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A NOVEL question of insurance has come up in connection with the burning of the *Advertiser* Building, in Boston, a few weeks ago. The structure was built long before the adoption of the present rigid building-laws, and it cannot lawfully be restored to the condition in which it existed before the fire. At the same time, the insurance-companies, which have contracted either to replace the building or to pay the amount of the policy, insist that they are only bound to replace it as it was before, and that the laws forbidding the repetition of the original construction do not concern them. As the difference in cost between a restoration of the original construction and the restoration of the building according to the construction now required by law is several thousand dollars, the contest may be a prolonged one, and every one who holds a policy of insurance is interested in the result. It is safe to say that the majority of policy-holders entertain erroneous ideas in regard to the kind or amount of indemnity which they would actually be able to collect from the insurance-companies in case of loss, and the sooner the rights of both parties can be clearly defined the better it will be for the insured, as well as for the companies, which, in the end, gain nothing by accepting premiums from innocent policy-holders for indemnities which their "rules," as they know very well, would forbid their paying.

FOLLOWING the example set by Mr. D. O. Mills, in New York, in the erection of the so-called "Mills Hotels," where poor men can be lodged and fed decently, comfortably and cheaply, Lord Rowton, with Sir Richard Farrant, not long ago built an experimental lodging-house for men, with four hundred and seventy-five beds, not as a purely charitable enterprise, but in the hope that it might prove a reasonably profitable investment, at the same time that it provided respectable men with something better than the ordinary rooms in cheap lodging-houses. The first experiment proved so successful that a company was formed to extend the work, with Lord Rowton as chairman, and five houses have now been built, with a combined capacity of about thirty-five hundred beds. Mr. H. B. Measures, who is the architect of all the buildings, read a paper on them the other day before the London Architectural Association, giving some important and interesting results of seven years' experience in their construction and management. Very sensibly, Lord Rowton determined, from the first, to try to attract the sober and prudent men, and repel the others, by establishing a rule, which has been strictly maintained, that no card-playing shall be permitted in any of the houses, and that no liquor of any kind shall be sold in them. The propriety of the latter rule is obvious enough, and that of the other, which excited, at first, a certain amount of criticism, will be acknowledged by those who know best the demoralizing effect of card-playing on working-men.

IN other respects, the rules of the Rowton Houses are not particularly strict. The dormitories, which are divided into separate "cubicles," each with its own window, must be vacated at nine in the morning, and are not opened again until seven in the evening; the interval being utilized for making the beds and keeping the rooms clean; but the public rooms, comprising dining-room, kitchen, scullery, reading-room, smoking-room and so on, are open at all hours. Every person who passes the turnstile in the office must have a ticket entitling him to a bed for one or more nights. For a single ticket twelve cents are paid, and the holder, by giving notice, and procuring a new ticket, can keep the same bed a second night, or he may take a bed by the week, at seventy-two cents a week. The bed-ticket gives admission to all the public rooms, and the holder may obtain other tickets, entitling him to a bath, or to a book from the library, with which each house is provided. In the dining-room he can have cooked meals, at a very moderate price, or, for a small fee, can cook his own provisions, at ranges devoted to that purpose at one side of the dining-room. If he chooses to cook for himself, he must, however, wash his own dishes, in a scullery connected with the dining-room. It is unfortunately true that thoughtful benevolence excites in some perverted minds only the desire to do mischief, and it is found necessary to take precautions accordingly. Several attempts have already been made to set the dormitories on fire by piling the bed-clothes at the foot of the partitions, and lighting them, so that the partitions should be made of fireproof material, although wood sheathing has hitherto been used in the London houses. For a similar reason, the bowls and traps of the water-closets are surrounded by a mass of concrete, which defies all attempts at malicious breakage; and even the baths, which it would hardly be possible to break, are cased-in solidly with enamelled brick, to prevent discarded clothing from being concealed under or behind them. Of course, people who try to burn their fellow-lodgers in their beds have no scruples about stealing their property, and, as the cubicle partitions do not extend to the full height of the room, it is found necessary to protect the clothes-hooks by a narrow shelf over them, which prevents the strenuous lodgers from appropriating their neighbor's clothes by means of a hooked wire.

IN a recent discussion at the Surveyors' Institution, in London, on the condition and prospects of the building industry, some curious facts were brought out in regard to the influence which the trades-unions have had upon the business, as well as in regard to the curious paralysis which seems to have fallen upon British trade in general. One speaker, a large contractor, said that, owing to the chances of strikes among their workmen, manufacturers of building material would not agree to any specified time for delivery of goods, and owing, apparently, to the habit of indifference to punctuality so formed, they were, even when not interfered with by strikes, so slow in filling their orders that their customers had been driven to purchase of foreigners, who could make a definite agreement, and fulfil it. Even now, as he said, nine-tenths of the window-glass used in Great Britain comes from abroad, and there are only about two manufacturers of such glass left in England. "It was the same," he said, "with iron and steel." He had given an order to an English house, some twelve months previously, for a quantity of steel, and had not yet received the full amount of goods; while an order for a similar amount placed with a foreign firm was entirely filled within three months. In the same way, wishing for a certain woodworking machine, he was told by two or three English firms to whom he applied that the machine could not be built in less than from three to six weeks. He, therefore, sent his order to a German firm, which delivered the machine in seven days.

ANOTHER speaker spoke of the well-known limitation of the number of bricks that a union bricklayer should lay in a day, and said that on one of his own buildings all the bricklayers struck because a union man, who was drunk, was not allowed to come on the work. Fortunately, he was able to get non-union men, and proceed with his contract; otherwise

he would have been obliged to choose between letting his work lie idle and paying wages to a drunken wretch, who, if he happened to fall off the staging, might, under the Workmen's Compensation Act, claim one hundred and fifty pounds from him as damages. Still another illustration of the effect of trades-unionism on British industry is given by a London paper, which says that a certain new gun-attachment was examined by a union committee, and classified as a day and a quarter's work. A machine was devised to produce it, but even then the union men could not, or would not, make the piece in less than a day and a quarter. At last a German workman was employed, and found no difficulty in turning out thirteen of the pieces per day.

EVERY American must be proud to see so many familiar American names in the lists of the winners of honors in the architectural section of the Paris School of Fine-Arts. So common has it become for Americans to enter, with success, the competitions for the higher prizes of the school that the Conseil Supérieur des Beaux-Arts has obtained from the Government a new regulation, applicable to the Section of Architecture, providing that foreign pupils, while they are permitted to compete for the prizes and medals not expressly reserved to French citizens, shall not be entitled to receive the sums of money which are attached to many of these prizes. In case, therefore, the jury in any school competition should award to a foreign pupil a "recompense" consisting of a medal, or other prize, and a sum of money, the name of the foreigner is to be announced as the winner, and he is to receive the medal, or other honorary distinction, but the money payment attached to it is to be reserved, and the jury is to vote again, to decide whether any of the other competing designs is worthy of a medal of the same category. If one or more designs are considered to be also deserving, the French pupil placed nearest to the winner is to receive the money payment; and if there are no other deserving designs, the money is to be reserved, and may be used for rewarding two French pupils in the competition of the following year. The new rule has already been applied, in the case of the Rougevin prize for decorative composition. The "Concours Rougevin" is one of the most important of the school-year. Three medals are awarded, and the winners of the first two medals also receive, from a fund established for the purpose, rewards of money, six hundred francs going to the winner of the first medal, and four hundred to the winner of the second. The first medal, with its six hundred francs, was awarded to M. Cret, a pupil of M. Pascal. The second, or rather, the second-first, medal was awarded to Mr. Brown, an American, a pupil of M. Laloux, and the third-first medal to M. Roy, also a pupil of the *atelier* Laloux. As the new regulation had already been announced, very possibly in view of this particular competition, Mr. Brown was, in accordance with it, obliged to content himself with his medal, while the four hundred francs attached to it were given to M. Roy. It does not appear that the American pupils in the school have made any objection to the new plan, and they are hardly likely to do so. Most of them are in comfortable circumstances, and do not need the money, and, if foreigners are permitted to compete for medals established by gifts or bequests from French citizens, it is obviously reasonable that the money-payments attached to them, which the founder would naturally have intended for the benefit of his own countrymen, should be so applied as to carry out that intention.

BY the will of the late Edward H. Kendall, provision is made, at the death of his widow, for the establishment of a travelling scholarship, or fellowship, in architecture at Harvard University, and in certain contingencies, a similar scholarship is to be established also at Columbia University, and, possibly, at the Massachusetts Institute of Technology.

THE well-known George A. Fuller Company, building contractors, of New York, Chicago, Philadelphia and Boston, has filed papers, certifying the increase of its capital stock from six hundred thousand dollars to twenty millions. All the new stock has been subscribed for at par, and none will be offered to the public. The Company proposes to extend its operations, including in them all kinds of iron and steel construction, as well as ordinary building. The new officers of the Company are not yet elected, but it is to be presumed that the principal ones, whose capacity has already been demonstrated, will be continued in their present positions.

A RATHER interesting question in regard to the use of scientific terms was decided in England a few days ago. Before the days of Portland-cement it was the practice in England to lay masonry exposed to dampness in an hydraulic lime, made from limestone of the formation known to geologists as "lias," or "blue lias," from the ordinary color of the stone. Enormous quantities of this material were used, wherever masonry was to be laid underground, or in damp situations, under the name of "lias lime," or "blue-lias lime," or "Aberthaw lime," from the place where the lias limestone was principally quarried, to distinguish it from the "fat limes," suitable for plastering. Recently, a deposit of argillaceous limestone has been found in Cambridgeshire, having qualities similar to those of the lias stone, but not belonging, geologically, to the lias formation. This stone, when burnt, furnishes an hydraulic lime, very similar in all respects to the Aberthaw or "blue-lias" lime; and the proprietors of the quarry put it on the market under the name of "blue-lias lime," which has for many years been used by contractors and workmen to denote a lime of a certain hydraulic quality, which the new lime also possessed. The persons interested in the original blue-lias quarries, finding that the Cambridgeshire lime could be sold in some places at a lower price than theirs, made a complaint to the courts against the Cambridgeshire quarrymen, as fraudulently using the name of "blue lias" for their lime, and the matter turned upon the question whether "blue lias" was a name which should be restricted to stone from a certain geological formation, or whether it denoted a lime having certain properties, whether it were found in any particular formation or not. Much evidence was brought forward on both sides, and the court finally decided to dismiss the complaint, but without costs. The judge said that the weight of evidence went to show that the term "blue lias" was accepted in the trade as an indication of quality. If the quarrymen had described their lime as Warwickshire blue lias, so as to lead people to suppose that it came from the original blue-lias quarries in Warwickshire, while it really came from Cambridgeshire, a conviction for fraud might follow, but the name "blue lias," by itself, did not appear to be a fraudulent misrepresentation, in the light of the evidence. The attorney for the genuine blue-lias quarries asked leave to appeal, but the judge said that the question was one of fact only, and that an appeal could not be based upon it.

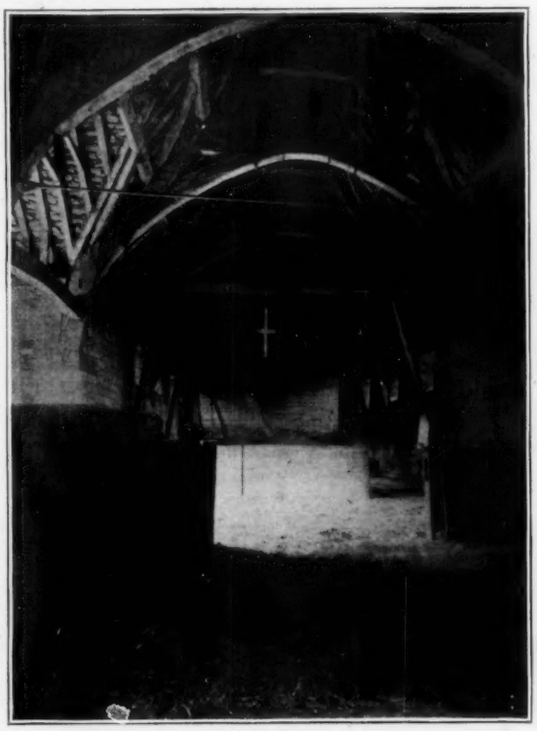
THE contractors for the Simplon Tunnel make monthly reports of progress, from which it appears that there are now about thirty-eight hundred men at work, twelve hundred of whom are occupied outside of the excavation. On the first day of February very nearly five miles of the tunnel had been excavated sufficiently to allow the laying of the temporary railway-track, and the work is now advancing at an average rate of about forty feet a day. Naturally, excavation goes on from each end of the tunnel, and the conditions have so far been favorable, the rock being mostly a bastard granite, without important veins of water, and only a few yards of wooden shoring have been found necessary. If the present rate of progress is maintained the mountain will be pierced in about two years more. It is interesting to read that, while nearly four thousand men have been safely and comfortably working in the warm interior of the mountain, a terrible avalanche of snow and ice overhead has destroyed a portion of the famous Simplon diligence route, killing three people, and covering the valley through which the road passes for a distance of a mile and a half with blocks of ice, stones, earth and débris from the neighboring forest.

WE mentioned, not long ago, the extraordinary success of the tests made by the British Fire-Prevention Committee on ceilings and floors of wire-netting, protected by terra-cotta, under a system invented in Germany, and in very extensive use there. An advertising circular sent us from Germany enables us to give the address of the manufacturer of this material, which we hope to see in use in this country before long. Nowhere in the world has so much attention been paid to fire-resisting construction as in the United States, and nowhere else are the principles of such construction so well understood by architects, and it seems to us certain that a material so simple and cheap would soon find extended application here. Of course, it is patented, but there is not likely to be any difficulty in arranging for the use of it. The manufacture is now in the hands of Messrs. P. Stauss and H. Ruff, Cottbus, Germany, who offer to send descriptive pamphlets and samples to persons interested.

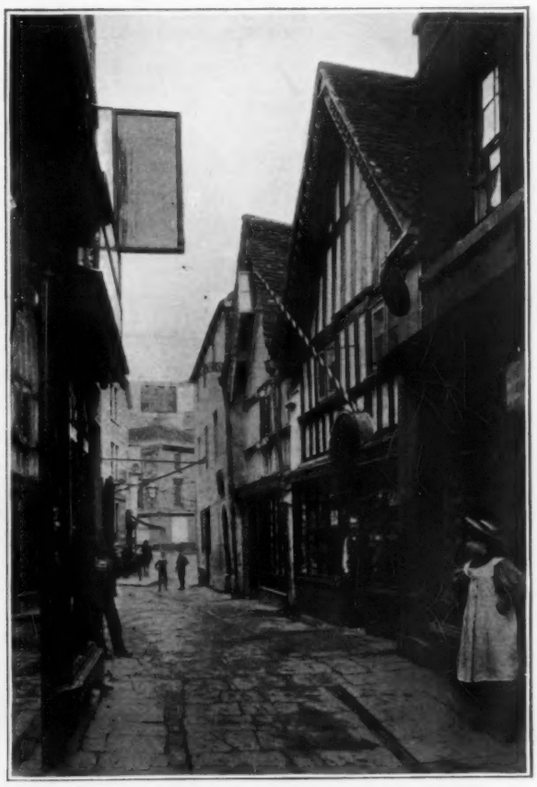
BRADFORD-ON-AVON.

THE old foreign-looking town of Bradford-on-Avon, England, is not only remarkable as the possessor of the finest of two or three veritable Saxon churches[1] and of a very ancient bridge with chapel thereon, but it is a good centre from which to make excursions to several grand manor-houses of Elizabethan or Jacobean date. In the town itself, the original of the English Pavilion at the Paris Exhibition may be seen, with its fine terraced front and beautiful mullioned windows. Its prototype beyond the seas is somewhat smaller, but built to scale; it appeared, however, to be much smaller, on account, doubtless ,of its surroundings. In Paris, the building was wedged in and choked by the tall Belgian Town-hall and the Hungarian Palace; whereas here in Bradford its original stands alone, with a background of trees. Kingston House, now called, as of old, "The Hall," was built by a rich clothier of that name, at the beginning of the seventeenth century. Its noble front, with an open balustrade, or battlement, over the gables, and its plethora of windows make it one of the best specimens of Jacobean architecture; nevertheless, we may wish that Great Britain had been represented at the Exhibition by a larger and more important palace. Lord Bacon described houses of this character thus: "They are so full of glass that one cannot tell where to become to be out of the way of the sun or of the cold." Leland, who made a journey through Wiltshire to report upon the monastic buildings after the dissolution (his survey was executed from 1540–42), speaks of Kingston House as a "prettie stone house held by one Haule *alias* De la Sale, a man of £100 landes by the yere." Leland was a clerk in Holy Orders. His

Kingston House, or the Hall.



Interior of the Tythe Barn, Bradford-on-Avon.



The Shambles, Bradford-on-Avon.

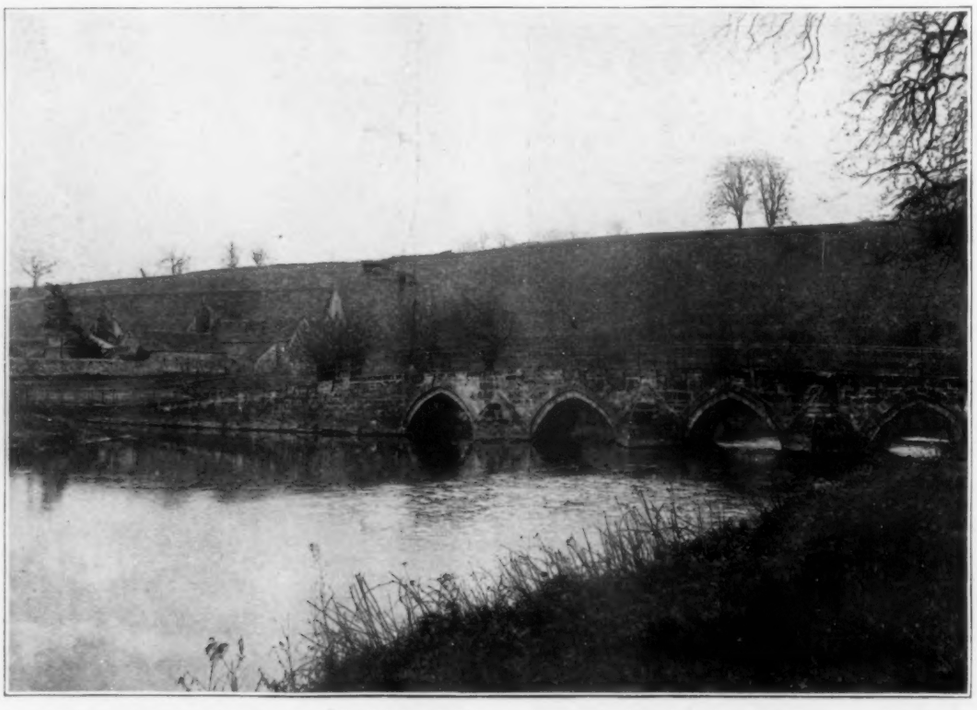
[1] See *American Architect* for February 18, 1893.

"*Itinerey*" still exists, and is interesting, although it is little more than a list of the buildings extant in his time or destroyed; but his "little stone house" must be an earlier building. The present house was built in 1567–79 by a certain John of Padua, who is thought to have been John Thorpe, Italianized. Leland was styled "Divisor of Public Buildings" to Henry VIII, Edward VI and the Protector Somerset.

The tythe-barn belonging to Barton Farm, formerly part of the domain of the Abbess of Shaftesbury, is a magnificent building of its kind, 170 feet long and 20 feet wide; including the transepts, the width measures 60 feet. The roof-timbers are all so framed from the ground as to be as far as possible independent of the walls, so as to minimize the lateral thrust which their great weight would otherwise exert upon the building to the detriment of the walls. The barn has two gabled porches, with buttresses and arched doorways. On the surface of the stones of the interior are the marks of the masons employed; and by them (for each man had his own distinctive mark, which he was obliged to put upon the stones he worked) it would not be difficult to make a rough calculation of the number of masons employed upon the building. Its date is from 1300 to 1350. The farm-buildings and the old bridge, with its sharp cut-water piers, belong to the same period.

The old town of Bradford is built entirely of stone upon terraces on the side of a high hill. Many of the houses bear the stamp of Dutch origin owing to the influx of spinners from Holland in the seventeenth century, who were introduced into Bradford by Paul Methuen, a clothier, to improve the character of the cloth produced by him. The quarter occupied by these weavers is still known as Dutch Barton. In the centre of the town, in a paved court, "The Shambles," are two or three half-timber-fronted houses.

Old Tythe Barn, Bradford-on-Avon.



Barton Bridge, Tythe Barn and Farm.

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L'ÉCOLE NATIONALE ET SPÉCIALE DES BEAUX-ARTS, PARIS. SECTION D'ARCHITECTURE.[1] — II.

THE simultaneous study of drawing and modelling is to instruct the painter in architecture and sculpture, the architect in drawing and sculpture, the sculptor in drawing and architecture.

The exercises in this school, which is open every day, consist: —

1. In figure drawing from the life or the cast.
2. In modelling ornament and the figure from the cast.

Each work of specified dimensions is to be executed in twelve hours, and is adjudicated on by a mixed jury, composed of the three Professors of the Simultaneous Study of the Three Arts, the Professor of Decorative Composition, ten painters, ten sculptors and ten architects, drawn by lot from the acting juries. Second-class medals and first mentions can be awarded.

[1] Continued from No. 1318, page 103.

Every year, at the conclusion of the course of lectures on the History of French Architecture, the Professor may award medals and mentions to those students who have shown most aptitude and have best profited by his instruction.

The Grand Medal of Emulation is awarded each year to the student who has gained the highest number of *valeurs* in the various competitions of the year.

The awards of medals and mentions may be illustrated by the following examples of last year: —

For a sketch competition, subject "A Pulpit," 118 designs were exhibited: three first second-class medals, two first and eight second mentions were awarded.

For a sketch competition, subject "A Synagogue," 124 designs were exhibited: the jury awarded three first-class medals, six first second-class medals, four second second-class medals, and eighty-three mentions.

For the "Prix Rougevin" 164 designs were submitted: the jury awarded a first prize and first-class medal, a second prize and first-class medal, three first-class medals, six second-class medals, and ninety-four mentions.

For the "Prix Godebœuf," subject a "Campanile of a Town-hall," 186 designs were submitted: the jury awarded six first-class medals, eight second-class medals, and ninety-six mentions.

For purposes of comparison, medals, mentions, etc., are converted into *valeurs* in accordance with an established valuation for each reward in each class: thus generally a first-class medal will represent three *valeurs*, a first second-class two *valeurs*, a second second-class one and half *valeurs*, a first mention one *valeur*, a second mention half a *valeur*; while in the division of Construction a first class medal represents five *valeurs*, a second-class four *valeurs*, a third-class three *valeurs*, and a mention two *valeurs*.

Various prizes are annually awarded — most founded by individuals. Such are: —

The *Prix Muller-Sœhnée* of 539 francs, awarded to that pupil in the second class who has carried off the greatest number of *valeurs* in the year.

The *Prix Jay* of 700 francs, for the pupil in the second class who takes the first place in the competition in Construction.

The *Prix Jean Leclaire* of 500 francs, for the student who takes the shortest time in fulfilling the conditions for passing from the second to the first class.

The *Prix Jean Leclaire* of 500 francs, for the student of the first class who has gained the Grand Medal of Emulation.

The *Prix de la Société Centrale des Architectes* — the Great Medal of the Society — awarded annually to the student of the first class who has gained in the three preceding years the greatest number of *valeurs* in medals only in the competitions on set subjects.

The *Prix Abel Blouet* of 1,000 francs, awarded each year to the student of the first class who has gained the greatest number of *valeurs* since his entry into the school.

The *Prix Rougevin* of 600 and 400 francs, above described.

The *Prix Godebœuf* of 740 francs, above described.

The *Prix Edmond Labarre* of 200 francs, awarded in a competition of three days' design between students of first and second classes.

The *Prix Couvents-Daupeley* — five prizes of 753 francs 80 c. each — awarded each year to students little favored by fortune, and whose work deserves encouragement.

The *Prix de Reconnaissance des Architectes Américains*, of 1,740 francs, founded by American architects in recognition of the instruction received by them at the school, is reserved exclusively for the French students of the section of Architecture, and is awarded as the result of a special competition.

There are also bursaries available under the *Fondation Chenavard* for assisting poor students (*Pauvres*) in their studies.

The *Prix Saint-Agnan Boucher* of 1,000 francs is awarded every fourth year to the architect student who, having acquired the *valeurs* required to qualify for the diploma, has continued his studies and obtained the greatest number of *valeurs* for set subjects.

The drawings submitted in competition for prizes are publicly exhibited, and collections of phototypes of each year's work are published.[1]

The vacation is from August 1 to October 15: during this vacation rooms are available for pupils who desire to continue their studies. At the same time, subjects for design are set for pupils of the second and first classes.

There are three *ateliers* or studios available for architects, who, subject to the concurrence of the Professor (Patron d'Atelier) can select the studio in accordance with the date and order of their admission. These *ateliers* are open every day under the control of the Professors.

Beyond the limit of age (30 years) there is no restriction of the time which may be spent in the schools, except that in the second class any student who has not submitted two designs at least, or taken part in two competitions of analytic elements, or undergone two examinations, or submitted one design and undergone one examination, or gone through the competition of Construction, is considered as withdrawn, and can only re-enter the school by the ordinary course. Any student of the first class who has not submitted one design at the least, and taken part in one of the sixteen competitions of the year, is considered as having abandoned the intention of continuing his studies in the school.

At the end of each year a prize of 816 francs is awarded to that pupil of the studios who has gained the Great Medal of Emulation of the school.

The Study of Decorative Design — by Painters, Sculptors, and Architects. — A room is daily open for the study of Decorative Design by such painters as have obtained mention in Modelling and Architecture, sculptors who have obtained mention in Drawing and Architecture, and architects who have obtained mention in Drawing and Modelling. The studies consist of exercises in Decorative Design, combining the three arts, and directed by the Professor, and each occupies twenty-four hours' work — of either Drawing or Modelling. The works are judged by a jury of three Professors of Simultaneous Study of the Three Arts, the Professor of Decorative Design, ten painters, ten sculptors and ten architects drawn by lot from the active juries.

Once each year there are two competitions among the members of this class who have obtained the "mention" of the three arts, on a programme set by the Professors, the sketch-design being made *en loge* in twelve hours, and the completed design within a month, in such form as to drawing and modelling and scale as the Professors may determine; the awards being made by a jury constituted as the last-mentioned, and being — a second-class medal and 200 francs; a first third-class medal and 150 francs; and a second third-class medal and 100 francs.

There are also, yearly, two competitions in Decorative Design open to students who have obtained the mention of the three arts. They are in two stages. For the first stage the competitors produce, *en loge*, in twelve hours, a sketch-design from the subject given. On these sketches are decided the six students in each section who shall be permitted to compete in the second stage. The second stage is the complete working-out of the sketch-design executed *en loge* in six days, either in drawing and modelling, and to a fixed scale. The awards are made by a similar jury to the last-mentioned, and consist of a first-class medal and 300 francs; a first second-class medal and 250 francs; and a second second-class medal and 200 francs, and mentions.

The "Certificat d'Etudes" of the School is only granted to those pupils of the first class who have obtained either an award in the competition for the "Grand Prix de Rome" or a first-class medal, or two second-class medals, one at least of which must be for design, or five *valeurs*, three of which must be for design.

Every year there is a public competition for the "Grand Prix" of Painting, Sculpture and Architecture — open only to French subjects between fifteen and thirty years of age. The result is decided by the united sections of the Académie des Beaux-Arts, to each of which half of its number of outside artists is added — viz, seven painters, four sculptors, four architects, two engravers. Its awards may be the first "Grand Prix" and two other rewards, second "Grand Prix," or honorable mention.

The competitors each receive a grant-in-aid for their expenses, two-thirds of the total being paid during progress, as needed, and one-third being retained to the end, and being forfeited by those who do not comply with the conditions.

The preliminary trial is on a sketch made in twelve hours: from the authors of these the jury selects twenty-five for a second ordeal, which consists of another sketch to be made in twenty-four hours: from these ten candidates are chosen, who enter, *en loge*, for the final competition.

The competition lasts 110 days. The competitors may make studies for this design outside, but can only bring *en loge* such studies on tracing-paper, the entire drawing of the design being made *en loge*.

The designs successful in this competition have been published in collected forms, which provide an interesting record of progress in design, etc.[1]

The successful candidate becomes a *pensionnaire* of the Académie de France at Rome, at the Villa Médicis, on the Pincian,[2] and of the École Française at Athens, and receives 3,510 francs, or £300 [*sic*], yearly for his expenses. Four years are to be spent in study in Italy and Greece, and the results are yearly sent to Paris. The prescribed drawings to be produced are: — *First Year*, four sheets of details, quarter full-size, from monuments in Rome or in Central Italy. *Second Year*, four sheets of details of ancient monuments of Italy, quarter full-size. Details of Renaissance architecture. *Third Year*, two sheets of details from an ancient monument of Italy, Sicily, or Greece, quarter full-size; a study of restoration of part of this monument; a study of restoration of part of the design and essential parts of the construction of the edifice — not less than four sheets, with explanatory memoir. Details of exterior and interior decoration of Middle Age and Renaissance architecture. *Fourth Year*, the restoration of a single edifice or group of buildings in Italy, Sicily, or Greece, with complete drawings of the present state; restoration studies and details, with an explanatory historical memoir.

Some idea of the thorough and complete nature of the studies made in these four years, and of the magnificent drawings produced, may be obtained by reference to published works.[3]

[1] *Les Médailles des Concours d'Architecture — de l'Ecole Nationale des Beaux-Arts — et Grands Prix de Rome.*
1re Volume, 227 Phototypes, année scolaire 1898-1899.
2me " " " " " " 1899-1900.

[1] *Grand Prix d'Architecture* (1804-31): *Projets couronnés par l'Académie Royale des Beaux-Arts de France.* Par A. L. T. Voudoyer et L. P. Baltard. Paris, 1818-34.
Les Grands Prix de Rome d'Architecture de 1850-1900. Reproduction en Phototypie des 1ers, 2me et 2me Seconds Grands Prix, avec les programmes des Concours (sujets donnés par l'Académie des Beaux-Arts). 4 vols., Paris, 1900.

[2] Baltard, Victor: *La Villa Médicis à Rome.* Dessinée, mesurée, et accompagnée d'un texte historique et explicatif. Paris, 1847.

[3] *Restaurations des Monuments Antiques, par les Architectes Pensionnaires de l'Académie de France à Rome, depuis* 1798 *à nos jours.* Avec les Mémoires explicatifs des Auteurs. 7 vols., fo. Paris, 1877-90.

The admirable work done by the *pensionnaires* is displayed in the two beautiful volumes of reproductions of selections from their drawings, recently published by M. D'Espouy, Professeur du Dessin Ornamental in the École. These instructive and valuable volumes should be carefully studied by young architects, not only as most important and useful records of details of historical monuments, but also as models of draughtsmanship which should awaken emulation, and the mere contemplation of them must produce a good effect.[1]

The "Diplôme d'Architecte."

The examinations for the Diploma are held in June and December of each year. A candidate for admission to them must have gained at the least ten *valeurs* of the first class in the competitions in Architecture; one *valeur* in the competition in the History of Architecture, Figure Drawing and either Ornament or Figure Modelling; he must also produce a certificate that he has for at least one year attended works of construction under an official engineer or architect, or has himself directed such works.

Although the age-limit of thirty years must be complied with as regards the acquisition of the requisite *valeurs*, the Diploma may be obtained after that age.

The examination is written, graphic and oral.

That in writing is devoted to the working-out of two questions — one relating to the laws of building, the other to the practical execution of works, to each of which two hours are given.

That in drawing is a design in architecture for some important building, conceived and carried out as for actual execution. It comprises plans, elevations and sections, figured, and includes all the details of construction, and is completed by a descriptive memoir and specification, quantities and estimate of part of the construction. The successful designs are now published in a collected form, of which two volumes have appeared, each containing about 250 phototypes.[2]

Each candidate may select the programme for his design, subject to rejection and revision by the architect-member of the jury of examination, who may fix the scale to which it may be drawn. There is no limit of time for this work.

The oral examination is on the different parts of the design delivered, the theory and practice of the construction, the history of the style, the elements of physics and chemistry applicable to the construction, and the essential influences of the laws of building and responsibility.

The adjudication is made by a jury specially appointed each year, consisting of two of the Professors of Architecture, Chefs d'Atelier of the École chosen by lot, two professors, heads of external *ateliers* chosen by lot from the permanent members of the Jury of Architecture, the Professors of the Theory of Architecture, of Construction, of Physics and Chemistry, and of Building Legislation.

The candidate may be relegated to a succeeding session in any portion of a subject.

The Diploma was first established in 1862, when only five candidates passed. It made but little progress till 1883, at which period ninety-four had obtained the Diploma, and in that year there were twenty-four successful candidates. Their numbers have probably increased to about 100 in each year — in 1900, ninety-eight candidates, students of eleven *ateliers*, were successful, so that the principle is firmly established and fully appreciated. The holders of the Diploma have established the "Société des Architectes Diplômes par le Gouvernement," and the success and further development of the scheme must have a serious and beneficial effect in the future on the advancement of architects and the promotion of architecture.

Discovery of a Roman Temple. — A temple in a walled square was found the other day at Naundorf, in the Hunsrück Mountains, in Rhenish Prussia. The square is about 220 feet long by 200 broad, and the temple, which stands in the centre, covers an area of about 60′ x 50′. The whole enclosure formed part of a settlement, of which seven buildings can be traced. Numerous objects, especially of terra-cotta, and evidently votive gifts, have been found on the southern side of the temple. About 100 figures are still complete, most of them being of goddesses, with fruits or a little dog in their lap or a child at their breast. These have not yet been identified. Small bronze statues representing Mars, Jupiter and Mercury have also been found. The temple is richer in terra cotta relics than any other hitherto discovered in Germany. — *London Standard.*

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[1] *Fragments d'Architecture Antique, d'après les Relevés et Restaurations des Anciens Pensionnaires de l'Académie de France à Rome.* Publiés sous la direction de H. D'Espouy, Professeur à l'École des Beaux-Arts. fo. Paris, 1899.

Fragments d'Architecture du Moyen-Age et de la Renaissance, d'après les Relevés et Restaurations des Anciens Pensionnaires de l'Académie de France à Rome. Publiés sous la direction de H. D'Espouy, Professeur à l'École des Beaux-Arts. fo. Paris, 1900.

[2] *Les Diplômés d'Architecte; Concours de l'Ecole Nationale des Beaux-Arts; Projets d'Architecture des Elèves de l'Ecole, donnant droit au titre officiel:* "Architecte Diplômé par le Gouvernement Français." fo. Paris.

*** This article is based on the official "Règlement" and "Programmes" for 1900; further information kindly furnished by M. Henry Jouin, Secrétaire de l'Ecole, and other sources. Reference has also been made to the following works, viz: Müntz (Eugène): *Guide de l'Ecole Nationale des Beaux-Arts, avec plans et vues.* Paris, 1889. — Lemaistre (Alexis): *L'Ecole des Beaux Arts, dessinée et racontée par un élève.* Paris, 1889 — Rousselet (Louis): *Nos Grandes Ecoles Militaires et Civiles.* 3e édition, Paris, 1892. — *L'Ecoles des Beaux Arts*, pp. 323-408. — Rousselet (Louis): *Nos Grandes Ecoles d'Application Militaires et Civiles.* Paris, 1895. — *L'Académie de France à Rome. La Villa Médicis*, pp. 419-485. — White (W. H.): *A Brief Review of the Education and Position of Architects in France since the year* 1671. *Transactions* R.I.B.A., Session 1883-84, pp. 93-120, with Plans of the Palais des Beaux-Arts. — Spiers (R. Phené): *The French Diplôme d'Architecte, and the German System of Architectural Education. Transactions* R.I.B.A., Session 1883-84, pp. 121-132. — White (W. H.): *Architecture and Public Buildings: Their Relation to School, Academy and State, in Paris and London.* 8o. London, 1884, pp. 1-63.

DOMESTIC ARCHITECTURE IN ENGLAND DURING THE MIDDLE AGES. — I.

THE term "Middle Ages" includes that period of European history that lies between the overthrow of the Western Roman Empire, A. D. 476 (and with it the decadence of Roman civilization) and the great "Revival of Letters" in the sixteenth century: the period, in fact, that lies between the classic glories of Ancient Greece and Rome and the splendors of Modern Rome and the renaissance of Western Europe; in time, about a thousand years.

In speaking of domestic buildings in England during the Middle Ages, we must be limited to the period that lies between the Norman Conquest of Britain, in the eleventh century, and the era of the Reformation, in the sixteenth century, except as a matter of introduction.

Of the time preceding the Conquest we have relics of much interest dating from the Roman occupation, prior to the fifth century. Those great rulers of the early nations introduced into Western and Southern Europe something like a universal architecture, so that the buildings of all Roman dependencies or colonies were more or less on the same general periodic lines. Brick was the favorite material, small in size, thin, like tile, used with a large proportion of mortar, in which was frequently imbedded local field-stones, forming a concrete mass. Remains of these old walls are to be seen in the ruins of old castles and villas scattered along the southern coasts of England that have survived the lapse of fourteen centuries. Their tile and stone pavements, the foundations of their villas, their hypocausts, show well-studied design, scientific knowledge and sound workmanship. Their engineering-works, in embanking the Thames, reclaiming and draining the marshes and protecting the low-lying districts from devastation by flood, prove that they, fourteen hundred years ago, were more advanced in science and gifted with greater foresight and energy than many peoples of the present day.

Of the Saxon period, immediately preceding the Conquest, the remains are more scanty. The Saxons built mostly with wood, and when they used stone, as in their ecclesiastical buildings, their construction was essentially similar in character, posts, struts and lintels being of stone instead of wood.

A few years preceding the Conquest, the idea prevailed throughout Europe that with the close of the tenth century the world would come to an end, that the dawn of the year 1000 would be the commencement of the Millenium; men's minds were overshadowed with apprehension, and buildings, in common with all other undertakings of a permanent nature, were held in abeyance. It was a crisis in European history, and when the date had safely passed and men's affairs went on as usual, there was a great reaction; men's minds recovering from the fearful suspense broke forth into pious zeal, and the eleventh century was a period of great religious activity, leading to the Crusades on one hand, and the founding and rebuilding, on a more magnificent scale, of vast numbers of churches, abbeys and monasteries, which rose simultaneously in every part of Southern Europe.

It was at this period of European history that William, Duke of Normandy landed on the shores of Sussex, and, by one decisive battle fought near Hastings, vanquished the native forces under King Harold, and the Kingdom of Britain lay at his feet. The result was not essentially due to William's superior generalship, nor to the superior bravery of his soldiers. The Britons were brave, and their king was slain in battle, but the overwhelming nature of the defeat was due more to the fact that the native forces had no fortified places in which they could seek refuge, or otherwise hold an advancing army in check whilst the scattered forces could reassemble and be recruited. Thus, we find Britain, at the date of the Conquest, 1066, a country with few buildings worth noting beyond those left by the Romans six hundred years before; a country rude, undeveloped, difficult alike to defend and to hold.

William brought with him the manners and customs of the Normans, their language, their architecture and methods of building, and, amongst other things, the Feudal System, at once a social bond, a concrete form of mutual defence and a form of civil government, patriarchal in its principles. This ancient system was resuscitated during the ninth century, when the fusion between the conquering barbarians and the subject populations of the Roman provinces was everywhere taking place, and is broadly the result of the mutual influences of the races, a system of service on the one hand and of protection on the other.

This system William brought with him; he rewarded his vassals, retainers and followers with gifts of land; they took possession of the country as if it were an inheritance, and those that lived thereon went with the land on which they dwelt.

Within twenty years of the Conquest the whole of Britain had thus been parcelled out among the followers of the Conqueror and the dignitaries of the Church, with ample reservations to the Crown. In Doomsday Book we have an indisputable record of this vast territorial revolution. There were, however, a few left in every county who still enjoyed the estates they held under Edward the Confessor, free from any superiority but that of the Crown. There were also many inferior freeholders who, by reason of the insignificance of their holdings, escaped the confiscation of those of the higher class. Thus William established his supremacy and that Feudal System, which, in itself, was so admirably adapted to the complete subjugation of the conquered races, the consolidation of divergent interests and the foundations of a kingdom.

The rich abbeys frequently retained one or more of the neighboring lords to defend their interests, who, in return for this protection and service, enjoyed many lucrative privileges, and frequently became possessed of large estates by way of fiefs from their ecclesiastic clients. The abbots were under the same feudal obligations to the Crown as other vassals, and had to perform service or provide substitutes. Thus, the bishops were frequently found in the field in command of battalions of the King's forces.

The oath of fidelity, which the abbots, barons and other landed proprietors had taken to the Crown, was in like manner exacted from their tenants, viz: that they should "faithfully render military service with life and limb, and wordly honour," and this became the essential obligation under which tenants held any benefice. The more powerful proprietors assumed the title of Duke (equivalent to army leader or general) or Baron (a land or territorial title), and, engaging in domestic or predatory warfare, placed their chief dependence upon the men whom they attached by gratitude and bound by strong conditions. The essential principle was a mutual contract of support and fidelity, the obligations laid upon the vassal of service entailing a corresponding duty on the part of the lord to protect and support.

There was small demand for labor at any time, and in seasons of famine or scarcity it was not infrequent for many freemen to sell themselves and become vassals to some powerful lord for the sake of his protection and maintenance. Others again surrended themselves and their property to the Church, in return for such temporal and spiritual benefits as they could reap from their new masters. Thus, landed estates grew in their extent; to him that had was given, and from him that had not was taken away even that which he had.

Although this was the state of Britain towards the close of the eleventh century, it must not be supposed that the conquered races quietly submitted their neck to the iron heel of the Norman. Hereward, the Saxon, and others waged ceaseless war, and the fierce struggle was carried on till the close of the century. The Normans built their strongholds for safety, and the fortified castle became the paramount necessity of the time. THOMAS C. SORBY.

[To be continued.]

ILLICIT COMMISSIONS IN AUSTRALIA.

A PAPER was read by Mr. A. B. Black before the recent Conference of Australian Architects in Sydney, in which he said: — I am a little disappointed, I confess, though I admit that I am not greatly surprised, to find this matter so little the subject of professional favor that it has devolved upon myself alone to lead the utterances preceding general discussion. It cannot be that we, as a body, incline to the belief that it is right and proper to accept such rewards. It cannot be, I feel sure, that it is wished to diminish public interest in this part of our work by minimizing discussion. If there be any here, as it is possible there be, who affect this view, I entreat them to remember that the belief on the part of the public in our general acceptance of such bribes is so wide and general that only the most carefully devised scheme for bringing to book those who are guilty of taking the illicit bribes, and in a systematic and judicial way, can eliminate their deep-rooted distrust. Only a few weeks ago the South Australian Builders' Association sent over to Melbourne a list of some half-dozen resolutions carried by them to a federal conference, and one of these was "that the taking of trade-discounts, etc., by agents and architects is injurious to the best interests of all parties." Now, can any one believe that such a resolution could have been carried by respectable builders unless on a solid substratum of truth? Meeting their secretary and president in the street, I asked if they were going to send me, as I suggested, names of the erring members of the profession for us to deal with. Their reply was, "We would lose all chance of future work in their offices, if we did so." But in the meantime the general public have read and believed the general charge, and even the expulsion of three or four members would not clear off the smirch of questionable honesty affixed to our guild. I believe this immoral feature, common to many other professions, is naturally more rife in those communities which are slowly rising from a state of "less specialized" to "more specialized" organization. The sparse population of our youthful colonies called for the "builder-architect," the "physician-surgeon-dentist," for the "non-legally-trained judge," and many other such combinations of businesses, very suitable to embryo communities, but which are bound very shortly to become specialized. It very often must happen that when the architect, who has been acting as a fire-insurance agent, has to hand over that part of his work to a branch office of the company, that some share of the commissions on business he has brought will still be allowed to him. This is merely a hypothetical case and one probably much less liable to the charge of wrongdoing than most of such. We in South Australia are well aware of the "building architect" who carries out work at less than the usual 5-percent rate, but whose jobs are always supplied as to timber or other valuable materials from some firm with which he has had close connection for years. In one case he had a partner, only recently retired. When I wrote the rough notes for this paper I see I used the words, "I hope and trust, nay, I verily believe, that the whole of our South Australian Institute stands free of this demoralizing irregularity." I regret that since then I have seen cause to moderate this belief; but I can still say that I believe there are only a few who still pursue a course which I hoped had ceased when, in or about 1889, we clearly declared against it. Of the six or twelve outside architects in South Australia I am aware that greater laxness prevails, for a builder from the country, the other day, quietly put some gold upon the table after getting his certificate, and was simply incredulous that it was not accepted. Let those who accept such bribes, or who do what amounts to the same, make charges in excess of the Institute scale for tracings, etc., read the speech made by the late Lord Chief Justice Russell of Killowen, in introducing his Bill before the last session of the Lords. He classes such acts as worse than the usual sorts of theft, by reason of their doers being men of light and learning. Doctors still sometimes accept commissions upon chemists' goods, and I am aware that even lawyers will ask for 10 per cent on the fees of some unfortunate architect towards whom they may have "influenced" work. But generally speaking the liberality and breadth of the education which such professional men have received keeps them with clean hands, if not always a clean heart. I take it that, in spite of there being no other speaker to share in the onslaught, I shall have no opposition to carrying a general expression of feeling against the taking of "any and all secret commissions." As Russell put it, "the guilt lies in the secrecy." If under his Bill a secret commission be accepted, or even offered, both parties in the former case and the tenderer in the latter are guilty of misdemeanor. Clear off the secrecy, and the crime at once goes. Daylight and conscience can be relied upon to do the rest of the work. But though I know you will be with any such resolution, how are we to detect breaches of the rule? The tradesman who is ordered to hand over to the architect all, or a part, or perhaps who has to give such commissions to both builder and architect, will keep silent, till his insolvency perhaps loosens his tongue, and, as a builder is terrorized into complaisance by an architect of this class, what can we do to punish such cases? I hope some delegates will bring some practical suggestions forward, but for myself I can only trust that with the spread of better training, which will in time make us all what all should be and what most are (I can find no better or simpler word), "gentlemen," no such detective service will be required in our body. As a bye-issue I hint very delicately that it would be a graceful thing were we to give up the charge to the builder for tracings. You, in the East, like the wise men of old, boldly charge 1 per cent all through contract-sum, giving in no copies free at all. We in South Australia give one copy, and charge a lower rate for the very requisite second copy. To charge at all to the builder has an ugly sound about it. If a majority view it as I do, the whole would be given up forthwith. No alternative, such as charging to the client and deducting from contract-sum, is worth much, being frequently put in a different form.

ILLUSTRATIONS

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

ADMINISTRATION BUILDING: HOLY GHOST HOME FOR INCURABLES, CAMBRIDGE, MASS. MR. W. H. McGINTY, ARCHITECT, BOSTON, MASS.

DETAIL OF THE SAME.

THREE BRIDGES DESIGNED BY MR. ERNEST GEORGE.

WE copy from the *Builder* as a kind of *succedaneum* to the series of park-bridges published in our last issue these bridges, designed by one of the past-masters of artistic expression.

CARNARVON CASTLE.

SEE article on English "Domestic Architecture" elsewhere in this issue.

CHILDREN'S HOSPITAL FOR ST. JOHN'S GUILD, NEW DORP, STATEN ISLAND, N. Y. MESSRS. WALKER & MORRIS, ARCHITECTS, NEW YORK, N. Y.

THE Lewis Memorial Cottage is one of a group of hospital buildings which has been especially intended for the charitable treatment of children from one to three years old suffering from summer complaints, and is to be open only during the summer months. It is a one-story frame building about 40′ x 103′. Between the two wards is a 16′ x 36′ piazza, with a southern exposure overlooking the bay. It is elevated several feet above the ground, and has a railing and provision for an enclosure of mosquito-netting, so as to make it always available for an out-doors ward or playground for convalescent children.

A feature of the planning is the isolation of the lavatory extensions, which are separated from the wards by wide passage-ways with solid walls and doors on both sides. Each extension contains an irrigating-room and a bath-room. The former is provided with a

large, deep rim-flushing porcelain sink, on each side of which there is a slightly inclined 19″ x 28″ marble slab, 29 inches high, on which the children are placed to receive irrigation treatment. In the adjacent bath-room there is a square, porcelain-lined roll-rim child's bath-tub with the bottom 30 inches above the floor and supported on galvanized-iron standards. The diet-kitchen has a refrigerator, sterilizing apparatus and a porcelain sink, and there is a sterilizing and disinfecting apparatus in the laboratory. A 250-gallon boiler is connected with a Gegenstrom heater of a capacity to supply water to all the fixtures simultaneously at a temperature from 95 to 130 degrees. The lavatories, the passage-ways and the main entrance-hall are heated by direct, and the wards by direct-indirect, steam radiators. The steam for them, as well as for the hot-water heater, is brought from the boilers in the power-house with 3½-inch main and 2-inch return pipes.

Each ward is about 18′ x 30′, with a 14-foot ceiling, and contains only eight cribs, and is lighted by a single large triple window in each end. The wards, passages and lavatories are ventilated through ceiling openings. Round galvanized-iron ducts in the space between the ceiling and the roof extend from these openings to two 30-inch cylindrical drums, connected to roof ventilators. The floors are of wood with maple wearing surfaces. All floor corners have sanitary cove fillets and all the interior surfaces of wood and plaster on the walls and ceilings are finished with white enamel-paint.

[The following named illustration may be found by reference to our advertising pages.]

THE APOLLO THEATRE, SHAFTESBURY AVENUE, LONDON, ENG. LEWEN SHARP, ARCHITECT.

This plate is copied from the *British Architect*.

[Additional illustrations in the International Edition.]

THE HOSPITAL OF ST. JOHN, HOORN, HOLLAND.

THE EAST GATE, HOORN, HOLLAND.

ENTRANCE PORTICO OF THE TRINKHALLE, BADEN-BADEN.

COLONNADE OF THE TRINKHALLE, BADEN-BADEN.

HOUSE OF HERBERT UNDERWOOD, ESQ., FOX POINT, WIS. MR. ELMER GREY, ARCHITECT, MILWAUKEE, WIS.

MORNING-ROOM IN SAME HOUSE.

LIVING-ROOM IN SAME HOUSE.

VIEW FROM LIVING-ROOM IN SAME HOUSE.

NOTES & CLIPPINGS

The Sultan as a Carpenter. — The Sultan when a Prince learned carpentering and became an expert carpenter himself, and has always continued to take a great interest in it. One of his first acts when sovereign was to establish a complete joiner's factory at Yildiz, in which he superintends the manufacture of all sorts of articles of furniture, mostly of his own design. These are worked by very elaborate secret springs, in the invention of which the Sultan takes great delight. He has just sent to the Russian Embassy a specimen of his work as a present to the Czar. It consists of a table richly inlaid with the Sultan's arms in front, where there are four drawers. By touching a spring the top flies open and the centre rises, bearing a silver plate, on which is to be found everything necessary for smoking, in silver and amber. The inside of the top has a medallion, in which is a portrait of the Sultan's son, surrounded by a frame of brilliants. Altogether it is a very artistic and useful piece of furniture. It reminds one, however, of a writing-desk which the Sultan invented. This was a mass of complicated machinery, and could only be opened by working the springs properly. The Sultan decided to give it to Queen Victoria, and confided it to Sir Clare Ford to take to her. The Sultan carefully explained the mechanism to him, and he brought it to England. When Sir Clare Ford arrived at Windsor he thought he would see that it worked all right before he presented it to the Queen. To his horror, however, the secret of the springs had escaped his memory, and nothing would induce the thing to open. Luckily for him it was Sunday morning, and so he had plenty of time to work at it. Suddenly he touched the right spring and it opened. Sir Clare Ford was so afraid of its shutting up again that he immediately inserted a bundle of newspapers to prevent it closing till he could get it off his hands. — *London Telegraph.*

Mediæval Church-clocks. — There was prior to 1298 a clock at St. Paul's Cathedral which struck the hours on a bell by means of mechanical figures, and Decker in his "*Gull's Hornbook*" calls them "Paul's Jacks." In the accounts of the cathedral for the year 1286 the allowances to Bartholomo Orologiario, the clock-keeper, are entered, namely, of bread at the rate of a loaf daily. In 1344 the Dean and Chapter entered into a contract with Walter the Orgoner of Southwark to supply and fix a dial. It is suggested that the clock previously struck the hours, but had no dial. In Dugdale's history of the old cathedral the dial is referred to as follows: "Somewhat above the stonework of the steeple was a fine dial, for which there was order taken in the 18th of Edward III that it should be made with all splendour imaginable, which was accordingly done; having the image of an angel pointing the hours both of the day and night." The dial was placed below the "Jacks," which were not ousted from office, but continued to strike the hours with their accustomed regularity. Decker says, "The time of St. Paul's goes truer by five notes than St. Sepulchre's chimes." There appears but little doubt that dials were absent from most of the early clocks. M. Viollet-le-Duc observes that from the twelfth to the fourteenth centuries no space was arranged in the towers of churches for dials which could be seen at a distance. The earliest dials, he says, were covered by small projecting roofs and made either of wood or lead and decorated in colors. Mechanical figures similar to the St. Paul's "Jacks" seem to have been in use before the introduction of dials and proved to be a lasting attraction. — *The Architect.*

Dust Explosion in a Cement-mill. — A mysterious and fatal dust explosion occurred in the grinding department of the Alpha Cement Works, Phillipsburg, N. J., Thursday, August 2. No one seems to be able to explain how it happened, but it is supposed that a lamp ignited the dust, which is thick in that part of the plant, and the explosion followed. Such explosions are by no means uncommon in flour-mills, where the finely-ground flour has often been the cause of an explosion. But in that case the particles of flour would appear to lend themselves more readily to combustion than would the particles of cement. In the case of the flour, the explosion is caused by the rapid burning of a carbonaceous material very intimately mixed, with a great excess of oxygen. This produces the very best conditions for the rapid combustion of the flour and produces almost instantaneously a large volume of gas, as all products of combustion are gaseous. The volume of gas produced in this case has been estimated as equal to 2,000 or 3,000 times the volume of the solid flour. You have here, indeed, almost the same condition as in the explosion of a powder. The only thing that is able to produce the shock in a powder explosion is the *rapid* liberation of a large amount of gas, the more rapid the formation of gas, the more powerful the explosion. In considering these facts, it is not, at first sight, very plainly evident how they can be used to explain the explosion of cement-dust which collects in the air around a grinding-mill. There is the same mixture of an exceedingly fine powder, with a great excess of air, but that powder is not combustible under ordinary circumstances. If the explosion occurred in that part of the mill where the limestone is ground before it is burned, it might be possible to say the explosion was produced by the sudden liberation of a large volume of carbon-dioxide, but this we are unable to state. We are still so superficially acquainted with the affinity that holds the atoms together in the molecule, that an explosion like the one recorded must remain a partially explained mystery for the present. Possibly, in grinding the particles of rock or cement as fine as we are now doing, we weaken the chemical affinity of atom for atom, and only a slight shock is necessary to destroy it entirely, when the elements out of which the substance is compounded must resume their own peculiar condition of solid, liquid or gas. What this shock may be, we are only able to conjecture. It may have been caused by the crackling of some of the minute particles of rock as they floated through the light; it may be that small particles of limestone were burned to lime and the sudden liberation of a small quantity of carbon-dioxide produced sufficient disturbance to destroy the equilibrium of all the particles around it. There might have been many other causes, none of them very susceptible of proof. The officers of the mill are investigating the explosion, and we may hope to get some valuable information from their report. — *Cement and Slate.*

Odd and Even in Churches. — The old church of St. Mary, Coddenham, Suffolk, is an excellent instance of that very characteristic and pervading feature (for such we believe it to be) of Pointed architecture which may be called "perissotes." That odd numbers are suggestive of the infinite, as even are of the finite, is a psychological fact more certain than explicable. But in that fact we must doubtless find the solution of the predominance of odd numbers in the details of Christian architecture, particularly in all such as are seen, so to speak, vista-wise, the effect produced or suggested in these instances being that of limitless extension. Thus, to take the example most in point, the case of roof interiors. Were the number of bays even, a completeness of sum, and consequent idea of repose, would be suggested to the mind immediately on becoming conscious of it. But the never-failing odd bay, and, in like manner, the odd arch or pillar or window, as commencing a new sum which is never finished, carries in it the idea of a reaching-out into the infinite. The number of bays in the nave-roof of this church is nine; nine and eleven are the most common numbers in Suffolk churches. The arches of the south aisle are four, and so at first sight form an exception to the "perissotes" spoken of; but the north aisle having but three, the entire number is seven, and we cannot doubt that there was design in this. As there are responds, the piers are seven in number likewise, reckoning each pair of responds as one pier. The windows on the south side are in like manner four, on the north three, in all seven, or, taking in the four which terminate the aisles and nave to the east and west, in all eleven. The clerestory windows are seven on one side and five on the other. — *The Architect.*

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

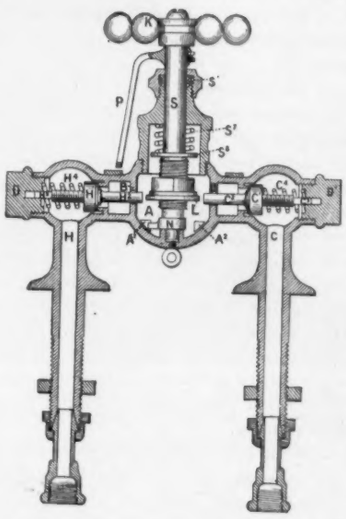
The American Architect and Building News

ADVERTISERS' TRADE SUPPLEMENT

No. 227 SATURDAY, APRIL 6, 1901 VOLUME LXXII No. 1319

THE SODERLUND TWIN FAUCET.

THE Soderlund Twin Faucet (patent applied for), manufactured by the Union Brass Works, Boston, Mass., is an entirely new departure in the line of manufacture of Faucets. It is designed for use where hot and cold water are used, and a mixture of the two, at a temperature of any degree, between the two extremes is required. The two valves, one for the hot and one for the cold, are entirely free and work with the pressure horizontally. The handle is attached to a cam which, as it is turned, comes in contact with one of the valve-stems, opening it gradually against the pressure. When the first valve is opened to its fullest extent, the cam will, by turning the handle a little farther,



come in contact with stem No. 2, and a mixture of the two waters is obtained, and as you keep turning the handle the chamber receives larger flow from valve No. 2 and less from valve No. 1, until No. 2 is wide open, and as you continue to turn handle to a stop, you gradually allow valve-stem No. 2 to come to its seat, with the pressure.

In operating this Faucet, you only make a half-turn with the handle; the same being a lever handle, you simply turn it from one side to the other. It has an indicator which shows on a plate which way to turn the handle to obtain the temperature of the water required, whether hot, cold or any intermediate temperature. There are many so-called combination faucets, but they are nothing more or less than two single faucets, with their outlets connected; the water does not mix in any of them, and frequently, if not in all cases, where the pressures are unequal, the stronger one will force the other back. The Soderlund Twin Faucet overcomes all these difficulties and mixes the water perfectly when there is a difference of 150 degrees, or more, in the temperature of the two streams. It also works perfectly when there is a difference of eighty pounds, or more, in the pressure of the two streams. Where a cistern-boiler is used, the cold water cannot force the hot water back, or shut it off.

The Soderlund Twin Faucet is arranged so that any person can replace the washers in five minutes, and they will last at least three years. It will not leak and is less liable to be left running than any other combination-faucet. It will not hammer or bind. It will stand the severest reasonable handling, and owing to its simple construction and using the best composition metal in its manufacture, it will last a lifetime without becoming out of order. It has only one handle to manipulate, is quicker in its action, and will give water at the required temperature in less seconds than it will take minutes with any other faucet.

The Soderlund device for showers and sprays is fitted with a cam of different shape which will make it impossible to get the hot water without enough cold to eliminate the danger of being scalded. This is designed for gymnasiums, asylums, clubs and hotels, where the hot water varies from 100 degrees to 200 degrees, and where inexperienced and forgetful persons using this device are perfectly free from the great danger of being scalded.

The price of the Soderlund fixtures does not exceed that of any other high-grade fixture, and certainly accomplishes more than any other combination-fixture. Information in regard to these fixtures, prices, etc., cheerfully furnished on application.

UNION BRASS WORKS,
BOSTON, MASS.

WISCONSIN GRAPHITE MINES.

GRAPHITE is proving to be a source of wealth to Wisconsin.

The mineral has carried the name of the State across to the German Empire, where it is conceded that the mines developed in Portage County, Wisconsin, produce a grade of Graphite Carbon superior to the Hungarian Graphite in the German market. Repeated shipments have been made to Berlin importers, who continue to send back the most encouraging reports. The character of the find is said to have astonished the mineralogists in the Wisconsin State University. Hitherto the best mines in the United States were said to produce a grade 14-per-cent Carbon. Several analyses of the Wisconsin production have shown the Carbon to be as high as 72 per cent.

Krembs & Co., chemists, of Chicago, say it is 74 per cent Carbon, 14 per cent Iron Oxydal and Oxide and 12 per cent Silica. There have been various investigations which show the heavy per cent of Carbon.

The mines were discovered in 1893 by E. E. Taggart, of Stevens Point, Wis. Mr. Taggart had been prospecting for iron over a wide section of Wisconsin. He heard of a woman who polished the kitchen stove with a substance which she found in the cellar. He made a quiet investigation which led to the discovery of great importance. The land about the house where the original find was made was found to teem with a grade of Carbon high in purity, and the development so far shows the deposit to be of a large area.

After submitting samples of this Granular Graphite to some of the largest users throughout the United States, from whom the most flattering testimonials were received, a company was formed to develop these mines, and a complete plant established, known as the Portage County Graphite and Mineral Paint Manufacturing Company. Since the plant has been in operation it has run to its full capacity, and the product has been disposed of as rapidly as it could be prepared for the market.

A short time ago Pittsburgh capitalists, after having made thorough chemical tests, and a personal investigation, became interested, and organized the Wisconsin Graphite Company, of Pittsburgh, for the manufacture of this product into Graphite Paints, Motor Greases, Pipe-joint Pastes, Lubricants, and for use in the making of steel and crucibles.

The Wisconsin Graphite Company, 409 Market Street, Pittsburgh, controls the sale and distribution for the States of Ohio, Pennsylvania, West Virginia, New Jersey and New York. It is considered that over 70 per cent of all the users of these products are located in this territory.

The Pittsburgh company will manufacture and place upon the market by-products which emanate from Graphite and Oxide bases, which come under the scope of its business.

The Granular Graphite, such as is mined by this company, is conceded to be the best form of Graphite. As a paint for iron the Wisconsin product is generally recommended because of its tenacity, its resistance to at-

mospheric action, its insolubility in acids, its fireproof qualities, its extreme flexibility (it being almost impossible to scale or crack it by bending the iron), and its splendid wearing qualities. This applies to its use on any iron and steel surface.

The manufacturers claim better results can be obtained by its use than with that of any other by reason of the large average percentage of Graphite Carbon. The Iron Oxide, as found on the properties of the Wisconsin mines, has been very severely tested and found to produce a very superior Oxide for mineral paint, such as is used for freight-cars and other exposed woodwork.

LIQUID GRANITE.

Liquid Granite is a varnish of such remarkable toughness and elasticity that although wood treated with it may dent under a blow the finish will give with it without cracking.

By virtue of its toughness it is peculiarly adapted for use on natural-wood floors, and is in fact the best floor-finish ever introduced.

It supersedes wax by right of its greater utility, not only producing a more handsome finish, but by its durability doing away with the frequent renewals necessary with a wax finish.

The use of Liquid Granite is not confined to floors; it has a much broader charter, being desirable for all kinds of interior work where a durable finish is wanted.

It is especially useful for counters, bathrooms, inside blinds, wainscoting, and other interior woodwork where exposure to wear and tear is unusually severe, and is also well adapted for use on linoleum and oil-cloth, adding to their durability, preserving their freshness, and making a glossy finish.

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

Liquid Granite is put up in sealed cans bearing our label, in all sizes up to five gallons, and care should be taken by the purchaser that cans are intact.

We have samples of wood finished with Liquid Granite that we mail free upon request.

BERRY BROTHERS, Limited,
DETROIT, MICH.

SPECIFICATIONS FOR THE PAINTER.

A little work which will be found of special interest and value to architects, housepainters and others engaged in the building-trades is an attractively printed and carefully arranged handbook issued under the above title by Harrison Brothers & Co., Incorporated, of Philadelphia, Pa. It presents in condensed form a great deal of information which is often desirable to have for ready reference, but which is seldom available when needed. Painters frequently complain of the inadequate manner in which the average painting specification is written, and when appealed to they are often unable to suggest a better form that will meet all the conditions of the case. In the preface to this little book it is asserted that within its covers will be found a method of specifying each different class of painting under its appropriate head, and in the briefest form. When different materials or methods may be used for the same class of work, the correct specification for each has been given, so that the architect or painter may use his own judgment in the selection of that best adapted to the special case in hand. Copious notes in small type have been introduced in explanation of the specifications, or to suggest amendments applicable to special conditions. In preparing the specification forms the compilers have sought the advice of a number of leading architects and painters, to the end that the information presented may be thoroughly practical. Under the head of "Useful Notes" suggestions are given as to the time required in painting; when to prime a new building; the number of coats recommended for stables, barns, outbuildings, etc., how to re-paint old surfaces, green or seasoned lumber, and how to produce tints of all kinds.

The American Bridge Company have secured the contract, through the Schultz Branch of Pittsburgh, for a large Government Warehouse at Progreso, Yucatan.

THE ACTIVITY OF A RETIRED SAILOR.

Clarke Merchant, who was recently elected President of the Schuylkill Traction Company, which owns and operates twenty-eight miles of electric-railway through Mahanoy City, Shenandoah, Girardville, Ashland and other points in Schuylkill County, Pa., is the virtual owner of the tin-plate and metal firm of Clarke Merchant & Co., incorporated in this city.

He is the son of Charles Spencer Merchant, who was one of the first cadets to enter the Academy at West Point and who served in the army sixty-seven years, retiring therefrom as Brigadier-General in 1863. He is accredited with having pulled down the last British flag lowered in the United States. At the time of his death, in 1879, he was the senior officer of the army, in date of original commission, and President of the Association of Graduates of West Point.

Clarke Merchant was born in 1836 in the Oglethorpe Barracks at Savannah, where his father was at that time quartered. Graduated from the Naval Academy at Annapolis in 1857, he was at once assigned to the United States sloop-of-war "*Germantown*." On that vessel's arrival in the Chinese seas he was appointed executive officer of the steamer "*Toey-Wan*," which had been chartered to convey Minister Ward to his post of duty at Pekin, and which later towed the boats containing the English sailors and marines into action in the conflict between the British squadron and the Chinese forts on the Pei Ho River, when Admiral Tatnall, having declared that "blood is thicker than water," demonstrated it by rendering valuable assistance to the British.

At the close of his naval career he was executive officer of the frigate "*Constitution*" at the Naval Academy, and it is interesting to recount that many of the naval officers who won renown during the Spanish-American War, including Bronson, Chadwick and others, were midshipmen on the frigate at that time, and received from him instruction in naval tactics.

He resigned from the navy in August, 1865, and the following year established himself in the metal business in Philadelphia. He is a member of the Loyal Legion, the Union League, the Philadelphia Club, the University Club and the Engineers' Club, of New York. — *Philadelphia Ledger, March* 29.

The American Bridge Company has secured the contract for the bridge over the South Shrewsbury River at Seabright, N. J. This contract includes furnishing cylinder piers and abutments, four deck-plate girder-spans, and one draw-span 220 feet long. The bridge will have a 30-foot roadway, and two 7-foot sidewalks. The contract is with Monmouth County, N. J.

A DURABLE PAINT.

Mr. O. H. Guttridge, of Atlantic City, N. J., is one of the strong advocates of Dixon's Silica-Graphite Paint. He stated to one of our representatives that he would bet $100 to a cent that he could put two coats of Dixon's Silica-Graphite Paint on any roof in Atlantic City and the roof would not need repainting in twelve years.

He made the following test in the year 1889: A flat roof two blocks from the ocean was painted with the following paints, the roof being divided into several parts: —

First part was painted with pure zinc and linseed-oil, with a little litharge; it lasted four years and then chalked or peeled off.

The second division was painted with pure white-lead and linseed-oil; it lasted two years and chalked or peeled off.

Section 3 was painted half zinc and half lead; it lasted between three and four years.

Section 4 was painted with oxide-of-iron in linseed-oil; it lasted two years.

Section 5 was painted with Spanish brown with linseed-oil, and lasted only six months.

On sections 6, 7 and 8 he used three kinds of the best ready-mixed paint; none of these lasted longer than nine months.

Section 9 was painted with Dixon's Silica-Graphite Paint. He bought it thick, ground in oil, and mixed it himself with raw linseed-oil and added a little litharge. It lasted nine years.

He also confirmed a report that our representative had received some time ago, in regard to the roof of the old St. Charles Hotel, this having been painted twenty years ago with Dixon's Silica-Graphite Paint. When the hotel was torn down, the roof was still in good condition, and Mr. Wootton, the old proprietor, also said that Dixon's Silica-Graphite Paint was by long odds the best paint that could be obtained for surfaces exposed to the salt air from the ocean.

Any paint that can successfully withstand the destructive salt-laden air from the ocean will be found proportionately durable for all inland painting.

JOSEPH DIXON CRUCIBLE COMPANY,
Jersey City, N. J.

The American Bridge Company will erect for the Central R. R. of New Jersey, at Weissport, Pa., twelve spans of deck-plate girders, 75 feet long.

BUTCHER'S BOSTON POLISH.

On page viii of this issue, the Butcher Polish Company, 356 Atlantic Avenue, Boston, call attention to their celebrated polish for floors, linoleums, interior woodwork and furniture. It is regarded as the best floor-finish made and has not a single objectionable feature. It is not brittle, will neither scratch nor deface like shellac or varnish, and is not soft and sticky like beeswax. It is perfectly transparent, preserving the natural color and beauty of the wood for years. Write for circulars, etc.

PATENT SCUTTLE-OPENER.

As a rule, testimonials do not have any great weight with the public, they are so easy to get and so often the result of interested motives: but fortunately there are testimonials that do count. For instance, when one maker of building-supplies as well known to architects as is John Williams, of New York, takes the trouble to bear witness to the virtues of a building-appliance made by another manufacturer equally well known to architects, the chances are that the apparatus in question is really a good and useful one.

Mr. Williams writes as follows of the scuttle-opener made by George Bickelhaupt, 248–5 West 47th Street, New York City: —

"I beg to say that the Patent Scuttle-opener which you have installed in my residence is very satisfactory indeed. It works perfectly, and I can strongly recommend it."

It is rather a misfortune that the cut of this scuttle-opener used in our advertising-columns by Mr. Bickelhaupt is too small to exhibit clearly the working of the simple and ingenious mechanism of this useful appliance; but this very lack of clearness affords a reason for asking the manufacturer for a copy of the little booklet he has prepared, which exhibits the details of the apparatus at a sufficiently large scale.

The Chicago, St. Paul & Missouri Railway have placed a contract for thirty-six bridges with the American Bridge Company.

When a manufacturing concern has been in business as long as has the house of Jenkins Brothers, 71 John Street, New York, its catalogue is worth looking over merely as a matter of curiosity, for the sake of discovering into how many different by-paths of cognate manufacture circumstances have induced the manufacturers to enter.

Of course, the catalogue for the current year issued by Jenkins Brothers shows only its live lines of goods and does not show the older and, perhaps, out-of-date patterns that they used to manufacture. But, because they have been honest makers, there must be large quantities of their earlier patterns of valves and steam-fittings still serviceable and still in active service, and as it is usually the case that a valve or fitting is several times repaired or partially replaced before it is finally discarded for a modern pattern, it follows, of course, that the manufacturers have to keep in stock, and ready for use, a large line of slow-selling and out-of-date fixtures, but it is hardly worth while to expand a catalogue by introducing illustrations and descriptions of them.

A man who acts as his own lawyer or undertakes to doctor himself usually has a fool for his client, and so, too, generally speaking, has the man who undertakes to tinker his own steam-fittings. Still, there are circumstances when, generally because of distance and isolation, a man is compelled to do his own tinkering, and, for one so placed, it may be useful

to know that Jenkins Brothers, amongst other things, manufacture "the only gate-valve that can be repaired without the aid of an expert mechanic."

For the same class of men, it may also be useful to know that Jenkins Brothers manufacture the "Wight and Rust patent valve-file," which is a complete, simple and effective tool for repairing the seat of all flat-seated valves. It is used with an ordinary bitstock, and valves can be repaired without disconnecting them from the pipes, thereby saving time and money.

IMPORTANT LITIGATION RELATING TO MAGNESIA-COVERING PATENTS.

The Keasbey & Mattison Co., the owners of the patents for magnesia-covering, have commenced a suit in the United States Circuit Court for the Southern District of New York against the Philip Carey Mfg. Co., George D. Crabbs, J. E. Breese, Schoellkopf, Hartford & Hanna Co., J. F. Schoellkopf, Jr., James Hartford, W. W. Hanna, C. P. Hugo Schoellkopf and Jesse W. Starr to restrain the defendants from making and selling magnesia-covering for boilers and steam-pipes containing more than 50 per cent of magnesia, and especially coverings containing 85 per cent of magnesia.

The bill prays for a preliminary writ of injunction, to be continued during the pendency of the suit, and upon the final determination thereof to be made perpetual, and also demands an accounting and damages.

All persons are respectfully requested to refrain from purchasing covering infringing these patents, as such purchasing must of necessity lead to suit.

KEASBEY & MATTISON CO.,
Ambler, Pa.

The Chicago & Alton Road have placed a contract for four thousand tons bridge-work with the American Bridge Company.

THE "TAYLOR OLD STYLE" ROOFING-TIN.

Why is our brand "Old Style" a household word and used broadcast in a descriptive sense?

Why is the word "kodak" used to designate nearly all kinds of cameras?

Simply because of the high standard they set. The growing use of private brands of extra-coated ternes made of common steel by cheap and common processes is a very dangerous experiment. Why not use what is acknowledged to be the best — the "Taylor Old Style?"

Some time since we received a letter from an architect, stating that the "Taylor Old Style" brand of Roofing-tin had been used on the Michigan State Capitol in 1876, and that the roof was apparently as good as when it was first put on. He ends his letter — "it affords me very much pleasure to testify to the excellent quality of this grade of tin."

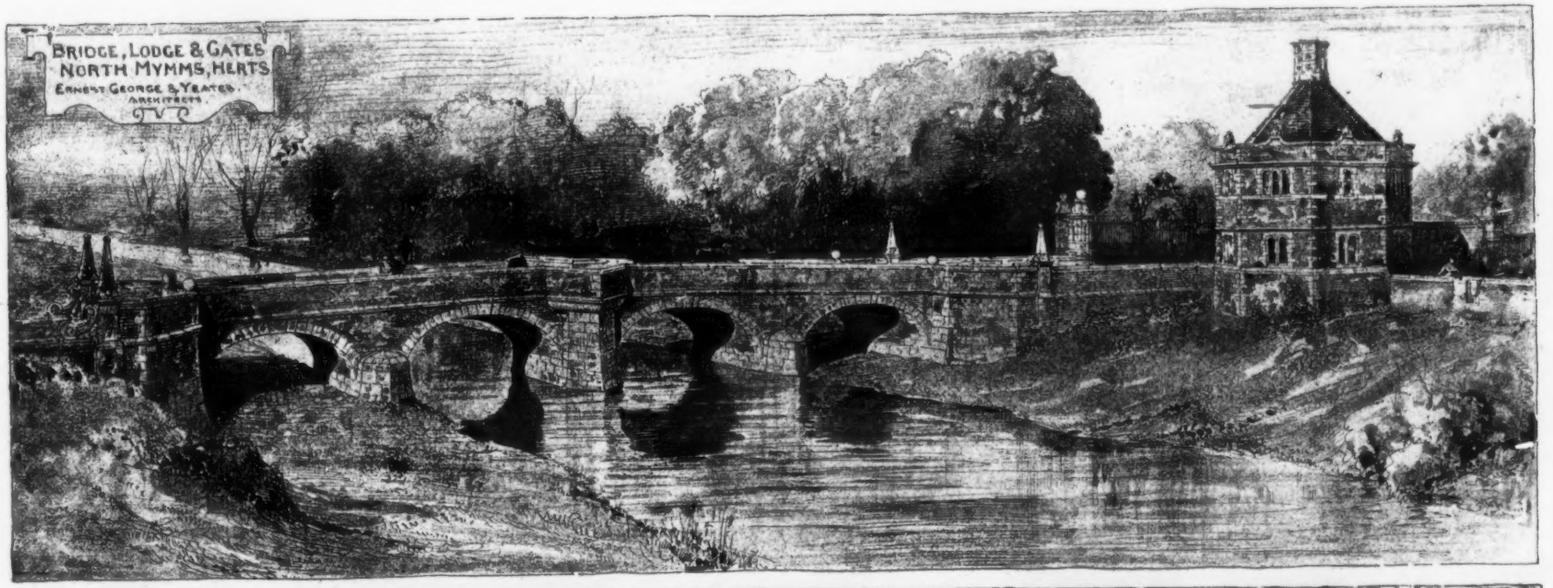
When architects specify several brands, the roofer naturally buys the cheaper, and the property-owner suffers.

The "Taylor Old Style" brand of Roofing-tin is the only brand that has ever been imitated.

N. & G. Taylor Co. are the only makers of Tinplates in the United States that sell their own brand.

It is the oldest brand of Roofing-tin made.

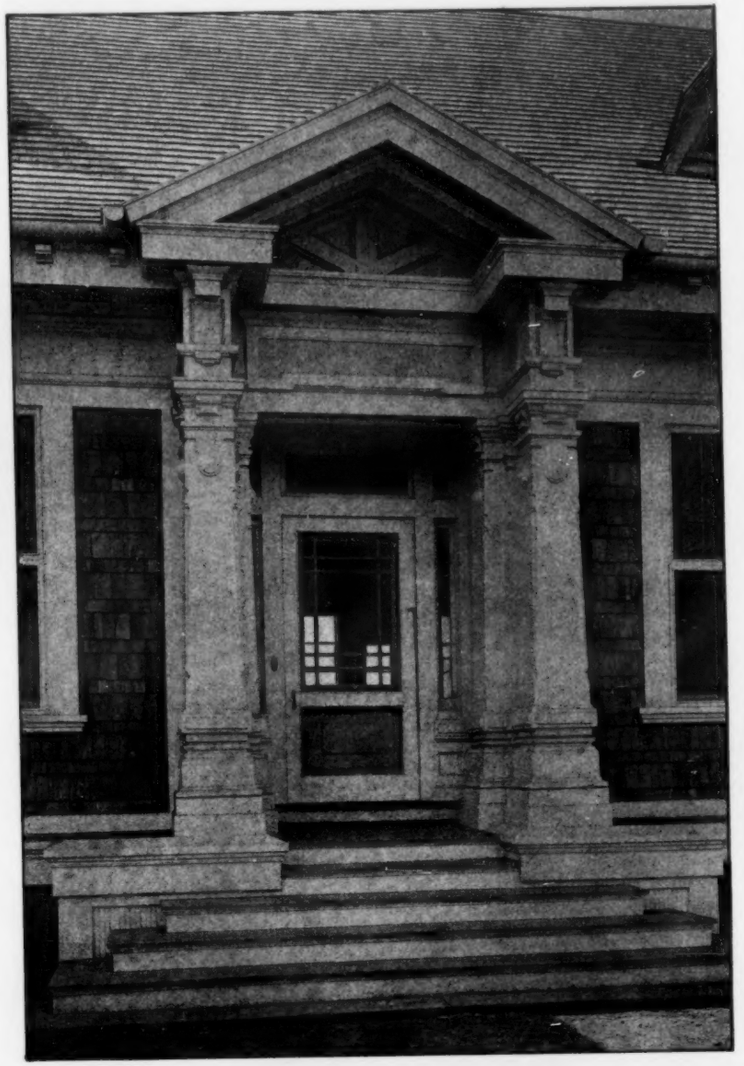
N. & G. TAYLOR CO.,
Philadelphia, Pa.

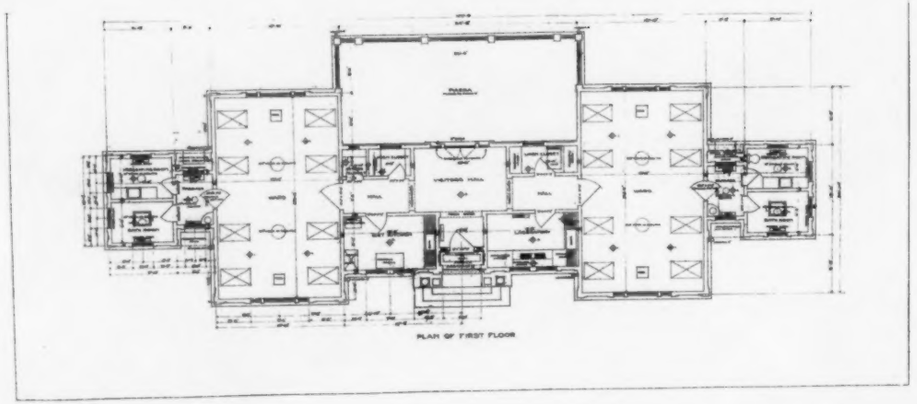


A COVERED BRIDGE
MONK-FRYSTON PARK, YORKS

From the Builder

HELIOTYPE PRINTING CO., BOSTON



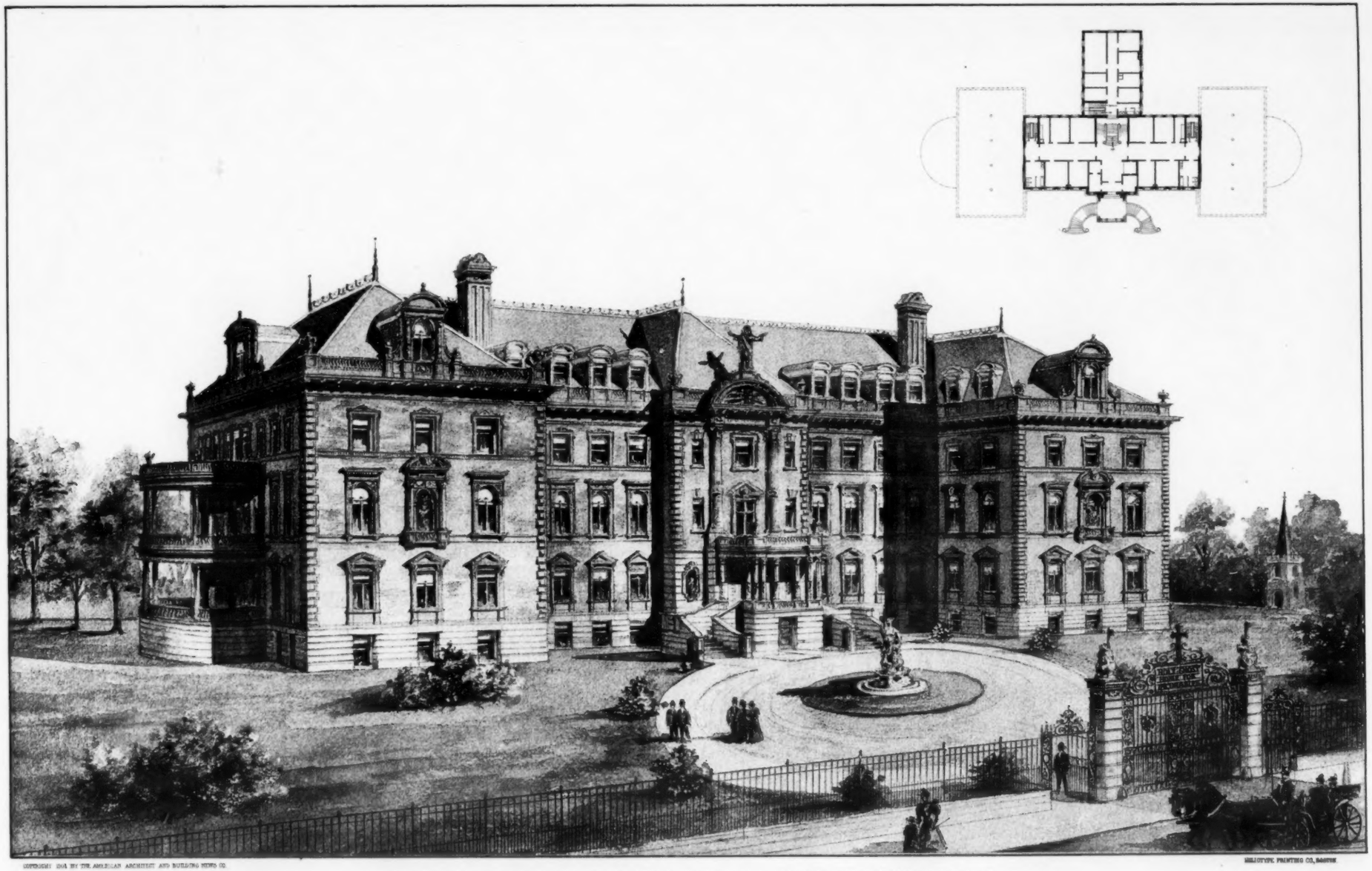


CHILDREN'S HOSPITAL FOR ST. JOHN'S GUILD, NEW DORP, STATEN ISLAND, N. Y.

WOLFE & MUNDIE, ARCHITECTS

The American Architect
April 6, 1907.

CARNARVON CASTLE.



ADMINISTRATION BUILDING: HOLY GHOST HOME FOR INCURABLES, CAMBRIDGE, MASS.

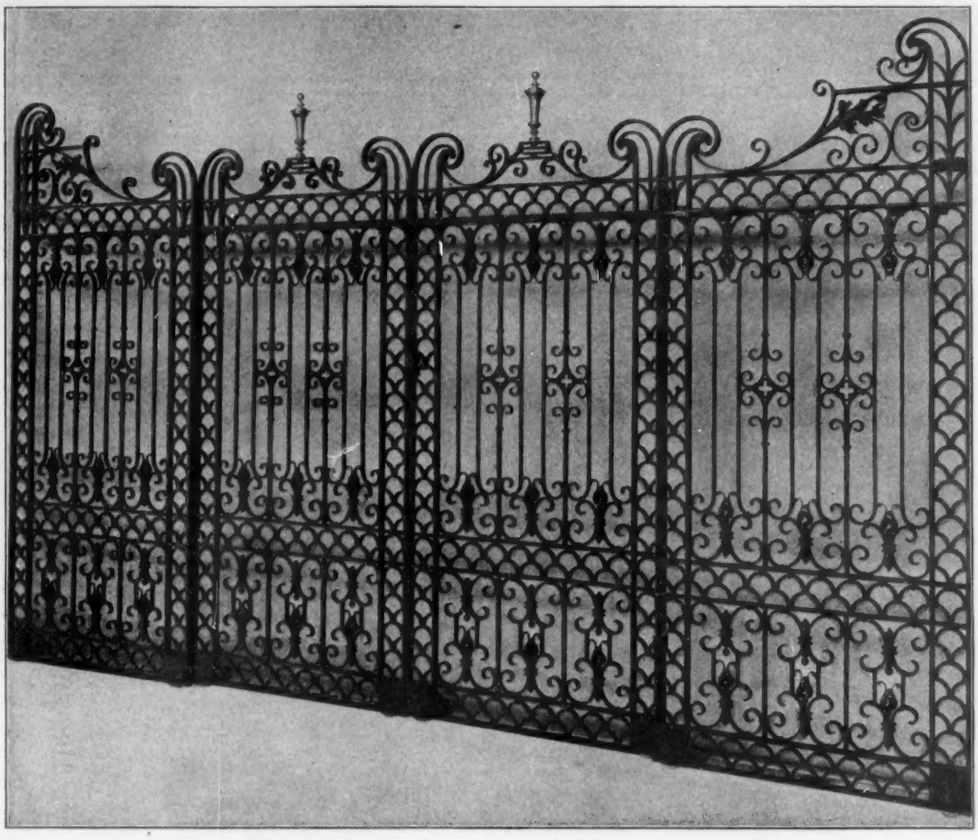
W. H. McGINTY, ARCHITECT.

The American Architect
April 6, 1901.
No. 1319.

The American Architect and Building News

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART

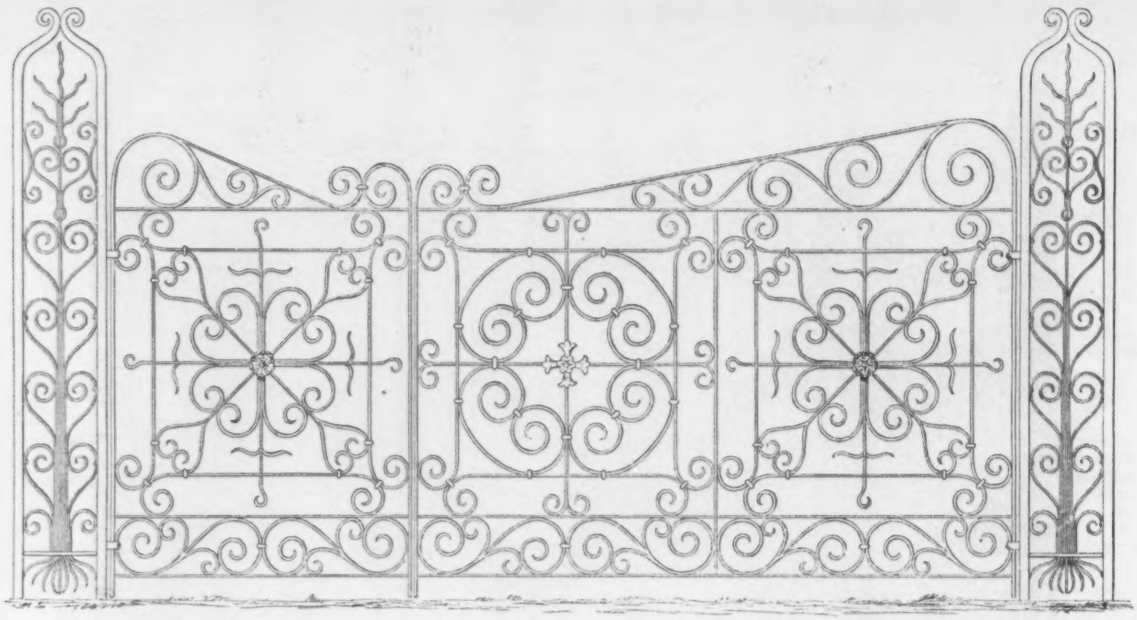
VOL. LXXII. — No. 1319.] SATURDAY, APRIL 6, 1901. PRICE, { INTERNATIONAL ISSUE, 50 CTS / REGULAR " , 15 "

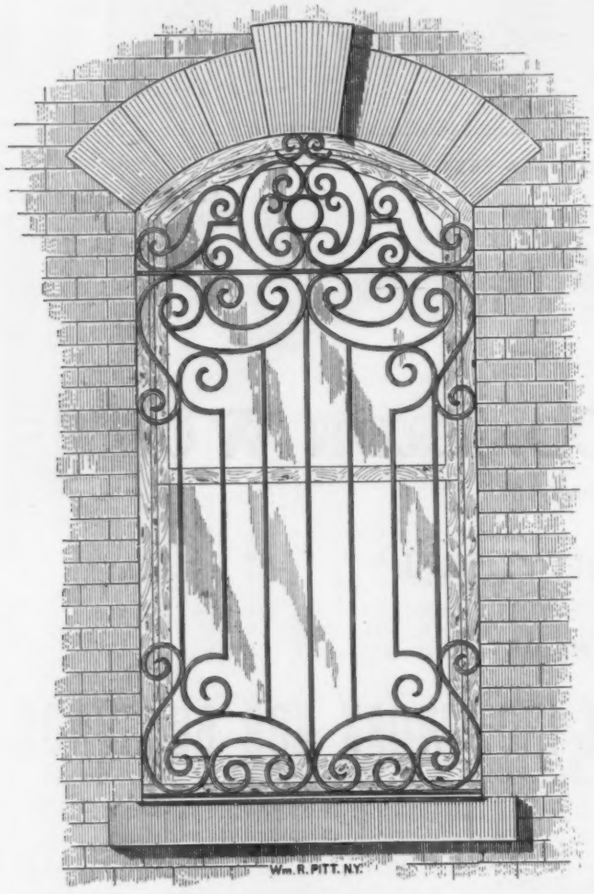


MAIN ENTRANCE GATES, 14 FEET WIDE

For Department Store
C. H. ROWE CO., PITTSBURGH, PA.

ALDEN & HARLOW,
Architects.





The Wm. R. Pitt Composite Iron Works, 111 Fifth Avenue, New York.

Manufacturers of the "Pitt," "Bostwick," "Composite" and Novelty Patent Folding Gates and Guards in Brass, Bronze, Steel and Iron, for Store Fronts, Vestibules, Elevator Enclosures and Cars, Bank Vaults, Windows, Bridges, Etc. Also Railings, Driveway and Entrance Gates, Window Grilles, Marquees, Stairs, Special Hardware, Lanterns and all Artistic Wrought Work. Estimates Furnished.

From *The British Architect.*

THE APOLLO THEATRE, SHAFTESBURY AVENUE, LONDON, ENG.

Lewen Sharp, Architect.

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Burrell & Fowler, 310 New England Bldg., Cleveland, O.

Advertising Rates: For "wants" and "proposals," 15 cents per line [8 words to the line], each insertion. 50 cents the least charge. Other rates on application.

ARCHITECTS' REMOVALS, Etc.

THE partnership heretofore existing between Mr. F. W. Wilcox and Mr. James Geary has been dissolved and Mr. Geary will for the future be engaged in the business of General Contracting, at 2236 S. Robertson St., New Orleans, La.

MR. GUSTAVE W. DRACH has removed his offices from 519 Main St. to Union Trust Bldg., corner 4th and Walnut Sts., Cincinnati, O. 1320

ARNOLD W. BRUNNER, of New York City, has removed his offices to the Decker Building, 33 Union Sq., West.

WANTED

Two or three first-class all around draughtsmen.

State experience and wages.

GEO. F. BARBER & CO., Architects.

1322 Knoxville, Tenn.

WANTED.

POSITION or partnership wanted by a leading N. Y. designer; 20 years' experience. European training. Designer of very important buildings in N. Y. Highest references. Particulars from A. McKelvey, 132 Remsen St., Brooklyn, N. Y. 1320

WANTED.

DRAUGHTSMEN. — Wanted, at once, two capable draughtsmen. New York men preferred. Apply to Andrews & Withers, 22 Bellevue Ave., Newport, R. I. 1319

WANTED.

DRAUGHTSMAN — Wanted immediately, first-class, experienced constructional draughtsman. Mason & Kahn, 80 Griswold St., Detroit, Mich. 1319

WANTED.

DRAUGHTSMAN. — Wanted, a first-class all-around draughtsman. Address Liebbe, Nourse & Rasmussen, architects, Des Moines, Iowa. 1321

BUILDING PATENTS.

669,578. Sash-Cord Guide. — William R. Fox, Grand Rapids, Mich.

669,622. Lock for Elevator-Doors. — Andrew M. Covle, Yonkers, N. Y.

669,639. Beam-Joist. — Curt Hessel and Walther Sippel, Berlin, Ger.

669,642. Feed Mechanism for Stone-Sawing Machines. — George D. Hunter, Bloomington, Ind.

669,646. Post or Pile Driver. — John S. Koester, Iberia, Mo.

669,715. Rack-and-Pinion Door-Bolt. — Henry G. Voight, New Britain, Conn.

669,762. Door-Check. — Seymour W. Peregrine, Portland, Me.

669,801. Fireproof Flooring. — James A. McNamee, Cambridge, Mass.

BUILDING INTELLIGENCE.

(Reported for The American Architect and Building News.)

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

ADVANCE RUMORS.

Akron, O. — The Colonial Salt Co. will erect here a mammoth plant to cost $250,000.

Atlanta, Ga. — Work has begun on the 2 three-story warehouses of the Atlanta Metal and Bottling Co., on the corner of Grant and Bigger Sts. They will cost $25,000.

A new five-story business building, 125 feet square, will soon replace the old Centennial Building on Whitehall St. It will cost $100,000. Owner, W. D. Grant.

Auburndale, Mass. — A large body of citizens attended a recent session of the Newton Board of Aldermen to ask for a new school-house on Ash St. The hearing was the result of a report to the board recommending an addition to the Williams School.

Barrington, Vt. — A proposition of great interest here at present is that to erect a modern schooling costing $20,000.

Bellows Falls, Vt. — Frank B. Gilbreth, building contractor, 176 Federal St., Boston, has been awarded the contract for a power-station to be erected here for the Fall Mountain Electric Light & Power Co. Messrs. Hollis French and Allen Hubbard, engineers.

Bennington, Vt. — Norcross Bros., of Worcester, have the contract for a residence for J. C. Colgate, of New York. Contract price is $48,000.

Boston, Mass. — It is rumored that Boston is to have still another theatre. The exact location is not stated, but it will be very near Copley Sq., and built by a syndicate of Boston and New York capitalists. It is said that work will be begun on the building within a few weeks, and the new theatre ready for occupancy before the close of another season.

A large apartment stable will be erected on Lansdowne St., Ward 11. It will be a seven-story building, entirely fireproof, costing in the neighborhood of $250,000. Plans by Whitman & Hood.

A project it on foot to erect a large building to be known as the Board of Trade Building. It is understood that the syndicate controlling the enterprise has secured the valuable block bounded by State, Central, Broad and India Sts.

Brooklyn, N. Y. — Mr. James Kelly, 137 Noble St., will erect 4 four-story brick and stone tenement houses, 25′ x 59′, on the corner of Meserole Ave and Guernsey St. Plans by P. Tillian, 121 Meserole Ave.; cost, $44,000.

Charlestown, Mass. — The new power-house at the Navy Yard is to be a very handsome building, in the Romanesque style. Work will begin at once and will be completed and the plant in operation before the end of the summer.

Chesterfield, N. H. — Mrs. Rudyard Kipling has purchased of C. P. Gibson a beautiful site near

BUILDING INTELLIGENCE.

(*Advance Rumors Continued.*)

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

Lake Spofford. It is expected that a summer residence will be erected.

Chicago, Ill.—The Congress Hotel Co. will erect one of the finest hotels from an architectural standpoint in the city. The building will cost between $1,000,000 and $1,500,000 and will be erected on Michigan Ave.

A modern heat, power and lighting plant, to cost $150,000, will be the first of eleven buildings to be erected at the University of Chicago this year. It will be located on Ellis Ave., between 57th and 58th Sts. Besides this building, the others to be commenced at the University this spring are the Press Building, the School of Education, Hitchcock Hall, the Bartlett Gymnasium, Mandel Assembly Hall, the students' club house, the tower, the commons, the café and the kitchens.

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

The Chicago Elks propose erecting a four-story club-house, to cost $50,000.

The finance committee of the Hyde Park Baptist Church has secured subscriptions amounting to $39,000 for the erection of a new church. A structure costing $50,000 will be erected at 56th St. and Woodlawn Ave.

At a meeting of the Illinois commissioners for the Pan-American Exposition the contract for the Illinois Building at the Buffalo fair was awarded to the Niagara Construction Co. When completed and furnished the Illinois Building will cost $20,000.

It is stated that work on the plans for the new $1,000,000 building for the John Crerar Library on the lake front between Madison and Monroe Sts. is to be begun immediately. In front of the classical building, which will have a frontage of 380 feet, will be a $100,000 colossal statue of Abraham Lincoln by St. Gaudens.

East Boston, Mass.—Mrs. Ann E. Taggard, late of East Boston, has left money to found an emergency hospital here.

Everett, Mass.—A factory building to be constructed of wood will be erected for the New England Bolt & Nut Co., in a court near Broadway. It will be 125′ x 175′ in size, one-story high, and will cost $15,000.

Hartford, Conn.—Andrews, Jacques & Rantoul, of Boston, are the architects selected to draw plans for a $70,000 dwelling to be erected on Woodlawn St., for W. C. Skinner.

Medford, Mass.—Plans for a brick and stone block to contain stores and apartments and to be erected at the corner of Cross and Salem Sts., are being prepared by C. B. Dunham, for E. S. Randall. The structure will be 58′ x 72′, and will cost $12,000 above the foundations.

Nassau, N. H.—Plans will be secured at once preparatory to the erection of the Hunt Memorial Library. It will cost $50,000.

New Haven, Conn.—The authorities of the Yale Medical School have awarded the contract for the erection of a new chemical building on Cedar St. It will be in the Renaissance style, of brick and stone. It is announced that $100,000 has been given for the building, but the name of donor is not disclosed.

Mrs. Lucy Boardman, of this city, has presented to Christ Church $25,000 for a parish home, the church members to raise a smaller sum to finish the work. It is also announced that Mrs. Boardman's sister, Mrs. Wade, also of this city, will give $5,000 to the church.

New York, N. Y.—George F. Pelham, 503 Fifth Ave., has completed plans for a seven-story brick, stone and iron apartment-house, 92′ x 100′, to be erected at the corner of Park Ave. and 80th St., by Messrs. Rothschild & Kallman, at an estimated cost of $200,000. The latest improvements and conveniences are called for.

Pawtucket, R. I.—It is stated that a general hospital may be erected for this city and for Central Falls.

Philadelphia, Pa.—The George A. Fuller Co., Stephen Girard Building, has secured the contract for the large new warehouse at Delaware and Chestnut Sts. for the Merchants' Warehouse Co. Designs by Hewitt Bros., architects, Bullitt Building, show a seven-story structure measuring 149′ x 160′, which will cost about $500,000.

Pittsfield, Mass.—The new hospital to be erected by the House of Mercy corporation will soon be

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

under way. The plans are by H. Niell Wilson, and the building will be of brick with sandstone trimmings, three stories high. $50,000 has been subscribed within a few weeks.

Watertown, Mass. — Ground has been broken for the St. Patrick's Roman Catholic Church, which is to cost $80,000.

Westerly, R. I. — A $50,000 high-school building will be erected on the site at the corner of Broad and Granite Sts., donated by Mrs. Harriet H. Wilcox, of New York.

A new armory is soon to be erected for the members of Company E, 1st Regiment, for which $30,000 has been appropriated. Plans by William R. Walker & Son.

APARTMENT-HOUSES.

Brookline, Mass. — *Harvard and Verndale Sts.*, 6 three-st'y bk. & st. aparts., comp. roofs, steam; $120,000; o., Century Bldg. Trust; a., Benj. Fox, 16 State St.

FACTORIES.

Newburyport, Mass. — *Waters St.*, four-st'y bk. factory building, 73′ x 82′, gravel roof, steam; $20,000; o., Fibreloid Co.; a., John E. Bailey, 6 Green St.

HOUSES.

Boston, Mass. — *Beacon St., No.* 899, Ward 11, three-st'y bk. dwell., 42′ x 51′, furnace; $10,000; o., Marshall Wentworth; a., W. L. Morrison; b., L. L. Sellew.

L St., cor. 8th St., Ward 14, three-st'y fr. dwell., 26′ x 60′, stoves; $7,000; o., Mrs. T. F. Ryan; a. & b., Daly Bros.

Washington St., Nos. 79-83, Ward 5, 3 three-st'y bk. dwells., 23′ x 72′, stoves; $30,000; o. & a., J. P. O'Reardan, 50 Chelsea St.; b., Edw. Brock.

Leverett St., No. 89, Ward 8, four-st'y bk. dwell. & store, 23′ x 65′, stoves; $11,000; o. & b., Harris Leshefsky, 39 Barton St.; a., F. A. Norcross.

Newcastle Road, Ward 25, two-st'y fr. dwell., 32′ x 35′, furnace; $6,000; o., C. A. Warren; a., S. E. Parsons.

COMPETITIONS.

JAIL. [At Eureka, Ill.]

Plans and specifications will be received by the County Supervisors **until April 16** for a jail and sheriff's residence. 1319

COMPETITIONS.

LIBRARY. [At Mankato, Minn.]

Competitive designs will be received **until April 20** for the proposed Carnegie library building. They shall provide for a building to cost complete with heating plant $32,000. 1319

LIBRARY. [At Houston, Tex.]

Designs will be received by the Trustees of the Houston Lyceum and Carnegie Library Association of Houston, Texas, **until 12 o'clock, noon, of the 1st day of May, 1901**, for the Carnegie Library Building, to cost not to exceed $45,000. For prospectus, address H. H. DICKSON, Chairman Building Committee, Houston, Texas. 1321

PROPOSALS.

JAIL. [At Watkinsville, Ga.]

Proposals will be received **until April 17, 1901**, for the erection of a jail. JOHN C. JOHNSON, ordinary. 1319

BRIDGE. [At Boise, Idaho.]

Sealed proposals will be received **until April 15, 1901**, for the construction of a steel bridge across the Boise River near Boise. W. M. CLARK, chairman board of county commissioners. 1319

STATION. [At Savannah, Ga.]

Sealed proposals will be received at the office of T. S. Tutwiler, engineer of the Savannah Union Station Company (in Sorrel Building, 4th floor, Bull and Bay Streets), Savannah, Ga., **until April 15, 1901**, for the construction of a union passenger station and train-shed at Savannah, Ga. 1319

SEWERS. [At Connellsville, Pa.]

Sealed proposals will be received by the undersigned **until April 15, 1901**, for the construction of twelve and one-half miles of sewers in accordance with the plans and specifications as furnished by the Borough Engineer. CLAIR STILLWAGON, chairman sewer committee. 1319

SCHOOL. [At St. James, Minn.]

Sealed bids will be received by the board of education of Independent School District No. 20, of Watonwan County, Minnesota, for the erection and completion of an eight-room grade school-building, and the erection and completion of a four-room addition to the present high-school building, in the city of St. James, Watonwan County, Minnesota, **until the 15th day of April, 1901**, at the said city of St. James. W. P. REMPEL, clerk of board of education, St. James, Minn. 1319

PROPOSALS.

Treasury Department, Office of the Supervising Architect, Washington, D. C., April 1, 1901. Sealed proposals will be received at this office until 2 o'clock P. M. on the 26th day of April, 1901, and then opened, for furnishing the heating apparatus complete in place for the N. W. Extension, Bureau of Engraving and Printing Building, Washington, D. C., in accordance with drawings and specifications, copies of which may be had at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1320

Treasury Department, Office Supervising Architect, Washington, D. C., March 27, 1901. Sealed proposals will be received at this office until 2 o'clock P. M. on the 18th day of April, 1901, and then opened, for plumbing, gas-piping, ventilating and new interior partitions for the northwest extension of the U. S. Bureau of Engraving and Printing at Washington, D. C., in accordance with drawings and specification, copies of which may be had at this office or at the office of the Superintendent at the Bureau, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1320

SCHOOL. [At Washington, D. C.]

Sealed proposals will be received at the office of the commissioners **until April 20, 1901**, for constructing a four-room school-building on the grounds of the Industrial Home School, Tenallytown Road, Washington, D. C. HENRY B. F. MACFARLAND, for the commissioners. 1320

PROPOSALS.

PAVING. [At Cohoes, N. Y.]
Proposals will be received **until April 15, 1901,** for paving on numerous streets, to cost in the neighborhood of $105,000. EDWARD HAYES, engineer. 1319

IRON PIPE, ETC. [At Governor's Island, N. Y.]
Sealed proposals will be received **until April 26, 1901,** for furnishing iron pipe, fittings and hydrants. S. R. JONES, Q. M. 1321

COURT-HOUSE. [At Butler, Mo.]
Bids are wanted **April 16** for a three-story stone fireproof court-house, to cost $50,000. S. T. BROADDERS, co. clk.; Geo. E. McDonald, archt., Kansas City, Mo. 1319

IRON WORK. [At White River, Ark.]
U. S. Engineer Office, Little Rock, Ark. Sealed proposals for furnishing iron work for lock and dam, Upper White River, Ark., will be received here **until April 11, 1901.** ROBERT McGREGOR, captain, engineers. 1319

CONSTRUCTION, ETC. [At Fort Terry, N. Y.]
Fort Terry, N. Y. Sealed proposals for constructing, plumbing and gas-piping brick hospital stewards' quarters, Fort Terry, N. Y., will be received here **until April 15, 1901.** GEORGE A. NUGENT, quartermaster. 1319

BUILDING. [At Key West, Fla.]
Sealed proposals will be received at the bureau of yards and docks, Navy Department, Washington, **until April 27, 1901,** for constructing a two-story fireproof brick and steel building about 60' x 160', at the naval station, Key West, Fla. MORDECAI T. ENDICOTT, chief of bureau. 1320

STEEL STACKS, ETC. [At Washington, D. C.]
Department of the Interior, United States Patent Office, Washington, D. C. Sealed proposals will be received at this office **until April 22, 1901,** for fitting up the scientific library of the U. S. patent office with steel stacks and book elevators. C. H. DUELL, commissioner. 1320

BRIDGE. [At Springfield, Mass.]
Bids will be received **until May 1, 1901,** for the erection of a bridge having two 150-foot spans, 20-foot roadway and two 5-foot walks. Estimated to cost $20,000. COLLINS & NORTON, engineers. 1321

POWER-HOUSE. [At Boston, Mass.]
Office of Bureau of Yards and Docks, Navy Dept., Washington. Proposals will be received here **until April 13** for constructing a brick and steel building at the Navy Yard, Boston, Mass. MORDECAI T. ENDICOTT, chief of bureau. 1319

Treasury Department, Office of the Supervising Architect, Washington, D. C., March 21, 1901. Sealed proposals will be received at this office until 2 o'clock P. M., on the 25th day of April, 1901, and then opened, for the installation of an electric wiring system for the outbuildings of the U. S. Bureau of Engraving and Printing, Washington, D. C., in accordance with the drawings and specification, copies of which may be obtained at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1319

Treasury Department, Office of the Supervising Architect, Washington, D. C., March 25, 1901. Sealed proposals will be received at this office until 2 o'clock P. M. on the 27th day of April, 1901, and then opened, for furnishing the heating apparatus complete in place for the south outbuilding and stable at the U. S. Bureau of Engraving and Printing, Washington, D. C., in accordance with the drawings and specification, copies of which may be had at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1319

STATION. [At Savannah, Ga.]
Bids are wanted **April 15** for a union passenger station and train-shed. T. S. TUTWILER, engr. of the Savannah Union Station Co. 1319

No. 15. *No. 15.*

"TOPICAL ARCHITECTURE"

PUBLISHED MARCH 15,

is devoted to

"IRON GATES AND RAILINGS."

Professional Ethics.

The following . . .
. . . CODE OF ETHICS . . .
Prepared in Conformity with the Best Standards of Practice, and Recommended to its Members by the Boston Society of Architects, was . . . . . .

ADOPTED BY THE SOCIETY, FEBRUARY 1, . . 1895. . .

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

[*See Alphabetical Index on Cover 2 for Pagination.*]

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