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A MONTHLY JOURNAL (WITH AN INTERMEDIATE NEWS NUMBER AND A PHOTO-GRAYURE EDITION) DEVOTED TO WESTERN INTERESTS.

VOL. X.—No. 9.

CHICAGO, JANUARY, 1888.

Regular Edition, \$3.00 a Year.
Photogravure Edition, \$8.00 a Year.

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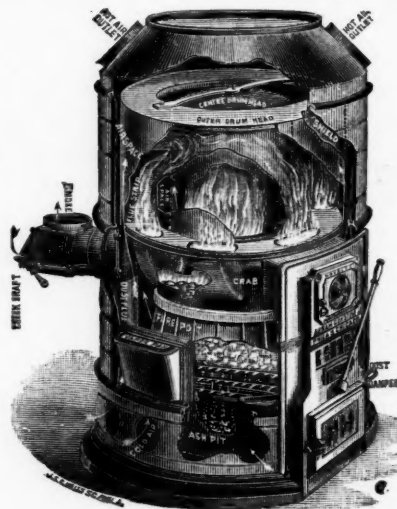
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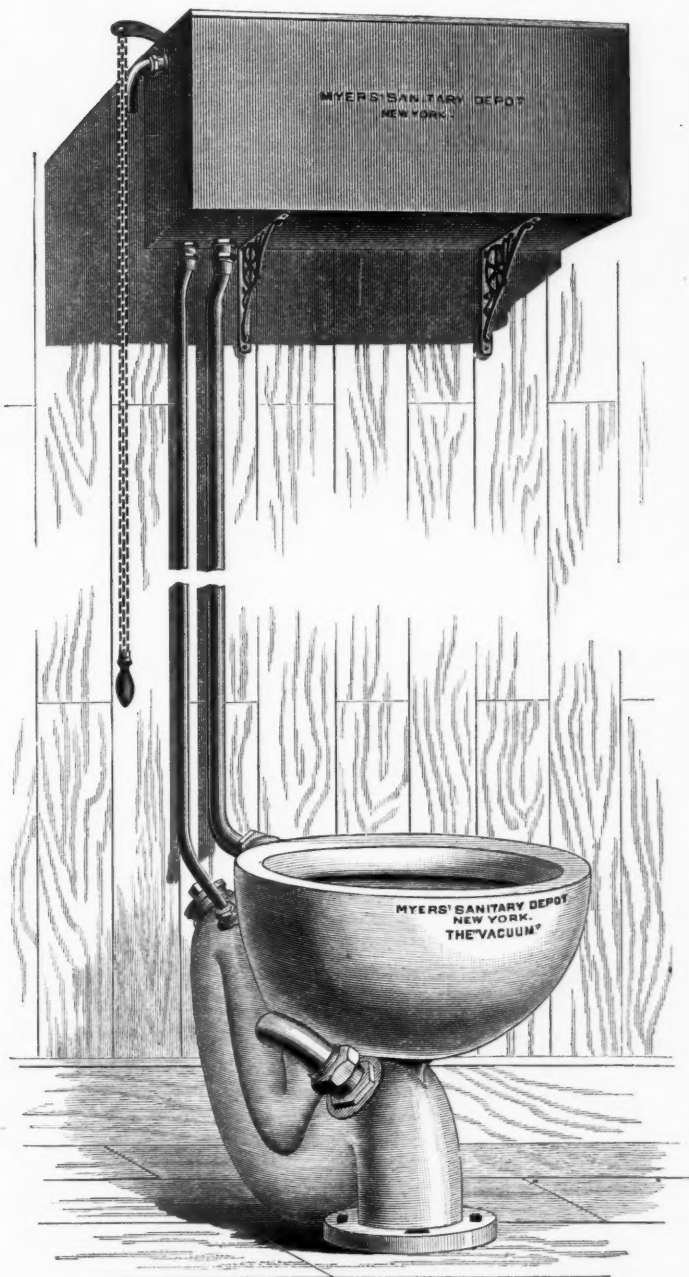


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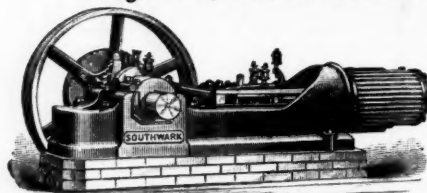
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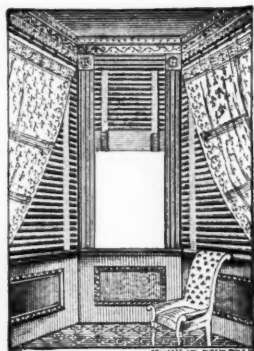
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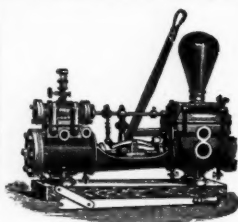
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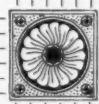
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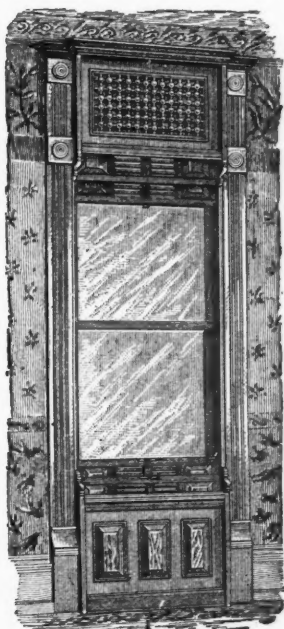
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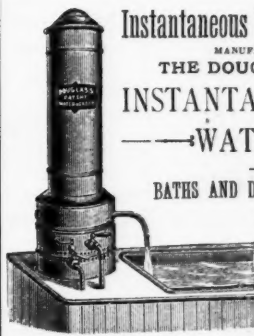
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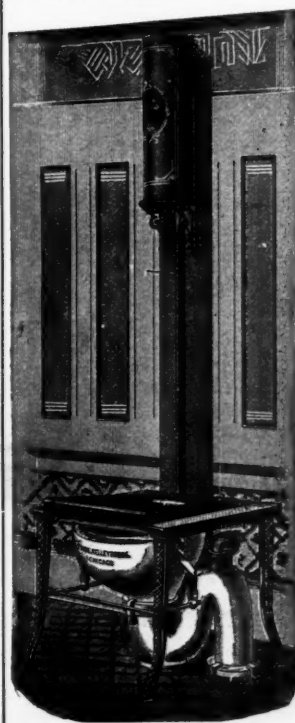
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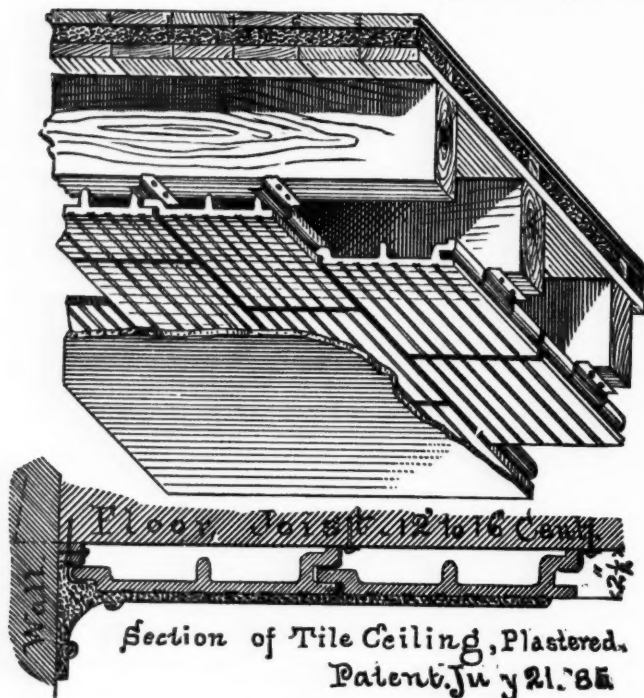
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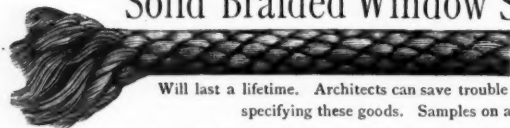
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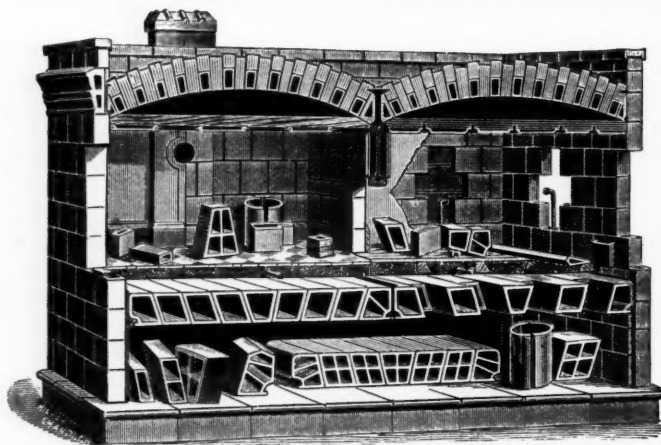
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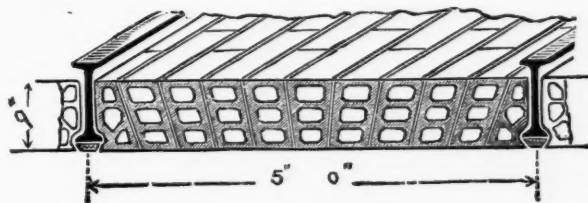
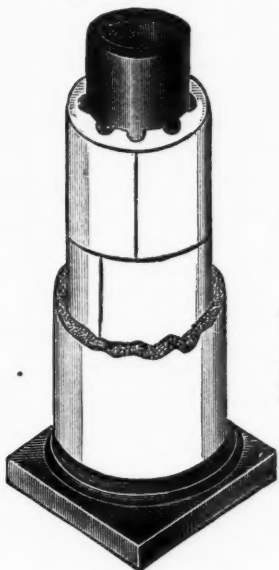
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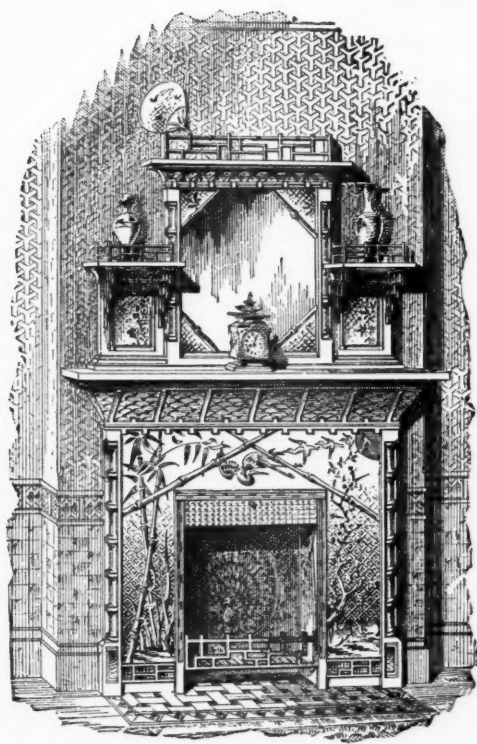
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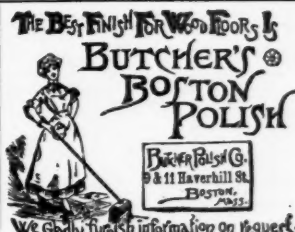
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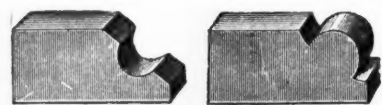
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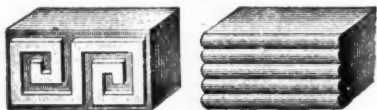
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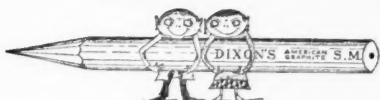
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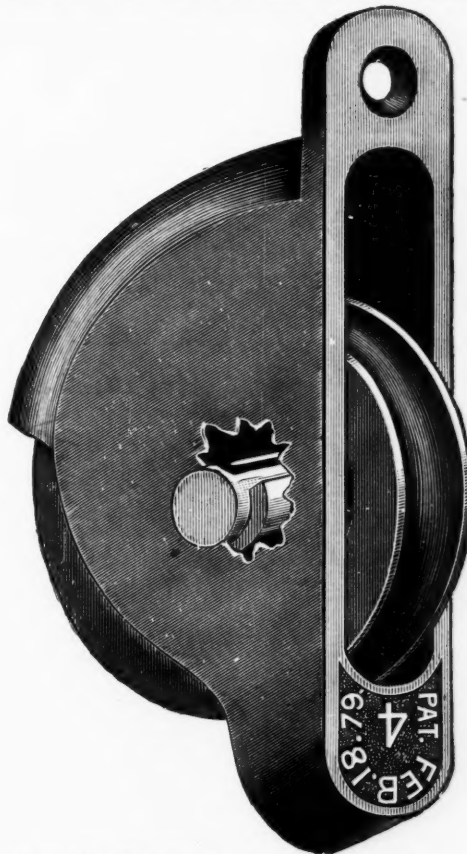
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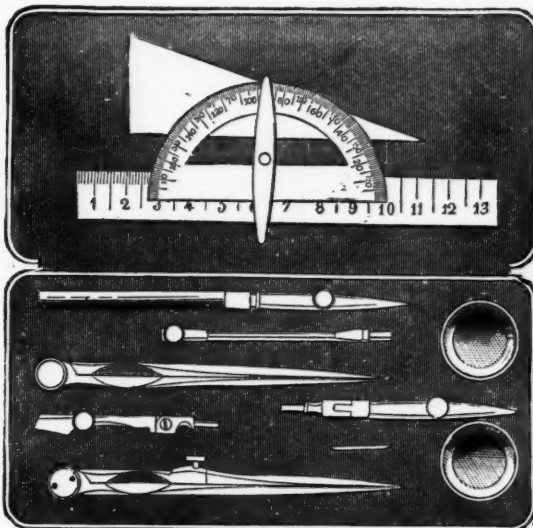
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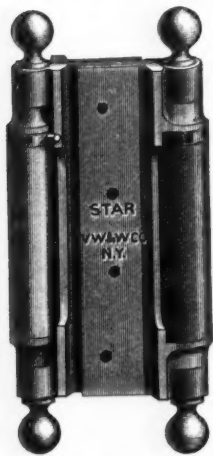
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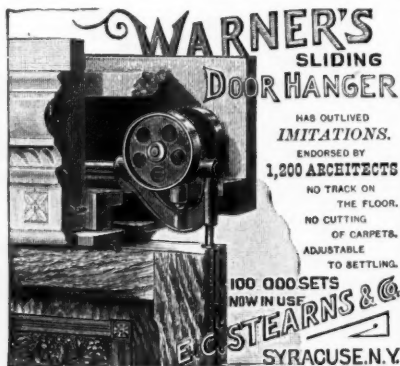
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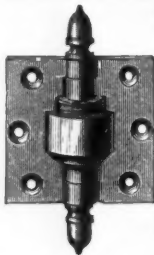
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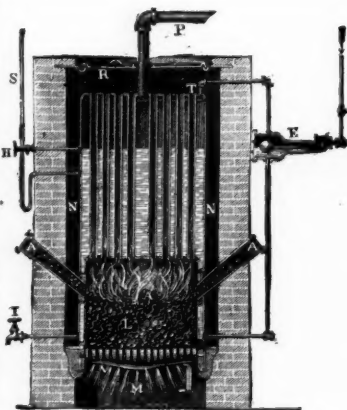
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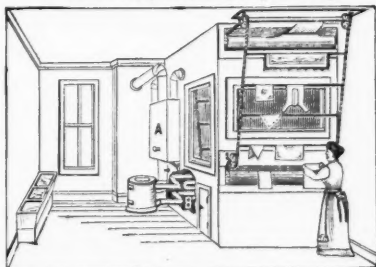
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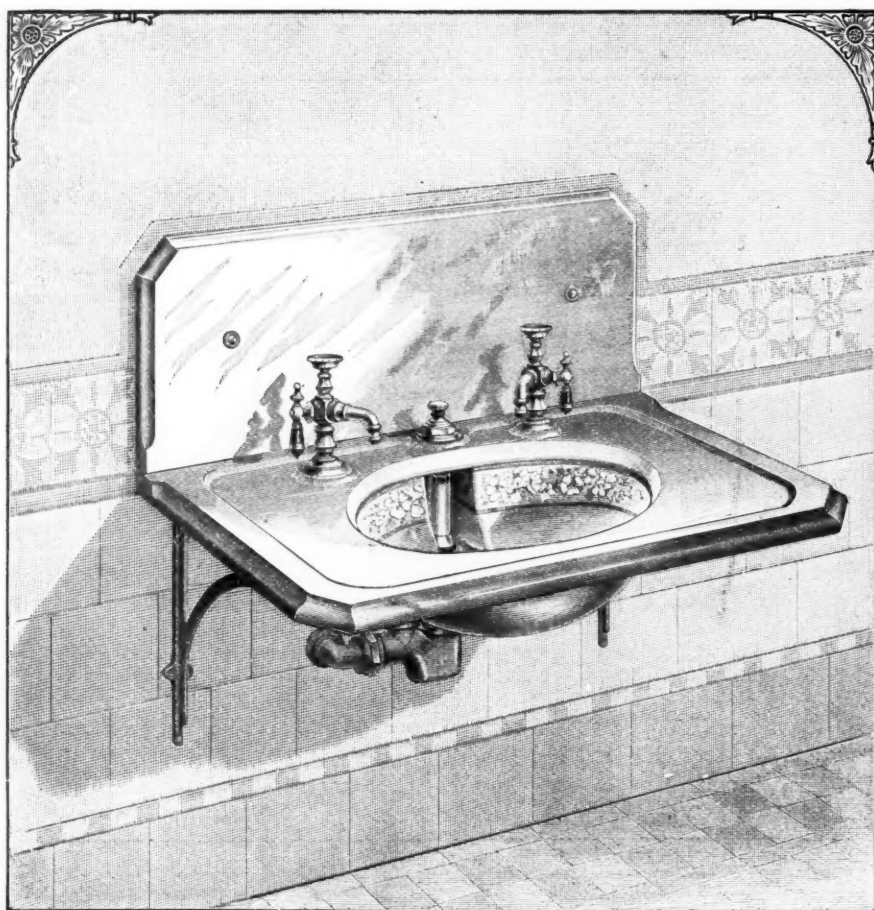


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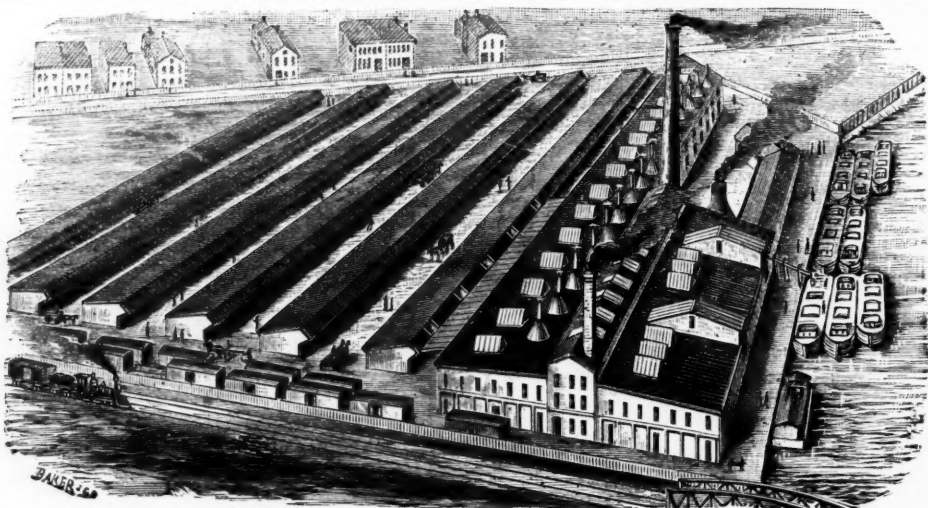
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THE INLAND ARCHITECT AND NEWS RECORD.

Vol. X.

No. 9

JANUARY, 1888.

THE INLAND ARCHITECT AND NEWS RECORD.

A Monthly Journal (with an Intermediate News Number) Devoted to

ARCHITECTURE,

Construction, Decoration and Furnishing

IN THE WEST.

TERMS: Regular number, \$3 a year; Photogravure edition, \$8 a year. Single copies: Regular number, 25c.; Photogravure edition (including 5 photogravures), 75c. Intermediate number 10c. Advance payment required.

L. MULLER, Jr., Manager. R. C. McLEAN, Managing Editor.
C. E. ILLSLEY, Associate Editor.

PUBLISHED BY THE INLAND PUBLISHING CO.
19 TRIBUNE BUILDING, CHICAGO, ILL.

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WITH this number we send to subscribers of the regular edition a specimen of our photogravure plates, with a view to introducing our photogravure edition to their notice. There are five of these plates in each number, the selections and photographs are made expressly for it. The price for the photogravure edition is \$8.

FOUR state associations of architects meet in the month of February. The Western New York State Association of Architects meets at Syracuse, February 7. The Architectural Association of Iowa meets (place not yet determined by the executive committee) February 8. The Association of Tennessee Architects meets at Memphis, February 16, and the Louisiana State Association of Architects meets at New Orleans, February 1.

THE National Association of Builders will hold its second annual meeting at Cincinnati, February 7. This association, made up, as it is, of the different builders' and traders' exchanges of the country, the conventions, composed of delegates from these, bring together each year a representative body of American builders. The Chicago Exchange, being the largest, sends ten delegates and one delegate at large; those of New York and Boston, coming next in size, send seven each. The work of the committees is already in a large measure completed, and their reports in the hands of the secretary, who has sent drafts of these to the different exchanges for consideration, so that their provisions may be thoroughly known to the delegates before they appear in convention. That this convention will show a large amount of work accomplished, and further outline much of vital importance to the building public, is a foregone conclusion, judging from the calibre of the men appointed to attend and execute the work.

MR. C. H. BLACKALL commences the publication, in a late number of the *American Architect*, of a series of notes of travel, dealing in the first and second articles with Chicago. He discovered what New Englanders who have never been west of New York State are sometimes slow to acknowledge: that the West has something more to show for its brief and tumultuous activity than a conquest of physical obstacles and a utilization of crude conditions. He saw that the almost incomparable progress in industry and material pursuits had not been wholly at the expense of the beauty and refinement which give to mere commodity a value which it could not otherwise possess. The West very frankly admits the superiority of the East in a nice discrimination in matters of art and taste. If there were no such superiority among a people reared under the shadows of Harvard and Yale, within sound of the voices of Lowell and Emerson, of Longfellow and Hawthorne, there would be small prospect of a great future in art for the people of the United States. Culture is something to be imbibed from surroundings; to be acquired unconsciously by a process of assimilation, at least in so far as culture is within the reach of the majority of a people. The crudeness and artistic poverty of the West has a very different import from the crudeness and artistic poverty of the denizens of the western Carolinas or of northern Georgia. The latter is a crudeness and spiritual numbness born of inertia and retrogression; the former is a crudeness made compulsory by the necessity of concentration of energy on things temporal, but is characterized by no spiritual numbness or artistic paralysis. The West is conscious, in large measure, of its

crudeness, and regards it as a deplorable but temporary necessity, and intends that its children shall enjoy and exercise a wider reach of all their faculties, and shall more and more learn to look upon "living" as the vocation, and "getting a living" as an avocation; and so it comes to pass that the western town, unable as yet to do more than support its mechanics, goes ever one step eastward for its teachers, its artists, its architects, and thus the artistic perception and refinement of the East is steadily extending its frontier and gaining new vantage ground for further extension. The architecture of the West has been built up under these conditions, and is crude in much; but in a day when reputable eastern architects find it profitable to establish a branch office in the West, and the western architect seeks a clientage east and west, the New England pilgrim is not in danger of being too severely shocked by the public or private architecture of a western town.

IN our December issue we commented on the suit for fees which was threatened against a Michigan school board by a firm of architects whose plans and specifications, prepared at the request of the board, the board subsequently refused to accept unless the architects filed a bond that the maximum cost should not exceed a specified sum and that the building—to be erected on contract by the lowest bidder—should manifest no defect at the end of a year's time. The architects, whose bill was something in excess of six hundred dollars, being refused payment, brought suit for three thousand dollars; and the school board, on consultation with a lawyer, were told that they had no legal grounds on which to make a fight, and were advised to effect a compromise. The result was a compromise by which the architects received for their services three hundred dollars and retained the plans and all rights therein in consideration of a withdrawal of the suit. Of course, this dictum has not the authority which attaches to the decision of a court; but it is valuable as indicating the probable outcome of a suit instituted on such grounds, and sustains the view which we took of the merits of the case. The attorney whom the school board consulted has recently been elected circuit judge for a term of six years, and is therefore, presumably, a lawyer of recognized ability, so that his opinion may afford guidance to our readers in a like condition of affairs.

WHILE most architects of standing in the profession frankly admit that architectural competitions are almost invariably a delusion and a snare, discreditable alike to the intelligence, honesty and reputation of those who take part in them, and are prompt in announcing that for themselves they eschew them altogether; yet when invited to advocate their total abolition, they reply that while individual owners might be convinced of the dangerous risk to themselves of intrusting their work to a competition architect, this method of selection would remain the only one practicable with corporations, boards of directors, and the like, where each party might have his own preference, and decline to yield. Apart from the fact that similar boards and societies have occasion to choose attorneys, engineers, physicians and other professional employés, and that they always do it without a competition, there are occasional instances to be found where the same plan is successfully pursued with architects, or would be did not other architects themselves interfere. An instance of the latter kind occurred some months ago in Birmingham, England, where a new city hall was to be erected, at an expense of \$500,000. The authorities, with a discretion which few on this side of the water would be disposed to question, selected Mr. Alfred Waterhouse, one of the foremost architects in England, as their architect, without

requesting him first to submit plans in full for their building in competition, and at the risk of not being paid for them, a request which such men are apt to refuse if made. Unfortunately, however, the appointment was subsequently rescinded, in consequence of the clamor raised by the "local profession," and at their demand there is to be a competition. An instance of a more creditable character is reported from the town of Châlons-sur-Marne, France, where a municipal architect is to be selected, and where, with the sagacity in practical administration which so often appears in French affairs, the mayor publishes an advertisement, stating explicitly that there will be no competition, but that candidates were invited to send evidences of their proficiency, "*honorabilité intelligence et aptitude*" with references to the works they have designed and superintended.

WILLOUGHBY J. EDBROOKE, the Chicago commissioner of buildings, has drafted an ordinance regulating the construction and management of theaters, which should be passed by the city council and rigidly enforced. This ordinance is printed on another page, so that the architects of the city may study its provisions and use their influence to secure its passage, and to give to readers everywhere a general idea of what can be and what cannot be accomplished in the line of securing greater safety in theater construction. We do not wish it understood that we think anything short of a perfectly fireproof theater perfect; but since the government does not seem disposed to make this compulsory, and managers maintain that a thoroughly fireproof building, isolated from other buildings, without offices or stores connected with it to assist in defraying the expenses of its maintenance, would not pay as an investment, it is eminently proper that the recommendations contained in Mr. Edbrooke's ordinance should be carried out. He asks for what he thinks he can get rather than what he believes the law should be.

EVIDENCES that there is not only a great lack of means by which the young aspirant to architectural honors may become properly educated, but that the draftsman is making great efforts to educate himself are equally prominent to those who look into the signs of the times architectural. Indeed, it seems as though the draftsman, despairing of receiving the aid advanced by government, as in France, or by apprenticeship to an architect, as in England, he of the United States has decided that to himself and his fellow craft must he look for all advancement. This is largely the fact, notwithstanding that departments of architecture are part of the curriculum of many of the leading colleges of the land. This impression, part false but in a degree true, has gone abroad that these schools are in too large a measure theoretical, and that the graduate is still a novice when he enters an architect's office for practical work. Be this as it may, the draftsmen have begun to work out their own salvation. In New York the Architectural League, though composed of the leading New York architects, stands first and foremost as an organization for practical advancement in architectural knowledge, though, perhaps, not so much to benefit itself as to disseminate knowledge among those outside. This association has just closed its third annual exhibit of architectural drawing, and has crowned its efforts by giving medal prizes in a competition between draftsmen under twenty-five years of age. In the West, the Chicago Architectural Sketch Club takes the lead, and is a practical and model sketch club, where well-laid plans are carried out to the general instruction and advancement of its members. Not only did the annual exhibit of the club's work during the

year show remarkable advancement, but its progressive spirit has led to the leasing of elegant rooms, in the Art Institute which when fitted up will form an attractive professional home for all the draftsmen in the city. Buffalo and Kansas City have their clubs, largely modeled on the Chicago club plan, and equally progressive and instructive to the members. Last, but not least, the students of the architectural department of the Massachusetts School of Technology are about to publish a journal, with the two-fold object of helping their school and of giving to the draftsmen of the country the best results in studied design. All this points to one thing, and that is that the American draftsman is progressive and is not content to wait till a beneficent providence places in his hands a means of obtaining a higher education, but he grasps the problem himself and by interchange of thought with his fellows seeks to acquire what would otherwise be denied him.

IT gives us genuine pleasure to herald the production of an architectural journal that will not only occupy a distinctively new field in this class of journalism, but be a benefit to those who have the wisdom (it will require very little cash) to subscribe for it. This is the *Technology Architectural Review*, published by the architectural department of the Massachusetts Institute of Technology. We have received some advance sheets of the illustrations to be included in the first number, which will appear shortly, with an outline of what the journal is expected to do, and the field it is hoped it will find a cordial reception in. One of this journal's chief aims will be to place the resources of classical design, as developed under the best instruction and criticism, before the draftsmen of this country. The subscription price to draftsman is \$2, but as the expense of publication will of necessity be much greater than this, those so inclined can pay as much more as they think the cause which it advocates may merit. The plates of the first number are all in photography. These, five in number, show photographs of work produced by students, and include third year competitive drawings for a fountain in a public park, fourth year competitive drawings for a casino, etc. The designs will be accompanied by full descriptions in the letterpress. As the journal in its entirety has not reached us, its typographical or literary excellence cannot be spoken of here, but judging from the superior character of the illustrative sheets we do not fear that in this it may not please the most critical. Its advent will doubtless not only be received with a certain amount of curiosity, and its review win the approval of architects and draftsmen, but its publication should have a strong influence upon architectural education in this country.

OUR *honest* contemporary, who created all things, and, with his maiden modesty, parades his mighty works on all possible and impossible occasions, claims, in his latest utterance, that out of the funds of his institution "the expenses were not only paid for the two conventions held in Chicago by the Western Association of Architects, but also the preliminary work of calling together the first convention." Those who were familiar with the initiative work of the first convention, do not need THE INLAND ARCHITECT to tell them who was the principal factor, and bore its full share of the expense. But aside from this, the claim of our *honest* contemporary is a gross injustice to the Chicago architects who so liberally contributed a fund for expenses of the first convention, a part of which fund was used to pay for some of this same preliminary work. We have neither time nor inclination for a controversy with a contemporary who makes such wild statements, and in the same breath poses as the champion of honesty and high morality.

Photography in Architecture.*

PART III.—BY FRED D. FOSS.

AT the conclusion of the last article the announcement was made that the next article would be devoted to the development of the exposed plates. Upon reflection I find there are several things requiring mention and explaining, that the readers may have a definite understanding of the manner of safely handling dry plates before and after their exposure, and before development. One thing should always be remembered, and that is, *the least trace of white light will fog a plate*. It may not, if the light is weak and the exposure of short duration, entirely ruin the plate, but it will greatly injure its printing qualities. An explanation of "fog" may not be amiss. Fog is the accepted term for a veiling or haziness that shows itself upon development, and is caused by several reasons, the principal ones being: white light entering the darkroom from some unobserved crack in the partition or walls, or around the cracks of the door; and right here let me say to those who may contemplate arranging a darkroom under some stairway or in some closet, that when you think you have it perfectly light-tight and secure, to go into the room and shut yourself up for at least half an hour, and the chances are you will find several cracks, either around the door or in the partitions, that allow enough white light to enter to fog any of the rapid brands of plates. If after half an hour's "solitary confinement" you discover no trace of white light, you may then regard your darkroom as safe so far as intruding light is concerned. The next danger to be guarded against is the developing light, which should be either gas, lamp or candle light, thoroughly protected by what is known to the trade as copper-flashed ruby. In using lamp or candle light, one thickness of glass is considered safe, but in using a strong flame of gas two thicknesses may be necessary; however, this is easily ascertained in the following manner: After thoroughly satisfying yourself that your darkroom is free from actinic light, place, in total darkness, a small-sized plate in the plate-holder, close the holder and light whatever medium you have selected to develop by, then draw the dark slide about one-quarter of its length from the holder, and expose it within eight inches of the ruby glass for not less than five minutes, and then proceed with the development as though it was an exposed negative. If the plate remains perfectly clear (showing plain clear glass upon being fixed), you may consider your light as safe and proceed in contentment; but if traces of fog are seen upon the exposed part of the plate, place a piece of red tissue paper over the ruby glass and again expose another plate. Repeat this operation until no haziness or fog is seen, and your light is then secure. Another cause of fog is imperfect plate-holders and cameras, which should be closely and carefully inspected for minute holes. Remember that the camera and plate-holders are to be used in strong daylight, and if any particle of white light is allowed to enter it will be quite disastrous to the plate. These minute holes in the cameras are usually found around the joining of the bellows and frame, but sometimes they appear in the bellows proper, and careful search must be made for them. The usual leak in the plate-holders is in the opening for the slide. This is remedied by pasting or gluing a narrow strip of black velvet, face down, upon the slit, and after it is dry cutting through it with a sharp knife. Care must be taken that none of the glue or paste enters or runs down the slide opening, as this would cause small lumps in the passageway, and result in the slide springing the frame of the holders enough to admit white light. One cannot be too careful about actinic rays striking the plate before you are ready to have it do so through the proper channel, i. e., the lens. After satisfying yourself that your darkroom, camera and plate-holders are safe, you can proceed to open the box of dry plates in the darkroom, illuminated by the developing light, care being taken not to expose the plates any longer than is necessary to the light. Take a plate from the box and carefully dust the film, which can easily be detected from the glass side by its mat or dead-looking surface, with a camel's hair brush, about two inches wide. This brush must not be used for any other purpose, and must not be allowed to come into contact with the hands or any article which will cause the brush to become greasy; then place the plate in the holder, with the film side toward the slide, carefully close the holder, and your slide is ready for the camera. Should you have a plate-holder of the "book" pattern, it will be unnecessary to remove the slides while inserting the plates; but this form of holder is not quite as convenient as the regular model, as there is a partition which is placed between the plates, and must be removed to insert both plates. This partition fits but one way, and you usually find about thirty wrong ways before striking the right one, especially if you happen to turn the partition in removing it from the holder. The usual form of holders, that take the plates film side out, are to be preferred. One important thing is not to forget to securely close your box of plates, and put it in a safe place before opening the darkroom door, as you might lay the charge of fog at the plate-maker's door.

(To be continued.)

* Continued from Vol. X, No. 7, page 73.

Venetian Byways.

BY IRVING K. FOND, C.E., ARCHITECT.



BYWAYS often surpass highways in point of picturesque interest, and in this regard Venetian byways are not at all behind their relatives on shore. Besides the magnificent churches and public and private palaces, which make Venice so noteworthy an object of study and admiration; besides the Grand Canal, whose entrance is grandly guarded, upon the one hand by the oddly-designed domes of *Della Salute* and the broad masses and low lines of the custom house, and upon the other hand by the crowded *Riva* and the royal gardens, back of which rise the royal palaces and, still more conspicuously, the famous Library and the Ducal palace, which are crowned in turn by the shining domes of St. Mark's and the lofty belfry of the Campanile; besides the attractively irregular groups of classic and romantic buildings which touch this Grand Canal every here and there along its entire course, and make a commonplace journey from *Della Salute* to the station, in a freight barge, by sunlight or by moonlight, like a voyage in dreamland; besides all this, the city abounds in picturesque quarters, with narrow, out of the way canals, leading up to secluded gardens or to market-places, where marble façades and bronze statues, on richly-decorated pedestals, look down upon the busy buyers of fruits and breadstuffs, and present an interesting study to the onlooker from abroad, to whom the scene is new, and who is seeking rather to satisfy the mind than the stomach. The outlying islands, too—some of them populous and lively, others of them deserted and dead—all contribute their share to the general attractiveness of the locality. One striking fact will fall with force on the artist who has spent any time and thought whatever in and out among the byways and highways of Venice, and that fact is this: Let him look where he may—about the *Piazza*, along the *Riva* and the *Guidecca*, into the out of the way squares and alleys, on the Grand Canal and into the most obscure waterway; upon the most elaborate palace or the most modest house—everything is intensely Venetian; each part proclaims the individuality and harmony of Venetian thought. No other city of Europe displays in so marked a degree this high artistic quality.

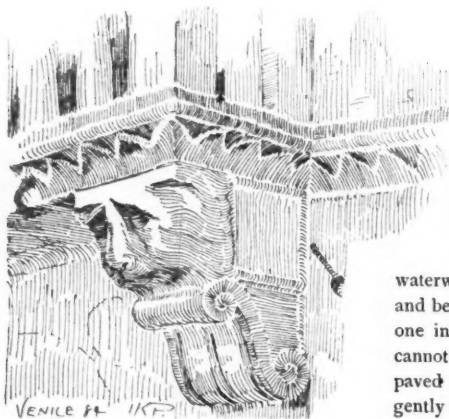
It is not my purpose, in this sketch, to institute any comparison between Venice and the continental cities, either in regard to methods or results, for I had in mind only going out into the byways, and picking up oddly characteristic bits of Venetian life and architecture; but, if we are in search of the picturesque, we must not overlook how grandly in its picturesque individuality Venice stands out against the background of contemporary art. As the student of art, in his wanderings about the city, loses himself more deeply in the twisted waterways and out of the way nooks, more strongly forced upon his mind is that vital quality of this picturesque individuality which so permeates the whole of Venetian art. And

if I do not intend to institute comparisons between Venice and other cities, neither do I intend to attempt a full explanation of the causes which begat this interesting and powerful condition of art in Venice. To the sympathetic student the reasons are very clear, and contain in themselves the key which may unlock the mysteries of all great art. There the position of the individual, working not unto himself alone, is most strongly manifested. There is set forth the complete exposition of the requirements of national art; of power gained by the union of forces; of the power and strength, not only of the ultimate achievement, but the power and inspiration given to each individual. One who is interested in the development of national art cannot do better than to study Venice, for her broad political power, her vast commercial interests, and her peculiar geographical situation, made her, above all other cities, the most advantageous ground for the solution of problems of this nature. Isolated from many of the disturbing and degenerating influences which beset cities of the mainland; alone, and in an out of the way corner of the sea, and yet controlling all the commerce of the seas, Venice was the focal point, toward which was drawn, and around which centered, all the wealth and power and grand ideas of the East, the South, the West. The world of commerce and of ideas was not only at her feet, it was hers. Her artists and architects felt this, and were the stronger, individually and collectively, for the feeling. They realized that Venice held a position in which she was unrivaled; they realized that she had needs that were unique that were felt and appreciated by no other city, and to minister most grandly to these

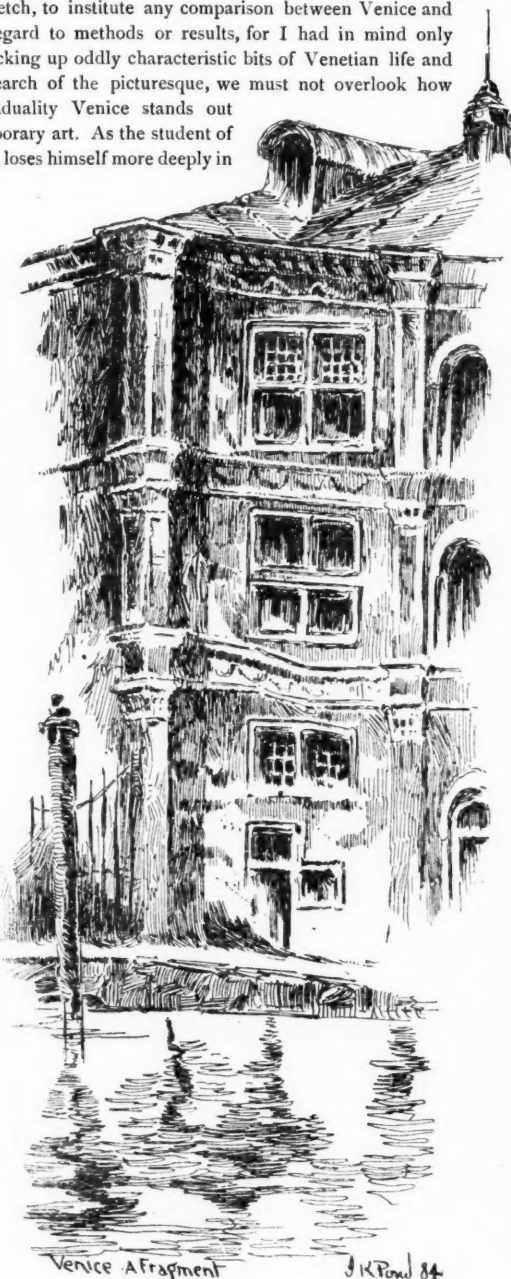
needs, they went at their work in a spirit of powerful harmony—powerful, because harmonious; harmonious, because governed by a single thought—the love they bore Venice. This is the key to national art.

But Venice is not always overpowering in its suggestion of great questions in art, for it touches the sensibilities of the artist on all sides. Its quiet

waterways induce almost to dream-life, and beget a feeling of rest which comes to one in no other city. Even the country cannot match the deep repose of this sea-paved city. The water rises and falls gently and forcibly, but always noiselessly,



VENICE #1



Venice A Fragment

J.K. Fond 84

in obedience to the action of the tides. The surface is now and then smooth as glass, and now and then broken with little ripples, which send the reflections of the poles and buildings and roofs in quivering confusion way across the broadest of the canals. On clear days, when there is nothing, not even a sound wave to disturb the sleep of the water, the buildings, as if wearied with restraint and enforced quiet, seem to change position as one looks from them to their image in the almost invisible water; seem to be performing a wonderful acrobatic feat of standing upright, or of hanging with foundations upward from the line of air-bubbles, which is like a string of pearls stretched along the water-line. The eye's repose is broken now and then by a flash of sunlight on the water or on the brilliantly-colored sails of some distant fishing boat returning from its early morning catch on the lagoons. A quiver is sent through the ear's repose now and then by the plash of the paddle, or by the quick, clear cry of warning from the gondolier, as he deftly guides his skiff around the sharp corner of a building as he enters or leaves a branch canal.

As all transportation is by gondola, or by boat of some sort, the gondolier is an important factor in Venetian life, and is a being worthy to stand in so unique a position. He is good natured, respectful, and accurate in his aim, as anyone must have noticed who has seen him shooting his long, dark skiff, like an arrow, in and out among the mass of houses and moving boats, and his strong, graceful movement lends much to the picturesqueness of the floating city. The gondolier is not generally of an inquisitive nature, and, if he is critical, he keeps such thoughts to himself, which is lucky for the sketchers of architectural models, for a talkative gondolier, looking over one's shoulder in a spirit of criticism, would not be an agreeable companion. One thing enjoyed by the sketcher in Venice above all other places, is the freedom from interruption in his work and the absence of necessity for restraining his temper, or of making explanations in unknown tongues, or of hearing advice and criticism from scores of loungers and ragged urchins who, from their remarks, must know a great deal about the technicalities of art (in

their own minds). But the gondolier is rarely critical, though often appreciative, and contents himself with keeping the boat in place, against the flowing tide, by a gentle, almost unnoticeable movement of the paddle, at various whiles giving interesting bits of gossip, or tradition, or history, relating to the objects in sight. The gondolier, like other Venetians, takes life easily, and if he happens to earn what he considers a day's ration before the noon hour, he does no more work that day, but spends the remaining hours with congenial companions in some dark, out of the way *Trattorie*. Venetian life today is simple to the verge of stupidity. I do not know that it is a crime on the part of humanity to live little lives in these old centers of power and influence, among these monuments of art and cul-

ture, but it is something which puzzles the brain of a philosopher to see what ingenuousness, ignorance, littleness and wickedness can thrive, and right on the battleground of great ideas; and in the south of Europe these battles have been so frequent, and so fiercely contested, that the very flowers which bloom upon these fields should have a rarer fragrance, for the blood which has fertilized the soil. This lack of vital force may be accounted for more easily in Venice than in many other cities, for it may well be that the spell of peace and restfulness, which is thrown about the visitor from away, holds in perpetual bonds the life inhabitant of the city.

But in spite of the restfulness, Venice gives to the visitor a clear insight into beauty, a deeper inspiration to do, a spirit impelling to potent activity, which seems to fly above the heads and wide of the hearts of the constant dwellers of the place.

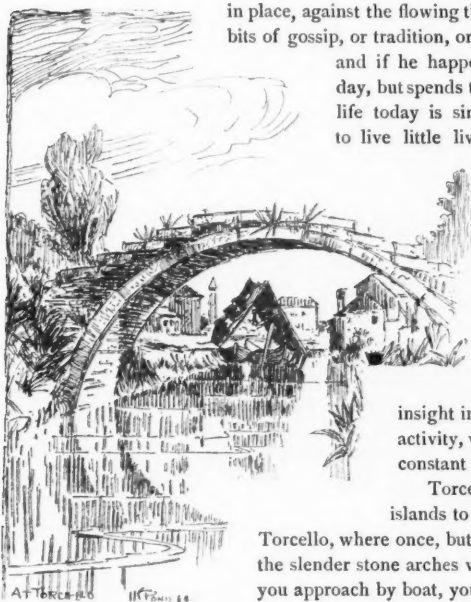
Torcello and Murano are perhaps the most interesting of the outlying islands to the searcher after the picturesque. There is almost no life now in

Torcello, where once, but very long ago, the eager multitudes used to surge in throngs over the slender stone arches which spanned the canals. At the end of one of these canals, as you approach by boat, you may see, framed by one of these light arches, and its reflection in the still water, a bit of landscape as peaceful in its sleep as is death itself. This bit of

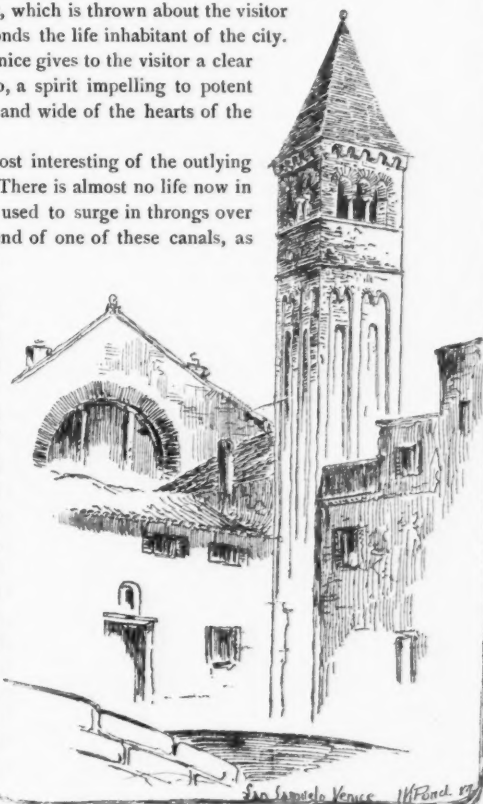
landscape contains everything which now remains of the former glory of the island, and everything of life it now holds—a few low huts near the ruins of former palaces, and the fairly well-preserved remains of three churches of imposing dimensions and curious construction, and over one of these structures more than twelve hundred years have dragged themselves out. I have sometimes questioned if ever, during the twelve hundred years of its existence, the church had been put to better uses than on the day I first saw it; and I have sometimes doubted if ever, in all those years, it had sheltered a more graceful figure, a more beautiful face and form than belonged to a little Italian peasant maiden, who bent over a washtub in the sunshine which fell in a shower of gold into the church's porch, and who hung out the glistening linen on lines stretched from column to column of the ancient arcade. I never quite understood why that scene impressed me as it did, for it was an hour or so before lunch time, and my companions and myself had made an early morning start, and had been sketching busily all the forenoon. It may have been this one sparkling bit of life, amid all those relics of a dead past, touching me as sometimes we are touched by the sight of a rare, frail flower blooming alone on the rocky breast of a cliff; or it may have been the incongruity of the things—clean linen among those islanders! and that will strike anyone who has escaped from the beggars of Murano, who follow your boat as far as they can, as you skirt the shores of their island on your way back to Venice and to rest.



BOATYARD VENICE 1887. ch. 49



AT TORCELLO 1887. ch. 49



SAN SAMUELE VENICE 1887. ch. 49

The Evolution of an American Style.

BY ALLEN B. POND, ARCHITECT.

A CORRESPONDENT of the *American Architect*, commenting on the designs submitted for the Lick memorial, asks why it is that designers cannot emulate the example of musical composers, taking a theme and developing it harmoniously and never losing sight of the main object. He queries whether it may not be a mistake that each American architect does not carefully consider what his strongest leaning is and keep to some one good style, irrespective of his neighbors. It seems very clear that no man is going to do any really first-class creative work until he does find out what his best hold is and work out an expression of his own individuality in his creations. And it is equally clear that we need never look for unity in the work of a man who had no singleness of conception when he entered upon the formal expression of his idea. That every man should if possible find his dominant motive and develop his designs with singleness of idea, is much more clear than that he should be constrained to seek the expression of that dominant motive through the medium of some *recognized* style, "Classic, Renaissance, Gothic, or whatever it may be." If we attempt to get at the essence of the idea sought to be conveyed by the term "an architectural style," we shall be carried back in our thought to a time when a great number of individuals were striving, each in his own way, to solve a common problem, the conditions of which were set by the age in which they worked and by the climate, customs and uses to be satisfied. Certainly, in the time that elapsed before the work of all these individuals had assumed the common form which came to be called a distinctive style, there was a wide diversity in the conception of the various architects, each of whom may easily have been following his own best light and have been producing works characterized by unity of idea and harmonious subordination of the parts to the pervading theme. The style only came into being when out of this mass of honest and creditable work the exigencies of place, time and purpose had made their natural selection and had stamped with approval a result which was to be credited to no man, but rather to the crystallization into a recognized style of the converging efforts of many single individuals.

Moreover, generally speaking, the *raison d'être* of any particular style vanishes with the change or disappearance of those conditions which in the first place called it into being; and its use under different conditions, in the fulfillment of different purposes, will almost inevitably be arbitrary and unnatural, out of joint with the times and seasons. It may well be that "earth proudly wears the Parthenon as the best gem upon her zone"; but place the Parthenon on an Illinois prairie or in the public square of a Missouri town, and time and place, rhyme and reason, alike cry out at the wretched taste that perpetuates such an anachronism, so incongruous a misappropriation of a thing in itself good and beautiful. The requirements of American life demand of the architect buildings that shall answer new purposes and meet unwonted uses under conditions never before presented to the craft. The conditions of this American life, which alone must ultimately decide upon the forms which shall best meet the new occasion, are themselves unsettled and in process of determination. Today it is impossible for even the most sympathetic mind to gain a clear and unflinching intimation of the subtle harmony which is to be wrought out from the heterogeneous elements of our national life. But enough can be already felt of the spirit and trend of our national feeling, enough is already known of the influences of place and climate and purpose to make it quite certain that none of the existent formulated styles can be reproduced in their entirety on our soil or satisfy, without wide departure from their established forms, the conditions and needs of American life. He who attempts with pedantic exactitude to reproduce in American architecture the feeling and poems of a remote and unrelated Classic or Renaissance or Gothic architecture, clapping their unyielding forms on his building with cast-iron indifference to fitness—if only he may keep his historic style pure—is foredoomed to failure; for failure must result from an attempt to graft roses on to peach trees or make an inflexible round covering fit a cube. Spencer, the realist, and Emerson, the idealist, each affirm that the nature of the inner man determines the outer, visible man of flesh—that the spirit molds the body. And most supremely must this hold true of architecture. The plan, the purpose, the inner soul of the building, determine the exterior, its form and features; and, if the form belies the plan, it is a freak, a monstrosity, and beauty is impossible when there is such a warfare of the members with their uses. I took note recently of a Gothic church with a façade having buttresses at either side and broken up by two buttresses rising the whole height of the gable, and giving to the front what the architect no doubt thought was a pleasing distribution of parts; though the buttresses neither received any thrust, nor sustained any truss, nor carried a tower or spire, nor denoted an interior partition. They were simply clumsy attempts to reproduce a

Gothic façade, and the parts thus ostensibly indicated had no existence in fact. The plan was an unbroken rectangle, the side walls carried the trusses, and the buttresses were excrescences, discordant and unseemly. In a similar way the Romans erected arches to do the work and stuck useless lintels over them, resting on useless columns; and nature has in numerous instances shown her respect for their art (?) by pruning away the excrescences and leaving the arches intact.

The American architect of today who would be something other than a contriver of freaks and misfits, must so plan his building that it shall most perfectly fulfill the requirements imposed by the needs of today. To this plan let him fit its appropriate garment; or better, let him discern the fit and proper form which grows naturally out of his plan. Why build a buttress where there is no thrust? Why break up a wall surface into artificial parts if the presumptive partition is a surface sham and corresponds to no actuality in the arrangement of the plan? Such a method of grasping after beauty is not art, for its very basis is an attempt to deceive; whereas art rests in fidelity to the truth and is the enemy of artifice. How then shall the architect avoid monotony and flatness when his plan necessitates a straight wall? By a proper proportioning and disposal of openings; by a proper treatment of corners and angles; by an artistic handling of the requisite moldings and string courses; by an intelligent use of the roof; and especially, withal, by making the most of the possibilities inherent in his materials. A substitution of fictitious appearances for integral verities cannot be permanent, for time unerring destroys the freak and the abnormal thing; and only the normal creation, that which is in harmony with itself and its environment and which fulfills the law of the type, prevails against the destructive forces of nature and persists.

The American architect who wishes to build a perfect building for what purpose soever must first perfect his plan and make the inner soul of his building conform to the law of its being, adequate to its function and inspired by the life it is to serve. The essential features of this inner soul of the building, once clearly comprehended, will of themselves dictate the fitting garment in which they are to be bodied forth. If the architect seeks to manifest in visible forms this inner soul with fidelity to its function, he will work with singleness of purpose, will be true to his theme through all its variations and enlargements, and, so far as he is successful in his effort, his work will be harmonious in its parts, the consistent expression of an idea—a work of art. The creation may not be Classic; it may not be Gothic; it may not be susceptible of classification in any recognized style; but it is none the less true art, for true art is the consistent embodiment of an ideal that has taken up into itself the essential truth of the real. In the proportion in which the American architect who is thus true to his art sympathizes with and enters into the spirit of the life around him, he is not merely producing works of art as an isolated individual, but is working along one of the converging lines whose meeting shall in due time bring forth the American architectural type or style, provided only there comes to be in the fullness of time a truly distinctive national spirit, the outgrowth of a homogeneous national life.

Two Important Papers.

AT the meeting of the Polytechnic Section of the American Institute, held December 8, L. Duvinage, in a paper of which this is an abstract, said that the increased quantity and quality of work that goes out of the modern machine shop was due to the skillful use of solid emery wheels. He said that a grain of sand from the common grindstone magnified would look like a cobblestone, a fracture of which shows an obtuse angle, whereas a grain of corundum or emery would look like a rhomboid, always breaking with a square or concave fracture. No matter how much it is worn down in use it does not lose its sharpness; hence it is evident that the grindstone rubs or grinds and heats the work brought in contact with, while the corundum or emery wheel, with its sharp, angular grit, cuts like a file or circular saw. There are two general classes of emery wheels in the market; one class of wheels has the grains of emery joined and consolidated by a pitchy material, as rubber, linseed oil, shellac, etc. These must run at a high speed to burn out the cementing material by friction, loosening the worn-out grains, and thus revealing new cutting angles. These are non-porous wheels. Truing up this class of wheels is done with a diamond tool. The other class consists of two kinds, one made by mixing the emery with a mineral cement and water into a paste, which will harden and bind the grains together; the other kind by mixing the emery with a mineral flux or clay, molding into shape and burning in a muffle at a high temperature. These are porous wheels in which the grains of emery are held together by matter having affinity therefor. This class of wheels, unlike the grindstone, has sharp grains of emery bedded together among matter which, in some cases, is as hard and sharp as the emery itself. Such wheels cut very greedily, and do not need to be run at any particular speed. The dresser, made of hardened steel picks, is the proper tool for truing up this class of wheels. Manufacturers in metal goods aiming in reducing the cost of production, would do well to look into the adaptability of the solid emery wheels or rotary file and other labor-saving machinery before deciding on reducing wages of labor.

Col. Richard T. Auchmuty, the founder of the New York trade schools, on First avenue, Sixty-seventh and Sixty-eighth streets, also read a paper. The subject was "An American Apprentice System." After referring to

the decay of the old apprentice system, caused by the subdivision of labor and the inability of the master mechanic to bestow much personal care on the apprentice, it was argued that the only method by which it was possible to train American mechanics who could compete with foreign workmen, was a combination of the trade school with real work. The trade school first to gain skill and to acquire what is now in danger of being forgotten, the knowledge of the science on which a trade is based, then real work to gain speed of execution and skill. To apply, in short, the same system of education to the trades as is now followed in the professions. Col. Auchmuty maintained that this was "no paper plan, devised in a study," but it was the result of the experience gained while instructing over one thousand young men at the New York trade schools, many of whom were now earning three or four dollars per day, and some of whom were master mechanics. Excellent specimens of plumbing work, of wood carving and stonemasonry were exhibited, the result of one season's instruction. Attention was also called to a large west side apartment house, the brickwork of which was done almost entirely by trade school graduates. Now that it has been demonstrated that trade schools could teach the American lad how to work, it rested with the master mechanics to give him employment. Two associations, the master plumbers and the silversmiths, had asserted their right to do so, notwithstanding trade union rules to the contrary. The opposition of the journeymen, most of whom were of foreign birth, to allowing boys to learn the trades, was attributable, Col. Auchmuty stated, to their dread of competition and over-production. This was a groundless fear. The labor of young men who had been taught how to work would, if properly utilized, lowering the cost of the product without lowering wages. Over-production came from high prices, not from people having too much. The tendency of trade union regulations in regard to production was to enhance prices, contract the market, and make the poor poorer.

Chicago's New Water Tunnel.

MAYOR ROCHE and Commissioner Swift, of Chicago, opened bids on November 16 for the new eight-foot water tunnel. They were as follows: E. Earnshaw, \$823,161; Angus & Robinson, \$1,145,175; A. Onderdonk, \$748,500; McAdams & Amberg, \$1,107,160; Fitz-Simons & Connell, \$887,490; M. P. Garrity, \$800,628. Each bid was accompanied with a certified check for \$50,000. Mr. Onderdonk received the contract.

Commissioner Swift opened bids at the same time for the crib break-water, the bids being as follows: Chicago Dredging and Dock Company, \$129,000; Fitz-Simons & Connell, \$119,000; H. B. Herr, \$119,000. This contract was awarded to Fitz-Simons & Connell, of Chicago.

Some surprise was expressed, says the *Chicago Tribune*, among the unsuccessful bidders that a New York man, who appeared to be unknown to them, should have carried off the contract. The same feeling was expressed to some extent about the city hall on account of the high standing of the Chicago contractors who put in bids. Fitz-Simons & Connell are especially well known. Among their most noteworthy undertakings are the Lincoln Park shore protection, the piling and dredging for Lake and Rush street bridges, and that for the new Dearborn street bridge, and the shore inlet to the North Side Waterworks. Angus & Robinson are substantially the firm of Robinson & Minor, who built the Hyde Park Waterworks tunnel, five thousand feet in length, and the other bidders are well known. The successful bidder is known elsewhere better than here. Andrew Onderdonk is a civil engineer of experience, who has his headquarters at New York City. He has done his most noteworthy work in Canada, California, and British North America, and is well known to the heavy financiers and leading engineers of those parts of the country. One of his biggest undertakings was the building of the western three hundred and fifty miles of the Canadian Pacific from the Rocky Mountains to the Pacific Ocean. There were over forty tunnels on this part of the line, and his work was considered by the best authorities as ranking with the most difficult and scientific ever done on this continent. One of his contracts with the Canadian Pacific amounted to \$9,000,000, and the smaller ones aggregated nearly as much. He built the harbor improvements of San Francisco, including the docks, ferry slips, and stone sea wall in deep water, and is an expert in submarine work. Financially he is entirely responsible, and his past work is a guarantee of his ability to successfully carry the new tunnel to completion.

The tunnel, according to the specifications, is to commence at some point in the Lake Park, to be located by the city engineer, and extend four miles in an easterly direction, the shore end to be made in a southerly or westerly direction, as may be determined by the commissioner of public works. The bottom of the inside surface of the western end of the tunnel shall not be less than eighty feet below city datum, and may have an incline upward of one foot per mile to the eastern terminus. A shaft is provided for in the Lake Park, and another at the extreme east end of the tunnel, with such intermediate working shafts as may be determined upon. The several shafts are to be ten feet in diameter, lined with brick masonry, not less than sixteen inches in diameter. The clear width of the tunnel is to be eight feet, and the clear height eight feet two inches, with the top and bottom arches semicircles. The tunnel is to be lined with brick masonry thirteen inches thick, the bricks being laid longitudinally with the tunnel, the edges toward the center. Mr. Artingstall states that the ground through which the tunnel is to extend is believed to be hard clay, but the contractor must take the work at his own risk and guard himself against quicksand or other danger. It was also provided in the specification that the commissioner of public works may elect to stop the tunnel at two and a half miles from the shore or continue it the full four miles. Should the tunnel only be extended two and a half miles the work must be completed within forty-two months after the contract is signed, and if the tunnel is extended to the four-mile limit, that part of the work must progress at the rate of 1,800 feet per annum from each working face. Bids were also received and considered for an iron tunnel, but in this case full drawings and specifications accompanied the bid. This provision was put in at the request of Engineer Onderdonk, of New York, presuming that this might be the means of cheapening the expense a great many thousand dollars.

A Chicago Theater Ordinance.

COMMISSIONER EDBROOKE, of the Chicago Building Department, has prepared the following theater ordinance, which will be shortly presented to the city council:

It shall be unlawful for any owner, agent, lessee or manager of any theater, opera house, public hall or other place of amusement, within the city of Chicago, having a stage, and with or without scenery, wherein people congregate for amusement, to sell, or give, or to permit or allow any other person or persons to sell or give away for any one performance a greater number of admission tickets than the number allowed by the commissioner of buildings and fire marshal for the regular seating and standing audience of such theater, opera house, hall or other place of amusement.

Ample and commodious aisles, lobbies, foyers, passage-ways and stairways without any obstruction whatever shall be provided under the direction of the commissioner of buildings and fire marshal in all such theaters, opera houses, public halls, or other places of amusement within the city of Chicago, and the space upon each floor, and in each gallery, after due allowance has been made for such aisles, lobbies, foyers, passage-ways and stairways, may be used for permanent seating space, or for seating and standing space together for the audience, and as follows, viz: The whole space so reserved for seating may be seated with permanent and fixed seats or chairs, or a portion of such space, not to exceed in any one case 500 square feet of floor surface, may be left unseated for a standing audience in each theater, opera house, public hall or other place of amusement, or in such proportion as the said commissioner of buildings and fire marshal shall in each particular case, and from time to time determine, allowing in no case a less space for each standing person than five square feet of floor surface.

A suitable and strong open railing shall extend along the lines of each aisle, separating the aisles from such standing space upon each floor and gallery, with such ingress and egress openings through such railing only as shall be allowed by said commissioner of buildings and fire marshal. Such standing space shall in no case be in front of or between any seat or chair and the stage, but must be back of the extreme seats or chairs in each and every case. Every person entering such theater, opera house, public hall or other place of amusement shall hold a regular admission ticket entitling him or her to a seat, chair or standing space, and every such person shall occupy such seat, chair or space assigned to them, and shall not stand in or occupy or in any other way obstruct any aisle, stairway or passage-way in any theater, opera house, public hall or other place of amusement.

It shall be unlawful for any agent, lessee or manager of any theater, opera house, public hall or other place of amusement to sell or give away, or permit or allow any other person or persons to sell or give away admission tickets for any performance, or to open to the public any theater, opera house, public hall or other place of amusement without first obtaining a license from the city collector, and no such license shall be granted by said city collector until such agent, lessee or manager shall first exhibit to said city collector a diagram of such theater, opera house, public hall, or other place of amusement, bearing the certificates and signatures of the commissioner of buildings and fire marshal. Such diagram shall show accurately each floor and gallery, and the number of persons that can be accommodated by seat, chair or standing space on each floor or gallery; the number of aisles, stairways, and exits, and their locations. One or more of such diagrams shall be framed and placed in such locality and in such numbers upon each floor and gallery of each theater, opera house, public hall, or other place of amusement as shall be ordered by said commissioner of buildings and fire marshal. The said commissioner or fire marshal shall have the right to close and keep closed any theater, opera house, public hall, or other place of amusement open to the public or operating without a license from the city collector, until such license has been procured, and in such manner and form as hereinafter prescribed.

The lessee, owner, manager or agent of any theater, opera house, public hall or other place of amusement, either one or each one of them, shall be liable to a fine of \$5 for each and every ticket sold or given away for any one performance, or for each and every person allowed as spectator to enter such theater, opera house, public hall or other place of amusement beyond that number allowed by said commissioner of buildings and fire marshal, and as shown upon the diagrams of each floor and gallery, and a further fine of \$100 for opening such place of amusement without a license, and a still further fine of \$100 in each and every case for allowing or permitting obstruction of whatever kind or nature by persons, camp stools, chairs or otherwise, in any aisle, passage-way, stairway, foyer or lobby upon any floor or gallery, in any box or balcony, during the time such theater, opera house, public hall or other place of amusement is open to the public. The above fines in each case shall be for the first offense, and double the amount of such fines in each case for the second offense and each subsequent offense.

The ordinance seems most acceptable and will in all probability be passed by the city council.

Safety of Foreign Theaters.

RECENT investigations appear to show that in respect to fire precautions, foreign theaters are not much better than our own. This is not saying very much for our own, but it indicates the common failings which make human nature much the same the world over, whatever the language, climate or sky. With only three exceptions, the theaters of Berlin are pronounced wholly unsafe as to fire. One place is named where "a perfect labyrinth of narrow passages and crooked corridors" must be traversed to reach the auditorium, and another with exits so faulty that in ordinary circumstances it takes fully twenty minutes to empty the house. The Berlin press is much excited over these revelations. A London writer proposes to compel the managers of theaters to appear before the curtain in advance of each performance and instruct the assembled audience how to escape in case of fire or alarm of fire. In some American theaters there is printed on the back of the programme a plan of the building, showing all the exits and how to reach them. These would be available, however, chiefly for those occupying the outer rows of seats. Those nearer the center would be apt to suffocate before they could climb over the intervening seats and barriers.

The Status of Foreign Architects.

AMERICAN architects are somewhat given to pessimistic reflections on the low estate of their profession in this country, the indignities, neglect and impositions everywhere encountered, most of which is undeniably true; and they look regretfully across the seas to the supposed honors and emoluments of their brethren in foreign lands. But there is as deep discontent among architects there as here, and for substantially the same reasons, a refusal of the general public to accord to them that high regard, confidence and adequate remuneration which are enjoyed by the other professions. The last volume of proceedings of the *Société Académique d'Architecture*, of Lyons, France, opens with a preface lamenting that "the architectural profession, once held everywhere in honor, now witnesses a daily diminution of that high consideration which is its due. This humiliation results from various causes, and must be checked by the dissemination of a truer and juster public sentiment." This may be accomplished by the union in an architectural society of all honorable practitioners, zealous for the dignity of their profession, true to its principles, determined to prevent ignorance and incapacity from usurping the esteem due to talent, and earnestly cultivating sentiments of fraternity and goodwill.

A Few Axioms About Architects.

AN axiom is a self-evident truth. Valuable and interesting collections of axioms relating to mathematics and other sciences have been made; but those relating to architects seem to have been generally overlooked. We present a few samples, just to show the richness of this field.

Architects who are able to command a good price always get it, like other people.

Architects who work for small pay do so not from pure benevolence, as some pretend, nor from anything else that is pure, save pure inability to get more—i. e., out of the owner.

They often do get more, however, a good deal more, without the owner's knowledge, though it all comes out of his pocket at last.

It always pays in the end to employ first-class talent. As to architects it pays in the beginning as well.

The loudest complaints about architects are from those who employ the cheap kind, and the cheaper the kind the worse the complaint. Those who pay least for their architecture pay the most for what they get.

It is poor economy that begins on the architect who makes your plan. Get a thoroughly good plan to start with and your house will have value even if poorly built; but when you set out with a cheap, ill-designed plan you will never get a decent house from it, no matter how much you may spend—absolutely never! It would be money in your pocket to start with a good plan if it cost ten or twenty per cent, rather than build from a poor plan which you could get for nothing.

There is nothing more stupid than to haggle and dicker with a good architect about his commission. Get the best man and pay his price. It is one of the very smallest items in the cost of a house at most, so trifling that could you save it all you would not be much ahead; and as you must pay something, the possible saving is too insignificant for you to spend your time disputing over it. Then think of the risk you run in imperiling your whole improvement when you buy cheap architecture from a Chatham street representative of the profession.

Corrosion of Lead Roofing.

LEAD is usually considered indestructible by atmospheric influences, whence it has been extensively used abroad for roofing, especially on public buildings. It is now found subject to rapid corrosion under certain circumstances, as when placed in contact with oak sheathing, particularly if unseasoned. This is ascribed to organic acids in the oak, and it is now customary to interpose some covering of wood or paper between it and the lead.

The handsome flèche of the Notre Dame, at Paris, was finished in 1864, under the care of Viollet-Leduc, architect. Its covering and ornaments are of lead. These have become so impaired already by corrosion as to need extensive restorations. The sheathing is of oak, coated with paint. The destruction appears chiefly in places where the lead has been nailed or soldered without proper allowance for expansion and contraction (strange that so eminent an architect as Viollet-Leduc should have overlooked that!), and where the metal is in such close contact with the wood as to leave no room for air to pass between. The corrosion appears on the under surfaces of the lead, where it touches the wood, and is most marked on the south and southeastern exposures, also wherever the lead has been hammered down to fit into moldings. Where the lead is free from the wood and there are apertures for the passage of air out and in, it is uninjured. The lesson seems to be that ventilation is as serviceable to preserve lead construction as wood.

Our Illustrations.

City Hall, Hamilton, Ont.; James Balfour, architect.

Residence for A. B. Dewey, Chicago; William W. Clay, architect.

Bank and office building, Minneapolis, Minn.; L. S. Buffington, architect.

House at Grand Rapids, Mich.; Frank M. Snyder, designer and delineator.

Residence of Mr. Barber, Lake View, Ill.; Gilbert & Taylor, architects, St. Paul, Minn.

Wesleyan male college, Winchester, Ky.; Crapsey & Brown, architects, Cincinnati, Ohio.

Sketch design of residence for George H. Kettelle, Lake View, Ill.; George Beaumont, architect, Chicago; cost \$6,500.

Residence of D. H. Tolman, Chicago; Jenney & Otis, architects; built of Vert Island brownstone; red tile roof, and finished entirely in hardwood; cost, with stable, \$25,000.

Englewood high school, Englewood, Ill.; M. L. Beers, architect, Chicago. Is building of pressed brick, with terra-cotta trimmings and black slate roof; interior is finished throughout in sycamore, and is divided into school rooms, laboratory, science rooms, offices for board of education, etc.

PHOTOGRAPHURE PLATES.

(Issued only to subscribers for the Photographure edition.)

Residence for S. S. Beman, Chicago; S. S. Beman, architect.

Residence of General Ryan, Cincinnati, Ohio; H. E. Siter, architect.

Residence of Wm. R. Linn, 2709 Michigan avenue; Burnham & Root, architects.

Residence of W. E. Hale, Chicago, corner Drexel Boulevard and Forty-sixth street; Burnham & Root, architects.

Residence for Prof. George E. McLean, Minneapolis, Minn.; Joralemon & Ferrin, architects. The house is of native graystone and shingles; color, yellow, with white trimmings; interior finish in colonial; parlor and hall white and gold, library and dining room in natural cherry.

Illinois State Association of Architects.

THE regular monthly meeting of the Illinois State Association of Architects was held in the assembly rooms of the association, Saturday, January 7, 1888, at 1 P.M., President Samuel A. Treat in the chair.

There were present Architects Samuel A. Treat, Robert C. Berlin, C. M. Palmer, O. J. Pierce, Normand S. Patton, L. J. Schaub, George Beaumont, Clarence L. Stiles, Smith M. Randolph, Clinton J. Warren, A. Druiding, Alfred Smith, J. L. Silsbee and W. W. Clay.

Immediately on calling the meeting to order, President Treat announced the association would go into executive session, and the reporters retired while business, presumably of vital interest to the association, occupied the attention of the fourteen architects present until four o'clock.

Upon the reopening of the session, W. W. Clay, on behalf of the committee appointed to report on a definite plan for the establishment of a uniform percentage for residence work, submitted a report in the form of an agreement to be signed by members of the association, in which 7 per cent should be agreed upon as a substitute of the present recognized fee of 5 per cent for residence work. The reasons given in the report were as follows:

WHEREAS, It is a matter of demonstration that the commission of 5 per cent does not, under present conditions, compensate architects for their services in connection with individual dwellings—the growth of popular taste and architectural skill having led to such a number and complexity of drawings; that for these drawings to be properly studied the commission of 3½ per cent does not remunerate the architects for this part of the service; and the increased individuality and complexity having also greatly added to the cost of superintending dwelling houses, 1½ per cent is not an adequate fee for this part of the service; it is true, therefore, that the total fee of 5 per cent is not in connection with this work a sufficient charge.

Mr. Clay supplemented the report by advocating the adoption of the recommendations in it, and said:

W. W. Clay: At some time some precedent must be established for work which is now a dead loss to architects, and they do great quantities of it under the present practice. I think it is honest of purpose, at least it is well founded, and should be tried, and the 7 per cent, in my opinion, will be recognized. It is a proper fee and the service is well worth the money. This agreement is signed by fourteen architects, every one a responsible person. Of course, I do not count myself as among the number, my own making fifteenth signature to it. I hope it will receive more responsible names from those who are present. Of course, I know that everyone feels a kind of uncertainty about it. You don't know how you are going to come out, but I feel so confident about it that I am willing to risk the little business I have in making the attempt to correct this injustice. I don't care to be looked upon as posing for a martyr if I don't succeed, but I do feel determined to make an honorable effort to establish justice.

N. S. Patton: Mr. President, I would ask for information whether this association has adopted any rates?

The President: We have only recommended the adoption of the rate adopted by the American Institute of Architects and the Western Association of Architects, 5 per cent. As one of the committee, I have circulated this paper. There are one or two whom I approached who have not yet decided whether they will sign or not. With them and additional names which we expect to get, I think we will have no difficulty in increasing the number to twenty. I think we will get ten more signatures. I understand the condition on which the signatures were to be obtained was that it should not be considered binding unless twenty reputable architects were secured to the agreement. I think there is no doubt but twenty members will sign.

Mr. Clay: I understand the original proposition was to secure the signatures of fifteen members. I don't know but there are some who would not be satisfied with thirty. I am quite positive twenty signatures will be obtained, and that number it was understood would make the agreement of force.

Mr. Patton: Mr. President, it seems to me that a movement like this, which will be a benefit to every architect in the country, because it is a higher and more adequate price, and with a general level charge it is easier for every architect to get it in his own business. To make this benefit as wide as possible, I do not see why we should not, as a state association, adopt this increase. In adopting it there is nothing compulsory. I therefore move that this association recommend that 7 per cent as a proper commission to be charged in cases of individual houses. In making this motion I would move further that it be laid upon the table until the next meeting, as by that time it can be pretty generally considered. I think it would be wise for this association to back up this step to a proper remuneration for service by its influence.

Mr. Clay: I second the motion.

The President: It is moved that this state association recommend the charge for individual dwellings be placed at 7 per cent. Are you ready for the question? The motion prevailed.

Mr. Clay: Mr. President, I would like to inquire, in adopting this recommendation, how is it to be known if a man who signs this paper is unfaithful to his agreement?

The President: A committee of three is to be appointed, who will have this matter in their charge.

C. L. Stiles: What will be done with a man who violates his agreement?

The President: It is to be hoped that every man who signs this agreement will have self-respect enough to live up to his word. There is no other law that I know of that provides for his punishment.

Mr. Clay: I think it is safe to assume that, when it is understood as well as 5 per cent, there need be no pledge, any more than there is for the 5 per cent, which is a matter of precedent. Of course, any such man will see insofar as he does dishonor his agreement he will in a measure injure himself by doing so, and men are not likely to work their own financial injury when they can help it. I think if the resolution is likely to be disastrous we will find it out by January next. I am of the opinion that the 7 per cent charge will be as fully used in another year as the 5 per cent is now. After some further discussion of the subject, the session was adjourned.

Association Notes.

AMERICAN INSTITUTE OF ARCHITECTS.—A. J. Bloor, 18 Broadway, New York, secretary.

WESTERN ASSOCIATION OF ARCHITECTS.—Fifth annual convention will be held November 16, 1888, at Chicago. Normand S. Patton, Chicago, secretary; W. L. B. Jenney, Chicago, secretary of foreign correspondence.

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

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

WESTERN NEW YORK STATE ASSOCIATION OF ARCHITECTS meets second Tuesdays of October, February and June of each year. Annual meeting in October. Next annual meeting at Buffalo. W. W. Carlin, Buffalo, secretary.

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

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

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

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

ASSOCIATION OF ALABAMA ARCHITECTS.—Annual meeting second Thursday in October. John Sutcliffe, Birmingham, secretary.

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

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

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

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

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

KANSAS CITY SOCIETY OF ARCHITECTS meets Monday afternoon of each week, at 4 o'clock. Annual meeting second Saturday in April, 1888. F. B. Hamilton, secretary.

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

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

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

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

THE ARCHITECTURAL ASSOCIATION OF MINNESOTA.

The annual meeting of the Architectural Association of Minnesota was held at St. Paul on January 3. The following officers were elected:

President, E. F. Bassford, of St. Paul; vice-president, W. H. Hayes, of Minneapolis; secretary, F. G. Corser, of Minneapolis; treasurer, E. E. Joralemon, of Minneapolis; board of management, D. W. Millard and C. A. Wallingford, of St. Paul, and G. M. Goodwin and J. W. Kelley, of Minneapolis.

CINCINNATI CHAPTER, ASSOCIATION OF OHIO ARCHITECTS.

Upon the death of James Sims Trowbridge, architect, of Cincinnati, the members of Cincinnati Chapter met, November 30, in the office of W. R. Forbush, inspector of buildings, with an unusually large attendance, and adopted the following resolutions in memory of their deceased colleague, J. Sims Trowbridge:

The architects of Cincinnati desire to express their sincere sorrow for the death of James Sims Trowbridge.

Stricken by the fell destroyer at the early age of twenty-four years, just as he was thoroughly prepared to engage successfully in the struggle for professional preferment, he has, nevertheless, left behind him many enduring monuments of his unusual skill and ability as an architect.

With pleasure we record our testimonial to his worth, not only as an architect, but also as an honorable and worthy competitor and a social, genial, companionable collaborer in the architectural field.

We extend to his parents and family our sincere sympathy in this their time of trouble, and as an evidence of our respect and esteem we will attend his funeral in a body, and spread this testimonial upon our minutes and send a copy to the family of our deceased brother.

E. ANDERSON, }
JAS. W. McLAUGHLIN, } Committee.
WALTER R. FORBUSH, }
A. C. NAST, Chairman.
THEO. A. RICHTER, Jr., Secretary.

In speaking of the deceased, of whom a brief biography appeared in our last issue, a friend who knew him intimately said: "The genial companionship of James Sims Trowbridge so impressed itself on all who knew him, that deep and painful regrets will accompany the sad news of his departure among all his acquaintances. Faithful, honest and true, his ready smile graced all his doings with the sunshine of good fellowship.

No anger or unkindness came from him, no matter what the provocation. An artist by nature, the world was beautiful to him, and the innate perception, which is the germ of a master, has gone out with his promising young life. His parents have the sympathy of more than usual depth from all his friends. Not soon shall we see his like again."

CHICAGO CHAPTER, A. I. A.

The annual election of Chicago Chapter, American Institute of Architects, was held December 15, and Mr. S. V. Shipman was chosen president; John Addison, vice-president; W. W. Clay, treasurer, and W. A. Otis, secretary.

CHICAGO ARCHITECTURAL SKETCH CLUB.

On December 19, John K. Allen, editor of the *Sanitary News*, gave a very interesting paper on "Architecture in the South of Ireland." The paper was illustrated by about sixty views, and occupied an hour and fifteen minutes in its delivery. Mr. Allen handled the subject not only with intelligence and vigor, but his descriptions were vivid and technical, appealing to the architectural knowledge and artistic sensibilities of his audience. The meeting was attended by the members of the club in full force, many being accompanied by ladies. At the close a unanimous vote of thanks was proffered Mr. Allen for the excellent treat of the evening.

The following was announced as the club syllabus for the year commencing December 5, 1887, and closing with the annual meeting November 19, 1888. The blank dates will be filled later:

- Dec. 5. Club Evening.
- Dec. 19. Architecture in the South of Ireland. Lantern Illustrations. Jno. K. Allen.
- Jan. 2. Club Evening.
- Jan. 16. Broad Art Criticism. J. W. Root.
- Jan. 30. Club Evening.
- Feb. 13. Club Evening.
- Feb. 27. Club Evening.
- Mar. 12. Evolution of the Styles. W. L. B. Jenney.
- Mar. 26. Club Evening.
- April 9. Style. L. H. Sullivan.
- April 23. Club Evening.
- May 7. Practical Plumbing. Martin Moylan.
- May 21. Club Evening.
- June 4. Student Days. R. E. Schmidt.
- June 18. Club Evening.
- July 2. Greek Architecture. F. L. Lively.
- July 16. Club Evening.
- July 30. Plaster Modeling. J. H. Carpenter.
- Aug. 13. Club Evening.
- Aug. 27. Club Evening.
- Sept. 10. Vacation Notes. C. A. Kessell.
- Oct. 8. Club Evening.
- Oct. 22. Originality in Design. W. B. Mundie.
- Nov. 5. Business Meeting.
- Nov. 19. Exhibit and Banquet.

The following are the club competitions for the year, the adjudicating committee remaining as before, composed of architects J. W. Root, L. H. Sullivan, W. L. B. Jenney:

- Dec. 19. Park entrance gate.
- Jan. 16. Staircase and hall.
- Feb. 13. A city residence in French Renaissance.
- Mar. 12. A sideboard.
- April 9. A park fountain.
- May 7. Eight-room frame house.
- June 4. Detail of capital of column, 16-inch diam., full size.
- July 2. Furniture design on one sheet.
- July 30. Carved panel, two feet square, full size.
- Aug. 27. Church gable and belfry.
- Sept. 24. Copper bay.
- Oct. 22. House doorway.

An important move was inaugurated at this meeting, which will place the club in surroundings, and it is hoped in membership, first among artistic bodies in the country. This was the passage of a resolution directing the executive committee to engage quarters for the club at the newly completed Art Institute, corner Van Buren street and Michigan avenue. The officers of the club immediately set about putting this project into operation, and a room 50 by 25 feet was secured. This is being divided into smaller rooms, and will be handsomely decorated and furnished. F. L. Linden, a member of the club, will donate a large part of the decoration. Realizing that all these improvements would cost the club quite a sum of money, a subscription paper was started among the members, and a liberal subscription was raised. It is understood that this fund will not fully cover the expenses involved, and no better time than the present could be selected for honorary members and other friends of the club to show their appreciation of the work the club is doing for the advancement of architectural knowledge by contributing to this fund. The arrangement of the rooms, decorations and purchases of furniture, is being rapidly pushed to be ready for the opening of the rooms, January 16. This first meeting in their new quarters will be occupied by a paper on "Broad Art Criticism" by Architect John W. Root, whose interest in the club has been manifested in many ways, the club's request for a paper being always complied with, giving his hearers his best thought and experience. There is no doubt that the meeting of January 16 will be fully attended by the club members and their friends.

CHICAGO REAL ESTATE BOARD.

The Chicago Real Estate Board held its regular monthly meeting January 4, President William D. Kerfoot in the chair.

The following report from the committee to nominate officers for the coming year was submitted by the chairman, E. A. Cummings. The list will no doubt be duly elected at the regular annual meeting, which occurs January 11.

For president, Henry L. Turner; vice-president, George M. Bogue; treasurer, Moses E. Greenebaum; secretary, James H. Van Vliissingen. Executive committee: Willis G. Jackson, D. S. Place, D. R. McAuley, F. C. Gibbs, and C. L. Hammond. Membership committee: Norman T. Gassette, two years; S. M. Parish, B. L. Pease, E. Goodridge, D. W. Erskine; O. G. Garfield, and C. R. Calkins, one year. Reference committee: Josiah L. Lombard, F. R. Chandler and J. W. Farlin. Valuation committee: W. D. Kerfoot and Bryan Lathrop.

The annual banquet of the board will be held at the Grand Pacific some time in February.

CHICAGO BUILDERS' AND TRADERS' EXCHANGE.

The annual meeting of the exchange will occur January 16. The exchange is now the largest in the country, and the membership has steadily increased during the past year.

At a recent meeting of the board of directors, the following members were appointed delegates to the second annual convention of the National Association of Builders, to be held at Cincinnati, February 7, 8 and 9:

Geo. Tapper,	J. G. McCarthy,
Wm. Goldie,	F. Gindele,
Adam Weckler,	Joseph Downey,
Matt Benner,	C. A. Paltzer,
James John,	M. Campbell.

Should any delegate fail to attend the convention, the president will fill such vacancy from the following:

P. B. Wight,	Ed. Kirk, Jr.,
A. W. Murray,	D. V. Purington,
Wm. H. Iliff,	P. S. Hudson,
F. S. Wright,	A. Corcoran,
C. B. Kimbell,	M. W. Powell.

The importance of this and other builders' exchanges is evidenced by their recognition by the United States government, the supervising architect having sent copies of the plans for the new custom house and post-office at Wichita, Kansas, to the leading exchanges of the country, so that builders in the different sections could figure on the work. Several of the leading builders of Illinois have called at the Chicago Builders' and Traders' Exchange rooms and figured upon the work. The bids will be closed January 10.

THE CHICAGO MASONS' AND BUILDERS' ASSOCIATION.

The Masons' and Builders' Association of Chicago held its annual meeting at the Exchange rooms, January 5. The following officers were elected: President, Charles Gindele; vice-president, William H. Iliff; secretary, Ed. Moss; treasurer, E. Earnshaw.

The arbitration committee remains as last year. It is composed of George Tapper, George C. Prussing, Joseph Downey, Chas. Gindele and William O'Brien.

New Publications.

STEAM ENGINE CATECHISM. Part I, fifth edition, by ROBERT GRIMSHAW, M.E., John Wiley & Sons, 15 Astor place, N. Y.

It would be difficult to say too much in commendation of this most excellent treatise on the subject of steam as a motor and the modes of its application. The book is liberally illustrated, and abounds in tables of important data relative to the phenomena of steam and steam-making, strength of materials, and principles of construction; in fact, everything that is necessary to make an expert, practical steam engineer or engine builder. The merit of this admirable treatise of 194 pages is, the author has intentionally avoided technicalities, and clothed the information in the garb of simple English words that cannot fail to reach the comprehension of the humblest reader. The appreciation by the engineering public of this catechism, is shown in the fact that four editions have been exhausted, making the fifth edition necessary, which has been much enhanced in value over the last edition by answers to practical inquiries received since its issue. The present edition is uniform in size with the previous editions. The price of the book, \$1, seems insignificant.

PROCEEDINGS OF THE SOCIETY OF ARCHITECTURE OF LYONS, FRANCE.

The Academical Society of Architecture of Lyons, France, issues its proceedings for the years 1883 to 1886, inclusive, in a handsome volume of nearly two hundred octavo pages. Beside constitution and by-laws, there is a list of twenty-nine publications issued by the society since the year 1846, a record of the annual competitions it has conducted since 1843, the proceedings of its convention, obituary notices of deceased members, accompanied by four excellent steel plate portraits, and several elaborate and scholarly essays, including a paper on concretes, a beautifully illustrated paper of thirty pages, giving an itinéraire of an architect's tour in Spain, and an essay of over one hundred pages on architectural styles. This notes in successive detail Hindoo architecture, the Assyrian, Egyptian, Greek, Etruscan, Roman, Byzantine, Lombardo-Roman, the Ogival (XIII century) and the Renaissance. This volume creates a very favorable impression of the erudition and industry of the members of the Lyons society.

INTERIOR DECORATION. By Arnold N. Brunner and Thomas Tryon. New York: W. T. Comstock.

The desire to decorate the person probably antedates the desire to wear clothes; and therefore we conclude that the desire to decorate the interior of houses preceded the consciousness of the need of houses. However, we are content to leave this question to the scientist who professes the historical method. Be this as it may, the desire to decorate interiors is universal, and a universal desire is not to be cried down, but taken account of and molded, or, at least, directed. Therefore it is that Mr. Gladstone Lippen wrote a "Theory of Taste," in which he used his likeness as a frontispiece; therefore it is that the German philosophers are floundering around the now pathless swamp of aesthetics; and therefore it is that Messrs. Brunner and Tryon issue this volume on "Interior Decoration," and having had clients to practice on, and knowing thus how people are inclined to go, have brought together, in tasteful form, with ample, well-designed and well-executed illustrations, a body of doctrine to lead them into better paths. We have rarely seen a statement of principles more clearly put or more to the point. The freedom necessary to allow scope for individual taste is frankly recognized and encouraged; but stress is laid on the necessity of making individuality accordant with fundamental principles. We are glad to see so outspoken a condemnation of the habit of making a house plan a study in political geography, by having an Italian hall leading to a Louis XIV drawing room, from which we are conducted to an Indian library and an Elizabethan dining room, and then converting the whole into a cheap

imitation of the British Museum by filling every nook and cranny with meaningless and tasteless bric-a-brac. Variety can be obtained without discord and quantity is not an essential in art. The book is full of happy suggestions and, while it will not make of each reader an expert decorator (which may Dame Fortune forbid, for the market for amateurs is already overstocked), it will be of great help to the housebuilder and housekeeper who are desirous of living, not in a curiosity shop or an asylum for cracked crockery, not in a bald and barren tenement, nor in an overdone and dowdy dwelling, but in a tasty and inviting home.

COAL AND COKE. Another splendid Christmas and New Year's Annual for 1888. The latest and best of the Rock Island series.

Thousands who have perused with delighted interest the pages of "Watt-Stephens, the Genius of Steam" (1885), "Voltagal, the Genius of Electricity" (1886), and "Petroleum and Natural Gas" (1887), will be pleased to know that the Chicago, Rock Island & Pacific Railway has issued another magnificent souvenir for the Christmas and New Year season of 1888, which surpasses in many respects anything of the kind heretofore published. "Coal and Coke" is the title of the work, and the subject has been exhaustively treated. It is written in a captivating colloquial style, embodying a vast amount of information in regard to coal strata; their relative position in the earth's crust; where deposits occur, their nature and extent; the different processes of underground mining; how coal is converted into coke, and some of its varied and multiple uses. The book is profusely illustrated from original sketches. Although the expense has been very great, the Rock Island has concluded to supply "Coal and Coke" at the nominal rate of 10 cents (for postage) per copy. By addressing E. A. Holbrook, general ticket and passenger agent at Chicago, Illinois, a copy of "Coal and Coke," will be mailed prepaid, to any part of the world.

Personal.

MR. R. M. TURNER, a leading draftsman in Chicago, who recently went to St. Paul, entering into partnership with Architect H. R. P. Hamilton, of that city, has gone to California for his health.

It is a pleasure while congratulating Architect Frank J. Grodavent, of Leavenworth, Kansas, upon his appointment as architect for the new military post near Denver, under Captain L. E. Campbell, assistant quartermaster, U. S. A., to speak of his high character as a gentleman and abilities as an architect, qualities which eminently fit him for this important appointment.

MORRIS G. HOLMES, whose skill as a draftsman has placed his name among those foremost in the craft in Chicago, made an important change in the general design of his life structure, on December 31, by adding a wing. Where before the façade was gloomy a light and airy cheerfulness pervades the new addition. Her name was Maud J. Harvey, and her home was Chicago, Ill. Mr. Holmes is vice-president of the Chicago Architectural Sketch Club.

MR. JOHN K. ALLEN, so long known in connection with the *Sanitary News* as reporter, associate and managing editor, is now editor of that excellent journal. Mr. Allen's friends among sanitarians and architects, and he has friends wherever he is known, will be glad to hear of his promotion, and give him every assistance to make his paper, if this be possible, even better than it now is. Mr. Allen has just been elected third vice-president of the Chicago Press Club.

Mosaics.

IN regard to Rosenberg's finishes, E. H. Jensen, representing the United States Treasury Department, has written a letter recommending their use by the department. He says he found "Rosenberg's Elastica Finishes" to be "as represented in every respect," and "very superior in finish to those we are now using."

ARCHITECT E. L. Roberts, of New York, has designed a residence for William Rockefeller, president of the Standard Oil Company, which is being erected on the Hudson river, near New York. The style is old English, the material greystone and the ground plan about 50 by 150 feet. It will be thoroughly fireproof and, exclusive of the decorative work, will cost \$250,000.

THE Standard Solid Leather Nail Company, of New York, have removed to 41 and 43 Center street, and have changed their firm title to The Standard Leather Nail Company. The firm have also made arrangements with Mr. Pianko for the manufacture and sale of leather gimps and edgings for use in the furniture and upholstery trades, under the name of Pianko's Standard Leather Gimp and Trimming Company, and will fill all orders for this class of goods.

SEVERAL features have been brought out by Merchant & Co. in the last few years; namely, guaranteeing, stamping and discontinuing importation of imperfect or waster sheets; but their last feature of stamping every box with the actual net weight of the 112 sheets in that box is of far greater importance than any move made by them in the past. This new feature cannot fail to be of importance to all architects and consumers, or with anyone wanting to secure the best plates in the market, and at the same time feel satisfied that they are getting just what they want.

LOCKWOOD & KIMBELL, the agents for St. Louis press brick and the different varieties of eastern pressed brick, have secured the services of William Edgar, so well known to the Chicago building public as the former secretary of the city building department. Mr. Edgar has an extensive acquaintance among the architects, with whom he is quite popular. Mr. Lockwood being asked, a few days since, regarding the state of trade, that gentleman pointed to the following telegram he had just written:

St. Louis Hydraulic-Press Brick Co., St. Louis, Mo.:

Begin immediately on shipment of one hundred carloads of pressed brick. Will write more fully.

LOCKWOOD & KIMBELL.

This represents about 800,000 brick, and the largest order for brick ever sent from Chicago. In anticipation of the coming season's demand,

it is the intention of Lockwood & Kimbell to keep, at least, 1,000,000 pressed brick on hand to supply the Chicago market, as well as a large stock of molded brick, so that the trade will be promptly supplied to any quantity that is desired.

COMPARISONS may be odious, but when a firm has the enterprise and taste to produce something that is by common consent acknowledged to be superior it should receive credit for so doing. This is true in regard to the calendar issued for 1888 by the Smith & Anthony Stove Company, of Boston. It is artistic enough to find a place on the desk of any architect, and if the inference is drawn that a firm that has the taste to get out such a calendar must have a corresponding taste in designing its stoves, ranges and furnaces, they will deserve a reputation for producing goods in which art as well as utility is combined.

THE massive reflecting chandelier of special design which hangs from the center of the audience room of the West Harlem Methodist Episcopal Church, New York, and which is one of the main ornaments of the church, was built by I. P. Frink, of that city. It measures eighteen feet four inches from brass ball at end of stem to the plate at the upper extremity of the stem, and weighs 600 pounds. It contains 130 lights. The gas burners are made to resemble candles. The lower circle contains eighty gas burners; it is surmounted by a silvered-glass reflector. Above this circle and the reflector are ten clusters of lights, each made up of seven gas burners. The gas will be lighted by electricity. The chandelier brilliantly illuminates the audience room, and is richly ornamented in polished brass and old gold.

Railroad Notes.

TO DENVER IN ONE NIGHT.—On December 4, 1887, the Burlington route, C. B. & Q. R. R., inaugurated a fast train service, as follows: Fast express train, known as "The Burlington's Number One," leaves Union depot, corner Canal and Adams streets, Chicago, at 12:01 P.M. daily, and runs to Denver solid, arriving at 10 P.M. the next day, thus making the run from Chicago to Denver in thirty-four hours. This train arrives at Omaha at 5 A.M., making the run to Omaha in seventeen hours. Corresponding fast train from Denver to Chicago. Direct connection made to and from St. Louis with these trains, and at Denver with the fast train of the D. & R. G. R. R. for San Francisco and Pacific coast points. Superb equipment on "The Burlington's Number One," consisting of sleeping cars and coaches from Chicago to Omaha and Chicago to Denver without change. Meals served en route on the famous Burlington route dining cars as far west as the Missouri river. Omaha passengers will be allowed to remain in their sleeping cars until breakfast time. See that your ticket reads via the C. B. & Q. R. R. It can be obtained of any coupon ticket agent of its own or connecting lines, or by addressing PAUL MORTON, General Passenger and Ticket Agent.

FAST TRAINS to Omaha, Denver, San Francisco and the Pacific coast. Local trains to Kansas City and St. Joseph, Mo. Sunday, December 18, the Chicago, Milwaukee & St. Paul railway commenced running a fast train, with through sleeping cars, from Chicago, at 7:30 P.M. daily, arriving at Council Bluffs at 11:30 A. M. next day, making connection with the "Overland Flyer" of the Union Pacific railway for Denver, Salt Lake City, San Francisco, and all points on the Pacific coast. This train also has a through sleeping car for Sioux City, arriving at that point at noon. A second train, with through sleeping cars, leaves Chicago at 10:40 P.M. daily, arriving at Council Bluffs next day at 7 P.M., making connection with the Union Pacific railway for points west of the Missouri river. This train also makes connection at Marion, Iowa, with a local daylight train for Ottumwa, Chillicothe, Excelsior Springs, St. Joseph and Kansas City. A third train leaves Chicago daily, except Sunday, at 11:30 A.M. for Cedar Rapids and intermediate points. This train has through coaches for Council Bluffs, which are attached to the fast train at Marion, Iowa, and passengers are thus enabled to arrive at the Missouri river at 11:30 A.M. All trains depart from and arrive at the Union Passenger Station, corner of Canal and Adams streets. City ticket offices, No. 63 Clark street, Grand Pacific Hotel and Palmer House.

THE two new Pullman palace sleeping cars, "Paulina" and "Fernando," which have been specially constructed by the Pullman Company and placed upon the new route between Detroit and Chicago, are composed of drawing-room, smoking-room and buffet, and have ten regular sections. They are finished in rare mahogany, the most beautiful wood ever worked. The upholstery of the body of the cars is pale blue "glace" plush, while the drawing-rooms are finished in satinwood, and the upholstery done in terra-cotta red plush. The carpets are the richest Wilton make, wrought in attractive designs, and the general effect of the decoration and finishing is not only highly luxurious, but pleasing to the most refined and fastidious taste. These cars will run on the new route between Chicago and Detroit, lately established by the Chicago & Grand Trunk railway. They leave Chicago at 8:15 P.M., arriving at Detroit at 8 A.M. Returning leave Detroit at 8 P.M., reaching Chicago at 8:10 A.M. Breakfast served in Chicago & Grand Trunk dining-car before reaching Chicago. As noticed above, these cars contain buffet service, and patrons therein are enabled to avail themselves of the enjoyment of a dainty and attractive lunch at any hour desired, in addition to the dining-car service. This being the only line of Pullman cars between Chicago and Detroit, is sure to be immediately popular with the general public. Passengers seeking the most comfort for their money are sure to be well satisfied.

ALLEZ-VOUS A LA NOUVELLE ORLÉANS DANS LA FLORIDE OU LA CALIFORNIE?—Oui, eh bien! vous pouvez prendre la ROUTE MONON par Louisville ou Cincinnati, visiter la cave Mammoth, Nashville, Blount Springs, Birmingham, Montgomery, Mobile, la côte du Golfe, pour la même somme d'argent que vous dépenseriez pour traverser les marais tristes et déserts du Mississippi ou du Missouri; nous sommes sûrs que vous ne pouvez pas choisir une ligne qui vous offre la moitié des avantages que ceux que vous

trouverez sur la Route Monon et ses embranchements dans le Sud. Personne ne peut aller dans le Sud sans visiter la Cave Mammoth, la grande merveille de ce continent. Elle surpasse toute description; les cavernes doivent être explorées, l'on doit pénétrer au milieu de leur obscurité, admirer les beautés qui y sont contenues, afin d'en avoir une appréciation ou une réalisation C'est la plus grande curiosité naturelle—sans même en excepter Niagara. De Mobile à la Nouvelle Orléans (141 milles) le voyage le long de la côte du Golfe vaut à lui seul l'argent dépensé. Vous avez le Golfe en pleine vue tout le long du chemin, vous passez par Ocean Springs, Mississippi City, Pass Christian, Bay St. Louis et Beauvoir, où demeure Jeff. Davis; ou bien par la ligne de Chattanooga et Atlanta; vous traversez en route les vieux champs de bataille. Lorsque vous décidez à aller dans le Sud, mettez-vous bien dans l'esprit qu'il est préférable de voyager sur une ligne qui passe dans la meilleure contrée et vous offre les meilleures places où s'arrêter. Cette ligne, d'une manière positive, c'est la ligne Monon qui fait connection avec les chemins de fer Louisville et Nashville, et Cincinnati, qui a des Dortoirs Palais Pullman, et double trains chaque jour. C'est la plus avantageuse pour Cincinnati, Louisville, la Nouvelle Orléans ou la Florida. Pour plus de renseignements, pamphlets et livres descriptifs, adressez vous à E. O. McCormick, Agent Général des Passagers, 183 Dearborn street, Chicago.

Building Outlook.

OFFICE OF THE INLAND ARCHITECT,
CHICAGO, ILL., January 2, 1888. }

The American people ought to be satisfied with what they have accomplished during 1887, but they are hard to please. There has been progress and improvement in every department of activity. We have built more houses, more lines of railroad, more shop capacity, more machinery, built more towns, spent more money on city improvements, built more miles of electric road, more miles of wire, organized a greater number of commercial and manufacturing companies, and have done more of everything than we ever did in any one year before, and that too, with less loss. The question today is, what will 1888 bring? Builders in all of the larger cities are making preparations for great activity. The impression prevails, and it is not merely an impression but a conviction, that the conditions of the country will permit as heavy investment in building operations during the coming year as during the past. In all the statistics that have been published from month to month, and in all the returns from railroad, manufacturing, lumber and mining companies there is not any evidence furnished that we are nearing the end of the present industrial era. What are the actual trade conditions? There is an abundance of money, crops have been large, prices for breadstuffs and provisions are remunerative, the manufacturing industries are all prosperous, railroad building has reached the highest point of any year in our history, in several lines there is an upward tendency in values, in only a few of them is there a downward tendency, manufacturing capacity all over the country is sold up, an immense amount of work is projected in the way of elevators, warehouses, lake craft building, railroad bridge building, manufacture and shop building and in many other directions. Even in the political field there is less to be apprehensive of than at first sight seems apparent. The speculative tendencies which were at work a few months ago have been eradicated. Land and real estate values are improving slowly. Prominent building authorities here and elsewhere give it as their opinion that there will be more house building during the coming twelve months, taking the entire country into consideration, than during the past twelve months. There will be this difference, however, that much of the building for the coming twelve months will be done in the smaller cities and towns instead of as heretofore in the larger cities. Excellent building authorities further state that a great deal of office building will be done in cities, that railroad terminal and transit facilities will be greatly improved, that a large amount of warehouse building will be done along the lakes and along the lines of the trunk lines between New York and the extreme Northwest. The direction of enterprise is toward the far Northwest, where extraordinary opportunities await the touch of capital and enterprise. Throughout the Ohio Valley a great deal of house and shop building is projected. In the southern states machine shop and mill building and furnace building will be done on a very large scale. The development in those states will be in the direction of the utilization of cotton, coal and timber, and the consequent demand for machinery of all kinds and appliances is already felt at the larger machinery establishments of the North and East. The leading architects in the larger cities between Boston and Chicago entertain no doubts as to the character of activity in their direction for the coming twelve months. There is a growing demand for finer residences within easy distances of our larger cities and towns. There is, they say, a growing tendency by the wealthier classes to live outside rather than inside city limits, and they have in hundreds of cases already received instructions to prepare plans for work to be entered upon next year. There is another tendency that architects speak of, namely, the tendency of employers in many branches of industry to erect tenements for the use of workmen, not only for those who are in their employ, but for others who may seek to buy or rent. There is a general movement in this country in the direction of providing abundant and comfortable homes for workingmen. The demand for enterprise and capital in this direction is almost unlimited. This tendency is being stimulated by the influence of building and loan associations.

Synopsis of Building News.

Ashland, Kan.—The new Clark County Court House has been contracted at \$30,000.

Auburn, Ill.—Architect Geo. H. Helmle, of Springfield, has prepared plans for the school trustees for a two-story brick and stone school building, 23 by 34 feet, steam heat; cost \$15,000; plans completed; contracts not let.

Beatrice, Neb.—Architects Mendelssohn & Lawrie; For Senator Paddock, opera house and hotel building, 125 by 140 feet; cost \$100,000. Episcopal Church building, stone; cost \$40,000.

Caro, Mich.—Contract for the \$15,000 school building has been awarded to J. Glanfield & Sons of Vassar.

Cincinnati.—Reported by Mr. Lawrence Mendenhall. There is a story current of a boy that caught a chicken, and immediately opened its mouth to see if it had teeth. It also relates that he was unable to find any. This is the exact state of affairs in the gleaming for architectural notes. All of the craft are exceedingly hopeful of a busy season, and many are already beginning to submit sketches, but which are secreted from the gaze of the immortal news gleaner. But "such as I have give I unto thee."

The only thing to mar the festivities of this happy holiday season, is the thought that one of our number, greatly beloved and respected, has been called to lay down his rule, compass, and text book, and submit himself to the plans of the Almighty. James

Sims Trowbridge's obituary has appeared in the columns of this journal before, and I can add nothing more, except to say that words cannot express the esteem in which he was held, or the enthusiasm which he imparted, especially to the younger architects and draftsmen of Cincinnati.

Architect James W. McLaughlin is busily engaged upon the working drawings for the new Unitarian Church in Avondale. This was a paid competition job, and in the persons of H. E. Siter, Wm. Martin Aiken, and A. O. Elzner he found worthy, painstaking competitors. The church is to be irregular in shape, built of roughstone with cistone trimmings, and tile roof. The campanile is very ornamental, and like the preacher's sermon, causes your thoughts to soar upward. The main audience room has a seating capacity of 425 and additional accommodations in the gallery and the adjoining school room. The seating and floor are theatrical in arrangement, while the ceiling is beautifully paneled. The edifice will be heated with steam; cost \$25,000.

Architects Buddemeyer, Plympton & Trowbridge report that several large contracts, in the shape of plans have been secured by them, but are in a state at present that does not permit reporting. This is likewise the state in which architects Elzner, Drach, Anderson and others find themselves.

The improvements at Addystone are going along nicely under Mr. Rapp's supervision. The drawings prepared by Mr. John Boll and others in Mr. Rapp's office are remarkably clear and well executed.

In addition to other work, to be reported later on, Emil G. Rueckert reports an eighteen-room addition to J. H. Ahlbrandt's restaurant, adjoining Music Hall. This will be four and a half stories high and contain a large dining hall; cost \$7,000.

Architects Samuel Hannaford & Sons have their time well employed on the plans below mentioned: Residence (frame) two and a half stories, for P. J. Cadwallader, containing ten rooms and attic. The roof will be of slate. For H. & G. Feder, a store building, eight stories high, with iron front and tin roof. Size 42 by 90. For Isaac J. Miller, Esq., a neat two-story brick of eight rooms, with tin roof. For the Alabama & Great Southern R. R. Depot at Chattanooga, Tenn. Size 52 by 205.

Chicago.—The report of the building superintendent for 1887 shows a larger number of buildings were erected than during any previous year, at a less cost than the average of former years. Many large projects were abandoned on account of the strikes and lockout during the spring, but the heavy decrease looked for during the early season was nearly made up by the exceedingly large number of small buildings erected, the total expenditure reaching \$19,987,900, against a total of \$21,324,400 in 1886. The following tables will show the figures in a condensed form for the different divisions of the city, the grand totals and a comparison of the past six years:

		FEET.	COST.
1887.	South Side—1,277 buildings	30,613	\$7,251,400
	North Side—541 "	14,347	3,400,300
	West Side—3,015 "	79,546	9,126,400
	Number of buildings constructed		4,833
	basements and additions		655
	feet frontage		115,506
	sheds and barns		2,098
Cost			\$19,987,900
TOTAL FOR SIX YEARS.			
1882.	Number of buildings	3,113	\$15,842,000
1883.	" " "	4,086	17,500,000
1884.	" " "	4,169	20,689,600
1885.	" " "	4,638	19,624,100
1886.	" " "	4,664	21,324,400
1887.	" " "	4,833	19,987,900

Architects Treat & Foltz: For J. G. Garibaldi, brick store and flat building, 32 by 37 feet; cost \$8,500.

Architect C. H. McAfee: For McGinnis & Boyle, three-story brick stable, 65 by 85 feet; cost \$8,000.

Architect A. F. Boos: For himself, three-story flats, 42 by 64 feet; cost \$8,000. For P. Schirra, three-story stores and flats, 24 by 70 feet; cost \$12,000. For J. Becker, three-story flats, 41 by 49 feet; cost \$7,000.

Architects Ostling Bros.: For Oscar Anderson, four-story flat building, 28 by 116 feet; cost \$34,000.

Architect J. H. Carpenter: For Wm. D. Gleason, three-story brick, brownstone and terra-cotta residence, to cost \$18,000.

Architect H. R. Wilson: For W. H. Thomas & Son, five three-story dwellings, 100 by 72 feet; cost \$40,000. Thomas & Son contractors.

Architect H. B. Seeley: For L. W. Pearce, four-story store and flat building, pressed brick and stone; cost \$40,000. For F. P. Owings, six-story warehouse, 100 by 100 feet, brick and stone; cost \$70,000.

Architect J. J. Donnellan: For Father Carten, three-story and basement brick school building; cost \$40,000.

Detroit, Mich.—Architects Mason & Rice, report: For Preston M. E. Church Society, two-story brick and stone church building, 62 by 44 feet, slate roof; cost \$16,000; Richard Helson, contractor. For Mrs. Maynahan, two-story brick and stone dwelling, 30 by 40 feet, slate roof; cost \$2,600; C. Bresnahan, builder.

Architects Donaldson & Meier: For Detroit Sheet Metal Works, three-story brick factory, 38 by 50 feet; cost \$3,000; A. Albrecht, builder.

Architects Scott & Co. report: For Marie E. Hoffman, three-story brick factory, 45 by 90 feet; cost \$4,500; Henry Carew, builder. For J. M. Nicol, three-story brick and stone dwelling, 40 by 68 feet, slate roof; cost \$9,000; McGrath & Wallich, builders.

Architect A. C. Varney, reports: For Mrs. Goring, three-story brick and stone dwelling, 25 by 72 feet, slate roof; cost \$6,000; Jos. Deitz, builder.

Architect G. W. Lloyd, reports: For Mrs. C. W. Whitbeck, five-story brick and stone factory, 58 by 100 feet; cost \$22,000; A. Chapoton, builder. For St. Aloysius

Church Society, three-story school building, 40 by 100 feet; cost \$12,000; A. Chapoton, builder.

D. Lane is building a two-story factory building, 56 by 90 feet, for J. E. & G. H. Scripps; cost \$5,000.

J. C. Wallich has the contract for a three-story school building, 86 by 95 feet, for the board of education, slate roof; cost \$40,000.

John J. Martin is building a brick and stone church building, 65 by 65 feet, slate roof; cost \$4,000; For All Saints M. E. mission.

Geo. H. Clark is erecting three two-story brick and stone stores, 60 by 56 feet; cost \$6,200.

During the month of December permits were issued for 131 new buildings, to cost \$219,880, and fourteen alterations, to cost \$8,140. Total \$228,020.

East Liberty, Pa.—Architect L. O. Dause, of Pittsburgh: For Calvary Protestant Episcopal Society, church building; cost \$60,000.

Ft. Wayne, Ind.—Architects Wing & Mahurin are preparing plans for an institute for the feeble minded; cost \$40,000.

Fort Smith, Ark.—Architects Lee & Roth, report: Building operations continue fairly active; weather fine; outlook for next season good. The Methodists are talking of a college building. The board of education will erect a new eight-room school building. The government postoffice building is well started. The Fort Smith Stone & Quarry Co., capital stock \$15,000, have filed articles of incorporation with the secretary of state. The officers are C. H. Lee, president; M. Z. Roth, secretary; Gust. Boehley, superintendent.

Houghton, Mich.—Contract for the erection of the mining school building has been awarded Wahlman & Grip, of Ishpeming, for \$63,500.

Indianapolis, Ind.—Architects Bohlen & Son: For Parrott & Taggart, two-story brick building, 70 by 140 feet; cost \$20,000. For F. Mayer, two-story brick and stone residence; cost \$20,000. For German Reformed Society, brick and terra-cotta church building, 70 by 100 feet; cost \$15,000.

Little Rock, Ark.—Architects Orlopp & Kusener: For O. C. Brack, two-story frame residence, 42 by 28 feet; cost \$2,400. Hedgepath & Covington, contractors: For Thomas Cotton Press Co., brick factory building, 50 by 250 feet; cost \$5,700. Hedgepath & Covington, contractors.

Architect F. J. Rickon will rebuild for Wm. Mitchell, *The Arkansas Democrat* building, part three-stories and part two-stories; estimated cost \$6,000.

Architect B. J. Bartlett: For R. W. Dawson, two-story brick hotel building; cost \$5,000. Grant & Sherman, contractors.

Madison, Wis.—Architect John Nader has completed plans for a brick and stone Catholic church building, to be erected in the spring, at a cost of \$12,000. Also, has plans for the St. Antonius Hospital building, to cost \$25,000.

Mayfield, Ky.—The court house at this place has been destroyed by fire; loss about \$50,000.

McComb, Ohio.—Architect V. Wyss, of Findlay, is preparing plans for a schoolhouse, to cost \$30,000, to be built at this place.

Milford, Neb.—John Layne, of Lincoln, has been awarded the contract for the Industrial Home building, at \$14,990.

Milwaukee, Wis.—Architects H. P. Schnitzky & Co. have prepared plans for a brick veneered church building, 51 by 71 feet, cost \$17,000, for the Second Congregation of German Methodists. For Board of Education, school building; to cost \$8,000.

Omaha, Neb.—Architects Mendelssohn & Lawrie. For Methodist Society, stone church building, 112 by 114 feet; cost \$100,000. For Knights of Pythias, five-story brick and stone hall building, 66 by 132 feet; cost \$150,000. For Transfer Hotel Co., four-story addition, 70 by 114 feet, to hotel building; cost \$40,000. For Omaha National Bank, two-story brick addition; cost \$40,000. For A. Schwartzlander, two-story frame residence; cost \$7,000. For Max Meyer, two-story brick and stone residence; cost \$17,000. For L. Mendelssohn, five two-story, brick residences; cost \$32,000. For E. L. Stone, stone residence; cost \$20,000. For Chas. Turner, brick and stone residence; cost \$18,000. For A. Cohn, four-story store and flat building, 66 by 66 feet; cost \$25,000. Also four-story brick and stone stores and flats, 66 by 120 feet; cost \$33,000. For Geo. W. Smith, five-story brick and stone store and flat building, 22 by 132 feet; cost \$75,000. For G. C. Moses, five-story brick and stone store building, 78 by 132 feet; cost \$48,000.

Paris, Ind.—Architect J. W. Geddis of Vincennes has prepared plans for a jail building, to be erected here.

Springfield, Ill.—Architect Geo. H. Helmle, reports: Building season closed, outlook fair. For James L. Powell, two-story frame dwelling, 34 by 50 feet, stained glass, furnace heat; cost \$4,500; under way, J. L. Powell, builder. For Robert Young, two-story frame dwelling, 30 by 48 feet; cost \$4,500; I. C. Whipple, builder. For Henry Iverson, one-story frame cottage, 30 by 48 feet; cost \$1,500; J. Council, builder. For C. B. Merriman, two-story cottage, 30 by 50 feet; cost \$2,500; projected; drawings completed. For W. H. Van Patten, two-story cottage, 32 by 50 feet, wood mantels, furnace heat, stained glass; cost \$3,200; projected; drawings completed.

Toronto, Ont.—Architect Chas. A. Walton has prepared plans for a stone and brick school building for this city.

Architects Smith & Gemmel have prepared plans for a school building to be erected in this city.

Wakeney, Kan.—George Barrett has been awarded the contract for the Frego County Court House, at \$26,994.

Warren, Minn.—The Warren Manufacturing Co's elevator has been destroyed by fire; loss \$25,000.

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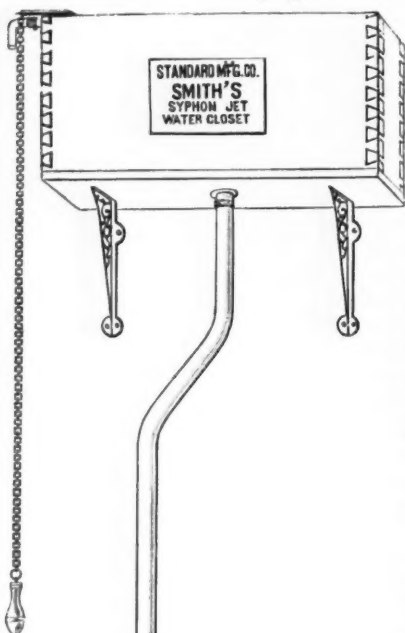
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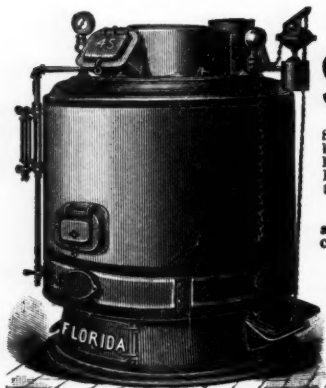
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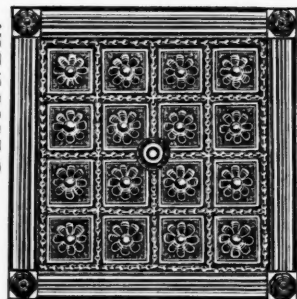
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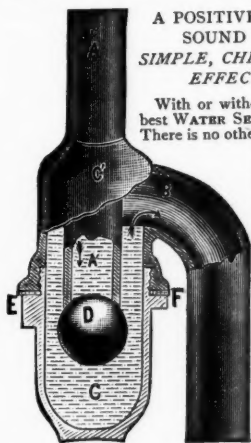
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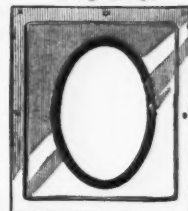
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[At Minneapolis, Minn.]

BOARD OF COURT HOUSE AND CITY HALL
COMMISSIONERS, 221 SOUTH SECOND AVE.,
MINNEAPOLIS, MINN., Dec. 6, 1887.

The time for receiving competitive plans has been extended to February 15, 1888, and the size of the stretchers may be increased to 48 by 48 and 55 by 55.

CHAS. P. PRESTON, Secretary.

PROPOSALS.**BROKEN STONE, CEMENT, SAND, FIRE-BRICKS AND GRANITE.**

[At Washington, D. C.]

WASHINGTON, D. C., Dec. 31, 1887.

Sealed proposals, severally indorsed "Proposals for Broken Stone," "Cement," "Sand," "Fire-bricks," or "Granite," will be received from regular dealers only, at the Bureau of Provisions and Clothing, Navy Department, Washington, D. C., until 11 o'clock A.M., January 23, 1888, and opened immediately thereafter in the presence of bidders, for the supply of the Navy-yard, Washington, D. C., of 6,000 barrels broken stone, 2,000 barrels cement, 18,000 barrels sand, 46,000 fire-bricks, 23 pieces granite coping, and 36 granite steps.

Cement to be delivered immediately; broken stone, sand and fire-brick within thirty days, and granite within sixty days from date of contract.

Offers will be received from one or more of the above-mentioned articles, but must include the full amount required of such article or articles.

The above articles must conform to the Navy standard, and pass the usual naval inspection; and a reservation of 20 per cent will be withheld from the amount of each delivery, until the completion of the contract.

Bidders are referred to the Inspector of Provisions and Clothing at the Washington Navy-yard, for specifications, forms of offer, and all information relative to the articles required.

The proposals must be made on the proper blank forms, and filled out as indicated by the blank.

The Department reserves the right to reject any proposal not considered advantageous to the government.

JAMES FULTON,
Paymaster-General, U. S. Navy.

BRIDGE.

[At Lockland, Ohio.]

COUNTY AUDITOR'S OFFICE,
HAMILTON COUNTY, OHIO,
CINCINNATI, December 20, 1887.

Sealed proposals will be received at the office of the Board of Hamilton County Commissioners until Saturday, January 14, 1888, at 12 o'clock M., for an iron superstructure, masonry, etc., of a bridge over Mill Creek, on Benson street, in Lockland, Springfield Township.

The work to be done according to plans and specifications now on file in the office of the Board of Hamilton County Commissioners.

The Board of Hamilton County Commissioners reserve the right to reject any or all bids.

By order of the Board of Hamilton County Commissioners.

FRED RAINE,
Auditor Hamilton County, Ohio.

SCHOOL HOUSE.

[At Gloucester, Mass.]

GLOUCESTER, MASS., December 15, 1887.

Time extended. Proposals for building new high school house. Proposals will be received at the city clerk's office at Gloucester, Mass., until Wednesday, January 25, 1888, at 5 o'clock, P.M., after which hour no bids will be received, for furnishing all the materials and performing all the labor necessary for the complete construction of a new high school building on Dale avenue in said Gloucester, according to plans and specifications which can be seen at office of said city clerk, or at the office of the architect, Tristram Griffin, 172 Washington street, Boston.

A deposit of \$500 by certified check must accompany each proposal, to be forfeited to the city of Gloucester if the successful bidder shall refuse to sign the contract.

Bonds will be required in an amount equal to one-third the contract, with satisfactory sureties, for the faithful performance of the contract.

The committee reserve the right to refuse any or all bids.

Proposals to be indorsed "Proposals for Building New High School Building in Gloucester," and addressed to George A. Watson, Chairman of Committee on Public Property.

Per order of committee.
JOHN J. SOMES,
Clerk of Committee.

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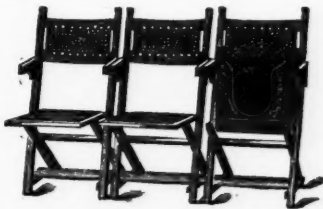
Address, "C. X.,"
Care of INLAND ARCHITECT,
Room 19, Tribune Building, CHICAGO.

TO CONTRACTORS.**PUBLIC NOTICE.**

Sealed proposals will be received by the undersigned at the office of J. R. Trimmer, trainmaster, Halsted street freight station, up to 12 o'clock noon of the 13th day of December, 1887, for the erection of a passenger station for the Chicago, St. Louis & Pittsburg Railroad at Logansport, Ind., in accordance with the plans and specifications now on file in that office.

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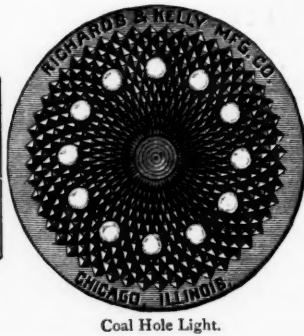
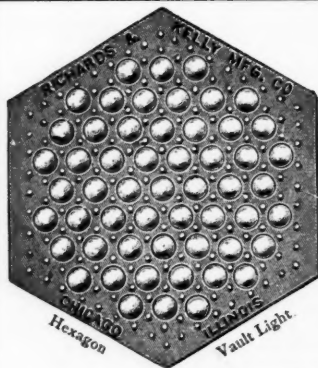
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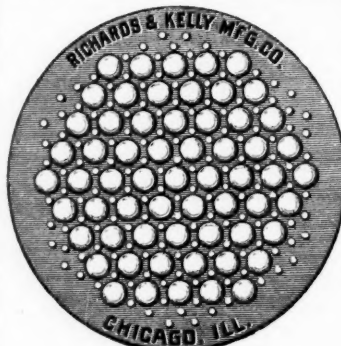


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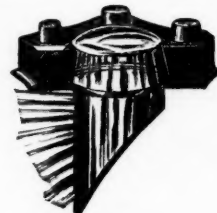
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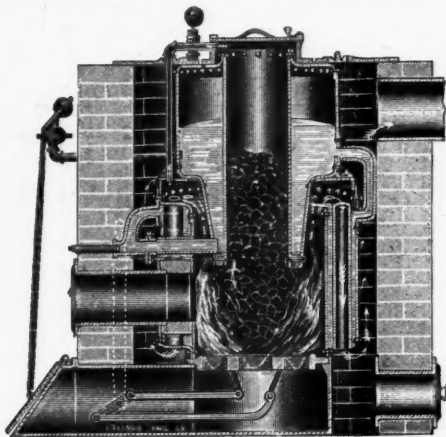
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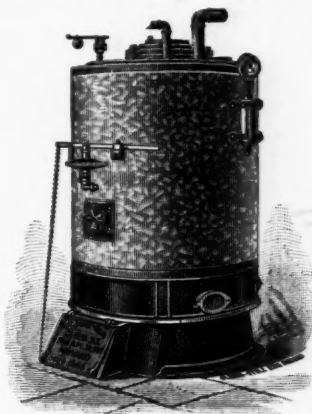
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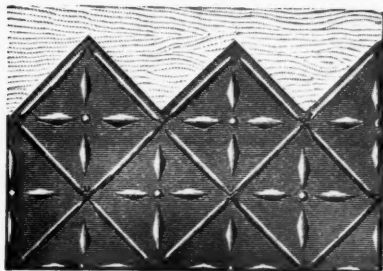
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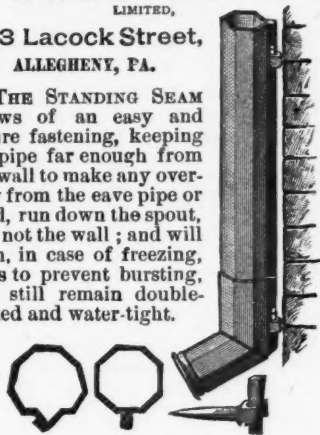


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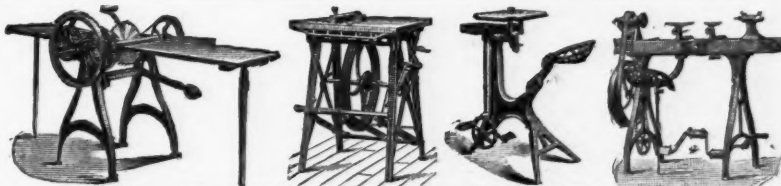
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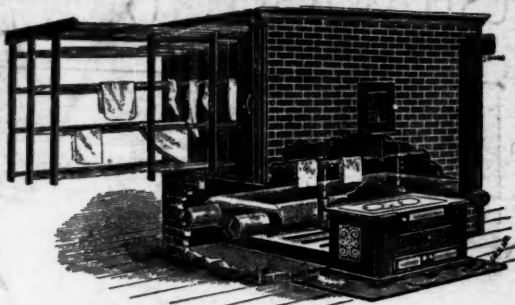
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