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THE competition for public buildings at Toronto, which we commented upon briefly when the conditions were first announced, has resulted very much as we feared. Although arranged with remarkable fairness and care, the terms of the competition required such a vast amount of useless work as to make it impracticable for architects with other important engagements to compete, and the absence of any guarantee that the award should be made by professional judges operated still further to deter the best class of designers. Sixteen sets only of drawings were received at the appointed time, nearly all, it would seem, from local architects, and in accordance with the agreement, three of these were allotted premiums, the first, of two thousand dollars, being given to a plan marked "*Datur digniori*," the second, of one thousand dollars, to one entitled "*Waterloo*," and the third, of five hundred, to "*Nox*." So far from the object of the competition being attained, however, by the awards, the experts declined to recommend any of the prize designs for execution, considering them all unworthy of the site, and although the Government acquires the title to the premiated plans, it is understood that they will not be used, and the Province of Ontario is, after paying away its thirty-five hundred dollars, as far from having a convenient and creditable public building as ever. One design only received mention as being "architecturally good," but its cost was excessive. A competition for a great public building which results in the production of but one good design, and that too costly for use, must be regarded as a practical failure; which in this case is the more to be regretted on account of the evident desire of the officials who directed it to obtain the best result by the most honorable means.

If the Government of the Province of Ontario should be disposed to make another effort to secure a conspicuously excellent design for its most important building, we think its object could be much better and more cheaply attained in a second competition, by abolishing all money premiums and making the execution of the work, at the usual commission, the reward of the successful contestant, the decision to be entrusted absolutely to a jury of not less than six architects, the most prominent in the Dominion or in the States, under the presidency of the Commissioner, and designs at a small scale only, without specifications, to be required. The names of the judges should be publicly announced at the outset, and if there is any fear that trustworthy competitors will not be attracted, a reservation may be made to the effect that no award will be made unless the character of the designs justify it. We have no such fear; but confidently predict that the ablest architects on the continent would be found competing, and that the choice of the jury would do honor to the profession and to the Province. Nor would there be any risk, with such a jury, in making a final decision from mere sketch designs. Men who devote all their lives to the study of plans, and of the constructions which those plans represent, do not need details or specifications to ascertain approximately the sum within which a given design can be properly carried into execution; and more than this, it is, as all architects know, folly to expect, before the contracts are actually made. As to the capacity and knowledge of the designer, also, an expert can judge with as much certainty from a small-scale sketch as from working-drawings; indeed, rather

better, for the hand of the master is to the professional eye far more quickly evident in a sketch where every touch is significant, than in bulky working-drawings, encumbered as they must be, with irrelevant and conventional indications.

It is said that the committee appointed at the last session of Congress to consider the subject of new and more adequate accommodation for the great Congressional Library, has agreed to recommend the erection of a special building, embodying the principles of plan advocated by Mr. Spofford, the Librarian, in a pamphlet published some years ago. Mr. Spofford's theory is, in brief, that a great library should be arranged in a circular form; the administrative department occupying the central space, and passages radiating in every direction from this, dividing the plan into sectors which would be filled with shelves. The light should be wholly from the top, so as to obtain ample illumination everywhere without resorting to the wasteful expedient of exterior windows and alcoves, and an immense number of books could be conveniently arranged in a small compass. Each principal subject would occupy one sector, and subdivision could be easily effected so as to render the time and labor required for finding a given book and producing it at the central station to the smallest possible amount. The general scheme is very similar to that suggested, it is said, by Prince Napoleon for the Paris Exposition of 1867, where division was effected in a circular or elliptical building, both by radiating and concentric aisles, so that while each sector comprised the exhibit of a single country, the classification of objects proceeded by concentric lines, and the visitor was able either to pursue the study of a given kind of product through the whole cycle of the nations by following the appropriate concentric aisle, or to gain a comprehensive view of the industries of a single nation by confining his attention to its particular radiating aisle. That a similar refinement could be applied to a library seems very probable. Mr. Spofford proposes that his construction should be made practically independent of the outside walls, so that these can be taken down when the building requires enlargement and rebuilt at a greater distance from the centre, a device which is perfectly practicable.

WHAT has come to be called the Feuardent-Cesnola controversy has entered upon a new stage by the appointment of an investigating committee, consisting of two members of the Board of Trustees, together with President Barnard, of Columbia College, Hon. Charles P. Daly, and President Roswell D. Hitchcock of Union Theological Seminary. The official representatives of the Museum, are Mr. J. Q. A. Ward, the sculptor, and Mr. W. C. Prime, a very prominent archæologist. The committee sent an invitation to Mr. Feuardent to be present at its discussions, which he declined to do, unless he could have the privilege of naming one of the investigating experts. As the committee was not self-appointed, and had no authority to add to their number, they were unable to accede to this request, which certainly seems not unreasonable, and the inquiry is proceeding without Mr. Feuardent's help. Mr. Ward and Mr. Prime who naturally conduct the technical part of the examination, seem to find no evidence of the correctness of Mr. Feuardent's "charges" in the present appearance of the objects which he considers to have been tampered with. However, it is plain from the tone of the letters on both sides that the dispute will not be appeased by their verdict, whatever it may be, and that Mr. Feuardent, if refused a representation on the jury, will appeal again to the public.

A FINAL decision has been reached by the committee appointed to choose a site for the Exhibition of 1883, whose previous recommendation, that the Central Park should be utilized for the purpose, was met with a public disapprobation too strong to be resisted. Failing the Park, it is proposed to place the buildings on what is called the Inwood site, a plot of some two hundred and fifty acres, situated near the line of the Harlem Railroad, ten miles north of the City Hall, in what was lately Westchester County, half a mile or more beyond the High Bridge aqueduct. Undoubtedly, this choice is made from motives of economy, since the use of the ground is, we believe, offered to the Commission free of expense, and a large subscription from the railroad company, or, what is the same thing, from Mr. Vanderbilt, is said to be conditional on its adoption. The Third Avenue horse railroad now extends to within half a mile or so of the place, and before 1883 the

Metropolitan Elevated Railroad will probably be extended to within an equal distance on the other side, but it must be acknowledged that the means of communication are not yet adequate to the needs even of the workmen who will be employed on the buildings and grounds. One can hardly help wondering whether the managers of the elevated roads will not discover that a World's Fair in a place so inaccessible must depend for its success entirely on the means of transportation to and from the grounds, and seeing that its fate is to a great extent in their hands, make some hard bargain with the Commissioners as to the terms on which they will extend their line so as to bring visitors and dollars to the door. Otherwise, the selection is a reasonably good one. The surrounding country is high, picturesquely broken, with beautiful villas scattered here and there. Its reputation as to freedom from malaria has not been very good, though it is far better than some of the sites which have been advocated. It is evident that the Committee have counted on a great extension of the city, with its conveniences and means of transportation, toward the upper end of Manhattan Island within the next three years, and it is more than probable that their expectations will be realized, and the decision founded on it will be fully justified.

THE New York City Board of Health has undertaken an investigation as to the causes of the diphtheria epidemic now prevailing in that city. We hope it will be rewarded with more valuable results than the inquiry into the plumbing of dwellings now being conducted by the Assistant Engineer of the Board, who reports that "in the majority of houses inspected the plumbing work is hidden in the walls, so that it would be very difficult to make a practical examination of the pipes in case of a nuisance." What this gentleman would call a "practical examination" of plumbing work we cannot imagine, but if he confines his inspection to the exposed parts of the apparatus, we are afraid the citizens of New York are not likely to profit much by his labors. Considering that the complete examination, by peppermint, of all pipes, traps, and other plumbing work, concealed or apparent, in an ordinary house, is a matter of only about two hours time, it seems a pity that the tax-payers should not be able to get such work done thoroughly, if at all. The inspector seems to have been quite surprised at such things as he found visible. He reports that in most cases the traps were "very small," and says that where the soil or waste pipes are unventilated these traps are "useless." What size of trap he thinks desirable we should be glad to know. Most sanitarians think that traps larger than the pipes with which they communicate, so that they are not fully flushed by the stream, are objectionable, and very recently some have even introduced traps smaller than the pipes, to obtain the utmost possible scour. Of course, the ventilation of each trap, not of the waste-pipes alone, is now known to be essential to their perfect action, but to say that they are useless without such ventilation is to ignore the fact that though siphoned by a full discharge, they may be and usually are, soon sealed again by a smaller flow. We never fail to admire the energy of the New York Board of Health, but the scientific information which it succeeds in gathering from its friends and employes is not always of the most valuable kind.

A SANITARY ASSURANCE Association has been formed in England, with an object differing somewhat from that proposed by the societies formed under Professor Fleming Jenkin, and on this side of the ocean by Colonel Waring, at Newport. Instead of being a combination of individuals who unite to share the expense of professional examination and advice in regard to the condition of their own dwellings, the new association intends to guarantee the sanitary completeness of buildings, new or old, keeping a register of those submitted to their supervision, corrected by periodical inspection; and it is hoped that their guarantee will soon come to be valuable, not only to those in search of houses for their own occupancy, but to builders and others who have them for sale or lease. We trust good may come of the movement; but there are many difficulties to be surmounted. Perfect healthfulness in a dwelling includes much beyond the scientific trapping of the waste-pipes, and a house with a damp foundation, or insensibly tainted by the emanations from a neighbor's cesspool, may be much more unwholesome, although fitted with the best of plumbing, than another in which the traps are subject to siphonage, but of which the situation is better.

A NEW process for the utilization of sewage has been tried near Paris, probably as the outcome of the discussion aroused by the stench which have pervaded that city for some months. This process, as described in the *Révue Industrielle*, begins by allowing the sewage to run into closed receptacles, where it is mixed with lime, and strongly agitated. There the mixture is pumped into "filter-presses," where the solid portions are formed into cakes, which are ready for immediate sale as manure, while the filtrate is drawn off into a distilling apparatus, which converts the remaining dissolved organic matter into salts of ammonia. The "filter-press," set up for purposes of experiment, was found capable of turning out about a hundred pounds per minute of fertilizing cakes, which contained one and one-quarter per cent of nitrogen. The preparation of ammonia from the clear liquid has hitherto been an offensive process, but an improvement is now made, by which it is conducted without odor, in closed stills. There is certainly some doubt whether the lime alone, in the short time during which it acts, can precipitate all the solids which a more complete treatment would separate; but this is not a matter of great importance, as the subsequent distillation would destroy any suspended matter. We suppose that such a method of utilization is applicable only to a very concentrated house-sewage, collected separately. The abundant water-supply which the dwellers in our city houses find it impossible to dispense with is quite unknown in France, and the house wastes are little diluted; if they were mixed with such volumes of water as is usual with us, the most ingenious chemist would find it hard to distil ammonia from them in paying quantities.

A CORRESPONDENT of the *Building News* asserts that he has seen in a schedule of quantities issued by a firm of surveyors, for the assistance of contractors in tendering for the erection of a large mansion in the west of Scotland, some items which he wishes explained. At the end of the joiner's schedule was the direction: "Allow for second set of plans for contractor's use during progress of works, payable off first instalment, six hundred pounds. Allow for expenses in connection with clerk of works' department five hundred pounds." He presumes, but does not assert, that similar items form part of the mason's, carpenter's, and other schedules, so that he estimates the amount of these "allowances," which he thinks the architect is to have the benefit of, at about four thousand pounds. He says that the designer of the building is a member of the Royal Institute of British Architects, and wants to know whether such charges are sanctioned by the official scale; or if not, what name is to be given to this mode of making money. It seems to us that there must be some mistake about the story. For an architect, without the knowledge and consent of his employer, to arrange for adding to the contract price of the work entrusted to him sums which were afterward to be clandestinely paid over to himself, would be an act of simple robbery, such as he would hardly dare to expose in this way to the knowledge, not only of the surveyors who prepared the schedule, but of all the contractors, successful or otherwise, who estimated on the buildings. Even if correctly reported, however, the evidence is by no means conclusive of improper conduct on the part of any person.

ONE of the noblest of all forms of art, the pictorial decoration of rooms used for public assemblages, is rapidly gaining not only in the favor with which it is regarded by those who have charge of the erection of important structures, but in the increasing dignity with which the given subjects are treated by the artists who are employed to execute them, and it is but fair to say that to the interest shown in the subject by artists in general is in great part due the honorable and conspicuous position which this class of work has assumed. There is something very attractive to the best class of painters in the idea of freeing themselves once in a while from the limited range of ideas, the conventionalities and *mesquineries* of the studio, and giving full play to their imaginations in pictures of heroic size, displayed in uncompromising and unsoftened daylight to the searching criticism of a public place, and necessarily executed in a style which must owe little to technique, but all, or nearly all, to inspiration. He who, under such circumstances, can move the hearts of those who look at his work is sure of a fame which no passing fashion can affect, and which will in the end gain rather than lose by the unrestricted criticism to which it must be exposed.

FOURTEENTH ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE AMERICAN INSTITUTE OF ARCHITECTS.

DURING the past year the Board of Trustees has held four quarterly meetings and five monthly meetings.

There have been elected as Fellows of the Institute, Mr. Charles Eppinghausen, and Mr. James H. Wintrim, both being formerly Associates.

There have been reinstated Mr. Walter Dickson, Fellow, and Mr. Aneurim Jones, and Mr. George Keller, Associates of the Institute.

The resignations are Messrs. John W. Wilkinson and G. A. Clough, both Associates. The deaths during the past year are Mr. Joseph Sands and Mr. Charles P. Hartshorne, Fellows.

There are now on the Secretary's list, 55 Fellows and 58 Associates. The membership of Chapters is usually appended to their reports.

Three hundred dollars were voted by the Board to cover expenses of the last annual report, which was issued by the Publication Committee in its usual form, and the cost of same was kept within the appropriation.

UNFINISHED BUSINESS.

It will be remembered that at the last (13th) convention certain subject matters embraced in the President's address and also in the report of the Board of Trustees, after having been discussed, were referred to Special Committee for report; but as their reports advocated certain changes in the Constitution and By-laws, requiring previous notice, no legal action could be taken, and the whole were referred back to the Board of Trustees for their report to this (14th) convention.

REPORT OF COMMITTEE ON MEMBERSHIP.

Among the most important matters as bearing upon the increased vitality of the Institute, so much to be desired, was its proper maintenance and increase in point of numbers. This was the subject of a report from a special committee on membership, who stated that "it was clear that upon this depended its usefulness to the profession, and its financial prosperity," and agreed to the recommendations of the Board of Trustees to that end.

Going farther, this committee declared that "in the forming of a federal union, by the establishment of a National Institute, composed of its various Chapters, it was hoped that this form of organization would lead to active relations between the societies and the central body," and that there would be "a certain amount of mutual assistance and coöperation, the Chapters serving as feeders to the Institute, supplying it with a regular succession of Fellows, trained up to regard it with respect and affection, and proud and eager to share its honors and burdens."

But in their opinion "these expectations have not been met," and they state positively that "these ingenious and carefully-adjusted ties have never worked, and never will; interfering with freedom of action, and giving a sense of constraint and compulsion which is irksome and dispiriting," that "many men would gladly belong to both organizations, viz., the Institute and the Chapters, if they were separate, but would refuse to join either, now that they are united."

They therefore thought "the time had come to take steps for a revision of the Constitution itself, with a view of dissolving all organic connection between the local societies, leaving still to the Institute the care of the general interests of the profession, and to be sustained by a purely voluntary membership."

Such a radical change as this report proposed, and coming suddenly upon the members unprepared to decide the matter, it was, after a short debate, referred back to the Board of Trustees, with instructions to communicate with each Chapter and ascertain their feelings in the case, and then, if in their judgment it should be expedient to carry out in any form the views of the committee, that the Board of Trustees should devise and lay before the next convention a scheme for accomplishing the necessary changes in the Constitution.

Conforming to these instructions, the Board of Trustees did communicate with each Chapter through its Secretary, sending the printed reports of the Board of Trustees and that of the Committees on Membership, By-laws and Finance, with the special request that the opinions of Chapters, after a full discussion, should be expressed in a report from each, to be sent to the Secretary of the Institute before September 1st, in order that the Board of Trustees might have ample time to compare them, with a view to forming its judgment upon so important a matter, and reporting the same to this convention.

The Board of Trustees is compelled to state that its letter of May 17, 1880, addressed to the Secretary of each Chapter, has met with but two responses, viz., from the Boston and Baltimore Chapters. Both of their reports advocate the separation of the Chapters from the Institute, with the proviso, in that of the Baltimore Chapter, that the present Fellows and Associates retain their membership with the Institute.

The report of the Boston Chapter includes a draft of a new Constitution, the changes proposed consisting in the omission of all references to Chapters, "thus making the Institute an independent institution;" and in the omission of some minor offices and certain purposes and objects of the Institute as expressed in the present Constitution, but proposing to "establish a permanent Council or Board of Trustees, to be elected at each annual convention, thus making them to appear in name, as they are in fact, the chief instru-

mentalities through which the Institute seeks to accomplish its work.

"The By-laws also to be modified by making corresponding alterations, corrections and omissions, with the effect of leaving every local society to manage its own affairs, while the Institute would attend to the general interests of the profession, which no local association could assume to direct or control."

No reports upon this subject were received from the New York Chapter, the Rhode Island, the Philadelphia, Cincinnati or Chicago Chapters, as requested by the letter of the Board of Trustees, of May 17; and the Albany Chapter has not made a report of any kind for more than two years past, owing to the removal of its President and many of its members.

The Board of Trustees must, therefore, act upon its own judgment in making its report upon this very important matter, with the partial assistance derived from the two Chapters mentioned, instead of the full expression of feeling so naturally expected from each and every one of the Chapters organized and now acting as integral portions of the American Institute of Architects.

In the careful consideration of the proposed change, so radical in its nature, your Trustees feel that they have no right under the circumstances to advocate the disestablishment of the federal union now existing, without the full consent of all the Chapters, and I would state the fact that in the case of some, if not all of them, they are organized by law, by special Act of Legislature under their present names as a part of the Institute, and are thus legally entitled to hold property, transact business, and maintain its objects.

And, therefore, this fact now existing, that each Chapter is an integral portion of the American Institute of Architects, the Board of Trustees deems worthy to be preserved and perpetuated, so that every member of any Chapter may feel that he has a right to be received as a brother by every member of every other Chapter, as being in full communion with them, through his membership in the Institute, the parent and national body; and in travelling abroad, his credentials as a member of a Chapter of the American Institute of Architects would, as a matter of course, carry greater weight than as belonging to any local society not connected with it. The same reasoning would also apply to our own country.

This connection, therefore, the Board of Trustees, in their judgment, thinks should not be dissolved. But, while making this assertion, they are fully aware that there must be some truth in the statement, as reported by the Committee on Membership at the last Convention, as to the causes of the lack of vitality in our organization. We admit the facts as stated, but are not so clear as to the causes, nor in our opinion will the vitality desired be restored by the truly heroic remedy of severing the limbs from the body.

Some of the statements made in that report are misleading, and not fairly expressed; as, for instance, instead of being "compelled virtually to join a Chapter, whether he will or no," any Fellow or Associate may now and according to the present by-laws, be elected a member of the Institute; and although it is the aim and desire of the national body to have its Chapters strong in membership and active in work, as furthering their mutual interests, and in this way those of the Institute also; yet it cannot compel, nor does it desire to compel, its members in distant or isolated communities to become members of Chapters, and even in the larger cities it gives perfect freedom to those making application for membership in the Institute, without any requirement as to the necessity of belonging to a Chapter.

They grant, however, that this is a natural expectation, as giving a more prominent field for friendly intercourse, and for uniting in fellowship those architects who desire to promote the artistic, scientific, and practical efficiency of the profession.

The other "cause of vexation and annoyance, interfering with freedom of action and giving a sense of constraint and compulsion, which is irksome and dispiriting," as expressed by the report of Committee on Membership, is the fact that by the by-laws every member elected into the Chapter as an Associate, becomes by that act also an Associate of the Institute and subject to Article 2 on Finance, and therefore liable to payment of its dues, whether they desire it or not.

And here appears to the Board of Trustees the great and ONLY cause of friction as existing between the Institute and its Chapters, except some minor matters which will be treated of hereafter; and they would state it as their opinion, that each Chapter shall have full liberty to impose its own conditions upon its own membership, without restraint from the Institute, save where inconsistent with its purposes and objects, viz., to elevate the standard of the profession and its members.

And to this end we would recommend that Article 1, on Memberships, Paragraph 2, be amended by omitting that portion relating to members of Chapters, thus leaving all Associates to be elected, as at present, by the Board of Trustees, upon the nomination of two Fellows.

Another possible cause of constraint in the relation of the national body to the Chapters may exist in Article XI, upon Chapters, where it is stated that the President of a Chapter shall be a Fellow of the Institute; and it has happened in two cases within the past few years, that the Presidents of the two Chapters referred to were Associates and not Fellows.

In one case no attention was paid to the remonstrance of the Board of Trustees, and in the other a Fellowship was applied for and obtained, and thus compliance with the by-laws was secured.

It seems to your Trustees that this slight control over the Chapters is due to the national body; it ought not to be "irksome," and, save

in the formation of new Chapters, is the only semblance of authority that it exerts; and it seems to be but just and rightful as belonging to the parent society.

In this connection your Trustees are also willing and do hereby propose an amendment to Article XI, on Chapters—that wherever the word "shall" exists, and its use is found to be resented or appears to interfere with the Chapters' freedom of action, it may be changed to "may" or "is requested," thus removing any possible cause of constraint or undue exercise of authority, (save in the case of the President, as before mentioned).

The only other grievance plainly expressed in the history of the past few years of the Institute is the question of the expenditure pertaining to its support, and secured by the imposition of dues upon its members.

It is but fair to themselves as the governing body for the Board of Trustees to state that a most rigid economy is now exercised, and has been for the past two years at least.

At present the objects and purposes of the Institute, as expressed in the Constitution, are hampered by the want of money, which seems to be but grudgingly bestowed, and a painful economy is the result. It has but the nucleus of a library, a spare collection of photographs and works of art; and having no rooms to display them, or for the meetings of the Board of Trustees, it cannot welcome its members to share what little it does possess, and to which they ought to have free access, but is compelled to transact its business in a perfunctory way in the bustle of private offices, and often to the inconvenience of those who kindly offer their rooms for this purpose.

The Trustees would also state that it ought to be fully understood, without question, that there are necessary expenses connected with the positions of Treasurer and Secretary, viz., clerical services, stationery, postage stamps, and printing; that the Committee on Publication require funds to be enabled to print the annual report of each convention, which report is often the only point of contact between the Institute and its members, scattered in our wide land, and therefore correspondingly welcomed.

Each annual convention, which ought to be the great feature of the year to its members, being the only occasion when from all parts of the country they come together for friendly intercourse—to strengthen the ties of fellowship, to be entertained and enlightened—as a matter of course involves a certain amount of expenditure, under the most favorable circumstances, which might be resented, as has been the case, if assessed upon the members.

Therefore, while the Board of Trustees do not think the amount of dues now existing to be too high, yet they are fully aware that if the membership were increased, these amounts might be lessened—and they are willing to make the experiment without further consideration. They propose, therefore, an amendment to Article II, on Finance, Par. I, that the sum of fifteen dollars for annual dues of Fellows be reduced to ten dollars, and that for Associates from seven dollars and fifty cents to five dollars, to be paid as now, in two semi-annual instalments.

With a desire to elevate the standard of membership, your Trustees would also propose that the number of Fellows be limited to seventy, and their election to be governed by the present by-laws, until that number is completed, and afterwards any vacancy occurring shall be filled, not by vote of the Board of Trustees, as at present, but nominations shall be made from the list of Associates only, and a majority of the votes of Fellows shall be necessary to elect, the result of such elections to be declared at each annual convention.

In conclusion, the Board of Trustees desire to say that they are perfectly aware of the grave responsibility involved in their position, and of their own shortcomings in the performance of their duties; but venture to assert the proposition that the vitality of the Institute as a national body does not depend so much upon them, as upon the vitality of its membership as involved in the Chapter system.

If the Chapters prosper, their close relation to the Institute, in their mutual membership, causes the prosperity of the Institute, and the united action of each or any Chapter gains tenfold force by its harmony with the purposes of the Institute of which it is a part. And here a fact may be stated which may have a practical bearing upon the usefulness of the Board of Trustees.

According to the by-laws, it is composed of the President of the Institute, the Vice-Presidents (and each President of a Chapter legally elected is a Vice-President of the Institute), the Treasurer, Secretary, and four Fellows, elected annually.

The meetings of the Board often fail for want of a quorum, and usually the work is left practically to the four Fellows, Treasurer, and Secretary. The President and Vice-Presidents are always invited to attend each quarterly meeting, and have a perfect right to attend any and every meeting of the Board, and opportunity to take an active part in the affairs of the Institute, and propose any reform as suggested by their several Chapters.

They have not taken advantage of this opportunity; as a rule they do not often appear at conventions, and it is not wholly due to the distances involved, taking New York City as a central point.

Our venerated President has always appeared at the quarterly meetings, and has shown the warmest interest in the welfare of the Institute; but the Vice-Presidents, who ought to represent the interests of their Chapters, if those Chapters are alive and awake, are, save in one or two cases, conspicuous by their absence.

If this is owing to the necessary charges involved in travelling, the Trustees would suggest that this slight expense would fall but lightly

upon the Chapters, either as a voluntary or fixed subscription on the part of its members.

This would enable all Presidents of Chapters within reasonable distance of New York to attend regularly the meetings of the Board, and thus something of the somewhat shadowy and unreal personality of the Institute would be replaced by a more substantial reality.

In the last discussion of this matter, the parallel was drawn between the R. I. B. A. and our own, as showing the needlessness of the Chapter system, and that society is pointed to as displaying a full membership and complete vitality, which is lacking here. As to the cause, it seems to the Board of Trustees that the comparison is unnecessary, as the cases are not analogous. In point of distance alone it is an easy matter to reach London from any part of England, while with us, a similar territory to be covered would include but the State of New York and a portion of the neighboring States.

As the course of empire has extended in our national government, and the founding of new States was necessary to extend and strengthen its authority, so with us, in a modified degree, do we believe that the Chapter system is a necessary help to strengthen and extend the purposes sought by the establishment of the American Institute of Architects.

As a means of increasing the interest in the Institute, and fostering a friendly rivalry among its members, the Board of Trustees would also suggest the establishment of a fund, the income of which is to be used for the annual issue of a gold and a silver medal, to be awarded to the architects of the best two completed designs of the year; the medals to be awarded by ballot at each annual convention, with the understanding that the gold or silver medallist cannot be nominated a second time for the same medal.

The other matters which were left for this convention to decide were the recommendations of the thirteenth annual report of the Board of Trustees, viz.: that they have power (without referring the matter to Chapters, as now) to elect Fellows from among the older Architects who do not belong to any Chapter organization, without the present proviso of a semi-examination; *i. e.*, by the presentation of plans and designs showing their work. Also, in their discretion, to advance from the grade of Associates to that of Fellows any such of the former who have distinguished themselves by specially meritorious work. That such advancement may be made by the Trustees without consultation with Chapters, and be considered as an honorable distinction, and that the usual entrance fee of Fellows be remitted in these cases; but otherwise they shall be subject to the same annual dues as Fellows regularly nominated and elected; also relating to admission of non-professional members under proper restrictions, and that any articles now incorporated in the by-laws, which are not in conformity with the recommendations, be altered in accordance with the foregoing.

The adoption of the above was recommended by the last report of the Committee on By-laws.

The Committee on Finance in their last report offered a resolution for the consideration of this fourteenth annual convention, that in case of non-payment of dues, a money penalty and suspension of active membership shall be substituted for a complete dismissal of delinquents.

Both of these reports (viz., that of Committee on By-laws and Finance) were submitted to Chapters, together with report of Board of Trustees, and but one reply was received; viz., from the Baltimore Chapter, voting against the above, but concurring in the proposition to admit non-professional members under proper restrictions.

The subject matter of this present report is laid before this convention by the Board of Trustees, with an earnest desire for the welfare of the Institute, and a hope that a careful consideration may be given to it by the members, looking to the best interests of the profession, and of the Institute as representing the same.

Respectfully submitted by the Board of Trustees.

HENRY M. CONGDON, Secretary, A. I. A.

UNDERGROUND SPRINGS. — II.

[From the French of Daniel Ramée.]

INDEPENDENTLY of the conformation of the ground, the character of the soil has much to do with the springs contained in it. A formation of primitive rock furnishes usually numerous water veins, of small size, but near the surface, and following a course easily traced. Sandstone, gravel, clay or limestone, on the contrary, contain few

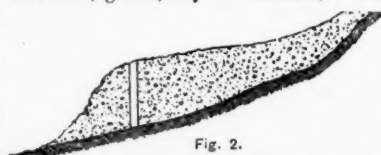


Fig. 2.

springs, at considerable depths and less easily traced, but abundant. In many places the water oozes out at the foot of slopes consisting of loose stone or gravel, and persons living near the top of the hill often imagine that the same current can be reached by a shallow excavation at any part of the slope, forgetting that the hill may be entirely composed of a mass of detritus washed down by a torrent, so that it will be necessary to excavate nearly to the level of its foot to reach the water. (Fig. 2).

Sometimes the side of a hill will present such a stratification of the rocks which compose it, as to bring to the surface a number of small veins of water, near together, but none of them furnishing the

supply desired. In this case, a trench cut across the slope will collect several of these veins, and may be so extended as to increase the supply at will.

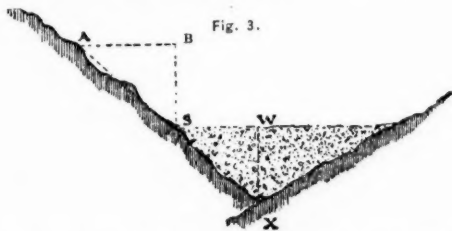
If a slope is of a convex rounded profile, the chances are against water being found beneath its surface, but it may exist. Wherever, upon close observation, the extremities of any inclined tract are seen to be higher than the middle, water must be sought toward the centre, and not at the ends. So if several depressions are detected, separated by ridges, the well must be sunk in the middle of one of the depressions. If such a depression runs down the hill, steep in its upper course, but less inclined toward the bottom, the shaft should be dug precisely at the foot of the steep part, where the gentle slope begins, and in the same way, if a depression extends part way down the hill, and then fills up and becomes obliterated, the excavation must be made at the point where the hollow first shows signs of diminishing in depth, for such filling up is an indication that the subterranean streams will sink farther and farther from the surface as it descends.

One of the most favorable signs of the existence of a spring upon a side hill is the appearance of a depression in the ground, commencing somewhere on the slope and continuing to the foot of the hill.

A surface spring would show itself as a small basin, continuing by a depression, forming the bed of the rivulet issuing from it, to the bottom of the slope, and a similar configuration of the ground, but without the appearance of water on the surface, still indicates a spring and stream of the same kind not far below.

It is useless to sink wells on the projecting spurs or flanks of mountains or hills, and nearly so to try to find water on a short, uniform slope, and even though all other signs are favorable, it is not advisable to excavate in places encumbered with the debris of land-slides or torrents, which will much increase the labor of digging. The most favorable points will be found at the apex of a reëntering angle; in the deepest recess of a gorge, either at the level of the plain or at the foot of a precipitous descent; at the point which the line of greatest depression of a valley is intersected by that of a lateral ravine; and finally, in the places where in heavy rains the water is seen to overflow the surface, or where willows or other aquatic plants and grasses are seen to flourish.

Where the water of a subterranean stream which it is desired to reach has been exposed by excavations in other parts of its course, or reaches the surface in natural springs, the depth which the new well must have can be calculated by levelling from the nearest spot where the stream shows itself, and adding or subtracting a certain allowance for the inclination of the bed. If the stream is nowhere exposed, the depth at which water will be reached in a given spot can still be calculated by a simple graphical operation.

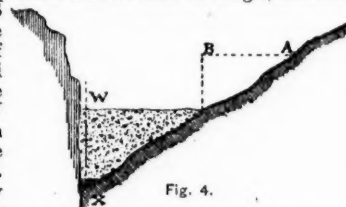


Having ascertained by the preceding rules the line which is vertically over the hidden rivulet below, plant a stake on this line, at the point where the well is to be dug. From this point, W in the diagram, measure horizontally over the alluvial mass which will generally occupy the bottom of the valley, to the foot of the slope, S. By raising a perpendicular here, and levelling outward from A, the distances A B and S B, can be ascertained, which will give the angle of slope; or still better, a clinometer can be applied directly to the surface. Laying out on paper at a suitable scale this angle, however formed, with the distance S W, the point X where the prolongation of the line of slope intersects the vertical dropped from W, will be the probable water line, and W X measured at the given scale, will represent the depth necessary for the well.

If one side of the valley is precipitous, while the other slopes gently, the *thalweg* will, as shown in Figure 4, lie immediately beneath the cliff, but its depth can be best ascertained from the angle of the opposite bank.

This method is only applicable to springs situated in the bottoms of valleys. For calculating the depth of wells sunk on a side hill or elevated plateau, a different rule is necessary. In such cases everything reduces itself to a knowledge of the permeable and impermeable strata, which must be acquired through the study of geology, assisted by observations made on the spot.

After the position of the well is fixed, it is necessary to descend the hill in a line directly below it for a score or two of steps, observing attentively the strata of rock and earth, which are generally sufficiently exposed for the purpose. If not, some neighboring spot



where a landslide or artificial excavation allows them to be seen should be sought. If the strata are found to lie inclined toward the interior of the hill, instead of level, or sloping outward, no further trouble need be taken, and the proposed well should be abandoned at once, since hills which present strata so situated are totally devoid of springs. If the layers are horizontal, or inclined toward the exterior, in a direction approaching that of the slope itself, the outcrop of the strata should be carefully examined, stopping as soon as an impermeable bed is reached, for it is over this that the water collects. A further examination will show the dip, or inclination to the horizon at which the strata lies, and an imaginary prolongation of this inclined surface to the spot where the well is to be dug will show the depth which this must have.

In extensive plains, the simplest way of ascertaining the necessary depth of a well is to find the height at which the water stands in other wells or hollows in the neighborhood, the presumption being that the level will be the same, or nearly the same, under the whole extent of the plain.

Some alteration of one or more soft, permeable layers with a retentive stratum is necessary to the existence of underground veins. In tracts composed of a great depth of loose gravel, sand, or porous stone, or where the strata lie at a large angle with the horizon, it is of little use to sink wells, unless they can be made deep enough to penetrate to the bottom of the formation.

WELLS AND WELL-DIGGING.

The water of subterranean springs is brought to the surface by means of simple conduits, ordinary wells, and artesian wells. In order that it may flow through pipes without pumping, the well must be so situated that the bottom will be somewhat above the point at which the conduit is to deliver, and so shallow that a trench can be dug to lay the pipe with continuous descent from it. If this is not thought of, the cost of a trench of sufficient depth may be very great.

In sinking wells in a depression, which is liable to become the bed of a stream in rainy weather, provision must be made for turning the surface-water away from the spot by dikes or artificial channels to prevent not only the annoyance and interruption to the work which would otherwise follow storms, but the filling of the well, when completed, with surface-water and earth brought in by the torrent.

Such artificial channels must be large enough to carry easily any possible flow, and should encircle the well at a distance of six or eight feet at least, besides being prolonged so far below it that there may be no possibility of water backing up to the excavation.

The pit should be dug vertically downward, and if the ground is loose or soft, so that any caving in of the sides is to be feared, they should be stayed with planks set vertically against them, held by cross-pieces wedged in between them and similar planks on the opposite sides. The earth excavated must also be dumped not less than eight or ten feet from the edge of the pit; if piled near the verge, its weight will probably cause the sides to fall in. The digging should not be stopped as soon as water begins to flow in. The first appearance of water is generally due to the soaking in, either upwards or sideways, of a small portion from a vein, the greater part of which continues its course undisturbed. If the pit is continued downward, until the water which comes in is observed to enter at the sides and fall down to the bottom, it will collect all that flows near it.

If it is desired to gather a supply of water to be carried in pipes to some place below, the well may be dug in the form of a long trench, which, when finished, should be walled up with dry stone to a height of five or six feet, and the top covered with flat stones. Over these should be thrown a mass of pebbles, large and small, and the excavation then filled up with earth to the top. The pebbles serve to prevent the earth from falling into the water, and also collect small springs which may come in through the sides of the excavation and transmit them to the reservoir below.

Ordinary wells, consisting simply of a circular excavation, should be dug with the same precautions as to staying and the deposit of excavated material as reservoirs of other shapes. They are often made much deeper, so that after a certain point is reached a windlass with tackle and bucket must be set up to raise the earth from the pit. As soon as rock is met with, if water is not found before, the surface must be swept clean, and a careful examination made. If it proves to be volcanic stone, or spongy and disintegrated material, or even if the strata or cleavage seams are found to be nearly vertical, the enterprise should be abandoned, for such rocks allow the water to descend to a great depth through them, and it is not worth while to try to follow it.

If, on the contrary, it is of an impermeable character, or shows beds of varying hardness, water may be found in it, and a further examination should be made, to determine the nature and inclination of the stratification.

The appearance of a double stratification, the beds of the stone on one side of the excavation sloping one way, while those on the other side slope the other way, meeting in a trough in the middle of the pit, is the most favorable indication, for it shows that the true *thalweg*, or line of greatest depression of the underground valley, has been accurately struck. If the strata all slope one way, the excavation should be enlarged toward the side toward which they descend, since the *thalweg*, or trough, must be situated on that side, and through this trough the subterranean spring, if it exists at all, is certain to flow. A little tunnel may even be run toward this point, if necessary, and when the channel is found, it becomes simply a

matter of judgment to determine whether it is best to sink a new shaft over the point so ascertained, or to extend the old one.

If the rock at its first discovery shows a horizontal surface and beds, there is no reason for supposing that the vein flows at one side or the other, and the excavation may continue in the same spot, but if seams are found, running in the same direction as the general course of the valley, they should be followed downward, even if a deviation from the vertical line is necessary for the purpose. In granite and other unstratified rocks, if the course of the *thalweg*, or longitudinal depression, is well marked above ground, a well sunk on the middle line of this may be carried downward confidently, regardless of lateral fissures which may seem likely to carry the water away from the pit; lower down there will probably be other seams which will bring the water in, instead of carrying it off.

When the spring is found, the well should still be sunk two or three feet or even more below it, in order to form a reservoir, which will be very useful in gathering, even from a small vein, a supply adequate for sudden special needs, and without some such basin it often happens that the water-course, which when first found rose to some height in the well, by degrees works its way again to its former channel, and simply runs over the bottom, without accumulating to the depth of an inch. Another inconvenience of omitting to cut a reservoir below the line where water is first met with is, that a large portion of the spring is often thereby lost. Many a well dries up periodically which would furnish an ample supply of water at all times if it had been dug three feet deeper, so as to intercept the whole of the underground stream.

The sides of the well should be securely stayed during the construction, and when the excavation is complete, it may be walled up, or stoned, with stone or brick, laid dry to within about three feet of the surface.

From this point the wall should be laid in mortar or cement, to prevent surface-water from washing in, and the mortar wall should be carried up three feet above the ground. Cement is far better than lime, as the bits of the latter which fall into the water will keep it "hard" and unfit for washing, for many months. It is hardly necessary to say that to lay the lower portion of the wall in cement or mortar would keep the water out of the well, instead of keeping it in.

Brick linings for wells may be four inches thick, if the shaft is of small diameter, and the wall carefully laid. Each course should be of bricks chosen of the same height, to prevent irregular joints, and stone chips or broken brick should be inserted as wedges in the wide part of the joint at the back. If this precaution is observed, the vertical joints regularly broken, and the earth well rammed in behind the wall, it will resist a considerable pressure without being forced in.

After reaching a certain depth, the workmen who excavate wells are very commonly incommoded by the carbonic acid which accumulates in the bottom, partly from their own breaths, and partly from the explosions of gunpowder or other sources, and this impurity often reaches a dangerous amount, so that as soon as any contamination is feared, fans or blowers should be arranged, with tin or wooden tubes to convey fresh air to the bottom, and the workmen should be carefully watched, in order that a timely supply of air may be forced down to them in case they show signs of being affected by the foul gas, which overcomes men very suddenly.

THE ILLUSTRATIONS.

COMPETITIVE DESIGN FOR THE ENTRANCE HALL OF A COUNTRY HOTEL.

We publish this week, in advance of the examination and report of the jury, one of the designs which has been submitted in the competition which closed December 11. It should be borne in mind that the action of the editors in so doing forestalls in no way the decision of the jury.

THE CHURCH OF ST. SEVERIN, PARIS, FRANCE, DRAWN AND MEASURED BY MR. LUCIAN F. PLYMPTON, CINCINNATI, OHIO.

SCHOOL-HOUSE, CHICAGO LAWN, ILL. MR. O. J. PIERCE, ARCHITECT, CHICAGO, ILL.

This school-house is now building. It is 38 feet by 50 feet in size. It is built of common brick, with flushed joints, and will be painted a subdued sage-color, in two shades above the water table, and dull plum-color below; belts of a reddish buff; window reveals, channels and projections, reddish brown. The roof will be painted with magnetic mineral paint, modified in color to suit, and the exterior wood-work, including the belfry, in tertiary colors—red, yellow and blue predominating. The interior finish is of white pine, finished in hard oil. Warming by the "Hawley Floor Warming" system. The tenders for the work complete amount to a little less than \$6,000; but a portion of the second story is to be left unfinished at present, as it is not required for immediate use.

LANDSCAPE AND GENRE AT THE BOSTON MUSEUM OF FINE ARTS.

LANDSCAPE has emancipated itself from prettiness and strikes a note or two here of nobleness and seriousness which are admirable. There are reminiscences of old art and affiliations are traceable in Mr. Miller's pictures, but they show a wealth of color and depth of tone which are not readily overpraised. In No. 49, there is the sentiment of Gainsborough and English painting. In No. 63, Rousseau

Diaz, Isabey, float through the mind, and the old Dutch painters. In the large picture, No. 100, one thinks of a noble composition of Salvator Rosa's in the little end rear room of the Pitti at Florence. The composition here is lacking. In No. 127, Decamps recurs. A sensitive man will show what his mind has fed upon. These works are very solid, grand masses and dense of ground, deepening into twilight gloom and intense tones and lights, burying the form and huddling all into shadow. Twilight stalks abroad. All the incommunicable poetry of the hour is felt. The works are poems. No such deep imaginative vein has been struck here that we know of. Its inspiration is from the imagination. Some men meet nature face to face, and ask for nothing more. She inspires them from the beginning. Others wrap her in their own ideality. One is steeped, the other open; one out of doors, the other in the recesses of the mind. Romance, depth of tone, colors one piece; nature's own light and frankness another. The modern feeling is more direct, and depends little upon association. It is an advance upon all previous art. It needs no subject. All is significant to it. To be out of doors suffices, and an artist will make a picture of it. They do not hunt for pictures. Hence art is freed from professional cravings and preoccupations. She is one with nature. All is picture, as it is to a Japanese, or to Emerson's Humble Bee.

The bare mountain head of Mr. Robinson, No. 75, illustrates this. It is not picture that is felt here, it is nature. She fills the canvas. The luminous sky quivers beyond the mountain top. A wide ridge crosses the scene; tosses itself, buttresses and barriers against the light; creeps and edges significantly in its outline. There is the sense of lifting and a transfiguration of mass against infinitude, such emotions and noble motive as broad belts of earth against the sky can give. The simplicity is grand. The cattle in the foreground gives the scale of distance and marks the majesty. There is sweep and impression. Here it stops. It is an intention not a fulfillment. Crome was the first one who struck this note of simple nearness of mass against the sky, and he did it with infinite breadth, tone, and luminous transparency. His things have gained by time, but they are the grandest English art has done, to our feeling.

Mr. Cole's picture, No. 62, is full of a sentiment of repose and sweetness, not carried far enough, not luminous, — a perfect preparation for a noble work. Mr. Cole has unfailing sweetness, sentiment, repose, color, and composition, if he could have luminous transparency! The two together well illustrate the simplicity, breadth and directness of modern feeling; are in a perfect direction or aim of development. The same may be said of Mr. Johnston's piece, No. 64, and the two marines, Nos. 57 and 56. We have surely gained upon previous ages when such unaffected art can be made interesting. The motive is absolutely without meretriciousness or glamor of any sort,—association, romance, poetry, any factitiousness. Nature is seen to be enough, if we can render her. We need nothing more. Mr. Johnston's things have the quality of Dutch art, a repose, a Paul Potter-like veracity. Some works sold in Bromfield Street some years ago had a remarkable note of this kind.

Mr. Wasson's luminousness and reflected lights and feeling for the glinting, the weltering of sea and sky, which marine pieces should have, give a marked value to his things. They are peaceful and quiet, as we have been taught here in Boston where composition has fairly taken root. We all see pictures through painter's eyes every day of our lives. A certain bright pervasion of transparency should be rushed through his canvas, and Mr. Cole's, to make them less painty and opaque, for they have all poetic and sweet qualities but that.

This note of prettiness, and therefore of pettiness, was all the stock in trade of American art, it seemed, for a long time. The New York Landscape School affected dainty scenes and tea-cup effects without a particle of sentiment for the grandeur of nature. They belittled nature; prettiness, sentimentality, Nature resents it. She is grand in every part, simple and pure. Prettiness is not the sentiment with which to approach her. To be out of doors is to be in the temple of the earth where everything is solemn and impressive, duly considered. The veil of familiarity may shut it from our sight, but it is there. Great painters, great poets feel it, and give it interpretation, and they do not depend upon subject.

There are two keys of feeling here very apt to point a moral: Mr. Fuller's *Quadroon*, No. 33, and Mr. Volk's portrait of Miss H., No. 65. One is all poetry and no *finesse*; the other all *chic*: vivid, startlingly real. Life rustles at every turn. We expect the lady to get up and go away, or to speak to us. She is only for a moment where she is. She would come through the frame without much ado herself in person. The life is marvellous and expressive. There is something very subtle and fascinating here—there is nothing left to do, no reserve. We are let in to every cranny and secret. The objectivity is painful, the result is harsh and sterile. It is the most picturesque thing possible for hitting the life. Picturesqueness is never a high motive. It is achieved here beyond all praise. It is its cue. On the contrary, Mr. Fuller saturates his style with sentiment, drowns it; loads the canvas with gold and poetry. Here is drowsy heat and tropical luxuriance. The summer day is given with all its shimmering, a glow as of a coal lights the peasant's figure, and her eyes and hair are a rich foil and wells of darkness to the golden reddishness around.

Without much character, the *Quadroon* is like the *Lotus Eaters*, a pure bit of sensuousness, warmth and wealth of color, which is itself an art that can half dispense with mastery. This it does not have,—poetic motive to the brim without cloying; but it misses the

strength and power which should underlie and support it, French skill and Millet's rendering. The Wyant, No. 32, underneath, is a similar burying of the form out of sight in sentiment. It is the intense twilight with the sky, be it said, far too bright for the hour, but the license may be pardoned for the depth of note it strikes. It is as poetic as the one above it with a similar surrender to pure poetry of treatment. They tread on the edge of the foible of our country if they do not fall into it, of making sentiment take the place of power and robustness of work as a basis of effect in art and literature—the fibre yet is not knit, the nature callow. We do not equal Europeans.

There is a little Cuypp-like note in Mr. Drown's small picture, No. 110, very precious, as Mr. Ruskin would say. Here is luminous transparency—a piercing beyond, a looking through; the sky is diaphanous. It is very noticeable and alone in the exhibition. The quietude, the absolute simplicity and unnoticeableness of the scene are a great charm. This is the feeling for Nature which needs no association, no introduction, no intruding element. It is its own passport—the scripture of the art. The foreground is not equal. In the other room is a pretty pendant to this unique little piece, No. 149.

Mr. Longfellow's Evening on the Nile (No. 87), paints itself. The subject let alone delights us, if the art be not equal. The famous picture in the Luxembourg, of the family descending the Tiber, is the parent of a prolific progeny.

Mr. Chase's No. 4, is a borrowed motive. Mesdag has done it with extraordinary breadth and power in a picture seen at Munich two summers ago. It is not the less interesting and spirited. The emotions of the boatmen are given by an artistic license. We feel as if we were climbing the wave. Their sensations are our own in a poetic way. It is a license; for it seems the water could not shelve out of the canvass in this way. Where is the spectator? He is nowhere, unless he is down in the hollow, where he would tumble out. We remember with huge pleasure the delight which this great toss and shelving of the sea-wave gave us in Mesdag's picture. Two fishing craft slanted up out of it, and climbed the hollow. We could not take our eyes off it. One is in the scene. Rarely has there been anything so vivid and stirring done. It is dramatic—an intense note. Shelley, Browning, put things in the same way. You are in the centre. Browning says:

"And did you once see Shelley plain?
And did he stop to speak to you,
And did you speak to him again?
How strange it seems, and new!"

Shelley:

"What! alive and so bold, O Earth?
Art thou not overbold?
And canst thou move, Napoleon being dead?"

Browning got this note from Shelley. Shelley again says:

"Thus to be lost, and thus to sink and die,
Perchance were death, indeed! Constantia, turn!

This touch of Mesdag is of a similar kind. Browning has developed the note into a literature, as seed comes out of Shakespeare.

No. 47, by Mr. Claus, is a study full of character, force and good work, modelling cleanly done, and the significance thus given is obvious: character may outshine sentiment where the former is lacking, as it is in so much American work. With character, we can spare ideality.

Lesbia (No. 40), is a thoughtful design. The accessories and background might have been carried farther. Alma Tadema, supreme in these things, is the great exemplar. Yet the motive of his works does not exhibit a subtler feeling than this. Doubled up, complex, lithe, concentrated, there is much play with the figure. It belongs to a school, but is well got together, fine in intention. *Genre* imbued with a wholesome sensibility, is a better art for it. Many a foreign school has no feeling with all its powers. Here the English come in, and we may, too. Our training is foreign, theirs domestic. They do not wander beyond their island, and are as insular as Chinese. We scour the world, have no art of our own, and are as plastic and imitative as children, and in the same period of development. The English motive is excellent, their art never rivals the Continental.

Two pictures by Sartain are instances of fine work. We do not see a deeper motive in them. The head (No. 73) is masculine in style, forceful in expression. It seems a little obvious and sensational, the apposition of so much shadow to bring out the effect. Wonderful old masters there are in this kind, which began, we think, with Caravaggio, but the only legitimate and great one is Rembrandt, who vitalized all space, and made the canvas breathe. All shadow seems alive and sentient with him. It is peering. The darkness has eyes. Untold wealth is there, and we dream of magicians' haunts and caves. The eyes of his figures light the space with their glowing depth. He is the only one who ever gave the humidity of the eye, its indwelling life. His canvases are as if all were one jewel, quivering with mystery. You feel his presence. No such magician ever lived. He is as alive this day as he was two hundred years ago. Other masters achieve the picturesque. That is the motive of this work, but it is a little cheap in motive. Such effects—for they are effects—are tricky. Mr. Sartain's other work, No. 39, is a fine piece of sober, solid tone and color, and grave expression, in harmony with the subject, these immemorial masses, breadth and repose, which meet us in such lands. There is not out-of-doors in it, but it is remarkable for tone as both are for ability.

Mr. Brown gives the American daylight. Shelley paints it:

"It is a garish, broad and peering day;
Loud, light, suspicious, full of ears and eyes;
And every little corner, nook and hole,
Is penetrated with the insolent light."

There is no tempering of it. We see things in the raw. Distant things come near. In the autumn how tender and beautiful the haze, rosy and purple. Byron might have had it in his mind. His lines rush into the memory as the long days continue when the wind never rises and the moon always shines,

"And not a breath crept through the rosy air,
And yet the forest leaves seemed stirred with prayer."

That wondrous trance, when nature seems sleeping in the arms of her lover, or looking into his eyes, the moon rises as the sun sets, with her "wide and tender light"—an epithet "wide" one may realize in consciousness watching the impression. To reproduce what artists and poets see and feel in our own consciousness is the only culture. We multiply many individualities into our own, and gain a manifold vision. How difficult with this rawness of light we suffer from to give sentiment or tone. It is next to impossible, but it is the sharpener and quickener of our lives, and the stimulus of that unromantic people we are. It will give temperament in the end, and we shall be artists better than our progenitors, the English, who hold the field of poetry as their own, where we have established yet no claim to be. Mixture of stock is well, the German mind, the Irish buoyancy, one bringing intellectual industry, the other enjoyment.

Here is a simple composition, thready pollards, two nibbling cows, and a wilderness of light beyond, with flat green spaces. Like our landscape work here lately, it seems it should be carried farther, and it is a trifle slovenly, but the achievement is fine, of luminousness or bright light, *ad infinitum*—a welter of day so profuse and pervading we draw back from it as an excess. It is true, and we should all have sunstrokes exposed to it. It is Nature's fault, Mr. Brown renders her truly, and so much the worse for Nature, with her unmitigated beams that sharpen and strip all to the bone.

Mr. Bunce's picture, No. 146, which holds a conspicuous place here, and deserves it, lacks character. It is Turneresque à l'outrance. There is richness and meltingness of all things—fusion. Everything is dissolved into space and air and weltering color. The dropping light does not know whether to seek the sky or the sea; it transfuses all. This is a motive which, if the work were held together by a thread of fact or consistency, or if it had a little *point d'appui*—a basis somewhere—would satisfy one better. Mr. Tilton's Fishing-boats off Torcello, now in this city, pitched in a different key, and classic in sentiment, has this quality, and is very lovely; impression of another kind, though hard. Mr. Bunce's picture lacks the real light it seeks to give, and is mannered or clogged with a certain heaviness, and a sky more dense than the water. With all its wealth, it should have purer translucence. It is massy, vigorous painting, but has not distinction enough to support its sentiment. Where our men are thoroughly true, and abide by Nature alone for motive, they are not far enough advanced to be masters; where they are sentimental and have poetry, they are in the same predicament, they stop there, and do not rival foreign artists. They excel them in feeling; do not equal them in power. Mr. Bunce's, Mr. Fuller's, Mr. Robinson's, Miss Oakey's, Mr. Miller's, Mr. Wyant's, Mr. Pierce's (No. 7), Mr. Cole's, are all inadequate works, in different degrees, of beautiful and high feeling. We are colonial yet to Europe; yet our one great man, Allston, was nearer to the old masters than any Englishman yet born.

La Farge was the father of flower painting here, and no such interpretation of their loveliness is elsewhere given that we know of. No positive painting of flowers ever does them justice; their grace is so evanescent, so ravishing, kindles such emotions in us that they can only be done by suggestion and a quiver of luminous breadths of color. The form should be general. It is not a sentiment of line we feel with regard to them; it is a presence. They abound in subtle curves and liquid form; but their charm is color, delicacy, frailness—too slight to be put into positive paint and made permanent. All flower painting is notoriously rigid and unsatisfactory the moment it is done, unless the yielding style is given, and they half vanish while they are seen in their own loveliness before us; this Boston has got, and got alone, as far as we know, and we believe it is owing to La Farge, who originated this exquisite art; and it is one of his notes of genius for which too high praise cannot be given. Hunt started the sensibility, La Farge gave this note of beauty and interpretation fifteen or more years ago. The pieces of Miss Carpenter (13), and Mrs. Ware (131), illustrate this. We dare not go further to speak of such fascinating subject. Like music, it devours the sensibilities. Such things are poems. The subject is too kindling and emotional, as flowers themselves are, for language to be trusted with it; it runs away with us into the realms of fantasy. Yet as we write this we call to mind—such is the perpetual revision of judgment art demands, subtle as it is—exquisite things by Mr. Charles Moore and Mr. Newman, so conscientious, so refined, so pure, delicate, faithful and rare, and sympathetic, with all that pre-Raphaelitism reaches after, and Ruskin with his matchless enforcement and suggestion preaches, that we hesitate in such a confident opinion. There is, after all, the labor and faith of the early art which, like the trustfulness of children, sits at the feet of Nature and will not alter her, whose motive is pious, not personal. Touching this was in the un-

taught times, and touching it is now, to see a few men determined to set back the clock of the world four centuries, recover the "innocence of the eye," and enter again into the sweetness and truth of faith—full epochs, and hold by conscience pure and nature unadulterated.

The impressionist art is modern, and we think a gain. The two styles, the emotional and the faithful, may interact upon each other. Men are nearer to Nature than they were. Art has grown, though genius has not. The exact rendering fulfils a yearning as the impressionist does. They are different phases of the same search after truth, the one subjective, the other devout and natural. Sensibility is in each, in the one in the conscience, in the other in the eye. Both are true and opposite sides of one shield, according as we are inclined to see it. Art is large enough to hold the two; neither exhausts the subject. Nature is still on her pedestal beyond them, forever beckoning for new revelations and fresher truth.

Miss Oakley's *Mother and Child*, (No. 20), is a very beautiful piece of sentiment and color. It has dignity and sweetness altogether, and is like an old master but for mastery. It has the feeling. Since Allston we do not have such things. It is Italian-derived, Madonna-derived. The best art rises into poetry; this does.

Other pictures deserve mention here. The collection is what one may call an earnest one. Nothing is more promising than the seriousness of work and the variety of feeling displayed. Many notes are struck, and all with refinement and high intention.

ERRATA. — In the first notice of this exhibition, on page 255, the following corrections should be made: Second column, line 38, insert "of" after "thought"; line 49, read "78" not "68"; line 59, read "contained" not "combined"; line 84, read "43" not "48". Page 257, line 8, read "1878", not "1868".

DECORATIVE DECORATIONS. — II.

PROBABLY the ideally worse way of exhibiting pictures is that adopted in our Royal Academy, and in most galleries of painting, at home and abroad. Jumbled together in close proximity to one another, arranged for the most part according to size alone, with little reference to prevalent tone, subject, harmony, or contrast, and destitute of any background or relieving interspaces, the pictures become a mere waste of colored canvas, separated by wearying masses of gilt frame. I believe the well-known Academy headache is just as much due to the intense and unbroken stimulation of red, blue, and yellow pigments, together with the dazzling effect of continuous gilding, as to the constrained position of the neck, and constant alteration of focus and muscular adjustment in the eyes, and the mental effort of passing so rapidly from one subject of attention to another. All these things not only weary our nerves, but also detract largely from our critical appreciation of the paintings. Of course a gilt frame throws up the color of the picture better than anything else could do; but then, in order to produce its full effect, it requires to be isolated in the midst of a comparatively wide field of neutral or dark-tinted background, so that the picture may be viewed by itself, as it was painted, uninfluenced in tone by the interference of other and often discordant fields of color, introducing fresh and perhaps disturbing sentiments into the mind. Accordingly, I believe that for our developed imitative art, divorced as it so largely is from decorative intent, the best mode of exhibition would be one apart from domestic adjuncts, and with each canvas in comparatively complete isolation against a studied background. As this, however, would defeat the object for which most persons buy pictures — as domestic decorations — I think the next best thing would be to subordinate the room as far as possible to the pictures, and to choose them as far as possible with an eye to their effect upon one another in juxtaposition. No doubt there are a few people who do this already; but the vast majority of picture-buyers are quite capable of hanging a *Derby Day* by Mr. Frith, close to a *Madonna* by Mr. Rossetti, and putting both against a background which makes even the first unnecessarily annoying to the eye.

If the picture is to be used as a household decoration, care should at any rate be taken that it is relatively decorative. But most people go to a gallery, see a thing that pleases them, buy it indiscriminately, and then put it somewhere where it loses in effect itself, and spoils the effect of everything else about it. It seems to me that in this way the ambition to have pictures of some sort, because they are the highest form of our developed art, has largely prevented our decoration from working into natural lines. . . .

So much for the first point, the dangers of ambition; now a few words as to the second, the neglect of the principal of relief.

Æsthetic pleasure seems to consist for the most part in the due intermixture of stimulation and rest. If there is no stimulation, there is no pleasure, but if the stimulation is too intense, sustained, and unbroken, the pleasure rapidly gives way to fatigue. In ordinary circumstances, however, we have abundant opportunities of relief in the general dull or neutral background. Hence, what we usually call pretty things are those which yield us considerable visual stimulation (for I am confining myself here to visual beauty alone) in lustre, color, form, or detail. A glance at the commonly recognized beautiful objects in nature will show us the truth of this, for they are mostly such things, as red, yellow, blue, pink, and orange flowers; ruddy fruits and berries; bright-colored butterflies, beetles, birds, and animals; golden or other metallic plumes; crystals, gems, and brilliant stones; rainbows and sunset clouds; autumn hues on the forest; blue or purple seas; green fields, red crags, white chalk cliffs, dazzling skies, and so forth. On the other hand, we do not think of brown earth, dingy roads, overcast and gloomy skies, desert

sands, or dull seas as *in themselves* pretty, though they may become so by some effect of contrast or sentiment. In fact, stimulation of color, lustre, brilliancy, and light-and-shade form the positive element of visual æsthetic feeling; whereas, relief, or rest, gained by the intermediation of duller or neutral backgrounds, forms only its negative or relative element.

Accordingly, we usually call stimulating objects pretty, and that is the common sense of the word in the mouths of all but a select artistic few. When average people want to buy anything, they naturally buy a "pretty" thing, and they buy everything "pretty" alike. They know the end they want to produce, but they mistake the means necessary to produce it. So they get a pretty white paper, with bright bunches of red and blue flowers; and a pretty piano with a piece of crimson silk facing let in behind its fretwork front; and a pretty carpet with green and orange spots; and a set of pretty chairs and couches, with light-blue satin coverings. They get still more color in their curtains and wool-work cushions, while they lavish a sea of gilding on their mirrors and cornices, besides running a little gold over the mouldings of the door and round the baseboard of the room. Then they stick in a lot of chandeliers with cut-glass prisms and brilliants, a pair or so of glass and porcelain vases, an ormolu clock, and a few water-colors or family portraits in heavy gilt frames, with knobs and curls to bring out the gilding into full prominence. We can hardly wonder at them when we look at what greater authorities have done — at the jumbled mass of internal decoration in Exeter Cathedral, or at the glassy-looking, slippery, oily, over-polished, and glistening interior of the Albert Chapel at Windsor.

Now, the error of all this consists in its neglect of the principle of relief. In order to produce an æsthetic effect you must have, not only a few pretty things, but also, if I may be allowed the expression, a great many ugly or neutral things. You must not make your bouquet consist entirely of tuberose and gladiolus; you must intersperse a little green foliage as well. You must not paint your picture all crimson and purple; you must have a bit of brown hillside and cloudy sky. The great secret of internal decoration consists in making the background into a background, and allowing your pretty things to come out against it by contrast. That is why everybody, or almost everybody, prefers (when once they have seen it) a neutral or retiring wall-paper to a white and gold pattern interspersed with casual bunches of red and green. You don't want your paper to be pretty in the sense of stimulating; you want it to be restful, delicate, relieving. If you can make it rich in diapered fretwork as well, so much the better; but its first object must be to retire, not to obtrude itself on the eye. Then, having secured such a general background, your next object must be to choose such decorations as will show well against it. In short, while your relief should be relieving, your decorations should be decorative. It is not enough that they should be pretty separately, or when closely examined; they should be pretty then and there, as they stand, in conjunction with all their surroundings. It is the neglect of this condition which makes most of our rooms into a bedlam of conflicting objects; it is attention to it which alone can make them into harmonious and intelligible wholes.

As a rule, a great deal too much labor is expended upon would-be ornamental products, and with very little artistic effect. Take, as a supreme and awful example, the old-fashioned Berlin wool-work. Look at all the time wasted in depicting and grounding those impossible bunches of patchwork roses, those ladies with square red blocks of woollen mosaic to represent their cheeks, those lap-dogs with lustreless eyes and rectangularly waving tails. Yet, incredible as it seems, human beings used to buy pieces of this work with the pattern already finished, and spend days in mechanically filling-in the black background. They paid work-girls for doing the only interesting part of the design, such as it was, to save themselves even the faint intellectual effort of counting the holes, and then contentedly reduced their individuality to the level of a steam-power loom, to cover the remainder of the canvas with uniform lines of black stitches. Happily, crewel-work has now saved one-half the British race from this depth of artistic degradation, and though they still buy their patterns ready traced, instead of honestly designing them for themselves, they do manage now to turn out something pretty in the end, and to make the result not wholly and ridiculously inadequate to the time spent over it. I have lately seen a beautiful brown-holland dado, one of the most effective bits of decoration that I ever saw for people of moderate means. It consisted of a plain wide strip of the simple material, unworked below, with a border about eighteen inches wide on top, worked in crewels with original designs of birds and water-plants, drawn in Japanese fashion, without reference to the artificial limits of the material. This piece of work was very rapidly wrought in outline merely, by a few deft-fingered girls, and yet it was fifty times more effective than a dozen antimacassars or table covers of the ordinary South Kensington type, which would have taken three times as long to make, and would not have had any of the spontaneity or originality of this pretty and clever dado.

Half our decorative work fails in just this same particular. that it lavishes labor without thinking of general effect. Vases are adorned with all kinds of quasi-ornamental knobs and excrescences, which take a great deal of time to make, and yet only succeed in spoiling the outline of what might otherwise have been a pretty form. Pictures are laboriously painted on porcelain or glass, which would really look far better in uniform tints, or with simple parti-colored glazes.

Legs of chairs and tables are turned into alternate bulbs and contractions, when they would look much more solid and workmanlike with undecorated tapering or fluted stems. Chairs and sofas are contorted and agonized into the strangest wriggles, like dying serpents, all for the express purpose, apparently, of preventing their shape from being readily recognized by the eye in any position whatsoever. Mirrors are surmounted by curls and arabesques in gilt plaster of Paris, which generally mar the good effect of a simple square or canted rectangular frame. And all these curious uglifications—to borrow an expressive word from *Alice in Wonderland*—have been positively intended to beautify the objects upon which they are imposed. I have stood in a pottery or glass factory and seen a workman take a natural and pretty vase in its plastic condition, and spoil it before my very eyes by crimping the lip, guaffering the neck, and adding a pair of bastard rococo handles to the two sides.

It will be said, no doubt, that most people like these things; that the taste for simple decorative objects, for relief, and for quiet arrangement, is confined to a very small number of people. I can hardly think so ill myself of the average taste. No doubt, there are some people whose naturally strong and hearty nerves will enable them to stand so much stimulation as one gets in the ordinary blue and gold drawing-room, without fatigue. But the vast majority of English people are really and unaffectedly charmed when they see a room prettily furnished, with due regard both to stimulation and relief. They allow at once that the effect is pleasant, and they are anxious to imitate it so far as they can. In most cases, the fact that their houses have been already furnished and decorated for them on the gilt mirror and blue satin principle, prevents them from adopting offhand the fashion they admire; but one often hears them say, "If ever I set up house afresh, I shall get all my things in this new style." Then again, there are others who like the old-fashioned glitter for association's sake, and find quiet papers and carpets "gloomy"; but these people often come round after a while, and learn to admire what at first they disliked. Only the other day, an old lady was looking with me into the windows of a good upholsterer's, and praising the pretty textile fabrics and the beautiful pottery displayed in tasteful black cabinets. "It takes some time," she said, "to acquire a taste for things of this sort; but when one has acquired it, they are so much more satisfying than the gilt absurdities we used to put into our rooms a few years ago." This is the feeling of thousands and thousands. They feel repelled at first by what they think the dullness and dinginess of restful backgrounds for decoration; but when they have learned how to arrange them, and how to bring in those bits of color and ornament for which the background is only a relief, they find the whole result a hundred times more satisfying than the old chaos of glitter and jingle. The astounding revolution in taste within the last ten years sufficiently shows that the world at large is delighted to be taught decorative principles when any one who understands them is willing to undertake the task.

G. A., in Cornhill.

SKYLIGHTS.

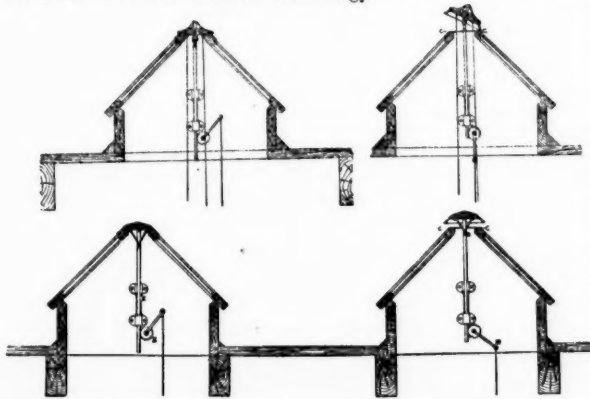
Nov. 30, 1880.

TO THE EDITOR OF THE AMERICAN ARCHITECT:

Dear Sir,—My attention has been called to the note of General M. C. Meigs, upon the need of openings in the roofs of large one-story buildings for the escape of fire and smoke.

All one-story factories are, of necessity, lighted mainly from above by monitors or lanterns upon the roof. These are furnished with double sashes with a view to warmth, but even more to prevent the condensation of moisture on the inside, and the drip which ensues when the frost melts.

Another form of skylight has been devised with a view to both light and ventilation. As yet, only one of these skylights has been constructed; this one may be found on the roof of the forge-shop of the Massachusetts Institute of Technology.



VENTILATING SKYLIGHT TO BE USED IN PLACE OF MONITORS ON FLAT ROOFS.

[Example I: Four Foot Bays. AA-AA, frame of plank set upon the rafters and spiked to the end of the roof plank.

BB-BB, thick sash-frame, two panes of glass, one inch air-space. Single

glass should not be used on account of the condensation of moisture on the inner surface.

CC, strips of woollen felt saturated with paraffine wax upon which the cap B will rest when shut, to make weather-tight joint.

DD, ventilator cap of wood and metal, to be raised and lowered by the mechanism EE-EE.

It is suggested that the best covering for the frame AA, will be of cotton duck painted, carried over the upper edge of the frame under the sash to the inside and there nailed, and carried under the roofing-felt or tin that may be used on the roof, to a sufficient distance. This form is suggested in place of the monitor or lantern customarily used on the roofs of one-story mills, or in place of a common skylight. If it is used as a skylight upon buildings that may be exposed to fire in the neighborhood, a sheet of fine wire netting should be placed between the glasses in the sash. This form of sky-light and mode of ventilation were devised at the Massachusetts Institute of Technology.

A strip of felt or flannel, filled with paraffine wax and laid between the sash and the frame AA would make an absolutely weather-tight joint.

Our experiment in bedding heavy rolled glass in felt prepared with paraffine wax in place of putty appears to be entirely successful, and makes the glass much less liable to crack under the expansion of heat.

Example II: Eight Foot Bays. AA-AA, frame of plank to be spiked to roof plank from below and joint leaded.

DD, cap on hinge with cords attached, so as to be tipped according to the direction of the wind.]

If the inner plate of glass in this skylight were ground or clouded, both glare and heat would be avoided, and the advantage of direct light attained.

Upon the same roof may be found some examples of heavy glass set in woollen felt saturated with paraffine wax; felt thus prepared is practically indestructible, and water-proof. The heavy plate lying free in a somewhat elastic bed may expand and contract by its own law, without danger of being cracked by the rigidity of the frame.

In this connection permit me, however, to call attention once more, to a practice which endangers the lives of firemen, and which is utterly without justification, viz.: the use of heavy rolled-glass, sometimes almost half an inch thick, in roofs and skylights. Whenever one of these lights is exposed to the heat of a fire it breaks into pieces from one to ten inches square, the larger ones heavy enough to kill a man, and the smaller ones exceedingly dangerous.

The alternative which we advise on factories is, a skylight fitted with single sash, each sash containing two plates of common glass $\frac{1}{2}$ to $\frac{3}{4}$ inch apart, (one of which may be colored or clouded), and a wire mesh between, fine enough to exclude sparks or burning fragments, but not fine enough to stop smoke after the glass has been broken by heat within.

The breaking of this skylight would expose firemen to no greater danger than any common glass.

Over properly constructed brick elevator-shafts such skylights are especially desirable.

E. A.

LIGHTNING-RODS AND UNCONNECTED IRON-WORK.

Is the danger from lightning likely to be increased by a metallic trellis arranged in the following manner?

The outer edge is made of gas-piping, galvanized, bent into the shape of an inverted letter U, the two ends passing into pieces of stone just below the surface of the ground, and the curved part reaching nearly to the (tin) roof of the house. The sides are six feet apart, and the space between is filled with a coarse net-work of galvanized wire. The trellis is connected with the wall of the house by eight rods of galvanized-iron, each twelve inches long, passed at one end through the pipe and secured by a nut, and fastened at the other end to the clapboards with two screws. A lightning-rod is carried up the wall at a distance of twelve inches from one side of the trellis, with which it is not connected in any way.

The house, of two stories and a-half, stands high, and is surrounded by other houses at distances varying from one hundred to two hundred feet. Several tall trees grow near it, and telephone wires cross the garden.

It has been proposed to have two more trellises, near other walls of the house, and these would be similarly situated as regards lightning-rods, perhaps nearer to them.

If the present arrangement is dangerous, is there any way of securing safety, and still having these trellises, which are more convenient than wooden ones?

[The danger from lightning is certainly increased by insulated metallic constructions within or near the house, which may serve, so to speak, as stepping-stones for a discharge which will tear its way through intermediate non-conducting substances. If, however, such structures can be connected with other portions of metal, and with the ground, this danger is averted, and the building is rather protected by them than the reverse. In this case it would be advisable to make metallic connection, by strips of copper, if convenient, between the tin roof and the trellis, and between each trellis and the neighboring lightning-rod. If these are properly put up and have good earth connection little danger need be feared from the additional masses of metal. Gas and water pipes, it must be remembered, should be connected directly with the lightning-rods. Their earth connection, by means of the street mains, is often so much superior to that of the rods that the discharge will leave the latter and break its way through intervening obstacles to the pipes, unless a way is provided by which it can pass quietly. It is safest to provide several connections, lest the failure of one should cause the lightning to seek another passage for itself, and if some are near the top of the house, as will generally be the case, others should be provided near the ground.—EDS. AMERICAN ARCHITECT.]

FURRING.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Sir.—All who are acquainted with the methods of building construction on both sides of the Atlantic will in the course of time see

that many things done in America, are left undone in England, or different ways of getting at the same result in both countries are founded, not so much on climatic differences, but are the result of ancient habit and custom. Your remarks on the subject of fire-proof construction recall the fact, for instance, that the brick walls of most buildings in England have no furring on them; the outer may in some cases be strapped, but where there are brick partitions, the plastering is placed directly on the brickwork. I have been told that the furring used in this country is to keep out the damp; but in reality there is more dampness in England, and I am sure, the bricks made here are no more porous than the English ones.

The amount of timber used inside a first class dwelling-house in this city is something enormous, and I think might very well be reduced. For instance, I fail to see the necessity for placing studding two inches by three inches scantling round a chimney-breast, even though there is an inch space between it and the rough coat of plastering on the brickwork. Far less chance of fire and much more space would be economized in the room if a thick coating of plaster were placed directly on the brickwork. Again in England, it is common enough to see in ordinary work partitions built of brickwork, half a brick thick ($4\frac{1}{2}$ inch), and plastered on the brick—a much more fire-proof partition than one built of timber, laths and plaster. If there are technical objections to such methods in construction as applied to building here, I for one, and perhaps some others of your readers might like to have these matters discussed.

Yours Truly,

B.

NOTES AND CLIPPINGS.

According to custom, the next issue will be delayed a day or two, so that the index for the present volume may be sent out with it.

GUN COTTON.—The Royal Engineers have tried the effect of gun-cotton in bringing down two old chimneys at the Dockyard Extension Works, Chatham, England. The first was demolished by placing a necklace of gun-cotton inside the chimney, the total charge consisting of about four and a half pounds. The second was destroyed by placing six charges of the explosive in the centre of the base of the chimney, the total charge weighing twenty-eight ounces. The experiment was very successful. At the instant the electric spark ignited the gun-cotton the chimneys became wrecks.

THE MOZZI PALACE.—An exchange states that the Mozzi Palace, opposite the bridge of Le Grazie, at Florence, one of the oldest and most historically important edifices of the city, will shortly be sold at auction. The Mozzi family built it in the year 1200, and for nearly seven centuries gathered there untold treasures of art and history, while exercising the most splendid hospitality. They were wealthy and powerful merchants, and for centuries the bankers of Holy See. Now, they are one of the poorest families in Florence, and are compelled to part with their ancestral palace.

MINERAL WOOL PACKING.—In many cases steam-pipes that were wrapped with mineral wool (slag wool) have become deeply rusted. It was at first suspected that the gypsum was the cause of the corrosion of the iron, but a careful analysis has shown that there were no sulphur salts, and it is now supposed that the rusting was due to the hygroscopic character of the wool. The following plan has been contrived for remedying the evil. Two-parted cast-iron mufflers are screwed upon the ends and in the middle of each tube, which serve as receptacles for wooden laths. The space between these and the tubes is packed tightly with the wool, about 5 centimetres (1.97 inch) thick, and the whole is wrapped at various places with iron wire, so that the envelope is bound fast to the tube. The laths are first soaked in tar, and the wrapping is also varnished with tar and then surrounded with a shell of sheet iron, which is also wound at different places with iron wire. The ends of the shell are placed in the mufflers, and those are also coated with tar.—*Dingler's Journal.*

THE NEW YORK STATE SURVEY.—The field work of the State Survey for this season has just been brought to a close by severe storms, and the assistant engineers have returned to the office in this city, bringing with them many hundreds of observations for determining the geographical positions and elevations of hitherto unlocated cities, villages, and prominent points in the State. The most striking result of this year's work is the completion of the first accurate measurement across the State. Strange as it may seem, the distance from the eastern to the western boundary of New York has never been precisely measured until now, and the best maps represent the width of the State quite different from its true dimensions. The result of the State Survey measurement can hardly be announced for two months, owing to the labor of computing the observations. Besides this valuable contribution to geographical knowledge, the division engaged on the Mohawk triangulation has determined the geographical positions of some twenty-six cities, villages, and settlements between Oneida and Montgomery Counties. Although the work is by no means complete, it has gone far enough to prove that the people do not know, with even approximate correctness, the area of a single one of the important counties lying along the Erie Canal and crossed by the triangulation of the State Survey. On the Hudson River, and on Staten Island, a system of enduring reference monuments has been placed, by which the position of the "bulkhead-line" may be exactly fixed and always found. A commission of United States engineers determine by law the limits beyond which no wharves or obstructions can be carried into the channel of the Hudson River or the waters around Staten Island. The proper determination and preservation of this bulkhead-line are of vital importance to navigation. Two surveying parties have been engaged on this duty since last May.—*The Albany Argus.*

A REYNOLD'S PORTRAIT IN COURT.—The Philadelphia *Telegraph* says an old family full-length portrait, painted by the celebrated artist, Sir Joshua Reynolds, in London, in 1730, was the subject of litigation which came up for argument lately in Court of Common Pleas No. 2, before Judges Hare, Mitchell, and Fell. The portrait was that of Vincent Lookerman, who died in Dover, Delaware, in the year 1785, in the old family mansion, in the parlor of which was hung the painting which was the subject of the present litigation. The portrait went to his son Nicholas, who died in the old mansion in the year 1850, and by his will the property, including the picture, went to the five children of his sister, Elizabeth Bradford, wife of Thomas Bradford. The administrator of the estate of Nicholas Lookerman was the Rev. Thomas B. Bradford, who, by arrangement, was permitted to reside in the old family mansion at Dover, and manage the property. The wife of Thomas B. Bradford is Mrs. Lucinda H. Bradford, and on the death of her husband she retained possession of the portrait until about four years ago, when William Bradford, the brother of her husband, she says, got the old portrait from her for the purpose of having it cleaned. He kept it for about two years, and upon her requesting a return of it he refused to deliver it up. Mrs. Bradford thereupon began suit in Court of Common Pleas No. 2, to recover the picture, and the case went before D. Webster Dougherty, Esq., as Master, who reported that the portrait was the property of Mrs. Bradford, and that William Bradford, the defendant, should deliver it unto her. It will be observed that the husband of the plaintiff, the Rev. Thomas B. Bradford, was administrator of Nicholas Lookerman, and by a curious law of the state of Delaware, it appears that an administrator can take the personal property of the deceased at the assessed valuation, and in that event the administrator becomes absolutely the owner of it. The portrait, it was stated, was put down in the inventory assessed at the value of \$10. The Rev. Mr. Bradford, the administrator, availed himself of this law, and thus became the owner of this picture, which his widow now claims, and it was upon the fact of the existence of such a law that the Master reported in favor of Mrs. Bradford's title to the picture. The defendant, William Bradford, denied that he had obtained the picture from Mrs. Bradford by a trick. He alleged that she was not the owner of it, and he never promised to return it to her, and on the trial of the case before the Master he produced a large number of documents and certified copies of records to show that the Rev. Thomas B. Bradford, the husband of the plaintiff, merely held the portrait in trust for the benefit of his brother, Benjamin R. Bradford, and his sister, Mrs. Elizabeth L. Dwight. The case to-day before the Court was on exceptions to the Master's report, and it was argued that the Master's finding was incorrect, for the alleged law of Delaware giving an administrator a right to keep the personal property at the assessed valuation was contrary to common sense and universal law. Held under advisement.

FURNITURE.—We are told that before the Middle Ages there was no such thing as furniture. There was a bed and there was a chair—more like a throne—and there was a table almost like a platform; but there was very little else. The ancient sculptures and the contents of museums of antiquities are appealed to in support of this view. Even the Middle Ages supplied few additional items to the furniture of a nobleman's room. Art had chosen another direction for its civilizing influences, and carvings in ivory, enamel, jewelry, tazzas inlaid with gems, cameos, chalices and illuminated missals usurped the taste of artists and the patronage of amateurs. Even the carved woodwork of Belgium and Switzerland seemed to be limited to church decoration and pulpit ornaments, but it was the carvings of pulpits which supplied the transition between sculpture and furniture. At first oak, from its hardness, was the principal material used, and soon afterward ash and walnut came into vogue. The introduction of light fancy woods, such as satin, maple, tulip, belongs to a much later date. France was, of course, the originator of art furniture, and the Gobelins tapestry which Louis XIV. patronized, and which came from the institution which he founded, was inconsistent with dark woods or delicate carvings. The style known still as "Louis Quinze" also demanded profuse gilding and florid decoration for the framework of the delicate needlework which adorned the chairs of the period. It was not till the end of the seventeenth and the beginning of the eighteenth centuries that polished woods and severe outlines took the place of the flamboyant carving and gilding which preceded them. It was at this period that mahogany owed to an accident its introduction, and it made its entry into the salons of Europe, not through Parisian influence, but through the London market. In the year 1720 a Dr. Gibson received from a brother of his, the captain of a trading vessel, several barks of a new kind of timber just imported from the Indies. The doctor who was furnishing a house which he had taken in King street, thought to utilize the wood for the doors and windows of his rooms. But the builders and carpenters refused to have anything to do with it. The grain was so close and the surface so hard that they could not work it with their tools. Dr. Gibson took specimens of the wood to Wollaston—at that time an eminent cabinet-maker. A whole suit of furniture was planned and executed, and at once a new fashion set in. This was the origin of mahogany furniture, which in England at least, has survived all the changes of a fluctuating fashion for a period of over a century and a half.—*London Globe.*

NEWPORT SEWERAGE.—At the meeting of the city government, December 7, the plan of sewerage as prepared by Mr. E. S. Chesebrough, of Chicago, was recommended by the committee having it in charge. The committee also recommended that the outfall be commenced as soon as possible. No action, however, was taken on the matter by the Council.

THE WORK AT HELL GATE.—The Providence *Journal* says that the great blast under Hell Gate will be made in 1883. Four acres of rock are honeycombed. Extending across the river are 22 headings, and at right angles to these 13 cross headings 7 feet high, 10 feet wide and 20 feet apart. During the past year 54,000 cubic yards of rock were removed, 43,000 blasts were made and 58,000 drills were sharpened. The work advances 600 feet per month, and two hundred blasts are made nightly.

TWO MONTHS FREE!

New Subscriptions for the *American Architect and Building News* for the year 1881, received on or before December 25, 1880, accompanied by the amount of the advance price (\$6.00), will entitle the subscriber to receive, free of charge, the eight issues for Nov. and Dec., 1880.

Prospectus for 1881.

DURING the past year the *American Architect and Building News* has adhered closely to the course which it has followed from the beginning, and its progress has been in a high degree satisfactory. It will be the endeavor of the publishers during the ensuing year to maintain the present character and quality of the journal, while they seek to attain for it an ever higher degree of excellence. To this end those features of the journal which in the past have been found acceptable to its subscribers will be continued in the future.

So far as depends on the editors, the present style and character of the published contributions will be maintained, and they will sedulously seek what may prove of most interest and permanent value to their readers. Even at this early stage of preparation for the coming year, they have made the following arrangements:

Dr. Hiram A. Cutting, State Geologist of Vermont, has agreed to furnish a series of original papers on the Character and Properties of the Building Stones in use in this country, which will give, in comprehensive form, certain technical information which can be found only in books not usually read by architects, together with much original matter, the result of long personal observation, experiment, and research.

Mr. Howard Ellis, a lawyer of repute, and editor-in-chief of the *Reporter*, has consented to report for the *American Architect and Building News* all important Legal Cases, both domestic and foreign, which affect the interests of architects and builders, whether they may arise between themselves, with owners or with the general public. These papers will be treated with legal accuracy and yet in that more intelligible style which is called "popular." It is thought that these papers will go far to supply a want that has long been felt by the profession.

The important matter of Decoration will be treated by Mr. Charles A. Cummings, F. A. I. A., in a series of fully illustrated papers, which will take up each historical style separately, showing its characteristics and its connection with preceding and succeeding styles.

It is probable, too, that the competitions in Interior Decoration, with money prizes, will be continued during the year. To a certain degree this will be influenced by the number and character of the designs submitted in the first competition, which closes December 11, 1880, so that the existence of this feature is largely dependent on the good-will and interest of the profession itself.

An exhaustive series of papers, amply illustrated, on the methods and processes of construction employed in this country, with explanations of the difficulties that arise in the daily practice of the American architect, will be contributed by Mr. Theodore M. Clark, A. A. I. A.

It is the intention of the editors to devote more attention to the selection of the illustrations for the journal, a task which the rapid and marked improvement in draughtsmanship in this country during the past five years will make more gracious than it has been hitherto.

The quadruple Detail Sheets will continue to be published with the first issue for each month, and an endeavor will be made to give to these monthly numbers the greatest practical value, so that students, draughtsmen and builders, who, for different reasons, are unwilling to subscribe for the complete yearly issue, may, by subscribing for the twelve monthly numbers, at \$1.75, benefit by the publication in a way that would be otherwise impossible. So far as possible these twelve numbers will be complete in themselves, and in them alone the papers by Mr. Clark will be published.

A new interest will be lent to the illustrations by the sketches of old Scottish Domestic and Ecclesiastical work, which are to be contributed by Mr. John W. Small, F. S. A. Scot.

Another feature that will prove of much interest to subscribers without the limits of the profession as well as within them, will be the Heliotype prints from nature, similar to the illustration of the Boston Museum of Fine Arts, published in the *American Architect and Building News* for October 30, 1880. These prints will be published with such frequency as circumstances may suggest, and will by themselves alone be worth the subscription price.

To the contributors who have so ably seconded their endeavors in the past, the editors would make their grateful acknowledgments, and at the same time would assure them that their assistance in the future will be equally appreciated.

PUBLISHERS' ANNOUNCEMENT.

According to the established custom, it will be understood that present subscribers who do not order a discontinuance, at the expiration of their subscription, desire to subscribe for the *American Architect and Building News* during 1881; it will therefore be sent to those subscribers who are now receiving it, and the publishers hope to be favored with a prompt remittance of the subscription price for the ensuing year.

Due notice is also given, that the publishers will enforce with more stringency than heretofore the rule which enables subscribers *who pay in advance*, to benefit by a discount on the subscription price (\$7.50).

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.]

- 235,063. PIPE.—Jefferson B. Baker, New Almaden, Cal.
 235,070. PROCESS OF TREATING WOOD, ETC.—Charles B. Carter, Lawrence, Mass.
 235,076. TOOL FOR LUMBERMEN.—John F. Finkbeiner, Clearfield, Penn.
 235,083. WRENCH.—Jos. P. Haigh, Hamilton, Ohio.
 235,095. MACHINE FOR MAKING SHINGLES.—Marshall McComb, Pittsburgh, Penn.
 235,097. SLIDING DOOR.—David K. Miller, Knoxville, (Pittsburg P. O.) Penn.
 235,109. STEAM WATER ELEVATOR.—Ezra W. Vandusen, Newport, Ky.
 235,111. LEAVE-TROUGH SUPPORT.—William R. Wilcox.
 235,113. IRON GATE.—James Young, Kenton, Ohio.
 235,121. HOISTING SYSTEM.—Zulma Blanchet, Epinae, France.
 235,122. LEAD AND CRAYON HOLDER.—Claes W. Boma, New York, N. Y.
 235,126. SHINGLING BRACKET.—Samuel S. Calhoun and Hiram L. Miller, Millersburg, Ohio.
 235,134. WATER CLOSET BASIN.—John Demarest, New York, N. Y.
 235,137. LOCKING LATCH.—Gilbert J. Dickson, Albany, N. Y.
 235,149. LEAD AND CRAYON HOLDER.—Joseph Hoffman, New York, N. Y.
 235,150. The Same.
 235,151. WINDOW BLIND.—Pierre Janssen, New York, N. Y.
 235,165. STEP-LADDER.—Matthew C. McCollum, Esq., Penn.
 235,169. CURTAIN CORD TIGHTENER.—John Rancavau, Cincinnati, Ohio.
 235,177. VISE-JAWS.—Benj. F. Stephens, Brooklyn, N. Y.
 235,178. MANUFACTURE OF BUILDING OR WALL PAPER.—Edward Thompson, New Orleans, La.
 235,207. PAINT CANS.—John G. Carter, Boston, Mass.
 235,216. TILE AND BRICK KILN.—Eber Davenport, Waynesville, Ill.
 235,217. VENTILATING APPARATUS.—James H. Doland, Malden, Mass.
 235,225. SPACING AND DIVIDING INSTRUMENT.—Albert K. Fulton, Baltimore, Md.
 235,233. SHINGLE SAWING MACHINE.—Oley C. Hanson, Eureka, Cal.
 235,234. AUGER.—Richard E. Hardisty, Cincinnati, Ohio.
 235,244. MALLET.—Solon G. Howe, Detroit, Mich.
 235,252. FIRE-ESCAPE.—Edward Komin and Heinrich Egberts, Bremen, Germany.
 235,255. FIRE-ESCAPE LADDER.—John F. H. King, Port Richmond, N. Y.
 235,263. STOVE PIPE DAMPER.—William G. Lindsay, Winneconne, Wis.
 235,275. STEAM GENERATOR AND FURNACE.—Mauricio M. Monsanto, New York, N. Y.
 235,283. CHUCK.—Charles J. Olin, Mason, Mich.
 235,303. SLIDE WALL VENTILATOR.—Willard H. Smith, Brooklyn, N. Y.
 235,306. REFLECTOR.—Willard H. Smith, Brooklyn, N. Y.
 235,307. COMBINATION PENCIL HOLDER.—Charles Snelder, New York, N. Y.
 235,319. WELL-BORING APPARATUS.—Edgar P. Watrous, Moravia, N. Y.
 235,326. MANUFACTURE OF HAMMERS AND HATCHETS.—Jonathan Yerkes, Philadelphia, Penn.

SUMMARY OF THE WEEK.

Baltimore.

BUILDING PERMITS.—Six building permits have been issued since the last report, none of which are of sufficient importance to be mentioned.

Mr. Frank E. Davis, architect, is preparing drawings for a new chapel building for the Lutheran Church at Frederick City, Md., 45' x 110' 10", to be of brick, with stone trimmings, two stories high; cost, \$10,000.

HOUSES.—Mr. Wm. F. Weber is preparing drawings for a row of dwellings (20) on Boundary Ave., east of Park Ave., as follows:—

Wilson & Hunting, 1 three-sty dwell., stone front, 20' x 67'; cost, \$6,000. Also 4 three-sty dwell., brick front, with terra-cotta trimmings, 18' 8" x 67' each; cost, \$18,400.

John Hufner, 1 three-sty dwell., stone front, 18' 8" x 67'; cost, \$6,000. Also 4 three-sty dwell., brick fronts, (18' 8" x 67' each) marble trimmings; cost \$18,400.

Robert E. Diffenderfer, 2 three-sty dwell., stone fronts, 18' 8" x 67' each; cost, \$12,000. Also 4 three-sty dwell., brick fronts, with terra-cotta trimmings, 18' 8" x 67' each; cost, \$18,400; and 4 with marble trimmings, 18' 8" x 67' each, cost \$18,400.

STABLE.—Messrs. J. A. & W. T. Wilson, architects, have just completed plans of a brick stable and carriage-house for Mr. L. L. Conrad, No. 74 West Madison St. The interior is fitted up entirely in hard pine, finished in its natural color. The arrangements for ventilation are very complete. Smith Brothers, builders.

Boston.

BUILDING PERMITS.—Brick.—No. 269 Commonwealth Ave., for Mr. Chas. Boyden, 1 dwell., 26' x 70', three stories and mansard.

Wood.—Cambridge St., near Webster Ave., for Jackson T. Davis, 1 stable, 24' x 35', two stories; Jacob W. Berry, builder.

Prattle Wharf, near Taylor St., for Combes & Ramsdell, 1 storage of produce, 24' x 60'; S. D. Ramsdell, builder.

Wilmon St., near Elm St., for William A. Couthony, 1 stable, 21' x 25'; Samuel T. Waters, builder.

412 Albany St., for Blacker & Shepard, 1 dwell., 24' x 24', two stories; John String, builder.

410 Albany St., for Blacker & Shepard, 1 stable, 35' x 38', two stories; John String, builder.

HOUSE.—A brick and free-stone residence is being built for Mr. J. S. Bigelow, on Commonwealth Ave., between Fairfield and Gloucester, to be 28' front and 68' deep, 4 stories above basement; Messrs. G. R. & R. G. Shaw, architects; cost, \$25,000.

Brooklyn.

BUILDING PERMITS.—Leonard St., w.s. 100' n Calver St., 1 three-sty frame tenement, 22' x 40'; cost, \$3,000; owner, John Calver, Meserole Ave.; architect, Fred'k Weber; builders, Walling & Fenwick.

Montague St., s.s. 124' w Hicks St., 2 one-sty brick stores, one 6' x 50', and one 30' x 50'; cost, \$2,800; owner, Golden L. Ford; builders, C. King and M. E. Ruch.

Hart St., s.s. 80' w Stuyvesant Ave., 1 two-and-one-half sty frame dwell., 20' x 32'; owner, Frank Gray, Bushwick Ave.; architect and carpenter, Wm. H. Doughty; mason, John Lambert.

Bremen St., e.s. 25' n Forrest St., 2 two-sty frame dwell., 25' x 40', tin roof; cost, \$2,000 each; owner, etc., George Loffler, 138 Floyd St.

Pacific St., n.s. 75' w Brooklyn Ave., 3 three-sty brown stone dwell., 16' 8" x 44'; cost, \$5,000 each; owner, etc., James A. Thompson, 310 Quincy St.

Clason Ave., cor. Putnam Ave., 6 two-and-half brown stone dwell., 16' x 40'; cost, \$4,500 each; owner, etc., James A. Thompson, 310 Quincy St.

Columbia Heights, e.s. 50' n Pineapple St., 3 four-sty brick dwell., 16' and 16' 6" x 49'; cost, about \$25,000; owner, Chas. E. Bigelow, 69 William St.; architects, Stillman & Farnsworth; builders, Hart & Boyd.

Greene Ave., 200' e Throop Ave., 1 two-sty brown stone dwell., 20' x 35'; cost, \$5,000; owner, A. W. Pollard; builder, M. C. Baker.

Oakland St., w.s. 100' n Nassau Ave., 3 two-sty frame dwell., 16' 8" x 40, gravel roof; cost, \$2,500 each; owner, John Miller, 601 Leonard St.; builders, Israel Reed and James Doig.

ALTERATIONS.—Water St., s.s. about 100' w Washington St., one-sty brick extension, 40' and 22' x 50'; cost, \$2,500; owners, Campbell & Thayer, 69 Maiden Lane, New York; builder, Jno. Guilfoyle.

Keap St., Nos. 39 and 41, two-sty brick extension, 30' x 84'; cost, \$2,500; owner, L. Simpson; architect, C. C. Buck; builder, G. F. Simpson.

Chicago.

BUILDING PERMITS.—F. Falch, two-sty brick office and ice-house, 40' x 60', North Union St.; cost, \$8,000.

Same, two-sty brick barn, 40' x 70', North Union St.; cost, \$5,000.

A. Lindgren, two-sty brick barn, 32' x 46' 6", Johnson St., near Fifteenth; cost, \$1,000.

H. C. Goodrich, three-sty brick factory, 50' x 100', 68 to 72 Smith St.; cost, \$10,000.

Jerome Beecher, 3 three-sty brick and stone dwell., 121' x 72', Indiana Ave., near Thirty-Third St.; cost, \$30,000.

P. Enders, two-sty brick dwell., 20' x 38', 271 Mohawk St.; cost, \$2,000.

J. Zangerle, three-sty brick warehouse, 40' x 100', Weed and Dayton Sts; cost, \$5,500.

Cleveland.

HOUSES.—Dwelling house for R. Arnold, Wilson Ave.; cost, \$5,000.

House for V. Gutzwiller, East Prospect St.; cost, \$2,500.

Remodelling W. P. Southworth's residence on Prospect St.; cost, \$10,000.

Two frame cottages for Jacob J. Mayer, on Schiele's Court.

Barn for W. P. Southworth; cost, \$2,000; Blackburn & Charlotte, architects.

Louisville, Ky.

TANNERY.—Since last report, in addition to numerous frame buildings and alterations, a permit was granted Messrs. McCarthy & Bayless, for the erection of a brick tannery, to cost about \$12,000; H. Wolters, architect.

AGRICULTURAL WORKS.—Mr. C. J. Clark, architect, has prepared plans for a large addition to the agricultural works of Messrs. Brennan & Co. The proposed improvements will probably lay over until early spring.

PROSPECTS.—Numerous prospective buildings are being spoken of, and an early spring season and plenty of work are anticipated.

New York.

BUILDING PERMITS.—Seventeenth St., Nos. 354, 356 and 358 W., rear, one three-sty brick stable, 75' x 30'; cost, about \$4,000; owner, Albert L. Thompson, 356 West Seventeenth St.; architect, W. J. Merritt.

Forty-Second and Forty-Third Sts., East River, 1 one-sty frame freight shed, 20' x 100'; cost, \$7,000; owner, New York City & Northern Railroad Co., 3 Broad St.; engineer, J. F. Lyman; builders, Meeker & Hedden.

One Hundred and Twenty-Third St., n.s. 300' w Sixth Ave., 5 three-sty brown stone dwell., 15' x 50'; cost, \$8,000 each; owners, McGinnis & Adams, 2313 Fourth Ave.; architect, Chas. Baxter.

Kingsbridge Road, s.s. 100' w Croton Aqueduct, 1 one and a half-sty frame stable, 46' x 100'; cost, \$5,000; owner, W. S. Dunn; builder, Geo. L. Miller.

Fifty-Fourth St., n.s. 100' w Sixth Ave., 1 four-sty brick apartment house, 44' x 100' 5"; cost, \$40,000;

owners, B. F. Lee, et al., 20 Nassau St.; architects, E. T. Littell and Arthur Crooks; builders, D. C. Weeks & Son and James Thompson.

South St., between Montgomery and Clinton Sts., 1 one-sty freight shed, 40' x 97'; cost, about \$3,000; owners, Glen Cove Starch Manufacturing Co.; builder, William Vosburgh.

Fifty-Fourth St., No. 48 w, 1 four-sty brick dwell.; 25' x 60'; cost, \$32,000; owner, Michael J. O'Reilly, 115 East Forty-Fifth Street; architect, Cornelius O'Reilly; builders, O'Reilly Bros.

Fifty-Fourth St., Nos. 223 and 225 e, 1 five-sty brick ice house, 41' 2" x 41' x 53' 1"; cost, \$25,000; owner, Joseph Doelger, 227 East Fifty-Fourth St.; architect, Charles Stoll; builder, John Goerlitz.

Seventy-Sixth St., s.s. 100' e Lexington Ave., 3 four-sty brown stone tenements; two 28' x 63', and one 19' x 63'; cost \$14,000 each; owners, Hodge & Cornburn, s.e. cor. Lexington Ave. and Sixty-Fifth St.; builder, A. T. Wilson.

Park Ave., n.e. cor. Sixty-Second St., 1 seven-sty brick hotel, 116' and 79' x 72', with extension 67'; cost, \$200,000; owner, John C. Thompson, cor. Lexington Ave. and One Hundred and Eighth St.; architect, J. C. Markham.

One Hundred and Thirtieth St., s.s. 100' w Sixth Ave., 3 three-sty brown stone dwell., one 18' x 60', and two 15' x 60'; cost, one \$10,500, and two \$9,500 each; owner, Thomas Keenan, 50 East One Hundred and Twenty-Fifth St.; architect, Charles Baxter.

Seventy-Third St., n.s. 150' e Fifth Ave., 4 four-sty brown stone dwell., two 21' x 58', and two 16' 6" x 58'; cost, two \$25,000 each, and two \$22,000 each; owners and builders, John and G. Ruddell, 1026 Third Ave.; architects, D. & J. Jardine.

Lexington Ave., e.s. 82' north Seventy-Eighth St., 1 three-sty brown stone dwell., 20' x 50', tin roof; cost, \$9,000; owners, Washington Bros., 116 East One Hundred and Twenty-Second St.; architect and builder, Wm. Harloe.

ALTERATIONS.—Bovary, No. 86, repair damage by fire; cost, \$2,000; owner, Julia Harvey, 73 North Seventh St., Brooklyn; architect, P. Lavelle.

Thirty-Second St., Nos. 116 to 124 e, five-sty brick extension, 10' x 8', interior alterations for storage; cost, \$5,000; owner, J. H. Morrell, 100 East Thirty-Second St.; builders, J. J. Tucker and Thos. Goodman.

Twenty-Third St., No. 38 w, three-sty brick extension, 21' 8" x 9'; cost, \$3,500; owner, James McCreery, Broadway and Tenth St.; architect, W. Jones; builders, Drummond & Jones.

Twenty-Third St., No. 40 w, building extended in front, 21' 8" x 9', and 42' in rear; cost, \$6,500; owner, etc., same as last.

Park Ave., Nos. 31 and 32, two-sty brick extension, 50' and 52' x 62'; cost, \$10,000; owner, Jay Gould, 8 Broadway; builder, Joseph Richardson.

Second Ave., Nos. 1524 and 1526, front alterations; cost, \$2,300; owner, James Higgins, 1132 Second Ave.; builder, John Keating.

BUILDING PROJECTS are very quiet, and until the new year, we expect to hear little new. Architects generally are very sanguine as to building next year, and we hear of projected building on Broadway and Wall St., which will add considerably to the list of fine architectural edifices. The Produce Exchange and the new Opera House will be among the noticeable.

Philadelphia.

BUILDING PERMITS.—Thompson St., north of Tioga, two-sty dwell., 15' x 28'; Cristoff Freidinger, contractor.

Barker St., east of Nineteenth, 3 three-sty dwell., 14' x 28'; Yarnall & Cooper.

Ireland St., between Palmer and Hanover Sts., boiler shop, 40' x 80'; Hyrzer & Patterson, contractors.

Callowhill St., No. 133, two-sty cabinet shop, 25' x 39'; Aug. Heider, owner.

Fernon St., west of Seventeenth St., 4 two-sty dwell., 14' x 28'; McGettigan Bros.

Clinton St., south of Barr St., 1 three-sty dwell., 12' x 50'; Eli Clymer, owner.

Lehigh Ave., east of Emerald St., 8 two-sty dwell., 13' x 58'; J. K. Pyle.

South Ninth St., Nos. 1618 and 1620, 2 two-sty dwell., 16' x 42'; J. L. Borsch, owner.

COLLEGE BUILDING.—A building for 160 more boys is soon to be added to Girard College.

MARKET remains firm at previous quotations.

Providence, R. I.

BANKING ROOMS.—A number of the architects are busy at present fitting up rooms for several of the banks here. The Mechanics National will occupy a room in the Wilcox building on Weybosset St., now being arranged from plans by A. C. Morse, architect, and furniture by Messrs. Morelock & Bayer.

Messrs. Stone & Carpenter, architects, have in hand the designs for the new rooms of the Commercial Bank, cor. Westminster and Exchange Sts. Furniture executed from designs of the architects, by Messrs. Potter & Co.

New rooms are being fitted up in the Vaughan building for the Rhode Island National Bank from designs by Walker & Gould, architects; carpenter's work, Wm. Sweet; furniture, Morelock & Bayer.

HOUSE.—James A. George and E. G. Billings are building a double French roof dwelling, corner of Broad St. and Wesleyan avenue, from plans by W. H. Colwell, architect; John K. Harris, builder.

ALTERATION.—Dr. G. W. Davis is making an alteration in his dwelling on Friendship Street. Messrs. French & Mackenzie do the work.

St. Louis.

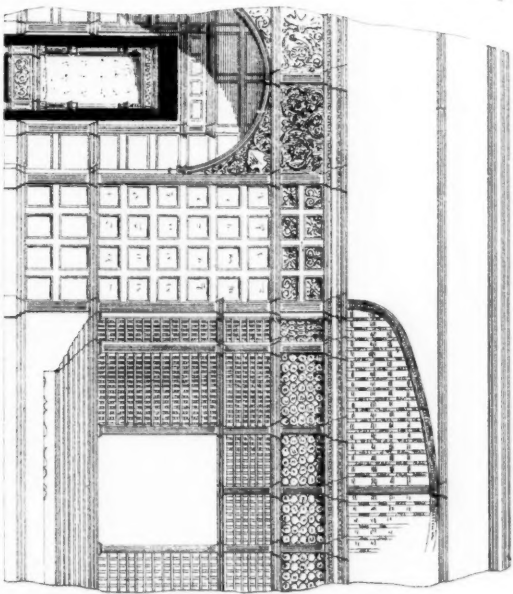
BUILDING PERMITS.—Eight permits have been issued since our last report, of which two are for frame structures of slight importance. Of the rest, those worth \$2,500 or over, are as follows:—

OWNERS' NAME.	USE.	Sq. ft.	Estimate.	Cost.
M. C. Stuyvesant,	Dwell.	12	1	\$4,500
Jos. Hafner,	Planing Mill,	1	3	4,500

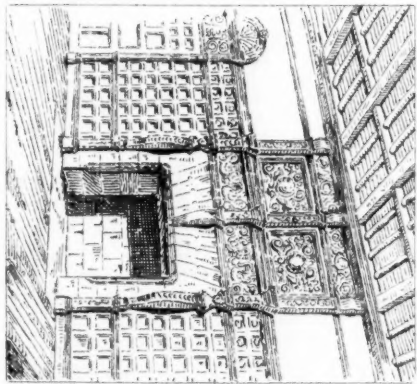


*Sketch Showing Clerk's Office and Entrance.
American Architect. Competition. Entrance Hall for a Hotel.*

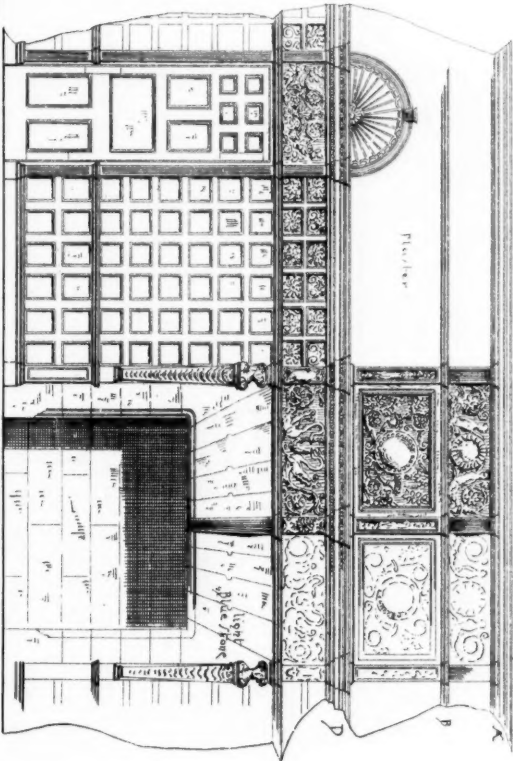
-Perceps-



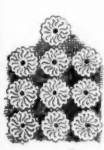
Elevation of Clerk's Office.



Sketch of Panel.



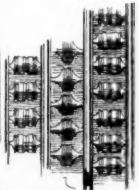
Elevation of Mantel and Door.



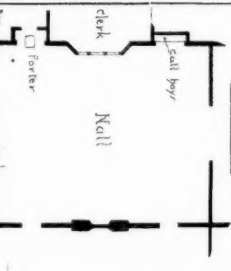
screen

counter

Plan.



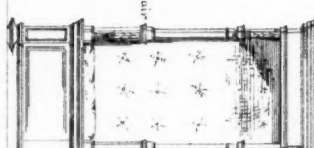
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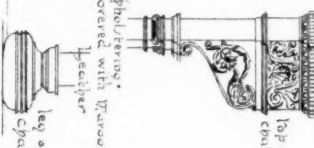
Porters' Chair.



screen



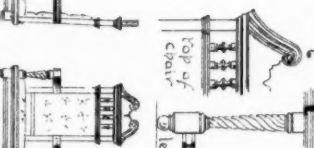
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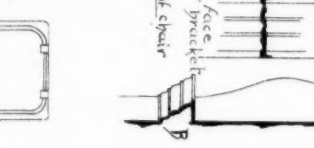
screen



screen



screen



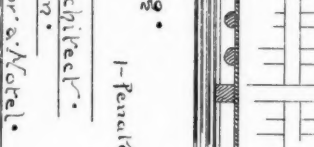
screen



screen

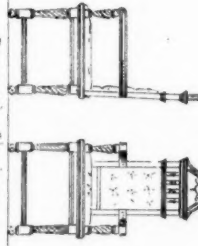


screen



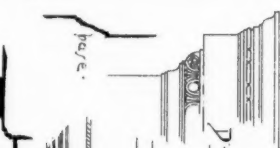
screen

General Chairs.



Plan

trim and door.



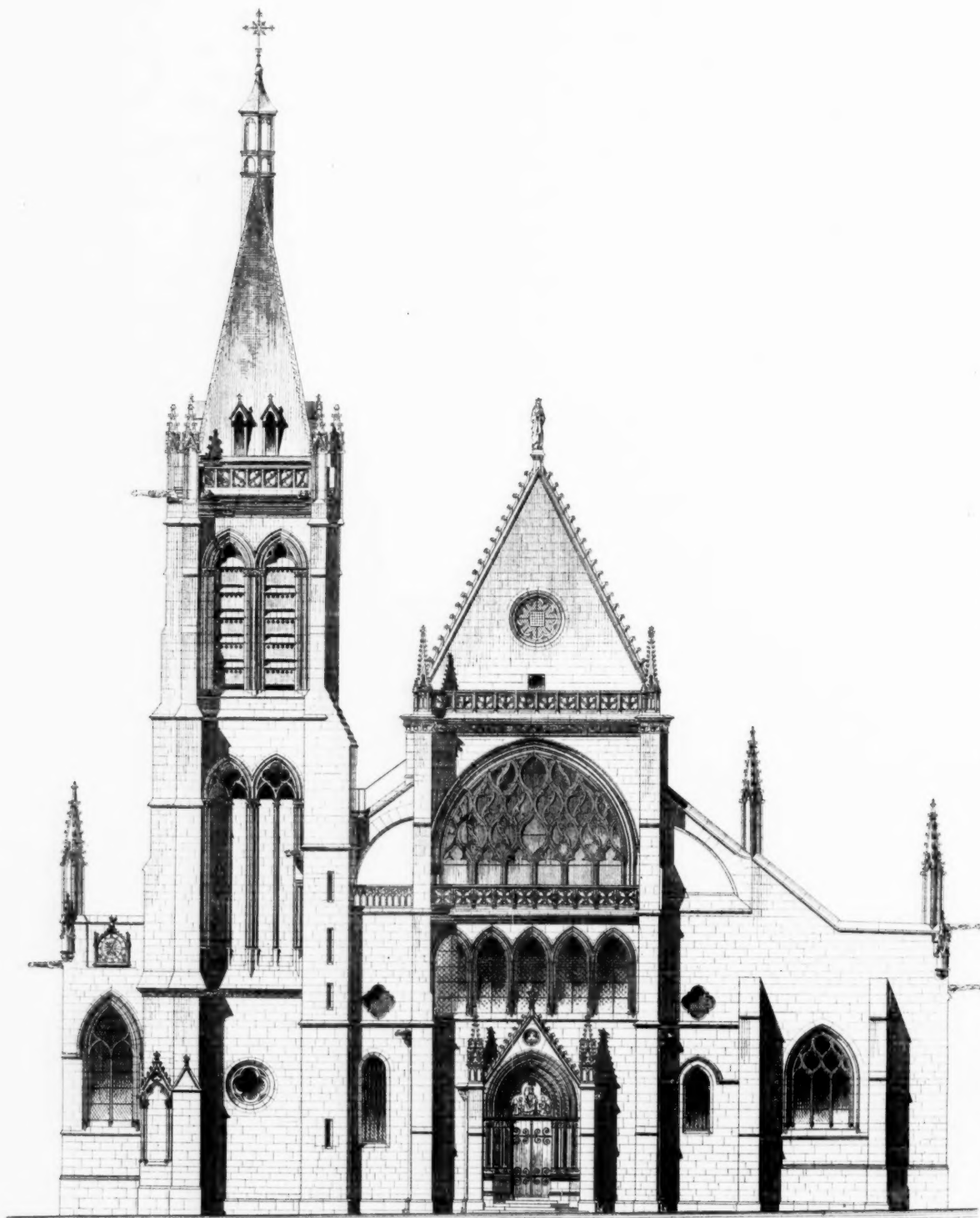
Ceiling.

1- Panels

American Architect.

Competition.

Materials all wood work is in scale of elevation 1/4" = 1'-0" Scale of Plan 1/8" = 1'-0"

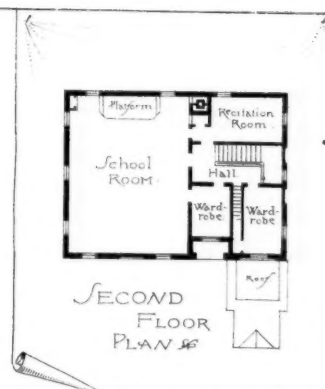
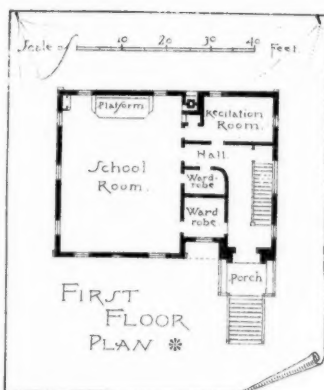


ST SEVERIN, PARIS.

Measured and Drawn by Lucius F. Plympton.

*July 2, 1872. v. Lucius F. Plympton
1876.*

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