All doubts as to whether the University of Minnesota is among the leading institutions of learning in the West were removed on the afternoon of Oct. 31st. It is now admitted to be such at Ann Arbor even. May no one suggest to the Board of Regents that the tremendous triumphs of the gridiron are made possible by their cutting out the fine arts from the courses of study for the year. It seems, however, that the orders to that effect have been somewhat modified or evaded, for at least one instructor in freehand drawing is retained. No one will try harder than this commentator to establish rooting as the rightful leader of the three R's of modern learning—still, an ever-increasing number of young people are finding it to their advantage to know how to draw.

The Managers of every great raid of exploitation have the kindness or foresight to provide themselves with a chorus of advocates whose duties do not cease with the bursting of the bubble. They are required to point out a suitable scapegoat for carrying away and hiding their employer's sins. Sometimes this and sometimes that is suitable for the purpose, but just now it is evident that the rapacity of organized labor is the scapegoat that is to screen the Wall street wreckage from public gaze. One of these advocates kindly exonerates skilled labor, and explains that it is the "unwarranted exactions of crude labor that have brought the menace of paralysis upon industry." This menacing party may, if he is young and active and fortunate enough to get an in-door-all-the-year job and has the health to stick it out, earn forty dollars a month or so. Or he may, when exploitation has borne its perfect fruit, tramp.

Skilled workmen in cities have shown a capacity for organizing and pulling together which has enabled them to hold their own, enough to at least get some share of the plunder in a time of combinations chiefly for plunder. No doubt it is the respect inspired by this pulling together that led the organ quoted above to pass by skilled workmen and to blame "crude labor" for its expected business collapse—a collapse which, if it comes, will be precipitated in the main by vast transactions in values created in stock exchanges and on curbs, rather than by the operations of workmen's unions. These last, coming as they do more directly in contact with the public, must naturally do duty as buffer to a large extent, but let us not let the sins of organized or "crude" labor hide the fact that while they are exacting from two dollars to five dollars a day for doing something tangible in the way of production, they whose organs are so busy decrying these exactions...
have been getting hundreds of millions out of operations representing no productive gain whatever.

As these hundreds of millions do not appear to have been seduced from Western pockets to any great extent, it is somewhat superfluous for a Western organ of these exploiters to be shaking in its shoes over what may happen to the business world. We have more than once pointed out that the development of the West for the past few years has been normal and conservative; that cities have been almost entirely free from land speculation; that a somewhat risky "boom" in farm lands seems to have spent itself early and to have been sustained by large immigration and good crops and prices; and that both steam and electric railway building, especially in the region of the great "merger" has been almost unknown for the past few years. Unless this great region suffers from a series of bad crop years with low prices as was the case a decade since, it is likely to be clamoring for increased transportation facilities and other improvements to match.

Reference was made in a former issue to the standing before the lower courts of the Minnesota statute licensing plumbers. These had decided against it on more than one ground, but of late the favored line of defense has been the unconstitutionality of the law, communitics of less than 10,000 being exempted from its operation. This defense has been sustained by the supreme court. Leaders in the craft have expressed doubts as to their chances of getting a new act passed that will overcome the obstacle—the "country member" don't see the interests of his constituents in that way. Nothing about the litigation thus far throws any new light on the limitations of the police powers of legislative bodies. One of the lower court decisions, our readers will recall, held that the contracting plumber, being responsible for the legal nature of his work, the law makers could not go beyond him and say what manner of workmen he should employ. This principle commends itself as a wholesome tendency to curb legislative meddling. A city attorney within the state has been known to rule that a common council might not only enact that such and such objects must be attained—like the security of a trap water seal under working conditions—but also the specific way of doing it—that the builder might not attain the desired object in another and by actual proof better way, yet such proof could not be held to outweigh the "police power" of the council.

Mr. Mann found himself a few years since—in the time of business depression of which we heard so much—to be possessed of one-twentieth of the stock of a large manufacturing corporation. By reason of good management in the shops, of a certain superior style and sturdiness to the output and of judicious advertising, the corporation came to be known as the leading producer of a great staple. Its property, with the goodwill of its business was reckoned to be worth ten millions of dollars, and shareholders were receiving fair returns on that sum. Then came a change,—the era of unprecedented prosperity of which we have heard so much—and with it came captains in finance who undertook to lead this corporation in the paths of true greatness and fortune. More capital would be needed, which an opulent public would be but too glad to provide, if only the word were said by the captains. Capital would be needed to remove competition,—by simple purchase—to enlarge and newly equip the home plant, to reward the captains, and what not. About thirty millions of capital would be none too much to ask of an opulent public. And all came to pass as the captains had told,—and more. Competitors did part with their properties at large prices, and stood by complacently while their factories were dismantled,—then cautiously invested their money in new ones.

The home plant was enlarged, so large that it seemed that common orders would be lost in it,—so large that customers could hardly expect common orders to receive any consideration—so large that the circumlocution of receiving and getting a common order filled seemed to be the greatest item of cost to the company. The captains did reward themselves for their services in promoting and underwriting. And somehow by the time the greatly enlarged plant was in working operation a lot of new competitors had sprung up, and they had interested some of the company's old foremen and heads of departments; then, too, this new system of piece work and inspection was fruitful of complaints all along the line. Then the new management which came with the new capital had assumed that the removal of competition would enable the company to save much advertising; but altho the enlarged factory was turning out ever so much goods, still it was found that there were others. Prices were higher, but so were cost and freights. And there must be something that the auditor hadn't fully explained; for dividends were continually shrinking,—in fact no dividend had been made the last quarter.

Mr. Mann became annoyed, then thoughtful. He began a computation. "Years ago, I owned, let me see, one-twentieth of this business. We enlarged our capacity several times and paid as we went. We issued no bonds then. We relied on our ideas of goods and things to keep us to the front. By the way, what is my present share in this business?" He began to figure it out on the margin of a daily, and reading down the column he learned that nothing stands in the way of continued and unprecedented prosperity but the labor unions. With this explanation he slipped his pencil in his pocket and went over to the bank to make a small 90 day loan.

Mr. Samiwel Pahr of Greater Gotham appears to be able to give boodling politicians of those parts an exhibition in official vitality that must astonish them. May the art die with him!

The manufacturer gives the merchant the benefit of his advertising, and in return asks that the retailer will co-operate with him in his efforts at trade-building.
Architects all recall a series of tests made some years since at the Washington University in St. Louis to determine the effect upon the lumber of southern hard pine of tapping the living trees for turpentine. These were made at the instance of Prof. Fernow, then at the head of the Forestry Bureau of the Department of the Interior, and enough specimens were used to establish the facts conclusively. Some one in the dim past had successfully launched the theory that tapping the trees for turpentine was followed by injury to the quality of the timber, and for years it was held to be a mark of skill in writing specifications to exclude lumber from trees so tapped. It chanced, however, that these tests showed the lumber from the tapped trees to be a trifle better than that from the untapped, although the difference was so slight that another series of tests made with equal care from other trees might not have pointed to the same conclusion. The main practical value of the inquiry lay in its exposing the way in which a popular assumption with actually no basis of respectable origin may gain currency and pass unchallenged for generations. And the greatest absurdity of these old specifications lay in the belief that they would ever be followed; for any one can see that if the butts of the trees so tapped were left in the forest, there would be no means of identifying the logs, even at the sawmill. Probably the only lumber that ever reached its destined use with any means of showing or knowing whether or not it was from trees tapped for turpentine was that used in the experiments at the laboratories of the Washington University.

An instructive inquiry into the behavior of cements under varying stresses is now being conducted under the direction of Prof. J. L. Van Ornum at the same university. Cement products are being examined to determine the effect of "fatigue," something after the manner of the inquiry made by Woehler and others with reference to steel a generation ago. Thus far results are reported on crushing tests of neat cement only, 2 inch cubes of a standard American brand. After an average crushing strength was determined, loads varying from 35 per cent to 95 per cent of that average were applied and removed repeatedly till failure ensued. The proceedings of the Am. Soc. C. E. for Aug., '03, give a preliminary outline of results thus far obtained, with the inevitable "curve." At 80 per cent of the full load, one hundred and fifty alternations of loading and unloading were sufficient to destroy the cubes, while at 60 per cent it took fifteen hundred such alternations. As 55 per cent of the ultimate load is used, something like a decent factor of safety appears, the curve flattens out, and we find that fifty-five hundred repetitions of the loading are necessary to equal one too great burden. This inquiry is being made to cover mixtures of the nature of concrete also, but these are not far enough advanced to warrant a statement of results.

But it is not given to the crude investigators of the Western World, limited as they are by belief and fancy, and relying for knowledge upon their cold scientific methods, to learn much of the nature of things. To know the real nature of inanimate things one must turn to the Orient, where the subtle insight and sympathies of men have enabled them to trace life thru its different incarnations, where one's belief in no way stands in the way of his accepting another's, and where the acceptance of several beliefs in no way shakes the faith in either. Readers of the current number of Pearson's will find a review by Mr. Ghosh of the discovery by an Oriental professor, and his demonstration by scientific tests, that metals have a life with not only its fatigue but its recoveries after resting. Furthermore, they have their antipathies, from which they recoil conclusively: their poisons, for which there are antidotes effective if applied in time. As with animals, if the antidote come too late, the metals die in fact, and cannot be made again to respond to the tests to which they were sensitive before being poisoned. Diagrams in proof of all these discoveries are given, not only showing the tests of metals themselves, but parallel pictures showing their likeness in behavior to muscles under similar conditions. Thus both muscles and metals make, in stages of fresh activity, generous undulations of the recording machine, which lessen as fatigue sets in, and become yet less and less toward exhaustion, but after a period of rest again respond with vigor. Too toxic applications render either lifelong for a season, but if these applications be withdrawn in time, or neutralized by antidotes, signs of life appear in metal and muscle alike. Here we have "scientific" confirmation of a belief that erstwhile had a foothold among us. Time was when a gentleman must have two razors which were each used for a time, turn and turn about—one to rest the other. In those days every locomotive engineer must have his own iron horse, and "her" day's work was the same as that of her driver, who was perhaps so thoughtful for "her" that he would raise loud protest if a switch engine were not present at the end of the run to haul "her" to the round house. "She has done her day's work, and it is a qualified shame to make her make the run to the round house on her own steam," would be heard from the driver as he stood beside the engine in the station, alternately patting "her" and scowling down the line where the waiting switch engine should be. To be sure in those days there were a very few scoffers who called attention to the fact that the gentleman's razor which was used perhaps only three or four times a week, needed periods of rest just as long and often as that of the barber, which saw a hundred times as much service; and that the marine engine could make a run across the Pacific without any more need of rest than the locomotive required after taking a passenger train a hundred and fifty miles, but such thoughts were only nonsense, anyhow.

There are probably not over fifty American architects who receive upwards of $50,000 a year, and there may be as many as 200 architects whose incomes are close to $25,000 a year.
Well, the American Institute Convention of 1903 has passed into history, realization in this instance having more than equalled anticipation. We were promised one of the times of our lives by the Cleveland Chapter, and right royally did they acquit themselves.

Delegates to the number of 100 and over had registered when the convention was called to order by President McKim on Thursday, Oct. 15th; this was increased by late arrivals to some 125 or 130, besides many ladies who accompanied the officers and delegates. President McKim’s opening address was brief and to the point, optimistic in tone and in full accord with the sentiment of the convention, judging by its very hearty and cordial reception. He felicitated the Institute upon the fact of their possession of a permanent home at Washington, the artistically and historically famous old “Octagon House”; upon the increasing and cordial interest with which the profession in England regards our efforts to solve the great problems now confronting us in America, notably the schemes for the development and improvement of Washington and Cleveland; he also referred to the movements in the same direction at Buffalo, Chicago and St. Paul, where the question of a proper environment for the noble new Minnesota capitol building has been seriously considered and practically solved; upon the importance of pending legislation at Washington, affecting the very foundations of our profession, as well as its future development; upon the increase and betterment of our architectural schools at home and abroad, a bill for the incorporation of the American Academy at Rome having been introduced in the last Congress, with good prospects of becoming a law at the next session, having already passed the Senate and been favorably reported to the House, but final action was prevented, owing to the strained conditions prevailing during the closing weeks of that session. It will be re-introduced in the 58th Congress and undoubtedly passed. President McKim called attention to the fact that the 57th Congress had authorized the restoration of the “White House,” the construction of a Municipal Building for the District of Columbia, the Army War College, a building for the National Museum, the Engineers’ School of Application, the Union Railroad Station, an office building for the use of Representatives, and a Hall of Records, besides making provision for the Lincoln Memorial. Designs for nearly all of these buildings have already been intrusted to members of our profession, and each will contribute to the fulfillment of the grand scheme for the improvement of Washington.

The duties of the Chapters, as organic members of the National Body, was pointed out, reminding them that the ultimate success of all these grand schemes lay largely in the zeal and perseverance of the Institute thro its Chapters influencing the members of Congress by personal explanations and enlargements upon the merits of these proposed improvements, special emphasis being laid upon the faithful performance of such duties by each chapter, and deprecating the lack of interest in certain quarters and failure to grasp passing opportunities, which was fatal to effective work as a whole.

The remainder of the session was occupied with the reception of annual reports from officers and standing and special committees, which were referred to special committees for further action. After a buffet lunch served in the rear of convention hall, the delegates and ladies were taken on a drive by the Cleveland Chapter, which included Euclid Avenue and the Park System of Cleveland, which is one of the finest in America. After a short stop at the Country Club we were driven to the new Euclid Club, where a fine dinner was served, concluding with impromptu songs and speeches, in season to enable us to return to the evening session of the convention, where interesting and able papers were read, as follows: “The Necessity for Trained Men in Future Artistic Productions,” by Theo. N. Ely; “Academic Training in Sculpture,” by Augustus St. Gaudens; “Rome as a Place for Schooling for a Decorative Painter,” by E. H. Blashfield, and upon “The Significance of Rome to the American Architectural Student,” by Austin W. Lord. Messrs. St. Gaudens’ and Blashfield’s papers were finely illustrated with lantern slides. This concluded the first day.

The second day was occupied with listening to reports of special committees upon the annual reports, upon credentials and such others as were not heard at the first session. The nominating committee upon candidates for office for 1904 reported, and the polls were declared open until 11 o’clock the following day.
ALTERNATE COMPETITIVE DESIGN FOR ST. STEPHEN'S CHURCH, (EPISCOPAL), WILKINSBURG, PA.

November, 1903.
EAST ENTRANCE, HITCHCOCK HALL.
Dwight Heald Perkins, Architect, Chicago.

INTERIOR OF THE VESTIBULE, CORRIDOR, HITCHCOCK HALL.
Dwight Heald Perkins, Architects, Chicago.
INTERIOR OF SECOND NATIONAL BANK, WINONA, MINN.
Nimmons & Fellows, Architects, Chicago.

SECOND NATIONAL BANK, WINONA, MINN.
Nimmons & Fellows, Architects, Chicago.
COMPETITIVE DESIGN FOR ST. STEPHEN'S CHURCH, EPISCOPAL, WILKINSBURG, PA.
The plans and specifications for the World's Fair Festival Hall at St. Louis, which is to stand at the head of the main cascade on Art Hill, have been given to the contractors. The pre-eminent feature of the hall will be a sculpture-crowned top to the immense dome 260 feet high. The dome, it is said, is to be larger than that of St. Peter's in Rome, which is the largest in the world.

The auditorium in the interior of the building will be 112 feet high, from the floor of the theater to the soffit of the dome. The proscenium arch of the stage has a space of ninety-three feet four inches, one of the largest in the country, and is fifty-four feet deep.
OLD ENGLISH DINING EXTENSION TABLE, 
For Mr. F. E. Weyerhauser, St. Paul, Minn. 
Manufactured by Wm. Yungbauer, St. Paul.

RETROSPECT AND FORECAST.

Fruition is the reward of labor, honestly pursued and intelligently directed. Four years ago the Architects' and Builders' Journal entered with trepidation into an untrodden local field of journalism—the publication of an organ in the interests of the arts and artisans of the building trade. While the promoters of the enterprise realized the utility of such a publication, they were dubious whether the support would be commensurate with the cost of the undertaking. Nevertheless, they had the courage of their convictions and faith in its ultimate success, and so the Journal was launched. That their confidence in the clientele they purposed to serve, was not misplaced, has been demonstrated by the growth of the Journal from a timid advocate to a recognized organ whose influence extends the length and breadth of the land.

With this issue we begin the fifth year of publication. To our efforts to make it a reputable and reliable instrument for the dissemination of news of interest to the building world, has been added the generous support of our patrons, to whom we take this means of returning our thanks. To the architects of this and other cities we are especially indebted for their obliging courtesy in favoring us with information concerning new projects as well as current building news of the day. To the builders and manufacturers of, and traders in, building supplies, we also owe a debt of appreciation for their consideration and support of an enterprise, which we have reason to believe has been mutually beneficial. It is the aim of the publishers to enlarge the scope of usefulness of the Journal by introducing features which will enhance the value of this publication to its patrons. Already it is a recognized source of information among those interested in all the branches of building, in all the important cities, from Canada to Texas and from the Atlantic to the Pacific. A continual increase in subscriptions enlarges its influence as a medium of exchange between producer and consumer, while its news columns provide a compendium of facts in the building industry which, in many instances, has been of invaluable service.

In thanking our patrons for their patronage in the past we ask a continuance of that support in the future and on our part we shall be ever alert to contribute to the success of those who have made the Journal an existent fact.—Editorial in Architects' and Builders' Journal.

NO CHANGE IN METHOD OF LAYING BRICK.

In the list of trades which have suffered from mechanical innovations it is interesting to note that the trade followed by the knight of the trowel and hammer has been least affected. In fact, it can be truthfully stated that this trade is the only one which has defied the genius of the inventor to devise or construct a machine to do the work in a more expeditious or satisfactory manner than it is performed today by hand.

By the introduction of machinery the labors of the carpenter and the machinist, as well as the scores of other trades which could be mentioned, have been simplified to such an extent as to cause alarm among the great army of workmen who eke out a livelihood through those channels. Yet the bricklayer, so far, has had no cause to feel these disquieting features which long ago started the rumble of discontent among his brothers the world over.

The progress of time and the great advance of civilization, with all its achievements in the way of applied mechanics, have let him severely alone, and today the bricklayer follows his calling in as primitive method, using the same tools as did the artisans of ancient Babylon in the construction of the famous Tower of Babel. Numerous attempts have been made by inventors of the past and present to rob the bricklayer of his individuality by substituting machinery, but that these attempts were without success is fully verified by the presence of the man on the wall and his spasmodic cries of "mort." The simplicity of the trade has been the bricklayer's salvation. The piling of one brick on another with a thin layer of mortar between until the wall is complete, to the layman seems no difficult task, but it takes years of practice and close application to the work for the novice to become a skilled mechanic.

The failure of inventors to relegate the bricklayer of many centuries into oblivion is, for the most part, responsible for the healthy condition of the trade at the present time. This failure has enabled the bricklayer to assume an air of independence which is not so prominently apparent in other trades where the man's place can be so easily filled by the machine. In labor troubles the bricklayer can always be seen taking the initiative, and he invariably experiences less difficulty in convincing the employer that his demands are within the bounds of equity and justice. For these reasons the bricklayer commands a remuneration for his labors which is the envy of the followers of all other trades.

The good architect, after he has acquired a reputation, is sure of work, and is likely to have more offered him than he can conveniently care for; but the third and fourth class architect lives from hand to mouth, and at best makes but a living.
LIMIT OF SPEED.

President Pritchett, of the Massachusetts Institute of Technology, has had the distinction of a ride on the new high-speed electric lines near Berlin, of which so much has been said of late. Dr. Pritchett rode in both the Siemens and Allgemeine cars, but on a foggy morning, when only 100 miles an hour was allowed to be made. He expresses himself as surprised at the steadiness of the car at this speed, which had the effect of lessening the sensation of speed, and he was assured that this steadiness was maintained at the extreme speed thus far attained, of 130 miles per hour. Dr. Pritchett was afforded every facility for studying the experiments, and was impressed with the practicability of speeds up to 100 miles an hour where no considerable grades or curves are to be overcome, such a line, for instance, as might be laid between New York and Washington.

PHILADELPHIA BUILDERS WILL BEGIN WAR ON SYMPATHETIC STRIKES. ON JANUARY 1, 1904.

The advisory board of the Master Builders' Exchange of Philadelphia on the 8th of last month fixed January 1, 1904, as the day on which systematic warfare by means of lockouts against sympathetic strikes will begin. The advisory board represents the 300 members of the Master Builders' Exchange and 1,000 subcontractors, whose signatures are on record.

This means that on and after January 1 any sympathetic strikes will have to face a lockout, not only of the Employers' Association, but of all of the leading individual employers.

This action is the most important ever undertaken in the structural trades in this city. The Philadelphia employers in this line did $30,000,000 of business in the city limits alone in 1902. This is only a small part of the work controlled by them, and was impressed with the practicability of speeds up to 100 miles an hour where no considerable grades or curves are to be overcome, such a line, for instance, as might be laid between New York and Washington.

The above named sum represents the money involved in work for which permits are necessary in this municipality. The largest contract let last year, the State Capitol, is a $4,000,000 work under the supervision of a Philadelphia firm.

The sympathetic strike situation is not local, but has caused trouble and dissatisfaction all over the country. The decision made on the 8th of September, say the master builders, positively sounds the doom of the sympathetic strike in this city, and will go far toward obliterating it wherever Philadelphia men are at work.

The subject has been pending since November 25, 1902. The advisory board was then created and was approved on April 24, 1903, by the presidents of the Employers' Associations. Since then the labor atmosphere, though clarified in some quarters, has again darkened, and the prospects are that little or no work will be done in the coming year.

The text of the resolution adopted on the 8th of September follows:

In pursuance of the authority given the advisory board of the Master Builders' Exchange by the resolution of the Exchange passed November 25, 1902, subscribed to by the Employers' Associations and by a number of individual employers, and further urged by a meeting of the presidents of said associations held April 24, 1903, at the Master Builders' Exchange, at which a resolution was adopted as follows:

"Resolved, On and after a time to be fixed at the discretion of the advisory board of the Master Builders' Exchange, no workman shall be employed on any of our buildings in Philadelphia unless he is willing to agree not to engage in any sympathetic strike and to arbitrate any difference that may arise, work to continue meanwhile."

We, the advisory board, have determined that on and after the first day of January, 1904, the above resolution shall be enforced, and we call upon you to adhere strictly to the resolution.

JOHN ATKINSON,
JOHN S. STEVENS,
GEORGE WATSON,
WM. H. ALBERTSON,
JOHN D. CARLISLE,
Advisory Board."

Henry Reeves of Stacy Reeves & Sons says:

Sympathetic strikes have demoralized the building trades. One trouble is no sooner adjusted than another branch of the trade finds some cause for complaint, and all building operations are brought to a standstill again.

I am not a member of the advisory board, but I understand that the members of the Building Trades' Council are themselves in favor of arbitrating disputes if a satisfactory plan can be found. The present action will bring the matter to an issue, and I believe that an amicable adjustment of all differences will result.

All builders in this city will unquestionably abide by the action of the advisory committee. In fact, the committee is but setting the date when the action previously determined upon by the master builders will be made effective.—Architects' and Builders' Journal.

It is undoubtedly possible to make paint hold to yellow pine and cypress quite as tenaciously as to white pine and poplar, but not by the same treatment. The first-named woods are resinous and full of paint solvents, therefore this resin must either be sealed in the wood or made to combine into a firm compound with the primer. To accomplish the first-named result shellac is about the only available material, and if used should be applied over the entire surface and not merely at the worst spots. To accomplish the second-named objects perhaps a small proportion of good hard varnish gum and a little turpentine in the priming coat might prove effective.

Speaking with diffidence on a subject yet open to experiment, it might be well worth trying a priming coat of pure zinc in refined oil with about one per cent of high-grade kauri and turpentine rubber varnish; to be finished with two coats of straight zinc in refined oil, with or without a proportion of lead or whitening. The French authorities generally recommend the grinding of some whitening with their zinc.—Exchange.
Mr. Albert Kelsey of Philadelphia, the architect who was instrumental in having the St. Louis Fair authorities give up a certain section of their fair grounds for a municipal exhibit, which will present all phases of the management of cities, has just returned from a trip abroad. Mr. Kelsey's special object on this occasion was to look into the municipal questions, and especially to visit the municipal exhibits at Dresden.

In speaking of his trip Mr. Kelsey said:

"I visited eleven cities in six different countries, besides making a careful study of the municipal exhibit at Dresden. M. von Wincktenhoven, the Belgian minister of foreign affairs, promised that his government would send a representative exhibit for my department, though Dr. Theodor Lewald, the imperial commissioner-general of Germany, was not to be seen, owing to sickness, and M. Michel Legrave, the commissioner-general for France, was absent when I was in Paris, yet through their secretaries I was assured that the exhibits I applied for would be available.

"I was sent abroad to get out-of-door exhibits especially. Full-size lamp posts, trolley poles, drinking fountains, tree guards and pavement grilles, kiosks, etc., and especially such combinations of street furnishings of an artistic character as tend to reduce the unnecessary cluttering up of highways. We want similar exhibits from American cities and manufacturers, as well as samples of paving, sections of sewers and conduits.

"The Dresden exhibition is exclusively a municipal exposition by German cities and German manufacturers, and may hence be studied without coming in contact with the usual distracting influences of unrelated classifications.

"I was amazed at the scientific display at Dresden, but in Berlin, Cologne and Munich, the only other German cities visited, the 'municipal housekeeping' did not seem to be quite up to French standards. Whether some of their paraphernalia and some of the new systems now being installed are not more advanced is a question I cannot answer after so superficial an examination. I wish to refer all who are interested in civic problems to the admirable catalogue of the Dresden Exposition. In it all exhibits are outlined, and the cost of the improvement, the date of its execution and the name of the architect and engineer in charge are given. It will be interesting to many to learn how cheaply many great public works in Germany have been executed, as all who have traveled know with what thoroughness and foresight the work has been done.

"The World’s Fair is attracting much attention abroad. I was surprised to find how well it had been exploited and how many people beside the officials I saw showed an interest in it. Of course, there is somewhat of an impression that exhibitions are becoming too frequent. Some seemed mostly to think that while St. Louis might hold the last great international exhibition, special exhibitions like the one at Dresden will increase in number."

Mr. Kelsey is very enthusiastic about the municipal exhibit at St. Louis, and thinks it will mark an epoch in American municipal affairs, as all those who have anything to do with cities will be able to see displayed the various methods and means of making a city not only beautiful, but comfortable and convenient from the point of view of freight and passenger traffic, public buildings and business and social needs.

A very important accession to the number of drawings and paintings in this country by J. M. W. Turner has just been made through the gift of Turner's "Devonport" to the Fogg museum of art of Harvard university. The drawing, executed in water-color during the middle part of Turner's career, was among the 57 which were owned by John Ruskin and exhibited in London in 1878, and again in 1900. It comes to Harvard as a gift from Charles Fairfax Murray, a well-known collector and dealer in London. Mr. Murray was at one time a pupil of Ruskin's. This drawing is distinguished, furthermore, as one of those which Ruskin held in highest esteem and of which he wrote:

"No more wonderful drawing, take it all in all, exists by his hand than this one, and the sky is the most exquisite in my own entire collection of drawings. It is quite consummately true, as all things are when they are consummately lovely. It is, of course, the heaping up of the warm rainclouds of summer, thunder passing away in the west, the golden light and melting blue mingled with yet falling rain, which troubles the water's surface, making it misty, altogether, in the shade to the left, but gradually leaving the reflection clearer under the warm opening light."

The growth of the Turner collection at Harvard illustrates the usefulness of a museum in a university as a depository for a selective, yet comprehensive, exhibit of the work of great masters and important periods in the history of the fine arts. The Fogg museum at Harvard is unique among the world's art museums in that it receives art treasures solely at their educational value. Such institutions as the Boston Museum of Fine Arts, the Metropolitan Museum in New York or the Art Institute in Chicago necessarily accept works of art that are interesting from various points of view, whether historical or decorative, or constructive or even scientific. But the Fogg museum stands for an attempt to present to students of the fine arts typical work, whether original or in the form of reproductions, of the highest importance. —Correspondence Springfield Republican.

Elliott Woods, the superintendent of the Capitol, at the direction of the House commission, has designated Robert S. Peabody of Boston to act as advisory architect in the preparation of plans for the proposed office building for the use of members of the House of Representatives.

Mr. Peabody has been president of the American Institute of Architects, is a well-known member of the profession, and the designer of a number of buildings at the Chicago World's Fair and at the Buffalo Exposition.
HITCHCOCK HALL.

The Plan.

Hitchcock Hall is 200 feet long, east and west, and varies in width, 35 feet in the center and 50 feet at the ends and is four stories high. The main front is on the south or campus side.

Long and dark corridors were not desired; small units or divisions of the student body into clusters were preferred. As a result, and as shown by the plans, the structure is divided into five separate buildings. Each has its entrance, its staircase and its baths, and so far as private rooms are concerned, is independent of its neighbors.

As there are portions of the end sections designed for the common use of occupants of the entire building, a vestibule corridor was built connecting the entrances of the five sections.

Mrs. Hitchcock wished to provide more than a mere collection of sleeping rooms—she wished to make a college home for young men. She believed that would require a library and sitting room, a chance for a breakfast before leaving the building, a place to go when ill.

The east section is largely devoted to these purposes, and contains a memorial library containing a portrait of Mr. Hitchcock, his favorite books and the oil paintings and ornaments from his home. Adjoining the library is a breakfast room connected with a large kitchen in the basement—and rooms are provided near by for a housekeeper.

In the fourth story is a hospital containing a ward for five beds, a nurse’s room, bath-room, serving room and diet kitchen connected by dumb-waiter with the basement kitchen. A hand elevator is provided to carry patients to the hospital floor.

In the basement of the west or corner section is a club room for recreation purposes.

Reference to the plans will show that various types of rooms are included. All have large closets. Some are single, some with a bed alcove, and others with two. Suites of studies with one or two bedrooms are also arranged to meet the varying demands.

Every room is finished with red oak trim and floors, and has walls painted with varying colors in oil. Each is heated by steam, lighted by electricity, and a large portion have open fireplaces. All portions, both public and private, have been furnished by the University with beautifully designed oak furniture selected to conform with the finish and character of the building.

Marble bath-rooms are located on every floor of each section, so that a complete set of fixtures is furnished for every four students.

Construction.

The structure of the building is fireproof throughout. The walls are of masonry, exterior ones being built of buff Bedford stone. All floors and the roof are built of steel beams and fire-clay tile, and all partitions are of tile. The roof is covered with red roofing tile, and all sheet metal work is copper. The stairs are of iron and marble, and in no case is wood used structurally.

Design.

It was desirable to conform to the general character of the other buildings of the University enough so as to avoid radical divergence without copying all of their
qualities. It was also desirable to be governed by the conditions of the plan. The result shows the influence of the Gothic, and is nearer related to that style than to any other, though it does not adhere strictly to that.

The detail is all original, the ornamentation being derived from various wild plants and prairie flowers which grow in the country around Chicago. The designs which are derived from plant forms are all conventional—no hidden significance is aimed at—they are simple ornaments designed to make an interesting play of light and shade and a proper finish to the structure from forms already loved by the people for their natural beauty.

NEW BUILDINGS SHOWN IN COLORS.

Those water-color pictures in perspective, commonly made of large buildings by the architects who design them, have for a dozen years past become more and more important as adjuncts to the successful practice of architecture. The French architects frowned upon these feats of the imagination as containing the possibility of misleading those to whom they are especially addressed, and in particular discourage the use of such drawings in architectural competitions. In this country, however, pictures of the kind are made with increasing elaboration of detail, especially as to surroundings and atmospheric effect. Every considerable architectural office has one or more men who can produce such colored drawings with picturesque effect, and there are some men in New York who give their whole time to this kind of work.

In earlier work of the kind the building to be presented in perspective was drawn with mathematical stiffness, rather crudely colored, and supplied with a few highly conventional human figure—gentlemen in high hats and ladies with parasols—to indicate proportions. The older school of architects would have been rather shocked at any attempt to present such a picture in natural colors, and at a substitution of realistic figures of men and vehicles, instead of the well-established conventional population of the sidewalks. The attempt to make a picture in any true sense of the word would have been regarded as an impertinence. Such drawings were often made by men unskilled in color, were produced in a few hours, and cost very little. The most skilled specialists in such work earn handsome incomes; one in New York is reputed to earn $20,000 a year merely as a colorist of architectural drawings in perspective. Some in doing such pictures for architectural competitions work for a contingent fee. The price is low unless the architect for whom the drawing is made shall win the competition, in which case the fee is an extremely handsome one.

A technical knowledge of architecture is almost a necessity for success in such work. Able architectural illustrators like Pennell have done such pictures with great success, but some skillful landscape painters have utterly failed. Most of those now executing such drawings in New York have the double education of architect and painter, and while nobody pretends that work of the kind occupies an important place in the realm of art, since more or less elaborate drawings are made without regard to the artistic interest of the buildings represented, the best of such work is not altogether despised even by able landscape painters.

After colored drawings in perspective have served their immediate purpose of illustrating to the owners of the building what the projected structure is to look like, they are preserved by the architects, or sometimes kept to be hung conspicuously in the completed structure. In a few cases the man who executes such work keeps it himself or sells it at a handsome price. Such paintings are more and more conspicuous at the Architectural League exhibitions.—Architects and Builders' Journal, Baltimore, Md.

BUILDING FOR THE PORTLAND EXPOSITION.

The plans for the buildings of the Lewis & Clark Exposition, which is to be held in Portland, Ore., next year, are now assuming shape. The report of Superintendent Oscar Huber shows that the main structures will consist of the States Building, Machinery Hall, Festival Hall, Forestry Building and the Lewis & Clark Memorial Building. The States Building, as outlined, will be a structure 490 feet long by 200 feet wide, and is intended to hold the exhibits from all the states participating. A separate annex is to be provided for agricultural and horticultural purposes in case it should become necessary. The architecture is to be of the French Renaissance. The Machinery Hall is to be of the same style and 400x100 feet in size. The Festival Hall, or Musical Pavilion, will be of liberal proportions, designed for large gatherings in connection with band concerts, etc. Its acoustic properties will be given special attention. The Forestry Building will be unique in style, and is designed to show the natural timber resources of Oregon. Large logs with the bark undisturbed thereon will form the walls of the building, and huge sawn timbers, the beams and girders. Trees will form the pillars supporting the verandas. All the different woods found in the state will be employed in the construction. The other buildings will be appropriate to the purpose for which they are intended.
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Among the most representative buildings in the Twin Cities, among which are the Minneapolis Gas Light Co. Building, Insurance Exchange Building, Minneapolis, Minn., Minneapolis, Minn., and the Western Architect Publishing Company.

FRED'CK KEES, Minneapolis, Minn., President.
J. WALTER STEVENS, St. Paul, Secretary.

F. A. GREENLAW, General Manager.

THE WESTERN ARCHITECT
ARCHITECTS SHOULD HAVE THIS CATALOGUE.

The U. S. Radiator Co., with Northwestern headquarters at 432-434 Guaranty Building, of this city, hands us copy of their new catalogue which is gotten up in a manner to do credit to their very complete line of radiators.

Among the additions to their line this year, we note the most up-to-date arrangement for direct and indirect work which we illustrate herewith.

"TRITON" DIRECT AND INDIRECT RADIATOR

On page (26) they show the new Triton five column radiator which is made in 12½, 14½ and 16½ inch heights. On page (18) is shown the new wall radiator, which is something entirely new in this line. Each section contains one foot of heating surface, and can be assembled in any unit desired. Page (26) shows a wall box for the direct-indirect radiator, also pedestals to be used where they are required to raise the radiator above the floor. These pedestals are made in half-inch sizes, ranging from one inch to five.

"TRITON" direct and indirect radiator.

New England Furniture & Carpet Co., Law Library, State University and Deering Building, of this city, besides Foley Bros., & Kelly and Gordon, Ferguson, of St. Paul, and numerous others throughout the country.

Mr. Warneke, northwestern manager, would be pleased to forward copy of new catalogue upon application, and no architect or steamfitter can afford to be without this book, embodying as it does, all the different styles of radiation made by the largest exclusively radiator manufacturers in the world.

A concern that can be considered as pioneers in their line in this section of the country is the Scribner-Libbey Co., of St. Paul, Minn. The firm was organized in 1870, nearly thirty-four years ago, and was incorporated as long ago as in 1883.

When the company was first formed nearly all the work they did was of a local character and confined mostly to the city of St. Paul, but a third of a century of business in this line, has marked a great change in the geographical territory which they cover.

Now this old pioneer establishment has almost a national reputation, their patronage extending to nearly every state in the Union. The personnel of the company now is as follows: Wm. Rhodes, president; A. G. Staples, vice president, and Geo. H. Ranny, secretary and treasurer. They are men who are well and favorably known in business as well as social life.

This concern recently issued a beautiful catalogue which is now before us, and it will compare favorably with any we have yet seen in that line. It is nicely printed on good paper and contains illustrations and descriptions of everything that can be manufactured in skylights, cornices, window caps, corrugated iron, fireproof doors, shutters and windows, while at the same time they are always willing to make estimates and manufacture from special drawings of the architect when desired.

Due credit should be given to such concerns as the Scribner-Libbey Co. for the building up of the reputation of St. Paul as a leading manufacturing center, as a large amount of capital as well as many employees are necessary in the conducting of such a large business. Messrs. Scribner-Libbey Co. will be pleased at any time to send their handsome catalogue to any owner, architect, contractor, or dealer in sheet metal goods upon request.

A PROMINENT AND SUCCESSFUL CONCERN.

The Celadon Roofing Tile Co., whose offices are located at 156 Fifth avenue, New York, and in the Marquette building at 204 Dearborn street, Chicago, with Geo. H. Lawes & Co., of Minneapolis and St. Paul, as its Northwestern Agents, have built up a most enviable reputation as manufacturers of high grade roofing tiles, as well as for square and honorable business methods.

Recently the company received quite an impetus in its business by a new election of its officers. Mr. William R. Clarke, who formerly held the office of vice-president and treasurer, has been elected to the position of president and general manager. Mr. C. Lyton Ford, a man of wide experience in commercial lines, has been elected to succeed Mr. Clarke as first vice-president, and Mr. E. S. Marvin, former superintendent of the American Temperance Life Insurance Association, has been chosen treasurer. Mr. Henry S. Harris, who was formerly located in Minneapolis, where he has many warm friends and acquaintances has been elected second vice-president. He together with Mr. Alvord B. Clarke, the general superintendent has charge of the western business, with their offices in Chicago at the address above mentioned.
The Celandon Roofing Tile Company has furnished tile for hundreds of the best buildings in the country, including government and public buildings as well as many of the best private residences. They are furnishing tile for the roofs of twenty-six large buildings of the Army and Navy Hospital at Washington, D. C. The company manufactures hard-burned, vitrified tiles only, which are distinguished for their even color throughout their entire thickness, and for an almost complete absence of porosity, thus showing the perfect annealing of their substance, which can only be effected by careful and scientific methods of burning when applied to a superior clay or shale.

The company has recently added two new kilns and extensions to its factory at Alfred, N. Y., which together with the additional workmen secured, increases its annual capacity by over forty thousand tile.

The company is one of the most prominent and successful of its kind in existence.

NATIONAL FIRE-PROOFING COMPANY.

The National Fire-Proofing Company of Pittsburgh, New York and Chicago, have recently opened offices in Minneapolis at No. 216 Lumber Exchange, Harold Johnson being appointed their Northwestern Agent. They intend to make an aggressive fight for a share of the business in hollow tile construction, and have just succeeded in securing a contract for all the hollow tile work at the new Cream of Wheat building. This will be an ideal construction with large fifteen foot square arches for the floors, somewhat similar in design to the Hennepin County Courthouse, which work was executed by the predecessors of this Company. They have also secured a contract for a fireproof floor on the first story of the C. J. Martin residence, using the Johnson system of long span flat floor arches similar to the work executed by this same Company at the Asbury Hospital.

Mr. Johnson, their local representative will at all times be prepared to submit designs and estimates for all classes of work in the line of hollow tile fire-proof construction.

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Coulson Patented Corner Post and Bar.

This corner post and transom bar combines for store fronts the special advantages of least obstruction to light, greatest strength for holding large windows safely, and least danger and trouble in setting or replacing large plate glass.

The Coulson Improved Corner Post, with glass plates attached, is a similar section of a transom bar. Instead of the heavy wood frame which has been universally used, the Coulson is made of a narrow, light piece of soft wood, with a groove in the back of which the angle of a steel T-bar is sunk and firmly fastened. The several pieces of glass being set in the back of which the angle of a steel T-bar is sunk and firmly secured by wooden stops, the advantage of an all-wood bearing for the heavy plates is secured. The advantage of all-wood bearing for the heavy plates is secured with the rigidity of the iron T-bar added. The face of the posts and bars, together with the wood stops, which, altogether, make up the outward appearance of a single metal or wood strip between several plates of the windows.

NAMING A NEW TRAIN.

Finding an appropriate name for a new train is not an easy task, as many things must be considered. The Great Northern Railway, in connection with the Canadian Northern Railway, inaugurated a new schedule between St. Paul and Winnipeg November 22nd, via St. Clair, Fergus Falls and Crookston.

The new train is solid vestibuled, steam heated and acetylene gas lighted. The dining and sleeping cars are new and embody all the improvements known to the car builders' art. The dining car service, which is unexcelled, is to be one of the special features.

The name adopted for this train was the "Winnipeg Express," but as the running time from St. Paul to Winnipeg is fourteen hours and twenty minutes, the travelling public insists upon calling it the "Time Saver."
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The Government engineers, after the usual careful and painstaking
investigation, have also approved it and specify its use in Government
Buildings.

While we expect to enforce our rights to the extreme limit of the law,
we have made arrangements to protect the public and give builders and
others an opportunity to procure the end-matched flooring without
danger of litigation. This may be done through our licensees who, in
order to identify the licensed flooring, will invariably mark it Wilce
Patent Jan 1st 1805, together with their own name or trademark.

Rumors are spread that the price of end-matched flooring will soon be
advanced two or three dollars a thousand. We wish to say that there is
no foundation for any such rumor, and in this connection we ask you to

REMEMBER

First. That the United States Circuit Court has fully sustained
our Patent.

Second. That we not only consented but joined in the request to re-
open the case to permit further evidence to be submitted.

Third. That this action does not indicate any change in the
opinion of the Court, as it was by consent of both parties.

Fourth. That end-matched flooring has not been advanced in
price and will not be at any time, any more than is warranted by the us-
ual conditions governing the lumber trade.

Fifth. That there is no such thing as a fixed cost in laying end-matched
flooring, and besides this there is a great reduction in the cost of
laying it.

Sixth. That it makes a better floor.

Seventh. That end-matched flooring will always be sold at a price
that insures the builder a substantial financial saving over any other
flooring in use of equal quality.

Eighth. That in using end-matched flooring an under or sub-floor
is unnecessary, thereby saving the cost of material and of laying such
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