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THE President's Message conveys a certain encouragement to building interests, by making it clear that the Administration will oppose any of the radical schemes, whether for making all the poor people of the country suddenly rich, or for making all the rich people suddenly poor, which may be brought forward in Congress. Every reasonable man knows that violent convulsions in legislation affecting business interests are always injurious, but it is a novelty, as well as a satisfaction, to find a politician with courage enough to make public announcement that he does not propose immediately to reform the community by the use of some nostrum of his own. The most serious difficulty under which the building trades now lie is, probably, the disinclination of people who have money to use it in new constructions. There is reason to believe that much of this indisposition to invest money in building comes from the fact that small capitalists, who would, under ordinary circumstances, invest their property in houses, have, for the last few years, been dazzled by the newspaper accounts of millions made in stock speculations and consolidations, and have put their savings into enterprises, the promise of which has, so far, been greater than the fulfilment. Every one who takes note of the course of stocks will remember shares which, a few years ago, were sold with the recommendation of bankers of the highest standing at fifty dollars, and, after paying an assessment, could with difficulty be disposed of now at fifty cents; or a copper-mine stock in which has fallen within a few months from seventy-five dollars to five dollars a share. The aggregate of the losses in these and similar investments is enormous, but it falls, to a very great extent, on people who are not very familiar with the stock-market, except through the newspapers, and who have not the personal knowledge of the promoters of the various schemes which, perhaps more than anything else, keeps out of them the more experienced investors; and these small speculators, with their contributions of a few hundred or a few thousand dollars each, make up the millions which are either irretrievably wasted, or go to fill the pockets of more prudent, or less scrupulous, people. It is probable that the troubles of stockholders in over-capitalized or dishonestly-managed corporations are not yet over, and, until the small capitalists who furnish the money for them have been totally ruined, or have saved up some more money, besides learning prudence, it is likely that the small building operations which do most to furnish employment for mechanics in general will not extend much.

THE Supervising Architect of the Treasury will, it is said, in his Annual Report, recommend to Congress a change in the Tarsney Act, by which the supervision of public buildings, erected, under that Act, from the designs of private architects, shall be confided to the Supervising Architect's office. Mr. Taylor does not base his recommendation on any indisposition on the part of private architects to give to Government work the same care in supervision that they would give to work for a private client; but he says, with perfect justice, that the construction of public buildings is hedged, by law, with such an elaborate system of checks and guards that a private architect, accustomed to the freedom with which he would act for an ordinary client, is apt to infringe in various ways upon the established and necessary routine, and make trouble, not only for himself, but for the officials with whom he is connected. For this reason, Mr. Taylor thinks that the execution of a design would go on more smoothly if the drawings and details could be turned over to officials accustomed to the routine prescribed by Department procedure, as well as statute law, who could carry them out according to established precedent, and with the really admirable precision and clearness common to American departmental work.

THE principal objection to this plan, and one which, as we think, ought to outweigh the consideration of the avoidance of occasional misunderstandings and friction, is that the work of the architect, as an artist, is by no means over when he has delivered his working-drawings and details. No building, perhaps, was ever constructed precisely in accordance with the drawings. Accidents of site, of material, of measurement, or a thousand other things, may disarrange to a slight extent the intended plan, even if the process of evolution into a finished building does not show points in which improvements can be made, and the judgment of the architect alone can decide how to take the best advantage, if necessary, of such incidents. So far as actual supervision is concerned, there is no question that private work, supervised by private architects, is, as a rule, much better executed, and of better materials, than that which the Government secures at the same or greater expense; and the mere fact that an architect unaccustomed to work under strict rules occasionally upsets official routine should not be allowed to endanger the artistic perfection of our public buildings, just as we have begun to try to make them artistically perfect. At the same time, architects who have public work to do should never forget that their official employers, however amiable they may be, are themselves bound by strict rules; that there must be a voucher for every expenditure, however small; an order from the properly constituted authority, plainly recorded, for every contract, and for every variation from every contract, no matter how unimportant; and that, besides authorized contracts and variations, there must be formal appropriations of money for carrying them out; so that, when the work is done, the authorized contracts and variations, the appropriations, and the actual expenditure, must balance to a penny. In fact, nothing is more valuable, as a piece of business training, to an architect inclined to be careless, than to be employed to carry out a public building; but architects ought not to get their business training at the expense of annoyance to officials, or injury to the public interest; and if those who aspire to public employment will take pains to learn the laws governing the expenditure of public money, and conform to them, they will not only save themselves and those with whom they are connected much annoyance, but may help to keep in the hands of the profession that supervision of their work from first to last which is essential to the highest artistic quality in the result.

MR. WILLIAM MARTIN AIKEN has been appointed Consulting Architect and Chief Inspector of the Building Department of New York, to take office January 1, with Mr. Percy M. Stewart as Superintendent of Buildings. We need hardly say that Mr. Aiken was for several years Supervising Architect of the Treasury Department and distinguished himself by the efficiency of his organization of the great office under his charge; and the qualities which he showed in Washington will be of the greatest value in reforming the abominations of the Inspection Bureau of the New York Building Department. Mr. Stewart is a builder of great experience, and, in addition, is a man of enlightened ideas on public responsibilities and duties, as he has shown in admirable service as a member of the State Assembly. It hardly seems possible that the Building Department of New York should fall, or rather, rise, into the hands of two such men, and there is no doubt that every trick known to the cruel and treacherous Irish and German politicians who have seen the rich plunder of the Department taken from them will be employed against them and their families to persuade or force them to resign,

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and it is to be hoped that the people of the city will support them loyally. Mr. Aiken, as we know, is very much of the stuff of the lamented Colonel Waring, and we trust that Mr. Stewart is like him.

THE contract for a portion of the superstructure of the New York Custom-house has been awarded by the Treasury Department to John Pierce, with a provisional acceptance of his bid for the remainder of the building, conditional on the making of an appropriation by Congress for the purpose. The story of the award of this contract furnishes an interesting lesson on the routine of Government work, with, incidentally, an illustration of the ease with which officials and architects who know the law, and conscientiously keep within it, can conform to the routine, without delay to the work, or damage to its artistic character. The original appropriation for the building did not specify the material to be used, and bids were invited for various materials. It appeared from the bids that the work could be carried out for a sum within the appropriation, but in a material which the architect and the Secretary of the Treasury considered less desirable for so monumental a structure than marble, or a first-class granite. Under the law, a contract cannot be awarded for a sum exceeding the appropriation, and, in order that the progress of the building might not be stopped until Congress could act, it seemed best to contract for the lower portion, leaving the construction of the upper part, the material of which could be varied as might be required, for a subsequent contract. At the same time, in order not to lose the benefit of a tender for the superstructure which was probably lower than any that could be obtained later, the Treasury Department bound Mr. Pierce, without binding itself, by an acceptance conditioned on the action of Congress. We may say that, while the transaction shows the scrupulous compliance with the law of an official, it also shows something of the ingenuity and business sagacity of a private architect. All of us remember scores of Government buildings which have been erected in the most wasteful and perilous manner, by a succession of appropriations, the structure being carried on, after each appropriation, until the money gave out, and then dropped, in whatever stage it happened to be, until another appropriation was made, perhaps years afterwards; and the Custom-house contract, which secures the continuous and rapid progress of the work to a definite stage, at the same time that it allows eighteen months for Congress to study the question of adopting a better material for the superstructure, and affords the certainty that the work will be continued and completed for a fixed sum, in accordance with the decision of Congress, bears testimony, not only to the intelligence and energy of Secretary Gage and Mr. Taylor, but also to the skill in business management of Mr. Gilbert.

THE examinations for the John Stewardson Memorial Scholarship in Architecture will begin at the School of Architecture of the University of Pennsylvania, in the city of Philadelphia, on Wednesday, January 8, 1902. The scholarship is of the value of one thousand dollars, and is awarded only to a person under thirty years of age who has studied or practised architecture in the State of Pennsylvania for at least one year prior to the date of the first examination. The successful candidate is required to sail for Europe not later than the thirtieth day of March following his selection, and to spend one year in travelling and in the study of architecture, under the direction of the Committee in charge of the Scholarship.

A CURIOUS operation is going on in New York, where a wall, eight stories high, and weighing about six hundred tons, is being lifted, so as to restore it to a vertical position, from which it now deviates more than a foot at the top. The structure to which the wall belongs is a mercantile building in process of construction on East Eighteenth Street, between Fifth Avenue and Broadway, known as the Heisler Building. Two months ago, when the walls were nearly finished, work was begun on another large building on the adjoining lot. The foundations for the latter building were designed to be made by sinking open caissons, and the process of sinking the caissons, by pumping out the water and gravel from within and beneath them, caused a movement in the subsoil under the foundations of the Heisler Building, so that the whole of the west wall of the latter sank until the top overhung the base about seventeen inches. The wall is of the usual steel-frame construction, covered with brick, and it is a valuable testimony to the capacity of this construction for resisting such movements that the brickwork and terra-cotta did not fall off the frame, and, beyond the variation from a vertical plane, the wall was substantially uninjured. It was, however, necessary to restore it to its proper place, and a contract has been made for doing so, the contractors removing so much of the brick casing as is likely to be injured by the operations, lifting the wall to its proper place, underpinning it, and restoring the brick casing. It is worth recording that the contractors for this delicate piece of work are Messrs. Terry and Tench, who are also contractors for a portion of the Rapid Transit subway, and if the operation succeeds, as there is every reason to suppose that it will, the Chapter of St. Paul's, in London, might do worse than invite them to try their hand at the Cathedral, whose condition has become so alarming.

THE architects of Paris, besides the opportunity offered them in the new territory added to the city by the levelling of the fortifications, are to have another, through the discontinuance of the Champ de Mars, the greater part of which has been turned over to the city authorities, to be sold for building-lots. The construction of the two great terminal stations of the Western and the Orleans railways in the immediate vicinity has made the land extremely valuable, and it is to be entirely sacrificed, with the exception of a small park which is to ornament the centre of the new quarter. The Champ de Mars is connected with many events of the greatest interest, from the Fête de la Fédération, in 1790, where the King and the National Assembly swore fidelity to the new constitution, and the gorgeous festival in which, in 1815, Napoleon celebrated his victories over the armies of all Europe, down to the Expositions of 1878, 1889 and 1900, and the lovers of historical associations will be sorry to see it disappear; but it is not large enough to accommodate even a part of any future exhibitions, and, as it is of no use for anything else, it is undoubtedly the part of wisdom to sell it. Of course, the transformation of the Champ de Mars will involve the removal of the Eiffel Tower, which stands in the middle of it; but the concession for the tower expires in 1908 in any case, and it is said that the receipts from it are now insufficient to pay the expense of maintenance, so that it will undoubtedly have disappeared long before the ground which it covers is needed for anything else.

MR. EDWARD ATKINSON makes to the Boston Manufacturers' Mutual Fire Insurance Company an interesting report on the Mond gas, about which there has been, of late, so much discussion in England. The Mond gas, so called from the name of the inventor of the process for producing it, Dr. Mond, is a rather dilute carbon monoxide, formed by blowing air and steam over red-hot coal slack, culm and other carbonaceous minerals of inferior quality. All the carbon is taken up by the air and steam, and the carbon monoxide so formed escapes, leaving in the retorts nothing but a small quantity of ash. The conversion is carried on at a low temperature, and in this way a large proportion of ammonia is saved, which is converted into sulphate of ammonia, and sold for fertilizing purposes at a price which will repay three-fourths of the cost of the coal used. The net cost of the gas obtained is thus extremely small, and it can be used for a variety of purposes. The most important of these is, perhaps, as fuel for gas-engines, for which it is particularly well adapted, the residuum from it being very much less than from ordinary gas; and Mr. Atkinson says that, by using it, five times as much power can be obtained from a given weight of coal as in the average steam-engine. It is hardly necessary to observe that a fuel which costs only one-fifth as much as coal, and gives five times as much power, has claims to the attention of the owners of steam-engines, and Mr. Atkinson is undoubtedly right in saying that the Mond gas has a great future before it. The main objection to it, which he does not mention, is that it is intensely poisonous. Although easily controlled, it must be used with care to prevent leakage. Another important, and perhaps safer, use for it is in heating furnaces. Being without ash, instantly controllable, and of great heating power, it forms perhaps a perfect fuel for this purpose, and it is very possible that, as our coal-reserves diminish, and it becomes necessary to economize what we have left, the Mond gas, or some other form of carbon monoxide, will come into general use, both for heating and power.

EXHIBITION OF AMERICAN PAINTINGS AT THE ART INSTITUTE. — OPENING OF THE RYERSON LIBRARY. — REPLACING THE FOUNDATIONS OF McVICKER'S THEATRE. — THE GOVERNOR'S ATTACK ON THE EXAMINING BOARD OF ARCHITECTS. — THE SPRINGFIELD STATE ARSENAL MATTER. — DEVELOPMENTS IN THE ALLIS-CHALMERS STRIKE. — BOYCOTTS. — A NEW RAILROAD STATION.

LAST month the Art Institute opened its fourteenth annual fall exhibition. This exhibition consists of oil-paintings and sculpture by contemporary American artists, and has much of especial interest. Gari Melchers has a room devoted to his works, prominent amongst which are portraits of many well-known Chicago people. When we look at Mr. Melchers's work other than portraits we feel that they could never hold first place in our affections, but when we look at some one else's portraits, ah! then we appreciate his. We realize that his art is right *all* the time and that we only quarrelled with him about his special interpretation of special characters. Mr. Melchers seems to wish to emphasize the faces of his portraits decidedly by keeping the head a well-finished piece of work, while the hands and other parts remain quite sketchy and, consequently, secondary. In the present subjects, perhaps the hands do not mean much, but there have been portraits of hands that tell more of the story than the face itself. Among the other Melchers pictures, one entitled "Sante Gudule" has the same charming qualities as did "The Family," exhibited here a year or two ago, and it makes one wish there were no commonplace people in the world if Mr. Melchers has to paint them.

The prize picture of the present exhibition is "The Old Gown," by Mr. Frederick Warren Freer. It certainly is charming and a delightful piece of painting, before which it is a great pleasure to sit. The prize which has been awarded to it is the Cahn prize of $100.

Mr. Freer's sister has in the same room a very attractive composition entitled "After the Lesson." A little boy kneels on the floor blowing soap-bubbles, while his mother, a closed book in her lap, fans the bubbles on high with a small yellow fan. Both faces are turned upwards and are full of eager interest. In this same room, also, Mrs. Kenyon Cox has a delicious bit of figure-painting entitled "Caroline," a portrait of a small girl in pink looking out at the world with wide-opened blue eyes, the kind of a portrait one laughs at and loves in the same moment.

Charles Curran exhibits ten perfectly delightful bits of Alpine scenery, many of them showing the Jungfrau in her various moods, rosy and blushing, sombre and dark, gray and dreamlike: they are bits such as one would like to own here in our flat prairies, where it is hard to remember there are places where men dwell "on the heights." And speaking of owning them brings to mind the encouraging report which comes from Mr. French, Director of the Art Institute, in regard to the sum which the sales will probably amount to from the exhibition. He says, never before has the outlook been so encouraging. Last year, during the entire year, $7,000 dollars' worth of pictures were sold, while this year it looks as if the sum might run up as high as $17,000. It is a very encouraging "symptom" that Chicago people are spending more and more money for pictures. It is pleasant, as not only indicating a larger growth and culture around us, but, also, because it brings good pictures amongst us to be seen in homes and private collections, and, consequently, at loan collections. A good picture-market always creates an art-centre with all that comes with it, which is a feature much to be desired in any large, rich city.

The increase in the public spirit for promoting things artistic here, in our city, has been most noticeable within the last ten years. The Art Institute has been the recipient of most exceptional gifts during the last year, and now another is added to the list. This time it is the Martin Ryerson Library which has just been opened to the public. The library is built in a court in a space which corresponds to that in the north wing which is occupied by the Fullerton Lecture-hall. It is a room which gives one the impression of having a low ceiling, the portion set aside for bookcase space being lower than the central part, where are the chairs and reading-tables. The lighting is all by means of skylights of slightly obscured glass. The whole general tone of the room seems to be a rather nondescript creamy gray, the large columns which have been introduced around the central portion seeming to serve as the key-note to the color-scheme. The whole tone is kept *very* quiet, perhaps being thought fitting for a place for study. The result is monotonous, but if it were to serve only as a background for some brighter mural decoration, it would no longer seem colorless and characterless. The general scheme of color is not nearly as successful as that in Fullerton Hall. The spaces above the bookcases are tinted, and here are hung fine autotypes of some of the old masters. Possibly, this space is destined to hold eventually some fine mural painting. The room would, indeed, be glorified if an Abbey could place some Sir Galahad series here. As a decorative feature, placed in the frieze of the higher part of the room are fourteen names of men, not only distinguished as artists, but as critics, men who have earned enduring fame as writers on art-subjects. The matter of choosing these fourteen names was not an easy task. Mr. French invited assistance and suggestions from any one interested in the subject, and the result was an *embarras de richesses* which rendered the final selection difficult. As they now stand, they are Sir Joshua Reynolds, Viollet-le-Duc, Ruskin, Winckelmann, Lessing, Vitruvius, Taine, Washington Allston, Vignola, Vasari, Leonardo da Vinci, Pugin, Cellini, Symonds.

Another one of those feats in which Chicago seems always to be indulging is about to be attempted at McVicker's Theatre. The entire structure, 150 feet deep by 50 feet wide and six stories high, is to be placed on jackscrews, have its foundations knocked out, and then lifted 7 inches. This is being done as a precautionary measure, the foundations for the new *Tribune* building immediately adjoining the theatre being so deep that there might seem to be danger of settlement on the west side. The theatre foundations will be deepened and the building itself raised. It will take fully three months to accomplish the undertaking, and in the meantime all work and play goes merrily on at the old stand. "Foxey Grandpa" will continue to prove enticing and, doubtless, will have as many admirers visit him as if the building were not being held in mid-air by 2,000 jackscrews. Such feats seem to be the natural outgrowth of long practice, a memory of those days when, of necessity, a street level had often to be raised some 8 or 10 feet above the original one to get it out of the swampy surroundings. Then the little houses along the line of improvement had pedestrians on the sidewalk looking into their second-story windows, and up the little structure had to go. Practice has made us perfect, as the original Chicago was many feet below the level of the present city.

It is to be regretted that politics seem to be having an architectural outcropping in several places, and our esteemed Governor has been putting his thumb into the architectural pie to see what plums he could draw out for some of his friends. Notice was drawn to the fact by the removal from the Board of Examining Architects of Charles W. Nothnagel. The appointment was made in 1899 for four years, Mr. Nothnagel being endorsed by 150 architects, the late Dankmar Adler heading the list. Last July he was requested to resign by Governor Yates and refused to comply with the request. Mr. Nothnagel was one of the men most prominent in creating the bill providing for this examining-board, which was to be entirely outside the realm of politics, consisting, as it did, of four practising architects of ten years' standing, and a fifth member who should be a member of the faculty of the State University. It looks now as if the entering-wedge to make this a political body had been inserted, and if such is the case it will not be long before its days of usefulness as an examining-board will be numbered. Why this poor little office, to which no salary is attached, should have any attraction for the politician is hard to understand. With an examining-board not devoted to the best interests of the profession, of course, a poor class of men might be passed through the examinations, which could be reduced in this way to something less than a farce. Even then, however, the spoils would be so uncertain and so far in the future, that the possibility of handling them would in no way pay for the trouble. Even with the best efforts of a corrupt examining-board, the entire profession could not be corrupted.

Another animated bit of wire-pulling has been going on at Springfield in regard to the architect of the plans for the State Arsenal. Mr. R. Bruce Watson, as State Architect, had been endorsed by Governor Yates, and realizing that the other two members of the board having the building in charge were not looking with favor upon him, he is alleged to have cut prices, and agreed to make the plans and superintend the building for $1,500. This tells its own story pretty plainly, as the appropriation for the arsenal was $150,000. The two other members of the board were the Auditor of the State, Mr. McCullough, and the Secretary of State, Mr. Rose. They united and remained firm on a Springfield architect, Samuel A. Bullard, and though Mr. Watson is still trying for a chance at superintending the job, it looks now as if the acceptance of the Bullard plans would change matters, and the various contractors who are accustomed to grow fat off tidbits at Springfield would be deprived of their rights for a while at least.

Aside from the machinists' strike, which has been on hand since last May, labor circles here are not at present actively aggressive. The striking machinists have been most active in picket service around the Allis-Chalmers plant, and have finally brought down upon themselves an order from Judge Kohlsaat restraining them in their attempts at "persuasion." The order was most discriminating and impersonal, adhering only to the side of law and order. It has, nevertheless, roused a tempest in the union bee-hive. This injunction, which fortunately has the support of some right-minded laboring men, restrains the striking employés from "in any manner interfering with or obstructing the business of the complainants by violence or threats of violence.

"From interfering with or molesting the persons who may be employed by complainants by any act of violence or any act calculated to intimidate such persons.

"From picketing, obstructing or in such manner as to intimidate, coerce or, by acts or language tending to intimidate, induce any of the employés of complainant from remaining or continuing in such employment.

"From interfering with the employés going to and from their daily work by either of the means aforesaid."

Certainly these are not the utterances of a high-handed tyrant.

To still act under the law while at the same time attaining their aim, cards were placed in the hands of the present employés by the pickets. These cards have on one side in large type the following:

"Attention, machinists! You are earnestly requested to stay away from the Allis-Chalmers plants of Chicago, known as the Fraser & Chalmers & Gates Iron Works. A strike is still on for the nine hour day."

The reverse side of the card reads as follows: —

"Brief history of the strike: Since May 31, 1901, a strike has been in progress in the Allis-Chalmers shops of this city. Every endeavor has been made to reach a peaceful settlement by the men on the strike at these shops, but with no results. The company in question has resorted to importing machinists from various parts of the country, misrepresenting the existing conditions. Failing in their endeavors to operate their plants by these means, they asked for and succeeded in securing from the Federal Courts an injunction against peaceful, law-abiding citizens, who are striving for shorter work-day with increase in pay. To win this fight against this unscrupulous corporation we need the assistance of every machinist who will aid us materially by remaining away." As the Chicago Federation of Labor has notified the machinists that it would aid them in fighting the injunction, doubtless the developments will become more complicated.

At present no labor questions are being actively "discussed" by any of the trades directly connected with building-interests. The only grievance belongs to the past, and a boycott is being established upon certain owners, whose buildings were pushed forward with non-union workmen during the labor troubles of the summer of 1900. Two down-town firms have already been singled out, and others, it is said, will follow. The fact that the owners had nothing to do with the hiring of non-union men does not affect the boycott. A flat-building on Fifty-ninth and Halstead streets in a neighborhood where many workingmen live is singled out for special hatred and its owner destined to be ruined. Not only are the flats boycotted as flats, but their present occupants subjected to much that is disagreeable. Small shopkeepers in the building are also included in the boycott, and the owner of the building seems completely at the mercy of his enemies. When, however, it comes to attacking firms like Mandel Brothers and the Merchant Loan & Trust Company, the attitude, though no less high-handed, has an element of the ridiculous in it.

The Chicago, Rock Island & Pacific, and Lake Shore Railroads, which for years have made their entrance into Chicago in a most unattractive and inconvenient station, are about to have a new one on the site of their present structure, which is one of the oldest, if not the oldest, stations in Chicago. The new station, it is estimated, will cost in the neighborhood of a million, while a new warehouse and office-building for the Lake Shore Road, a few blocks away, will add $150,000 more to the outlay.

CHANGES IN CATHEDRAL-PLANNING.[1]

IN speaking last November, from this Chair, of the problems that the architecture of this century is likely to have to solve, I mentioned as one the planning of large churches to meet the needs of modern congregations, with a view to avoid the blocking of the central portions of churches in the mediæval manner of our Gothic cathedrals. I wish to-day to go a step farther on this point, though I do so with some diffidence, because any suggestion of alteration in our accustomed church or cathedral arrangements is looked on by many as almost heretical; but what I may say is with a view possibly to induce, at some later date, a discussion on the point I am going to raise — namely, that of bringing altars forward, nearer to the congregations than is possible with the present arrangement of deep chancels and choirs. Such a discussion might be very interesting and instructive from the architectural side of church arrangement, as well as in relation to the question of congregational worship in our larger churches.

In 1884 I wrote, in one of the building-journals, some thoughts on church-planning, the object of which was to show that the common fourteenth-century plan, with the crossing blocked by large piers, and the enclosed choirs in the centre of the church, though well adapted for the mediæval and monastic times, is quite unsuited to modern worship in the nineteenth century. This view now seems generally accepted; but further than this, the fervent spirit that has developed itself under the Church revival of late years renders it necessary that the large congregations should be able both to hear and see all parts of the services for full participation in them.

Beresford Hope, in his "*Worship and Order*" (written many years before his death, but still, I am assured, expressing his latest views, for he presented copies of this book to friends shortly before he died), says: —

"I tell the man who wants to build a church which shall be at once useful and beautiful, to forecast that church in his mind's eye, to forecast it at work — full of worshippers joining in the 'Te Deum,' upon their knees at the Holy Communion, of worshippers listening to the evening services. Let him guess, as he only can, by such a glance how every one can hear and every one can see. Let him notice where his light falls, and where it is darkness, and in particular let him make sure that the altar and its adjuncts stand well forward, and are not lost in the obscurity of some unlucky shadow. There is no reason, beyond the prejudice which such a novelty might excite, why at times one should not construct a circular or polygonal nave. The nave of the Temple Church is precedent enough, and the glorious decagon of St. Gereon, at Cologne, would hold a goodly multitude. There are no more congregational naves anywhere than the octagon at Ely and the dome of St. Paul's."

All which means that what is wanted now, and much more now than when the above words were written, is a large open space for worshippers, with the altar brought well forward, and not buried in the depths of a lengthy chancel or choir, as in the case of the fourteenth-century English cathedrals, of which type the new one at Truro is a modern representative, and, however good in its architecture, is simply an anachronism.

Tradition and conservatism are well in their way, but should not go the length of hampering modern requirements with obsolete arrangements made for the benefit of colleges of monks, and not for the people. The desirability of a good open space for congregational purposes is now, by most thoughtful minds, generally conceded. The point for reflection is the possibility and propriety of a further advance in increasing the facilities of large congregations for seeing and hearing, and participation in those parts of the services conducted at the altar, by an alteration in its position, which might, while being a step in advance towards meeting modern congregational wants, possibly also be found to be, in a measure, almost a return to early usage. In a modern cathedral, say, for argument's sake, the choir must contain stalls and seats for seventy or one hundred persons, with proper space for altar-communicants and steps. The length would be at least 100 to 120 feet, and though this is considerably less than the depth of many mediæval churches, it, nevertheless, removes the east end of the sanctuary so far from the nearest members of the congregation that it becomes practically impossible for them, as a body, to see or hear the services conducted at the altar.

The question I ask is, conceded the open space in the centre of a large church, why should we not consider the advisability in the future of altering the arrangement of our choirs and placing the altar at the entrance to the choir instead of at the east end, with the clergy, choir and bishop's throne behind the altar? To see if there is any reason in such a suggestion let us look back at some points in the history of church-planning.

The seats for the clergy being situated behind the altar is a far older arrangement than the position assigned to them in the mediæval and monastic times. It existed at first in some of our own early cathedrals, as you all know — at Norwich and Canterbury, for instance. I believe I am right in stating that the view of the Anglican party in the Church is that their rules, doctrines and worship are intended to be in accordance with those of the earlier church, and go back to the time before the Bishops of Rome established the Roman Church as the chief of all the churches, and arrogated to themselves the position of supreme head as Pope or Father. Now, at this early period, it is certain that the arrangements in the Christian churches provided for the altar being immediately in front of the congregation, and the seats for those who officiated at the various offices and at the altar being behind it. It is interesting to note how the earlier arrangements developed and were altered to meet the requirements of various times and peoples, and changes of thought.

Let us glance broadly at the various alterations that have occurred. In the early basilican arrangement, as in old St. Peter's at Rome and St. Paul's Without the Walls, St. Apollinare at Ravenna, St. Clemente at Rome, both in the ancient and lower, and the later, or upper, churches, and later also at St. Ambrogio at Milan, Sta. Maria Maggiore, at Rome; also at Torcello and Parenzo, and in the Armenian church of Pitzounda, in the Coptic churches, and, as before mentioned, in Canterbury and Norwich, and also at the little early church of Deerhurst, it was evidently thought desirable that no great distance should intervene between the congregation and the altar, and for this reason, no doubt, it was placed in front of the bema, thus bringing it in close proximity to the worshippers. In those days the form of worship was comparatively simple, and the officiating clergy, who probably acted as cantores also, were seated behind the altar, their seats being ranged around the bema, with the Bishop's throne in the centre, and the worshippers evidently took full part as well as the clergy in the ceremony of Divine worship.

These altars, it is true, faced the reverse way from ours, and the priest officiated standing behind the altar facing the people and the east. Now, both priest and congregation in our churches usually face eastwards, or towards Jerusalem, perhaps originated by Solomon's prayer at the dedication of the Temple, though other reasons are more usually given for the custom. Some few centuries later, when, in consequence of the holy mystery of the Divine Sacrifice being more prominently suggested in the church arrangements, indicated by the veiled altars, the ritual had extended, and comprised more ceremonial, and more attention was paid to music, the addition of a chorus cantorum, or choir, was made, intervening between the altar and the congregation and jutting into the nave. The clergy still occupied the same position behind the altar during the missa and officium divinum, but subsequently those in holy orders, as well as the cantores, occupied the lower portion of the choir during the officium divinum, and those only actively engaged in the missa occupied the bema.

One evident reason of the choir being thus brought forward into

[1] Extract from the annual address of the President of the Royal Institute of British Architects, Mr. William Emerson.

the nave between the altar and the congregation in the basilican churches, as in the upper church of San Clemente and others, seems likely to have been, that had the increased number of singers been placed, like the priests, behind the altar, it would have necessitated, in such a plan, the position of the altar being moved some bays down the church, towards the centre of the nave, by which arrangement many of the worshippers in the large aisles would have found themselves during the missa behind the altar and the officiating priest, instead of in front.

It seems to me there could have been no other logical reason for the departure from the first method of arrangement, which brought the altar in greater proximity to the congregation; and from this departure, by gradual steps, our mediæval choirs were evolved, resulting eventually in the abbey churches in the entire shutting off of the altar, clergy, brotherhoods and choirs from the congregations by the elaborate screens even now remaining in many churches both here and abroad.

The more exalted ritual, with its greater suggestiveness of the importance of and reverence for the holy mysteries, aided by other Roman doctrines, seems to have led to the screening off of all those engaged in the service of the church from the congregations by the veiling of the altars, as in the Coptic and Eastern churches, by the iconostasis, or solid screen, which separated the altar from the choir, and also a further and more open screen which again separated the choir from the congregation. Instances of both these arrangements are found — of the first in the Church of Abu Sargah and the old Coptic churches of Egypt at old Cairo, in Russia and Armenia; and of the second in the upper church of San Clemente at Rome, and other early churches, and at Torcello; and possibly some such similar arrangement was adopted at old Canterbury and Norwich, and the little ancient church of Deerhurst.

Again, later on in mediæval times, when civilized but pagan Rome had fallen, and education for the masses had disappeared, the Church being the only light of the Dark Ages, and the Bishops of Rome had added worldly pomp and power to the spiritual character of their office, and claimed for themselves the title of Pope as head, or Father, of the Universal Church, it was to be expected that the clergy and monastic orders should have conceived it necessary, considering the strong line of demarcation they had drawn between themselves, their elevated office, and the ignorant laity, to emphasize this point in their churches by altogether enclosing for themselves and occupying the central and best part of the churches and cathedrals. This was the natural evolution of the first enclosed choirs in the basilicas placed between the altar and the congregation, and completed by the separation of the clergy and monastic bodies from the laity. This arrangement is familiar to us all in the numerous cathedrals with the enclosed choir, or pulpitum. By this plan the congregations were debarred from any prominent or general joining with the clergy in Divine service or public worship, excepting in connection with the mass or services held at the altar, which it was then found necessary to place in the nave, outside the choir, or rood-screen, as was the case at Lincoln and York. These altars were for the popular services. There was a great screen between the western piers of the central tower, the altar in the middle and doors on either side. A necessity for this altar for popular or congregational services is felt at the present time in some of our cathedrals, as at Norwich, in consequence of the enclosed choirs still remaining.

In the early mediæval times, that the congregations should unite with the clergy in public worship was, judging by the arrangements then existing, apparently considered of small moment. The people were to be impressed, or perhaps improved, from a spiritual point-of-view; but their worship was done for them, if I may so express it, by proxy, "as in the Jewish sacrificial rites, when the priests and Levites acted alone, but with this difference, that in this case the people could not even join in the prayers and praise, as did the Jews, for the reason that the Divine offices were not in the vernacular." It was when, later on, education, both religious and secular, caused an expansion of thought and feeling in the popular mind that an alteration was felt to be necessary; and it was the recognition on the part of the clergy for the necessity of the participation of the congregations in the whole of the services that caused the introduction of these second prominent nave altars in such proximity to the people that all could easily see and hear, and, at last, the holding of the services in the language of the people, as an additional aid to their heartily joining in them.

This principle of two altars is sometimes considered not in accordance with the feeling of the English Church, which it has been said is one church, one altar; but it seems to have been the outcome, first, of the desire for the separation of the clergy and choir from the congregation, and, secondly, of the basilican churches having first arranged the choirs intervening between the altar and the congregation. If the basilican churches — which, after all, were first derived from courts of justice — had had, instead of the bema, long chancels or choirs to accommodate a large number of cantores, like the late cathedrals, is it not possible that the same relative position of the altar near the congregation would have been maintained, and the chorus cantorum have been placed behind it with the clergy, instead of in front of it? The fact that later on the nave altars outside the choir were found necessary seems, to my mind, to argue that it would have been so.

In Spain, in the fifteenth century the arrangement obtained of the *coro*, or choir, being placed in the nave and the altar in the eastern part of the church, with the congregation intervening between the altar and the choir. A modified form of this principle of arrangement is now to be seen at Westminster Abbey; and this plan was, no doubt, also the outcome of the feeling for the necessity of the altar being not too far distant from the congregation. There are also many instances now in Italy of the choir being behind the altar; but in some of these cases the public are brought too near the altar, which seems somewhat derogatory to reverence, as in Sta. Maria del Fiore, at Florence, where the high-altar was placed under the dome, and the congregation entirely surrounds it. At Sta. Maria Maggiore the altar is still at the entrance of the bema in the nave, and the choir and stalls for priests behind it on either side of a second altar at the end of the apse or bema; and a somewhat similar arrangement exists in the semi-Romanesque churches of Cologne and St. Gereon, thus bringing the altars in proximity to the congregations.

Does it not seem evident, from these variations at different times of the arrangements made to suit the feelings and education of the ages, that there can scarcely be said to be a hard-and-fast line drawn, or any grave law that would be broken if the present plan of accommodation of our tripartite arrangement of congregation, choir and sacrarium were somewhat altered to meet modern requirements, however much, in some respects, our sentiment and conservative feeling make us averse to alterations?

The present arrangement, when we consider the late earnest Anglican movement, which claims to go back in its faith and ritual to the period previous to the absolute sway and domination of the Roman Church, seems in some respects to be wanting and illogical, where, as in our larger churches and cathedrals, large choirs and numbers of clergy have to be accommodated, causing, by this plan, the altar to be removed from the congregation, say from 80 feet to 150 feet, and suggests the necessity for some revision in our plan which shall, as in the early times, bring the altar and the services conducted at it in closer proximity to the worshippers.

I quite feel that difficulties arise which are not easy to surmount in the suggestion of the principal altar being placed at the entrance to the choir, but I do not see that they are insurmountable. First, there must be the elevation of the choir above the nave, and then of the sacrarium and altar above the choir; but with a wide choir, and a large open space in front, I do not see that this would be impossible any more than at Sta. Maria Maggiore in Rome, or at the Duomo in Florence.

Also there is the question of a great reredos, but a canopied altar and a dossal of beautiful workmanship and precious and rare materials might be infinitely more satisfactory and in better taste than some of the large and elaborate altar-pieces of soft stone and inferior sculpture and workmanship that have been erected in many of our churches in late years. One objection, no doubt, that would be raised to such an arrangement would be, that by the present plan we are supposed by degrees to arrive at the holiest of all at the altar, which, therefore, is removed farthest from the vulgar; but the Roman Church has evidently not attached weight to this, and why should ours? A second altar might be placed at the extreme east end and used for smaller services, the bishop's throne and the choir and stalls remaining in the same relative position as at present. With the enormous congregations our churches are now attracting, width of nave and choir and spacious interiors are a necessity, and with these, were it found advisable, this arrangement could, I imagine, be made to suit our worship as easily as the Roman Church has, in numbers of instances, made it suit theirs.

As to its advisability in regard to sentiment and conservatism, no doubt many adverse arguments could be raised; but, all the same, the question would still remain of the vital necessity for fervent worshippers being able to see and hear and join in all parts of Divine worship. The subject has been in my mind for a number of years, which must be my excuse for bringing it before you on this occasion, and, after all, it is as much an architectural question as an ecclesiastical one. At any rate, I am not the first to have proposed such a thing, and numbers besides myself are interested in the subject. I would commend the point for consideration to any of you who may be likely to have the chance of erecting a large church or cathedral suited to modern times.

BOOKS AND PAPERS

THERE is this in common between the Renaissance and the eighteenth century: that each has its enthusiastic and devoted admirers, although to many art-lovers both are anathema, or nearly so. And yet what a charm there is in Italian Renaissance architecture and its French follower — a charm that Leader Scott knows so well how to convey to his readers.[1]

The life of Brunelleschi by his contemporary Manetti, who is now, upon very good evidence, accredited with the authorship of an anonymous manuscript from which most lives of the architect have been evolved, begins thus: "Filippo the architect . . . was of our city. . . . He was born in 1377. He lived there almost all his life, and there, according to the flesh, he died." As a boy, he neglected study and scribbled on his books. How one would like to pick up some of these spoiled Classics! In Florence, in those days,

[1] "*Brunelleschi*," by Leader Scott, 5s. net. Bell & Sons, London.

every boy upon leaving school was apprenticed to some guild, and Brunelleschi senior ordained that his son should join the goldsmiths. His matriculation in *oreficeria* took place on July 2, 1404, but he went on studying mathematics and all other sciences necessary to an artist, and he is accredited with being the perfecter of the art of perspective. He began life as a sculptor, but his failure in the competition for the bronze gates of the Baptistery, Florence, made him turn his attention to architecture, and so he went to Rome to study. But although Ghiberti obtained the commission for the "Gate of Paradise," Brunelleschi's design has tremendous dramatic power, and the modelling of the panel "The Sacrifice of Abraham," now in the Bargello, side by side with his rival's, is very fine.

Donatello accompanied the older man to Rome; but once there, their individual tastes led them apart in their studies. Brunelleschi explored the Classic buildings; Donatello revelled in the sculpture. Whether the former conceived the idea of building the dome of the Cathedral at Florence during his Roman visit, we do not know; but in 1417 he seems to have discussed the matter with the masters of the Opera. They all knew how to build a small cupola with the usual scaffolding of curved planks of wood, but a dome covering a diameter of 200 feet had never been attempted. This, however, Brunelleschi offered to do, and without any scaffolding. The masters, of course, jeered at the idea, and the discussion ended in the artist being carried bodily out of the room, so stormy was the meeting; and then the people took up the cry at the "crack-brained fellow who says such preposterous things." However, artists were asked to send in designs and models, and Brunelleschi's brick-and-mortar model was erected in the Piazza, where it remained from September 1, 1418, until January 23, 1430–1. "Guasti gives a long list of expenses paid during all this time, ending April 26, 1420, with 46 *soldi* and 8 *denare* paid for three flasks of white wine and two of vermiglio, with bread, pomegranates and beans, for the collation of the masters who went to inspect it on the morning of that day." This style of feasting came off from time to time all through the building of the dome.

The modern use of the grappling-iron for raising heavy weights by crane was instituted by Filippo. He had noticed a number of square holes in the Roman buildings, about which there were divers opinions, but he decided that they were for the better grip of some instrument for raising the blocks. The discovery that the Romans dovetailed their stones one into the other was made by an inspection of the roof of the Pantheon. He realized how cross-beams might gird the ribs together, and how an inner dome would strengthen the outer one. The "Instructions given in 1420 by Brunelleschi for the construction of the cupola, according to his model, with the amendment made in 1421," forms an interesting account of his scheme, but it is too long for quotation. It may be found on page 50, with an illustration of a section of the great dome. The scheming and squabbling went on, and the idea of entrusting the work to one man, "when for ages the guild had been accustomed to a plurality of masters taking counsel and working in concert," was ridiculed. Ghiberti had defeated Brunelleschi in the designs for the great door. Why not let him build the dome? was the reasoning of many. But Filippo held that even if Ghiberti were the better sculptor (which he considered doubtful), that was no reason why he, Filippo, should not be the better architect. However, he had to give way or lose the work altogether, and so three "consuls" were appointed to carry out the plan. The head of the lodge of masons and eight master-builders were also deputed to assist Brunelleschi in his work.

The account of the building is most interesting; the invention of a crane for raising the materials, the payments made to the various workmen, the celebration of the various epochs during the building by collations of barrels of wine and fruits, and the various deliberations of the masters are all detailed by the author. In 1432 the dome was so far advanced that the design for the lantern was discussed. Six master-builders of the Opera, including Ghiberti (who had matriculated into the guild) and a lady, a member of the Gaddi family, sent in models, but Brunelleschi's was acccepted unanimously and was erected in the Piazza. The inspection necessitated another collation, five flasks of *trebbiano* wine, white bread, melons and plums; and when the lantern was placed on the summit, and in spite of fears and reports, did not crash down and bring the whole cupola with it to the ground, another feast was held at which all the Cathedral clergy were present. The benediction was performed by the Bishop of Fiesole, and the architect's scornful words to his detractors were verified: "the heavier the weight, the better it [the lantern] would hold the cupola together." So all the bells of the city rang peals of joy, and Brunelleschi was greeted with applause wherever he went. It was the old story of "La Camaraderie"; Filippo was not a member of the guild of masons, therefore he had no right to finish the Duomo. However, his success made him the fashionable architect, and we may see his work all over the beautiful city of Florence: the tribune of San Zenobio, and that wonderful *arco piano*, a flat passage leading to the organ-gallery and passing across the sacristy over the door, built without supports, with the masonry of an arch, without the curve. The choir of the Duomo, the beautiful basilica-church of San Lorenzo with its cloisters and sacristy, the church of Santo Spirito with its double colonnade, the Pazzi chapel, the Badia at Fiesole, the Palazzi Busini, Pazzi, Barbadori, Pitti, and the Royal Villa at Petraja are some of his principal buildings. Besides these he erected fortifications at Pisa, Lastra, Mantua, Ferrara, Milan, Rimini and Rome, and at Pistoja Cathedral and at Florence he sculptured some groups in wood, bronze and silver.

The author sums up Brunelleschi's characteristics as follows: "A real Brunelleschi building differs as much from those of the later Renaissance masters of the seventeenth century as it does from the Italian Gothic of his contemporaries. One may be certain never to find a false or an unscientific design by him. If in a building which he may have begun you see such a falsity as a broken pediment or an arch lacking the keystone, be sure that it was placed by a later hand. If you find one of his favorite simple arches without pillars, whether plainly moulded or sculptured, filled by a window or a door with a pediment which has no relation to the arch, such as Donatello's door in the sacristy of San Lorenzo and Ammannati's windows in the basement of the Pitti Palace, it is pretty certain those pediments were not in Brunelleschi's design. He so loved the pure arch that he never mingled it with other architectural forms; if he made his windows with pediments, the pediment stood alone, dedicated to its right use of supporting the weight above an opening, but never did he mix it with his arches. The strongest mark of his architecture is truth, the truth of a line to its object, the truth of form to its meaning. He used very few forms, his architectural lines being always confined, where support in space was needed, to the arch and pillar; for mural decoration he chose the pillarless moulded arch, or the classic panel. The round window, or *occhio* ('*œil-de-bœuf*,' as he called it), was also a favorite form with him when building required light from the higher parts. Yet, though his own choice of style was so severe and simple, he was perfectly unbigoted . . . he always respected the older styles, and never made a visible clash. Thus, in the Guelph Palace, he kept the outside in the mediæval style of the basement already existing, though his hall in the interior was in pure Renaissance style. Again, at the Badia he sacrificed any design he might have wished to make for the façade, so as to keep the Romano-Lombard work pure and untouched; yet the interior is in his own semi-classical style." His work was quite individual. All earlier works had been constructed in parks by different masters of the craft, and thus many great buildings are unsigned, so to speak, by the artists; but with Brunelleschi began the era of the individual craftsman, and the "gain was homogeneity in the buildings. . . . Brunelleschi was the first to apply the classic bias to architecture, and he did it on the purest lines. . . . Michelozzi, Alberti, Cronaça, San Gallo, and, last and greatest, Michelangelo, were all individual artists, whose works were their own independent conception. . . . If he had not made the first step, Alberti surely would have been the pioneer . . . but it would have been a different style. Indeed, if Alberti and the later builders had followed the lead of Brunelleschi on his own lines, Italian Renaissance architecture would have been far nobler than it is."

THE profession in this country has awaited with great interest the publication of Mr. Wheelwright's book[1] on school architecture, of which it had received only a foretaste in the articles published in the *Brickbuilder*. Now that the book has appeared, we think that most readers will find it even better than they had anticipated. Not only is a book, in which reference can be made from one page to another, infinitely more satisfactory than a series of magazine articles, but a large amount of new material, of the most valuable character, has been added to the original papers. No American architect needs to be told that Mr. Wheelwright, during his official life as City Architect of Boston, designed a large number of conspicuously successful school-buildings, but his book is very far from being monopolized by his own work. On the contrary, it gives an extremely interesting survey of the whole field of modern school-architecture, both in this country and abroad, treated with the discrimination of an architect of great and special knowledge, the details of construction and arrangement which the experience of the author has shown to be of practical importance being collected in the later chapters. No architect needs to be told that school-planning has, of late years, been reduced to a science, by careful observation of the effect upon children and teachers of various modes of lighting, systems of heating and ventilation, size of classes, length of school-hours, and so on; and the result of experience in these matters has, in many countries, been embodied in official regulations relating to school-buildings, or, at least, in certain general principles accepted by school-authorities. It must be said, we think, that the tendency to lay down general principles in school-architecture is rather stronger than it should be, particularly among School Boards and superintendents, and the advance of the science is in some danger of being checked by the reduction to formulas of principles which greater experience or the changing conditions of school life should be left free to modify. It is, therefore, with much satisfaction that we find Mr. Wheelwright criticising frankly and unhesitatingly the official rules and practices which he thinks deserve such criticism. For example, in regard to the lighting of school-rooms, he says without reserve that school-rooms twenty-eight feet wide, which may be called the standard width for class-rooms in grammar-schools in the Eastern United States, "cannot be considered, when the windows are on but one side, as sufficiently lighted, even in bright weather. They are ill-lighted on dark days." This applies to rooms of the usual height of thirteen or thirteen and one-half feet, and, although Mr. Wheelwright's position in this matter is in direct contradiction to that of most school-superintendents and a large part of the hygienists and

[1] "*School Architecture*": A General Treatise for the Use of Architects and Others. By Edmund Maech Wheelwright, Fellow Boston Society of Architects, Fellow American Institute of Architects. With Descriptive Illustrations. Boston: Rogers & Manson, 1901. $5.

oculists who interest themselves in school matters, we believe that it is the correct one. That lighting from two sides is objectionable in school-rooms is conceded, on account of the shadows cast by the second set of windows on the desks, as well as the annoyance to the teacher of having to face a strong light, but Mr. Wheelwright is convinced that these troubles, which may to some extent be obviated by putting the secondary windows in the corners, leaving a blank wall directly opposite the teacher's desk, are less to be feared than the deficiency of light inevitable where windows occupy only one side of a room twenty-eight feet wide; and it should be said that his opinion is supported by that of the English, French and German school-officials, the last of whom make the observation, which sometimes escapes our scientific oculists, that windows in school-rooms rarely receive the unobstructed light of the sky, trees, neighboring buildings or other obstructions almost invariably cutting off a large portion of the illumination which they are supposed, theoretically, to transmit.

Another accepted American formula which Mr. Wheelwright does not subscribe to is that which adopts the class-room of twenty-eight by thirty-two feet for fifty-six pupils as the standard unit for grammar-schools. School-superintendents, studying, as they must, the problem of getting the greatest number of pupils reasonably well taught with the smallest number of teachers, have concluded that fifty-six children is the maximum number that an average teacher can keep in order without total collapse, and have, as a rule, organized American grammar-schools in accordance with this standard; but our author is not contented with formulas, and not only questions, with the support of the most experienced teachers and school-officers, both here and abroad, the economy, taking into consideration efficiency of teaching and the progress of the pupils, of classes of more than forty-eight children, but shows that, with classes of forty-eight, the school-rooms may be twenty-four and one-half feet in width, and will be, in consequence, better lighted, and the construction will be considerably less expensive, particularly in city schools, which are now usually fireproof.

These instances are not the only ones in which Mr. Wheelwright has taken the liberty of criticising details in the arrangement of schools which have received the sanction of committees and superintendents; but he gives good reasons for his criticisms, and, even if they commended themselves less to his readers than is really the case, it is well to have them made, if only to maintain the habit of discussion which is so essential to progress in any art. As he shows, by the extremely interesting and valuable details which he gives of novelties in school-planning, such as the provision of baths, workshops and so on, the science of educating the young is itself undergoing great and rapid changes, and unless the art of planning school-houses is kept, by such frank expression of views among experts as he gives us, in the alert and receptive condition necessary to enable it to respond at once to new requirements, its usefulness will be greatly diminished.

It will be inferred from what we have said that Mr. Wheelwright's book is almost indispensable for architects, however experienced, who have occasion to design school-houses, but school-committees and superintendents will also find of the greatest value a work which not only gives them innumerable examples of the best school-planning done in this and other countries, but includes details of the proper methods of caring for buildings and apparatus, of carrying on manual-training classes, and many other items of school-management.

Mr. H. G. Tyrrell, C. E., has written a little book[1] on "*Mill Building-construction*" which mill-owners, superintendents and treasurers are likely to find very useful, and to which architects may often refer with advantage. Naturally, architects have little to learn from such a book in relation to the principles of construction, and we doubt whether they would approve, for their buildings, calculations of roofs which took sixteen and nine-tenths pounds per square foot as the maximum wind-pressure, normal to the surface, on a roof of 25 degrees pitch, or which allowed 25,000 per square inch fibre-stress, as Mr. Tyrrell tells us was the case in proportioning the steel structures at the Chicago Exposition, but it is notorious that engineers take much greater risks than architects do in designing structures, and Mr. Tyrrell by no means places himself on the side of hazardous construction. On the contrary, he calls attention to the necessity of bracing in buildings, to resist lateral pressure, a matter, which as architects think, engineers too often forget, and says that "There are more steel buildings throughout the country going to ruin on account of insufficient bracing than, perhaps, from any other cause"; and points out that, in such buildings, when used for mill-purposes, defective bracing, even if it does not endanger the structure, leads to dislocations of the frame, breaking of glass, distortions in lines of shafting, and many other troubles. With proper bracing, he approves, for mills, a construction of steel columns and girders, and in this opinion he will be followed by most architects.

In the lesser details of building the book follows the approved architectural authorities, so far as they are applicable, making allowance for the comparatively cheap and temporary construction demanded for mills, and some useful tables of cost of various materials and modes of construction are given.

[1] "*Mill Building-construction.*" By H. G. Tyrrell, C. E., Bridge and Structural Engineer. New York: The Engineering News Publishing Co. 1901.

ILLUSTRATIONS

[*Contributors of drawings are requested to send also plans and a full and adequate description of the buildings, including a statement of cost.*]

FRONT VIEW: HOUSE OF A. B. LEACH, ESQ., SOUTH ORANGE, N. J. MR. G. W. MAHER, ARCHITECT, CHICAGO, ILL.

REAR VIEW OF SAME HOUSE.

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INTERIOR OF THE SAME CHURCH.

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THE MINING BUILDING OF THE UNIVERSITY OF CALIFORNIA.

Boston, Mass., November 12, 1901.

To the Editors of the American Architect:—

Dear Sirs,—In your editorial of November 9 stating that a discrepancy of 70 feet in grade had been developed by the staking out of the Mining Building for the University of California, you assume that the error is not on the part of M. Benard, but of the topographical survey, on the ground that his plans had long been accepted by the authorities of the University.

Now, in the first place, it has long been notorious that the plans of M. Benard, although based on a topographical survey furnished alike to all the architects, and although accepted by the authorities, were nevertheless conceived with a supreme disregard of said topographical conditions. It has further been generally understood for a considerable length of time that M. Benard has been superseded as architect by Mr. Howard, of New York.

Therefore, your editorial leaves the general reader in considerable confusion of mind as to the real situation.

Yours very truly, Henry C. Holt.

[We very much regret that the temporary mislaying of the above communication has prevented its publication earlier. There is, as Mr. Holt suggests, ample opportunity for confusion in the matter of the University of California building undertakiug. As we understand the situation, the Trustees, or whatever the authoritative body is properly styled, accepted the scheme of M. Benard to which the jury awarded first place in the competition, but made it understood that its execution was dependent on the possibility of so modifying it that it could be adapted to the practical requirements both of the site and the institution itself. Meanwhile, as there were certain exigencies which must be satisfied at once, Mr. J. G. Howard, whose plan deservedly attracted much attention, was employed as the architect of the Mining Building, the site for which was indicated on the plan

prepared by M. Benard, and the trouble with the topographical plan developed at this point, and it would seem as if it might have a very prejudicial effect on the adoption of M. Benard's general scheme as a working basis. — EDS. AMERICAN ARCHITECT.]

NOTES & CLIPPINGS

THE UNEMPLOYED WORKING-CLASSES IN BERLIN. — A good deal has been printed lately about the condition of the unemployed working-classes in Berlin. Some suggestive details on the same subject are furnished by the *Kölnische Volkszeitung*. Investigations made in one day among 150 applicants for work disclosed the fact that during the year 100 of the men, members of the union of workers in metal, had been out of employment for an average period of nineteen weeks, and that before their dismissal most of them had had their wages seriously reduced. Saving had been out of the question, as their earnings had been barely sufficient to provide for the immediate needs of their families. The burden of bread-winning has now fallen upon their wives, who have betaken themselves to needlework or factories. Members of the union of one year's standing receive relief at the rate of six marks per week for the first seven weeks after loss of employment, and those of five years' standing at the rate of ten marks per week. Figures supplied by the union show that, whereas, in the period from July to December, 1900, only 16,000 marks were paid out for the support of unemployed members, the amount increased to 47,000 marks between January and July, 1901. Other figures show that since last April the officials of the union have received applications for work from 3,295 unemployed members, for only 450 of whom employment was obtained. Of the remainder, some have supported themselves by borrowing money, others have pawned their possessions, while others have been compelled to beg. The state of the workmen who are not members of any trade-union is described as being infinitely worse, as might naturally be expected. — *N. Y. Evening Post.*

MORE ABOUT THE STATUES FROM THE SEA. — The recent remarkable discovery of antique statues at the bottom of the sea, near the island of Anticythera, off Cape Malea, was duly reported in the *Transcript* last spring. The work of recovery is still going on, but it has met with a temporary check, according to a note in the New York Greek newspaper, the "*Atlantis.*" The divers have reported that the remaining antiquities supposed to be there are covered by a rock too large to move by any ordinary means. So they have requested permission to blow this up with dynamite. Mr. Staes, Minister of Education, whose department has charge also of antiquities, has agreed to this, and an electrician is to be sent from the navy-yard at Salamis to lay the electric-wires and blow up the rock. Meanwhile, the statues and fragments already recovered are being cared for at Athens at the National Museum. The same number of the "*Atlantis*" reports that Mr. Staes has directed Mr. Kabbadias, Ephor-general of Antiquities, to write to the sculptor at the Louvre in Paris, requesting him to come to Athens and undertake the piecing together of the splendid bronze statue called a Hermes, and likewise to write Herr Strock, the distinguished sculptor of Vienna, for his opinion as to the restoration of the Hermes. On the other side, Moustapha Bey, the best sculptor of the Imperial Museum at Constantinople, is eager to try his hand at this work, and has preferred his request through the Greek minister at Constantinople, Mr. Mavrokordatos. The Minister of Education has directed the minister at Constantinople to make further investigations in regard to this sculptor. A brief account of the former finds is to be seen in the last number of the *Journal of Hellenic Studies* (1901, part i., pp. 205–208). It is by Mr. Kabbadias, and gives photographs of several of the statues. For other accounts see the New York *Independent* for February 2 and March 2, 1901.

THE TRAJAN CULT IN ROUMANIA. — Mlle. Hélène Vacaresco, in the *Contemporary Review*, writes very interestingly of life in Roumania. She tells of the old Boyard aristocracy, of the lonely life of shepherds, and of the local hermit-saints, or "skimmitzes." The sense of Roman origin has been preserved and intensified through centuries of struggle with pagan nations. From one extremity to the other, she writes, the name of the Emperor Trajan is still revered in song and record. On a starlit night, the country people point out the Milky Way as "Trajan's Road"; every village ditch is "Trajan's Moat." Not even in Rome itself, where the famous column attests his greatness, is the stern Emperor so honored and remembered as in the midst of our nation, where a man must be ignorant indeed who ignores the valor and renown of Trajan. I am myself a witness to the truth of this. On a bitterly cold night last January, as I was hurrying home over the newly fallen snow, in the twilight, a beggar, shivering in a doorway, attracted my attention. He groaned and moaned, and expressed his misery in the eloquent tones peculiar to such fellows in our country. While looking for a coin, I listened to him. He was, of course, complaining of the cold, and he said: "Father Trajan! Father Trajan! the land you have brought us to is fair in summer, but in winter . . . Father Trajan! You should have led us to milder climes."

NEBUCHADNEZZAR'S THRONE-ROOM. — The German Oriental Society confirms the reports in American papers to the effect that Dr. Koldewey has succeeded in discovering Nebuchadnezzar's throne-room at Babylon. It is a gigantic building, about 60 feet wide by 160 feet long. Exactly opposite the door is the niche in which once the royal throne stood, and on both sides and on the northern front of the hall are richly-colored ornaments, in good preservation, which will, doubtless, prove of the highest historical and artistic importance. The German expedition has also begun excavations in the city of Babylon, near the present village of Jumjuma, and has already discovered a goodly number of inscribed clay-tablets, which, according to the testimony of Dr. Weissbach, the Assyriologist of the expedition, contain letters, psalms and vocabularies. They are, therefore, all documents of the deepest interest, and are specially calculated to further the study of the Old Testament. With the help of new railway-material, the work on the hill of Amraniibu Ali is shortly to be resumed, and the excavations of this unique Pantheon of the Babylonian metropolis, hidden deep down in the earth, promise rich and varied discoveries. The German Oriental Society does not confine its activity to Babylon. It has secured two other hills, named Fara and Abu Hatah, which are believed to contain particularly fine monuments dating from 4,000 B. C. The two hills are not far from Nuffar, where the American excavations are being made, and the Sultan has already issued an irade permitting the excavations. — *The London News.*

COST OF STRUCTURES FOR THE ST. LOUIS EXPOSITION. — The following figures are issued by Isaac S. Taylor, Director of Construction and Maintenance of the World's Fair, showing the area and cost of the principal exhibition buildings. The total area of twelve buildings is 126.53 acres, and the total estimated cost $6,250,000. The estimated cost is for the bare buildings and does not include sculptural or other decorations. There will be probably thirty other buildings, covering from one to several acres, for special exhibits and other purposes, besides the State and foreign buildings. For example, the proposed Temple of Fraternity will cover an acre and a half, the Administration Building about the same amount, and the power-house probably two or three acres. The statement of Director Taylor in detail is as follows: —

Building.	Dimension.	Area in Acres.	Cost.
Art Building	300′ x 900′	6.19	$1,000,000
Two pavilions, each	200′ x 300′	2.75	
Liberal Arts	600′ x 525′	7.25	375,000
Manufactures and Liberal Arts	525′ x 1,200′	14.46	345,000
Electricity	600′ x 525′	7.25	400,000
Mines and Metallurgy	525′ x 1,200′	14.46	760,000
Education	525′ x 750′	9.04	500,000
Social Economy	525′ x 750′	9.04	460,000
Transportation	525′ x 800′	9.61	660,000
Machinery	525′ x 1,000′	12.05	700,000
Government Building, with Fisheries Pavilion and Ordnance Pavilion	400′ x 250′	2.29	250,000
Agricultural Building	700′ x 2,000′	32.14	800,000
Total		126.53	$6,250,000

ALLAIRE, N. J., A DESERTED VILLAGE. — The town of Allaire was established in the year 1835, as a centre for the production of iron from bog-ore, and for a time prospered greatly. One of its workers was John Roach, afterward the famous shipbuilder. With the gradual advancement in smelting, however, other iron deposits came to be worked with greater profit. The business waned steadily, and at last was abandoned. The workmen moved from their pretty cottages, the founder died, and his son, though he had inherited a fortune in county lands, would never sell a foot of the village property, and, while doing much to improve the region about, did nothing whatever to preserve the town. A few of the houses are occupied, while the rest stand empty and are weather beaten, with sagging roofs and moss-grown walls, while the once busy streets are choked with grass, young trees, and bushes. To-day the church alone retains any of the pristine architectural beauty for which Allaire was noted in its day. Many romantic stories, most of them purely imaginative, are told about the place, which, off the beaten lines of travel, is seldom now visited save by occasional carriage parties and bicyclists of sentimental temperament. — *N. Y. Times.*

THE PECULIAR RUSSIAN CROSS. — A stranger in Russia is always puzzled by a short bar near the foot of every cross, set at an angle of about 45 degrees. This peculiarity is not seen elsewhere, and is attributable to the fact that the Russians believe the Saviour to have been deformed, having one leg shorter than the other. This, their priests teach them, was by his own wish, in order that He might suffer to the utmost the degradation of humanity. "He hath no form nor comeliness," saith the Russian priest. "We did esteem Him stricken, afflicted and smitten of God. It pleased God to bruise Him and put Him to grief." Strangers are also struck by the way in which the crosses on the old churches are usually represented as rising from crescents. The Tartars, who were masters of Russia for two hundred years, converted the churches into mosques, and placed crescents upon their spires. When the Grand Duke Ivan Vassilivitch drove out the Tartars and restored the churches, he left the crescents where the Mahometans had placed them, but planted the cross upon them as the sign of victory, and the Russians still continue this practice. — *Chicago Record-Herald.*

NEW MONUMENTS FOR BERLIN. — The Kaiser intends to place magnificent marble monuments to the Emperor and Empress Frederick facing the Brandenburg Gate entrance to Unter den Linden, and in order that they may be thrown into greater relief, the buildings on either side of the gate will be purchased and pulled down. — *N. Y. Evening Post.*

A PORCELAIN TOWER FOR ST. CLOUD. — Paris is to have a porcelain tower, which will rival in size and beauty any similar structure in China. It is to be over 130 feet high, covered with porcelain decorations made for the purpose at the Government factory of Sèvres, and will be erected in the Park of St. Cloud on the site of the old tower known as "Diogenes's Lantern." — *Exchange.*

S. J. PARKHILL & Co., Printers, Boston, U. S. A.

THE AMERICAN ARCHITECT AND BUILDING NEWS

ADVERTISERS' TRADE SUPPLEMENT

No. 235 SATURDAY, DECEMBER 7, 1901 VOLUME LXXIV No. 1354

THE WALKER BOILER.

We present an illustration of the New Walker Boiler, for steam-and-water heating, now being made by the Walker & Pratt Manufacturing Company, 30–35 Union Street, Boston, Mass., and offered to the trade.

These boilers are made in three widths of fire-box, viz, 17, 22 and 32 inches wide, and almost any capacity can be had by varying the number of sections.

These boilers are numbered in three series, viz, 15, 20 and 30, and are made in nineteen sizes, ranging in capacity from 400 to 3,650 square feet of direct radiation, for water; and 240 to 2,200 square feet of radiation, for steam.

The fire-boxes of these boilers are of sufficient depth to carry a fire from 14 to 16

inches thick, if desired; therefore it can be uniformly kept during the night.

The boilers are made strong and have ornamental and well-designed fronts, and will be found durable and economical in the use of fuel. The sections are connected together by the use of push nipple-joints, especially made for the purpose.

Triangular grates are supplied in the 15 and 20 series, and rocking or triangular grates in the 30 series, and the boilers when used for steam are supplied with the usual trimmings.

Walker & Pratt Manufacturing Company have been making boilers for over thirty years. This is the best boiler they have ever offered. They will be pleased to furnish catalogues upon application, and respectfully direct the attention of architects to their productions.

Quite apart from the intrinsic merits of the apparatus referred to above, architects will be interested to know that Mr. John A. Fish, with whom they were frequently brought in contact during his long connection with the Gurney Heater Manufacturing Company, now has charge of the wholesale department of the Walker & Pratt Manufacturing Company's large business, and will be glad to place his skill and knowledge at their service.

THE YALE LOCK AND SOME IMITATIONS.

Are you one of the multitude who carry keys and use locks? If so, you will be interested in learning where the best lock in the world is made and can be purchased. The Yale & Towne Manufacturing Company, of Stamford, Conn., and New York, make it.

Everybody knows the Yale Lock by name (who knows the name of any other really good lock?), but not every one knows how it got its name. It is named after its inventor, Linus Yale, Jr., who died in 1868; its numerous imitations have usually been dubbed by the name of one or another of the leading colleges, owing, presumably, to modesty on the part of the makers. The corporate title of the Company embraces the names of the two partners, who started the business in 1868, just prior to Mr. Yale's death, with 30 employés; the surviving partner, who since then has controlled and managed the business, is the President of the present corporation, which now has upwards of 1,500 employés. While the foundation of the enterprise was the Yale Lock, recognized everywhere as the best and safest lock made, and as typical of American ingenuity, the business has been vastly broadened, and now includes the most extensive variety of locks (of every grade and for every purpose) in the world, a corresponding line of Builders' Hardware, and many specialties.

Mr. Yale was the inventor of the "Cylinder" Lock, in which the key-mechanism is contained in a separate case, or "cylinder," and consists of a series of the ancient Egyptian "pin-tumblers" combined with a revolving "plug" containing the key-way, thus affording greater security and greater capacity for key changes than any other system. He was also the inventor of the Flat Key (every lock with a flat key is commonly, but erroneously, called a "Yale" Lock) and first used it in the original Yale Lock. His successors, intending always to maintain the preëminence of the Yale Lock as the best and safest in the world, abandoned the flat key some fifteen years ago for the improved "Corrugated" key, and, in turn, abandoned that for the still better and safer "Paracentric" key now used exclusively with the genuine Yale Locks.

Mr. Yale adopted for his original key the Trefoil Bow, which for many years was associated exclusively with the keys of Yale Locks. The design was not patented, however, and recently has been copied by nearly every other lock-maker, including most of those who, since the expiration of the patents on the original Yale Lock, have reproduced it in its earlier forms.

Desiring to maintain the individuality which has always marked every detail of the genuine Yale Lock, its makers have recently discarded the trefoil bow in connection with the Yale Paracentric Locks, substituting therefor a new design, although they still use the trefoil bow for the keys of locks of other types. Every genuine product of the Company, however, bears its Trefoil Trade-mark.

Knowing these facts, any purchaser can easily distinguish the genuine from the imitation, and will know what credence to give to the specious arguments of an interested vender who may represent that some imitation is "just as good" as the genuine.

The products of the Company, however, embrace locks of every kind and for every purpose, including not only those of the highest and most expensive kinds, but also the cheaper grades used for all ordinary purposes and, especially, a great variety of middle-grade goods of excellent quality and moderate price.

The line of Builders' Locks includes night latches, front-door locks, store-door locks, and locks for all kinds of interior doors, combined with which is the most extensive line in the world of hardware for doors, windows and cabinet-work, in plain bronze, brass and iron, and in a vast variety of designs covering every school of ornament.

The Company's products include also complete lines of padlocks, cabinet-locks, trunk-locks, and many specialties, such as bank-locks, prison-locks, Blount door-checks, Weston chain-blocks, Yale post-office lock-boxes, etc., etc. Its trade catalogue is a large folio volume of 900 pages, clearly illustrating all of its products.

HARD OIL-FINISH.

Hard Oil-finish is the trade-name for a very superior interior varnish, introduced and christened by Berry Brothers, of Detroit,

(Continued on page 3.)

"The Georgian Period"

This publication, which now consists of eight Parts, contains more than a hundred pages of text, illustrated by over three hundred text-cuts, and two hundred and ninety-seven full-page plates, of which one-third are gelatine or half-tone prints. It is in truth a work of superior excellence and great usefulness.

The matter already illustrated may in small part be classified thus:

PUBLIC BUILDINGS

City Hall, New York, N. Y.	Date 1803-12
Old State House, Boston, Mass.	" 1748
Pennsylvania Hospital, Philadelphia, Pa.	" 1755
Carpenters' Hall, Philadelphia, Pa.	" 1770
Independence Hall, Philadelphia, Pa.	" 1729
Faneuil Hall, Boston, Mass.	" 1741

and others.

CHURCHES

King's Chapel, Boston, Mass.	Date 1749
Seventh-day Baptist Church, Newport, R. I.	" 1729
Christ Church, Alexandria, Va.	" 1767
Christ Church, Philadelphia, Pa.	" 1727
St. Paul's Chapel, New York, N. Y.	" 1764
Old South Church, Boston, Mass.	" 1729
First Church, Hingham, Mass.	" 1681
St. John's Chapel, New York, N. Y.	" 1803
First Congregational Church, Canandaigua, N. Y.	" 1812
St. Peter's P. E. Church, Philadelphia, Pa.	" 1758
Gloria Dei Church, Philadelphia, Pa.	" 1700

and others.

IMPORTANT HOUSES

Fairbanks House, Dedham, Mass.	Date 1636
Royall Mansion, Dedham, Mass.	" 1737
Philipse Manor House, Yonkers, N. Y.	" 1745
Tudor Place, Georgetown, D. C.	" 179-
Mappa House, Trenton, N. Y.	" 1809
Woodlawn, Va.	" 1799
Mount Vernon, Va.	" 1743

and others.

Incidentally there are shown special measured drawings or large views of the following features and details:

Porches and Doorways	67 Subjects
Staircases	21 "
Mantelpieces	81 "
Pulpits	6 "
Fanlights	60 "

In addition to the subjects enumerated above there is a large quantity of measured and detailed drawings of Cornices, Ironwork, Gateposts, Windows, Interior Finish, Ceiling Decoration, Capitals, etc., together with elevational and sectional views of entire buildings.

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Imitations have appeared, of course, and all sorts of varnish, from good to the poorest trash, have been put on the market branded and sold as Hard Oil-finish.

Genuine Hard Oil-finish is still made by Berry Brothers, *and by no one else*, and still takes the lead, as it always did, for first-class interior finishing.

It is not sold in bulk, but is put up in sealed cans only, up to five gallons, each can bearing our well-known label. This is an important fact to remember, and cans should be carefully scrutinized to see that they are intact.

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No one makes Liquid Granite but ourselves, the name being a registered trademark, and in view of the many unreliable finishes and varnishes in the market, it should be a welcome fact that there is at least one that can be called for by name and relied upon as being right.

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We deem it our duty to apprise all architects of the foregoing and to point out that fully 90 per cent of those who visit our warerooms to select plumbing appliances choose (without hesitation) Imperial Porcelain Lavatories — indeed, it is invariably the case that when the original specifications call for marble lavatories, they are changed to Imperial Porcelain by those whose attention is drawn to them.

A complete catalogue of our Imperial Porcelain Lavatories has recently been issued.

We shall be pleased to mail this catalogue to all architects who may not have received it and will kindly write us.

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NOTES.

I. P. FRINK, 551 Pearl St., New York, who makes a specialty of lighting store-interiors, show-windows and show-cases, reports the following prominent stores as having recently adopted his special Patent Window-reflector, which is so well and so favorably known to the public: Houston & Henderson, Boston, Mass.; Lewis Dry Goods Co., Butte, Mont.; Schuette Bros., Manitowoc, Wis.; Simon Clothing Co., Des Moines, Ia.; The Church-Dodge Co., Troy, N. Y.; L. B. Ogilvie & Co., Paducah, Ky.; Marshall & Ball, Paterson, N. J.; Browning, King & Co., Cincinnati, O., and their new Fourth-Avenue store, New York; Adams Dry Goods Co., New York; Simpson, Crawford & Simpson, New York; and the show-cases of Joseph H. Bauland Co., and art-department of Frederick Loeser & Co., Brooklyn, N. Y. Mr. Frink is always glad to answer any question on the lighting subject, and his catalogue on the above specialties is a practical help in specifying this class of work.

WHEN visiting the Pan-American Exposition our readers have doubtless noticed the unusually attractive display made by the New York Belting & Packing Co., Ltd. This house has been awarded the Gold Medal by the Judges of the Exposition for their Interlocking Rubber Tiling, which has proved to be especially adapted for general use, not only in public buildings, but in private houses, kitchens, pantries, bath-rooms, etc. The Medal awarded them is conclusive proof of the fact that their tiling is superior to any similar product shown at Buffalo, and we would earnestly advise our readers interested in this class of flooring to correspond with them. They will cheerfully furnish full information, samples, prices, etc.

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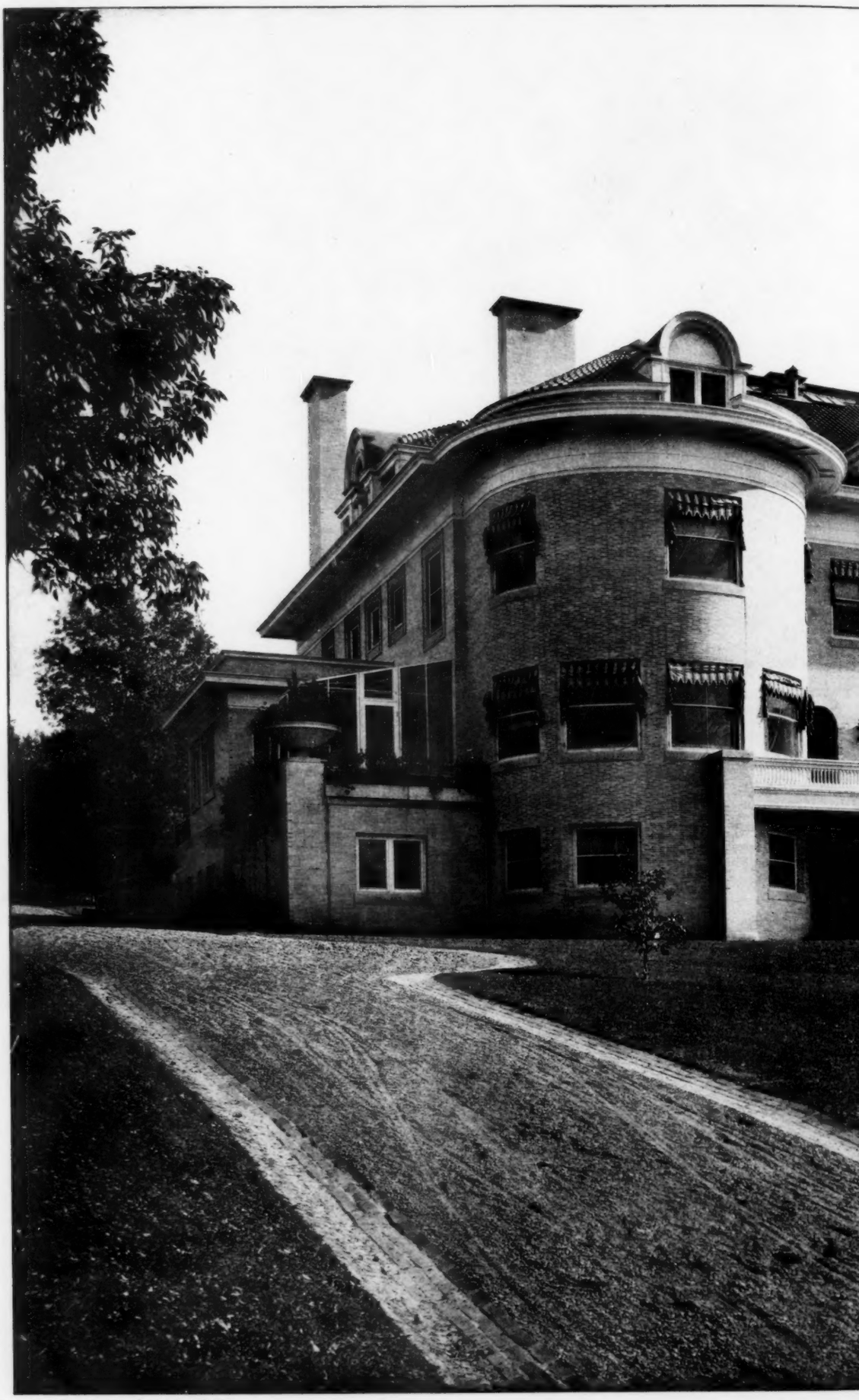
FRONT VIEW: HOUSE OF A. B. LE

G. W. MAHE

F A. B. LEACH, ESQ., SOUTH ORANGE, N. J.
W. MAHER, ARCHITECT.



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REAR VIEW: HOUSE OF A. B. L
G. W. MA

OF A. B. LEACH, ESQ., SOUTH ORANGE, N. J.
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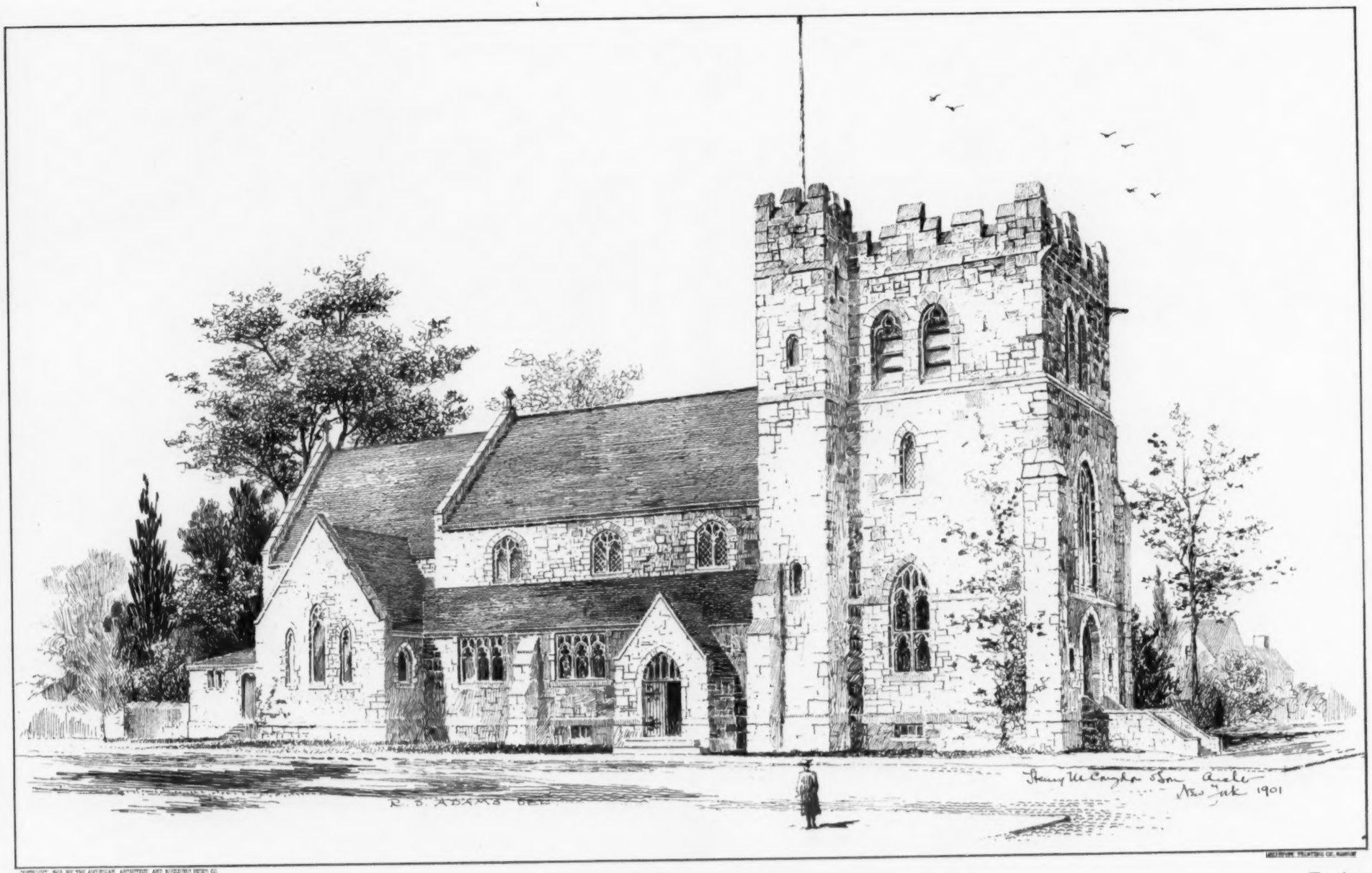

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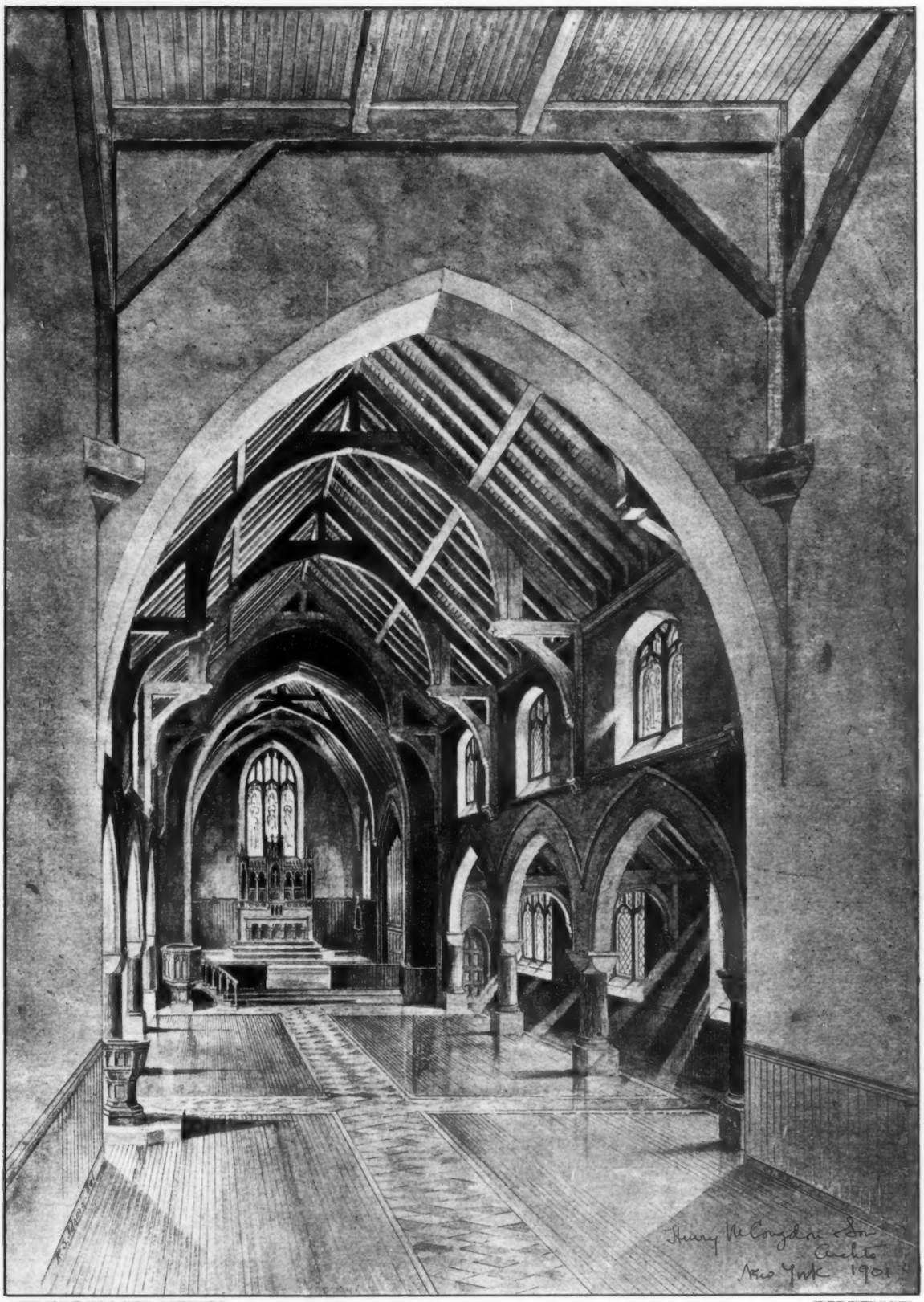
ST. JOHN'S CHURCH, BOULDER, COL.

H. M. CONGDON, & SON, ARCHITECTS.

The American Architect
Dec. 7, 1901.
No. 1354.



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The American Architect
Dec. 7, 1901.
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INTERIOR OF ST. JOHN'S CHURCH, BOULDER, COL.

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THE AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART

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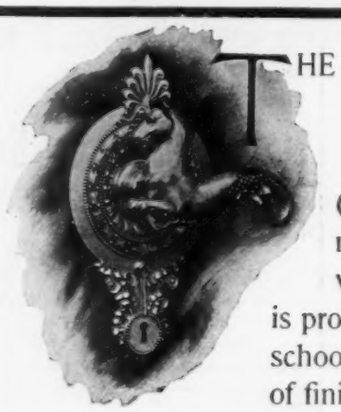

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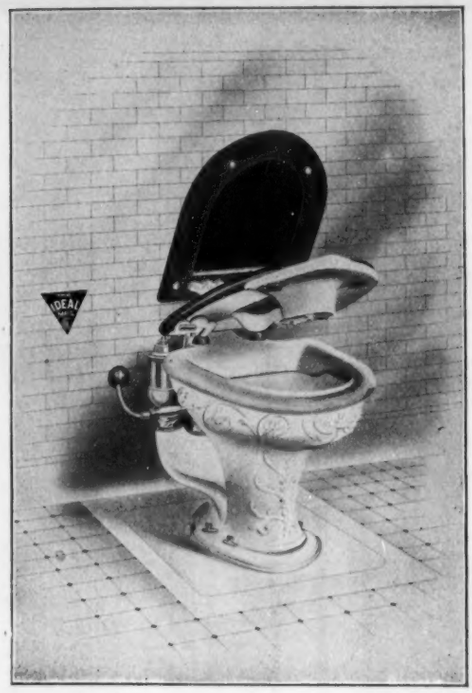

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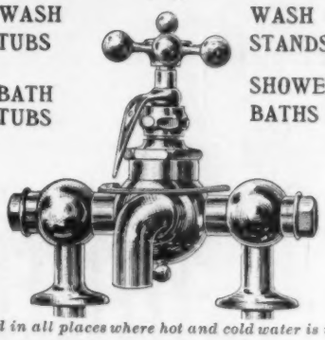

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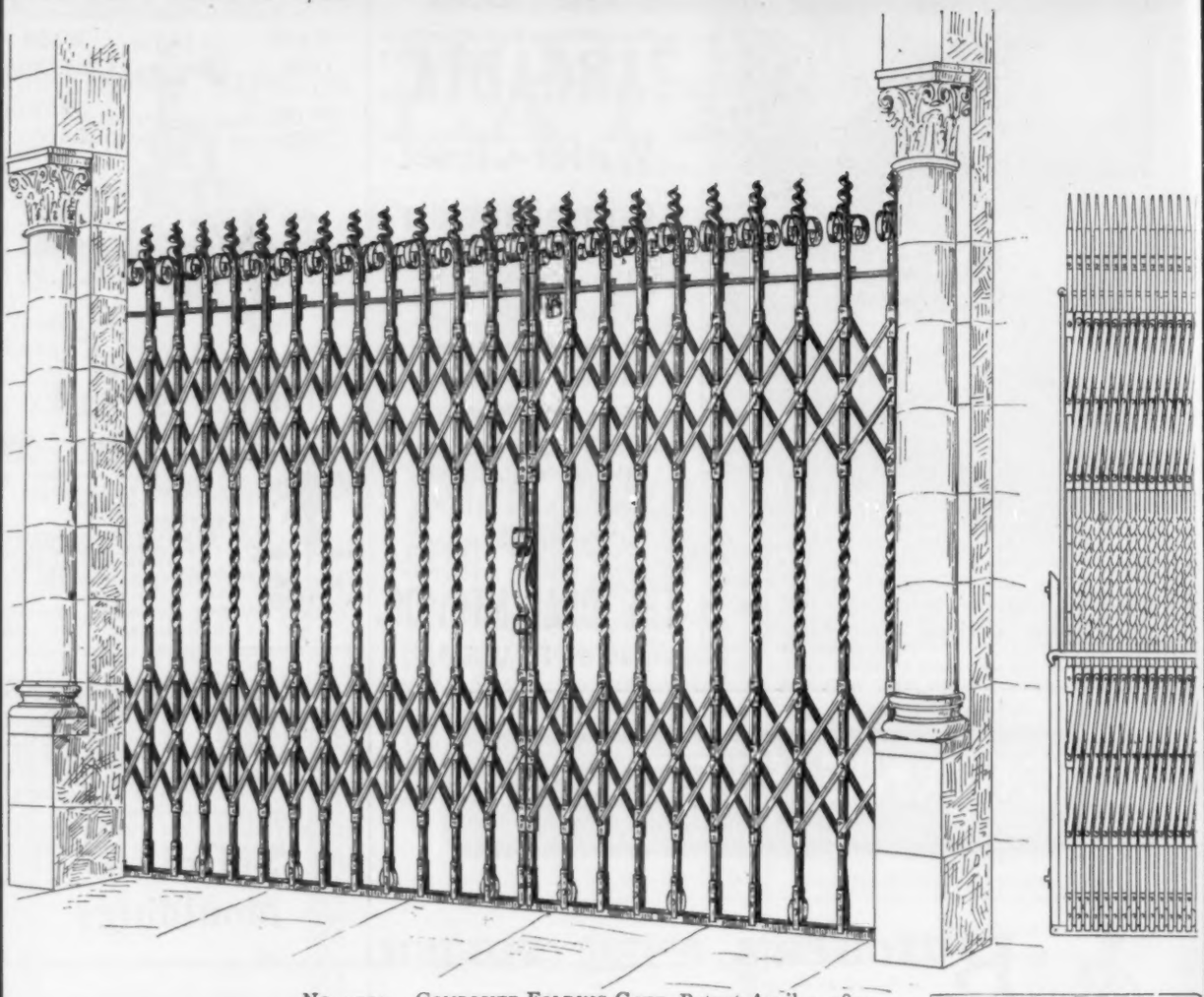

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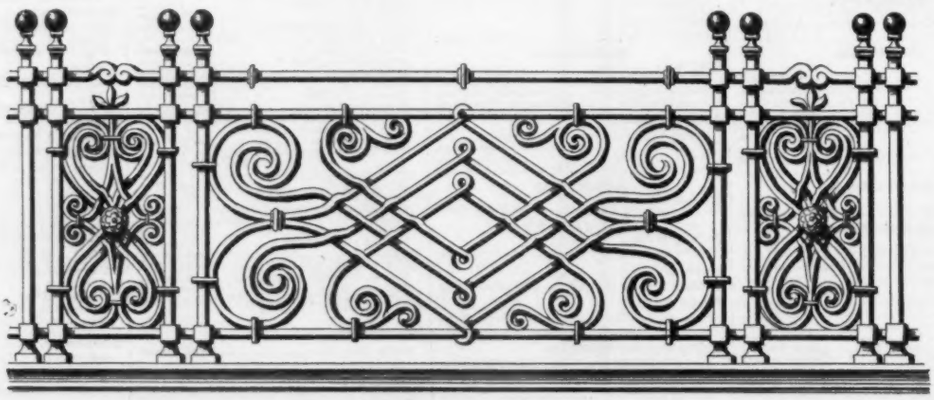

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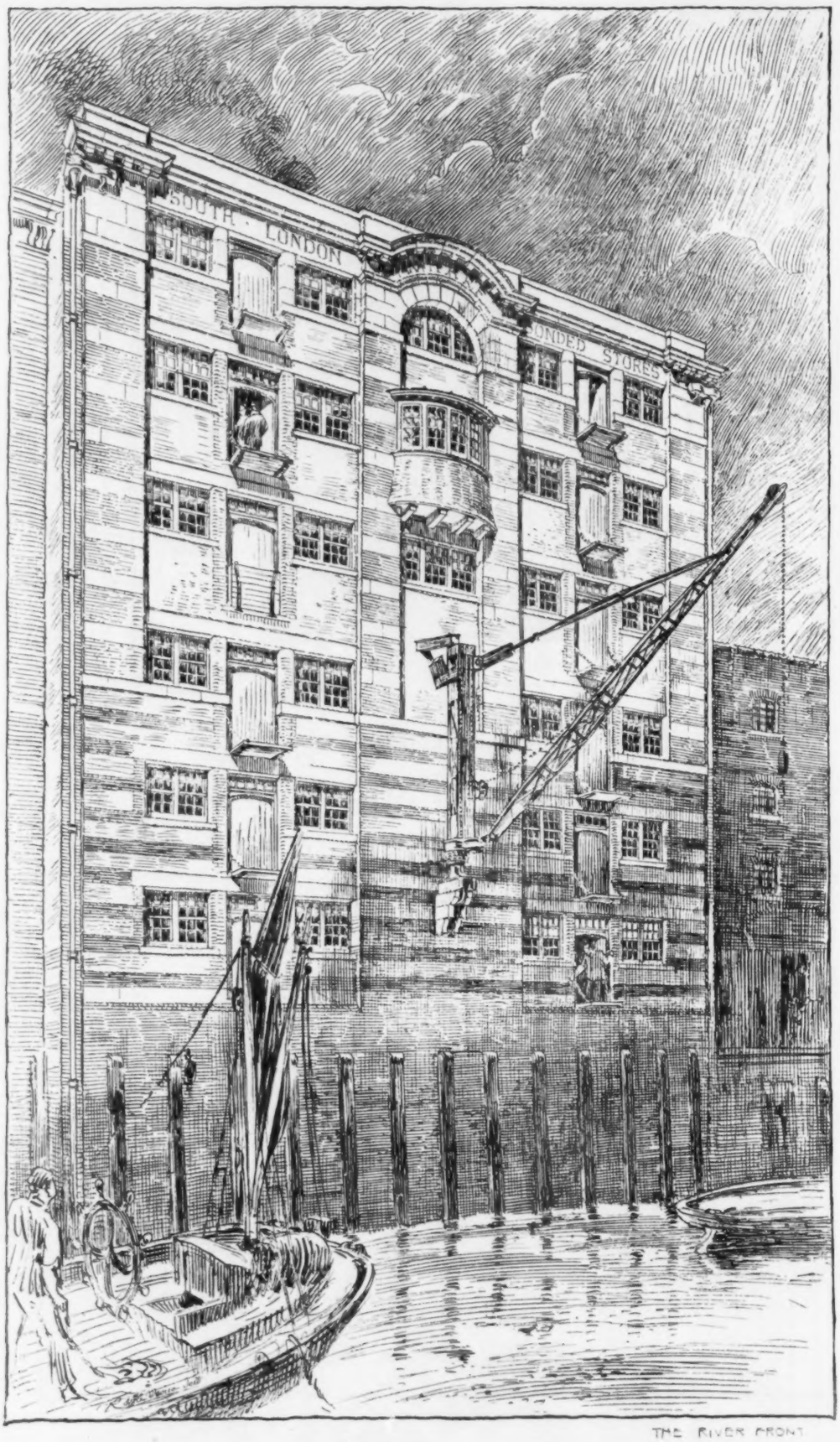

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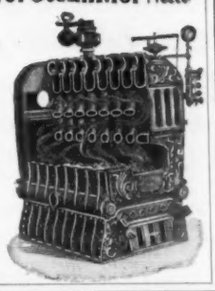

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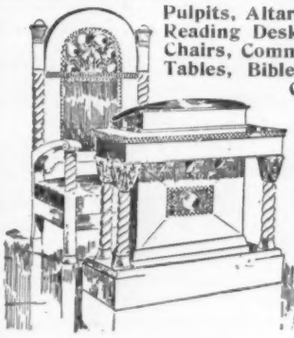

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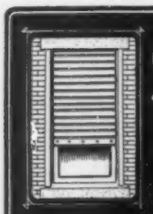

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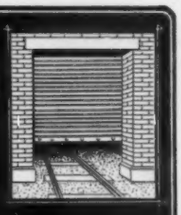

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BUILDING INTELLIGENCE.

(Reported for the American Architect and Building News.)

[*Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.*]

ADVANCE RUMORS.

Alton, Ill. — Plans have been prepared for a $25,000 depot for the Chicago & Alton R. R. Co.

Atlantic City, N. J. — William Steele & Sons will break ground this winter for the proposed $500,000 six-story fireproof hotel to be erected for Joseph N. Borden and Philip & Jos. H. Marvel, at Michigan Ave. and the Boardwalk. It is proposed to have the building ready for occupancy for next summer's season.

Baltimore, Md. — Hodges & Leach have drawn plans for a thirteen-story buff brick and terra-cotta apartment-house, 63′ x 130′, to be built at Eutaw Pl. and Laurens St.; cost, $350,000.

Bangor, Me. — It is stated that Frank A. Bourne, Tremont Building, Boston, Mass., has awarded the contract to Otto Nelson for the carpenter work on a two and one-half story granite edifice to be erected by the Central Congregational Church, at a cost of $50,000.

Chicago, Ill. — Falkenau Construction Co., Stock Exchange Building, has general contract for the ten-story office and factory building at 277 to 281 S. Clinton St., for the Western Electric Co.; cost, $172,000. S. A. Treat, 1507 Fisher Building, archt.

Plans have been prepared by J. F. & J. P. Doerr, Chamber of Commerce Building, for a three-story apartment-house for William L. De Beck, to be erected at 4744 and 4746 Indiana Ave. It will be of pressed brick and stone, 44′ x 60′; cost, $20,000.

Mercy Hospital has purchased the property at 2535 Prairie Ave. It is the intention of the hospital authorities to raze the residence on the property and to extend the hospital.

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BUILDING INTELLIGENCE.

(*Advance Rumors Continued.*)

S. V. Shipman, 238 La Salle St., has drawn plans for alterations to the building at the corner of Wabash Ave. and Monroe St., for Work Bros. & Co., Jackson Boulevard and 5th Ave.; cost, $50,000.

Report states that the G. H. Hammond Co., of Hammond, Ind., will remove its immense packing plant to the Union Stock Yards. A plant, modern in every way, will be erected. Plans for the buildings have been prepared and the improvement will entail an expenditure of $2,000,000.

It is reported that the Union Stock Yards Can Co. has been incorporated with a capital of $500,000. The company will erect a large factory for the purpose of making cans, tinplate and handling other metals.

W. G. Krieg, 84 Washington St., is taking figures on a 12-apartment building for C. A. Warner to be erected in Woodlawn; cost, $36,000.

The corner-stone of the new Bartlett gymnasium at the University of Chicago was laid on the morning of Thanksgiving Day. The building will cost $210,000 when completed, and will be one of the finest gymnasiums in the country. It is the gift of Adolphus C. Bartlett as a memorial to his son, Frank Bartlett, who died in Germany. The building will be finished in stone, and will be four stories high, including the basement.

Cincinnati, O. — The Central Labor Council contemplates erecting a three-story lodge and office building, to cost $50,000.

Cleveland, O. — Drawings have been made by Meade & Garfield, Garfield Building, for a brick and marble dwelling, 84′ x 96′, on Euclid, near Sterling, Ave., for H. C. Wick, Wick Building, at a cost of $75,000.

Matzinger & Allen have completed plans for a $45,000 church to be erected by the German Evangelist Lutheran Society.

Thirty acres on Coventry Road has been purchased by the local German Club. A large club-house will be erected costing $40,000.

Columbus, O. — St. Matthews' Evangelist Lutheran Society will erect a $25,000 church. Plans by Richard & McCarty, 75 "The Ruggery."

Crowley, La. — Work on the erection of a $22,000 office-building at Parkerson Ave. and 3d St. will soon be started by Mr. Duson.

De Kalb, Ill. — It is said that a bill will be presented to Congress asking an appropriation of $100,000 for a new post-office building.

Eureka Springs, Ark. — Architect Herbert C. Chivers, of St. Louis, Mo., has drawn plans for a Baptist church to be built here at a cost of about $60,000. It is to be of native stone with an elaborate ornamental stone spire and red tile roof.

Glen Ridge, N. J. — The cornerstone of the addition to the Congregational Church was laid on Thanksgiving Day. The proposed addition will cost in the neighborhood of $35,000.

Hamilton, O. — Plans have been prepared by Geo. Barkman, Second National Bank Building, for a $35,000 school for the 1st Ward.

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BUILDING INTELLIGENCE.

(*Advance Rumors Continued.*)

Roberts & Moare, Manchester, have been awarded the contract to build a $50,000 residence for Rob't G. Shaw, of Boston. Guy Lowell, Tremont Building, Boston, architect.

Ladysmith, Wis. — F. G. & C. A. Stanley, of Chippewa Falls, have secured the contract for erecting a $25,000 court house for Gates County.

Lafayette, Ind. — Purdue College has received a Thanksgiving present of $60,000 from Mrs. Eliza Fowler for the erection and equipment of an assembly hall.

Lakewood, N. J. — The Sisters of Mercy have had plans prepared by H. D. Dagit, 435 Chestnut St., Philadelphia, Pa., for an academy building to cost $50,000.

Lenox, Mass. — The contract for erecting the new town-hall building has been awarded to Jas. Clifford & Sons for $36,000.

Lewiston, Idaho. — Business men are arranging a stock company for the erection of a modern fireproof hotel to cost $75,000.

Los Angeles, Cal. — R. C. Young, 427 S. Broadway, has prepared plans for a five-story hotel, 160′ x 215′, to be erected on 4th and Main Sts., for Col. Jas. B. Lankershim, to cost about $200,000.

A new $75,000 Chamber of Commerce Building will be erected on Broadway, between 1st and 2d Sts.

Louisville, Ky. — Kenneth McDonald, 349 W. Main St., has completed plans for an apartment-house to be erected on 3d St. and Broadway, for Harry Weissinger; cost, $250,000.

Lynn, Mass. — The Lynn Evangelical Association Society, which has been worshipping in Wesleyan Hall, corner of Chestnut and Mason Sts., is to have a new church building. It will be erected on Summer St., corner of Chadwell Ct., on the Daniel Flagg estate. The Flagg house has been moved to the rear of the lot and fronts on the court. The new church will face on Summer St.

Marshalltown, Ia. — Report states that the plant of the Marshalltown Oil Co., which was destroyed by fire on November 13, causing a loss of $70,000, will be rebuilt.

Matoon, Ill. — Van Ryn & De Gelleke, Merrill Building, Milwaukee, Wis., have drawn plans for a Carnegie library to be erected here. It will be of stone, pressed brick and terra-cotta; cost, $30,000.

Report states that W. R. Brown, 433 Wabash Ave., Chicago, has prepared plans for the First Presbyterian Church, to cost $20,000.

Menomonie, Wis. — The County Board voted to construct a county agricultural college and teachers' training school combined, at a cost of $20,000.

Merom, Ind. — B. A. Palmer, New York, N. Y., is stated to have given $30,000 to Union Christian College.

Minneapolis, Minn. — The H. N. Leighton Co. has secured the general contract to erect the engine and boiler house for the National Biscuit Co. at 254

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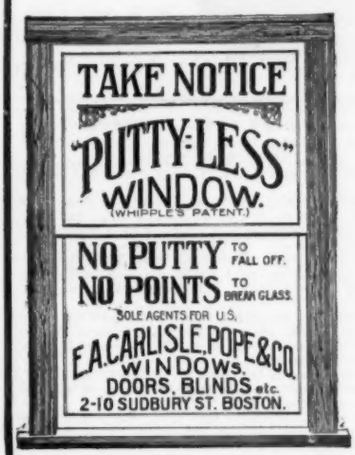

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WARREN P. LAIRD,
Professor of Architecture.

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Should find its way into the reference-room of every public library, as well as into the draughting-rooms of the architects, and the studies of cultured men.

EDWIN H. GAGGIN,
Professor of Architecture,
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I have looked over the plates of "*Topical Architecture*" and think the idea excellent.

ALEX. B. TROWBRIDGE,
Professor in Charge.

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Third Ave., N. It will be of stone and brick, fireproof. Kees & Colburn, architects. Cost, $30,000.

Work will be begun soon on rebuilding the building at 43 S. 3d St., to be occupied by Henry Dreschler as a bowling alley, etc. It will be 22′ x 165′, two-story and basement, of buff pressed brick and terra-cotta. Cost of building and fixtures will be about $30,000. Plans by Mark Fitzpatrick.

James H. Owen, Lumber Exchange building, has the contract for erecting the $60,000 Indian school-house at the Navahoe reservation.

Morgantown, W. Va. — The Methodist Episcopal congregation will erect a $30,000 church in the near future.

Nashville, Tenn. — Repairs will be made to the State capitol building, the improvements costing $25,000.

The erection of several school-houses is contemplated by the Board of Education and an election may be held to vote on the issuance of $70,000 in bonds for this purpose.

New Castle, Pa. — The Knights of Pythias of this city have under consideration the erection of a $40,000 temple.

Newport, R. I. — The Newport Trust Co. has been organized. It is the outgrowth of a movement on the part of the Industrial Trust Co. to increase the scope of its business here by allying itself with new and important interests. The directors and stockholders are men well known throughout the country, and represent large wealth and influence. It is proposed to erect a commodious modern fireproof banking building upon the site of the present building, owned by the Industrial Trust Co., on Thames St., corner of Commercial Wharf. The building will be of brick and will have all the facilities of a modern banking institution. The capital stock of the company has been fixed for the time being at $300,000.

New York, N. Y. — The Puritan Realty Co., who have just purchased the plot, 71′ 10″ x 100′, at Nos. 59 to 63 W. 44th St., will erect thereon a twelve-story apartment hotel. The Thompson-Starrett Co., 51 Wall St., will be the general contractors. The entire operation will cost about $600,000.

The Society of the Sons of the Revolution has completed plans for a two-story fireproof building to be erected somewhere in the neighborhood of Carnegie Hall, the American Society of Civil Engineers and the American Fine Arts Society Building. The site has not yet been definitely decided upon. Plans for the building were drawn by York & Sawyer, 156 Fifth Ave. It is intended that its character shall be in keeping with the history and traditions of the society, and it will recall the best examples of Colonial work. The exterior will be of white marble. Work on the building will begin about the first of the year, and the architects promise that it will be ready for occupancy in the fall; estimated cost, $100,000.

It is stated that the old home of Samuel V. Hoffman, 210 Fifth Ave., next door to the old Delmonico place, now owned by Dean Eugene A. Hoffman, is being torn down to make way for a ten or eleven-story business block. Detailed plans for the new structure have not yet been decided on. The upper stories will be used for lofts or bachelor apartments. The house now being torn down was built about 50 years ago, and was used by Samuel V. Hoffman as his home until his death, in 1880. It was then altered for business purposes.

Report states that architects' plans will be asked soon after January 1st for the handsome new club-house to be erected for the Republican Club. The new house is to front in 40th St., between 5th and 6th Aves., about 250 feet east of 6th Ave., and will occupy the present site of St. Ignatius's Church. The cost, with lot, will be about $450,000.

Plans have been filed at the Department of Buildings for a twelve-story brick hotel to be built at 120 W. 57th St. The building will be constructed of brick, terra-cotta and limestone. The Central Realty Co., of 900 Seventh Ave., is the owner and Harry B. Milliken the architect; estimated cost, $350,000.

Plans have been filed for a four-story brick boys' club-house, to be erected on 56th St., near 10th Ave. Its frontage will be 32 feet and its depth 87 feet. The mission of the Immaculate Virgin, of which Archbishop Corrigan is president, is the owner. Schickel & Ditmars are the architects. The estimated cost is $30,000.

It is reported that a ten-story apartment-house will take the place of the four-story brownstone dwelling house at the corner of Madison Ave. and 31st St., which was sold recently by Philip Jeselson for Martin Geiszler. The buyer, whose name is withheld, is a builder and loan operator.

The Board of Directors of the New York Juvenile Asylum met recently to discuss plans for the development of the ground which they have purchased at Dobbs Ferry. It is the intention of the directors to move the institution to this new site as soon as possible. It is expected that architects will be asked to submit competitive designs for grounds and building, but nothing further has been decided.

Oskaloosa, Ia. — $32,000 has been subscribed for the erection of a Y. M. C. A. building.

Peru, Ind. — It is reported that Frank and G. M. Webb contemplate erecting an opera-house costing $30,000, on W. Main St.

Philadelphia, Pa. — Architect Horace Trumbauer has designed a splendid residence which Anthony J. Drexel will build on the Phillips estate, near Villanova, which he recently purchased. The mansion will be of large proportions, having a frontage of 100′ x 160′ in depth. It is to be three stories high, built in the English Renaissance style. The construction will be of Indiana limestone. A court-yard 90 feet wide will afford an entrance to the house, while the main entrance hall, of elaborately carved stone, will open into a main hall 60 feet long and 30 feet wide. Builders will soon be asked to estimate on the cost of construction. Among those likely to be asked to figure are George Watson & Son.

Contractors W. A. & A. E. Wells have signed a contract to reconstruct the old Exchange building at 3d and Walnut Sts. for the uses of the Stock Exchange. The work will cost $160,685 and is to be finished in 10 months.

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BUILDING INTELLIGENCE.

(*Advance Rumors Continued.*)

Dr. John B. Meyers is preparing to erect 38 two-story brick dwellings, 14′ x 36′, on Water St., near Octorara; cost, $70,300.

Architect Arnold H. Moses has been given a permit to build the one-story brick boiler and economizer houses at the new plant of the Pennsylvania Sugar Refinery Co., at Shackamaxon St. and the Delaware River. The building will cost $20 000.

The Board of Directors of the Jewish Hospital has been notified by Meyer Guggenheim, of New York, that he is willing to donate $60,000 to the institution for the erection of a hospital for the treatment of private cases. Mr. Guggenheim, who formerly was a Philadelphia lace manufacturer, made the offer upon learning that the lack of a private hospital was responsible for a considerable deficit annually in the funds of the institution. He desires that the building shall at all times be open to the public without regard to race or creed.

Pittsburgh, Pa. — Plans have been made by W. Arthur Thomas for a 15-room colonial brick residence to be built on Negley Ave. at a cost of $20,000.

John Siebert has the contract for erecting the plant to cost $80,000 on S. 17th St. for the Duquesne Ice Co. The main structure will be of brick, three stories high.

Patterson & Shaw, Allegheny, have secured the contract for building a residence for D. McK. Lloyd, after plans by Alden & Harlow, 314 Fourth Ave.; cost, $40,000.

F. G. Scheibler, Jr., Wilkinsburg, has plans for a four-story building to be erected by the United Real Estate & Construction Co., at a cost of $130,000.

He also is drawing plans for the addition of two stories to the Smith Block at 6th and Liberty Sts. The improvement will cost between $50,000 and $75,000.

Alden & Harlow, 314 Fourth Ave., have awarded contract to the George A. Fuller Co , 135 Broadway, New York, for the construction of a twenty-four-story office and bank building, at Wood St. and 5th Ave., for the Farmers' Deposit National Bank; cost, $2,000,000.

James T. Steen, 611 Smith Block, is drawing plans for remodelling the Pittsburgh Natatorium, on Duquesne St., near 6th St.; cost, $35,000.

Portland, Ore. — An annex will be erected to the Hotel Portland to cost about $60,000.

Providence, R. I. — The union of two of the most beneficent associations in this city, the Young Women's Christian Association and the Evangelical Young Women's Christian Association has taken place. An appeal is made to all friends of both associations to aid by contributing to the fund for the erection of a suitable building in which the work now being done by both organizations shall be combined, and which shall also ensure an income to the association from the building itself. Contributions have already begun to come in and the amount contributed to date is $32,500. The plans for the building have been drawn by Hoppin & Ely. It is intended to erect a substantial fireproof building, of six stories above the basement, costing, with the grounds, $160,000.

Remsen, Ia. — St. Mary's Catholic Society will erect a new brick church to cost between $30,000 and $40,000. A committee was appointed to secure plans at once.

Richmond, Va. — It is reported that the plans of J. K. Peebles, of Norfolk, have been adopted for the hotel to be built for Wm. H. Zimmerman at Broad and 7th Sts.; cost, $200,000.

Sault Ste. Marie, Mich. — The International Tube Works will be located on the American side instead of the Canadian side as originally planned; cost, $1,000,000. The buildings will cover a ground space of 800′ x 1,500′, and will be of steel and stone.

J. P. Hummel, of Milwaukee, proposes to erect a large paper mill here to cost $750,000.

Seattle, Wash. — The Australian-American Woolen Manufacturing Co. has been organized and proposes to establish an immense woolen mill here; cost, $500,000.

W. P. Trimble will erect a $60,000 steel building on Pike St. and 2d Ave.

Sheboygan, Wis. — Patton & Miller, 115 Monroe St., Chicago, Ill., have prepared plans for a Carnegie library building, 45′ x 80′, stone exterior, marble and tiles, etc.; cost, $25,000.

Sheriden, Pa. — The Catholic Society has plans for a $40,000 church to be erected at Lynwood and Ashland Aves.

Springfield, Mo. — Andrew Carnegie is reported to have given this city $50,000 for a public library.

Stanford University, Cal. — It is stated that Mrs. Stanford has authorized Resident Architect Hodges to announce that a stone gymnasium will be built on the campus next year.

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BUILDING INTELLIGENCE.

(*Advance Rumors Continued.*)

St. Louis, Mo. — It is reported that the Travelling Men's Protective Association will erect a world's fair hotel on the exposition grounds, to cost $200,000. The hotel, as projected, will cover five acres and contain 2,000 rooms. Eames & Young, Lincoln Trust Building, have drawn plans.

B. Cunliff, 706 Chestnut St., has plans for 5 brick flats to be erected at 4310 Maryland Ave., for Roy L. Black, at a cost of $30,000.

St. Paul, Minn. — Reed & Stem, architects, are preparing plans for residence to be erected on Summit Ave., between Kent and Mackubin Sts. for B. H. Evans. It will be of pressed brick and cut stone, two and one-half stories and basement; cost, $20,000.

Taunton, Mass. — L. M. Witherell, Court St., has the contract to erect the new building for the Y. M. C. A. on the corner of Cohannet and Franklin Sts.; cost, $25,000.

Titusville, Pa. — It is reported that C. M. Robinson, of Pittsburgh, has prepared plans for a $30,000 edifice for the M. E. congregation.

Warren, Pa. — The American Turrel Lathe Co. has been organized with a capital of $250,000. It is said a large factory will be erected in the West End.

Washington, D. C. — Eight acres of land has been purchased west of Connecticut Ave. on Pierce Mill Road, as a site for the new Government Bureau of Standards building, for which Congress appropriated $250,000. Work on the buildings will be begun in January.

West Homestead, Pa. — J. W. Eckles, of New Castle, has been selected to prepare plans for a $40,000 school to be erected here.

Wichita, Kan. — Thos. H. Griffith is stated to have purchased a site on Douglas Ave. for the erection of a $25,000 building, to be occupied by Letts & Spencer.

Wilkinsburg, Pa. — An office-building will be erected at Wood St. and Ross Ave. for Leopold Vilsack; cost, $75,000.

HOUSES.

Boston, Mass. — *Waldeck St.*, Ward 20, two-st'y fr. dwell., 40′ x 46′, pitch roof, furnace; $7,000; o., Annie M. Holliday; a. & b., G. L. Davidson, 53 Greenwood St.

Chambers St., No. 192, Ward 8, four-st'y bk. dwell., 22′ x 51′, flat roof, stoves; $7,000; o. & b., Jos. Schoolman, 772 Columbus Ave.; a., F. A. Norcross.

Harlem St., nr. Glenway St., Ward 20, two-st'y fr. dwell., 31′ x 46′, pitch roof, furnace; $5,000; o., Mary L. Plunkett, 19 Harlem St.; a., G. P. Connor.

Lyon St, nr. Adams St., Ward 20, three-st'y fr. dwell., 25′ x 50′, flat roof, furnace; $5,000; o. & b., B. G. Crosby, Carson St., Dorchester.

Park St., nr. Waldeck St., Ward 20, two-st'y fr. dwell., pitch roof, furnace; $5,300; o., Isabella C. Holliday; a. & b., G. C. Davidson, 53 Greenwood St.

Spencer St., nr. Wheatland Ave., Ward 20, three-st'y dwell., 23′ x 50′, flat roof, furnace; $5,000; o. & b, M. F. Sullivan, 131 Spencer St., Dorchester; a., E. A. Snow.

Bay State Road, Ward 11, four-st'y bk. dwell., 28′ x 70′, flat roof, furnace; $30,000; o., Alfred Bowditch; a., Peters & Rice.

Savin Hill Ave., No. 54, Ward 20, three-st'y fr. dwell., 27′ x 47′, flat roof, furnace; $5,500; o., a. & b., Wm. Riley, 22 Auckland St., Dorchester.

Humboldt Ave., No. 78, Ward 21, three-st'y bk. dwell., 22′ x 36′, flat roof, stoves; $5,000; o., a. & b., O. E. Furber, 3 Eliot St., Roxbury.

Centre St., nr. Johnson Ave., Ward 22, 2 three-st'y bk. dwells., 24′ x 49′, flat roofs, stoves; $11,000; o., Cath. O'Brien, 348 Centre St.; a., J. H. Roth.

Chambers St., Nos. 195-9, Ward 8, 3 three-st'y bk. dwells., 21′ x 52′, flat roofs, stoves; $18,000; o. & b., Jos. Schoolman, 772 Columbus Ave.; a., F. A. Norcross.

Barry St., nr. Quincy St., Ward 20, three-st'y fr. dwell., 26′ x 50′, flat roof, furnace; $6,000; o., B. A. Newcombe; a. & b., W. H. Newcombe, 60 Crescent Ave.

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(*Houses Continued.*)

Auckland St., No. 86 and *East St., Nos.* 27-29, Ward 20, 3 three-st'y fr. dwells., 24′ x 58′, flat roofs, stoves; $18,000; o., a. & b., Higgins & Scarr, 67 F St., S. Boston.

Stanwood St., nr. Columbia Road, Ward 20, three-st'y fr. dwell., 25′ x 51′, flat roof, hot water; $6,000; o. & b., Boyd & Berry, 11 Grampian Way; a., P. A. Tracy.

Tower St., nr. Washington St., Ward 23, three-st'y fr. dwell., 24′ x 48′, flat roof, furnace; $5,000; o., Suffolk Asso.; a. & b., W. W. Sherman, 27 Thetford Ave., Mattapan.

Elbert St., No. 2A, Ward 21, three-st'y bk. dwell., 22′ x 34′, flat roof, stoves; $5,000; o., a. & b., O. E. Furber, 3 Elbert St.

Saxton St., nr. Savin Hill Ave., Ward 20, 2 three-st'y bk. dwells., 23′ x 46′, flat roofs, stoves; $10,000; o., W. A. Pieu; a. & b., P. H. McCue, 68 Leonard St., Dorchester.

Iona St., nr. Humphreys Sq., Ward 16, two-st'y fr. dwell., 33′ x 42′, pitch roof; $6,000; o. & b., J. E. Wilber, 299 Norfolk St.; a., C. A. Russell, 54 Warren St., Roxbury.

Templeton St., nr. Adams St., Ward 24, 4 three-st'y bk dwells., 22′ x 48′, flat roofs, stoves; $24,000; o. & b., Isaac Sherman, Florida St., Dorchester.

Brooksdale Road, nr. Ranleigh Road, Ward 25, two-st'y fr. dwell., 32′ x 38′, pitch roof, furnace; $6,000; o., W. M. Parsons; a., G. E. Parsons, Tremont Building.

COMPETITIONS.

SOLDIERS' MONUMENT. [At Philadelphia, Pa.]

Office of Clerks of Common Council, Room No. 494, City-hall, Philadelphia, Pa. Competitive designs for the erection of a monument in honor of the Soldiers, Sailors and Marines who served in the War for the suppression of the Rebellion are invited; to be submitted **on or before March 3d, 1902.** Competition open to any architect who is a citizen of the United States. Copy of a printed programme will be furnished on application to GAVIN NEILSON, Clerk of Committee on Soldiers' Monument. 1357

PROPOSALS.

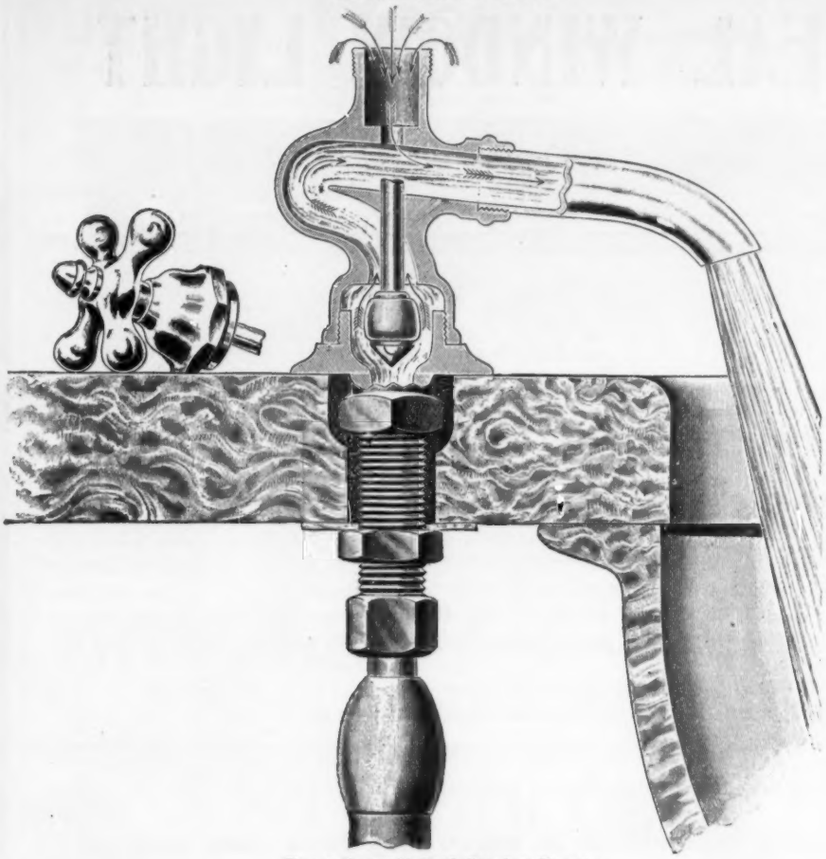
LIBRARY BUILDING. [At Mankato, Minn.]

Sealed proposals will be received by the Library Board of the City of Mankato, Minn., **until December 17th,** for the furnishing of all materials and labor (except heating plant) for the construction of a public library building in accordance with plans and specifications drawn by Jardine, Kent & Jardine, copies of which may be seen at the Builders' Exchange, St. Paul, the *Improvement Bulletin*, Minneapolis, and at the office of J. C. Thro, president of the Board, Mankato. JOHN C. THRO, president Library Board. 1354

MASON WORK. [At Des Moines, Ia.]

Sealed proposals will be received at the office of the county auditor of Polk County, Iowa, **until December 20** for the erection and completion of the mason work and cut stone for the new Polk County court-

Patented December 5, 1898.



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PROPOSALS.

house, according to plans and specifications prepared by Proudfoot & Bird, architects for the same. Plans and specifications may be seen at the auditor's office and at the office of the architects, 712 Crocker Building, Des Moines, Ia. Copies of the plans and specifications may be obtained of the architects. Proposals must be addressed to the Board of Supervisors and filed with the county auditor, Des Moines, Ia. 1355

BUILDING. [At Springfield, Ill.]
Bids are wanted **December 19** for erecting a building for armory, arsenal and museum purposes. Sam'l A. Bullard, architect. JAS. A. ROSE, Sec. Bd. of Commissioners. 1355

U. S. Engineer Office, 735 N. Capitol St., Washington, D. C., November 27, 1901. Sealed proposals will be received here until noon, December 27, 1901, and then publicly opened, for Hardwood and Tile or Mosaic Floors, complete in position, for New Building for Government Printing Office. Information furnished on application. JOHN STEPHEN SEWELL, capt., engrs. 1356

BUILDING. [At San Marcos, Tex.]
Bids are wanted **December 16** for erecting a building for the Southwest Texas Normal School at San Marcos. JOSEPH D. SAYERS, Gov. 1354

JAIL. [At Boise, Idaho.]
Bids will be received by the Board of County Commissioners **until December 16** for erecting a jail and fireproof vault adjoining the court-house. M. W. CLARK, chmn. 1354

Treasury Department, Office of the Supervising Architect, Washington, D. C., November 23d, 1901. Sealed proposals will be received at this office until 2

PROPOSALS.

o'clock P. M. on the 8th day of January, 1902, and then opened, for the foundations, superstructure and roofing of the U. S. Custom-house at Baltimore, Maryland, in accordance with the drawings and specification, copies of which may be had at the discretion of the Supervising Architect on application to this office, or the office of the architects, Hornblower & Marshall, 1509 H St., N. W., Washington, D. C. Application must be accompanied by a certified check for $250, which will be held at this office until the return of drawings and specifications. JAMES KNOX TAYLOR, Supervising Architect. 1354

DORMITORY, SEWER SYSTEM, ETC. [At Pryor Creek, Mont.]
Department of the Interior, Office of Indian Affairs. Sealed proposals addressed to the commissioner of Indian affairs, Washington, D. C., will be received at this office **until December 16, 1901**, for furnishing and delivering the necessary materials and labor required in the construction and completion of dormitory, water and sewer system at Pryor Creek, Crow Agency, Montana, in strict accordance with plans and specifications and instructions to bidders, which may be examined at this office, U. S. Indian warehouse, 235 Johnson St., Chicago, Ill., and the offices of the Montana *Daily Record*, Helena, Mont.; *Times-Herald*, Chicago, Ill.; *Post-Intelligencer*, Seattle, Wash., and the St. Louis *Globe-Democrat*, St. Louis, Mo., and at the Crow Agency, Mont. Also bids will be received for furnishing the pipe, delivered at Crow Agency, Mont. For any additional information apply to this office or J. E. Edwards, U. S. Indian agent, Crow Agency, Mont. W. A. JONES, commissioner. 1354

EMPLOYES' QUARTERS. [At White Earth Agency, Minn.]
Department of the Interior, Office of Indian Affairs, Washington, D. C. Sealed proposals addressed to the commissioner of Indian affairs, Washington, D. C., will be received at this office **until December 17,**

PROPOSALS.

1901, for furnishing and delivering the necessary materials and labor required in the construction and completion of one brick or frame employés' quarters at the White Earth Agency, Minn., in strict accordance with the plans and specifications and instructions to bidders, which may be examined at this office, the U. S. Indian warehouse, 235 Johnson St., Chicago, Ill., and the offices of the *Pioneer Press*, St. Paul, Minn.; *News-Tribune*, Duluth, Minn., and the *Times-Herald*, Chicago, Ill., and at the White Earth Agency, Minn. For additional information apply to this office or the U. S. Indian agent, White Earth Agency, Minn. W. A. JONES, commissioner. 1354

BRIDGE. [At Des Moines, Ia.]
Sealed proposals will be received by the Board of Public Works of the city of Des Moines, Ia., at the office of the said Board of Public Works, **until December 14, 1901**, for material and the construction complete of a steel highway bridge across the Des Moines River from the south end of E. 6th St. to the north end of an extension of Main St. in Sevastopol, according to plans and specifications to be on file in the office of the city engineer and the Board of Public Works on or before December 1, 1901. G. A. EBERHART, J. E. STOUT, Board of Public Works. 1354

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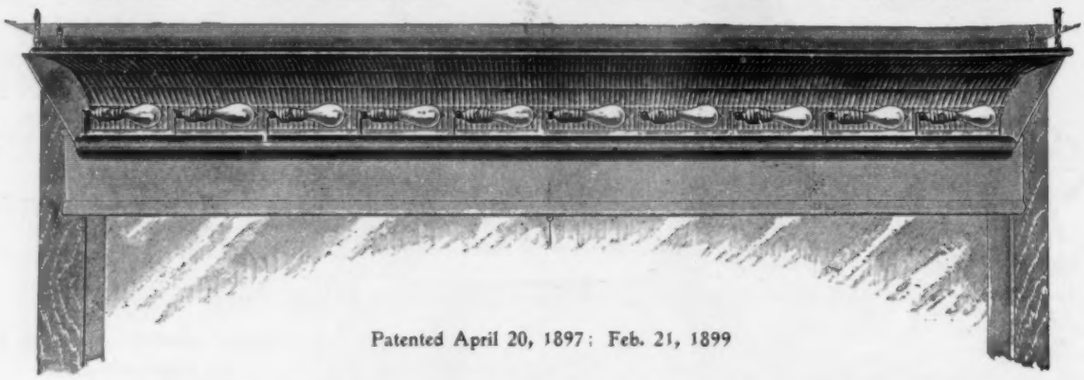

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SECTION 1. No Member should enter into partnership, in any form or degree, with any builder, contractor, or manufacturer.

SECTION 2. A Member having any ownership in any building material, device or invention, proposed to be used on work for which he is architect, should inform his employer of the fact of such ownership.

SECTION 3. No Member should be a party to a building contract except as "owner."

SECTION 4. No Member should guarantee an estimate or contract by personal bond.

SECTION 5. It is unprofessional to offer drawings or other services "on approval" and without adequate pecuniary compensation.

SECTION 6. It is unprofessional to advertise in any other way than by a notice giving name, address, profession, and office hours, and special branch (if such) of practice.

SECTION 7. It is unprofessional to make alterations of a building designed by another architect, within ten years of its completion, without ascertaining that the owner refuses to employ the original designer, or, in event of the property having changed hands, without due notice to the said designer.

SECTION 8. It is unprofessional to attempt to supplant an architect after definite steps have been taken toward his employment.

SECTION 9. It is unprofessional for a Member to criticise in the public prints the professional conduct or work of another architect except over his own name or under the authority of a professional journal.

SECTION 10. It is unprofessional to furnish designs in competition for private work or for public work, unless for proper compensation, and unless a competent professional adviser is employed to draw up the "conditions" and assist in the award.

SECTION 11. No Member should submit drawings except as an original contributor in any duly instituted competition, or attempt to secure any work for which such a competition remains undecided.

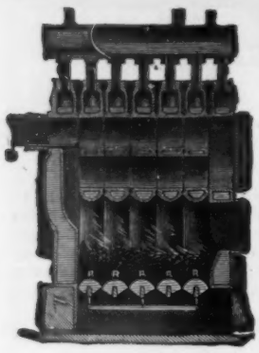
SECTION 12. The American Institute of Architects' "schedule of charges" represents minimum rates for full, faithful and competent service. It is the duty of every architect to charge higher rates whenever the demand for his services will justify the increase, rather than to accept work to which he cannot give proper personal attention.

SECTION 13. No Member shall compete in amount of commission, or offer to work for less than another, in order to secure the work.

SECTION 14. It is unprofessional to enter into competition with or to consult with an architect who has been dishonorably expelled from the "Institute" or "Society."

SECTION 15. The assumption of the title of "Architect" should be held to mean that the bearer has the professional knowledge and natural ability needed for the proper invention, illustration and supervision of all building operations which he may undertake.

SECTION 16. A Member should so conduct his practice as to forward the cause of professional education and render all possible help to juniors, draughtsmen and students.



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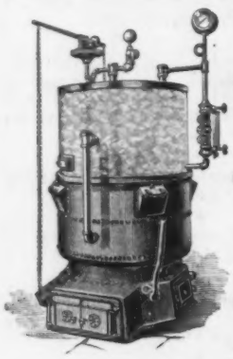

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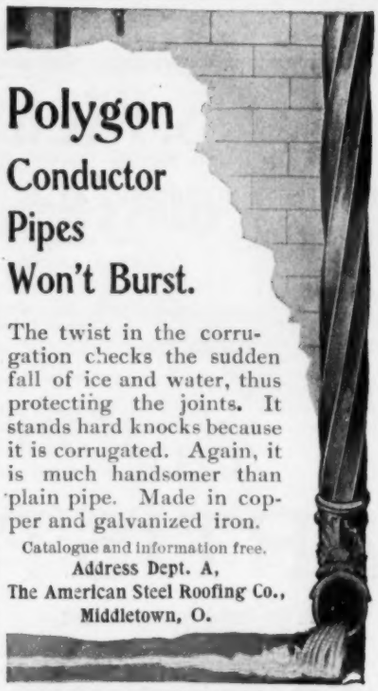

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Kinnear Mfg. Co., The, Columbus, O.

DOORS (Interior Finish).
Carlisle, Pope & Co., E. A., New York.

DRAUGHTSMAN.
E. Eldon Deane, New York.

ELECTRIC SIGNALS.
Elevator Supply & Repair Co., New York

ELEVATORS, ETC.
Morse, Williams & Co., Philadelphia.
Whittier Machine Co., Boston

ENGINES (Hot-Air).
Rider-Ericsson Engine Co., New York.

FAUCETS.
Union Brass Works, Boston, Mass.

FILING DEVICES.
Art Metal Construction Co., Jamestown, N. Y.

FILTER.
Loomis-Manning Filter Co., Phila., Pa.
Sealfe & Sons, Wm. B., Pittsb'g, Pa.

FIREPROOF DOORS.
Kinnear Mfg. Co., The, Columbus, O.

FIREPROOFING.
Johnson Co., E. V., Chicago, Ill.

FIREPROOF LATHING.
Hayes, Geo., New York

FIREPROOF SHUTTERS.
Kinnear Mfg. Co., The, Columbus, O.

FLOOR POLISH.
Butcher Polish Co., Boston

FLUSHOMETER.
Kenney Co., The, New York

FLUSH-VALVE.
Peck Brothers Co., Chicago, Ill.

GALVANIZED IRON.
American Sheet Steel Co., New York

GATES.
Wm. R. Pitt, New York (mon)

GRATES, ETC.
Wm. H. Jackson & Co., New York

GREASE (Graphite).
Wisconsin Graphite Co., Pittsb'g, Pa.