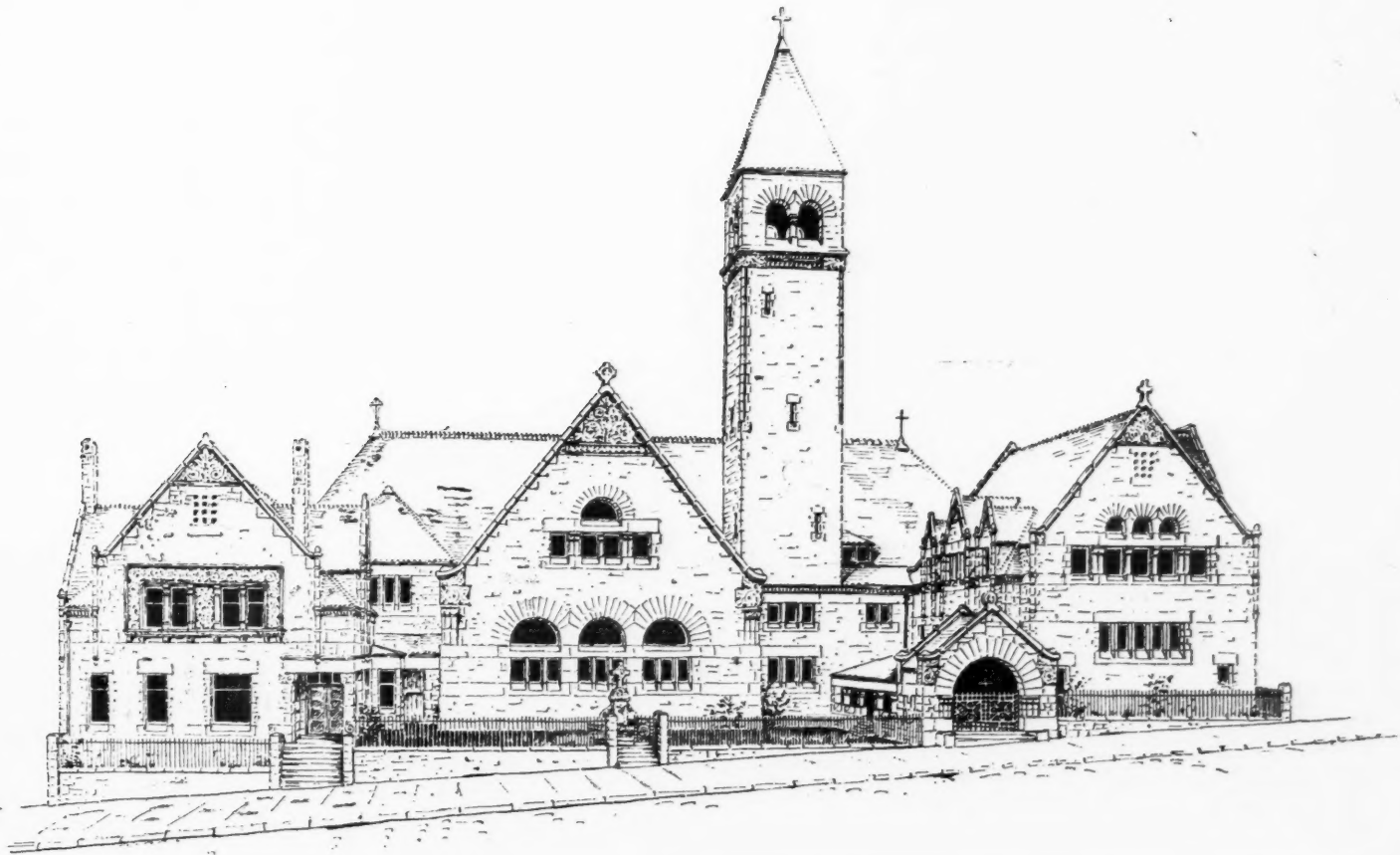
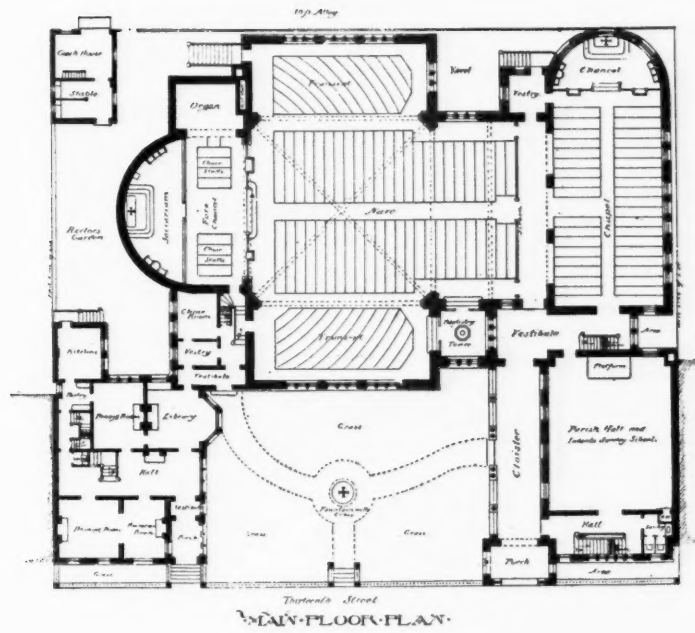
GROUND PLAN



PERSPECTIVE VIEW

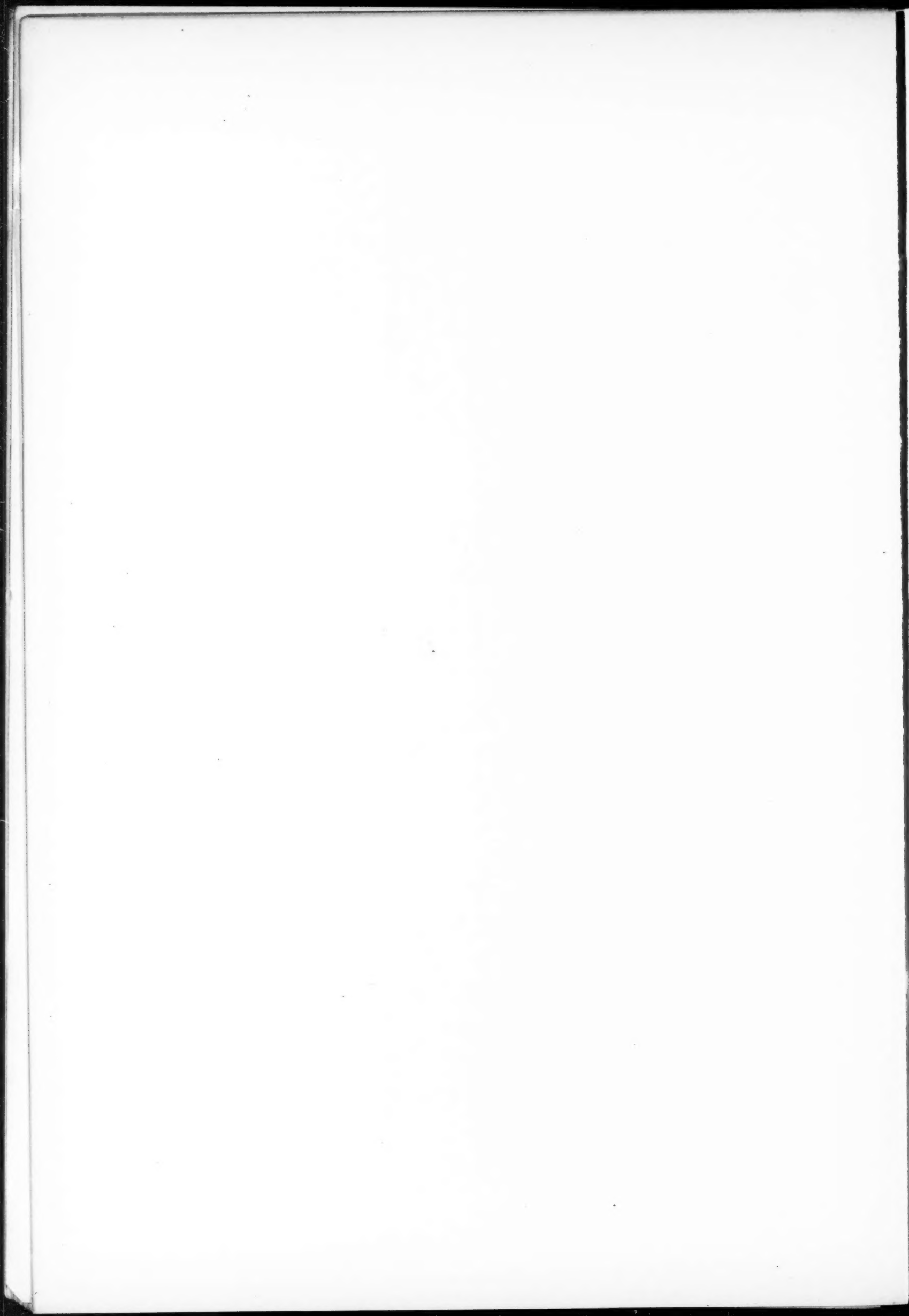
ACCEPTED DESIGN FOR GRACE CHURCH, KANSAS CITY, MO.

SUBMITTED IN COMPETITION BY A. VAN BRUNT, ARCHITECT.



COMPETITIVE DESIGN FOR GRACE CHURCH, KANSAS CITY, MO.

SUBMITTED IN COMPETITION BY BURLING & WHITEHOUSE, ARCHITECTS, CHICAGO.



ted everything to common sense; that he made himself obeyed, because he made himself understood." This we can say truthfully of the Americans when pertaining to larger buildings, particularly the office building, that he submits everything to common reasoning that he does not feel in the dark.

Thus we could point out various classes of buildings which have originality in some form or other; such originality is bound to exist so long as there are different nations and speaking a different language; their wants are, as a matter of course, of a different character, hence their living abodes must correspond to their tastes.

Separated as this nation is by great distance from the older nations, progressive in her character under a free government, one of the main essentials for development in art or practical science, there is no reason why a style should not develop, which if not particularly grand in one sense, would be grand in the sense that it exhibits the wants and necessities of an enlightened life.

We have heard over and again the complaints made upon our buildings, and there certainly are prominent things as regards design to deplore. Yet time alone will be the true corrector. Rome was not built in a day—and American architects can best contribute to the art in their country by elevating the character of these designs themselves rather than calling too much attention to the fact outside the profession and dictating what rules should be followed. A true architect, like a true poet, is born, not manufactured, and the prospect for the future is that more talent will be developed in our edifices erected in the future than those erected in the past.

Illinois State Association of Architects.

THE annual meeting of this association was held on Saturday, October 1, President Adler in the chair.

After the usual lunch the minutes of the previous meeting were read by Secretary Stiles.

J. W. Root, chairman of the Executive Committee, reported that his committee was acting in concert with the committee of the Chicago Chapter A. I. A. in preparing for the coming convention of the American Institute. The rooms of the Chicago Literary Club in the new building of the Art Institute had been secured for convention purposes, and the Leland Hotel had been selected as headquarters. The committee had decided not to give a general banquet, but a pleasant programme would be arranged so that lunches would be given and individuals would entertain visitors at dinner. Ample provision had been made in the way of carriages, etc. Notices had been sent to architects, not only to those who were members of the W. A. A., but leading architects throughout the country, asking them to send drawings to be exhibited at the Western Association Convention at Cincinnati, and Mr. Bloor, secretary A. I. A., had asked those of the Institute who were included in the list to send their drawings to the Institute convention first. The intention of the committee is to make a full exhibit of the reputable work executed in the last ten years, and making by drawings, water colors and photographs the most complete exhibit of completed work the country has seen. Judging from the responses received, this hope will be fully realized.

In relation to the two conventions, that of the A. I. A. and the W. A. A., it was the opinion of the Executive Committee that the matter of a union of interests would be discussed, as the A. I. A. recognized that they had been at fault in too great conservatism and the W. A. A. in too great radicalism, and that many members of each are anxious to establish some plan of common action or union.

The president asked the chairman if the outgoing Executive Committee had any recommendations to offer, and in reply Mr. Root said that there seems to have been a general agreement that the past Executive Committee had not been in a position to be as active in inquiring into the status of applicants for membership, and recommend that this be looked into more closely in the future and a higher standing be taken. The committee also recommended that the series of symposia be again taken up.

The report of Treasurer S. M. Randolph showed total receipts, \$2,106.27; total expenditures, \$1,481.10; the amount on hand at the annual meeting of 1886, \$199.52, and the amount at present in the treasury, \$715.17. There was an indebtedness in the way of dues, etc., to be collected, of \$206.95. The report was referred to the incoming Executive Committee to be audited.

It was recommended by the chair that the treasurer be notified by the secretary of all meetings of the Executive Committee. The election of officers was then taken up.

The chair stated that three tickets had been printed, but only suggestive, and members could only use them as their convenience dictated.

Mr. Treat placed in nomination a ticket composed of the officers of the past year. Mr. Adler objected in well chosen words, stating that it was for the best interests of the association that every member be considered eligible to office, and that as thorough a change should be made as possible. Mr. Burnham expressed similar views upon the subject, and the ticket was withdrawn. The following officers were then nominated and elected:

For president, Samuel A. Treat received 10 votes; Wm. Holabird, 3; Louis H. Sullivan, 6. Mr. Treat was elected president.

For vice-president, L. D. Cleveland received 11 votes; Wm. Holabird, 6. Mr. Cleveland was declared elected first vice-president.

For second vice-president, C. L. Stiles received 14 votes; J. L. Silsbee, 2; and W. W. Boyington, 1. Mr. Stiles was declared elected second vice-president.

For treasurer, H. W. Hill received 10 votes; J. L. Silsbee, 4; J. L. Halberg, 2; Wm. Holabird, 1. Mr. Hill was declared elected treasurer.

For secretary, Mr. R. C. Berlin received 13 votes; N. S. Patton, 4. Mr. Berlin was declared elected secretary.

For Executive Committee, L. H. Sullivan, W. W. Clay, J. W. Root and Alfred Smith were elected. The president is a member *ex-officio*. The meeting then adjourned.

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.—Twenty-first annual meeting at Chicago, October 19, 20 and 21, 1887, A. J. Bloor, 18 Broadway, New York, secretary.

WESTERN ASSOCIATION OF ARCHITECTS.—Convention will be held November 16, 1887, at Cincinnati. J. F. Alexander, La Fayette, Ind., secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

NATIONAL ASSOCIATION OF BUILDERS OF THE UNITED STATES OF AMERICA.—Convention will be held the first Tuesday in February, 1888, at Cincinnati. Wm. H. Sayward, Boston, secretary.

ILLINOIS STATE ASSOCIATION OF ARCHITECTS meets the first Saturday of every month, at 15 East Washington street, Chicago. Annual meeting first Thursday in October, 1888. R. C. Berlin, Chicago, secretary.

INDIANA STATE ASSOCIATION OF ARCHITECTS meets on the fourth Wednesdays of January, April, July and October of each year. Annual meeting fourth Wednesday in October. E. H. Ketcham, Indianapolis, secretary.

MISSOURI STATE ASSOCIATION OF ARCHITECTS meets at Kansas City on the second Tuesday in January, 1888. Charles E. Illsley, St. Louis, secretary.

THE ARCHITECTURAL ASSOCIATION OF IOWA, annual meeting, second Wednesday of February, 1888, at Spirit Lake. F. D. Hyde, Dubuque, secretary.

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA meets every other Tuesday at Minneapolis and St. Paul alternately. Annual meeting January 3, 1888. F. G. Corser, Minneapolis, secretary.

KANSAS STATE ASSOCIATION OF ARCHITECTS meets at Wichita on the third Tuesday of January, 1888. J. C. Holland, Topeka, secretary.

ASSOCIATION OF ALABAMA ARCHITECTS.—John Sutcliffe, Birmingham, secretary.

ASSOCIATION OF OHIO ARCHITECTS meets annually. Next meeting third Thursday in August, 1888, at Cleveland. F. A. Coburn, Cleveland, secretary.

ASSOCIATION OF TENNESSEE ARCHITECTS meets bi-monthly. Annual meeting third Thursday in February, 1888, at Memphis. T. L. Dismukes, Nashville, secretary.

ASSOCIATION OF TEXAS ARCHITECTS meets at Houston on the third Tuesday of January, 1888. S. A. J. Preston, Austin, secretary.

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

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

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1887. F. B. Hamilton, secretary.

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

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

BUFFALO SOCIETY OF ARCHITECTS meets first and third Tuesdays each month. W. W. Carlin, secretary.

THE CHICAGO ARCHITECTURAL SKETCH CLUB meets every alternate Monday, Builders' and Traders' Exchange. W. G. Williamson, secretary.

AMERICAN INSTITUTE OF ARCHITECTS.

The following circular has been issued from the secretary's office of the American Institute of Architects:

AMERICAN INSTITUTE OF ARCHITECTS.

NEW YORK, September 1, 1887.

DEAR SIR,—The twenty-first annual convention American Institute of Architects will take place in Chicago on Wednesday, Thursday and Friday, October 19, 20 and 21 ensuing.

In advance of the detailed programme which, as soon as some points in abeyance are decided, will be issued by the Committee of Arrangements—Messrs. W. L. B. Jenney, E. T. Littell, H. L. Gay and the secretary—the undersigned wishes to call special attention to the occasion, which promises to be one of great interest and enjoyment. The architectural development of the great City of the Lakes, particularly perhaps, in its business buildings, has of late years been very notable, and will be seen under the best auspices, the Illinois State Association of Architects having passed a resolution expressing its "great pleasure in extending to (us) a hearty welcome," and having appointed a committee to act in concert with a corresponding committee of the Chicago chapter of the institute, "in providing a suitable entertainment to the invited guests."

The Western Association of Architects have appointed their president, Mr. Root, their secretary, Mr. Alexander, and their ex-president, Mr. Adler, as their representatives at our convention; and on a recent official occasion, the first alluded to it as one "which may pave the way to some possible union of the two associations, which will be a benefit to all," and the last as "an occasion which we may hope to see bring the institute into closer relations with the Western Association, possibly resulting ultimately in both associations forming under one organization."

The secretary has been in correspondence with some of the most prominent practitioners in the country in reference to getting brief practical papers, treating of important buildings or other architectural subjects with which their experience has rendered them familiar, and has already the promise of several. In addition to these there will be presented the opening address of President Thomas U. Walter, LL.D., the annual reports of the various chapters, and of the board of trustees and standing committees, as well as several proposed amendments to the by-laws, and other routine matter.

It is proposed also to collect illustrations of the works of members for exhibition, first at the institute convention, and afterward—by request of the Western Association of Architects—at their convention in Cincinnati, opening November 16 ensuing. The illustrations may include any form of rendering, whether drawings, photographs, photogravures, or the results of any other of the various processes in vogue, and whether in whole or in part of the work delineated, but only such as represent work executed within the last ten years are desired.

The undersigned will be glad to hear, at the earliest possible moment, from members as to what illustrations they propose to send; as, also, from those to whom he wrote

under date of August 10, in relation to the professional papers before mentioned; and in view of inquiries made by some of the latter, he wishes to repeat that a short paper will be preferable to a lengthy one, and that when there is only leisure for a mere statement of the paramount requirements of the subject suggested, it will be entirely acceptable; nor is it essential that the papers be forwarded before October 12, though it will be convenient to have them earlier.

Referring to his letter, also of the 10th ult., to the presidents and secretaries of the various chapters, the undersigned begs to remind them of the suggestions therein made. Any reports or communications for the Committee of Arrangements, which cannot be mailed in time to reach the secretary, in New York, by October 15, may be forwarded to Mr. H. L. Gay, 15 East Washington street, Chicago.

Respectfully yours,

A. J. BLOOR, Secretary A. I. A.

This circular was followed by the one giving exact information and general programme, received October 8, printed on page 37.

At a meeting of the Board of Trustees A. I. A. held September 22, the following candidates were elected fellows:

M. L. Beers, D. H. Burnham, H. L. Gay, H. W. Hill, Wm. Holabird, J. W. Root, S. V. Shipman, J. L. Silsbee, and Alfred Smith, all of Chicago.

The following were elected associates:

Otis Dockstader, Elmira, N. Y.; Alfred F. Pashley, Chicago; Geo. W. Bunting, Oscar D. Bohlen, R. P. Daggett, James B. Lizius, J. H. Scharn, Adolph Scherrer, all of Indianapolis, Ind., and Chas. P. H. Gilbert of New York City.

The societies of architects, in Washington, D. C., and Indianapolis, Ind., were, on application, admitted as chapters of the Institute.

The officers and members of the Washington Chapter are as follows:

J. L. Smithmeyer, president; W. M. Poindexter, vice-president; Glenn Brown, secretary; C. A. Didden, treasurer. Professional members: J. L. Smithmeyer, F. A. I. A.; John Moser, F. A. I. A.; O. Von Nerta, A. A. I. A.; S. M. Howard, A. A. I. A.; W. M. Poindexter, A. A. I. A.; J. A. Henry Flemmer, J. R. Marshall, C. A. Didden, A. A. I. A.; Glenn Brown, F. A. I. A.; C. H. Reid, T. F. Schneider, A. A. I. A.; Robert Stead, Wm. Kirkus, Jr., Henry H. Low, Paul Schultze, Adolph Cluss, F. A. I. A.; Jos. C. Hornblower, J. West Wagner, Will A. Freret, Edward Clark, H. L. Page, H. H. Kendall.

The secretaries of the A. I. A., the W. A. A., the A. L. N. Y., and of each chapter of the Institute are *ex-officio* corresponding members.

The membership of the Indianapolis Chapter consists of the gentlemen in Indianapolis just elected to Associateship in the Institute, together with Mr. D. A. Bohlen, F. A. I. A., its president, Mr. Lizius being the secretary.

WESTERN ASSOCIATION OF ARCHITECTS.

The following circular has been issued by the secretary, and is especially interesting to architects who contemplate applying for membership.

WESTERN ASSOCIATION OF ARCHITECTS,
Secretary's Office, Lafayette, Ind.

NOTICE OF DIRECTOR'S MEETING.

DEAR SIR,—The Board of Directors of the Western Association of Architects will meet in Chicago, Illinois, October 18, 1887, for the transaction of general business. All matters for the consideration of the Board of Directors at this meeting must be filed with the secretary on or before October 15, 1887.

At the last annual convention of the Western Association of Architects, Article X was added to the by-laws, which reads as follows:

ARTICLE X—BY-LAWS.

"All names of candidates are to be presented to the Board of Directors, and by them sent to all members of the association thirty days before the meeting of the convention." The requirements of Article X are imperative that all applications for membership must be filed with the secretary on or before October 15, 1887. This will be the last meeting of the Board of Directors will call preceding the annual convention, which meets in Cincinnati, Ohio, the third Wednesday in November.

The Board of Directors earnestly request that copies of the reports of each committee be filed with the secretary on or before October 15, 1887, so that the Board of Directors will have ample time to examine and compare reports and correspond with committees.

JAMES F. ALEXANDER,

Secretary Western Association of Architects.

Lafayette, October 10, 1887.

Members who wish to bring matters before the Board of Directors will also take notice that the last meeting of the board before the annual convention occurs October 18.

The following circular has been issued by the directors of the Western Association, and is deserving of the special attention of every member of the national and state associations:

WESTERN ASSOCIATION OF ARCHITECTS.

SECRETARY'S OFFICE, Lafayette, Ind.

DEAR SIR,—The Western Association of Architects was organized to encourage the development and progress of architecture, and to establish uniformity of action and understanding among the architects of the West and South, so that their combined influence should tend to elevate professional standards throughout the country.

Believing comparison and consultation to be among the best methods to induce interest in the growth of the profession, in behalf of the American Institute of Architects, which will hold its twenty-first annual convention in Chicago, Ill., October 19, 1887, we extend to you a cordial invitation to send to the committee in charge of the drawing exhibit at the Chicago convention such pencil or pen-and-ink sketches, water color drawings, photographs and models of a few of the buildings designed and executed under your supervision during the past ten years. It is the hope of the association that the exhibition at the convention will be, in all its departments, unusually full and widely illustrative, so that architects from all parts of the country, whether members of the American Institute of Architects or not, will have an opportunity for a wide survey of the work done throughout the country during this period of time. Your cooperation in this, which we believe to be a very important work, will be highly appreciated.

The A. I. A. will pay all costs of transportation to Chicago and return, as well as charges for boxing, shipping, hanging, etc.

Should it be your pleasure to contribute to the exhibition, will you kindly send all drawings or photographs to Henry Lord Gay, Committee on Drawing Exhibits, 15 East Washington street, Chicago, on or before October 14, 1887.

The American Institute of Architects will also be gratified to have your presence and cooperation at the next convention, which we trust will be one of interest and significance.

JOHN W. ROOT, President, W. A. A.,

115 Monroe street, Chicago, Ill.

D. ADLER, Chairman Board of Directors, W. A. A.,

58 Borden Block, Chicago, Ill.

J. F. ALEXANDER, Secretary, W. A. A.,

Cor. Fourth and Main Sts., Lafayette, Ind.

HENRY LORD GAY, Chairman Committee on Drawing Exhibit,
American Institute of Architects, 15 East Washington street, Chicago, Ill.

WASHINGTON CHAPTER A. I. A.

The architects of Washington, D. C., organized a chapter of the American Institute of Architects August 11, and were admitted to membership to the A. I. A. by its board of trustees, September 21. The officers

are: president, J. L. Smithmeyer; vice-president, W. M. Poindexter; secretary, Glenn Brown; treasurer, C. A. Didden.

Professional members: J. L. Smithmeyer, John Moser, O. Von Nerta, S. M. Howard, W. M. Poindexter, J. A. Henry Flemmer, J. R. Marshall, C. A. Didden, Glenn Brown, C. H. Reid, T. F. Schneider, Robert Stead, Wm. Kirkus, Jr., Henry H. Low, Paul Schultze, Adolph Cluss, Jos. C. Hornblower, J. West Wagner, Will A. Freret, Edward Clark, H. L. Page, H. H. Kendall.

Junior member: Thomas Francis, Jr.

Corresponding members, *ex-officio*: A. J. Bloor, secretary A. I. A.; J. F. Alexander, secretary W. A. A.; C. I. Berg, secretary Architectural League, New York; E. M. Wheelright, secretary Boston Chapter A. I. A.; Alfred F. Pashley, secretary Chicago Chapter A. I. A.; Arthur Truscott, secretary Philadelphia Chapter A. I. A.; J. A. Wilson, secretary Baltimore Chapter A. I. A.; Chas. Crapsey, secretary Cincinnati Chapter A. I. A.; E. L. Nickerson, Secretary Rhode Island Chapter A. I. A.; B. E. Hendricksen, secretary San Francisco Chapter A. I. A.; H. W. Kirchner, secretary St. Louis Chapter A. I. A.; J. H. Stem, secretary Indiana Chapter A. I. A.

The chapter has printed in neat pamphlet form its constitution and by-laws, with extracts from the by-laws of the Institute bearing upon the formation of chapters, and in reference to memberships as fellows and associates, and the schedule of charges formulated and adopted by the Institute October 23, 1884, since adopted by the Western Association and fourteen state associations.

THE ARCHITECTURAL LEAGUE OF NEW YORK.

An annual competition has been established by the League, and the following announcement and programme is received:

The Architectural League takes pleasure in announcing that it has instituted, in connection with its exhibition, an annual competition, open to all draftsmen in the United States under the age of twenty-five. The object of such competition to be the promotion of good design and the improvement of draftsmanship.

As prizes, it offers to the design placed first, a gold medal, to be known as The Gold Medal of the Architectural League; and to the design placed second, The Silver Medal of the Architectural League.

The conditions for admission to the competition are:

First—That the competitors shall be residents of the United States, and under the age of twenty-five; and,

Second—That the drawings shall be made in conformity with the following programme, and, in all parts and portions, entirely by the hand of the competitor.

The drawings will be judged by the jury appointed for that purpose.

The successful drawings, and such others as may be thought worthy, will be hung at the exhibition, the first and second prize drawings being so indicated, and these latter shall thereupon become the property of the League.

CHAS. I. BERG, Secretary.

JOHN L. DU FAIS, President.

For the First Annual Competition the following programme has been arranged: The drawings shall exhibit a "Memorial Clock and Bell Tower on a Village Green."

The tower to stand on a base which shall not exceed the dimensions of a square of twenty-two (22) feet.

Each contributor to exhibit two sheets of drawings: one to contain plans and elevations at the scale of four feet to the inch, and one to exhibit a perspective view. The plan and elevation sheet to be finished in line with India ink and the lining pen. No brushwork on this sheet, except in blacking in windows and sections. No shadows are to be cast.

The perspective sheet to be rendered at will.

Each sheet to be cut to the uniform size of 24 x 32 inches, and to be white card or Bristol board, or Whatman paper, mounted on stretcher. No colored borders, frames or glazing will be allowed.

Each sheet must be distinguished by a motto or cypher. A sealed envelope, bearing the same motto or cypher, must contain the name and full address of the author.

Drawings are to be delivered flat, carriage paid, on or before December 5, 1887, to Chas. I. Berg, Secretary, 152 Fifth Avenue, New York City. They will be returned at the close of the exhibition at the expense of the contributor.

WM. C. HAZLETT,
JOHN L. DU FAIS,
CHAS. I. BERG, } Committee.

Rock Asphalte in the Phenix Building.

AMONG many systems of roofing and the different materials used in their construction, Neufchatel and Seyssel rock asphalte, such as used in the Phenix building, is rapidly gaining in favor where a permanent and thoroughly fireproof roof is desirable. Taking, for example, that placed upon the Phenix office building, recently completed at Chicago, under the plans of Architects Burnham & Root. This is laid upon fireproof hollow tile, leveled up with cement, and thoroughly resists the action of the elements, neither sun, rain nor frost affecting in the slightest degree the uniformity of its surface. While giving to builders a roof that is as permanent as the building which it covers, Neufchatel and Seyssel rock asphalte is being largely used for other purposes. Simpson Bros., of Chicago, who furnish and lay the material, have just closed a contract with the Conrad Seipp Brewing Company for one of the largest rock asphalte flooring and roofing jobs yet laid in this country.

The adaptability of this material for brewery, cellar, laundry, or stable, store and mill floors lies in its permanent character, and the facility with which it can be laid over cement, brick or wood, equally well in winter or summer, and its being both waterproof and fireproof.

The basement and vault floors of the Phenix building are also covered with this material, and its use is increasing as rapidly as its valuable qualities become known.

NEXT to the unconquerable stovepipe, the sliding door has come in for more victories over man than any other house belonging. Who has not encountered this foe? True, some thoughtful men have gained some slight advantages over it, and made its uncertainties less certain, but it has evidently been left for the Climax Rail Co., of New York, to put this foe to tranquillity in well-ordered households *hors de combat*. Wherever it has been used, and it has been used quite extensively, it has won golden opinions from architects, builders and the indwellers of homes. It is a floor rail, that is, is put level with the floor, and the device is such, that the door cannot jump the track or become jam-locked. Moreover it can be put in any house, old as well as new, and in the former case without disturbing the casings or marring the paint. In a word, it is, if architects' words are to be taken for the truth, and they are, "the right thing in the right place,"—that is when put there.

Mosaics.

THERE is a good demand for first-class draftsmen on the Pacific coast. Architect C. E. Apponye, 25 North Spring street, Los Angeles, California, wants two good men.

EDWARD D. ADAMS, a New York banker, has raised \$100,000 by subscription, which he hopes to make \$200,000, for the erection of a large building and gallery for instruction in art and the founding of an American salon. It is a worthy undertaking, and ought to succeed.

THE Star Steam Heater Company, of Mt. Joy, Pa., addresses the plumbers and steamfitters of the country, through the medium of a circular letter, calling their attention to the special merits of their improved Star Steam and Hot Water Heaters, which is meeting with unqualified success wherever it has been introduced. The claims of the company for their magazine heater are presented logically, and are worthy of careful consideration by builders.

THE illustrated catalogue of Edwin Louderback & Co., of Philadelphia, manufacturers of sliding blinds, Venetian blinds, window screens and shades, and also of combination blinds, is received. Illustrations of Hill's sliding blinds are given, and particular attention is called to the Philadelphia Venetian blinds, manufactured by Louderback & Co. An experience of twenty-five years in the manufacture of these and similar fixtures, with special and improved machinery, is a guarantee of first-class work, and their ability to forward them at a minimum cost.

FASHION and wealth create new industries. It is only recently that the industry of architectural brasswork has acquired large proportions. Now our public buildings and residences are incomplete without artistic brasswork. Chicago has at once jumped to the first rank in this industry, and some of the most important contracts in the country have been intrusted to Chicago firms. The Union Brass Works are at present busily engaged in manufacturing the bronze stairway for the United States Custom House at Baltimore. To give some idea of the extent of the contract it may be mentioned that there are five hundred balusters at \$13 apiece, and twenty-three newels at \$300 each, and the total amount is over \$11,000; the same company is furnishing a large counter for the Dakota Loan and Trust Co., of Watertown, Dakota, which, when completed, will be probably the finest counter in the country. There are fifty-four feet at \$76 a foot, or nearly \$4,000. With the bronze work on the American Bank, of Kansas City, and other large contracts the Union Brass Works cannot complain of dull times.

IN older countries the general use of hardwood lumber is taken as a matter of course. But little more than ten years since it would have been hard to find a firm in Chicago doing business in hardwood lumber exclusively, except perhaps for use in the manufacture of furniture. Today this is entirely changed. No house of any pretensions is erected that has not more or less hardwood trimming, and usually in the entire trimming as well as the floors nothing but hardwood is introduced. This is not altogether because the architectural taste has changed, but largely because many of the hardwoods, such as maple, ash, oak, and even cherry, can be furnished dressed for less money than the same grade of soft pine can be obtained. One firm, and probably the largest in the line in the West, Hayden Bros., have a yard covering six acres of ground, in which there is nothing but hardwood lumber. The yard is centrally located, with ample track facilities, and within it is piled over six million feet of hardwood lumber of all descriptions. Sheds are built for the storage of fine mahoganies, etc., and large drying kilns enable the firm to deliver kiln dried lumber on short notice, and not only supply the local market, but ship to all parts of the country.

IT is always a satisfaction to call attention to a device of merit wherein the necessities of the people are met, especially home needs, and in this issue of this journal the attention of architects and the builders and owners of homes is called to a unique laundry stove and clothes dryer, manufactured by the Chicago Laundry Dryer Company, which has proved to fill a long felt want among housekeepers wherever it has been introduced. The device comprises a stove and drying apparatus attached; the former furnishing every convenience necessary in a laundry stove, such as boiling the clothes, providing any desired quantity of hot water by a water-back system, and the heating of sadirons, the latter an apartment or addition in which the clothes are dried after washing by a constant current of heated air passing through, heated from the ordinary fire of the stove, and the whole at a minimum cost of fuel. Thus, in a very limited space, is furnished the most complete laundry outfit that has yet been offered to the public, so that whether the weather is stormy, or rainy, or the air is filled with dust, soot or smoke it matters little to the possessor of one of these, as the work can be done within doors without tumult or annoyance of any kind, be the washing large or small. It is only necessary to say that this laundry stove and dryer has been especially designed for residences, flats, apartment buildings, hotels and public institutions to recognize the field of adaptability covered by the originators and inventors.

NOTHING in connection with architecture has developed more rapidly and with greater variety than modes for building ornamentation, interior and exterior. The strides from crudeness to perfection, when one stops to consider the first beginnings of many of the standard appliances and their present status is simply amazing. These remarks are inspired by the receipt of the fifth edition of Messrs. Bakewell & Mullins, of Salem, Ohio, illustrated catalogue of the various products of their extensive establishment for the manufacture of building ornamentation, in brass, copper and zinc, and which strikingly illustrates the assertion made at the outset of this article. Such architects, builders and metal workers who have not received this edition should procure a copy at once as they will find it a very treasure store of suggestions in house ornamentation that will challenge their highest ideas of novelty and beauty as well as of art. The illustrations are superbly produced, representing an almost infinite variety of details, for interiors and exteriors, ranging through the line of full length statuary, busts, animal figures, bas relief panels, spandrels, frieze pieces,

cornices, blocks, quoins, garlands, festoons, brackets, consoles, medallions, heads and faces, capitals, rosettes, corbels, bracket leaves, mansard leaves, frieze and belt enrichments, panel ornaments, angle ornaments, gargoyles, scrolls, crestings, finials, etc., together with many specimens of spunwork. In point of fact, for artistic outlines and exquisite finishing, it would seem these manufacturers have reached the climax of perfection of metal furnishings, and have provided in advance for any probable emergency.

Building Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, Ill., October 8, 1887.

The building activity continues unabated in nearly all the larger towns and cities of the United States. Enterprise has not taken any relation as yet at the rumors which have checked activity in one or two other directions. Architects and builders have an abundance of work in sight for the winter and spring. The probabilities are that the same activity will continue throughout all the next year. There are some reasons to be considered why less building will be done. Low wages and cheap material have always stimulated enterprise; high wages and dear material have, after a certain time, checked enterprise. The cost of building at this time is very little, if any, more than a year or eighteen months ago. Nearly all kinds of building material remain where they were, and the demand for houses, shops, factories and for mechanical power is on the increase. Railway construction is being pushed as rapidly as labor or material can push it. It is very true that a number of important enterprises have been for the present dropped. These enterprises may be taken up within thirty or sixty days or perhaps not until next spring. It is estimated on good authority that there are 30,000 miles of road projected which will be built during the next two years. The distribution of the population throughout the West and South is the strongest guarantee that house, shop and mill building will be prosecuted next year with as much vigor as it has been this year. Diversification of our industries is advancing at a very rapid rate, and is laying the foundation for permanent activity. The report of building operations from states east and west shows that a larger amount of work has been done this year than last. All of the houses built have been promptly and well rented. Houses have sold rapidly at good prices. There is still a demand for more room, and as long as this demand exists we can rest assured that building enterprise will not abate. The New England states have had an exceptionally busy time in manufacturing, and there has been a steady extension of mill and shop capacity. This has been followed by an unusual degree of activity, house building throughout the middle states and our advices are to the effect that more house and mill building has been done this year than ever. It is also stated on good authority that a minimum amount of work is projected for next year. The mills of New York and Pennsylvania are all crowded with orders ranging from one month to six ahead. The ship yards on the Delaware have more work in hand than they have had for years. The boat yards along the lakes are also crowded with orders. The car works throughout the interior are unable to accept all the orders proffered. This general condition of vigorous activity is almost a sure guarantee that the coming year will be an exceptional one. The only possibility of disaster is to be found in a stringency in the money market. We have an assurance that the government will do all in its power to aid us when a stringency is threatened. It is to be regretted that our financial system is in need of government aid at any time. The population throughout the West within the past two years is developing in the markets, and is equalizing the productive points between manufacturing and agriculture. Low prices have prevailed, but enterprise has not been discarded. New schemes are constantly coming up calling for more money, more material and more labor. This year's railroad mileage will probably reach eleven to twelve thousand miles. Locomotive building will exceed last year's output by fifteen per cent. Productive capacity is being extended very rapidly and in the opinion of many too rapidly for permanency. No serious question divides the sentiments of the people, and no threatening obstacle stands in the way of our progress. With an abundance of cheap building material, with an abundance of iron, steel, hardware, lumber, coal and all that goes into building and manufacturing, we could not anticipate any serious falling off in the demand or break up of the confidence which has been growing steadily for three or four years past. The labor question may and probably will give employers a great deal of trouble in the future, but boards of arbitration have been established in different cities, and they are rendering good service. Employers themselves are more united than ever, and are standing like their workmen, shoulder to shoulder for their mutual protection.

Synopsis of Building News.

Arkadelphia, Ark.—Architect B. J. Bartlet, of Little Rock, has prepared plans for the Ouachita Baptist College, 74 by 90 feet, three stories, brick; estimated cost, \$15,000; contract will be let about October 15.

Baldwin, Kan.—Architect Geo. P. Washburn, of Ottawa, reports: For School Board, two-story brick and stone school building, 60 by 78 feet; cost, \$10,000; under way; Geo. Miller, contractor.

Batesville, Ark.—Architect B. J. Bartlet, of Little Rock, has prepared plans for Mr. Hanaford, for a frame dwelling, to cost \$3,500; contract not let.

Boone, Iowa.—Architect F. D. Hyde, of Dubuque, reports: For Catholic Church, two-story brick school and sisters' residence, 47 by 47 feet; cost, \$7,000; plans in preparation.

Burlingame, Kan.—Architect J. G. Haskell, of Topeka, reports: Masonic Hall, 50 by 65 feet; cost, about \$5,000; projected; contract not let.

Chicago, Ohio.—Architect H. C. Lindsay, of Zanesville, has prepared plans for a brick, stone and terra-cotta school house, slate roof; cost, \$15,000.

Chicago, Ill.—Architect A. Bessler, reports: For Dr. Frank McCormick three-story brick and stone building, 22 by 56 feet; cost, \$4,800; under way. For Frank Senft, two-story brick and stone building, 24 by 70 feet; cost, \$5,400; under way. For Charles Schroeder, two-story frame, 22 by 48 feet; cost, \$3,500. For Jacob Schultz, three-story and basement flats, 22 by 68 feet; cost, \$5,600. For S. Kerwin, three-story flats, 21 by 58 feet; cost, \$4,000. For Henry Hoppe, two-story store and flat, 25 by 90 feet; cost, \$7,000. For Christ Menks, two-story flats, 22 by 48 feet; cost, \$3,500; two-story and basement flat building, 22 by 56 feet; cost, \$4,500. For Mrs. M. A. Egan, two-story and basement tenements, 22 by 62 feet; cost, \$3,800. For J. P. Werner, three-story store and dwelling, 25 by 43 feet; cost, \$6,300. For Elwood & Nitz, two-story store and dwelling, 48 by 72 feet; cost, \$10,000. For John Riordan, three-story tenement, 22 by 66 feet; cost, \$4,200. For Frank Wozescki, two-story store and flats, 22 by 70 feet; cost, \$4,500. For Frank Kudra, two-story flats, 22 by 58 feet; cost, \$4,000. For Andrew Muehlhausen, two-story store and dwelling, 24 by 67 feet; cost, \$4,800; also several less important buildings.

Architect Fred Keltenich reports: For Adolph Metzger, two-story brick store and flat, 24 by 66 feet; cost, \$5,800. For Henry Wolf, three-story store and flat building, 25 by 78 feet; cost, \$8,500. For S. Granick, four-story store and flats, 25 by 80 feet; cost, \$12,300. For Weber Wagon Company, at Auburn Junction, wagon works plant; cost, \$80,000. For William Stoltz, four-story and basement carriage factory; cost, \$18,000.

Architect F. R. Shock reports: For Mrs. C. M. Brooks, three-story store and flats, 25 by 84 feet; cost, \$7,000. For Austin Library Association, two-story library, hall, etc., 70 by 130 feet; cost, \$25,000. For B. Crane, two-story summer cottage, 40 by 65 feet; cost, \$25,000. For J. J. Lindman, three-story stone front residence; cost, \$12,000. For F. R. Millard two-story flats, 25 by 72 feet; cost, \$6,000. For Mr. Fitzgerald, two-story residence; cost, \$5,000. For H. F. Frink, two-story cottage at Austin; cost, \$4,000. For M. Baily, two-story cottage at Oak Park; cost, \$4,000. For Mrs. Shock, two-story cottage at Austin; cost, \$4,000.

Architects Froman & Johnson report: For George W. Ferris, two-story dwelling, 22 by 44 feet; cost, \$4,000. For O. Allen, two-story dwelling; cost, \$8,000. Architect L. G. Halberg reports: For B. F. Felix, three-story residence; cost, \$20,000.

Architects Edbrooke & Burnham report: For William Hill, two three-story dwellings; cost, \$20,000.

Architect C. O. Hansen reports: For P. Christenson, three-story stores and flats; cost, \$14,000.

Architect L. G. Halberg reports: For John Erickson, three-story store and flats; cost, \$5,000.

Architect Austin Moody reports: For W. H. Davis, six-story warehouse, 75 by 100 feet; cost, \$90,000.

Architects Halabird & Rothe report: For J. R. Walker, two-story residence, 32 by 80 feet; cost, \$11,000.

Architect P. W. Ruehl reports: For Louis Schafer, three-story flats, 48 by 56 feet; cost, \$10,000. For J. Elmer, three-story store and flats, 26 by 78 feet; cost, \$9,500.

Architect L. Martens reports: For J. F. Smith, two two-story dwellings; cost, \$10,000.

Architect J. H. Carpenter reports: For Proctor & Wood, four three-story dwellings; cost, \$30,000.

Architects Schaub & Berlin report: For F. Koepke, two-story flats; cost, \$6,000.

Architect C. M. Palmer reports: For J. S. Barnes, three-story dwelling; cost, \$12,000.

Architect Henry F. Starbuck reports: For E. C. Day, three-story dwelling; cost, \$7,000.

Architect G. Thiele reports: For J. Krewer, three-story flats; cost, \$8,000.

Architects William Strippelman & Co. report: For C. Thielman, two-story flats; cost, \$6,000.

Architect A. Woerner reports: For J. P. Prehler, two-story flats; cost, \$4,000.

Architect John F. Warner reports: Three-story flat building, 72 by 100 feet; cost, \$35,000.

Architects Burling & Whitehouse report: For Mrs. F. Rand, two-story flats, 42 by 70 feet; cost, \$7,000.

Architect F. L. Lively reports: For J. L. Patterson, three-story store and flats, 100 by 72 feet; cost, \$50,000. For H. H. Walker, two-story and basement residence; cost, \$15,000.

Architect H. R. Wilson reports: For James A. Landen, eleven dwellings, to cost, \$50,000.

Chouteau Springs, Mo.—Architect C. B. Lakin, of Kansas City, reports: For Stegner Investment Co., four-story frame hotel building, 100 by 98 feet, closets and baths, stained glass, steam heat, hardwood finish and tiling, electric bells, speaking tubes, etc., wood mantels, water power, passenger elevator; cost, \$25,000.

Cincinnati, O.—Reported by Mr. Lawrence Mendenhall: I do not remember of ever having given your readers any figures showing the business done in several branches of the building interests. This month I take pleasure in presenting figures taken from the annual report of the Cincinnati Chamber of Commerce, compiled by Col. Sidney D. Maxwell, its superintendent: Brick, \$759,000; building materials, exclusive of brick and stone, \$3,875,000; carpentering, \$3,617,935; cement, lime and plaster, \$85,640; cement felting, \$15,000; galvanized and sheet iron, \$931,000; glass, stained and ground, \$28,000; iron, wrought, \$849,000; lightning rods, \$150,000; locks, \$500,000; mantels and grates, \$530,000; painting, \$874,914; plastering, \$355,000; roofing materials, \$328,144; stair building, \$137,460. By the trouble (strikes) in the spring, it can be safely estimated that there was a loss of \$500,000 to all concerned. It is about time that the average mechanic was finding out that strikes have a disastrous reflex action, and that more is lost than is gained.

The bids for our exposition building have been laid over for consideration two weeks. There is not much to report in the way of building news, but "such as I have, give I unto thee."

Architect J. W. McLaughlin is busy on the working drawings and details of one of the exposition buildings. He has also prepared plans for a beautiful stone residence of thirteen rooms for Sol. P. Kinean, Esq.; cost about \$15,000; tiling will be used for roof. The First National Bank building is progressing, and when completed will be a great addition to our city. It is being built of red granite, the solid extension being indicative of the bank's strength financially. I consider this Mr. McLaughlin's *chef-d'œuvre* in the way of office buildings.

Architect Wm. Martin Aikin is moderately busy, and has prepared plans for a beautiful residence of fourteen rooms for Arthur M. Stem. The first story will be of brick, and the second and third stories of shingles. He has also prepared plans for additions to the residence of David Sinton, one of our millionaires. The residence is quite a historical one, having been built in 1817, when Cincinnati was an infant in swaddling clothes. Mr. Sinton bought it from Nicholas Longworth, and the interior, old-fashioned as it was, indicated ease and wealth in its furnishing.

Architect A. O. Elmer has prepared plans for residence for Geo. Pohlman, containing twelve rooms, to be built of brick and timber; cost \$7,000. The Western German Bank building, designed by him, and built of Lake Superior sandstone, is certainly an addition to the many office and bank buildings of our city recently erected.

Architect Henry E. Siter has prepared plans and the ground is broken for a new building for the Third National Bank. It will be a truly beautiful structure, three stories high, built of Amherst sandstone, with brown Ashland trimmings.

The safe deposit vaults will be very complete and commodious. Mr. Siter has been very successful in obtaining several contracts for bank buildings, everyone of which shows careful study and reflects credit upon him.

Architects Craspey & Brown report: For A. McNeill, a frame dwelling of eight rooms, shingle sides and slate roof; cost \$5,000; contract let. Miss Lizzie B. Thorne, a brick and shingle residence of ten rooms; shingle sides and slate roof; cost \$9,000; contract let. Dr. T. A. Reamy, a brick dwelling of twelve rooms, with part hardwood finish, slate roof; cost \$10,000. W. J. Haldemann, Glendale, Ohio, a shingled residence of ten rooms, with slate roof; cost \$7,000; contract let. This firm has had their time well employed, and deservedly so, too, and have several plans on the boards now, not in condition to report.

Detroit, Mich.—Present condition and outlook excellent. Prices of labor unchanged from last report.

Architect R. F. Brooks reports: For M. T. Billings, block of three-story flats, 80 by 50 feet, brick and stone; cost \$12,000; under way. Wm. Sirloff, builder.

Architects Hess & Raseman report: For L. W. Barrie, two-story brick and stone dwelling, 22 by 56 feet; cost, \$3,000; under way. M. Blay, builder. For R. C. Faulconer, three-story brick and stone dwelling, 45 by 75 feet, slate roof; cost \$11,000; Clark & Vinton, builders. For Perrin Bros., three two-story stores and dwellings, 80 by 60 feet, brick and stone; cost \$10,000; under way. M. Blay, builder.

Architect Robert Parsons reports: For Mrs. L. Mitchell, three-story brick and stone dwelling, 22 by 66 feet; cost \$4,700; under way. Thos. Fairbairn, builder.

Architects Donaldson & Meier report: For Mrs. Lynn Stoward, two-story dwelling, 39 by 52 feet, brick and stone; cost \$5,000.

Architects Scott & Co. report: For fire department, two-story brick and stone engine house, 50 by 85 feet; cost \$11,287; Topping & Fisher, builders.

Architect Gordon W. Lloyd reports: For Detroit Homoeopathic Association, four-story hospital building, 60 by 165 feet, brick and stone, slate roof; cost \$80,000; Alex. Chapoton, Jr., mason; Clark, Vinton & Co., carpenters; Lane Bros., plumbers.

Architects Mason & Rice report: For A. L. Stephens, two-story barn, 28 by 40 feet, brick and stone, slate roof; cost \$4,000; Spitzley Bros., builders.

Architect Mortimer L. Smith reports: For James Scott, two-story stone dwelling, 23 by 82 feet, slate roof; cost \$8,000; Patrick Dee, builder.

Geo. W. Orren is building a two-story brick and stone dwelling, 39 by 43 feet, slate roof; cost \$7,000.

E. H. Durand is building five frame dwellings, 22 by 82 feet; cost \$5,000.

H. S. Peoples is building two two-story brick stores and dwellings, 40 by 60 feet; cost \$8,000.

Henry Ohrens is building sixteen one-story frame cottages, 20 by 44 feet; cost \$9,000.

Architects Van Leyen & Preston report: For East Detroit and Grosse Pointe Railway Company, one-story electric light power buildings, 40 by 100 feet, and car house 30

by 100 feet, brick and frame; under way; Perrin & McKinney, carpenters; Henry Carew, mason. For Milo Schaffer, two-story frame dwelling; cost \$2,500; Peter McDougall, builder.

Leo Scheible is building a one-story German Catholic church, 44 by 90 feet, frame; cost \$5,700.

Andrew McEuhill is building two two-story frame dwellings, 28 by 46 feet; cost \$5,600.

A. Lewis is building a two-story brick and stone store and dwelling, 22 by 45 feet; cost \$3,000.

John Patterson is building a two-story frame store, hall and dwelling, 40 by 60 feet; cost \$3,000, for John A. German.

W. Diehl is building a two-story frame barn, 47 by 137 feet, for the Fort street Railway Company; cost \$3,140.

W. H. Scovel is building for Wm. Baxter, two-story brick and stone dwelling, 40 by 54 feet; also barn; cost \$5,000.

E. Nuopenan is building for himself a block of four three-story brick and stone dwellings, 80 by 42 feet; cost \$10,000.

George H. Hammond is building six one-story and three two-story frame cottages, 24 by 40 feet; cost \$6,000.

During the month of August permits were issued for new buildings, to cost \$273,137. For alterations, etc., to cost \$23,875. Total, \$297,012.

Dubuque, Iowa.—Architect F. D. Hyde reports: For Dubuque Boat Club, two-story frame boat and club house, 40 by 60 feet; cost, \$2,000; plans in preparation.

El Paso, Tex.—Architects Stewart & Carpenter report: Outlook good; boom anticipated this fall. For H. W. Myar, three-story brick, stone and terra-cotta opera house building, 106 by 134 feet, incrusta walton decorations; seating capacity 1,500; cost, \$60,000; under way; Chas. Frim, builder. For Wells, Fargo & Co., three-story bank and express building, 66 by 43 feet, with a two-story L, 40 by 70 feet, pressed brick, stone and terra-cotta; cost, \$20,000; to be commenced December 1; contract not let. For W. J. Glenn, two-story brick store; cost, \$3,050; to be commenced October 1.

Englewood, Ill.—Architect H. Boehme, of Joliet, Ill., reports: For C. R. I. & P. R. R. Co., passenger depot; cost, \$2,500; under way.

Galveston, Tex.—Architect N. J. Clayton reports: In giving the list of building work now in my office in your last issue, Mr. Geo. Sealy's residence was inadvertently stated as one of my buildings. I wish to correct this clerical error and to say that I am the superintendent of construction for Messrs. McKim, Meade & White, of New York, who are the architects of this building.

Greensburg, Kan.—Architect A. J. Ashley, of Hutchinson, reports: Two-story school building, brick and stone; estimated cost \$10,000; plans just completed.

Hutchinson, Kan.—Architect A. B. Howatt reports: For Mr. Brown, three-story stone store and office building, 35 by 150 feet; cost \$30,000; nearly completed.

Architect A. Le Belle reports: The Valley State Bank building, 75 feet front, three-stories, pressed brick front; cost \$40,000; under way. For Mr. Woodward, three-story store building, 100 feet front; pressed brick front, stone trimmings; cost \$30,000; foundation under way. Also three two-story brick stores, for Messrs. Wislar, Hyde & Clymer; cost \$10,000 each.

Architect A. B. Howatt reports: For Mr. Handy, brick business block; cost \$10,000. Architect A. Le Belle reports: For F. Hyde, brick business block; cost \$5,000; C. Richardson, builder. For J. W. Crow, two brick business blocks; cost \$16,000; G. Shears and H. Metcalf, builders.

C. Richardson is building a brick business block for H. Walker.

Independence, Mo.—Architects Nier, Hogg & Byram, of Kansas City, report: For J. Mott, three-story store building, 50 by 160 feet; pressed brick, stone and terra-cotta trimmings; cost \$20,000; plans in preparation. For W. A. Findley, D.D., two-story residence, 52 by 85 feet; pressed brick, cutstone and terra-cotta trimmings, all modern improvements; cost \$20,000; plans in preparation.

Joliet, Ill.—Architect H. Boehme reports: Outlook good. For Wade & Clement, two-story and basement stone and brick store building, cost \$5,000; under way; John Seely, builder. For David Weaver, addition to store; cost \$2,500; John Taylor, builder. For Joseph Stevens, double store; cost \$3,000; P. B. Bannan, builder. For Thomas Surple, dwelling; cost \$2,000. For Sisters of St. Francis, stone addition to hospital building; cost \$6,000; under way. Also nine depot buildings at various points on the line of the C. R. I. & P. R. R.; cost \$20,500; all under way.

Kansas City, Mo.—Architect C. B. Lakin reports: For P. W. Powers, two-story residence, 32 by 59 feet; pressed brick, cutstone and redwood shingles, slate roof, galvanized iron cornices, closets and bath, stained glass, hot-air heat, wood mantels, hardwood finish and tiling, electric bells, speaking tubes, etc.; cost \$10,000. For P. W. Powers, two-story residence, 36 by 60 feet; first story pressed brick, with cutstone trimmings; second story slated; galvanized iron cornices, slate roof, closets and bath; stained glass, hot-air heat, wood mantels, hardwood finish and tiling, electric bells, speaking tubes, etc.; cost \$10,000. For M. S. Tyler, two two-story residences, 35 by 70 feet; pressed brick, cutstone trimmings, galvanized iron cornices, slate roof, closets and baths, stained glass, hot-air heat, hardwood finish and tiling, wood mantels, electric bells, speaking tubes, etc.; cost \$10,000 each. For M. S. Tyler, block of four-story brick and stone residences, 225 by 50 feet; slate and felt roof, galvanized iron cornices, iron beams, etc.; closets and baths, stained glass, hot-air heat, hardwood finish and tiling, electric bells and speaking tubes; cost \$80,000.

Architects Nier, Hogg & Byram report: For United Presbyterian Society, pressed brick church building, 74 by 71 feet, stone and terra-cotta trimmings; cost \$20,000; plans under way.

At a meeting of the executive committee of the exposition, held September 18, Mr. T. K. Tinsley, ex-city superintendent of buildings, was appointed to relieve Architect F. J. W. Hart in the superintending of the construction and completion of the building.

La Salle, Ill.—Architect H. Boehme, of Joliet, reports: For Sisters of St. Francis, St. Mary's hospital building; cost \$20,000; contracts not let.

Lindsburg, Kan.—Architect A. J. Ashley, of Hutchinson, reports: For Union Hotel Company, three-story brick and stone hotel building; cost \$12,800; Levi McCash, contractor, McPherson, Kansas.

Los Angeles, Cal.—Architects J. N. Preston & Son report: Present condition is good, with a large amount of work projected, which will certainly be performed if sufficient mechanics are obtainable and we do not have more strikes. For San Gabriel Valley Land and Water Company, three-story frame hotel building, 172 by 109 feet; cost \$50,000; under way; John Rehman, builder. For H. H. Markham, two one-story frame dwellings, 30 by 38 feet, at East San Gabriel; cost \$2,500 each; under way; Jas. H. Barry, builder. For Mark G. Jones, two-story frame dwelling, 30 by 58 feet; cost \$6,500; under way; Jas. H. Barry, builder. For Bradley & Raymond, two-story frame store building, 50 by 80 feet, tin roof; cost \$5,000; projected. For G. Gilchrist, one-story frame cottage, 28 by 36 feet; cost \$2,500; projected.

Milwaukee, Wis.—Architects H. P. Schnetzky & Co. have prepared plans for a \$30,000 schoolhouse.

Missoula, Mont.—Architects Nier, Hogg & Byram, of Kansas City, Missouri, report: For I. O. O. F., two-story brick and stone hall building, 50 by 80 feet; cost \$15,000; C. Clark, contractor; work to be commenced at once.

Mobile, Ala.—Architect James H. Hutchisson reports: Outlook very good. For T. Guesnard, two-story frame tenement house, 60 by 72 feet; cost \$6,000; J. P. Emrich & Son, builders. For Mrs. T. Dolan, two-story frame cottage, 50 by 68 feet; cost \$3,900; Wm. O. Pond & Sons, builders. For E. G. Dreaper, two-story frame dwelling, 29 by 72 feet; cost \$3,600; Wm. O. Pond & Sons, builders. Also several less important buildings, ranging from \$1,200 to \$3,000 each; all under way.

Morehead, Minn.—Architect J. W. Stevens, of St. Paul, has prepared plans for a new high school building to be erected in this city.

New Corporations.—The Grano-Metallic Stone Co., of Jersey City; capital stock, \$1,000,000; John Henry Bryant, London, Eng., Richard Irvin, Jr., John J. McCook, Robert Bliss, 30 West Fifty-eighth street, New York City, and Orestes Cleveland, incorporators. The Howard & Sprague Heater Co., of Syracuse, N. Y.; capital stock, \$50,000; Chas. D. Howard, Chas. H. Sprague, Robert Van Keuren, Bradford Kennedy and Edward C. Stearnes, incorporators. The Hohenstein Manufacturing Co., of Elizabeth, N. J., to manufacture steam heaters; capital stock, \$100,000; Theo. F. Meeker, Geo. M. Morrell and Geo. M. Ross, incorporators. The Schreiner Oil Heating Co., of Chicago; capital stock, \$10,000; J. Henry French, Joseph B. Keeler, 608 Washington boulevard, and Thomas A. Banning, incorporators. The Standard Lime & Stone Co., of Point Marblehead, O.; capital stock, \$75,000; W. A. Gamble, J. O. Sloan, W. A. Jackson, J. C. Zollinger, Byron Gager and H. O. Docker, incorporators.

Olathe, Kan.—Architect Geo. P. Washburn, of Ottawa, reports: For State of Kansas, three-story and basement brick and stone deaf and dumb institute, 104 by 160 feet, tin roof; cost \$20,000; under way; Geo. W. Goodlander, of Fort Scott, contractor. For F. R. Ogz, frame dwelling, 36 by 50 feet; cost \$5,500; under way; S. C. Pettigrew, builder. For J. W. Parker, frame dwelling, 28 by 20 feet; cost \$1,500; under way.

Architect C. B. Lakin, of Kansas City, Mo., reports: For H. L. Burgess, two-story frame residence, 34 by 60 feet; closets and bath, stained glass, hot-air heat, hardwood finish and tiling, wood mantels, electric bells, speaking tubes, etc.; cost \$7,000.

Ottawa, Kan.—Architect Geo. P. Washburn reports: For First National Bank, three-story brick and stone building, 26 by 90 feet; cost \$16,000; under way. For S. B. Rohrbaugh, three-story brick and stone business block, 50 by 110 feet; cost \$20,000; under way. For L. Shamer, three-story brick and stone business block, 50 by 60 feet; cost \$8,000; under way. For W. C. Allen, three-story brick and stone business block, 25 by 50 feet; cost \$7,500; under way. For A. F. Sharp, three-story brick and stone printing house, 25 by 70 feet; cost \$7,500. For S. G. Norris, three-story brick and stone business block, 25 by 100 feet; cost \$8,000; under way. For H. F. Sheldon, three-story brick and stone business block, 25 by 70 feet; cost \$7,000; under way. For Tom Pickrell, three-story brick and stone business block, 50 by 80 feet; cost \$8,500; contract not let. For Geo. P. Washburn, two-story brick and stone office building, 25 by 50 feet; cost \$4,500; under way. Also a number of dwellings and business houses not enumerated, and work in other places.

Paolo, Kan.—Architect Geo. P. Washburn, of Ottawa, reports: For H. C. Jones, remodeling brick and stone business house, 65 by 100 feet; cost \$5,000; J. H. Petty, contractor. For T. M. Holson, two-story brick and stone business house, 50 by 65 feet; cost \$5,500; M. Baer, builder. For S. Baker, two-story frame dwelling, 34 by 40 feet; cost \$4,000; under way.

Pleasanton, Kan.—Architect Geo. P. Washburn, of Ottawa, reports: For S. Blue, two-story frame dwelling, 36 by 52 feet; cost \$4,500; under way; R. Kennedy, builder.

Parsons, Kan.—Architect Geo. P. Washburn, of Ottawa, reports: Frame church, 52 by 72 feet; cost \$8,000; contract not let.

Savannah, Ga.—Architects Fay & Eichberg report: For Meinhard Bros. & Co., brick store building; cost \$30,000; Henry Bartlett, contractor. For John L. Hammond, brick residence; cost \$20,000; B. R. Armstrong, mason; Henry Bartlett, carpenter; Robert Mitchell Furniture Co., Cincinnati, O., interior finish. For Lewis Kayton, brick and terra-cotta residence; cost \$25,000; John R. Eason, contractor.

Springfield, Ill.—Architect Geo. H. Helmle reports: Very little new work being done. For Miss Cora Burkhardt, two-story frame cottage, 34 by 52 feet; furnace heat, stained glass, wood mantels; cost \$1,600; plans completed. For E. H. Helmle, two-story frame cottage, 32 by 54 feet; furnace heat, stained glass, wood mantels, etc.; cost \$4,000; under way; J. L. Powell, builder. For J. O. Humphrey, two-story and attic colonial cottage, 40 by 54 feet; cost \$5,000; drawings under way. For Miss Lou Freeman, two-story and attic colonial cottage, 36 by 56 feet; cost \$4,500; drawings under way.

St. Paul, Minn.—Architect George Bergmann reports: Present condition and outlook medium. For Andrew Foss, three-story and basement brick and stone tenement, 117 by 38 feet; galvanized iron cornice, tin roof; cost \$30,000; projected; Kohlmann, builder. For A. Stathel, two-story brick and stone residence, 24 by 42 feet; cost \$5,000; Dannecker Bros., builders. For Leonard Ayd, three-story brick business building, 40 by 64 feet, pressed brick and stone front; galvanized iron cornices; cost \$12,000; Frank Hofer, builder. For George Roeler, two-story frame residence, 22 by 40 feet; cost \$4,000; Klinkerfuss, builder. For Dr. C. C. Berkman, three-story brick residence, 26 by 46 feet; pressed brick and stone; galvanized iron cornices, gravel roof; cost, \$9,000; Bassford, builder.

Architect Walter Iff reports: Dull at present; outlook good. For Hon. A. Boedghem, residence; projected; cost not estimated. For trustees St. John's church, church building to cost \$5,000; under way; W. C. Erickson, builder. For Chas. Groff, residence; cost \$18,000; under way. For N. E. Solmon, residence; cost \$10,000; under way. For H. H. Herbert, residence; cost \$6,000. For R. Franklin, residence; cost \$5,000. For N. Rogers, residence; cost \$5,000. For Dr. Hutton, residence; cost \$5,000. For Dr. Parsons, residence; cost \$5,000. For John Rogers, Jr., residence; cost \$6,000. For Mr. Barber, residence; cost \$4,000. For a syndicate, flat building; cost \$25,000; projected.

Architect H. R. P. Hamilton reports: Prices steady; not so much talk of new work as there has been. Outlook for next season is good. For Griggs Bros., four-story brick livery stable, 49 by 100 feet; pressed and molded brick and stone front; cost \$13,000; under way; A. Boesel, builder. For Geo. W. Wentworth, two-story pressed brick and stone residence; hardwood finish; cost \$9,000; under way; Zinck & Springer, builders. For H. W. Gutsche, three-story store and flat building, 27 by 80 feet; brick and stone; cost \$7,500; under way; A. Boesel, builder. For J. W. Nabersberg, M. D., two-and-one-half-story frame residence; cost \$6,800; under way; A. Nippott & Bro., builders. For C. C. Herriott, D. D., two-and-one-half-story frame residence; cost \$3,900; stable, cost \$900. For city of South St. Paul, five two-story brick and stone school buildings, 31 by 39 feet; cost \$17,500; C. Zinck, builder. For South St. Paul Rapid Transit Co., one-story brick motor-power building, 43 by 83 feet; hardwood finish; cost \$4,700; R. E. Patterson, builder. For Mrs. Helen J. McCaine, two four-story brick and stone buildings 33 by 60 feet; cost \$10,000; under way; John Nelson, builder. Also several smaller jobs and several in prospect for next year, the foundations of which may go in this fall.

Architect E. S. Radcliffe reports: Indication good. Have several large buildings not yet ready to report. For Thos. Riley, two-and-one-half-story brick residence, 34 by 56 feet; terra-cotta trimmings, slate roof; cost \$16,000; contract not let yet. For city of St. Paul, brick and stone school building, 82 by 84 feet; slate roof; cost \$29,740; Armit & Co., contractors. For city of St. Paul, brick and stone school building, 82 by 47 feet;

slate roof; cost \$22,600; N. B. Rundell & Co., contractors. For Chamberlain & Brainard, block of three-story brick and stone stores, 60 by 75 feet; cost \$12,460; under way; M. McKay, contractor. For J. B. Hawley, frame residence, 32 by 54 feet; cost \$7,000; E. N. Armit & Co., builders. For W. B. Banks, block of tenements, 80 by 57 feet; brick and stone, slate roof; cost \$31,000. Also residence, 32 by 50 feet; cost \$5,670; plans in preparation.

Stillwater, Minn.—Architect E. S. Radcliffe, of St. Paul, reports: For the state of Minnesota, stone solitary cell building, 57 by 64 feet; cost \$42,000; under way; F. H. Lemmon & Co., contractors.

Wichita, Kan.—Messrs. Robt. Spurgin & Co., real estate dealers, give an exhaustive report of the amount of building done in Wichita in 1887 up to August 27, of which the following is a recapitulation: New brick and stone buildings, 73, valued at \$1,675,000; new frame buildings, 33, valued at \$40,000; important brick structures commenced in 1886 not yet completed, 5, valued at \$345,000; residences, \$2,000, valued at \$3,500,000; total, \$5,760,000. This does not include any building not yet begun. The following are the more important buildings mentioned in the report that are not yet completed, and have not been previously mentioned in this journal:

Architects Dumont & Hayward: For Mrs. M. Zummerly, four-story stone front block, 50 by 130 feet; cost \$40,000; to be completed November 15; Wood, Brown & Isgrig, contractors. For W. P. Stein and others, three-story brick and stone block, 100 by 100 feet; cost \$40,000; to be completed January 1, 1888; W. P. Stein contractor. For the Episcopal Church Society, stone church, 72 by 85 feet, seating capacity 900; cost \$35,000; to be completed December 15. For J. N. Bayless and others, three-story brick and stone block, 150 by 100 feet; cost \$60,000; to be completed November 1; Steinmetz & Sullivan, masons; B. R. Downing, carpenter. Wichita University main building, three-story brick, 79 by 100 feet, brick and stone; cost \$30,000.

Architect J. J. Crist: For J. W. Lamb, three-story brick and stone block, 30 by 100 feet; cost \$12,000; to be completed December 15. For the Catholic Society, Diocesan building, main building, four-story brick and stone, 45 by 80 feet; cost \$25,000; to be completed December 1. For Ben. Kelsch, two-story and cellar brick and stone block, 50 by 100 feet; cost \$9,000; to be completed October 15.

Architect Arthur Peabody: For Joseph Koenig, three-story brick and stone block, 50 by 65 feet; cost \$10,000; to be completed October 15; Joseph Brandt contractor. For Gilbert Plow Co., one-story brick building, 60 by 280 feet, one-story brick building, 60 by 150 feet, two two-story brick buildings, 35 by 35 feet; cost \$15,000; to be completed December 1.

Architects C. W. Kellogg & Co.: For C. C. Rushing, two-story brick and stone block, 125 by 60 feet; cost \$18,000; to be completed October 15. For H. Schweiter, four-story brick and stone block, 52 by 100 feet; cost \$27,000; to be completed January 1, 1888. For Israel & Miers, five-story and basement brick block, 50 by 120 feet; cost \$35,000; to be completed December 1.

Architect J. B. Legg: For Miller & Stowe, three-story brick and stone block, 75 by 100 feet; cost \$20,000; to be completed December 15. For Blackwelder & Rouse, five-story brick and stone block, 140 by 120 feet; cost \$120,000; to be completed January 1, 1888.

Architect W. R. McPherson: For Oscar Smith and others, four-story stone front block, 100 by 120 feet; cost \$70,000; to be completed December 1.

Architects L. C. & W. M. Bulkeley: For E. E. Cummings, three-story and basement brick and stone block, 50 by 120 feet; cost \$20,000; to be completed December 1.

Architects Proudfoot & Bird: For City School Board, brick and stone building, 72 by 75 feet; cost \$19,000; to be completed early in 1888. For D. A. Mitchell, three-story and basement brick and stone block, 50 by 100 feet; cost \$14,000; to be completed December 1. Garfield University (previously reported); cost \$200,000; not yet completed. For Rudolph Hatfield, two-story and cellar brick and stone block, 50 by 80 feet; cost \$8,000; to be completed October 15. For M. Stanton and others, two-story and cellar brick and stone block, 175 by 80 feet; cost \$25,000; to be completed November 1; Taylor & Co., contractors. For John Garrison and R. E. Lawrence, two-story and cellar brick and stone block, 75 by 80 feet; cost \$12,000; to be completed November 1.

Architects J. M. Gill & Co.: For Pearce, Pollack & Home, three-story brick and stone block, 50 by 100 feet; cost \$17,000; to be completed October 15; Green & Thomas, contractors. For P. Getto, four-story brick and stone block, 50 by 100 feet; cost \$40,000.

Architect W. M. Rapp reports: For C. E. Rogers, three-story and basement brick and stone block, 50 by 140 feet; cost \$15,000; to be completed November 15; Sullivan & Steinmetz, brick masons; Bustle & Smith, stonework; John Landis, carpenter.

Architect J. V. Majors reports: For F. W. Whitlock, four-story stone front block, 50 by 140 feet; cost \$50,000; to be completed January 1, 1888. For F. W. Whitlock, four-story granite front block, 25 by 137 feet; cost \$25,000; to be completed December 1. For F. W. Whitman, four-story stone front block, 75 by 140 feet; cost \$80,000; to be completed early in 1888.

Architects Thompson & Terry report: John Bright University, main building, 40 by 170 feet; four-story brick and stone; cost \$100,000; to be completed in 1888. For Mrs. L. C. Bird, two-story and cellar brick and stone block, 50 by 80 feet; cost \$10,000; to be completed November 1; John Moore, contractor.

Architect J. F. Long, of Chicago, reports: For C. R. I. & P. R. R., two-story brick and stone passenger depot, 36 by 122 feet; cost \$20,000; to be completed October 15; A. R. Link, contractor.

The brick and stone church, 44 by 76 feet, for the Society of Friends, cost \$10,000, will be completed December 1.

The Burton Stock Car Company will complete their works January 1, 1888; cost \$100,000.

The United States custom house and postoffice, 84 by 87 feet (W. A. Ritchie, superintendent), will be completed in 1888; cost \$150,000.

Wyandotte, Kan.—Architect Geo. P. Washburn, of Ottawa, reports: For the state of Kansas, three-story brick and stone blind asylum, 60 by 100 feet; tin roof; cost \$20,000; under way; J. W. Meyer, builder.

The Jackson Heat-Saving and Ventilating-Grate.



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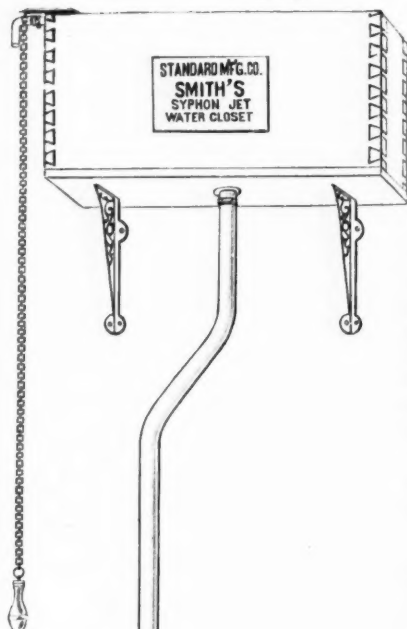
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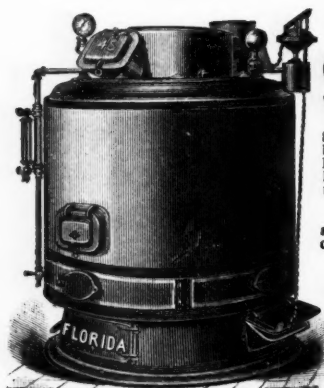
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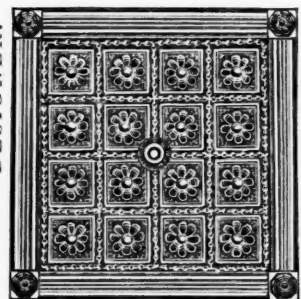
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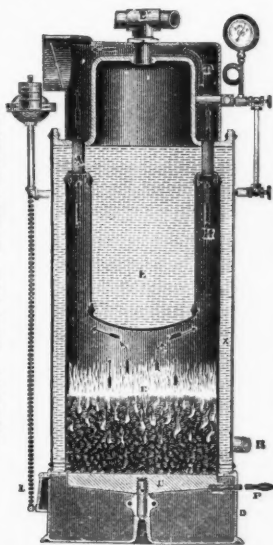
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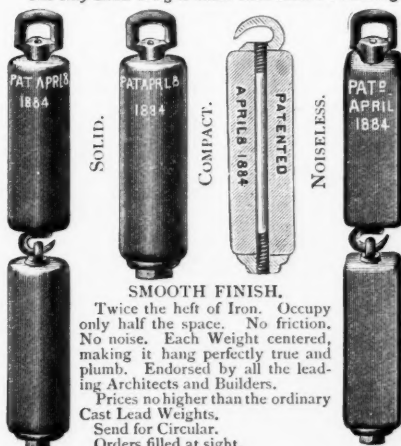
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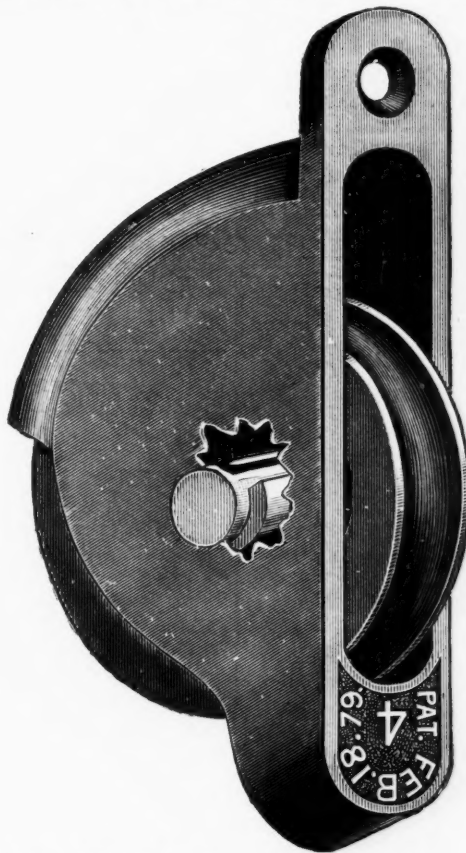
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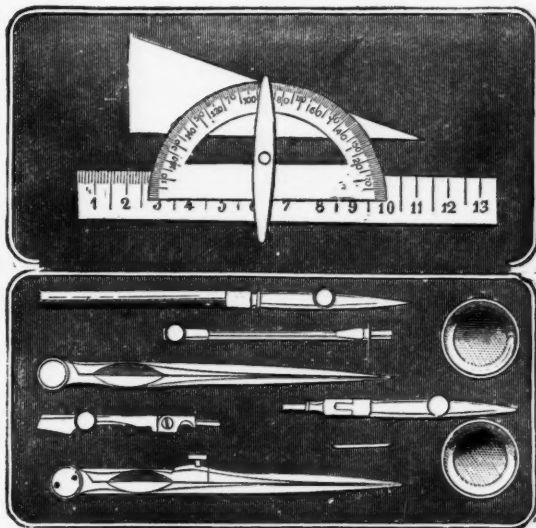
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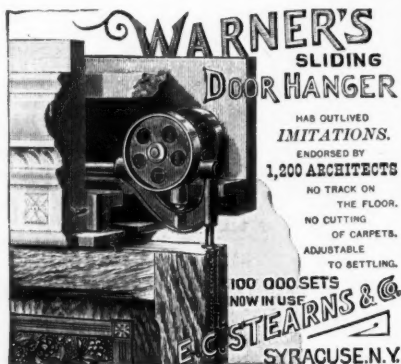
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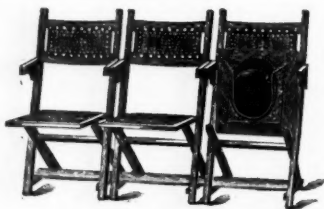
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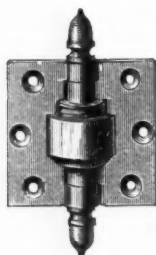
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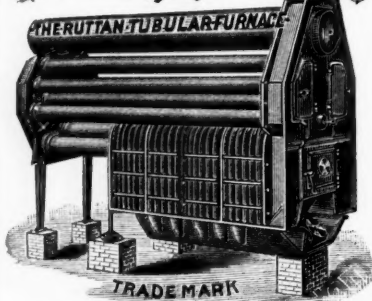
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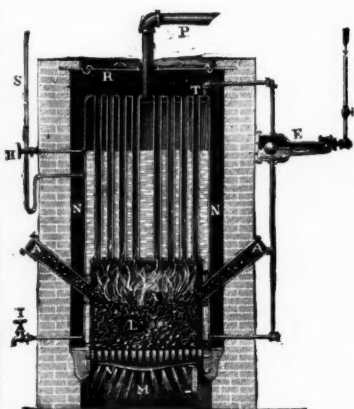
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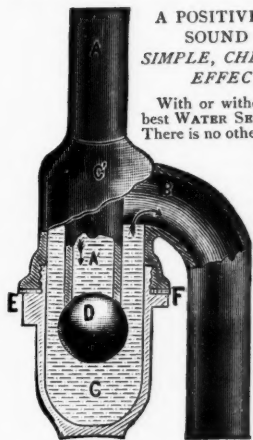
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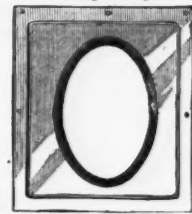
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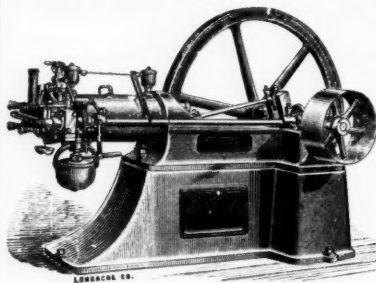
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Roofing, Vermont, per square:
 Green..... 6 50
 Purple..... 6 50
 Red..... 13 50
 Black, Lehigh..... 5 75@ 6 75
 Black, Chapman's..... 7 30@ 8 00
 Black, Bangor..... 5 50@ 5 80

LUMBER, CAR LOTS.

(Lumbermen's Exchange, 250 So. Water St.)

(Ordinary Dimensions.)

Boards:
 Pine, 1st quality, clear.....\$47 00@ 48 00
 Pine, 2d quality..... 41 00
 Pine, 3d quality..... 41 00
 Common..... 12 50

Siding:

Pine..... 10 00@ 21 50

Framing Timber:

Pine..... 12 00@ 18 00

Laths:

Pine..... 1 85

Shingles:

Pine (sawed)..... 2 15@ 2 50

Cedar:

2 00@ 2 30

Miscellaneous:

Pickets, pine..... 9 00@ 18 00

Posts, cedar..... 10@ 00

Pine, yellow southern..... 28 00@ 35 00

HARDWOODS.

(Quotations furnished by Holbrook Co.)

Walnut, 1st & 2d, 1 in..... \$ 75 00@ 80 00

1 1/4 and up..... 80 00@ 100 00

Walnut, counter top..... 15@ 20

Ash, 1 1/4 & up..... 30 00@ 32 00

Ash Steps..... 33 00@ 36 00

Maple, 1st & 2d, 1 in..... 40 00@ 45 00

1 1/4 & up..... 25 00@ 35 00

Oak, white, 1st & 2d, 1 in..... 35 00@ 40 00

1 1/4 & up..... 30 00@ 35 00

Oak, white, quarter sawed..... 45 00@ 50 00

Oak, red, 1st & 2d, 1 in..... 30 00@ 35 00

1 1/4 & up..... 35 00@ 40 00

Oak, red, quarter sawed..... 40 00@ 50 00

Cherry, 1st & 2d, 1 in..... 80 00

1 1/4, 1 1/2 & 2 in..... 85 00@ 90 00

2 1/2, 3 & 4 in..... 95 00@ 100 00

Beech, Red, 1st & 2d..... 25 00@ 30 00

Whitewood, 1st & 2d, 1, 1 1/4, 1 1/2 & 2 in..... 26 00@ 30 00

2 1/2, 3 & 4 in..... 32 00@ 38 00

Birch, red, 1st & 2d..... 35 00@ 40 00

Butternut, 1st & 2d, 1 in..... 40 00@ 45 00

1 1/4 & up..... 45 00@ 50 00

Sycamore, 1st & 2d..... 20 00@ 25 00

Gum, red, 1st & 2d, 1 in..... 30 00@ 35 00

1 1/4 & up..... 35 00@ 40 00

FINISHING WOODS.

Mahogany, Mexican, per lb..... 15@ 20
 Mahogany, St. Domingo, per lb..... 20@ 25
 Mahogany, Cuba, per lb..... 12@ 20
 Rosewood, per lb..... 5@ 15

CALIFORNIA WOODS, ETC.

(Quotations furnished by James O. Cuthbert.)

Redwood lumber.....\$50 00@ \$55 00
 Redwood shingles—square, sexagon, round, diamond and octagon, small quantities..... 4 80@ 5 00
 Mexican Spanish cedar..... 150 00@ 300 00
 California pine..... 65 00@ 75 00

Georgia Yellow Pine:

Flooring:

1st & 2d clear, 4 in..... 35 00

1st & 2d clear, 6 in..... 35 00

Boards, D 1 s..... 33 00@ 35 00

Beaded Ceiling:

1st & 2d clear, 1/2 in..... 18 00@ 21 00

3/4 in..... 26 00@ 30 00

3/8 in..... 33 00@ 36 00

Step plank:

1st & 2d clear 1 1/4, 1 1/2 & 2 in..... 33 00@ 35 00

Georgia Cypress:

Lumber, 1st & 2d clear..... 35 00@ 40 00

Shingles..... 3 75@ 4 25

Frame Oak Lumber and Timber:

Plank..... 23 00@ 25 00

Timber..... 24 00@ 30 00

PAINT, ETC.

Per lb.

Dry. In Oil.

White lead (American).....\$ 6@ 6 1/2

Zinc, white (American)..... 8@ 10 7 1/2@ 10

Red, Venetian..... 2@ 6@ 8

Red, Vermilion..... 20@ 50 40@ 1 00

Red, Indian (English)..... 12@ 22

Yellow, Ochre..... 2@ 8

Yellow, Chrome..... 18@ 20

Green, Chrome..... 12@ 16

Black, lamp..... 20@ 35

Blue, ultramarine..... 8@ 15

Putty..... 16@ 35

Whiting (dry)..... 1@ 2

Paris white (English)..... 2@ 3

Litharge (American)..... 6@ 10

Sienna, burnt..... 7@ 12

Umber, burnt..... 6@ 12

Oil, linseed (raw), per gal..... 38

Oil, linseed (boiled)..... 41

Turpentine..... 45

Varnish, coach, " "..... 1 25@ 2 00

Varnish, shellac, " "..... 3 25@ 4 00

HARDWARE.

Per Keg.

Nails:

Tenpenny, common..... 2 15@ 2 30

Shingle, 4 s..... 2 90@ 3 05

Lath, 3 s fine..... 4 35@ 4 50

Steel nails, 10's to 60's..... 2 15@ 2 30

For steel nails add 15 c. per keg.

For casing-nails add 75 c. per keg.

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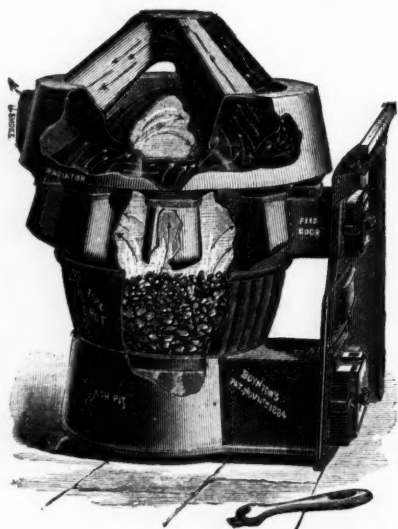
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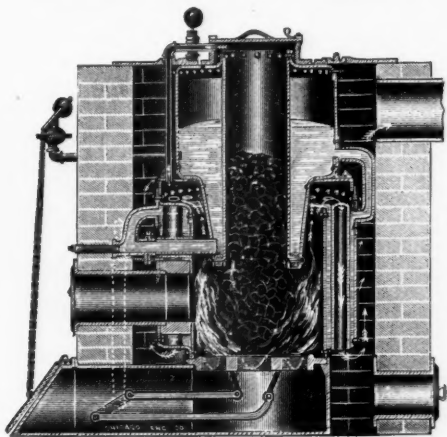
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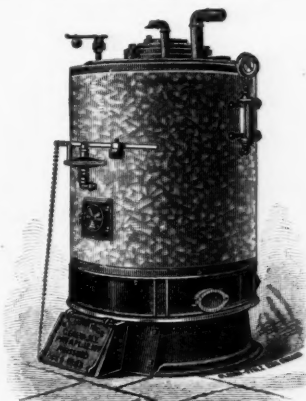
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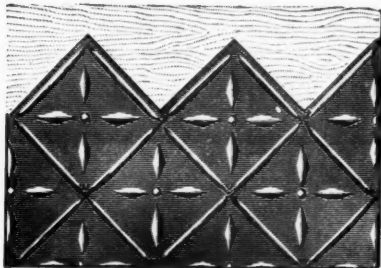
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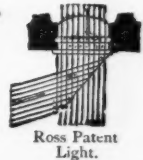
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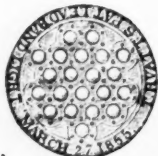
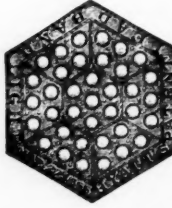
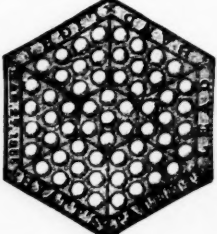
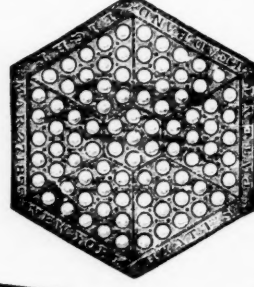
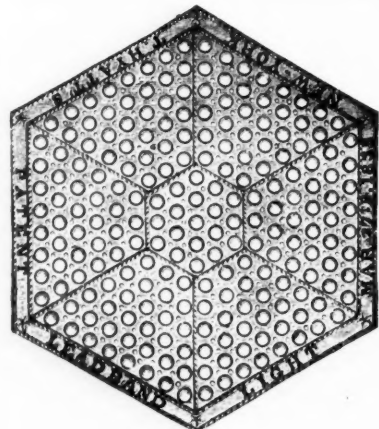
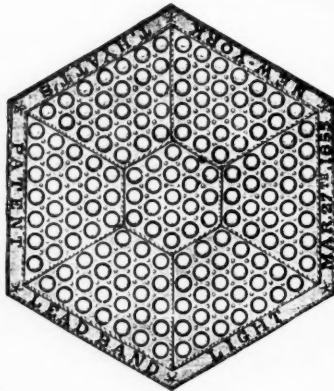
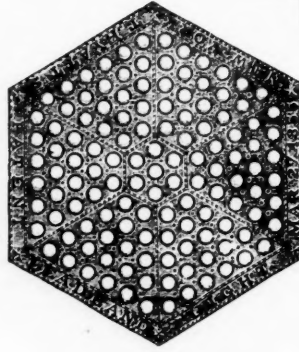
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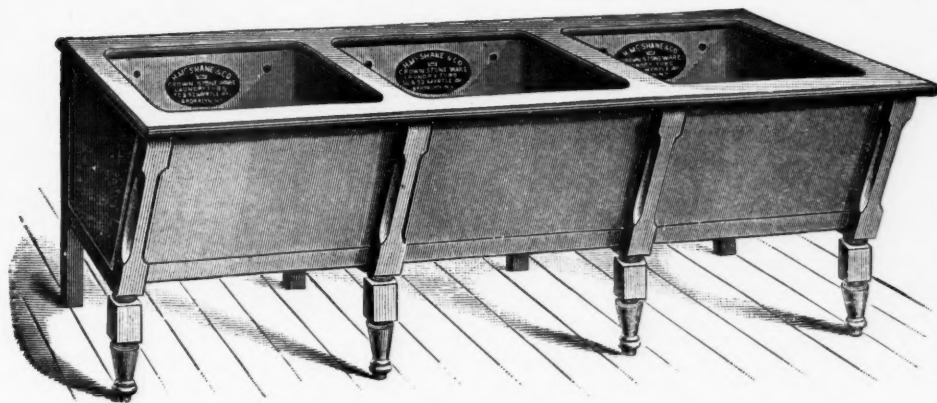
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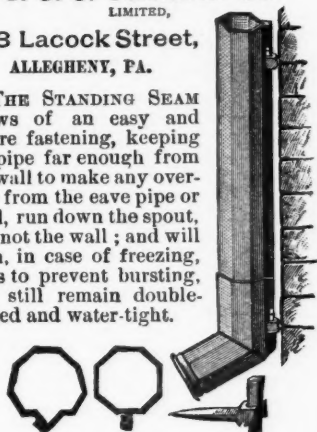
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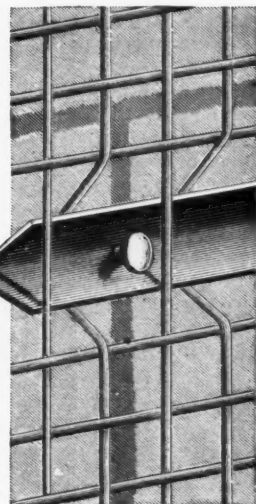
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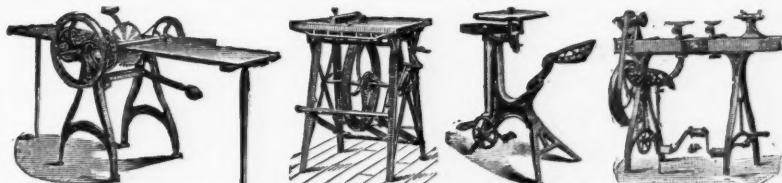
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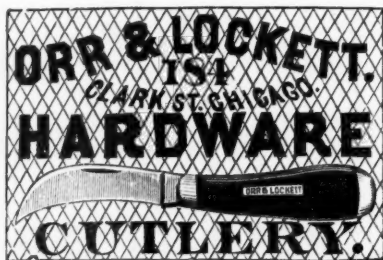
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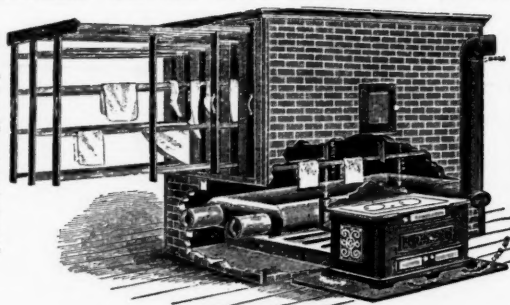
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