

THE AMERICAN ARCHITECT AND BUILDING NEWS.

VOL. XII.

Copyright, 1882, JAMES R. OSGOOD & Co., Boston, Mass.

No. 361.

NOVEMBER 25, 1882.

Entered at the Post-Office at Boston as second-class matter.

CONTENTS.

SUMMARY:—

The Reply of the Architects of the Albany Capitol.—The Explorations at Assos.—Placing the Telegraph and Telephone under Government Control.—Spontaneous Combustion of Building Sites in France and in New Jersey.—Licensing Leaching Cesspools.—Electric Clocks for New York.—Elliptical Lead Pipe.—Discoveries in Lower Mesopotamia.—The Pedestal for the Statue of Liberty.—Raphael's Madonna dei Candelabri.	249
PLUMBERS' TRAPS.	251
ART IN PHILADELPHIA.	252
REPORTS MADE TO THE CONVENTION OF THE A. I. A.	253
THE ILLUSTRATIONS:—	
Our Foreign Exchanges. X.—Design for a Tomb.—Design for a City House.	255
NEW JOURNALS.	255
COTTAGE-HOSPITALS.	256
COMMUNICATIONS:—	
Waterproofing Solutions.—The Efflorescence on Brick-work.—The American Architect Competition.	257
NOTES AND CLIPPINGS.	258

MESSRS. EIDLITZ, RICHARDSON and OLMSTED, the architects of the new Capitol at Albany, have presented to the Governor of New York a reply to the report of the Commission recently appointed to examine the condition of the vaulted ceiling of the Assembly Chamber, which, whatever may be the merits of the controversy, is in itself an admirable document,—clear, unassuming, and to the point. Without contradicting any assertions or arguments of the Commission of experts, the architects claim that the experts were misled by accidental appearances into the belief that settlements had taken place which do not really exist, and that reasoning from these false premises they reached a conclusion in regard to the stability of the building which was not entirely warranted. In the determination of amounts and direction of strains in the ribs of the vaulting, and the thrusts upon the abutments, the experts of the Commission agree substantially with the architects. They criticise the manner in which the side-vaults of the ceiling are balanced, but this is a comparatively small matter, their greatest apprehensions being founded on the use of iron ties for resisting the strains in the stone-work, and on the unequal and severe pressure upon the foundation. To these points the architects reply by figures showing that under the greatest extremes of heat and cold, the tensile stress upon the iron tie-rods will not exceed eighty-five hundred pounds per square inch, which is less than half the safe load, and hardly more than one-ninth the breaking strain; and by a record of levels, indicating that some apparent settlements in the building are nothing more than inequalities in construction, while all indication of actual settlement has ceased. The conclusion reached by the Commission—that the stone ceiling of the Assembly Chamber should be removed and replaced by a wooden construction—is for these reasons rejected by the architects, who say that the rapidity with which the ceiling was erected is in itself sufficient to account for the settlements which have cracked the stones of the ribs, but that these movements have now ceased, and there is no probability of any further change in the work; but that when the broken stones have been replaced, and the joints repaired, the stone ceiling will be a perfectly sound and permanent structure.

THE explorations at Assos, which have been continued this year under the care of the Archaeological Institute of America, have met with gratifying success, the various buildings of the city having been more definitely measured and studied, and many interesting sculptures and objects of ancient Greek art secured. Notwithstanding the modest scale of expenditure of the exploring party, a further supply of money is needed to continue the work, as the laborers must be paid, even though the best of the service, that of direction and recording results, is performed in great part by volunteers. About twenty-five hundred dollars is asked for, and ought to be promptly raised. The Boston Society of Architects, learning through one of its members that contributions would be acceptable, promptly voted a hundred dollars out of its own funds, and there is no doubt that other associations in the profession which has furnished most of the members of the expedition would be glad to do the same. By the skilful and enthusiastic effort of young

architects from New York and Boston a great addition has been made to our knowledge of Greek art, and as they regard the appreciation of their brother architects as their best praise, so ought the profession in return to take special satisfaction in sustaining and encouraging their efforts.

THE New York Board of Trade and Transportation has taken the serious step of adopting resolutions recommending the appropriation by the Government of all telegraph and telephone lines as a part of the postal system, following the example of all, or nearly all, European countries. Similar action has already been taken by the National Board of Trade at its last two annual meetings, and the idea has evidently taken strong hold upon the public. One weighty argument in favor of the change is that by making the telegraph an adjunct of the postal-system, every post-office may be made a telegraph-office, without any extra expense of maintenance, to the great benefit of many towns, and even cities, which, with a very large postal business, have now no telegraphic communication with the rest of the world. There may be some fear that the government administration of the service would be less efficient than that of a private corporation, and the complaints which were formerly made of the English postal-telegraph are fresh in the memory of every one; but we must remember that the post-office is, or has been, perhaps the best managed department of the government, while the administration of our private telegraph-lines is not, to say the least, everything that might be desired. Moreover, the genius of all our people, including those of them who govern the remainder, is strongly in favor of improvements in the way of rapid and certain communication, while the English Government looked at first upon the telegraph as an invention "of which it could make no use," and even now is said to view the telephone with a somewhat unfavorable eye. If an American postal-telegraph could be managed as well and as cheaply as the Continental systems, no business man would regret the change, and if the lines are ever to be transferred from private hands to the public custody, the present is perhaps the most favorable time for the transaction.

A SINGULAR accident has occurred in the manufacturing town of Hautmont, in France. One of the buildings belonging to a large chemical laboratory was built on made ground, filled in some fifteen years ago with coal cinders and mineral refuse, particularly iron pyrites which had been calcined. The structure was only completed last year, and now a fire has broken out in the ground beneath it, which has worked so far in the combustible material as to cause serious settlement, threatening the ruin of the building, which cost six hundred thousand francs. Such fires are very difficult to reach or control, and the owners of the laboratory are nearly helpless; but efforts have been made to saturate the ground with water, adding also chloride of calcium, which is produced in the establishment, although so far these attempts have not met with much success.

A CASE exactly parallel to that at Hautmont is reported from New Jersey, at the works of the New Jersey Steel and Iron Company, where for many years cinders and refuse have been thrown into the river until they have formed an artificial territory said to be six acres in extent. Upon this several buildings have been erected, including the bridge-shop, a structure three hundred feet long, and the template-shop, used for storing patterns. A few days ago smoke rising from the surface of the ground arrested the attention of a workman, who searched for the cause, and found the material actually burning on the edge of the bank. Now the extent of the subterranean conflagration is estimated at an acre, and the fire is at work directly under the bridge-shop, and is approaching the template-shop. Smoke rolls up from the surface in many places, and the heat is very sensibly felt by persons walking over the affected ground, while an iron bar driven twelve feet into the mass is red-hot when drawn up. Efforts are being made to extinguish the fire by digging trenches and filling them with water, so as to ensure a thorough soaking of the ground about them, but the task is an unpleasant one on account of the heat of the mass below the surface. A similar but less extensive fire is said to have occurred at the works several years ago.

THE French Minister of Commerce has addressed a letter to the prefects under his control, calling their attention to the report of the Council of Hygiene for the Department of the Seine, which condemns the use of leaching cesspools, and recommends that such should be permitted only by special license in exceptional cases, as for instance, where manufactories, completely isolated, and at a great distance from any dwelling-houses, should be able by means of a tight pipe to discharge waste liquids into a porous stratum separated by beds of impermeable formation from any water-bearing stratum made use of for supplying wells; advising also that such licenses should be made subject to revocation at any time. To these views, the Minister says, the General Committee of Public Hygiene of France has substantially given its adhesion, and so far as regards manufactories he has himself approved them, and requests that henceforth the rules recommended should be carried out in such of these establishments as the various prefects may be called upon to authorize. In regard to private dwellings and small workshops, he considers that both the suppression of cesspools and the surface irrigation which is recommended in place of it present grave practical difficulties, which should not be encountered hastily; and he asks that the subject may be brought immediately to the attention of the local and departmental boards of health, that they may inquire into the matter, and submit reports upon it. We shall hope to learn more of the results of this investigation, which is one of the most important ever undertaken in any country. The French have hitherto been regarded as being decidedly behind the rest of the civilized world in sanitary matters; but if they succeed in discovering and adopting in practice a satisfactory substitute for the leaching cesspool, they will have done more for the health of mankind than all other nations together since sanitary science began.

A COMPANY has been formed in New York for the transmission to subscribers of correct time by means of electric currents from a central regulator clock to dials set anywhere that may be desired. The dials are of very simple construction, containing no machinery except one or two ratchet-wheels and an electro-magnet, and nothing is necessary to keep them in working order except the occasional replenishing of the battery in each building. Unlike the pneumatic clocks, which are already in use in New York, the electric time-pieces can, and probably will be, all regulated from one central station, where an absolutely correct standard can be maintained. According to the *Evening Post*, the cost of subscription is to be very moderate, varying from twenty-five cents to one dollar per month, according to the character of the dials used. We hope that the *Post's* information as to the prices is correct. At three dollars a year, the luxury of possessing a correct time-piece is one that would seem cheap to every householder, and the company may rest assured of having all the business that it desires.

A DISCUSSION is going on in some of the papers about the merits of the new elliptical lead pipe made for plumbers' use, and recommended as being proof against bursting by the freezing of water in it. The theory of its design is that the expansion of congealing water, instead of tearing the walls of the pipe asunder, as it must with one of circular section, in which the perimeter is the least which will contain the given volume, acts in the elliptical pipe merely to push out the flatter sides of the ellipse, bringing it more nearly to a circular form. This process, it is claimed, can go on until the section of the pipe is changed to a circle, when, the maximum capacity for the given perimeter being reached, a further expansion will cause the walls to give way. There is, as some object, the difficulty about this explanation that the body of water contained in the elliptical pipe must in freezing expand in all directions, and, it would seem, with the greatest force in the direction of the longer axis of the ellipse, whereas the theory of the pipe supposes the stretching of the pipe to take place in the direction of the shorter axis, the length of the ellipse actually diminishing to accommodate the stretching of the metal in the transverse direction. The controversy would be best settled by the summary process of filling a piece of the elliptical pipe with water and freezing it, but in the absence of this direct testimony we are inclined to think that the plasticity which freezing water undoubtedly possesses may account for the superiority of the elliptical pipe. At the first congelation a greater resistance would certainly be presented to the expansion of the water in the direction of the longer than of the shorter axis, since it

would be easier to bend than to stretch the metal, and by regelation, or in some other way, the particles might accommodate themselves to the forces opposed to them so as to produce the effect described. For some reasons, however, a pipe of octagonal or corrugated section, like that of the expanding water-conductors now so extensively used, would be more convenient than one of elliptical form, and we hope that it will not be long before something of the kind will be manufactured for use in our trying climate.

SOME very interesting discoveries have been made in Lower Mesopotamia, by M. de Sarzec, the French Consul at Bassora, who seems to have been the first to brave the dangers from malaria and marauders which have hitherto made explorations in the valley of the Euphrates impracticable. Since the destruction of Babylon by Cyrus the surrounding region, partly, perhaps, on account of the diversion of the course of the river by which the city was entered, and partly from the obstruction caused by the ruin of buildings on its banks, has become marshy and unhealthy, and at certain seasons is completely overflowed; so that M. de Sarzec found no small difficulty in continuing his work, but after five years' labor he has at length sent home to Paris a collection of objects which differ in many respects from any others in the world. Near an artificial channel for irrigation which seems to have been made by the ancient Chaldeans, M. de Sarzec found a spot called by the Arabs "Tello," or "the Mounds," from the number of hillocks which cover it, and here commenced his excavations, which soon brought to light a great variety of statues, large and small, bas-reliefs, statuettes and utensils in bronze, stone and terra-cotta. These objects seem to belong to several different periods, some being of the most archaic character, and marked with inscriptions in a Chaldean hieroglyphic somewhat similar to that of Egypt, while others show only the more modern cuneiform alphabet. Besides portable objects, the excavations have exposed the substructure of an extensive palace, raised, like those of Assyria, on an artificial mound of brick, fifty feet above the surrounding plain, and still preserving the partition-walls which divided it into apartments. Everything so far found which could be transported has been brought to France, and is now in place in the new Assyrian rooms in the Louvre, where the whole can be studied with care by the best archaeologists in Europe.

A SERIOUS effort has at last been made to do something toward raising funds for the erection of the pedestal in New York Harbor for the reception of Bartholdi's colossal statue, and a public meeting has been called in aid of the project at the Academy of Music for November 28. Various distinguished persons are expected to be present, to add brilliancy to the occasion and inspire contributors by their eloquence. The whole amount to be raised is fixed at two hundred and fifty thousand dollars, and conditional subscriptions amounting to one hundred thousand have already been secured. If real interest could be excited in New York there should be little difficulty in obtaining the necessary additional amount, and the indications are very favorable for such a result. The managers of all the best theatres in the city have volunteered to give special entertainments for the benefit of the fund, and the example of their liberality will probably be followed by others. Fortunately, the foundation of the pedestal is already laid, so that the work of construction can be prosecuted through the winter, as will certainly be necessary if it is to be ready for the reception of the statue next summer.

MR. WILLIAM HENRY HURLBERT, the editor of the New York *World*, has had the good fortune to persuade his friend, Mr. Munro Butler-Johnstone, to lend for a time his picture by Raphael, known as the *Madonna dei Candelabri*, to be exhibited at the Metropolitan Museum of Art; and if the officials of the New York Custom-House can stretch their clemency so far, it will appear in a conspicuous place at the Loan Exhibition which is soon to be opened. This is said to be the first genuine picture by Raphael ever brought across the Atlantic, and it will naturally excite much interest among the many people in New York who know the greatest of painters only by name. We trust that it will meet with due appreciation and the best of care among us, and that the happy thought of Mr. Hurlbert may inspire others who can influence the owners of beautiful pictures to imitate him for the public benefit.

PLUMBERS' TRAPS.



engineer, which was well-nigh universal. Their influence in enlightening this ignorance seems to have been incomplete. Preconceived ideas still hinder the full acceptance of their teachings.

The chief of these preconceptions is the idea that efficient security is given by a water-seal S-trap supplied with a vent-pipe of practicable diameter, running from its highest point to the open air. Another is that mechanical traps, like Bower's and Cudell's, are useless, because they allow air to be drawn through them, in the direction of the flow, and that they lose a part of their water; the criticism not being limited in the case of Bower's trap to the fact that it sometimes loses so much water that its ball drops away from and opens the mouth of its inlet-pipe.

The demonstrated facts seem to me to be as follows:—

1. We have discovered no trap of any kind that is substantially perfect.
2. Water-seal S-traps, even when "vented," are not safe under all, nor under nearly all, circumstances. Practically "you may trust them as far as you can see them," and no farther, and even then only when you do see them constantly.
3. Traps closed by floating balls are practically safe, so long as the water to which the flotation is due is maintained at a sufficient height, and so long as the ball maintains its buoyancy. As neither of these conditions is necessarily permanent, these traps need watching, also.
4. Traps closed by hinged valves are never safe.
5. Traps closed by balls resting on submerged seats are more or less good according to the closeness of the joint. They are, if of such form as to keep themselves clean, and when well made, the only trap thus far devised that may be trusted without watching: but with a somewhat doubting trust, even then.

The influence of preconception is shown at every turn in the discussions referred to. Mr. Philbrick shows the futility of the venting device by repeated experiment, thus: [See *American Architect* for September 9 and 16, 1882.] (A—4.) A 2-inch trap on a 2-inch waste had a 1-inch vent-pipe 28 feet 6 inches long; its seal was 1½ inches. In nine experiments with the discharge through it of a pail of water it lost its seal twice. (A—5.) A 1½-inch vent, 50 feet long, being substituted, this trap lost 1 inch of its seal in five trials out of ten, so that a second use without replenishing it would probably have unsealed it. (B—2.) A 4-inch trap on a 4-inch soil-pipe, with 1½-inch seal, had a 1½-inch vent-pipe 1 foot long. The discharge of a pail of water destroyed its seal three times out of ten. (B—3.) Increasing the vent to 2 inches, the discharge of six pailfuls broke the seal once, and nearly broke it twice. (B—4.) Increasing the vent to 3 inches (still 1 foot long), ten pailfuls broke the seal once, and reduced it to less than half its depth six times. (B—10.) "Under conditions which indicated perfect security, with a pipe 1 foot long and 1½ inches in diameter on a 4-inch trap, a coil of pipe 50 feet long coupled to the vent rendered it inefficient once in eight trials—the trap having 2 inches seal being siphoned in this case—and lost 1 inch of water three other times out of the eight. In another case, where a short vent of 1 inch in diameter seemed to be quite efficient, a coil of 1-inch pipe, with a length of 28 feet 6 inches, being coupled to it rendered the vent of apparently little use, for the trap lost its seal at every trial." (E.) He concludes that with ordinary hopper-closets used for emptying slops "it is difficult to preserve the seal in the ordinary form of S-trap, even by a vent-pipe attached thereto, unless this be applied directly to the crown of the trap, and be as large as 4 inches in diameter for at least a foot above the trap."

With these conclusive data under his eye, Mr. Philbrick says: "The ordinary S-trap alone, with ample air-vent, is therefore recommended for use under water-closets, and also for all other fixtures where its proper ventilation can be secured within reasonable limits of expense." He recommends that such ventilation should in every case "be severely tested by repeated trials," but he seems not to have noticed how little prospect of universal success he has left to the "ventilating" system, nor how little basis for his preconception. Farther on, Mr. Philbrick repeats his recommendation thus: "The best and most simple remedy for the siphoning of traps, in most cases, is undoubtedly to be found in the introduction of air at the normal pressure at the crown of the trap."

The *Sanitary Engineer*, in introducing Mr. Philbrick's report, with a tenacity worthy of a sounder holding says: "We have here-

tofore often urged on our readers the importance of providing air-vents for every trap, and if it needed any further proof it is to be found in these experiments."

This set of experiments included the testing of Bower's and Cudell's traps, yet, although the ball, in the case of each, remained against its seat, they are not deemed worthy of notice in the "Conclusions and Recommendations."

Mr. Hellyer's experiments are hardly worthy to be mentioned in connection with Mr. Philbrick's, but it should be stated that his somewhat inconsequent conclusions as to the venting of S-traps are similar. Some of his results may have been influenced by the direction of his soil-pipe, and most of his reasoning is based on experiments with two-inch wastes. His processes are illustrated by the fact that he found that 110 linear feet of air were drawn through his Bower's trap (from the house to the drain), that the water was constantly agitated, that the ball "did not keep its seating three seconds together"—in short, that it behaved exactly as it is intended to behave,—and that he blindly concludes: "this test proved that this trap also requires ventilation." In one case from which he reasons he evidently had an effect of pressure in the atmosphere of the soil-pipe.

Dr. Lissauer, of Dantzic, has made some notable experiments, which would be more useful if we knew the condition of the drain from the house to the sewer. It was supposed not to be trapped, but the fact that nearly, if not quite all of his results showed that the pouring down of water produced a compression of air in the soil-pipe, causing a forcing of the trap toward the house—not a rarefaction, causing "siphonage"—it is presumable that this channel was in some way obstructed. From the fact that the flame of a taper placed in an empty trap was drawn outward, he argued a movement of the air toward the sewer. It may have been only a movement toward the open top of the soil-pipe. That the movement was most active on stormy days indicates that this was the case, as the sewers of Dantzic are not connected with an open outlet. The compression caused by the descent of water in the soil-pipe sometimes blew out the taper, or when the trap was sealed forced its water over the house end of the trap.

Renk's experiments in Munich were in the main confirmatory of Lissauer's and Philbrick's: they developed nothing new as to siphonage.

My own experiments agreed with neither. They indicated the constant efficiency of the free ventilation of the soil-pipe alone. In one sense they are of little value, for the experiments of others show that under other conditions the open top of the soil-pipe may fail to protect the trap. It is possible that one of the causes of the differences between Mr. Philbrick's results and mine is to be sought in the fact that his soil-pipe was new and smooth, while mine was old and probably retarded the flow of its water.

The sum of all the testimony very decidedly demonstrates the impossibility of maintaining the water-seal of traps, not larger than the pipes they protect, either by ventilating the soil-pipe, or by ventilating the traps themselves; that is, of maintaining them at all times.

The deduction from this is inevitable: whether ventilated or not, such traps must be used only where their unsealing will be at once detected; practically that they must be used nowhere. Deep water-closet traps are sometimes large enough to allow the passage of air without becoming unsealed, but for all other uses some other device must be adopted if we are to avoid the danger of unsealing under certain combinations of flow. Each trap may be subjected to tests more severe than it can possibly undergo in practice, and it may (with an open soil-pipe, it probably will) be found safe, but without such testing no small trap can be trusted. Large traps are inadmissible, foul cesspools. The fact that the ventilation of the trap itself is found effective cannot be accepted, for in use the ventilation may, and probably will, soon become obstructed by deposits.

Those who, controlled by their preconceptions, still look to trap-ventilation for relief, should read again and ponder well Mr. Philbrick's results as to the relations between the size and the length of ventilation-pipes. Surely those Boards of Health which insist on such ventilation should now modify their regulations. The inadequacy of the system to meet all conditions—even when traps and pipes are new and clean—condemns their judgment in the matter. And these traps and pipes are clean only before they are used. Subsequent examination shows that the mouth of the vent at the top of the trap quickly catches deposits, and often becomes quickly closed by them, soon turning our fancied protection into an unsuspected failure. It is my own opinion that if all the traps in a house were vented as required by these sanitary authorities, the venting would soon become null in most of them, and that the traps where it remained effective would become unsealed by evaporation (due to the draught immediately over them) much more often and more thoroughly than, without venting, they would have been unsealed by siphonage.

Then again, trap ventilation-pipes are usually made with lead (thin lead at that), and every unnecessary foot of lead pipe in the drainage-work of a house is an added danger to be avoided so far as may be. We must bear in mind, also, the great addition to the cost of the work that this modern hypothetical cure for bad trapping entails on the householder,—whose interests we are in duty bound to regard, at least to the extent of imposing on him no extra charge for uncertain benefits.

Some importance is attached to the effect of trap-ventilation in es-

establishing a needed current through long lateral waste-pipes. A much more radical and better way to meet this need is to do away with long lateral wastes altogether. We have tried long enough to learn how we may safely maintain the widely diffused baths and basins characteristic of the "first-class" houses of a year or two since. I have hitherto believed that this end might be secured, but I abandon the belief. Prudence demands that while we should—as we safely may—provide what is necessary for reasonable conveniences and comfort, we should limit as much as may be the distribution of plumbing appliances. In pursuance of this policy we can place all vessels requiring waste-pipes so near to the perfectly ventilated soil-pipe that the ventilation of lateral wastes may be disregarded.

Until we shall have learned enough of the processes by which traps are siphoned to prevent such siphoning under all circumstances—and we shall learn this sooner or later—we cannot do better than to avail ourselves of the nearly complete protection afforded by mechanical traps. Philbrick and Hellyer seem to assume that the condemnation of Bower's trap should follow their discovery that its water may be lowered by siphonage, but neither of them secured, with an open soil-pipe, the dropping of the ball away from its seat.

Mr. Philbrick says, "Air was now readily sucked up through the trap by the mouth in spite of its ball." He says in another connection, but with a suggested inference, "We live in a climate where artificial heating of houses, warm chimneys, and the careful closing of wall and window cracks, combine to produce a decided pressure of air from without the house inward, acting through all our house-drains through several successive months every year, and (that) we know of no method, as yet, so satisfactory for resisting this pressure as the use of water-sealed traps." Preconception again. Did Mr. Philbrick ever use a nargileh where a water-seal of several inches offers no appreciable obstruction to the inhalation of the idlest and drowsiest smoker? He would probably accept one and a half inches depth of seal as sufficient for a wash-basin trap. Such a seal will yield to a variation of barometric pressure of four-tenths of one per cent. Surely the ball of Bower's trap would offer an important additional obstruction, even though not absolutely tight. Then again, we should rather look to the supplying of the draught of our chimneys by other simple means of ventilation—necessary for other reasons. This done, the suction on our drain-trap ceases.

He dismisses Cudell's trap—which in my judgment represents a most useful class—with the statement that siphonage removed all its water. No doubt it did and often does. It is only then that this class of trap possesses an advantage. When the water is withdrawn the wet ball rests on a wet seat, and closes the opening against any interchange between the atmosphere of a properly ventilated soil-pipe and that of any even slightly ventilated room.

Cudell's trap is not suitable for wash-tubs and sinks, where Bower's trap, exposed to view, is better; but imperfect though it is, it is the best yet introduced for baths and basins. It is surely to be used—always—in preference to a simple S-trap with a back ventilation-pipe, that may to-morrow become clogged and useless, and which constitutes another artery of the drainage system subject to injuries and imperfections which may deliver into the house the impure air of that system.

GEORGE E. WARING, JR.

ART IN PHILADELPHIA.

THE FIFTY-THIRD ANNUAL EXHIBITION AT THE ACADEMY.



BY holding its annual exhibition in the fall instead of in the spring, as heretofore, the Academy secures a few pictures that have already figured in the spring exhibitions at New York and elsewhere. The gain from this source is, however, very slight in the present instance, and it is more than doubtful whether it is sufficient to compensate for the loss caused by holding the most important exhibition of the year at a season when the artists can hardly be expected to have much to exhibit except the contents of their summer portfolios.

That the present exhibition is not more truly representative of anything in particular is partly to be attributed to this cause, no doubt, though I cannot help fancying that there must be other reasons why the very liberal offers of the Academy officials have elicited no heartier response from the artists, especially those residing abroad. For to defray the expense of transportation and insurance on all works accepted by a jury of artists in Paris is certainly a generous thing to do, and one which, so far as I know, no similar institution in the country has offered to do.

No, it can hardly be the Academy's fault that the display from Paris is so meagre, even when the fullest allowance is made for the blunder of changing the date, to which allusion has already been made, and for the somewhat hasty commission, for which due apology is made in the catalogue. Shall we say it is the artists' own fault,

and that they have not done their share toward making a success of an enterprise designed to aid them so directly? Or shall we infer that the encouragement they have received on former occasions has not been such as to attract to us now the first fruits of their industry? I am afraid this last is nearer the truth, and that the present display would have been much more brilliant if an admiring public had shown a little more substantial appreciation of the very admirable work which has been sent in former years.

As an indication of what Philadelphia painters have been doing, the exhibition is even more unsatisfactory than is its foreign contingent. Of the forty active members of the Philadelphia Society of Artists only fifteen have sent anything at all, and among the contributions of these very few are important enough to be more than apologies for the non-appearance of other authors.

These reservations made, however, the exhibition will be found by no means lacking in interest. The pictures from Paris, though few in number, are for the most part very good indeed, and are the more interesting as coming in many cases from artists who are comparatively unknown. This is indeed the best thing about the exhibition, that it is particularly strong in good work from the younger men, both at home and abroad. It is an admirable feature in anybody's exhibition too, and one which we are not accustomed to associate with the displays of academical institutions. What lends an additional interest to this part of the exhibition as far as local art is concerned, is the fact that the Charles Toppin prizes for works, by students of the Philadelphia Academy, which show best drawing are to be awarded now for the first time. They are two money prizes of two hundred and one hundred dollars respectively, and the recipients must have been students at the Academy for at least two consecutive years. The Mary Smith prize of one hundred dollars, for the best painting by a lady artist of Philadelphia, is also to be awarded. It was won last year by Miss Emily Sartain.

A return is made this year to the old practice of including water-colors and black-and-white drawings in the exhibition, as well as paintings in oil. With the spacious galleries of the Academy to arrange them in, it seems to be very desirable that works in these departments should be included, and for one I was surprised and very sorry to find the exhibit so small. Mr. Freer has sent a couple of good water-colors, and Mr. Pennell two or three capital etchings. There is a set of drawings for illustration by A. B. Frost, of considerable merit, and a charcoal head, by Mr. Kirkpatrick, that is more satisfactory than most of his paintings. But the little room devoted to works of this class is only half filled, and there are few besides those I have mentioned that arrest one's attention, or repay his scrutiny.

In sculpture, there are some good bronzes by the Bartletts, father and son, strong, earnest work; a study for a statue of Alexander Wilson, by Mr. Calder, of Philadelphia, and two very good busts in plaster, by Mr. George F. Stephens, a young sculptor of considerable promise, who makes, I believe, his first appearance at this exhibition.

There always has to be a place of honor, you know, and you can't help fixing your eye on it if you begin to mention particular works. On the present occasion it has been given to Mr. Bridgman, for the very brilliant piece of work which is catalogued as "A Roumanian Lady." The title is not very significant, but that does not matter, for the subject is really not a lady of anything at all, nor even a fine figure of a peasant woman of somewhere or other, seated at her spinning, before the door of her thatched cottage, as she pretends to be. No, it is nothing but a model, as much and as obviously a "property" as the distaff and the thatch, and her only mission here is to let us see how well Mr. Bridgman can render subtle values and delicate textures.

In a different vein is the "Castles in Spain" of Mr. T. Alexander Harrison, which possesses, I think, imaginative qualities of a higher order than anything in the exhibition. It was one of the successes of the last Salon, and it is perhaps not necessary to describe it; besides there is not much to describe. A ragged and not very lately-washed boy is stretched on the sand beside the sea, gazing at vacancy, absorbed in the unreflecting extravagance of his waking dream. The current of this is symbolized for us by the make-believe structure of sticks and shells which he has formed in the sand. And that is all. The execution is such that Mr. Harrison ranks with the realists in any question of truthfulness to nature, but so exquisite is the treatment that the mind refuses to dwell upon any material thing which the artist has found it necessary to paint. The solid earth and the stretching sea seem less real and less enduring than the childish imaginings of this ragged boy. Are they not so indeed? Shall not his little dream outlast them both?

As a piece of story-telling, pure and simple, I think Henry Bacon's "A Sailor's Story" is quite alone. It is painted a good deal better than the "Luck of Roaring Camp," which was shown here a year or two ago, and the dramatic power which would have redeemed a much worse picture than that, is not less marked in this. The composition is admirable. The principal gathering, of which the young reciter of adventures is the centre, and the subordinate groups, the outer rings, so to speak, of the agitation which his return has caused in the little village, are alike delightfully treated. The figures are drawn with spirit and are carefully studied, while the model has not been allowed to play the tyrant, as in Mr. Bridgman's picture, and quite as conspicuously in Mr. Eakins's "Crucifixion," which is here seen for the first time, although it has already been shown in New

York and in Chicago. That the conception of this is hardly the most dignified or reverent one possible, I presume that we shall all agree. The one dead figure nailed to the cross fills the canvas. There is nothing else in sight. There is only a glimpse of rocky descent and the open sky at noonday. The figure is that of a blond young man, slender but not delicate or refined; weak rather than spiritual, and deluded rather than divine. I confess that to me it only seems to say, "Come away and leave him alone in the white sunshine; it was all nonsense that we have heard about the darkness and the heavens themselves being moved. It was cruel to kill him, of course, but it is done now and cannot be helped; the clamoring mob was inhuman, we know, but it was not so very blind after all; there is one less delusion in the world, at any rate." I am, however, quite ready to waive the whole question of the conception as something with which the critic has little to do. Besides, there is another side to it; what business have we to obtrude our petty "conceptions" into a scene like this. I really think the artist means to say, "Let us paint what might really have been seen on Calvary when the crowd had departed and the darkness was gone; let us paint it as simply and truthfully as we can. It will tell its own story, and enforce its own lesson." Looked at from this point of view, however, I am afraid the picture cannot be reckoned a great success; the model is oppressive; his heavy hand is felt everywhere. With the exception of the head, which is certainly very weak, from whatever standpoint it is judged, the whole upper part of the figure is painted with a good deal of power. The body does certainly seem to be dead and to hang heavily by the rigid and bloody hands. It is hideous in its uncompromising faithfulness to an ugly model, but we will not gainsay its truthfulness, which is perhaps much more beautiful than any of our little standards of beauty after all. In the lower part, however, the figure certainly fails. The strained muscles of the legs maintain the body in its position only by exertion, and the feet are purple with standing. The model has done too much, and has only defeated the purpose which he hoped to serve. Poor man, he has suffered from long posing in a most uncomfortable position, but he is not dead; there has been no violence; we are all glad of that.

Another work of Mr. Eakins's is more satisfactory. He calls it "Singing a Pathetic Song," and I think it shows him at his very best. It is a simple group, a family group, let us say. One lady stands and sings, the other sits at the piano; the old father in the background completes the harmony with his venerable 'cello. There is almost an utter absence of accessories, and no attempt at anything like prettiness; indeed everybody knows that Mr. Eakins seems rather to enjoy making his sitters look a little homelier than they really are. There is no nonsense anywhere, but plenty of downright earnest sentiment. There is nothing in the whole collection that seems quite so genuine and sincere.

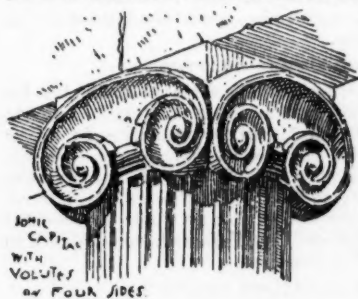
Of portraits there is an abundance certainly, but never, I think were so many bad ones got together before. Mr. Alexander's "Thurloe Weed" is strong and good, and one by Mr. Charters Williamson—quite a new name to me—has something about it that arrests and holds the observer's attention from the moment he enters the room; but with these two exceptions there is very little of interest in this department, and it would be as unprofitable as unpleasant to catalogue the infirmities.

Among the landscapes there are several very good ones—a winter piece by Bruce Crane, "A Nipping and an eager Air;" several capital things from Brittany by Burr H. Nichols and by Clifford P. Grayson; quite a brilliant, large "Venice" by Walter L. Palmer, and a good many more which I should be very glad to mention by name if it were not out of the question within the limits of this notice. I should be sorry, however, not to mention the work of one young man who makes his first appearance here, but from whose future I am confident a good deal may be expected. Mr. Chas. H. Davis of Boston sends from Paris two landscapes, "Evening" and "The Plain," which are simple and effective and are pervaded by as fine a "feeling for his business" as anything that is shown. "February in the Forest of Fontainebleau" by Mr. H. Winthrop Peirce deserves to be noticed in company with these.

L. W. MILLER.

A. I. A. — SIXTEENTH ANNUAL REPORT OF THE BOARD OF TRUSTEES.

TO THE AMERICAN INSTITUTE OF ARCHITECTS:—



meeting, not included in this enumeration, has failed for want of a quorum. They have been held in the office of the Treasurer, while the work of the Secretary has been carried on in his own office, and

has involved the writing of over one hundred and fifty letters, exclusive of permanent records, and of routine correspondence and its replicates.

The elections during the eleven months since the last Convention, embrace thirteen (13) Fellows, as against two (2) during the previous twelve-month, and 17 Associates, (as against 15 the previous twelve-month), or 30 professional members in all as against 17. The following list, as arranged in chronological order, covers the names of the new members, viz.: in the Fellowship grade, H. Edwards Ficken, T. M. Clark, Charles Crapsey, Seth Babson, James E. Wolfe, G. W. Sanders, J. Wright, Wm. Curlett, Thomas J. Welsh, Thomas Fuller, Samuel Hannaford, George W. Rapp, and C. A. Wallingford; and in the Associateship grade: C. A. Didden, Augustus Eichhorn, M. F. Bell, D. T. Atwood, O. von Nerte, H. R. Marshall, W. M. Poindexter, N. G. Starkweather, Charles M. Bartberger, Glenn Brown, H. S. Barnes, J. Morgan Slade, Douglas Smyth, Stanford White, C. J. Clarke, Fred. H. Gouge, and S. S. Bemen. Two of the Fellows and one of the Associates just enumerated were formerly members, and after the lapse of years have sought and received re-instatement; but your Board has reason to know that some of the old members who unwillingly lapsed, during the long depression in business matters, simply from inability to meet an accumulation of dues, and would still find it a hardship to liquidate them, have nevertheless, such present resources and prospects, as would justify them in seeking re-habilitation, and would be glad to do so, if assured that back dues would not be called for. Under these circumstances the Board has felt it incumbent to pass a resolution asking this Convention to authorize it to remit, at its discretion, the back dues of former members seeking re-election.

To the list of Honorary Members, one name, that of General J. D. Cox, of Cincinnati, has been added, while Mr. N. H. Hutton, of Baltimore, a former professional member, but who has for some years confined himself to the practice of civil engineering, has been elected a Corresponding Member.

No resignations from membership have occurred during the inter-Convention period; but the necrological list unhappily includes our late young Associate, Mr. J. P. Sims, of Philadelphia, who died very suddenly of heart-disease last May, while conversing with an assistant in his office, and whose merits and promise we shall doubtless presently find duly memorialized in the report of the Philadelphia Chapter. We have also lost by death four Corresponding Members, Major-General J. G. Barnard, of the Engineer Corps of the U. S. Army; Robert Briggs, A. W. Craven, and W. Milnor Roberts, all civil engineers of prominence, who have already received elsewhere the obituary memorials due to their reputation.

Although the period covered by this report—as was also the case the previous year—has witnessed a larger accession to the professional membership of the Institute than has occurred during the same space of time, since the earlier years of the organization, the Treasury is lower—owing to the greatly decreased regular assessments on members—than it has ever been before; so that the reduction of dues, unless the membership largely and rapidly increases, must still be regarded as experimental. One cheering indication for the future is, however, to be found in the rehabilitation of the long-time dormant Chapter whose hospitalities we are now enjoying; and another in the accession, which occurred on the 5th of last May, of a branch on the Pacific sea-board, transformed from the Pacific Coast Association of Architects into the San Francisco Chapter, A. I. A. It is to be hoped that this latest acquisition, planted at the Golden Gate of the Republic, may be of good augury for the coming resources and consequent influence of the Institute, and that it may be the starting point of many links which, sweeping eastward with the energy of new blood, from the farther ocean, may meet those that, originating on the Atlantic Coast, have been slowly (and with such toil and discouragement as those who have worked the most best know) forged on the westward course of gathering wealth and culture, till one unbroken chain spans the Continent, and binds together for the common good of the architectural fraternity and the public that employs it the otherwise divergent local interests and mutually destructive forces of the practice of our specialty.

The report of our Secretary for Foreign Correspondence will give us the particulars of the important and interesting discovery, by our old and esteemed Honorary and actively-Corresponding Member, the Chevalier J. da Silva, President of the Architectural and Archaeological Society in Portugal, of the remains, in the Province of Estramadura, of a Roman city—a discovery believed to be altogether or quite unique in that country. Your Board voted the Chevalier thanks for his interesting information.

The Secretary has, at the request of Associate J. L. Smithmeyer, of Washington, about to visit Europe on a visit of inspection for the U. S. Government, furnished him with credentials for presentation to the Honorary Members of the Institute, and the architectural societies of Europe.

The last report of the Board of Trustees, in illustration of the "increase in the calls upon it for authoritative opinions, in contested cases naturally falling within the jurisdiction of its specialty," cited certain resolutions passed by it in the case of an issue between Associate George Keller, of Hartford, Conn., and a Committee of the Common Council, of Buffalo, N. Y., for a soldier's monument. Mr. Keller informed the Board last January that he had been partially paid, and that he was to receive in all about eight per cent on the whole cost of the structure, his claim having been for ten per cent.

The same report contains a resolution of the Board "on an important question, raised by one of the documents of the Institute itself — the schedule of charges recommended by it." The resolution is intended to indicate the duties of an architect in reference to the supervision properly exercised by him over a building, "as distinguished from the superintendence of a clerk of the works," and was furnished to Mr. R. P. Southard, of Charleston, S. C. (afterwards and now an Associate of our body), to serve him in a lawsuit with a client, in which, as he informed the Board last March, he was successful. The discussions in the Board attending the passage of the resolution referred to, led indirectly to the expression at the last Convention of a request, "that the question of revising the schedule of charges recommended by the Institute be referred to the Board of Trustees," and accordingly it was discussed at its February meeting, and "Mr. Le Brun was appointed a sub-committee of one to present to the Board such amendments as might appear to him to be advisable." His very careful and exhaustive report on the subject, when presented to the Board was gratefully accepted, and after debate it was resolved to report progress at this Convention, and to ask that the subject be referred back to the Board for further consideration, while presenting for temporary employment the schedule now endorsed and issued by the Institute, with the following changes: The title to read, "Schedule of Charges and Professional Practice of Architects, as usual and proper, and as endorsed by the American Institute of Architects;" the words "For stores three per cent," to read "For warehouses and factories, three and one-half per cent," and the price figures, "\$5,000," in the following line, to read "\$10,000."

Since the last Convention two similar cases of issue between architects and clients have been referred to your Board, and one requiring immediate action, and an expression of opinion on which the architect interested would not defer to a special meeting of your Board, which your Secretary wished to call, was referred to him during the summer. In one of these cases occurring in Western New York, it is understood that no result has been reached; in another, occurring in Massachusetts, your Board

"Resolved, That, providing the facts are as stated, Mr. —'s claim is moderate and just, is according to the schedule of the Institute, and should be allowed."

In the third case the Secretary gave it as his opinion, to quote the substance of his letter on the subject, "that it is customary to plan and supervise a warehouse for three per cent, and that the word 'store' as used in our schedule is synonymous with 'warehouse.' The (building in question) however," — the letter went on, — "as described in the printed circular you enclose, is to be a building of complicated construction, as far as possible removed from the simple statical lines of an ordinary warehouse, and in which the inclusion of a few stores is a very unimportant matter as compared with the rest of the work. My judgment, therefore, is that for full architectural service on said building you are entitled to five per cent commission." The architects personally interested in the latter two cases have each forwarded their thanks for the assistance received from the expression of opinion remitted to them.

At the regular meeting in March, the Secretary was authorized by your Board, in view of a certain case presented to him, to procure information as to the actual emoluments of architects practising in the United States, and particularly as to the methods of remuneration employed in the case of public buildings, on the understanding that the information obtained should be subject to the future use of the Board, for publication if necessary, with respect to facts, though not with respect to names. Consequent on this action the Secretary has had, and is still having, a varied and very interesting correspondence, which, however, in its present incomplete shape is necessarily to a considerable extent confidential. Probably by the next Convention it may be expedient to lay at least its substance before the Institute, with the promise of good collective and individual results.

Many members have probably felt what a desideratum exists for a thoroughly arranged and exhaustive technical manual, suitable for the current use of the architect practising to-day in the United States. At the September meeting of your Board "the Secretary produced a letter from Mr. F. W. Vogdes, architect, of Louisville, in reference to the possible sanction of the Institute for a new edition of his price-book, 'the Architect's and Builder's Pocket Companion,' with his answer to the same expressing the opinion 'that the chief need of [Mr. Vogdes's] manual seemed [to the Secretary] to be a full and alphabetical index, and an appreciation of the different customs and terms that prevail in different sections of the Union, as regards the building and cognate trades.' It was also suggested that 'familiarity with our proceedings, and correspondence with affiliated practitioners all over the country might materially assist [him].'"

At the regular meeting in January, your Board, fearing the result of political action, brought to bear for personal profit, adopted the following minute: "The Board of Trustees, A. I. A., understand with regret that there is a movement to dispossess of his office the present Supervising Architect of the Treasury Department, and desire to express the opinion that any change in the incumbency would, in all likelihood, result unfavorably to the public interests." This unsolicited communication was forwarded to the Government officer indicated and elicited a grateful acknowledgment.

At the first meeting of the Board after your Washington Convention the following preamble and resolution were adopted:

"Whereas the names of the architects who have successively been

employed on the National Capitol at Washington nowhere appear on the edifice, and whereas the precedents are numerous in this country and still more in Europe for honoring the creators of important and conspicuous works of art by such permanent record, therefore

"Resolved, That it is the sense of the Board of Trustees, A. I. A., that such omission should be supplied, and it desires the Secretary to communicate with a member of Congress, with a view to placing a tablet within the rotunda, inscribed with the names of the successive architects, with the dates relating to their periods of service."

President Walter, one of the architects of the Capitol, was not present at this meeting, but at a subsequent one in January, being present, he showed, for reasons which he stated, little favor to the proposition. It was not, however, abandoned by the Board, but the Secretary has not yet found an opportunity for moving in the matter to what he considers the best advantage, and it remains *in statu quo*.

At the regular meeting in March the Board

"Resolved, that the sum of \$100 be taken from the Treasury of the Institute and put at interest by the Treasurer as the nucleus of a Building Fund, to be devoted to the acquisition by the Institute of a Building for its own purposes," and

"Resolved, That no part of said fund or its accretments shall be withdrawn except by unanimous vote of the Board of Trustees, five being present."

At the next meeting a small additional sum was voted to pay the premium on a U. S. bond for \$100, in which shape the Treasurer had invested the previous appropriation. This nucleus has just been slightly enlarged by the gift from a member of \$100 with the promise of an additional hundred dollars when the fund shall have reached one thousand dollars; and the Treasurer, who first officially broached the scheme on the basis of \$25, will be only too happy to forward receipts and move the thanks of the Board for much larger sums subscribed to the same fund. The costly Masonic Temple in New York City was built from a fund which was started from a subscription of one dollar. There are few large cities in Europe which do not boast a convenient building of assembly owned by the resident Society of Architects; some, as in Vienna, being of very ornate and costly description; and in this country of dominant trade, business combination, and high city rents, when the junction of stores and offices with assembly and show rooms may be made in a very few years to pay for the cost of a building and provide a current revenue, besides leaving a large part of the structure rent-free to its owners, it must certainly sometimes seem strange to themselves — as it would undoubtedly seem discredit to the public if it were generally known — that the practitioners of the art and science of building in America are destitute of a professional home, and have not where to store its books and archives without encroaching on the personal appliances of its members. The moral effect on the public and the professional advantages to themselves that would accrue from the display of their works in, and the advertising of themselves from, their own quarters can hardly be overrated.

Respectfully submitted for the Board of Trustees by
A. J. BLOOR, Sec'y.

October 24, 1882.

EXTRACTS FROM THE CHAPTER REPORTS.

FROM THE CINCINNATI CHAPTER.

THE Cincinnati Chapter of the American Institute of Architects begs leave to report that during the past year they have again come within the fold of the Institute, fully complying with all the requirements of the By-Laws, and like the Prodigal Son, we hope and expect that the fatted calf will be prepared in honor of the event.

FROM THE RHODE ISLAND CHAPTER.

Little formal business has been brought before the Chapter, while the increase of professional work, following upon the prosperity which has everywhere been apparent in commercial and business centres, has prevented us from entering upon any united efforts towards reforming abuses which still surround and permeate all building interests. We may flatter ourselves, however, that while as a Chapter we have been apparently idle, individually we have all reaped benefits from our organization and connection with the Institute. The bond of union among us is strong, and the general public in Rhode Island is gradually recognizing the fact that there is something more than mere longing for display in our assumption of the initials of Institute membership.

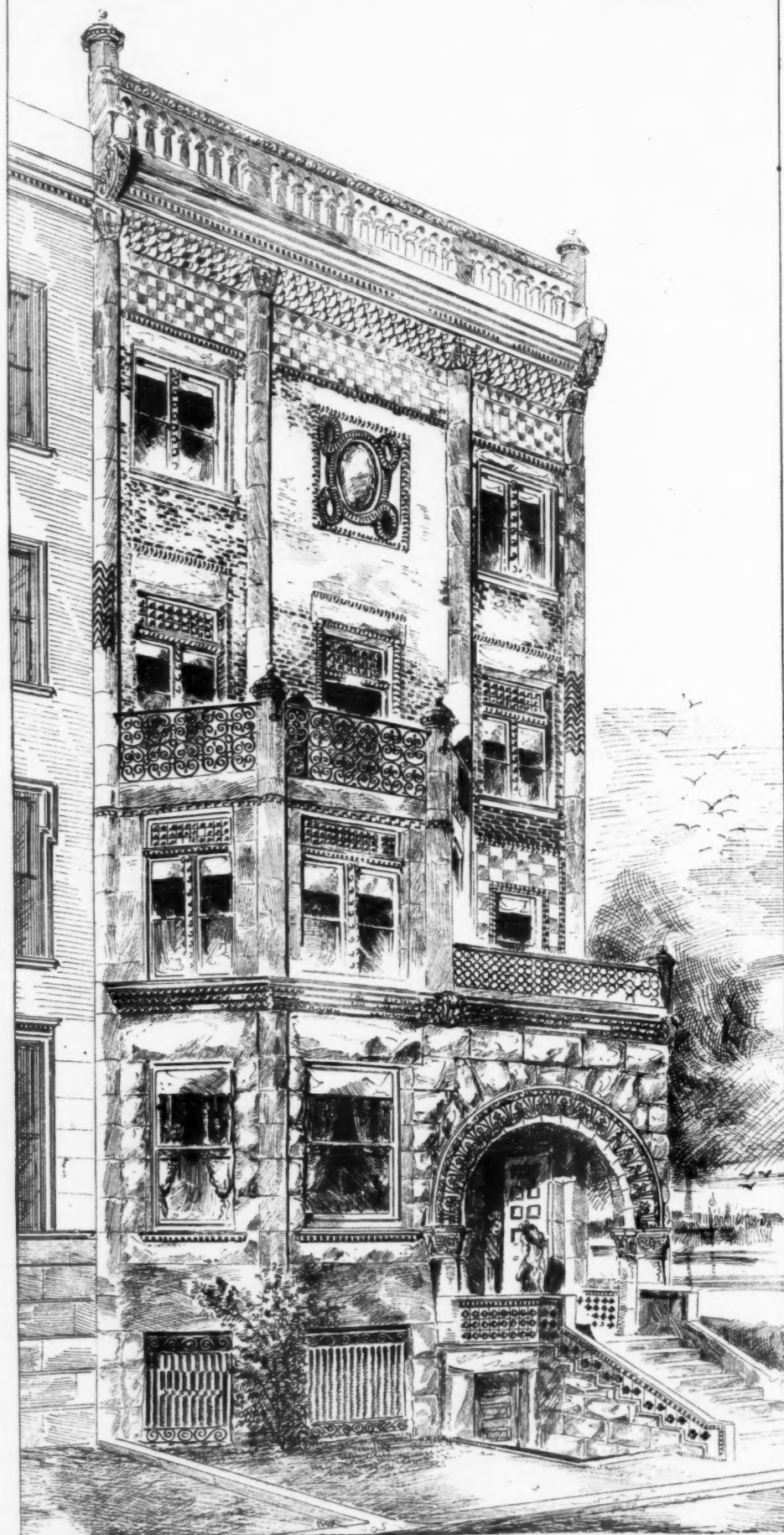
FROM THE BALTIMORE CHAPTER.

The attempt made by the Chapter to provide a building-law for the city of Baltimore has failed. After having the matter brought before him by the Chapter, the late Mayor, by ordinance of the City Council, appointed a commission composed of one lawyer, three architects, and two builders to draft a suitable law. This committee, after a good deal of labor, having as a guide the building-laws of other cities, presented such a law as they thought would be beneficial to the citizens of Baltimore, but our City Fathers have allowed it to sleep quietly, with no hope of its passage.

FROM THE SAN FRANCISCO CHAPTER.

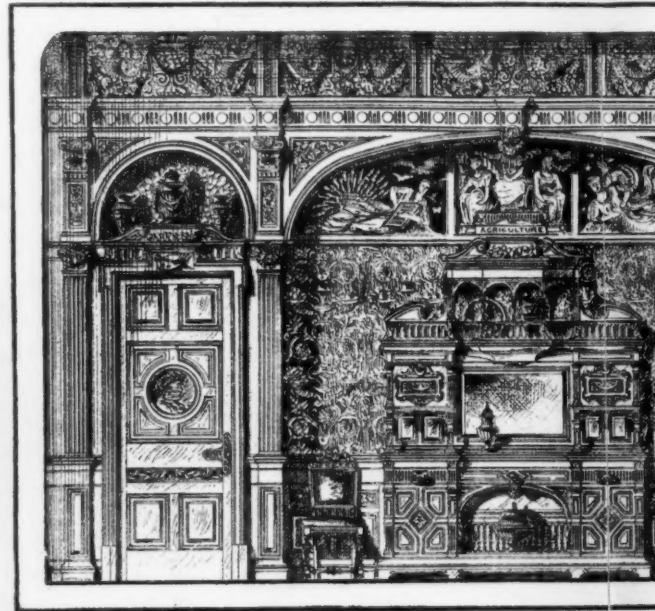
As you are doubtless aware the "San Francisco Chapter" is a resolute of the "Pacific Coast Association of Architects" inaugurated in May of 1881, the change from the same to our present position as a Chapter, by kind recognition of your body, having been

... Cabot and Chandler ...
... Architects ...

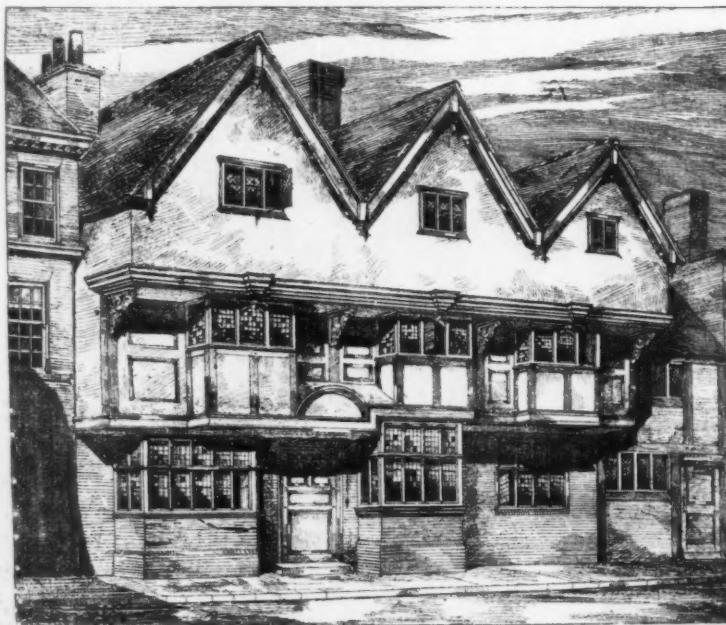
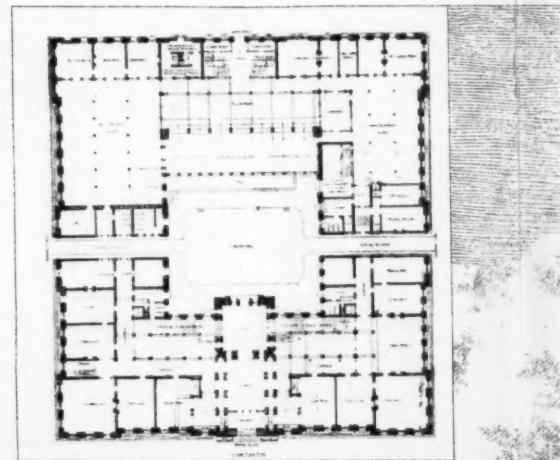




MAISON SÉPULCHRALE AU CIMETIÈRE DE CHARENTON (S. M.) PAR M. A. BOUTY, ARCHITECTE
Menteur des Architectes

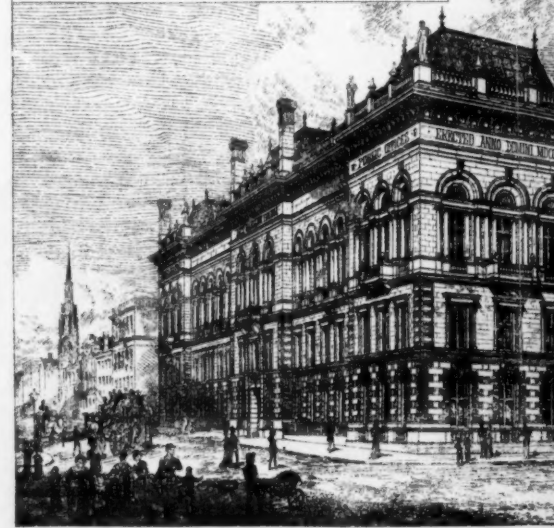


FIRST PRIZE DESIGN.—Side of Dining Room, by W. Valerius



AN OLD HOUSE AT CANTERBURY
DRAWN BY GERALD LALCOTT HORSLEY

THE BUILDING NEWS.

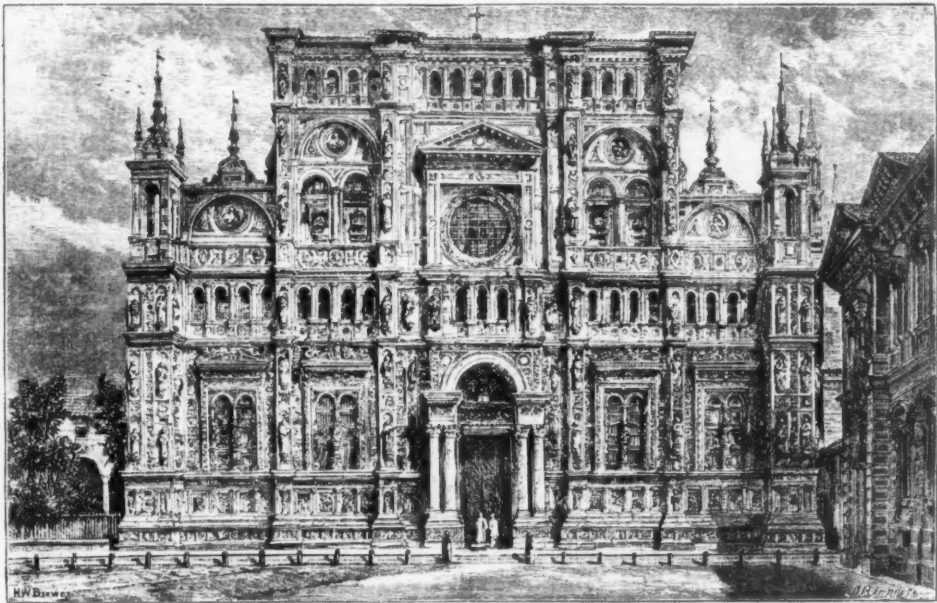


DESIGN FOR
ONE OF THE
BY THOMAS



g Room, by W. Valerius Aspen, Glasgow.

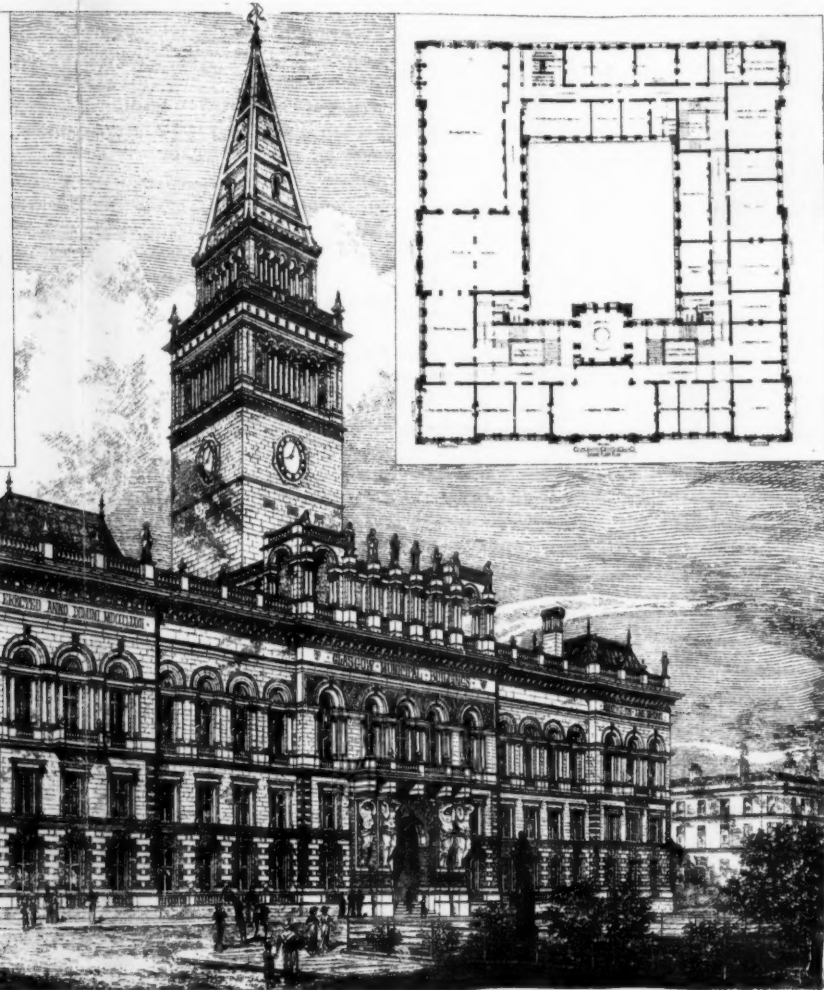
THE CABINET MAKER



THE CERTOSA AT PAVIA.

The Builder

OUR FOREIGN EXCHANGES, X.



DESIGN FOR THE GLASGOW MUNICIPAL BUILDINGS.
ONE OF THE FOUR DESIGNS SELECTED IN THE FINAL COMPETITION
BY THOS. WORTHINGTON, F.R.S.A. AND JOHN G. ELWOOD, A.R.B.A.

The Architect



Part
of a
Painted
Window
"David giving instructions to Solomon
for building the temple."
by Mr. Byrne-Jones

submitted for
Trinity Church
Boston U.S.A.
by Messrs. Morris & Co
449. Oxford St.

At the St James's Hall Fine Art and Industrial Exhibition No. 1.

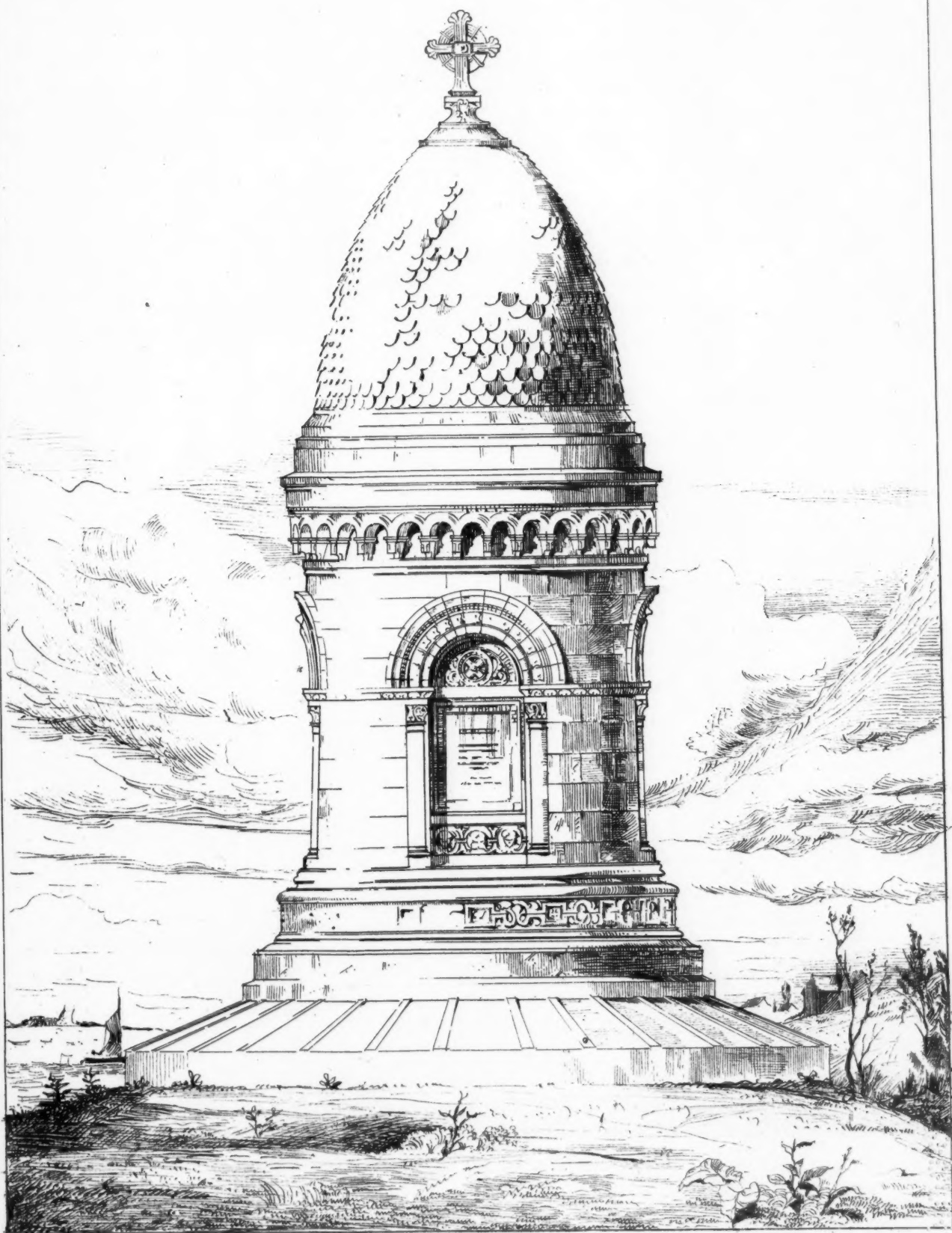
Rambling Sketches by T. Raffles Davison No. 86.

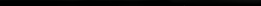
The British architect.

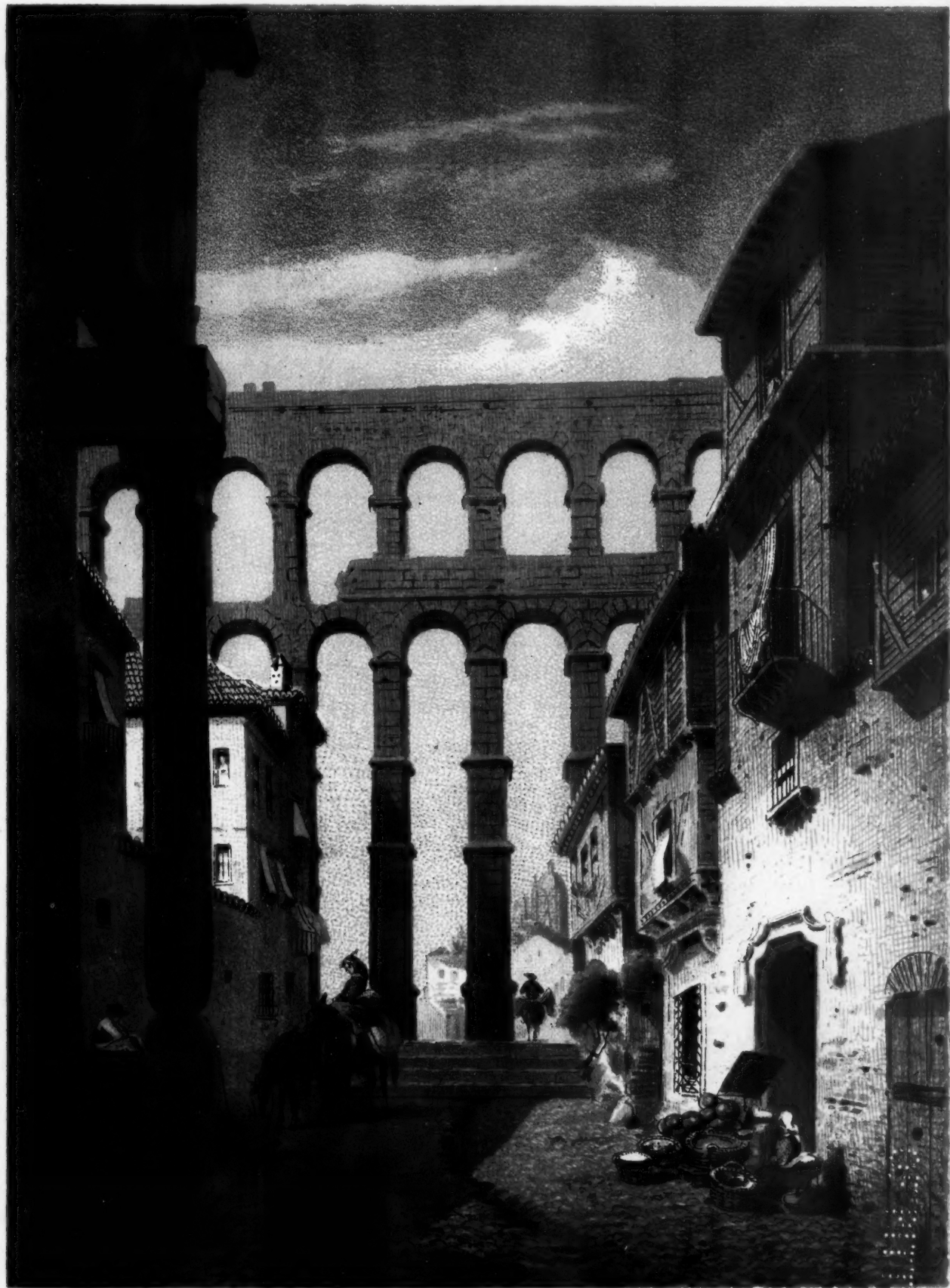
[illegible]

Monument to be erected in
Woodlawn Cemetery :-

Thos. Hastings Archt.
27 West 46 St. N.Y.







Helotype Printing Co. 211 Tremont St. Boston.

ROMAN AQUEDUCT, SEGOVIA, SPAIN.

SECRET
OF THE
UNITED STATES



made in May of the present year, and the mere realization of such a recognition has already been fruitful of an increased interest on the part of our members; such interest being manifested, we are happy in stating, not for personal aggrandizement, but for the maintenance of the status of the profession as an art, the interchange of ideas upon a thorough social basis, and the display of the utmost good fellowship, with the assurance that concerted action is the only road to successful issue, feeling that as the "star of empire" is westward, we, here upon the Pacific slope, become the recipients of the advancing tide of progression having its birth in the East.

As the heretofore comparative isolation of the "Pacific Coast," the matter of climate, conditions of the people, and the phases of social life, have been the means of engendering certain types of originality, as displayed in our artistic and mechanical productions, our architectural groove will admit of many deviations, and with a unanimity of action with yourselves, we hope by such procedure to essay productions worthy of mutual rank and consideration.

THE ILLUSTRATIONS.

THE ROMAN AQUEDUCT AT SEGOVIA, SPAIN.

[Chromo-lithograph.]

SOME score or so of years ago an amateur of noble blood,—judging by his name a Russian or a Pole, Prince Mestchersky,—travelled through Spain and northern Africa, having in his train one or more excellent water-colorists to make sketches of such architectural or other subjects as appealed most strongly to his individual taste. Whether or not the object of his travels was the future publication of these sketches, the fact remains that on his return home a certain number of them were issued as chromo-lithographs—and the best of their class we have ever seen. One of these, the Roman Aqueduct at Segovia, we have reproduced at about one-third the size of the original. As some of our subscribers may be tempted to endeavor to obtain some of the original prints, we ought to advise them that, as we have probably used very many fewer stones for our reproduction, much of the rich sobriety of the original has been undeniably lost.

DESIGN FOR GLASGOW MUNICIPAL BUILDINGS. MESSRS. WORTHINGTON & ELGOOD, ARCHITECTS.

[From the Architect.]

This design was one of the premiated designs selected in the final competition, and is based mainly on the city architect's plan, it being understood that the arrangements and accommodation required had been under his consideration for several years, in conjunction with the other chief officials. The distinguished feature of this design is the arrangement of the saloons to serve as picture and sculpture galleries; one of the illustrations now given shows how this was proposed to be effected, also the internal appearance of the principal entrance and council chamber. Entrances are provided in John Street for the gas and water departments, and service of banquet-hall, etc.; in the quadrangle for public works and Dean of Guild, as well as minor entrances to the other departments. Considerable dignity is given to the main entrance by the arrangement adopted of a circular vault, the tower on each floor serving as a means of communication from each side of building, with an open well and balcony looking into the entrance loggia. The warming and ventilation, sanitary arrangements, etc., were all worked out by the authors, without external aid, having had considerable experience in similar matters on other large public buildings; and the lavatories and water-closets were all placed next the external walls, with ample provision for air-supply, ventilation, flushing, and disconnection from drains. Separate smoke and ventilation shafts are provided for the various departments, under proper control in the basement, supplemented by hot-water pipes for the larger rooms, corridors, staircases, etc.; and the tower is utilized for extraction of vitiated air, also for storage of water, clock and chimes, alarm bell, and electric-light. Two lifts for passengers are provided for access to the principal rooms and saloons, and smaller hoists for coals and service in convenient positions, with tramways in basement all round; the construction of walls, floors, and roofs being fire-proof throughout.

THE CERTOSA, PAVIA, ITALY.

[From the Builder.]

DESIGN FOR A STAINED-GLASS WINDOW FOR TRINITY CHURCH, BOSTON, MASS. DESIGNED BY MR. BURNE JONES.

[From the British Architect.]

PRIZE DESIGN FOR THE SIDE OF A DINING-ROOM.

[From the Cabinet Maker and Art Furnisher.]

OLD HOUSE AT CANTERBURY, ENGLAND.

[From the Building News.]

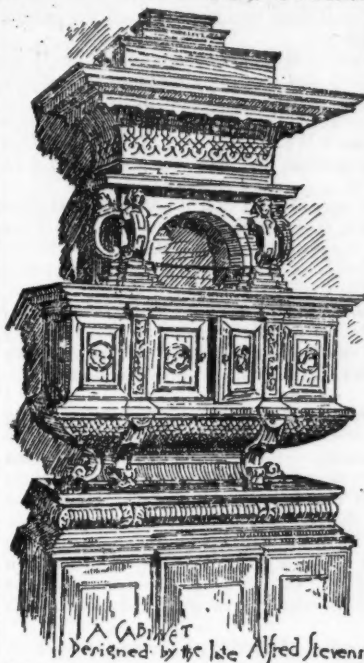
TOMB.

[From Le Moniteur des Architectes.]

MONUMENT TO BE ERECTED AT WOODLAWN CEMETERY, NEW YORK, N. Y. MR. THOMAS HASTINGS, ARCHITECT, NEW YORK.

DESIGN FOR A HOUSE FOR MR. —. MESSRS. CABOT & CHANDLER, ARCHITECTS, BOSTON, MASS.

NEW JOURNALS.



DURING the past few years we have witnessed the advent of many trade and *soi-disants* art-journals and have found few among them that were well-developed infants: most of them seeming to be prematurely born, and requiring the most careful cossetting to enable them to weather that most critical period of their existence, the first year. Every rule has its exception, however, but in spite of this we have been rather startled by the birth of a journal which, Minerva-like, presents itself to the world full-clad, with all the panoply of editorial staff, business-like management and corps of illustrators. So far as we know, this is a unique example of journalistic enterprise, and has evidently profited to the fullest by an unknown period of gestation, which we hope has been painless. The publisher has apparently taken advantage of his long connection with serial publications—of a wholly different character, however—and has had the wisdom not to allow his editor to begin his career before adequate preparation had been made for his support. The reality of the assistance he has secured is sufficiently evidenced by the statements made in the first issue of the *Decorator and Furnisher*,¹ by its contents, and by the array of contributors announced. The journal promises to be an exceptionally good and successful one, and like most good things is sure to create its own demand. To be sure, we could hardly do less than to speak kindly of a journal which pays us the compliment of editorially placing the *American Architect* at the head of the short list of journals which it declares most completely meets its own idea of what a "trade paper" should be. In "make-up" and general scope the new journal more nearly approaches the excellent *Art Amateur* than any other journal we know, but its aims are evidently less purely artistic; for the latter is in no sense a trade paper, while the new-comer as distinctly is. We have but little inclination to make any derogatory remarks, but we cannot help repining that the new journal has an exterior which tends to scale it down below the rank which its interior merits should secure for it. We could hardly blame an intending subscriber for thinking that if the design of the cover marked the height of the publication's aspirations art-ward, it would be hardly worth while to expend money on it. Fortunately many a rough shell encloses a palatable kernel, and though this elaborate cover can hardly be called rough, it certainly encloses things better than itself. It also serves as an illustration of a caution which we offer for the consideration of the editor. It is evidently a mere design, and not a record of executed work, and it is in the matter of accepting and rejecting mere designs—sketchy ideas, phantasies—that the editor will find one of his most useful occupations, and one which it will require some firmness as well as delicacy of treatment to discharge satisfactorily. Designs, as such, fall very well into the same category with patents: they may be ingenious, but few of them are practicable, and still fewer could stand the test of use and prove profitable. We do not advocate the publication of none but executed designs, but we do urge that in the treatment of the multitude of designs that will be offered, the editor should keep in mind the whist-player's rule, "when in doubt, play trumps," and when he has a doubt as to the absolute merit of a design, trump it with a refusal. The journal will gain in the long run, though it may lose a host of dubious supporters. With executed work a less rigid rule may be followed, on the plea that all historical records are of use.

A SERIAL publication, even though it be a monthly, which has apparently no editor, no editorial department, and no editorial views or intentions is surely something of a novelty, though the innovation is not without distinct advantages. It saves an editor's salary to the publishers, and the bodily comfort and peace of mind of some fortunate individual who might otherwise have the mischance to occupy the editorial chair. It does not burden the publication with the necessity of maintaining a policy or adhering to views already expressed. It throws on the publisher the immediate responsibility for all that the journal contains, on whom, of course, pecuniary responsibility must rest finally, even when the journal's views are enounced by an editor, who probably expresses them without consultation with his employer; and finally, it probably tends to waken in

¹ The *Decorator and Furnisher*, issued on the third Saturday of each month. New York: E. W. Bullinger.

its contributors a greater interest in their work and a more active support, for they must feel that if their own zeal slackens the journal will pine for want of nourishment.

It is possible, of course, that "*Building*"¹ has an editor, but if so, he is a man of unusual modesty and is not willing to make the public partners in his views and intentions, but is content to produce his first number without the attendant trumpetings that usually announce the presence of the omniscient "We." The result is that this first number looks unusually business-like and seems to promise that its subscribers will be well served.

Of its general character it may be said that it apparently aims to occupy the field lying between that which we attempt to cultivate and those which are now in the possession of the *Builder and Woodworker* and *Carpentry and Building*. The whole area is so vast that even with the assistance of the *California Architect*, *Wood and Iron*, the *Manufacturer and Builder* and the *Southern Manufacturer and Builder* it cannot be said to be yet wholly occupied, so that knowing and appreciating the energy and perspicacity of its publisher we can hardly doubt that it will earn its livelihood and prove a success.

It is a pleasure to encounter a new journal which is made up with an eye to appearances, and the tastes and predilections of its subscribers for good book-making, — for most publishers intend that their journals shall have more than an ephemeral being, and in their "make-up" keep an eye on the appearance that the bound volume will have at the end of the year. Trade papers are rarely issued in such creditable form as this of the *Sanitary News*,² which in every respect compares most favorably with the only competitor in its specialty that is now published in this country — leaving out of the question such monthly publications as interest themselves with matters of sanitation.

There cannot be, for the good of the public, too many journals of a high grade, making a specialty of matters of public health, and though, of course, a survival of the fittest is to be expected, we see every promise in the two numbers of this journal which have reached us that it will be found amongst those which have the best right to a long and useful career.

COTTAGE-HOSPITALS.

From
Chateau
de
Cornod



M. Miandre ~ sculpt.

sick and suffering might find the means of speedy restoration to life and health. Partly for economy of administration, and partly from mistaken ideas of hospital management, this method of benevolence has taken the form of large, many-storied buildings, in which the care of the sick can be economized under a single roof, and the wants of large numbers met by a simple organization of physicians, nurses and attendants. Has this economy of administration been attended with a corresponding economy of life? Some years ago Dr. Simpson, of Edinburgh, took up the subject of "Hospitalism," and fixing upon the amputation of the limbs as affording the best standard of comparison, he collected a great number of these cases from town and country, from hospitals of all sizes and grades, and from surgeons not attached to the hospitals in Scotland and England. As the result of his labors, he showed that the ratio of mortality in the smaller provincial hospitals was less than half as great as in the large London hospitals. Out of 2,089 amputations in hospital practice, 855 die; out of 2098 amputations in country practice, 226 die; of amputations performed in hospitals of from 300 to 600 beds, 1 in 2½ die; in hospitals of from 100 to 300 beds, 1 in 4 die; in hospitals from 25 to 100 beds, 1 in 5½ die; in cottage-hospitals under 25 beds, 1 in 7 die, and in isolated rooms in country practice 1 in 9 die, showing that, as the number collected under a single roof diminishes, the rate of mortality also decreases.

In 1869 Dr. Kennedy, ex-master of the Dublin Lying-in Hospital, proved from the hospital records that the deaths in that institution had been, to the whole number of patients received, one in 72 for the whole period of its existence of more than a century, during which time it has received 200,000 patients. In some years this rate rose to one in 30, once to one in 19, and once to one in 14, while the death rates from all the accidents of child-birth, in a series of years, for the whole population of England and Wales, had been one in 223; of Scotland, one in 225, and of London, one in 229. In

¹*Building*: An Architectural Monthly. Published the middle of each month. New York: W. T. Comstock.

²The *Sanitary News*, published semi-monthly. Chicago: G. P. Brown.

a paper on "Hospitals," published in 1874 by the Massachusetts State Board of Health, Dr. Derby, of Boston, calls attention to the foregoing, and also furnishes much valuable additional information on this subject. From tables compiled by Mr. H. C. Burdett, of England, in his work on "Cottage-Hospitals," we learn that, while the average rate of mortality in the general and special hospitals of London is 10.21 per cent, the death rate in forty cottage-hospitals having an average capacity of eight beds each, is only 5.4 per cent, or less than half the rate of the large metropolitan institutions. These observers have demonstrated that, other things being equal, the ratio of mortality is proportional to the size of the hospital or the aggregation of the sick in one establishment. Dr. Kennedy insisted that the origin of this mortality was in the hospital itself, arising chiefly from the pollution of the atmosphere of the building. The wards are occupied continuously day and night, and the air is being constantly contaminated, not only with the usual emanations from the skin and breath, but the presence of suppurating surfaces, and excretory discharges often add largely to its poisonous character. Unless this pernicious atmosphere can be effectually purified, its effect upon those compelled to breathe it day after day cannot be otherwise than injurious. In his remarks upon the report on Hospital Hygiene in Great Britain (made to the government by Dr. Bristol and Mr. Holmes,) the medical officer of the Privy Council, Mr. Simon, uses the following language, in relation to the fouling of the air by exhalations from the persons of the sick: "In such exhalations are embodied the most terrible powers of disease, the spreading flames, as it were, of some infections, and the explosive fuel of others, and any air in which they are let accumulate, soon becomes a very atmosphere of death. Against this danger ventilation is the one possible safeguard—ventilation which, with continuous current, shall always be bearing away, as rapidly as evolved, every volatile taint which rises from the sick, so that for hospital hygiene, ventilation requires pre-eminent regard. And, if ever the phrase 'well ventilated' may be (though it never ought to be) at all indulgently construed, in respect of a common dwelling-house, it must never, in respect of a hospital, be construed but with the utmost conceivable strictness." The value of an ample supply of fresh air, for the cure of disease as well as for the preservation of health, is now established beyond question. It is, in truth, nature's great restorative. Says Sir James Paget: "Of all the remedies which I have seen used, or seen in use, I can find but one thing I can call remedial for the whole disease pyemia, and that is a profuse supply of fresh air." During our late civil war, an ample opportunity was given to demonstrate the truth of this remark. Hastily constructed buildings of various kinds, churches, factories, private dwellings, etc., were all used for the care of the sick and wounded, and it was found, as the result of a most varied experience, that small, detached, one-story buildings, so situated as at all times to be freely exposed to air and sunlight, furnished the best conditions for rapid recovery. "Never before," says Dr. Derby, "in the history of great wars, has been found such immunity from erysipelas, surgical fever and kindred affections, to which all great hospitals are liable, as in these simple constructions. The chance of recovery," he continues, "to both sick and wounded, is better in the rudest barracks, to which the air has perfectly free access, or in tents, than in the most elaborate and completely appointed hospitals of great cities, in which the plans for supplying air are artificial." From the foregoing reliable testimony it would seem that, to reduce to a minimum the dangers arising from the presence of a poisonous hospital-atmosphere, it is necessary to substitute a series of one-story detached pavilions or cottages, having a central management, and so situated as to allow the freest possible exposure to the air and sunlight, for the large, many-storied buildings in which, one and all, the most elaborately constructed machinery for artificial ventilation has proved a failure. In these cottages but few patients can be accommodated at one time, and the evils arising from the aggregation of the sick, will, in a great measure, be avoided, while the means of ample ventilation will be made more simple and efficient. A larger ground-space will, of course, be necessary, and the cost of administration will doubtless be more than in the large hospital building, yet, at the same time, the cost of construction will be less. But as Dr. Derby remarks: "This is not a mere question of cost, not one of ordinary economy, but of economy of life, and it cannot be put aside with the usual arguments of thrift." Our large cities are now, generally, well supplied with hospital accommodations, and, while the substitution of small detached cottages for the massive piles of brick and stone is desirable, and will be a great step in the reform of hospitals, it is to be remembered, in addition, that our smaller cities and larger towns and villages, with but few exceptions, are entirely unprovided for in this respect. For such places, the system of cottage hospitals, which has proved so successful in England, seems peculiarly well adapted. In that country it has been found that cheap wooden buildings, under the care of the neighboring physician, assisted in the management by committees of ladies, provide admirable conditions for the care and recovery of the sick, at the same time furnishing a pleasant, home-like retreat for a class of patients who otherwise must be treated in their homes or boarding-places, in many cases under the most disadvantageous circumstances, distance from the large hospitals or the nature of the injury or sickness precluding removal. About 200 of these small hospitals are now in successful operation in England, varying in their capacity from two or three beds to thirty, the average number being about seven or eight beds. They have there served an admirable

purpose in the small cities and towns previously destitute of hospital accommodations. The rate of mortality in them is in striking contrast with that of the large metropolitan institutions, as shown by Mr. Burdett's tables. The smaller number of patients under one roof, and the more perfect ventilation possible in these small buildings are important factors in the production of this result. . . .

The yearly expenditure in twenty cottage-hospitals of the average capacity of eight beds each, taken at random from Mr. Burdett's tables, is not far from \$1,300 in each institution. It is more difficult to ascertain their cost of construction, as some of the hospitals are remodelled dwelling-houses, others are rented, while some are partially or wholly provided by the generosity of individuals.

The average cost of twelve cottages of about eight beds is not far from \$5,000 each. The sources from which these institutions derive their income are chiefly from annual subscriptions, donations, collections in churches, and from the payments of patients. . . .

These, in brief, are the chief characteristics of the English cottage-hospital system. Its simplicity, the home-like surroundings, and its ready adaptability to the needs of country life have won for it a warm place in the regard of the English people. Are there any serious reasons preventing its more general use in this country? One bed for every 1,000 inhabitants in the rural districts, with a somewhat larger proportion in manufacturing districts, is the standard laid down by the best English authorities. With us here few towns of 10,000 inhabitants or less have any hospital accommodations whatever. In Massachusetts, for example, according to Dr. Adams, while Boston possesses 15 hospitals, with accommodations for over 1,000 patients, there are in the rest of the State, exclusive of those for the insane, and those belonging to the naval and marine service, but 10 hospitals, with an aggregate of about 240 beds. All of these are in cities or large towns of from 12,000 to 50,000 inhabitants, scarcely any of them having that decidedly rural character which belongs to the English cottage-hospitals, many of which are located in very small villages. We are not aware that other States are better provided for in this respect than Massachusetts. The board of health of that State recently sent circulars of inquiry to its correspondents in every town and city of 10,000 inhabitants and upward in the State, and in every instance, where no hospital existed, the correspondent stated that, in his opinion, such an institution was needed. Cottage-hospitals established in our large manufacturing towns will be of the greatest benefit to the employes, many of whom are without friends in the town, and live in boarding-places, in which it would be impossible to provide in time of sickness that necessary care and attention which could be so easily obtained in the cottage-hospital, and for which many would be willing to pay a small weekly sum while there. A recent number of the *British Medical Journal* remarks, editorially, on this point: "The advantages of these cottage-hospitals are not extended to the poor only, but they may be made to contain rooms for people who, when sickness comes to them in boarding-places, and in crowded homes, cannot have the care and quiet they need, and would prefer paying a moderate sum per week where they will have medical treatment and nursing, and all the best appliances for a speedy recovery." Every physician practising among mill operatives knows how utterly unsuitable are their boarding-places for the care of those so unfortunate as to be sick in them. It is very seldom that there is the slightest provision made for the care of the sick. How much greater are the chances of recovery if, when the individual is sick or injured, he can be removed at once to the quietness of the village hospital, where all the resources of the institution are at his command, under the direction of the physician of his own choice. At the same time the beneficial effect of the home-like atmosphere, which should always be present in these small hospitals, is by no means to be lost sight of.

In 1875 the "House of Mercy" was established at Pittsfield, Mass., as a cottage-hospital, after the English plan, and has since continued in successful operation. From the paper of its medical director, Dr. J. F. A. Adams, we learn that the entire management is in the hands of ladies from the various churches of the town, who constitute the board of control. They at first rented a building for hospital purposes, having a capacity of eight beds. This was occupied for three years, when a new hospital for thirteen beds was erected, which, including steam-apparatus and other extras, together with the lot, cost about \$9,500. The working force of the hospital has consisted of a matron and a woman in the kitchen, assisted by such help as the convalescents could give, additional nurses being employed when necessary. The physicians of the town have attended in rotation, but paying patients are at liberty to select their own physician. The total expenses of the house, including rent, have averaged about \$120 a month. The success of this institution would seem to indicate that there is no insurmountable obstacle to the establishment of similar hospitals in all our larger towns. Certainly the benefit to be derived from them by a class now deprived of hospital advantages would be incalculable.

It is also very desirable and necessary that cottage-hospitals should be established in healthy country towns and villages for sick children, especially for those suffering with the more chronic diseases. These cottages will by no means replace the "summer sanitarium," but will provide small hospital homes throughout the year, where sick children from the city, or elsewhere, can receive medical and surgical treatment, together with all those advantages so essential to the well-being of childhood which country life affords. With this object in view, a movement to inaugurate the English system of

country hospital cottages, in behalf of children suffering from chronic and other diseases, and to be in operation winters as well as summers, was initiated a few months since at Baldwinsville, Mass. . . . The necessary buildings for a children's cottage-hospital, having a capacity of 25 beds, have been erected. The estimated annual expense per bed is about \$100, and it is hoped that benevolent friends of poor children will provide the means for furnishing and supporting the beds in permanency. . . .

Through the efforts of Mr. J. W. Coolidge of Baldwinsville, a similar institution has also been established in Chicago, known as the Betsey Moody Cottage-Hospital Association.

WATER-PROOFING SOLUTIONS.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Gentlemen,—Can you inform us of any suitable paint, or other preparation, that may be applied to a porous sandstone, (used as coping to a brick wall) that will render it water-proof, so as to prevent injury from moisture to wall below. Yours, etc.,

WYATT & SPERRY.

[We believe that the silicate paint sold by Howard Fleming, 23 Liberty Street, New York, would give the desired protection.—Eds. AMERICAN ARCHITECT.]

THE EFFLORESCENCE ON BRICK-WORK.

ST. LOUIS, November 14, 1882.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Several inquiries have appeared recently in the *American Architect* concerning the white incrustation which often shows itself after rain on the face of brick walls in exposed situations. New buildings are especially subject to it. No care nor skill in the selection of the materials, nor in their laying has availed to protect the finest buildings from disfigurement by these unsightly coatings. The difficulty is not confined to any particular section of the country, but is encountered apparently wherever coal, especially bituminous coal, is used for fuel. The term "salt-petrifying" is sometimes erroneously applied to it, and supposing it to come from the mortar, the addition of oil to the latter has been recommended as a remedy.

Some years ago Mr. William Trautwine, of Philadelphia, analyzed these incrustations, and found them to consist chiefly of sulphate of magnesia (Epsom salts), a substance which is very soluble in water, and which tends peculiarly to efflorescence on drying. A very small portion of it thus covers a large surface. He found this salt existing partly in the bricks and to a less degree in the mortar also, and he ascribed it chiefly to the action of the sulphurous acid generated in the combustion of bituminous coal containing iron pyrites (sulphide of iron) on the magnesia in the clay and in the lime.

It is not due to the weather nor to fumes in the atmosphere alone, nor chiefly, for in that case the oldest buildings would be most affected, whereas this appears chiefly on new work. A new stock brick which had never been used was immersed in water and on drying showed the white incrustation. The same coating was found on bricks piled up in suburban brick-yards where the air was comparatively pure, and it was even found on some bricks that were still in the kiln.

Analysis of the brick clays used in these yards showed, besides the clay, varying proportions of magnesia, lime, and iron, supposed to exist as silicates. Analyses of bricks made from these clays showed equal proportions of magnesia and lime in the form of sulphates. The coal used for fuel in burning these bricks was known to contain iron pyrites, from which in combustion sulphurous-acid gas would be generated. These facts would appear to account for the presence of the efflorescent substance in the bricks, unless it could be shown that bricks burned with wood or coke fuel had the same. So far as known such bricks are believed to be free from it.

One remedy for the evil would, therefore, be to use only wood fuel in burning those bricks which are intended for fronts, especially stock bricks, also for exterior terra-cotta work, which should be most carefully protected from disfigurement.

Concerning the mortar it is well known that a great deal of the limestone burned for lime contains magnesia, whence it exists in the lime, and therefore in the mortar. If wood were used for burning the lime the magnesia would remain unchanged until subject to sulphurous vapors in the atmosphere, and probably very little annoyance would be experienced from the efflorescence, although there are sometimes white streaks in stone-work which are due to the mortar. In such cases the remedy would be either to secure lime from a pure limestone free from magnesia, or to use Portland cement instead of lime-mortar.

Mr. Trautwine used cement for this purpose successfully in laying certain basement walls in damp places, where stones laid with lime-mortar had been affected with the incrustations. He also substituted hydraulic cement for lime-mortar in the inside joints of a room whose painted walls had been disfigured by the efflorescence. After repainting the walls remained unaffected.

Not all cements would answer for this purpose. Rosendale cement is said to contain magnesia, with soda and potassa, and a double annoyance might arise from the sulphate of magnesia, and from the carbonates of the two latter ingredients, which are said to produce stains also. The English Portland cement is supposed to be free from these foreign substances.

For buildings already erected there is generally no remedy but to wait. The coating is soluble and is washed off by the rains, and un-

less the bricks are especially charged with magnesia it will in time cease to appear.

Those who have access to the *Journal of the Franklin Institute* will find a full account of Mr. Trautwine's investigation in the number for April, 1878, from which the above information is chiefly taken. It was also re-printed in the *Scientific American Supplement*, No. 123.

Very respectfully, C. E. ILLSLEY.

AMERICAN ARCHITECT COMPETITION.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Gentlemen,—Will you be kind enough to inform me whether the competition plans mentioned in the *American Architect* of this week are intended for a city or a country dwelling.

An early reply is most respectfully requested.

Yours, etc.

STUDENT.

[In preparing the programme we had in mind a country or suburban house, but we have, however, no objection to receiving designs for city houses as well.—EDS. AMERICAN ARCHITECT.]

NOTES AND CLIPPINGS.

TEMPLE OF DAMBULA, CEYLON.—It is carved entirely out of stone, and there are seven caves hollowed out of the rock, which are reached by a long flight of stairs roughly hewn up the side of it. These caves are grotesquely painted with the chief incidents of the history of Ceylon. In the first one there is a statue of Buddha, reposing full length, which is sixty feet long and all carved out of one block of stone. Before it on a table are placed offerings of flowers, candles, camphor, incense, etc. In the other caves there are immense figures of the ancient Kinks; they are larger than life-size and are painted in the most varied shades of yellow, slashed with red and green. Their faces have much the same features as are represented on wooden Dutch dolls, and have about as much expression. The walls and ceilings are decorated with rough paintings representing battles, tournaments, elephant hunts, and religious processions. Portions of these rooms were curtained off, and when we asked the reason, the old priest who was our cicerone informed us that "they were very sacred statues," but did not offer to make us acquainted with them. When we left the temple he locked the door after us with a massive silver key, which must have been at least two pounds in weight. There were curious-looking rooms, with windows with gratings, at one end of the caves, which our venerable guide explained to us had been used as prison cells for State prisoners, with so many shakes of his head that we imagined it fared ill with the poor wretches. At leaving, we offered the old priest a sanctosim (tip); but he shook his head and said he could not take anything, but we might make it as an offering to Buddha, and pointed up the hill again, but as it was a good half-mile up, ending with a severe flight of steps to the temple, we declined to do so, but settled the question by telling him to make the offer next time he went up, which arrangement seemed to meet with his views as well as it did with ours.—*Tinsley's Magazine*.

IVY LAWNS.—Ivy lawns are known to but few amongst the many who are interested in garden economy. They consist, as the name implies, of ivy only, and they offer some peculiar advantages in cases where grass lawns are apt to occasion more trouble than they are worth. An ivy lawn may be well made in one season, and if the primary operation of planting be properly performed, the lawn will make itself; it will want no cutting, no sweeping, no watering, no protection from the birds that eat the grass-seeds to-day and to-morrow scratch up the tender plants, as though it was their mission to make grass lawns impossible. And when made, being, as it were, self-made, an ivy lawn will take care of itself for any number of years; but if in need of repair or trimming, the knife, the shears, or the spade may be used with good effect by unskilful hands, and with the least imaginable cost of time, for it is not an easy thing to kill, or even to seriously injure, a lawn consisting of ivies solely. Such lawns are unfit for games, and indeed should not be trodden on. They will not, therefore, supersede grass in a country garden, which perhaps is a matter for gratulation; but they will give us the most delightful breadths of verdure in thousands of places where grass is more plague than profit, and, at the very best, tends rather to disgrace than adorn the position. In town gardens generally, where small patches of ill-kept grass tell us but too plainly that a garden is not necessarily an advantage, the ivy lawn would make all the difference between a too evident failure and a complete success. So again in spots shaded by trees, where usually we see bare earth, and it is confidently said that nothing will grow, a surfacing of ivy may be as surely secured as the shade that renders grass impossible. And while with grass for a lawn we have but little choice as to color, for the good lawn grasses are all green, with ivy we may have a great variety of colors, for there are ivies with creamy-tinted leaves and leaves splashed with gold-yellow, as well as dark-green leaves and light-green leaves. After observations and experiments extending over many years, however, we have concluded that the very best of all known ivies for the purpose is the one known as "Hibbard's Emerald," for it is literally always growing, and travels fast and far, and the color of its fresh glossy leafage is a rich blue-tinted green, suggestive of the gem from which it takes its second name. It is, in truth, a delicious ivy at all seasons; it is the first to begin growing in spring and the last to cease growing in autumn, and, while it spreads freely and forms a close felt of rich herbage on the ground, it will climb and cling wherever it touches a perpendicular surface, and thus, without being directed, it will quickly clothe the walls and pillars and trees with its ever-fresh and lovely leafage. But the well-known Irish ivy is a valuable carpeting-plant, and is at command everywhere for the purpose.—*Gardener's Magazine*.

HOW SOME OLD WALLS IN ROME WERE MADE.—On the west side of the Piazza Vittorio Emanuele, where large houses are being built by Signor Marotti & Co., a peculiar wall has been found. It gave us some two hundred pieces of marble bodies. As far as I can judge, they belong to four statues, but a great many fragments have not yet been classified. One of the statues, of colossal size, seems to represent an athlete of the Greek-Roman school brought to such perfection under Hadrian. Another represents a female figure, perhaps a Faustina. There are, besides, lovely busts of Hadrian, of Antinous, and others. It is difficult to state at what period these works of art were turned into building materials. Perhaps they met their fate in the Middle Ages, although I should not wonder if such things had happened before the fall of the Empire. Here is an example of statues walled up under Aurelian. A new gate is being bored through the walls of the city to afford a direct communication between the Esquiline and Saint Lorenzo fuori le Muri. Between the third and the fourth tower south of the old gate, the walls, ten feet thick, are patched up in the following way: the outside face is of brickwork of the time of Aurelian; the inside face belongs to an earlier building, of which Aurelian took advantage, as it fell exactly on the line of his projected ramparts. It is an enclosure or foundation-wall of a garden, handsomely ornamented with a rustic kind of mosaic made of shells, colored stones, and pieces of enamel, such as are often seen in Roman nymphaea and fountains. The wall had rows of niches for statues. Three niches have been found in cutting the new gate, and in front of each one the corresponding statue lay embedded in the nucleus of the wall. One represents a sitting Venus, of no artistic value; the second and the third represent fighting fauns, bright and spirited in their attitude, well chiselled, and beautifully preserved.—*The Athenaeum*.

THE RED-BRICK ORDER.—The *London Pall Mall Gazette*, in a recent issue says: In its own way red brick is a very good thing indeed. It is warm in color; it is domestic; it sorts well with Dutch and English notions of home life; but it is not an architectural panacea. In London red brick is a simple necessity of the situation; no other good building material can be had within a convenient distance, and for all purposes of ordinary house-building brick or nothing is the Hobson's choice of the limited house-holder. Under these circumstances our architectural authorities of late years, turning over in their heads the question of sound, honest material for London dwellings, have wisely repudiated the time-honored maxim that Queen Anne is dead, and have revived Queen Anne in all her ruddy glory, from Fitzjohn Avenue to Hampstead, down to the humbler roofs of Bedford Park at Turnham Green. Being compelled to build in brick, they have sensibly decided to adopt a style based entirely upon brick as its material, instead of copying styles based upon solid stone, which is unattainable within the limits of what the *Saturday Review* will not allow us to call the metropolitan district. But a curious result of this accident or misfortune of the London basin has now begun to show itself in many provincial regions where good building-stone is cheap and abundant. Visitors to London have got into their heads the notion that brick is fashionable, and they have accordingly set about building brick houses, brick schools and brick public offices in places where stone is quite as cheap and far more desirable. Anxious to be in the height of the architectural mode, they have taken to putting up Queen Anne erections where Queen Anne ought never to have shown her royal red face at all. Instead of building pretty houses of the same strictly domestic type in local stone and in styles adapted to stone, they seem to fancy that if they adopt the new æsthetic fancies at all they must adopt them in their entirety, material and all. In fact, they want to reverse the boast of Mæcenas and Baron Haussman, and to leave a city of brick where they found a city of marble.

A WATER-CURTAIN FOR THEATRES.—A tank containing a continuous supply of water is fitted over the part to be protected; the water in the tank being used for general purposes also. In this tank a curtain of woollen material is kept immersed, which is caused to descend by its own weight, and which may be undone automatically, when it instantly becomes a fire-resisting screen. The suctional nature of the material attracts the water down the curtain in a siphon-like manner, forming a complete cascade of water, flowing down the already saturated curtain, which the flames cannot burn. It can be lowered into the fire without being burned or receiving any damage, a feature that cannot be accomplished by water-curtains which have to be saturated whilst descending. The inventors also propose some improved appliances for extinguishing fires by the use of existing gas-fittings. In this case the gas-main is connected with that for water, having junction-cocks, levers, and pull-lines leading to stations inside and out the building. The supply of gas can be instantly shut off and water turned on in the event of fire, leaving the necessary guide-lights burning. In theatres there are at command a multitude of gas-jets, or outlets, between borders, cloths, wings, set pieces, rows, etc., in the parts in which fires generally originate. Suspending iron-rods are applied to existing gas-battens and work vertically, thus admitting of their being raised and lowered from gridirons without swinging up or down the stage, thereby preventing their frequent contact with scenery and effects. The gas is an indicator of the perfection of the outlets, and the readiness of the apparatus for extinguishing purposes. For buildings, offices, etc., where gas-jets are not so numerous, an apparatus of a decorative character is used, which, although forming part of the existing gas-fittings, will only admit of water passing when needed. By this invention the water can be set to work simultaneously over the entire building, or should it be necessary to localize the action to one part only, this can be done, still leaving the other gas burning.—*Iron*.

A NEW EUROPEAN CANAL.—The newest of the many European canal projects is one for uniting Cologne with Antwerp. A Dutch engineer is the author of it and is said to have already secured from the Cologne Chamber of Commerce a promise of warm support. He has petitioned the German Government for financial assistance.

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.]

BUILDING PATENTS.

[Printed specifications of any patents here mentioned, together with full detail illustrations, may be obtained of the Commissioner of Patents, at Washington, for twenty-five cents.]

- 267,326. DRAIN TILE OR PIPE. — Newton B. Childs, Kansas City, Mo.
- 267,332. WOOD-TURNING LATHE. — Cyrus A. Curtis, Chicago, Ill.
- 267,336. PROTRACTOR. — Alexander H. Ege, Mechanicsburg, and Chas. D. Walters, Harrisburg, Pa.
- 267,354. LATHE. — Jacob B. Lile, Springfield, O., assignor to himself and Oliver S. Kelly, same place.
- 267,355. WEATHER-STRIP. — William H. Lynchard and George S. Saunders, Mount Pleasant, Iowa.
- 267,381. BEVEL AND GAUGE. — John S. Thornburg, Clinton, Iowa.
- 267,385. BRIDGING FOR JOISTS. — Henry B. Walter, Cincinnati, O.
- 267,398. BOLT. — James P. Black, Nelson, New Zealand.
- 267,399. FIRE-ESCAPE. — Nicholas H. Borgfeldt, New York, N. Y.
- 267,447. LOCK-HINGE. — August Müller and Josef Wolf, New York, N. Y.
- 267,448. LOCK-HINGE FOR SHUTTERS. — August Müller and Josef Wolf, New York, N. Y.
- 267,479. CHIMNEY-COWL. — Winfield S. Beebe, Middletown, Conn.
- 267,481. CENTERING BEVEL AND TRY SQUARE. — Charles L. Bellamy, Arlington, N. J.
- 267,493. PAINT. — Geo. J. Cline, Goshen, Ind.
- 267,499. GRATE-BASKET. — Charles F. W. Dankers, New Orleans, La.
- 267,503. BURGLAR-ALARM. — Russell G. Dudley, Jersey City, N. J.
- 267,504. FIRE-ESCAPE. — J. Paris Dunn, Brooklyn, N. Y.
- 267,505. WRENCH. — James Du Shane, South Bend, Ind.
- 267,515. SCAFFOLD. — Robert M. Gooze, Fleming, Ga.
- 267,541. SAFETY-GUARD FOR ELEVATOR-HATCHWAYS. — Edward G. Kendall, Boston, Mass.
- 267,578. FIRE-ESCAPE. — Robert Pallett and Francis Nahedy, New York, N. Y.
- 267,591. BIT AND COUNTERSINK. — Aurelius O. Revenaugh, Jackson, Mich.
- 267,618. ROLLING WINDOW-SCREEN. — Thomas Tribe, Colorado Springs, Col.
- 267,649. STOP FOR ELEVATORS. — Lorenzo D. Hawkins, Stoneham, and John H. Webster, Boston, Mass.

SUMMARY OF THE WEEK.

Baltimore.

- BUILDING PERMITS.**—Since our last report thirty permits have been granted, the more important of which are the following:—
- Wm. Diven, three-sty brick building, e s Gilmor St., s of Baker St.
- Elizabeth W. Long, 2 three-sty brick buildings, e s Gilmor St., s of Baker St.
- Wm. Horn, 2 three-sty brick buildings, n s Orleans St., e of Eden St.
- Ferdinand Passano, 4 two-sty brick buildings, Madeira Alley, between Pratt and Gough Sts.
- O. Swingle, three-sty brick building, w s Arlington Ave., s of Edmondson Ave.
- George Beck, two-sty brick building, Hampstead St., between Bond and Bethel Sts.
- W. T. Phillips, 7 three-sty brick buildings, w s Gilmor St., commencing n w cor. Gilmor and Mulberry Sts.
- J. B. Irvine, 4 two-sty brick buildings, w s Mount St., s of Franklin St.
- J. B. Irvine, 7 three-sty brick buildings, w s Mount St., n of Baltimore St.
- J. B. Irvine, 7 three-sty square brick buildings, Mount St., between Baltimore and Fayette Sts.
- John Fox, 4 three-sty brick buildings, Prestman St., between Etting St. and Druid-Hill Ave.
- John N. Foss, 7 two-sty brick buildings, Chesapeake St., between Hudson and Lancaster Sts.
- E. W. Gorman, 5 two-sty brick buildings, Luzerne St., between Alice-Ann St. and Canton Ave.
- Stephen McGowan, 6 two-sty square brick buildings, Sterrett Alley, between Hamburg and Cross Sts.
- Paul Armond, two-sty brick building, e s Cannon St., n of Alice-Ann St.
- Israel Gable, two-sty brick stable, in rear of 128 Ridgely St., between Cross and West Sts.

Brooklyn.

- BUILDING PERMITS.**—Bushwick Ave., w s, 50' s McKibben St., three-sty frame store and tenement, tin roof; cost, \$3,500; owner, etc., Henry Loettler, 192½ Stockton St.
- Stanhope St., s s, 150' e Central Ave., three-sty frame tenement, gravel roof; cost, \$3,500; owner, etc., Chas. Isbill, 419 Herkimer.
- Java St., No. 50, n s, 175' e West St., three-sty frame tenement, tin roof; cost, \$4,000; owner, W. H. Newarow, 61 Java St.; builder, Thos. Davis.
- Nearby Ave., e s, 200' n Atlantic Ave., one-sty brick stable, gravel roof; cost, \$3,200; owner, Mr. Richardson, 676 Washington Ave.; builders, John J. Bintzen and Howard J. Smith.
- South Second St., No. 225, n s, 100' e Sixth St., three-sty and basement brick dwell., tin or gravel roof; cost, \$9,500; owner, Thomas N. Harris, 307

- South Second St.; architect, Ernest Dennis; builder, William L. Langridge, Jr.
- Newtown Creek, 600' n Greenpoint Ave., one-sty brick storage shed, gravel roof; cost, \$9,000; owner, L. V. Sone, 116 Pearl St., New York; builders, Jas. Rooney and Thomas Davis.
- Freeman St., No. 213, n s, 125' w Oakland Ave., three-sty frame tenement, felt and gravel roof; cost, \$3,150; owner, Mr. Horkins, Freeman St.; architect, A. Gamble; builders, Peter Cawley and Port & Gamble.
- Broadway, e s, 80' n Van Buren St., three-sty frame store and dwell., tin roof; cost, \$4,000; owner, James P. Little, 1019 Broadway; architect and builder, R. H. Heasman.
- Park Ave., n e cor. Grand Ave., 2 four-sty brick stores and tenements, tin roof; cost, each, \$9,000; owner and builder, N. F. Griffiths, 94 Clason Ave.; architect, J. D. Reynolds.
- Skilman St., Nos. 27 and 29, one-sty brick mill, gravel roof; cost, about \$3,500; owner, Gutta Percha and Rubber Co., office, Franklin Ave.; architect, John Murphy; builders, Jas. Noble and P. O'Brien.
- Troy Ave., No. 38, w s, 160' s Herkimer St., three-sty frame dwell., tin roof; cost, \$3,000; owner, J. B. King, 5 Bainbridge St.

Boston.

- BUILDING PERMITS.**—Brick. — Tufts St., cor. Medford St., Ward 3, for City of Boston, two-sty flat storage and workshop, 30' x 48'; Fred. H. Tarbox, builder.
- Newbury St., No. 259, Ward 11, for Silas W. Merrill, three-sty and mansard dwell., 25' x 58'; Silas W. Merrill, builder.
- Wood. — Barnham St., near Gerard St., Ward 20, for O. H. Drisko & Co., two-sty flat box-manufacture, 50' x 100'; O. H. Drisko & Co., builders.
- Central Ave., near Berry St., Ward 23, for Edw. K. Johnson, two-sty pitch dwell., 18' x 28'; John A. Crosby, builder.
- Unimbed St., near South St., Ward 23, for Wm. J. Miller, 2 two-sty pitch dwells, 19' x 30'; ell, 10' 6' x 12'; John C. Betts, builder.
- Shelton St., near Adams St., Ward 24, for Bernard Minton, one-sty pitch greenhouse, 16' x 116'; Michael Ryan, builder.
- Warren St., near Howland St., Ward 21, for S. S. Campbell, two-sty pitch dwell., 11' and 26' 6' x 40'; C. H. Wetmore, builder.
- Bearse Ave., near Butter St., Ward 24, for Frank Rogers, two-sty pitch dwell., 21' and 24' 6' x 28'; ell, 15' x 16'; Frank Rogers, builder.
- I St., cor. East Fifth St., Ward 14, for Messrs. Locke & Nolan, 6 one-sty mansard dwells, 19' x 36'; Locke & Nolan, builders.
- I St., cor. East Fifth St., Ward 14, for Messrs. Locke & Nolan, one-sty pitch storage, 25' x 35'; Locke & Nolan, builders.
- Virginia St., near Bird St., Ward 20, for Frank L. Young, two-sty pitch dwell., 26' x 29' and 35'; M. Shields, builder.
- Mt. Bowdoin Summit, near Mt. Bowdoin Ave., Ward 24, for Andrew J. Mallon, two-sty pitch dwell., 59' and 63' x 68'; J. W. Coburn & Co., builders.
- Wakulla St., near Dale St., Ward 21, for Christopher Kenney, two-sty pitch dwell., 22' and 25' x 30'; ell, 20' x 23'; Kennedy & McHeffey, builders.
- West Sixth St., No. 102, Ward 13, for Patrick Keenan, three-sty flat dwell., 22' x 42'; Patrick Hanlon, builder.
- Brighton Ave., near Linden St., Ward 23, for Samuel N. Davenport, two-sty pitch dwell., 32' x 34'; ell, 7' x 21'; Samuel N. Davenport, builder.

Chicago.

- STRIKE.**—The threatened strike of the bricklayers, if it is consummated, will have the effect of seriously delaying many buildings now in the course of erection. The trouble is that they demand pay for ten hours' work, whether it is performed or not. The days are getting so short that it is impossible to work after five o'clock, and thus an hour is lost, which employers refuse to pay for. It would seem that it is too late in the season to inaugurate such a move, as cold weather will soon put a stop to all operations, and the amount gained, even if they should be successful in their demands, would be far less than the amount lost through being idle for a few weeks or even days.
- HOUSES.**—Horace F. Waite is to build three pressed brick dwellings with stone finish, three-sty and basement; to cost \$25,000; Treat & Folz, architects.
- APARTMENT HOUSES.**—S. B. Williams is building a four-sty and basement apartment house on Locust St., near Wells St., 55' x 70', which will cost \$30,000; from plans by Treat & Folz; and E. Earnshaw is to build an apartment house on Ontario St., near Pine St., to cost \$20,000; designed by the same architects.
- BUILDING PERMITS.**—Mrs. Mary Keller, 3 three-sty brick stores and dwells, 60' x 100', 2,9 to 237 W. Harrison St.; cost, \$20,000; G. Zucker, architect.
- Elizabeth H. North, three-sty and basement brick dwell., 30' x 70', 26 Walton Place; cost, \$10,000.
- Smith & Coplein, two-sty and basement brick store and dwell., 40' x 60', 53 and 55 Wells St.; cost, \$4,800.
- A. T. Ewing, 12 two-sty brick dwells, 20' x 38', cor. Thirteenth and Oakley Sts.; cost, 25,000.
- C. F. Gross, one-sty and basement brick store, 47' x 70', 272 and 274 Sedgwick St.; cost, \$3,500.
- Henry F. Sheridan, two-sty and basement brick dwell., 22' x 40', cor. Twenty-sixth and Murray Sts.; cost, \$5,000.
- Robert C. Hoopes, two-sty brick dwell., 22' x 44', 1314 Jackson St.; cost, \$4,500.
- John Fortune, two-sty and basement brick dwell., 23' x 42', 213 So. Sangamon St.; cost, \$3,000.
- C. A. Holander, three-sty and basement brick dwell., 22' x 52', 94 Sedgwick St.; cost, \$6,000.
- M. Loskie, two-sty and basement brick store and dwell., 21' x 51', 658 Dixon St.; cost, \$2,400.
- Toolen & Maloney, two-sty and basement brick dwell., 21' x 50', 3543 Dearborn St.; cost, \$3,500.
- D. I. Pluckney, three-sty and cellar brick flats, 53' x 61', 153 and 155 So. Wood St.; cost, \$8,000.
- John Moeller, three-sty and attic brick store and dwell., 24' x 62', 2943 Wentworth Ave.; cost, \$6,000.

- Geo. Trumbull, 2 two-sty and basement brick dwells, 41' x 53', Ellis Ave., s of Thirty-seventh St.; cost, \$8,000.
- John Sokup, three-sty and basement brick store and flats, 25' x 80', 1176 Milwaukee Ave.; cost, \$8,000.
- P. Rabbitt, two-sty and basement brick store and dwell., 24' x 70', 609 Centre Ave.; cost, \$4,000.

Cincinnati.

- FACTORY.**—The Strobrige Lithographing Company are to erect a new building for their business. The site is on the canal near Elm St., fronting 150 feet on the canal, and being 90 feet deep. It will be six-stories, of a plain but substantial character, and will cost about \$50,000; Mr. Samuel Hannaford is the architect.
- BUILDING PERMITS.**—John Wile, three-sty brick dwell., No. 115 Browne St.; cost, \$6,000.
- Henry Jacob, three-sty brick dwell., Jefferson St., near Corey St.; cost, \$6,000.
- Three permits for repairs; cost, \$200.

Cleveland.

- RAILROAD BUILDINGS.**—Passenger station and track-house, for the New York, Chicago & St. Louis Ry., (East side) cost, \$65,000; Louis Cowles, architect; Chas. E. Cole, superintendent.
- Freight-house (East side), wooden; cost, \$13,000; Louis Cowles, architect; Chas. E. Cole, superintendent.
- Passenger station (South side); cost, \$6,000.
- Freight-house (South side); cost, \$3,000; Chas. E. Cole, architect and superintendent.
- Mr. Cole has also made plans for quite a little passenger station at Euclid Ave., on entrance to Lake View Cemetery, where President Garfield is buried, to cost \$4,000; but which has not been commenced yet.

Detroit.

- BUILDING PERMITS.**—The following are the most important of the permits granted since our last report:—
- A. C. Varney, double brick house, No. 229 Howard St.; cost, \$4,000.
- A. E. French, brick house, Montcalm St.; cost, \$3,400.
- E. Schwicking, 2 brick stores, Michigan Ave.; cost, \$6,000.
- Gideon Vivier, 2 brick houses, Twelfth St.; cost, \$4,000.
- Sutton & Backus, brick house, Forest Ave.; cost, \$4,500.
- R. S. Hawley, frame house, Hancock Ave.; cost, \$3,000.
- Blay & Son, brick house, Adams Ave.; cost, \$8,000.
- T. S. Reath, brick house, No. 70 Adams Ave.; cost, \$4,500.
- H. Scheible, frame house, Orleans St.; cost, \$2,800.
- Leo Scheible & Co., brick house, Clinton Ave.; cost, \$3,800.
- Geo. Hatt, frame house, Alexandrine Ave.; cost, \$3,100.
- Kirshner & Co., frame house, Selden Ave.; cost, \$3,500.
- S. Beattie, brick house, Garfield St.; cost, \$3,400.
- M. Scoville, brick house, Macomb Ave.; cost, \$5,000.
- W. H. Holcomb, brick house, Fourth Ave.; cost, \$5,000.
- H. Carew, double brick dwell., Elizabeth St.; cost, \$5,000.
- Hart & Co., brick factory, Franklin St.; cost, \$25,000.

New York.

- COMPETITION.**—New York Mutual Life Ins. Co. has requested six eminent architects to submit paid competition plans for their new building.
- NEW WORK.**—Very few important buildings have lately been projected in the architects' offices, but recent sales of real estate, with conditions for improvements attached, necessitate a considerable amount of new work. Nothing has yet been decided on the New York Mutual Life Insurance Building or the Cotton Exchange, and several other large building enterprises are in abeyance, including two theatres.
- HOUSES.**—8 three-sty dwells., to cost \$109,000 are to be built by Mr. Stephen Wright.
- CONTRACT.**—The contract for glazing work at the Barge Office, has been awarded to Simon Bache, and the contract for heating the southern wing of the extension to the Custom-House, Cleveland, to Bartlett, Hayward & Co., at \$8,900.
- BUILDING PERMITS.**—Broome St., s e cor. Goerck St., five-sty brick tenement and store, tin roof; cost, \$16,000; owner, Dieterich Otterstedt, Spring Valley, N. J.; architect, John McIntyre; builder, H. Holwedel.
- Broome St., s s, 25' e Goerck St., five-sty brick tenement and store, tin roof; cost, \$13,000; owner, architect and builder, same as last.
- Cliff St., No. 83, five-sty brick boiler and storage-house, tin roof; cost, \$20,000; owners, Harper Bros., Franklin Sq.; architects, J. C. Cady & Son; builder, Marc Eidlitz.
- East Sixteenth St., Nos. 429 and 433, 2 five-sty brick tenements, tin roof; cost, each, \$11,000; owner, John Schmitt, 602 East Seventeenth St.; architect, J. Hoffmann.
- Twenty-second St., s s, 175' e Eighth Ave., 2 five-sty brick apartment-houses, tin roof; cost, each, \$25,000; owners and builders, W. F. and A. M. Parsons 842 Lexington Ave.; architects, Thom & Wilson.
- West Thirty-fourth St., Nos. 524 and 526, five-sty brick paper-hanging factory, gravel roof; cost, \$22,000; owner and architect, Richard Gledhill, 423 West Thirty-fourth St.; builders, W. B. Pettit and Jno. Farrell.
- West Forty-fourth St., No. 32, two-sty brick stable and dwell., tin or gravel roof; cost, \$12,000; owner, Washington E. Connor, 14 East Forty-fifth St.; builders, Jacob V. Myers, and A. G. Bogart & Bro.
- First Ave., No. 443, three-sty brick office and factory, gravel roof; cost, about \$6,500; owner, Carl H. Schultz, on premises; architect, E. E. Raht; builders, Joseph Johnston and C. W. Klappert's Sons.
- East Twenty-seventh St., No. 225, five-sty brick

tenement, tin roof; cost, \$12,000; owner and builder, Cornelius Callahan, 226 East Twenty-seventh St.
Ninth Ave., No. 676, four-sty brick warehouse, with extension, tin roof; cost, \$9,000; owner, Christian Striffler, 265 West One Hundred and Twenty-seventh St.; architect, C. F. Kidder, Jr.; builders, Thos. Cockerill and Fessler & Wolfarth.

Sixty-fifth St., s s, 230' w Second Ave., 3 four-sty brownstone apartment-houses, tin roof; cost, each, \$18,000; owner, Mrs. Sarah T. McCool, 227 East Seventy-ninth St.; architect, J. C. Burne.

East Seventy-fifth St., Nos. 325 and 327, n s, 325' w Second Ave., 2 five-sty brownstone tenements, tin roof; cost, each, \$12,000; owner and architect, John Sullivan, 1365 Lexington Ave.

Eighty-sixth St., s s, 100' w Second Ave., 6 four-sty brownstone flats, tin roof; cost, each, \$22,000; owner, Wm. Henderson, 511 East Eighty-second St.; architect, J. C. Burne.

East One Hundred and Ninth St., No. 163, n s, 245' w Third Ave., four-sty brick tenement, tin roof; cost, \$15,000; owner, Elizabeth Seitz, 84 East One Hundred and Eighth St.; architect, J. Hoffman.

Third Ave., n e cor. One Hundred and Eighth St., four-sty brownstone store and tenement, tin roof; cost, \$15,000; owner, Jacob L. Maschke, 65 Forsyth St.; architect, J. C. Burne.

Third Ave., e s, 25' w One Hundred and Eighth St., four-sty brownstone store and tenement; tin roof; cost, \$15,000; owner and architect, same as last.

Second Ave., n w cor. One Hundred and Eighth St., four-sty brownstone store and tenement, tin roof; cost, \$14,600; owner, etc., same as last.

Second Ave., w s, 25' w One Hundred and Eighth St., four-sty brownstone store and dwell., tin roof; cost, \$14,000; owner, etc., same as last.

East Seventy-sixth St., No. 418, five-sty brick tenement, tin roof; cost, \$14,000; owner, Eve Mueller, 246 East Seventy-sixth St.; architect, John Brandt.

Seventy-seventh St., n s, 95' e Third Ave., 2 five-sty brick and stone tenements, tin roofs; cost, each, \$17,000; owners and builders, Green & Nason, 349 and 351 East Fifty-ninth St.; architect, George W. Hughes.

One Hundred and Twelfth St., n s, 160' w Third Ave., 2 five-sty brick and stone tenements, tin roofs; cost, each, \$15,000; owner, Patrick H. Lalor, 121 East One Hundred and Sixteenth St.; architect, A. B. Ogden.

One Hundred and Twelfth St., n s, 250' e Twelfth Ave., two-sty brick dye-house or factory, gravel roof; cost, \$9,700; owner and architect, James Halstead, One Hundred and Seventeenth St., bet. Ninth and Tenth Aves.; builders, Wm. Cowen & Son and Jas. Pettit.

One Hundred and Thirty-sixth St., n s, 225' e Seventh Ave., two-sty brick stone-dressed church and school-room, slate tin roof; cost, about \$7,000; owner, Church of Holy Innocents; architect, J. H. Buck.

One Hundred and Fifty-second St., n s, 175' e Tenth Ave., one-and-a-half-sty frame dwell., shingle roof; cost, \$4,000; owner, Henry Webendorfer, 490 West One Hundred and Fifty-third St.

Seigwick Ave., w s, 2,000' s Morris Dock Station, three-sty frame dwell., tin and slate roof; cost, \$3,500; owner, A. E. A. Marshall, 450 Fourth Ave.

ALTERATIONS.—*West Nineteenth St., Nos. 540 and 542*, to be raised two stories, also three-sty brick extension; owners, Stewart & Co., 472 West Twenty-fourth St.; builder, James T. Stevenson.

West Twenty-third St., No. 14, raise upper sty, 6', and a one-sty brick extension, tin roof, also new store front; cost, \$15,000; owner, estate of Geo. R. Jones, F. R. Jones, exr., 312 East Eighteenth St.; architect, H. J. Hardenbergh.

West Twenty-third St., Nos. 139, 141, and 143, build buttresses on side walls, and alter the interior for a theatre; cost, \$15,000; lessee, Salmi Morse, 139 West Twenty-fourth St.; architect, H. Ed. Ficken; builder, A. Gibbons.

Thompson St., No. 212, four-sty brick extension, tin roof, also alterations to front and interior; cost, \$6,500; owner, Chas. G. Moller, 96 Wall St.; builder, Cornelius Callahan.

Philadelphia.

STABLE.—Stable for George Burnham, Esq., Twenty-third St., below Green St.; Wilson Bros. & Co., architects.

SUNDAY-SCHOOL.—Sunday-School building for the Episcopal Hospital; Wilson Bros. & Co., architects.

ALTERATIONS to residence of Wm. M. Viguers, No. 3,611 Baring St.; Wilson Bros. & Co., architects.

G. W. Kendrick, No. 3,507 Baring St.; Wilson Bros. & Co., architects.

HOUSES.—A stone house, to cost \$90,000, is to be built for Mr. John H. Converse, at Rosemont.

And another for Dr. Edward H. Williams at same place; both from designs of Messrs. Wilson Bros. & Co.

For Mr. Thomas Sparks, a cottage of brick with stone and terra-cotta finish, is to be built at the cor. of Thirty-third and Race Sts., at a cost of \$14,000; from designs of same gentlemen.

BUILDING PERMITS.—*North Fourth St., No. 820*, two-sty dwell., 15' x 20'; Chas. O. Kronglowicz, contractor.

Twelfth St., w s, s of Snyder Ave., one-sty addition to factory, 21' x 51'; Jos. Bird, contractor.

Ninth St., w s, s of Dickerson St., 6 two-sty dwell., 13' x 42'; Thos. E. Nesbit, owner.

Front St., e s, n of Willow St., freight shed, 17' x 150'; Reading R. Co., owners.

Thirty-first St., w s, n of Wharton St., 4 three-sty dwell., 20' x 40'; Harbert, Russell & Co.

Reading R. R. cor. Twenty-first St., two-sty office-building, 60' x 62'; T. H. Doan, contractor.

Cemetery Lane, w s, n of Kidge Ave., two-sty dwell., 18' x 48'; Sturges & Heath, contractors.

Ridge Road, w of Scott's Lane, boiler-house, 18' x 35'; J. & J. Dobson, owners.

Thirty-fourth St., n e cor. Powelson Ave., 7 three-sty dwell., 19' x 72'; W. S. Kimball, owner.

Forty-first St., cor. Chestnut St., 2 three-sty dwell., 20' x 55'; W. S. Kimball, owner.

Howell St., Nos. 1912 and 1914, new front and alterations to stable, 30' x 60'; W. C. Mackie, contractor.

St. Louis.

BUILDING PERMITS.—Twenty-seven permits have been issued since our last report, fifteen of which are for unimportant frame houses; of the rest those worth \$2,500 and over are as follows:—

Mrs. H. Beers, three-sty brick flats; cost, \$21,000; architect, J. B. Legg; contractor, Aug. Wieden.

F. Rozier, two-sty addition brick store; cost, \$10,000; architect, F. D. Lee; contractor, J. L. Guedry.

G. Grabbe, two-sty brick dwell.; cost, \$6,000; architect, Mortimer; contractor, H. Hussman, Jr.

A. Atkins, two-sty brick dwell.; cost, \$6,500; architect, T. Annan; contractor, T. Roach.

Washington.

BUILDING PERMITS.—Permits issued from November 1st to 15th.

Dennison & Cushing, three-sty office-building, 22' x 40' F St., n w bet. Ninth and Tenth Sts.; cost, \$4,000.

Mrs. E. Gelson, three-sty brick dwell., 22' x 57', s e East Capitol St., bet. Sixth and Seventh Sts.; cost, \$4,000.

Judge C. J. Hillier, 5 three-sty brick dwell., 20' x 38', Hillier Ave., bet. Twentieth and Twenty-first Sts.; cost, \$25,000.

Litchum Institute, 4 three-sty brick dwell., 20' x 57', cor. Green and Washington Sts.; cost, \$25,000.

Adelaide Wright, 2 two-sty brick dwell., 13' x 26', s w Tenth St., bet. D and E Sts.; cost, \$2,500.

E. J. Hill, 2 three-sty brick dwell., 16' x 34', n w Twenty-second St., bet. N and O Sts.; cost, \$5,000.

C. C. Meader, 6 two-sty brick dwell., 12' x 26' s w I and L Sts.; cost, \$3,000.

A. M. Gibson, three-sty brick dwell., 27' x 58', N. H. Ave., and Dupont Circle; cost, \$10,000.

Jas. L. Waters, two-sty brick dwell., 20' x 31', n w Third St., bet. B and C Sts.; cost, \$4,400.

J. W. Sanderson, three-sty brick dwell., 22' x 28', s e A St., bet. Sixth and Seventh Sts.; cost, \$3,500.

Metropolitan R. R. Co., two-sty grist mill, 38' x 52', n w P St.; cost, \$2,000.

Messrs. A. E. F. Stewart, repairs after fire, the Stewart Mansion, Dupont Circle; cost, \$20,000.

General Notes.

ATLANTIC CITY, N. J.—House for W. F. Ladner, Esq.; Chas. Supplee, of Philadelphia, contractor; A. P. Benner, architect.

CHICAGO, ILL.—By the United Rolling Stock Co., a set of car-shops, near Chicago; Wilson Bros. & Co., architects, Philadelphia, Pa.

LAKE GEORGE, N. Y.—On Green Island a hotel is to be built; plans by Wilson Bros. & Co., architects, Philadelphia, Pa.

MINNEAPOLIS, MINN.—A house and office for Dr. F. A. Dunsmoor is now building, at the cor. of Third Ave. and Tenth St. It is of brick, and measures 76' x 80'. Mr. M. P. Haggood, of Hartford, Conn., is the architect.

PORTSMOUTH, N. H.—Cottage for G. T. Comins, of Boston, Mass.; Wilson Bros. & Co., architects, Philadelphia, Pa.

WHITE PLAINS, N. Y.—A house to cost \$20,000, is to be built from designs of Mr. Carl Pfeiffer, of N. Y.

PROPOSALS.

FORCE-PUMPS, ETC. [At Sand Beach, Mich.]

OFFICE OF SUPERINTENDENT OF LIFE-SAVING STATIONS, TENTH DISTRICT, SAND BEACH, MICH., November 9, 1882.

Sealed proposals will be received at this office until 12 o'clock, noon, of Thursday, the 30th day of November, 1882, for furnishing force-pumps, etc., to be delivered at Sand Beach, Mich., for use of the life-saving service.

The force-pumps, etc., needed, consist of twelve double-brake force-pumps, each provided with handles to operate, with wood screws sufficient to fasten, and with six feet of three-inch gas-pipe fitted for suction; the discharge-pipe to be large enough to force water through one-and-a-half-inch hose, and warranted to throw water forty feet high. Eighteen hundred feet of three-ply one-and-a-half-inch rubber hose with brass couplings fitted every fifty feet, and twelve common brass nozzles.

Proposals to furnish these articles must explain the style and manufacturers' number of pump, and the manufacturers' name of hose.

Proposals to be addressed to the undersigned and indorsed "Proposals for Force-Pumps, etc."

The right is reserved to reject any or all bids, and to waive defects, if deemed for the interest of the Government.

JEROME G. KIAH,
361 Supt. Life-Saving Stations, Tenth District.

FIRE-PROOF SHUTTERS, BOXES, ETC. [At Cincinnati, O.]

OFFICE OF SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., November 20, 1882.

Sealed proposals will be received at this office until 12 m., on the 11th day of December, 1882, for furnishing and putting in place complete, the fire-proof shutters, boxes, etc., required for the Custom-House, etc., at Cincinnati, O., in accordance with drawings, specification and schedule, copies of which and any additional information may be had on application at this office, or the office of the Superintendent.

JAS. G. HILL,
361 Supervising Architect.

JOINERS' WORK AND WOOD FLOORING. [At Albany, N. Y.]

OFFICE OF SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., November 18, 1882.

Sealed proposals will be received at this office until 12 m., on the 7th day of December, 1882, for furnishing and fixing in place complete, all the joiners' work and wood flooring required for the Custom-House, etc., at Albany, N. Y., in accordance with drawings and specification, copies of which and any additional information may be had on application at this office, or the office of the Superintendent.

JAS. G. HILL,
361 Supervising Architect.

PROPOSALS.

GLASS.

[At Philadelphia, Pa.]

OFFICE OF SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., November 14, 1882.

Sealed proposals will be received at this office until 12 m., on the 2d day of December, 1882, for furnishing and delivering, ready for fixing in place, all the plate, double-thick sheet and double-thick ground glass required for the Court-House and Post-Office at Philadelphia, Pa., in accordance with specification, schedule and diagrams, copies of which and any additional information may be had on application at this office, or the office of the Superintendent.

JAS. G. HILL, Supervising Architect.

ENCAUSTIC AND SLATE TILING. [At Columbus, O.]

Sealed proposals will be received by the Trustees of the Ohio Institution for Feeble-Minded Youth, at Columbus, until Thursday, December 7, 1882, at 12 o'clock, m., for all encaustic or slate tiling and base required for the new buildings.

Plans and specifications can be seen at the office of the Superintendent, at the Institution.

All proposals should be addressed to John A. Shank, President of the Board of Trustees, and endorsed, "Proposals for Encaustic or Slate Tiling and Base."

JOHN A. SHANK,
J. K. RUKENBROD,
J. M. HOLMES,
B. B. WOODBURY,
M. A. DAUGHTERTY,
Trustees.

IRON-WORK. [At Toledo, O.]

OFFICE OF SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, D. C., November 10, 1882.

Sealed proposals will be received at this office until 12 m., on the 4th day of December, 1882, for furnishing and fixing in place the cast-iron stands under columns, rolled iron beams, girders, etc., required for first story of the Court-House and Post-Office at Toledo, O., in accordance with drawing, specification and schedule, copies of which and any additional information may be had on application at this office or the office of the Superintendent.

JAS. G. HILL, Supervising Architect.

IRON BRIDGE. [At Springfield, Mass.]

The Connecticut River Railroad Company proposes to build a double-track, through, wrought-iron bridge, across the Connecticut River opposite the city of Holyoke, Mass., to be completed for use early next summer.

The bridge will be of five spans; each 152 feet from centre to centre of piers, and 27 feet from centre to centre of trusses, with a walk outside of the truss, for foot-passengers, 6 feet wide.

The trusses to be proportioned to support, in addition to the weight of the structure itself—the rails, ties, guards, etc.,—a rolling load of 3,000 lbs. per linear foot, having at its head a consolidation engine of 96,000 lbs.

This bridge is to take the place of a Howe Truss bridge, through which forty-five trains pass each day.

The traffic of the road is not to be disturbed in putting up the new bridge and in removing the old bridge.

The piers are level on the top, 64 feet wide, standing at an angle of 72 degrees with the line of the bridge, and 34 feet above low-water mark.

The company does not propose to furnish specifications for the building of this bridge, but desires each bidder to present plans for a first-class bridge.

All specifications and bids will be submitted to a special expert and the selection of the bridge to be built will be determined by the character of the bridge proposed, and the price named for the removal of the old and construction of the new bridge.

The bids to be forwarded to reach the office in Springfield, Mass., by December 1. The company to retain the right to reject all proposals. It is desirable also that the proposals should state the time required to place the new bridge and remove the old bridge.

JAS. G. HILL, Supervising Architect.

HOT-WATER HEATING-APPARATUS. [At Paducah, Ky.]

OFFICE OF SUPERVISING ARCHITECT, TREASURY DEPARTMENT, WASHINGTON, November 4, 1882.

Sealed proposals will be received at this office until 12 m., on the 27th day of November, 1882, for furnishing and fixing in place complete in the Court-House and Post-Office at Paducah, Ky., a low-temperature hot-water heating-apparatus, in accordance with drawings and specification, copies of which, and any additional information, may be had on application at this office, or the office of the Superintendent.

JAS. G. HILL, Supervising Architect.

PENSION OFFICE-BUILDING. [At Washington, D. C.]

OFFICE OF SUPERVISING ENGINEER AND ARCHITECT, DEPARTMENT OF THE INTERIOR, No. 1316 N Street, n w, WASHINGTON, D. C., November 1, 1882.

Separate sealed proposals will be received at this office till noon on Saturday, the 2d day of December, 1882, for furnishing and delivering at the site of the new Pension Building on Judiciary Square in this city, foundation-stone, broken stone for concrete, bricks, cement, lime, sand, coloring matter for mortars, terra-cotta, consoles, brackets and pilaster caps, and for excavation and grading, for all labor in laying concrete foundation, for all labor in building foundation and cellar walls of rubble-stone, and for all labor in laying bricks required for the construction of a fire-proof building for the United States Pension Office. Specifications may be obtained from this office.

M. C. MEIGS, Supervising Engineer and Architect.

Bvt. Maj.-Gen'l. U. S. A.