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THE thirteenth convention of the American Institute of Architects, held in New York last week, differed somewhat from the usual habit of the conventions in the little prominence of the business element,—we had almost said its suppression. Important questions of government and of official action were laid before it, but the Convention seemed unprepared or indisposed to discuss them with any thoroughness, and they were mostly decided with a tranquil promptness that savored of the perfunctory, or referred without recommendation to committees. Indeed, there was hardly anything that could be called a debate, from the opening of the sessions to the final adjournment. This gave the meetings a somewhat languid air, which contrasted with the animation of former conventions. At the same time, it certainly favored the dispatch of the business that actually came before the meetings, and it gave to the papers that were presented the elbow-room that they have wanted in previous years. Some of the papers justified the importance of the position thus assigned them, others did not; but from the point of view from which the managing committee evidently looked at the matter the sessions of the Convention were excellently arranged; the proceedings and the papers were agreeably varied, the work of the Institute was done in a business-like manner, and the patience of the members was not too much taxed nor their interest wearied by the predominance of either element, as often happens in conventions. All this agrees with a change which has seemed to steal over the Institute conventions in the last two or three years, making them more like the conventions of other associated bodies than they used to be, by reducing the attention given to executive business to a minimum, and fixing the interest of the meetings chiefly in its literary exercises. As to the desirability of the change, there will probably be a difference of opinion. Naturally, it may be said, the less the time of such a convention is taken up with the mere details of internal administration, and the more its attention can be given to matters of permanent interest to the profession, the better. On the other hand, in a profession so actively engaged in the business of the community as ours, and one whose relations to the world are in some respects still undetermined or unrecognized, the matters of permanent interest constantly include questions which are not to be settled without debate, and are the better for general discussion. So that the tendency to decide questions off-hand, or by reference to committees, which appeared this year, and which is in place perhaps so far as the questions concern only the internal polity of the Institute, as they mostly did this time, is to be deprecated, so far as it tends to make the character of the sessions purely literary, and to discourage altogether the habit of discussion.

THE officers chosen for the coming year were as follows, most of them being those of this year: President, Thomas U. Walter; Treasurer, O. P. Hatfield; Secretary, H. M. Congdon; Secretary for Foreign Correspondence, W. P. P. Longfellow; Trustees at Large, C. C. Haight, J. C. Cady, R. M. Hunt, W. A. Potter; Committee on Publications, E. T. Littell, T. M. Clark, A. J. Bloor, J. McArthur, Jr., R. M. Upjohn; Committee on Education, Russell Sturgis, Jr., W. R. Ware, N. C. Ricker, Joseph M. Wilson, H. H. Richardson. The most important

pieces of executive action were, an order passed giving the Board of Trustees power, on the recommendation of their report, to waive the proscribed formalities (not the conditions) of membership, and elect fellows directly at their discretion from among qualified architects; a proposition to form a new grade of non-professional life-members, which was referred to the Trustees; and a resolution directing the Trustees to consider the question of dissolving the present Chapter organization, so as to leave the Institute, as it was in its earlier days, a body consisting entirely of members at large, and if, after consulting the Chapters, they decided in favor of the change to report the necessary alterations in the law of the Institute for action at its next convention. This proposition was the outcome of a recommendation in the report of the Committee on Membership, and was directly suggested, we believe, by symptoms of disaffection on the part of the Chicago and Cincinnati Chapters, which had failed to convert the Institute to some desired legislation; the Cincinnati Chapter, with no fear of coercion before its eyes, having sealed its devotion to its lost cause by a deliberate secession. A special committee was appointed to collect and present to the next convention records of the architecture of the Colonial period of the United States and of the first fifty years of their independence, and another for "the consideration of the best solution of the Tenement-House Problem, especially as it is presented in the city of New York."

THE papers read at the Convention will in their order be printed in the *American Architect*, as usual. President Walter's address we hope to give in this number. Professor Chandler's informal lecture during the visit of the Convention to Columbia College was not written out, and was a very clear and straightforward setting forth of the present and past condition of the tenement-house question in New York, illustrated with many plans of such buildings as they have been and as they are now proposed. It was made plain that the Board of Health in New York had no easy duty to perform, and that, whatever evils may be necessarily tolerated at this day, there is really a tendency to a considerable improvement on the old state of things. The main difficulty with which the board has to contend in its oversight of plans is naturally the eagerness of owners to house more families than their lots will provide room for, the restrictions in construction being to them a subordinate matter. There is a constant effort, as the lecturer showed, to shirk the conditions of the law, which require that not more than sixty-five per cent of the lot shall be covered, and that every room shall have a window opening to the outer air. The sixty-five per cent restriction, which is open to modification at the discretion of the board, subjects the board to a pressure that makes its position a difficult one. The open wells,—slots, we may fairly call them,—which are provided for aeration of the inner bedrooms in many of the plans presented for approval, and the windows that look into them, are ridiculously small, so that a minimum area of twelve square feet has been fixed for light and air shafts, and the same for the windows opening upon them; a minimum, however, which seems to require further definition in practice, since a slot of one foot by twelve, or one and a half by eight, such as is actually proposed for a light well in some plans submitted, would be obviously intolerable. A further proposition is to require that each shaft shall have an air-duct of at least three feet section leading from its bottom through basement or cellar to the outer air. Such a provision is not always easily carried out, but something like it is essential to making the shafts of any use at all for ventilation. On the whole, the conclusion is inevitable that the New York lot of twenty-five by a hundred feet is not suitable for the use that is demanded of it, that is, for housing four families on a floor; and the thing to look forward to is a law against building on such lots houses containing more than three tenements to a floor. This will amount to a prohibition from building tenement-houses on such lots when they are too valuable to yield a paying rent under this restriction.

WE have more than once expressed our admiration at the complacency with which the modern Italian measures himself against the great men of his country's great days, the confidence with which the restorer spreads his hasty patchwork over the noblest paintings of her old masters, or tacks a coarse and cheap-looking new façade against her mediæval buildings. English papers, and even American ones, have of late rung

with complaints of the indifference with which old landmarks and noted buildings are damaged or removed in the alterations that are now going on in Rome. But none of these degradations are quite so important or offensive as the project that is now brought forward to rebuild the famous front of St. Mark's at Venice. The letter from Mr. Morris, which we quote in another column, contains what we must assume to be a true account of the danger. We cannot wonder at hearing a general protest from persons who care for the beauty, the example, the historical teaching or associations, of the most beautiful and the absolutely unique one among the churches of Venice. For once, at least, all such persons will agree with the English Society for the Protection of Ancient Buildings in the protest which they have made against the restoration, and it is pretty safe to say that there is hardly an architect—outside of Italy, at least—who will not have a sense of personal grievance at the hopeless injury which he knows will be done if the restorer gets at work upon this front. Mr. Morris's letter says that the commission which is to discuss the fate of it this month will decide whether the destruction and reconstruction are to begin this year or next. There is room to hope that the approach of winter or some other cause may incline the commission to put off the work for the year, which will allow time for earnest protests from people of all countries. The agreeable confidence which is inspired by the tradition of past greatness, that no foreigners, *barbari tedeschi* or others, can offer any advice worthy of the attention of Italy in matters of art, may close the ears of an Italian commission against such protests; but if the civilized world outside of their country should express with unanimity the distress which it will unanimously feel, the commission might hesitate to fly in the face of universal disapproval.

THE lover of Venice who goes back there in a year or two will be sufficiently disturbed by the other alterations which she has taken in hand. Already in many places smaller canals have been filled up to make streets, the original streets of Venice, which are numerous enough, being too small for modern uses,—not so wide as the sidewalks in most other cities, in fact. The Calle San Moisè, we are told, the picturesque way which leads westward behind the Grand Canal from the great Piazza of St. Mark, is now under transformation into the likeness, as far as may be, of a Parisian street. These changes, and the building of a causeway across the lagoon to the mainland, are intended to open the city to carriages. However much those who love the old Venice may deplore these alterations, and wonder at the perverse wish of the Venetians to exchange their gondolas for carriages, we must accept the changes as inevitable, if the city is to be checked in its decline and to recover any of its old prosperity. The world prefers bustle, luxury, and wealth to repose, beauty, and poverty, nor can we expect the Venetians to differ from it in this. The streets and canals that were sufficient for traffic in the small and costly wares of the fourteenth century are not enough for the hurrying, bulky commerce of the nineteenth; and under the guise of commercial improvement more or less needless devastation will inevitably be done. But St. Mark's is, or ought to be, entirely aside from this movement, and its claim to be unchanged is perhaps unequalled. We do not think at this moment of any existing building, unless it is St. Sophia at Constantinople, whose position in the history of art is so significant and the preservation of its testimony unimpaired so important. It is an epitome of the architectural development of Venice from the tenth century to the fifteenth, as yet comparatively undisturbed by modern alterations, and the associations of all her history are wreathed about it. That the modern Italians, with all their patriotism, should be so dulled to such appreciation as they are is a standing wonder to foreigners. But the greatest value of St. Mark's, after all, is as a work of art, and here it has no rival. As a piece of purely architectural design the façade has less importance than is commonly ascribed to it. Its detail, however, is of the greatest interest and beauty, and as a work of color it is the crowning glory of Italian architecture, and is absolutely without parallel in the world. This color is the work of centuries of existence as well as of man's hand, and it would be no more possible to restore it than to replace the cloud which the wind has swept away from a sunset sky. What the probabilities are we may see from the paltry effect and dreary color of the restorer's work on the north flank of St. Mark's, where it adjoins this same front. If the modern Italian will improve his old architecture there is a plenty

of work by Borromini, Bernini, Maderno, and the like, which he need not be afraid of spoiling, but he seems to itch to lay his heavy hand on his noblest inheritance.

ONE often hears it said of the great works that have come down to us from past ages, as of natural features of great beauty and renown, like Niagara Falls, that the public as well as their actual possessors has acquired a right in them, so that their owners are not at liberty to convert them or ruin them so as to destroy the general enjoyment of them. This is in a certain way true, in that to needlessly interfere with such buildings or features is an unjustifiable injury to the world. But to secure consideration for any such proscriptive interest the world should be prepared to assume a corresponding responsibility. The public which expects an owner to waive any of his rights over this or that monument for its enjoyment should be prepared to share with him the expense of its conservation. If the world is really interested in saving the present front of St. Mark's from a renewal that would amount to a destruction, it may fairly be asked to provide some other treatment for it. No protest in its favor would be half so efficient as one that was backed by the offer to provide for its security and maintenance in its present state so far as possible. That something will be done to it can hardly be doubted, and we believe that a certain amount of careful reparation is actually necessary to keep it from going to pieces. At any rate, it will be pretty surely taken in hand, and the question of most interest practically will be, whether it shall be strengthened with a reverential care, preserving its worn capitals and richly tinted mosaics as tenderly as possible, or whether it shall be restored in the drastic manner that we see in the renovation of the Fondaco dei Turchi, and of its own north side. Italian cities to-day have many new things to do, and not too much money to do them with; it may be that a protest from without against the renewal of this façade, if it were accompanied by a liberal subscription for its conservation, on condition of as little substitution as possible, would save the rebuilding, when a protest alone would not. There are those, no doubt, who would rather see it moulder away than have a stone replaced. We may be sure that this will not be allowed, and that the utmost which can be accomplished will be to hold the restorer's hand, making him bind together the loosening fabric as carefully as he can, and with as little patching as is consistent with security. The right kind of conservation is costly,—as costly as renewal, perhaps; but there must be wealth enough among the myriad people who are interested in preserving St. Mark's to make it an easy thing for them to provide means for it, if they will. Here is a possible chance for Mr. Ruskin, or any other friends of the great Venetian church, who are influential enough to give direction to a public movement, and who may be willing to secure the best that can be secured, even if it may not be all they could desire.

A CORRESPONDENT has sent us for comment a letter which he received from the auditor of Palo Alto County, Iowa, inviting him to submit plans in competition with other architects for a county jail. The cost of the building is set at twelve thousand dollars, and the board of supervisors offer to "pay not to exceed fifty dollars for the plans, specifications, with detailed drawings, adopted by them, and nothing for the others." We have always argued that this misappreciation of an architect's work is owing more than anything to the behavior of architects themselves, and that if architects refused, like our correspondent, to work for such pitiful remuneration, people would soon cease asking them. The sum offered by the board of supervisors is about one eighth of an architect's proper fee for such service; but if this board finds architects willing to work for it, we may not wonder if the next board offers no more. It appears, indeed, that architects will always be found who will give their work, such as it is, for pretty much anything that is offered, and the next thing to be desired is that architects should make as clear as possible the difference that is to be expected between work that is paid for on this scale and that which commands a reasonable remuneration. The way to do this is for architects who value their work and do it faithfully to let it appear that a distinct line is drawn between them and those who can be enticed by any trivial bait that committees may choose to throw out. There will always be in any community persons who prefer cheap wares to better ones, some from poverty, and some because they do not appreciate the better ones; but if the public is once brought to recognize that there is a corresponding differ-

ence in value of service between the architects who snatch at work for a pittance and those who expect what experience has decided to be reasonable pay, the way of the conscientious and capable in the profession will be easier.

THE THIRTEENTH ANNUAL CONVENTION OF AMERICAN INSTITUTE OF ARCHITECTS.

PRESIDENT WALTER'S ADDRESS.

Fellows and Associates of the American Institute of Architects:—

It devolves upon me to-day to open our Thirteenth Annual Convention with an address; I shall therefore proceed to discharge that duty.

These annual reunions afford us opportunities for the interchange of views in relation to our art, that cannot fail to be interesting as well as profitable.

The changes that are going on in all the elements of design and construction present subjects for discussion which demand our earnest attention. While we seek to enlarge the sphere of ennobling influences to which architecture is peculiarly addressed, it becomes us to confer freely on the aspect of the present methods of embodying architectural thought, both as relates to æsthetic handling, and to scientific construction.

The objects of our meeting are, substantially, the transaction of business growing out of our corporate relations; the general advancement of architectural science; the progress and improvement of the cognate arts, and whatever may tend to promote the interests of the profession. The reports of the Board of Trustees, and of the several Chapters, will be duly laid before you, and we hope to be instructed by the reading of interesting papers by the members.

The Institute, as a scientific and professional organization, appears to be exerting a decided influence for good on the public mind, in all matters pertaining to our art; and its usefulness in promoting a proper degree of fellowship in the profession is every year more apparent.

There has been considerable architectural activity throughout the country since our last annual convention. It should, however, be remarked that but few buildings having claims to magnificence have been projected, though many grand and costly structures, commenced in former years, have progressed with satisfactory results.

Works of more recent date exhibit a freshness in their architectural handling that seems to indicate the advent of a new era in the arts of design. The manifest tendency of architects to break away from the trammels of conventional rules, and to make style subservient to the spirit of the age, indicates a progress in the development of independent thought hitherto unknown. Architecture, both in this country and in Europe, is obviously in a transition state. What may be the result of this new departure remains to be seen; if, however, architects are careful to design their works on true æsthetic principles, and in conformity with the sciences which underlie our art, it is not likely to be regretted that they show a disposition to do their own thinking.

Classic forms and classic combinations are everywhere yielding to more ornate compositions bearing the names of Queen Anne, the Stuarts, the Jacobean, the Italian Renaissance, the style called "Eastlake," which it would be difficult to define, and other fashions of building having no trace whatever of paternity, either ancient or modern.

It is, however, greatly to be regretted that a good deal of the architecture of the present day gives but little evidence of conformity with æsthetic principles. We find modern compositions, both in this country and in England, having a decided flavor of the old English Renaissance, or Elizabethan type of building, but which manifest a lamentable want of vigor in the form of their masses, and an aggregation of trivialities in the making up of details, which awaken emotions in the cultivated mind that are anything but pleasing.

The largest license in architectural composition is undoubtedly admissible, provided it does not degenerate into the production of forms and combinations that do violence to the elements of *fitness*, *beauty*, and *stability*, which, in all cases, are essential to successful building. The *first* involves the planning of our works so as to fulfil the requirements, and promote the comfort and convenience, of our employers; while the *second*, which embraces, in the fullest extent, the philosophy of architectural propriety and taste, tends to results that ennoble and elevate our science; and the *third*, comprising stability of construction in all its ramifications, insures the safety and durability of our work.

As regards the peculiar claims of domestic architecture on the skill of the profession, they are undoubtedly greater than they have ever been before; and it is only by becoming thoroughly acquainted with the increasing requirements of the age, in reference to buildings intended for domestic purposes, that an architect can keep pace with the progressive elements of his profession. Improved processes for warming and ventilating buildings are continually being developed, and questions relating to drainage, to the disposition of sewer-gas, and to other sanitary appliances that are now profoundly occupying scientific minds, should be regarded by the architect as objects of study that demand the most serious attention.

It should also be remarked that the requirements of modern civilization and taste are not to be met without an intelligent knowledge

of what is going on in the outside world in relation to improvements in building appliances. We have now a thousand and one inventions which furnish us with every conceivable object of usefulness and beauty in the building art, of better design, of better materials, of better workmanship, and at cheaper rates than were ever known before; it is therefore to our interest to keep abreast of the times, so as to utilize all modern devices for the perfection of our works.

In relation to the present status of the Institute, and its outlook for the future, I have the satisfaction to say that it is evidently exerting a decided influence for good on the public mind in all matters pertaining to our art, and that architects in general are deriving from it, directly or indirectly, advantages that never could have been realized if the profession had remained without a corporate existence. It therefore becomes our duty to seek to enlarge our field of usefulness by increasing the membership of the Institute until it embraces respectable practitioners in every considerable centre of civilization throughout the country.

It is greatly to be regretted that a large number of respectable, and in many cases distinguished, architects in our most important cities have never yet become members of the Institute; while it is known full well that many who are outside of our organization are not inferior in professional standing to any who are within it. It would be well, and in no small degree courteous, if steps were taken, by making exceptional modifications in our terms and processes of admission, to receive all such into the membership of the Institute upon their expressing, in writing, a desire to that effect.

Whatever promotes the consolidation of the profession tends to lead the public to a higher appreciation of architectural genius, and to inspire confidence in the principles which govern scientific building.

The peculiar relations of architecture to civil life render it desirable to institute popular educational processes by which the public mind may be reached and instructed in the general principles which govern fitness, propriety, and good taste in architectural composition.

Unlike other professions, architecture primarily addresses the eye, and its developments are always exposed to view; it is therefore incumbent on us to enlighten the public in reference to its æsthetic elements as well as to the sciences which underlie its practice, and to its historic relations. This may be done by illustrated lectures, by popular articles in our architectural publication, and in scientific and other periodicals.

This subject has often been alluded to in the proceedings of the Institute, and in the chapters, but we have never yet taken any concerted steps in this direction.

The architectural training pursued in many of our educational institutions is important, as far as it goes, but it fails to reach the general public. I would therefore suggest that regular courses of public lectures on architecture, with proper illustrations, be delivered under the auspices of the several Chapters during the winter months by such of the fellows of the Institute as may be willing to perform that service.

I am aware of the labor involved in such a process of teaching, but I have no doubt that it would work a revolution in public sentiment regarding architecture, and at the same time greatly promote the interests of the profession.

By directing our energies to the accomplishment of the objects for which we are associated, even though it may require labor and self-sacrifice, we shall be accumulating as well as dispensing knowledge by which our sphere of usefulness in the practice of our art will be greatly enlarged, and those who call upon us for professional service will entertain a more intelligent and proper appreciation of our works.

Having said all that appears to be necessary by way of formally opening the convention, it remains for me to congratulate you on the return of our annual convocation, and to recognize with gratitude the goodness of Divine Providence in bringing us together, at the close of another year, to do fresh work for the advancement of the interests of our profession. Let us endeavor to improve the opportunity thus afforded us, so that our deliberations may tend to enhance the dignity of the Institute, and to enlarge the field of its usefulness.

THE HUNT EXHIBITION AT THE BOSTON MUSEUM OF FINE ARTS.

YEARS, doubtless, will pass before Mr. Hunt's abilities can be calmly and impartially reviewed. We are too near the catastrophe coolly to discuss the merits or demerits of our distinguished confrère. The public is now in a laudatory vein, and intolerant of criticism. "God save you from the day of praise" (meaning the day of your death and consequent panegyrics) is an apt Italian proverb, which proves that the custom of eulogizing the departed is not confined to our countrymen. Any attempt to assign to Hunt his true position among living or dead painters would be premature. This will be the task of our successors. Yet there is so much that is instructive in the present exhibition of his works, that the cause of education, not to mention the distinction of their author, calls for some notice of them, even though it be unsatisfactory. Both in quality and in quantity the display is noble,—a display of which Boston may justly feel proud. Its success has in no small measure been assured by

the energy and liberality of the museum authorities, who have invariably been generous in the furtherance of art.

Were we obliged to sum up Hunt's characteristics in one word, that word would be sensibility. It explains almost all the phenomena to be found in his work, and solves the toughest problems. Take, for instance, the pictures from one to eight inclusive. How else could we account for their diversity? No. 1 is in the style of Millet, No. 2 is different from No. 1, and totally different from No. 3, which reminds us of many a head we have seen in the Italian palaces, bearing the date of the last century. No. 4, again, is in the Millet style, and No. 5 in anybody's style except his own. No. 6 savors of the Normandy school, No. 7 is treated in his Newport manner, and No. 8 is unlike all the preceding.

Hunt first felt the influence of Couture, and the result was La Marguerite (No. 101). Later he worked under the auspices of Millet, and the result was La Marguerite (No. 128). The former is more graceful in movement, more harmonious in line, truer in tone and "value." The latter is characterized by softness of outline, as well as by great breadth and simplicity of accessory. Compared with the latter, the sky and background of the former look "tortured" in treatment. Compared with the former the landscape of the latter seems rudely massive, like the clay prototype of the marble statue in its elementary state, the forms indicated, but unmodelled; or, better still, like the completed work in stone, corroded by time and the elements, the detail gone, the general forms alone distinguishable.

In order to arrive at a more complete understanding of these styles it will be profitable to describe the respective methods of the two masters. Couture proceeded in this wise: Having completed the charcoal drawing, he prepared a sauce, half cooked oil (*huile grasse*) and half spirits of turpentine. This was his vehicle for the bitumen (or as a substitute ivory-black and burnt sienna, ivory-black and light red, etc.), which he applied with a long, supple, sable brush for the outlines, and with a bristle brush for the shadows and mezzotints. When this preparation was "tacky" (not quite dry), whatever he had to paint he painted *alla prima*, that is to say, in one sitting. The high lights he placed on the unprepared parts of the canvas, and by crushing the same colors into the prepared mezzotints he obtained most beautiful cool-gray half-lights. For the shadows he avoided white and painted vigorously into his preparation with comparatively positive colors, the undertone harmonizing and subduing them. His palette was very simple; he rarely mixed more than three, and usually two, colors together. This frank treatment gave great splendor to his work. Later in life he adopted other methods, but these do not concern us now. Millet's processes were almost diametrically opposed to Couture's. Where Couture was frank Millet was labored. Couture detested the retouch, Millet adored it. The latter's work has all those qualities which frequent repaintings yield, — air, softness, mystery, and, in a measure, uncertainty of outline. Couture's performances are distinguished by freshness of color and precision of form. The latter's characteristics are essential to the decorative-monumental painter, and it is Couture's, not Millet's, influence, that we feel in the Albany work. We cannot help thinking that Hunt placed Millet on too high a pinnacle. He certainly had his qualities which his countrymen recognized. In Paris he is fairly estimated. All honor to him as one of those hardy pioneers who gave the death-blow to a false and stilted style. He was *par excellence* the interpreter of peasant life; but peasant life is not the *ultima Thule* of art. When Hunt turned with enthusiasm from *genre* to creative work he must have felt that he was exchanging a narrow for a boundless art; the limitations of the eye for the illimitable scope of the imagination. Then it was that he instinctively felt the precepts of the author of *La Décadence des Romains*. But little attention is paid nowadays to the durability of pictures. That modern works of art perish, Hunt caustically remarked, humanity would be the gainer. For the majority of such works this doubtless holds true. But who is to be the judge? To keep the few we must preserve the many. The blackening and cracking modern canvases in the Luxembourg Gallery, compared with the ancient but well preserved *chefs-d'œuvre* of the Louvre, should warn the rising generation that the methodical and direct processes of the old masters cannot be exchanged with impunity for the eclectic methods of to-day. Millet's manner in this respect is dangerous. Vehicles and frequent paintings produce those chemical changes that tarnish and split the pigments. Couture's palette and handling, on the contrary, are admirably adapted to a long and healthy life, if we may apply such an expression to inanimate things. We except, of course, his use of bitumen, a color to be avoided. Pictures Nos. 4, 7, 10, 13, 29, 35, 57, 99, 128, to go no farther, are all painted in the Millet style, — a style easy for the tyro to recognize. In La Marguerite (101), The Hurdy-Gurdy Boy (130), The Fortune-Teller (83), and The Prodigal Son (67) we perceive the influence of Couture. In some respects Hunt improved on Millet's manner. The latter's woolly forms and rough-hewn members are often offensive. The pupil worked and modelled better than the master.

In 1855 he returned to America and settled in Newport. As LaFarge was at that time a student in Hunt's atelier it is fair to presume that the former acquired the latter's style. How like LaFarge is Moonlight (166), and a House in the Snow (148)! It is interesting to know that LaFarge's landscape style is Millet's filtered through Hunt.

Happy the moment Hunt was inspired to paint the Portrait of a Child (45), the *bijou* of the exhibition. Quiet, dignified, full of character is the picture of this little person. No seeking for the effects so much in vogue, thanks to our Salons, Royal Academies, and National Galleries, no obtrusive relief, no "technique." To the materialistic, coarsely-painted portraits of the day, in the presence of this sympathetic child, we feel inclined to exclaim with the Latin poet, "*Procul, O procul*." It is our purpose to analyze Mr. Hunt's genius rather than to criticise its products. Were it not so we should extol the imposing portrait of Chief-Justice Shaw, — stern personification of everlasting law and order. The canvas proclaims its own triumph.

Always impressionable, Hunt yielded to his American surroundings and devoted much of his time to landscape. Twenty years ago in this country there was but little incentive to treat the figure. Why should we regret it if we are repaid by such delightful bits of scenery? Every phase of shifting nature seems to have captivated him. Now he is enamored of placid streams, now of sunlit woods, now of pastoral scenes. Here he revels in blinding light, there in murky skies and malignant waves, as, for example, in No. 157, Storm at Manchester. At one time he reminds us of Corot, at another of Diaz, Daubigny, and Courbet with his palette-knife execution. How much better all this than constantly harping on the same chord. Hunt would be what the French call an *impressionist*, did he not occasionally deign to finish. The true impressionist scorns good work. His idea is to give an impression of tone, of light and shade, of "value," of everything, in fact, save finished form. Hunt, on the contrary, was a cunning workman when he chose to be. Look at the crayon drawing of Chief-Justice Shaw, or at his cameos!

It is well known that painters, as they grow old, grow likewise impatient of finish. This is natural. It is also true that directness of handling, detestation of processes, and a generous use of *pâte* (as the French say) come with years. Artists, when young, are prone to employ glazes and transparent pigments. As they wax old they prefer the use of fresh paint, little fearing its crudeness. To take an example: Most visitors to the Luxembourg remember Ziem's Venice, its rich and transparent tones. Compare that canvas with his later works, painted with brilliant but opaque colors, or transparent colors applied opaquely. Couture had the same tendency. So has Bonnat. So had Hunt. Note the difference between his Millet pictures, his Newport studies, and his later works.

As we have before remarked, it is not our purpose to discuss individual pictures. Any one who expects to find in this brief notice a hand-book to the gallery will be disappointed. Yet we cannot refrain from singling out two typical landscapes, both of the impressionist order, namely, Gloucester Harbor (100) and Cattle Ploughing (12). The marine piece vibrates with dancing light. Nothing could be brighter. Students would do well to study it. Standing on the steps leading to the Allston room we had the good fortune to compare it on the spot with Turner's well-known Slave Ship, before the latter was removed from the museum. Turner was striving for color and light; Hunt only for light. The one for scenic effect; the other for truth. As far as light is concerned, how superior the Hunt! He obtained his brilliancy by force of "values;" Turner by means of vermilion, lakes, and gamboge. In No. 12 we have a vivid impression of gleaming cloud and dark earth. Any one can see that the cloud stands out unduly; that it comes before his figures. But that is not the question. All art is in a way an exaggeration. Hunt saw a snow-white cloud over a red-brown hill-side, with cattle ploughing. This impression he was bound to give, should the cloud come out yards before the frame. Therein he was an "impressionist."

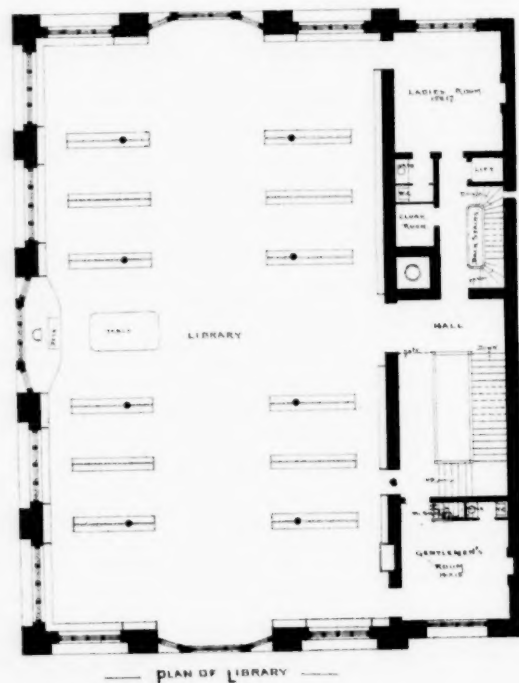
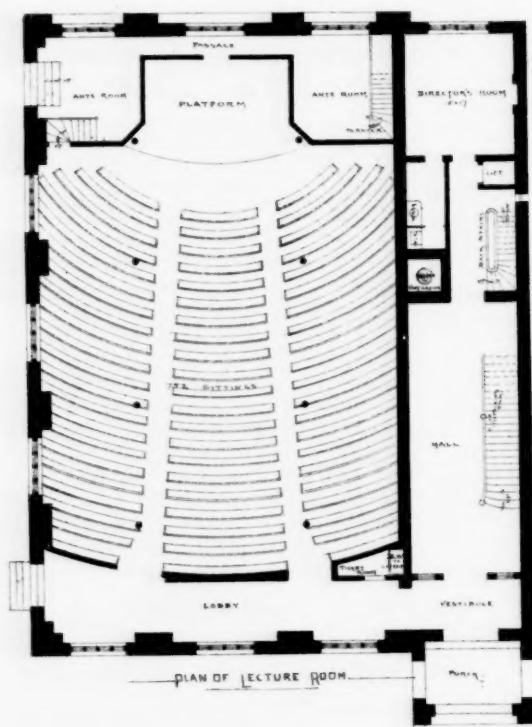
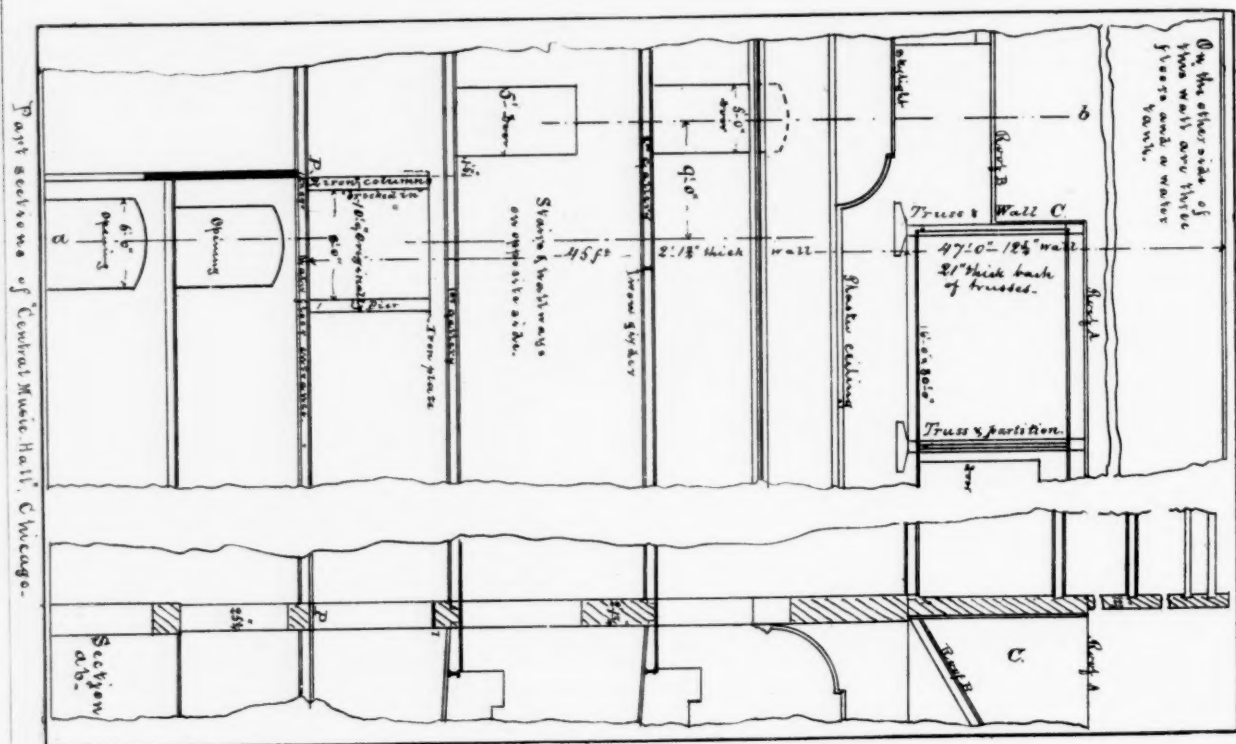
Still insisting on his sensibility, we see in the Boy with Violin (27) notes of color, suggested by Duveneck and the American-Munich school. In Nos. 63 and 66 (Portrait of Mr. Schlessinger and Nico'o with Mandolin) we have reminiscences of the Venetians, though certainly not of their methods, for Giorgione, Titian, and their followers glazed freely, whereas these pictures are executed with opaque pigments. In No. 85 (Elaine), strange as it may seem, we have actually a type of the Burne-Jones school.

The charcoal drawings and pastels throw no new light on Hunt's characteristics save in one particular, to which we shall presently refer. As a material charcoal was admirably suited to his temperament — nervous and excitable — he could rapidly give expression through its agency to fleeting effects of Nature and to the "moods of the moment." This is aptly illustrated by the Whirlwind (206), by the well-felt Head (225), or by the Girl at Piano (294). No. 230 (The Fagot Gatherer) reminds us of Edouard Frère, and No. 311 (July, — not a pastel, by the way, as the catalogue says) is an experiment in a new direction, an oil-painting à l'aquarelle, a process much in vogue with Fortuny and his school, which consists in painting frankly on a white ground, and even allowing the ground to show in places.

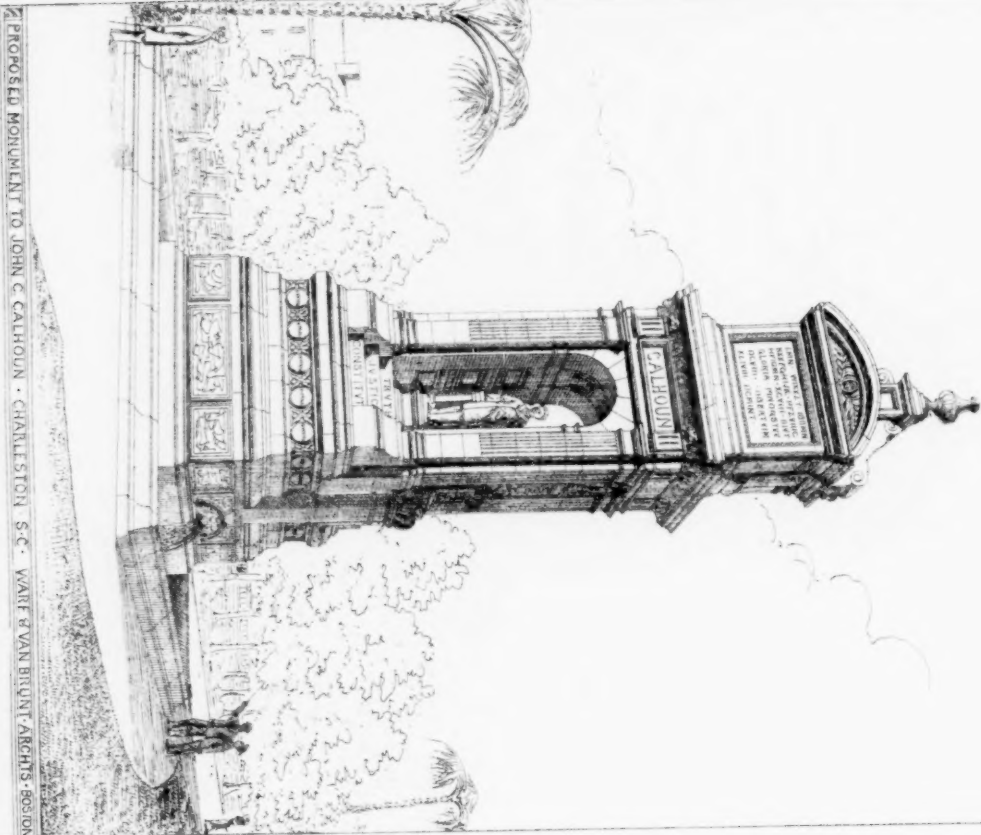
No. 310 (Cow, Autumn) is a perfect pastel. We prefer its delicate low-toned sky, the autumnal trees, the simple anatomy of the landscape, with its well-defined planes, to the somewhat confused and brush-marked oil (No. 72) which treats of the same subject, though the cow in the latter is admirable.

The most casual observer must have noticed a great change in the color of Hunt's last works. For convenience' sake we shall call this

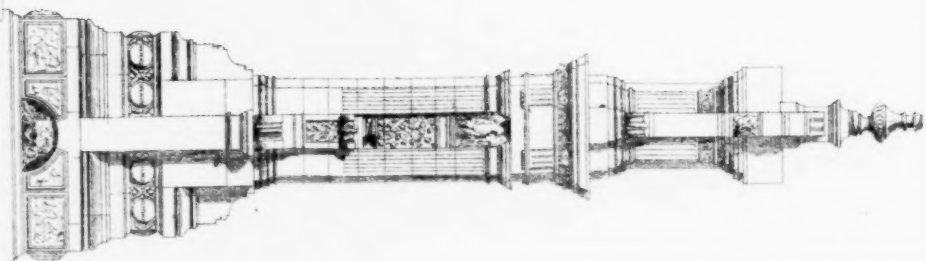
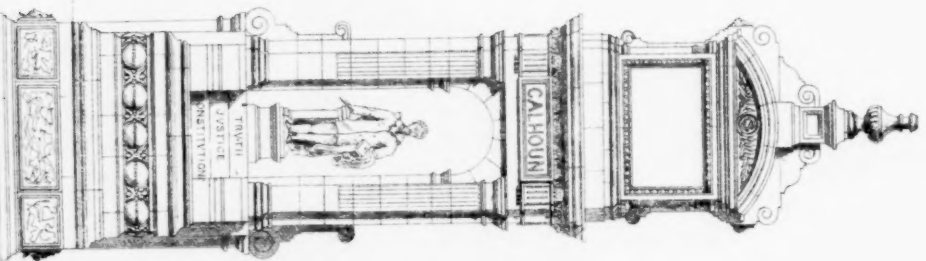
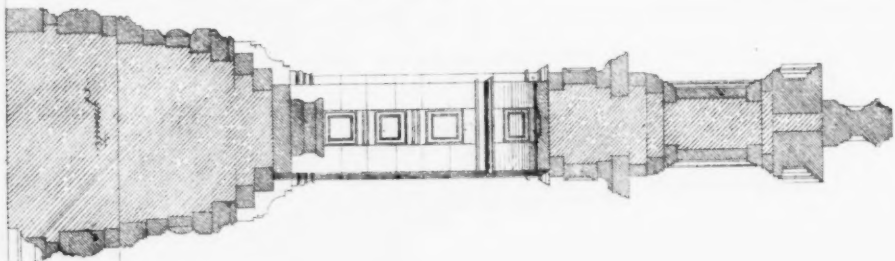
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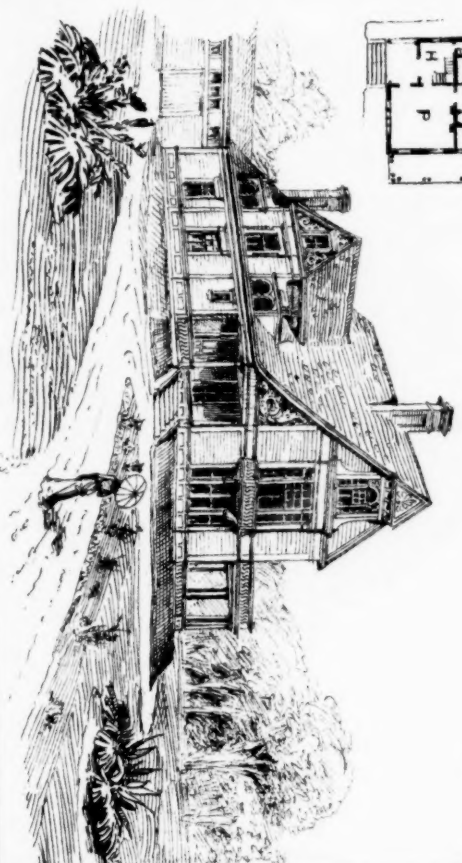
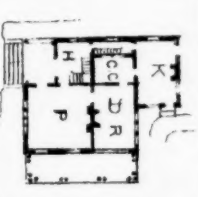


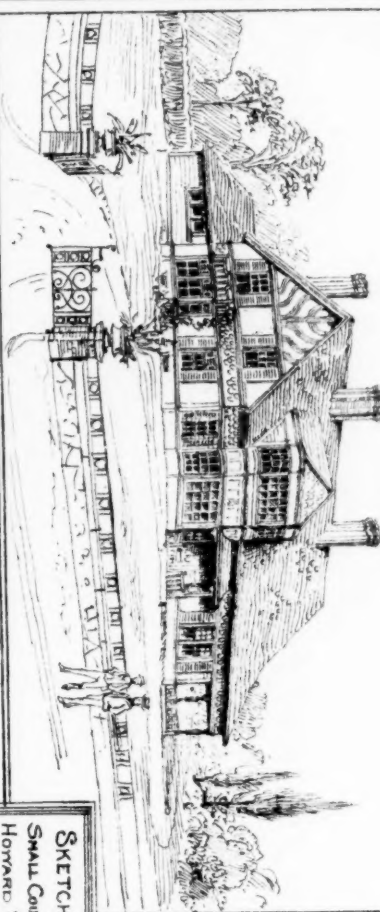
COMPETITIVE DESIGN FOR THE LONG ISLAND HISTORICAL
SOCIETY'S BUILDING



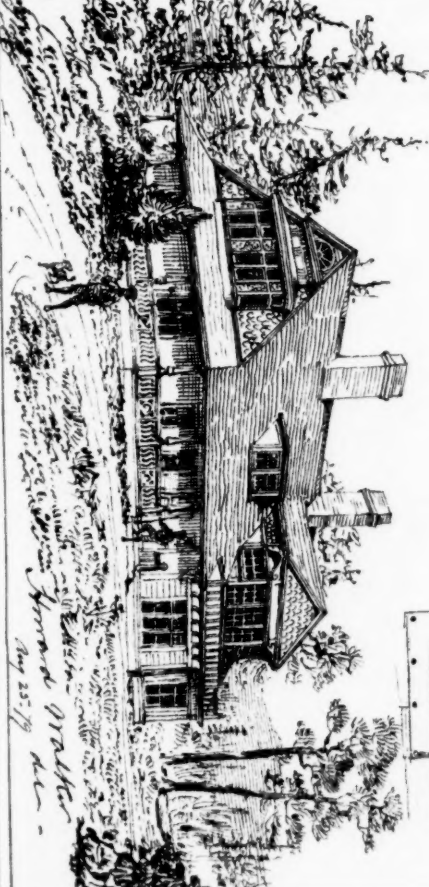
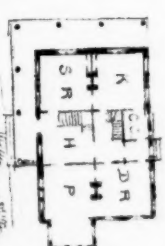
*Proposed Monument to John C. Calhoun
at Charleston, S.C.
Ware & Van Brunt Architects
Boston, Mass.*

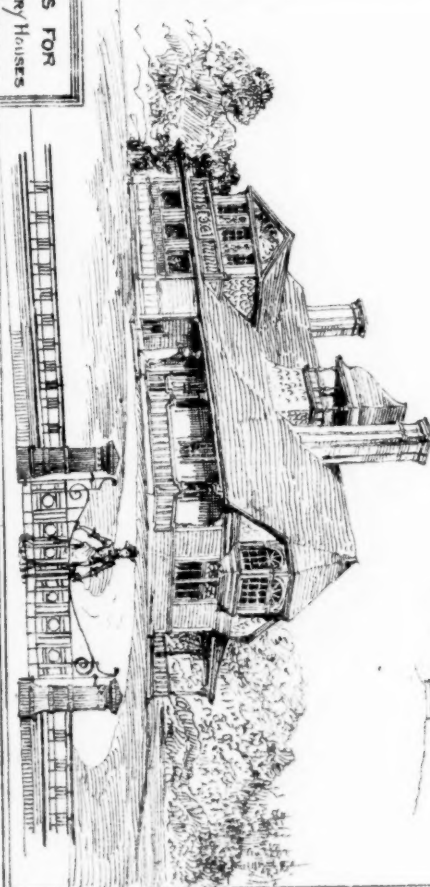
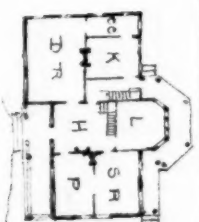





SKETCHES FOR
SMALL COUNTRY HOUSES
HOWARD WALKER, DEL.
45 WEST 35TH ST.
NEW YORK
 H. HALL - L. L. LIBRARY
 D.R. Dining Room - K. Kitchen
 S.R. Sitting Room - C.C. Cupola
 P. Parlor

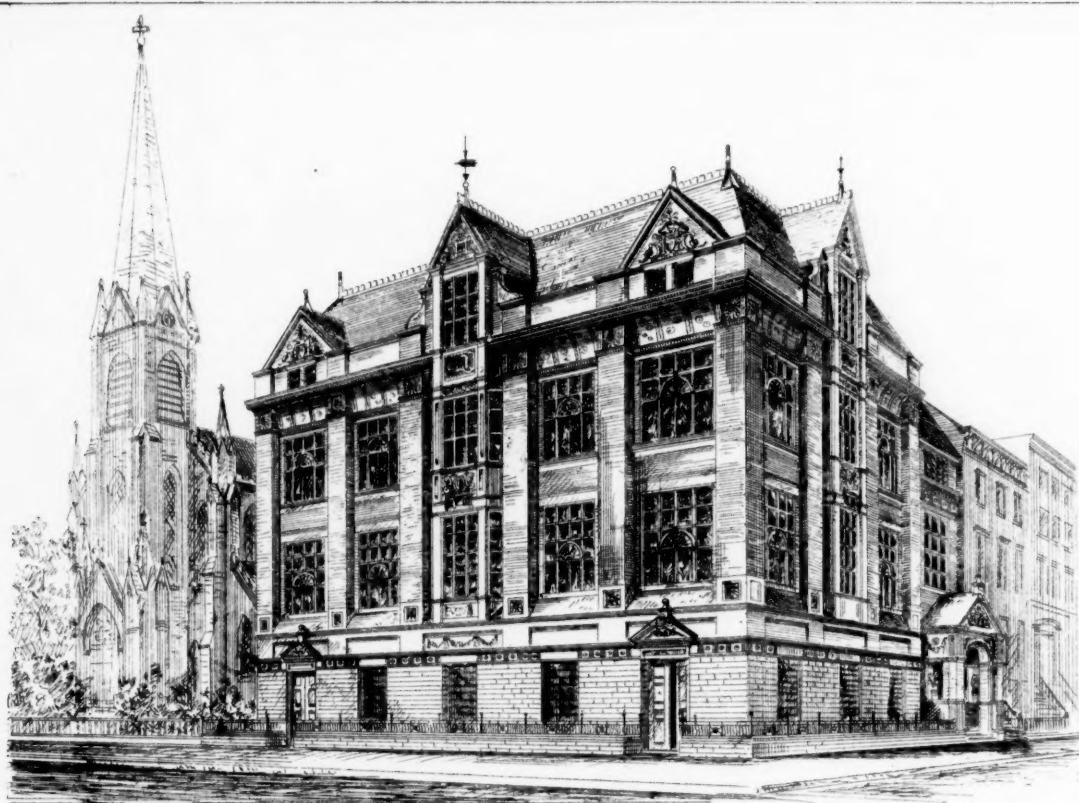



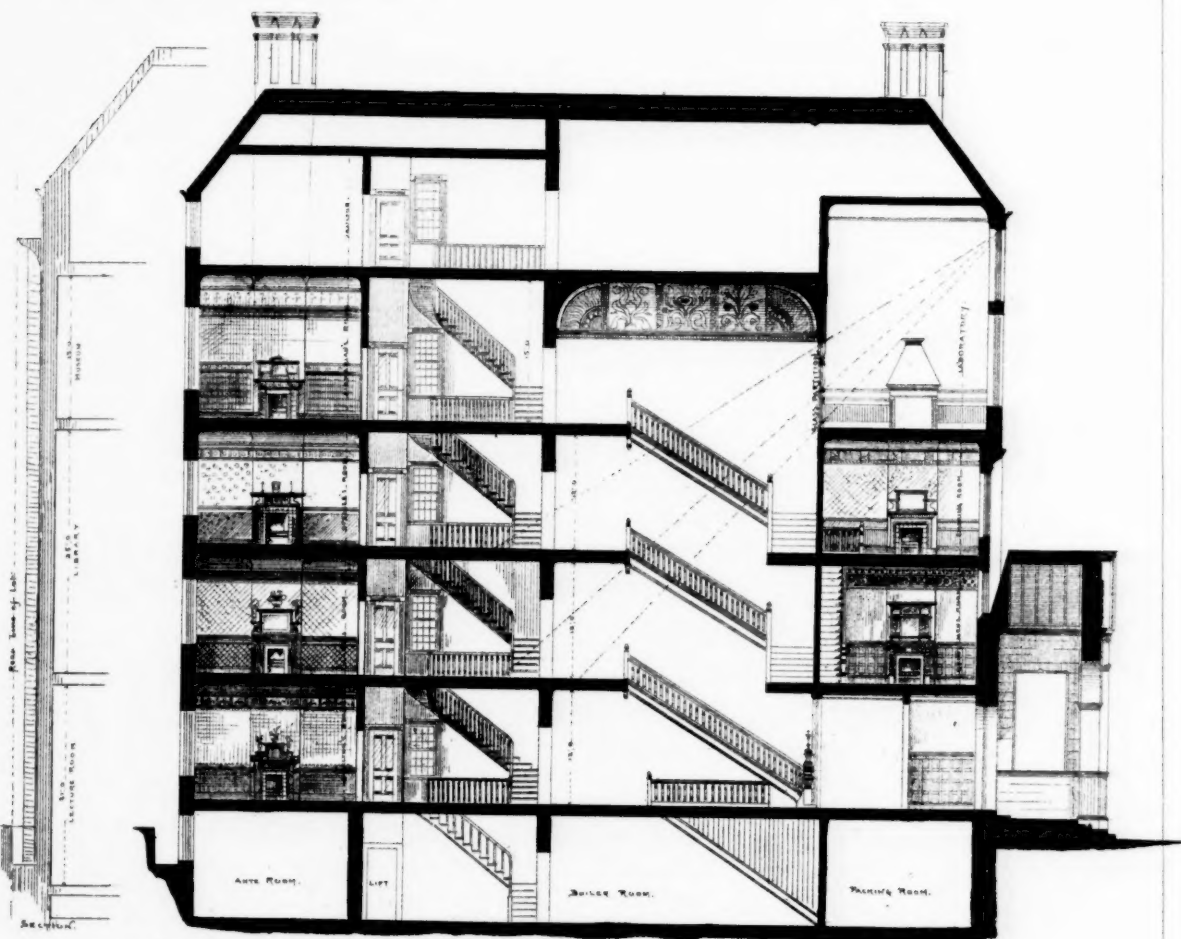
SCALE



Howard Walker Del.
Nov 25/79



H. HUDSON HOLLY, ARCHITECT



H. Hudson Holly, Architect
11 Broadway N.Y.
Dec. 25. 1877.

— STAIRCASE SECTION —

THE HALLOTT & PRITCHARD CO. 220 DEVONSHIRE ST. BOSTON

COMPETITIVE DESIGN FOR THE LONG ISLAND HISTORICAL
SOCIETY'S BUILDING

his Albany period. In these works it is interesting to note that there is a close resemblance in the quality of their color to the quality of the color of a pastel. We have not seen the Albany decorations, but we have conversed with those who have been more fortunate. We have examined the preparatory sketches and cartoons, as well as the photographs, of the originals. Their color is not that of a fresco, semi-transparent, semi-opaque, but opaque like that of a pastel. Bearing in mind that his studies were made in that material, we cannot but come to the conclusion that the final work at the Capitol was sensibly affected by it.

Before closing this article, even at the risk of being wearisome, we must insist on Hunt's sensibility. He was very impressionable, and, consequently, in a measure poetic. We do not consider him highly original, or imaginative, or creative. To sustain our opinion we could cite several pictures where he has put his creative powers to the test. As dilettanti and artists understand the word, he was not a colorist, but rather a lover of tones. As a draughtsman he was bold. His pictures teem with life. His large compositions are picturesque, in the best sense of the word, rather than ideal. Above all, he was an artist; not soaring into the lofty realms of creation, but never degrading himself with materialism, never dealing in the commonplace; an artist of whom we have every reason to be proud, and whose memory we should never cease to honor.

THE ILLUSTRATIONS.

COMPETITIVE DESIGN FOR THE LONG ISLAND HISTORICAL SOCIETY'S BUILDING, BROOKLYN, N. Y. MR. H. H. HOLLY, ARCHITECT, NEW YORK.

We have already published several of the designs submitted in this competition, which took place some time ago, and hope to have the opportunity to publish the accepted design.

SKETCHES FOR COUNTRY HOUSES, BY MR. HOWARD WALKER.

PROPOSED MONUMENT TO JOHN C. CALHOUN, TO BE ERRECTED AT CHARLESTON, S. C. MESSRS. WARE & VAN BRUNT, ARCHITECTS, BOSTON, MASS.

CONSTRUCTION OF THE CENTRAL MUSIC-HALL, CHICAGO.

See communication in another column.

ENGINEERING IMPROVEMENTS IN ROME.

The water-shed of the Tiber is more extensive than that of the Thames. The former is estimated at 6,455 square miles, the latter at 5,163, or, including the basin of the Medway, at 6,160 square miles. The rain-fall over the Thames basin is averaged at 30 inches; that of the basin of the Tiber is stated by Venturoli as 34.8 inches, which amount is registered at Perugia. But the quantity of water which runs down the Thames is estimated, in the sixth report of the Rivers Pollution Commission, at only 6.67 inches in the year. That flowing down the Tiber is estimated by Venturoli at 27.3 inches per year. The irregularity of the discharge of the latter river, however, is something of which we have but little experience in this country. In a recent tabulation of the Italian rivers compiled by the Ministry of Public Works, while the mean flow of the Tiber is calculated at 169 metric tons per second, the minimum is 100 and the maximum 2,800 metric tons per second. The disproportion, wide as is the range, is not exceptional among Italian rivers.

Under these unusual conditions of feed and of discharge, it is not surprising that the delta of the Tiber gains rapidly on the sea. The advance made since the Christian era is measured by the obliteration of the ports of Trajan and of Claudius. According to plans collected by Sir John Rennie, the gain of the shore is about two yards per annum; but this is not so much the advance of a projecting delta as a gradual gain over a whole line of seaboard, extending over a great curve of more than 110 miles chord, stretching from Cape Farnesio to Cape d'Anzo.

It is clear that any serious effort to construct a permanent port on this shifting shore-line can only have a chance of success if it is conducted with a full knowledge of, and in due accordance with, those great operations on the course of the Tiber through Rome which have of late excited such vigorous criticisms and counter-criticisms in English and Italian journals. The plea raised by an English writer of fiction for the preservation of monuments of which it is the pride of Italy that she is the trustee for the world, is one that strikes a responsive chord in our breasts. But even a deeper note would vibrate if we could present to our readers anything of a picture of the misery and disease caused in Rome by the overflow of the Tiber. Here, as we observed before, we see the different interests which the engineer is called on to protect, in conflict. Health demands one thing; art another; commerce yet a third. How is Father Tiber to be induced to satisfy the conflicting claimants?

In 1876 a report was made to the Supreme Council of Public Works at Rome (we pause to remark on the total absence of any corresponding institution in Great Britain) by a Commission which had been nominated to inquire into the means of preventing inundations from the Tiber in the city of Rome. Nineteen plans were exhibited by the Commission, and information as to the steps which had been taken for the protection of other cities, notably Paris, Lyons, and Verona, are contained in the voluminous report. All such projects as — at the expense of twenty minutes of reflection, a sheet of paper, and a penny stamp — have been freely offered, in the columns of the daily press, as to floods and water-supply in England,

were exhaustively discussed by the Commission. The chief of these were (1) the re-wooding of the banks of the river; (2) the formation of store-lakes, or basins of reserve; (3) total deviation of the course of the Tiber; (4) partial diversion of its water; (5) limitation of the flow of water allowed to enter the channel through the city; (6) rectification of the channel; (7) additions to the bridging and lateral defences of the river.

Total diversion, in the case of Rome, is impracticable. The consistency of the soil is so slight that on the construction of a new channel a powerful stream would cut its own course, and the cost of making bridges and keeping up communications would be excessive. The abandonment of the actual bed through the city would be a fertile source of malaria, even if it were filled up. Rome would have been rendered uninhabitable during the progress of the works. Water carriage would be stopped, drainage would have to be constructed, and what, the Italians further say, would Rome be without the Tiber!

A partial diversion of the Tiber was attempted by the Emperor Trajan; and Pliny recounts how the river burst the banks the emperor had made, and spread a deep flood. Some antiquaries are of opinion that the canal of Fiumicino, intended to put the port of Claudius in connection with Rome, — a precursor of the present project, — is here intended. Each plan for partial diversion and for restriction of the water allowed to come within the walls has to contend with special difficulties, on architectural, orographical, and geological grounds, — difficulties more numerous and complicated in the case of Rome than perhaps in any other spot in the world.

The Commission was thus reduced to the less heroic expedients of the clearing the channel of the Tiber within the city from the numerous existing obstacles (including the curve by the Farnese Gardens), and the walling the channel within, and embanking it without, the city, in such a manner as to contain the greatest floods. The dimensions determined were as follows: The "urban trunk of the Tiber" — that is to say, its channel through Rome — is to have a minimum width of 109 feet; the walls are to rise to the height of 55 feet, 3 inches above the zero of the Ripetta hydrometer; and the bed of the river is to have an even gradient of 1 in every 2,500, or a little over 2 feet per mile. This channel has been designed on the principle that it would be sufficient to discharge a flood equal to that which occurred in the year 1598. This was the highest rise registered in Rome, rising 8 feet higher than did the disastrous flood of 1870.

It is with the fuller information that has been gathered by the Commission on the inundations of the Tiber before them that the Italian Ministry of Public Works will be able to form a definite judgment as to the proper steps to be adopted with reference to Rome-a-Port. Whatever information was possessed by the engineers of Claudius and of Trajan, there is no doubt that those of the present king of Italy will have enriched it with the fruit of minuter researches. There is evidence, both on the Tuscan and on the Adriatic shores of Italy, of two distinct movements which have occurred since the time of the formation of Rome, or, indeed, since that earlier time when what is now the valley of the Po was an arm of the Mediterranean. There has been a steady gain of the land on the sea, which has amounted to some 2,000 square miles in the basins of the Po, the Adige, and the Brenta, since our era; and which, on the Fiumicino shore, is going on at about the rate of two yards in the year. But together with this has occurred a series of upheavals and depressions, which, in Venetia, have even attained the depth of 143 yards; the gradual progress of which has checked or hastened the advance of the shore line at any particular epoch. The rate of depression now going on in the neighborhood of Rimini is estimated, from observations made by the engineers Lanciani and Paoli, at from 5.6 to 7.2 inches per century. It is obvious that to collect all the available information on this point is an essential preliminary to any wise outlay for the formation of a new port. Constant attention must be given to the maintenance of the depth of water. It is only by recognizing that there must be a certain amount of deposit removed every year, that a new port at Fiumicino can escape the fate of the more ancient ports of Trajan and of Claudius.

While the depression occurring on the Adriatic shore of Italy is said to be constant, though slow, we can bear personal testimony to the fact that movements are alternate on the western shore of the Peninsula. The case of the temple at Pozzuoli is well known. The alternate depression and elevation of the columns of that structure are proved by the sign of the action of boring molluscs; and, indeed, form almost the a, b, c of the geological doctrine of contemporary change. It is almost unnecessary to cite the admirable account given by Lyell, in the "Principles of Geology," of this celebrated temple, an account which has neither required nor received any alteration in the tenth edition of that work. In the earthquake of 1858, which had the chief seat of its destructive energy in Calabria and Basilicata, when many buildings were overthrown and many people perished, the entire circumference of the Bay of Naples, from Sorrento to Baia and Misenum, was elevated during the night from 6 inches to 8 inches above its former level, as was apparent from the line of mark of animal and vegetable life on the rocks that lined the bay. Nor did the ground thus raised subside to its former level, — certainly for six years, — or, we believe, up to the present time. We refer to this as showing how wide must be the information of the architect or engineer to whom the execution of such a project as making a port for Rome can be safely entrusted.

Another point of view deserves a word of comment as connected with the subject we have repeatedly discussed, the influences of the improvement of artillery on the safety of urban sites. Rome is only 20 kilometres, or 12½ English miles, distant, as the crow flies, from the sea. The new Krupp cannon are said to have attained a range of 24 kilometres. Considering the question of the depth of water and the distance from the shore within which an ironclad carrying enormous guns may safely approach, it may be said that this is only a sort of fringe of danger, and that the more so as the Italians themselves possess some of the biggest ships, and largest and heaviest guns, in the world, as yet. Still there is a question of possibility, — mere possibility of mischief should not be allowed, when Rome is the objection. Any works of port construction in Fiumicino must also be works of efficient coast defence.

For us, and for the greater part of our readers, perhaps, the most immediately interesting part of the subject is that which relates to art. As far as we can judge from experience, art treasures of rare interest may be expected to be found in any excavations on the site of the Claudian port. At the same time the architectural, the engineering, and the sanitary portions of the enterprise are each attended with difficulty, and are thus each a subject of interest. Nor is it the least of the marvels of the day to see a repetition of the work of the Emperor Claudius proposed under the reign of Humbert of Savoy, and under the Pontificate of Leo XIII. — *The Builder*.

THE "RESTORATION" OF ST. MARK'S.

29 QUEEN SQUARE, BLOOMSBURY, October 31.

TO THE EDITOR OF THE LONDON NEWS:

Sir, — I have just received information, on the accuracy of which I can rely, that the restoration of the west front of St. Mark's at Venice, which has long been vaguely threatened, is to be taken in hand at once. A commission is called for next month to examine its state and to determine whether it is to be pulled down immediately or to be allowed to stand till next year. The fate of such a building seems to me a subject important enough to warrant me in asking you to grant me space to make an appeal to your readers to consider what a disaster is threatened hereby to art and culture in general. Though this marvel of art and treasure of history has suffered some disgraces, chiefly in the base mosaics that have supplanted the earlier ones, it is in the main in a genuine and untouched state, and to the eye of any one not an expert in building looks safe enough from anything but malice or ignorance; but anyhow, if it be in any way unstable, it is impossible to believe that a very moderate exercise of engineering skill would not make it as sound as any building of its age can be. Whatever pretexts may be put forward, therefore, the proposal to rebuild it can only come from those that suppose that they can renew and better (by imitation) the workmanship of its details, hitherto supposed to be unrivalled; by those that think that there is nothing distinctive between the thoughts, and expression of the thoughts, of the men of the twelfth and of the nineteenth centuries; by those that prefer gilding, glitter, and blankness to the solemnity of tone and the incident that hundreds of years of wind and weather have given to the marble, always beautiful, but from the first meant to grow more beautiful by the lapse of time; in short, those only can think the "restoration" of St. Mark's possible who neither know nor care that it has now become a work of art, a monument of history, and a piece of nature. Surely I need not enlarge on the pre-eminence of St. Mark's in all these characters; for no one who even pretends to care about art, history, or nature would call it in question; but I will assert that, strongly as I may have seemed to express myself, my words but feebly represent the feelings of a large body of cultivated men who will feel real grief at the loss that seems imminent, — a loss which may be slurred over, but which will not be forgotten, and which will be ever deeper as cultivation spreads. That the outward aspect of the world should grow uglier day by day in spite of the aspirations of civilization, nay, partly because of its triumphs, is a grievous puzzle to some of us who are not lacking in sympathy for those aspirations and triumphs, artists and craftsmen as we are. So grievous it is that sometimes we are tempted to say, "Let them make a clean sweep of it all then; let us forget it all and muddle on as best we may, unencumbered with either history or hope!" But such despair is, we all know, a treason to the cause of civilization and the arts, and we do our best to overcome it, and to strengthen ourselves in the belief that even a small minority will at last be listened to and its reasonable opinions be accepted. In this belief I have troubled you with this letter, and I call on all those who share it to join earnestly in any attempt that may be made to save us from an irreparable loss, — a loss which only headlong rashness could make possible. Surely it can never be too late to pull down St. Mark's at Venice, the wonder of the civilized world?

I am, sir, yours obediently,

WILLIAM MORRIS.

THE "CENTRAL MUSIC-HALL."

CHICAGO, November 17, 1879.

TO THE EDITOR OF THE AMERICAN ARCHITECT:

Sir, — Observing that you have noticed my letter regarding the safety of the Central Music-Hall, nearly completed in this city, and the report it called forth from the experts selected for that purpose,

in which report I am convicted, but not convinced, of being wrong regarding its safety; and being anxious for ascertaining the truth, I will herewith lay the matter before you, sir, asking for elucidation on this rather perplexing topic. Hoping that the theme may be interesting to the profession at large, I shall be pleased to see it discussed more generally, for your correspondent does not seem impartial in his remarks.

Weak and faulty construction is by no means an uncommon error in this Western country, and the building named is, in my opinion, rather conspicuous for the manner in which the strains "such a building" is exposed to, the law of gravitation, and physical propensities of the materials are disregarded. After having in vain called the attention of parties connected with the building enterprise to its insecurity, although unprofessional, I concluded to ventilate the matter, as it was better for one to receive the abuse of infuriated parties, than that thousands of human beings should be exposed to injuries and death. Hence the letter which appeared in the *Chicago Times*, October 19.

The building, erected by a stock company, is a comprehensive one designed to serve all purposes, from the worship of the Deity, through the various pursuits of Mammon, to be "a worthy temple for the Muses." A difficult architectural problem to solve. The result is due to show-manager George B. Carpenter, secretary for the company, who, according to the descriptions in the daily papers, "has made it his especial business to study all the music-halls in the country from Maine to California, in order to surpass them all." This raised the expectations of architects and lovers of art considerably above the realization.

A sample construction of the building in question is illustrated in the accompanying sketch, essentially correct at the time of investigation, which shows part sections of the main hall, the position of openings leading thereto, what the same part of wall has to carry, and the manner in which the bearing has been augmented with iron columns and brick piers in the main door jambs. The iron trusses, six tons each, some eighty feet across the main hall, supported by the side walls at their ends, carry floors for art galleries above, roofs, partition-walls, and ceiling, and although exposed, as at least the one centring over the door opening is, to the extreme changes of our temperature, have no provision made for expansion and contraction; consequently subjecting this wall to an undesirable exercise back and forth.

The principles or axioms of construction and data for figuring I have used for arriving at my conclusions are as follows, viz.: That a pier or part of wall between two openings must carry the load that comes between the centres of said openings; that cohesion in mortar and the lateral pressure in ordinary brick walls are not admissible factors of strength in correct practice (for this Rothstein is my authority, and I find the same was concurred in by the committee who investigated the Rockford Court House accident); that our common brickwork will crush under a weight of 500 to 800 pounds per square inch. Rankin gives the crushing weight of ordinary good brick from 550 to 800 pounds; Barlow from 562 pounds; *Encyclopedia Britannica* to 490 pounds, all per square inch. The same authorities state that 112 pounds is the average per (one) cube foot of brickwork, and the safe load it can carry to one sixth of its crushing weight. We will further suppose that the minimum strain the floors, galleries, and stairs in "such a building" are required to sustain is 175 pounds per square foot, their own weight included, and that the incidental strain on the roof is 20 pounds per square foot.

The dimensions of the brick wall are as marked on the sketch, and the part that lies above and between the centres of the opening will, according to the above, alone amount to sixty tons; the weight and incidental strains of floors, galleries, stairs, the iron truss, with its partition, etc., that are supported by this part of the wall, amount to sixty-six tons more, or, together, one hundred and twenty-six tons, counting nothing for the proposed water-tank above the hallway. Now, for supporting this load, there was originally one foot five inches horizontal distance between the main entrance and the first gallery-door, the wall two feet and one and three fourths inches thick; but at the time the iron trusses were put in place this part of the wall showed unmistakable signs of crumbling, and then a couple of iron columns were introduced in the south door-jamb, standing on an iron plate 12 by 24 inches, laid on the brick wall at P. These columns were subsequently bricked in, and a similar pier built on the other side of the opening. This questionable operation added two square feet to the bearing area of brickwork, which thereby became about five square feet, without any allowance for joists and trimmers resting thereon. According to the above data this would safely carry only thirty tons, and if the best of materials were used, then fifty tons would be its limit.

Under these circumstances I am unable to comprehend the meaning of the experts' report concerning "proper coefficient of safety for such a building," unless in connection with the analysis of this "weak spot" of the building and the strength of the report we also examine the experts and the object they had to serve. Architects will notice the scarcity of the profession represented in the examining committee, and, with due respect for the gentlemen constituting it, I cannot refrain from observing that the chairman, ex-mayor, president for a dock company, etc., is said to be a "rusty expert" on the subject. Mr. Chesbrough is ex-city engineer, and, judging from the manner in which some of our public work have

been planned by him, his abilities have been somewhat over-estimated. I have criticised the abominable way in which he mixes Chicago sewage in its water-supply rather harshly, and I suppose he, in return, enjoyed the opportunity of attesting to a report not very favorable to my reputation. The other two gentlemen, and, perhaps, the only ones who know anything about architecture, had, you will notice in the report, examined the plans for this building before work thereon commenced, and approved of the same, particularly as to strength. Is it likely that they would go back on their previous report? That they did err in the first one seems evident from the fact that iron columns and brick piers had to be inserted in the door-jamb in question in order to keep it up. I will excuse these "architectural experts" for not being able to see cracks in a wall that had been plastered, but they ought to have noticed the fact that it had been patched and added to. My criticism, perhaps rash and emphatic, was done in order to avoid a calamity, which, at one time or another, seemed to be the inevitable result of such construction, and I am not alone in this opinion. Had similar questions been raised regarding the safety of Rockford Court-House, Adrian grand stand, and others of the same category, those horrible catastrophes might have been prevented. The philosophy and data whereby the experts came to the conclusions expressed in the report would be of great interest and, perhaps, of great value to the architectural profession.

Very respectfully,

L. G. HALLBERG.

AN ARCHITECT AND HIS SUB-CONTRACTOR.

St. Louis, November, 1879.

TO THE EDITOR OF THE AMERICAN ARCHITECT:

Dear Sir, — In No. 202 of your journal, published November 8, you were kind enough to insert my letter and also to express your opinion of the case. That you misunderstood me, and the reason why, were evident to me on re-perusing my letter. As the person who I understand is the correspondent of your paper in our city has an office directly opposite the building where the signs mentioned were exhibited, I waited some time before writing to you. Finally becoming convinced that he had either not noticed it, or intended to take no notice of it, I considered it my duty as a member of a profession which is, I am sorry to say, not regarded with too much confidence by the public, to notify them that such proceedings were not indorsed by the profession.

I shall now endeavor to give you a more clear account of the case. The building is one of the most conspicuous in the city and will be occupied by one of our principal retail dry-goods firms, located on one of our most crowded thoroughfares, where the better class of our business community pass daily to and fro. On account of its immense size as well as the prominence of the firm who intend to occupy it, public attention was naturally directed to the building.

The signs were large ones, plainly lettered and hung in such a manner as to attract the attention of any one passing that way.

As they hung there for nearly two weeks, it is hardly fair to suppose that the architects were unaware of their presence, the building being but two blocks from their office and visible from their windows.

In such conduct the reason may perhaps be sought why the American Institute has no Chapter in as large a city as ours, the party referred to being a member of that body.

Respectfully yours,

JUNIOR.

THE WALLS OF TANAGRA.

November 23, 1879.

TO THE EDITOR OF THE AMERICAN ARCHITECT:

Dear Sir, — I solicit once more your indulgence for the insertion of my excuses, and the rectification called out by your candid correspondent.

As no reference to the "battle of Tanagra" (which certainly occurred in 457 B. C.) is contained in the passage of Notes on Tanagra Figurines, page 13, where is noticed an erratum of one numeral in the date of the razing of the city walls, I confined my attention to the chronology proposed by your correspondent, for the battle with which he seemed so well acquainted. Distinct from this was an engagement casually mentioned as giving the epoch at which the fortifications of Tanagra were demolished.

For 426 B. C. read 456 B. C.; see Curtius, book iii., chap. ii.; Leake, Northern Greece, vol. ii.

M. F. C.

PRIVATE SEWERAGE IN BALTIMORE.

BALTIMORE, Md.

TO THE EDITORS OF THE AMERICAN ARCHITECT:

Gentlemen, — In a house which I have just finished for a gentleman of this city I have, I believe, about as perfect a system of drainage as can be devised, — the product, jointly, of the owner's suggestions, the builder's experience, and my own thought.

The problem to be solved was not an easy one. Given, a lot, sloping up considerably towards the rear; a basement kitchen, considered an essential by the ladies of the family for successful house-keeping, and for gaining additional light into the dining-room above;

and the preference for a servants' latrine at the extreme end of the yard; to find the most perfect means of carrying off the water, soil, etc., and in a way that would be likely to cause no trouble in the future. The kitchen being in the basement, and the ground high behind, had of necessity to have an area, and a sloping grass bank, with steps on one side for reaching the yard, which runs fifty feet back to an alley, and is accessible also by a sort of bridge from the dining-room window. This area, four feet wide, and inclosed by a retaining wall, extends along the side of the entire back building, forming a sort of alley from the main house, with an entrance at grade to the cellar.

The first move that we made was to dig a well at the extreme end of the lot, over which was placed the servant's closet; but the soil-pipes from the house could not be carried into this on account of the great expense of digging, and because the mouths of the pipes would have been too low down in the well. We therefore dug another well in the rear area, which can easily be got at, and covered it over with heavy flags, cementing well all joints and paving over the top. Both these wells were dug to a good head of running water. In the second one we struck a spring which, emptying more rapidly than the soil could drain the water off, threatened at one time to give us trouble, but eventually the tide went down, after reaching within eighteen inches of the cellar level. In the corner of the wall, near this well, was left a four by eight inch opening clear to the top of the house, and connected with the well, so that any gases on the surface would be taken off, and not enter the house-pipes. The rear well had a wooden ventilation tube out through the roof of the servants' closet. Into the area well drains all the soil from the water-closets, but nothing else.

We were well aware that soapy water will eventually choke up a well by lining the sides with grease and slime, — and on no account should such water be allowed to empty into it. What then were we to do with soap-water from the basins, tubs, laundry, pantry-sink, etc., the waste from the slop-hoppers, and the rain-water from the roofs of back and main buildings, — the latter, with exception of a small mansard, throwing all its water to the rear, — together with the water that would collect in the area?

Baltimore is very badly provided with sewers. The numerous hills on which it is built provide surface drainage to such an extent that none are absolutely necessary but those at the bottoms of the slopes, which receive the contents of numerous gutters, by means of open culverts. By this arrangement the streets are thoroughly washed by rains, and the residents are able to dispose of their drain-water with very little trouble. But we were some distance under ground, and had all this torrent of water of every sort to dispose of. Fortunately for us, running along one of the cross streets, at two or three hundred yards distance, is a private sewer that some gentlemen had laid to drain the basements of their houses in the block above. This sewer consisted of a ten-inch pipe, connecting with a city sewer at about four blocks distance. Into this we ran an eight-inch cement pipe from the front of the house, and from thence to the rear laid an iron pipe under the cellar pavement. It is trapped in the cellar to prevent freezing, and at its opening in the yard has a grating to prevent any solid matter from finding its way into it. This sewer disposes of all the before-mentioned water, the rain-water flushing it out at frequent intervals.

From the area well we laid a small drain, opening about two feet below the top, to prevent any overflow should the water ever rise again, as it might do in the spring. This drain connected direct with the main drain.

All the pipes from pantries, baths, etc., empty into the open area gutter, thus preventing any odor from the sewer finding its way into the house.

The soil-pipes of the water-closets are carried up all the way to the roof, as usual, and capped with ventilators; besides which we have a ventilation pipe from the trap of each closet to a smoke-flue just back.

I believe all the arrangements I have mentioned are very complete; and thinking a description of them may be of some use — or if not of use at least of interest — to your readers, I send it to you.

Yours, gentlemen,

T. BUCKLER GHEQUIERE.

[We cannot agree with our correspondent as to the perfection of his method of drainage, and shall look to see some of our expert contributors take him to task for infecting the soil, if not the air, of his city. — Eds.]

THE STÈLE OF LYSIAS AT ATHENS. — It has lately been discovered that the well-known Stèle of Lysias, at Athens, which has ever since its discovery been of great interest because of the form of the letters upon it, these being supposed to date from the sixth century B. C., has another claim upon those interested in Grecian art. Thanks to a judicious cleansing, says the *Portfolio*, a full-length portrait of Lysias, painted on the white marble with much delicacy of drawing, has been revealed. The color is a reddish brown, with accessories in a bluish black. On the plinth of the stèle is painted a youth riding a race-horse. These paintings have been published in the original colors by the German Institute at Athens. Lysias stands in profile, with the pointed beard and the severe expression characteristic of Greek art in the sixth century B. C. He wears a long mantle reaching to the feet, and holds in one hand the drinking-cup of Dionysos; in the other hand he holds a branch; and from these two emblems it is concluded that he is here represented in the capacity of a priest of Dionysos. It is thought now that others of the Athenian tombstones, hitherto supposed to be plain, will, if cleansed, turn out to have been painted with a memorial design.

NOTES AND CLIPPINGS.

THE NEW YORK BUILDING DEPARTMENT AND THE CANNON STREET FIRE. — One of the causes which operate to nullify the best endeavors of the New York Department of Building in reforming defects and abuses in existing buildings is explained by the *Commercial Advertiser* as follows: It is necessary to find out every one interested in the construction and alteration of a building, including mortgagees, etc., in order to serve notices of irregularities upon each of them, and a failure to serve one may, and often does, invalidate a suit at law. The inspectors will sometimes find that some violation of law has taken place on a piece of property, and ascertain who are the owners, etc. Before notices can be served, after the case has been reported, the property has often been transferred, without the transfer being recorded, to avoid responsibility, and nearly all of the labor has been thrown away, requiring the work to be done almost *de novo*, only to meet, perhaps, with another obstruction of a further transfer of the property. At times, also, when certain provisions have been ordered by the Department of Buildings, and they have been carried out under the supervision of the Inspectors, some subsequent owner will change the plan without notice to the department. This was particularly noticeable in the case of the fire at No. 80 Cannon Street, where a fire-escape and scuttle were ordered, and where both were completed according to the inspector's report, the scuttle being provided with a ladder. And yet fireman Lynch was badly burned in the vain attempt to find a scuttle, which must have been closed up and the ladder removed by a subsequent owner of the building, as the property had evidently changed hands.

INDUSTRIAL SCHOOL. — As a fitting sequel to Dr. Robert Grimshaw's address at the Spring Garden Institute, Philadelphia, Tuesday evening, November 11, the Board of Managers of that institution has decided upon establishing a school of mechanical handiwork, similar to the one in Moscow, where young men may be taught practical mechanics by competent instructors and in a regular system calculated to produce finished workmen.

FIGURES OF SESOSTRIS. — Mr. F. W. Furnival, writing to the London *Athenaeum* from Smyrna, says: "I shall be glad if you will allow me to inform archaeologists in England of a very important discovery which has been made in this neighborhood. It will be remembered that in his second book Herodotus speaks of two figures of Sesostris carved on rocks in Asia Minor. One of these is well known, and is commonly called the Pseudo-Sesostris. It is sculptured in low relief on a rock in the pass of Carabel, near Nymphi, and represents a man with a conical head-dress and boots turned up at the toes, holding in his right hand a bow, and in his left a spear. Herodotus, so far as I remember, describes one of the two figures, and speaks of it as having the spear in the right hand and the bow in the left; he also states that there was an inscription in sacred Egyptian characters running across the breast, whereas the only characters on the Pseudo-Sesostris are near the head of the spear. Hence it has generally been supposed that the historian's account is inaccurate; but I am now able to inform your readers that the second figure has been discovered, and that it exactly answers to his description. It was found about eighteen months ago by Mr. Spiegenthal, the Swedish Vice-Consul at Smyrna, who kindly furnished me with particulars which enabled me to see it last week. It is sculptured on a piece of rock near the entrance to the pass of Carabel, and at a short distance from the Pseudo-Sesostris, to which it bears a general resemblance; but there are several reasons which lead me to believe that it is the figure which Herodotus describes. In the first place, the spear is held in the right hand and the bow in the left, as he distinctly asserts; and, moreover, there are traces of a belt running across the breast on which characters may have been inscribed, while there are no signs of them near the head of the spear. Again, it is probable that Herodotus would describe the second figure if he visited the spot, as the old road, which can be clearly traced, passed close by it, while the first figure, by which I mean the Pseudo-Sesostris, stands about 120 feet above it, and could not be seen so easily. Owing to its position near the road, the second figure has not been so well preserved as the first, and no characters of any kind can be distinguished; but those on the first figure are still legible, and Professor Sayce, who accompanied me, considers them to be Hittite. The road through the pass of Carabel now runs at the back of the rock on which the second figure is sculptured, and on this account it has not been seen by former travellers. I may add that when we visited the statue of Niobe, on Mount Sipylus, we heard of a rock-cut figure near it, representing some kind of animal, and apparently of a very archaic character. Unfortunately we were unable to find it; but we discovered ancient remains of various kinds, including several rock-tombs; and the fact that these and the second figure of Sesostris have been so long unknown shows clearly enough how much is left for archaeologists to do in this part of Asia Minor."

JANNIN'S CEMENT. — A plastic cement is a recently patented French product, which is called, after its inventor, "Jannin's Cement." It is simply composed of a mixture, in suitable proportions, of yellow oxide of lead — that known in trade as "Massicot" — and glycerine; other metallic oxides and coloring matters may be added to the above mixture, according to the character or color that may be desired. The cement may be made to possess more or less stiffness by varying the proportions of glycerine; the larger the percentage of the latter, the softer the cement, and *vice versa*. This cement is represented to be especially adapted for moulding objects which demand an extreme delicacy in the lines of the cast, such as engraved blocks and plates, forms of printing type, photoglyphic plates, etc. It is affirmed that it sets in a few minutes under the influence of a gentle heat, and then admirably resists heat and pressure. When set it is said to make a good substitute for lithographic stone. It is also recommended for artistic reproductions, such as fac-similes of terra-cotta, the color and sonorosity of which it closely imitates. It does not shrink in setting. — *English Mechanic*.

A HORSE'S BOX-STALL. — A box-stall costing \$13,000 has just been finished in the stable of Baron Rothschild, of Vienna, for his favorite horse. The stable proper has marble floors and tiles painted by distinguished artists, rings, chains, and drain traps of silver, and the walls are frescoed with hunting scenes. The building cost \$80,000.

CERAMIC ART AND THE CHEROKEES. — A curious fact, in view of the rivalry now existing between England and America, and one unknown to most potters, is that in 1632, about the time when the first china-ware was made in England, the principal clay used in the manufacture was obtained from America, being purchased from the Cherokee Indians of the Carolinas, and was called by them "unaker." This material was used for thirty years, and only abandoned because of the great expense of transportation. At that time great fears were entertained in England lest America should be able to flood the world with a superior china, but the discovery of china clay-beds at Cornwall arrested the impending danger. To-day, however, the ceramic art, as developed at Trenton, N. J., promises to cope successfully with the best goods at Staffordshire, England. — *Commercial Advertiser*.

METALLIC ROOFING. — Apropos of new uses for iron, which are now being looked out for, as it would seem, with but insufficient zeal, we may mention that systems of metallic roofing have been for a considerable period in vogue in more than one Continental state. The Montaire Company in France have a patent system of metallic tile and tile fastening, which promises well from the description, and has given, we believe, satisfactory results in practice. A firm in the Harz, at Rübeland, is now making metallic tiles, not like the Montaire tile, of corrugated plate, but of charcoal pig-iron. This firm is said to have been induced to take up the manufacture by noticing that a cast-iron roofing over one of its shops had stood for fifty years without undergoing deterioration. It was also found, at the time when inquiries were made about this, that a neighboring castle which was the seat of the Dukes of Brunswick, had received a metallic roofing in 1830, and this roofing was still absolutely sound and weather-tight. The Rübeland Company state that as against common tiles the metallic substitute is lighter in the proportion of 35 to 60. A square metre can be covered for 4s. 6d. — *Iron*.

MECHANICAL PLASTERING OF WALLS. — A machine for plastering walls has been invented, which consists of a receptacle for the mortar, the segment of a cylinder in form. It is provided with a hinged plate that presses against the mortar, and, as the receptacle is moved upward against the wall, presses the plaster out through a narrow-gauged opening at the bottom.

CAN A STEAM PIPE SET FIRE TO WOOD? — At the Crescent Steel Works in this city a steam pipe 2½ inches in diameter, carrying from 90 to 100 pounds pressure, was laid under ground about three years ago, encased in common pine boards about one inch thick. A few days since occasion was had to dig up the pipe, and the whole length of the wooden drain was found to be charred and apparently burnt, about three-fourths of the thickness of the wood, the other fourth being partially rotted. The whole inside of the drain was turned to charcoal, with here and there spots of white ashes, showing that ignition had actually taken place. It seems probable that if the casing had not been excluded from the air by the earth covering it, it would have blazed and been entirely consumed. It is generally believed that a steam pipe cannot set fire to wood, but this case seems to prove the contrary, and it may explain the origin of many mysterious fires. — *American Manufacturer*.

SAND-PAPER. — There is such a scarcity of No. 1½ sand-paper, such as the finishers of soft wood use, that the manufacturers of it are now fully three months behind their orders. The trouble arises from the fact that the machines that crush the quartz run their products either too coarse or too fine, and the exact size of grit for the 1½ paper is obtained only through the medium of a great waste of labor and quartz.

ANECDOTE OF MÉRYON. — Mr. Seymour Haden, in his new work on etching, tells an odd story of Méryon, that eccentric and insane genius. He went to visit Méryon and found him in a clean but plain little room, high up on Montmartre. He was at work and did not resent Haden's visit; "but with a courtesy quite natural, offered me, and apologized for, the single chair, and at once began to discuss the resources and charms of etching. He was also good enough to allow me to take away with me a few impressions of his work, for which, while his back was turned, I was scrupulous to leave upon the table what I was sure was more than the dealers would have given for them; and so we parted, the best of friends. But what followed showed how, even then, his mind was unhinged. I had walked fully two miles in the direction of Paris, and was entering a shop in the Rue de Richelieu, when I became aware that Méryon, much agitated, was following me. He said he must have back the proofs I had bought of him; that they were of a nature to compromise him, and that from what he knew of 'the etched work which I called my own,' he was determined I should not take them to England with me! I of course gave them back to him, and he went his way; and it was not till after his death that I became aware that about this time he had written to the editor of the *Gazette des Beaux-Arts* to caution him against being taken in by me, and to impart to him the conviction that the plates which I pretended to have done were not done by me at all, or even in this century; but that, doubtless, I had discovered and bought them, and signed and adopted them as my own."

A QUEER HOUSE. — An eccentric Englishman has recently built a house in the Tivoli Quarter for the residence of himself, his wife, and eight children, which is the talk of all Paris. It is circular, and has neither door nor window externally. The approach to it is from the ground floor to the roof by means of a ladder, which is moved up and down by machinery similar to that of a drawbridge. There is only one floor, and that contains eighteen apartments, more or less small in dimension, looking into the centre, which is lighted from above by a glazed cupola. One stove for all these rooms is in the middle, and in summer its place is to be occupied by an exquisite parterre of flowers. A circular balcony, open to all the apartments, surrounds the space. The motive of this oddity is, of course, only known to the author of it, but everybody can see that two points are gained by it, — immunity from the taxes on doors and windows, and a perfect preventive of any attempt at burglary.