

THE AMERICAN ARCHITECT AND BUILDING NEWS.

VOL. IV.]

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[No. 150.]

BOSTON, NOVEMBER 9, 1878.

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THE twelfth annual convention of the American Institute of Architects will be held in New York on the 13th and 14th of this month. There will be two morning sessions and one evening session, the afternoons being taken up with excursions, visiting different buildings of special interest in the city. Besides the usual addresses, reports, and regular business, there will be a memorial address on the life and services of the late Mr. Richard Upjohn, and a variety of papers on special subjects. The resolutions submitted by the Rhode Island Chapter with regard to the liability of architects are made the subject of discussion at the first session, with papers on Commissions to investigate causes of failure in buildings, and Penalties when they are the result of culpable negligence. The other subjects for discussion are: Plumbing and Sanitary Experiments, Prevailing Faults of our Architectural Designs, and the Use and Abuse of Brick in Decoration. — fruitful topics all, and each of them sufficient to occupy a whole session, if there were time for it. The excursions will be, on the first day, to the old City Hall, the Brooklyn Suspension Bridge, and the Church of St. Augustine; on the second day to Trinity Church, for examination of the new reredos, the new court house of the Ninth Judicial District, the Church of St. Thomas, and the new Roman Catholic cathedral. On Thursday evening will be the annual dinner.

IN a new law book, Sedgwick's Cases on Damages, we see recorded a case which is interesting to architects and somewhat amusing in its inferences. It is the case of *The Adams Express Co. vs. Egbert*. A building committee offered a premium of five hundred dollars for a design to be submitted on a fixed day. An architect's plans, which the express company undertook to deliver, were negligently delivered so late as to be thrown out of the competition. The Pennsylvania court before which the case was tried decided that the amount of damages to which the architect was entitled was simply the value of his chance of success in the competition, and that since he could not prove any likelihood of succeeding, the value was nothing; therefore merely nominal damages were awarded. A like case which came before an English court, however, was differently decided, the court ruling that the architect, who claimed damages for the loss of his chance, should be restricted to the cost of producing his plans. Apart from the question of the merit and conflict of the two rulings, which is of some importance, it may be interesting for adventurous architects to consider the opinion which a respectable authority holds of the value of the chances for which they expend their invention and labor when they go into competitions. Whether it is good for the morals of expressmen to tell them that when by their negligence they destroy these chances they may be holden to no indemnity, is a question by itself.

FROM the architect's professional point of view it appears that the American decision is the right one in its main principle, though unreasonable in its application, and that the English one avoids the essence of the question. The loss in such cases is not of the plans, but of the opportunity of competing. Nor is the value of the opportunity any measure of the value of the plans: that an architect does not consider it to be so is shown by the fact that, although he may be willing to make

them for its sake, he never thinks of exchanging them for the opportunity; that is, he never surrenders his plans in return for the privilege of competing, but retains the ownership of them unless in case of subsequent sale. The weak point in the Pennsylvania decision, it strikes us, — and the thing is worth noticing because such cases often occur, and may always occur, in competitions, — is its allowing no value to the chance of winning. In this case the chairman of the committee appears to have testified in behalf of the express company that he found the drawings unsuitable, and therefore unlikely to have been adopted; but we cannot see that the company were entitled to shield themselves from responsibility behind this opinion. The actual probability of any one competitor's winning, and therefore its value, are of course too remote to be computed, depending on the composition of the committee, his relations to them, his personal address and influence, and possibly on the merit of his design. But the fact that it is not to be computed does not prove that it does not exist. Men buy and sell things every day whose value they cannot compute, on the strength of greater or less probability. Though we set aside the value of absolute success as beyond appraisal, there remains the value of the money recompense which is offered. Here the value of all the chances is necessarily equal to the sum of all the premiums. Then if there are a thousand dollars in premiums and ten competitors, — all the chances should be assumed, in default of knowledge, to be equal, — each chance is worth one hundred dollars plus the tenth part of the uncomputed value of success in the ultimate object of the competition. The minimum compensation, then, that should be awarded him for the sacrifice of his opportunity is the hundred dollars. If, however, there are a hundred competitors, the value of each chance is reduced to ten dollars, and the damages may fairly be called nominal. Without entering further into it, we earnestly commend this subject, and especially practice in this sort of computation, to the enterprising men of the profession.

As for the value of architectural drawings, that is a subject which deserves attention, because it is usually misunderstood. The common impression is that their value is simply the cost of making them. Nothing can be more fallacious. It is true only of copies that may be multiplied. The original drawing of a design has a twofold value, as a record of an idea and as a manufacture. The invention embodied in it gives it its principal value; and it is worth the value of this invention added to the cost of making it. Unless the drawing is very elaborate the cost of manufacture is held to be a small part of its value; has in fact no more to do ordinarily with real value than has the engraving on the face of a bank-note. This principle is recognized in the ordinary practice which appraises a set of plans for a building, or rather their use, without any regard to the cost of making, but simply by the importance of the work which they describe. It would be impossible to make such appraisal exact, that is, special in each case; but by common consent the system has been accepted which values the record of a design, when elaborated so far as to be adequately comprehended, at one per cent of the cost of executing it, and a record complete enough for its carrying out at two and a half per cent; the value being due simply to the fact that the record is the only means of giving effect to the idea, and nobody troubling himself, in fixing the price, about the cost of making the record. If this clear, matter-of-fact view of the case could be commonly understood, it would save architects many controversies and many sacrifices.

A PAPER on the sewerage of Cincinnati, read lately before the medical society of that city by its chief engineer, contained some suggestions which cannot be comforting to the people of the Ohio and Mississippi valleys. At present these two rivers are used at once as a common water supply and a common sewer by the people who live on their banks. Twenty years ago it used to be the boast of the people on the Mississippi that its water was the best in the world; that after its sediment had deposited, the water was clearer and kept fresh longer in tanks than any other. The skeptical stranger would naturally receive this boast with a grain of allowance; whether it is still made or not we do not know. During the interval the large cities of the valleys, — Pittsburgh, Cincinnati, Louisville, St. Louis, Memphis, and New Orleans, to say nothing of the

smaller towns,— have been steadily passing their sewage into it, Cincinnati now taking all her water from it as it comes from her neighbors, and sending it on with her contribution of defilement to the cities below. If we are to accept the conclusion of the English Rivers Pollution Commission, that "there is no river in the United Kingdom long enough to secure the oxidation and destruction of any sewage that is discharged into it even at its source," the people who drink the Ohio and Mississippi water may well be uneasy. Colonel Anderson, the engineer to whose paper we refer, gives additional comfort to the people of Cincinnati by telling them that one of their sewers empties into an eddy which extends several hundred feet above the water works, so that more than once the discharge of the sewer has absolutely been traced into the reservoir. He cites an instance, which perhaps will not be so wholesomely deterrent as some. The whiskey from a burning distillery ran into the sewer, and the next morning all the people of the town recognized it at their breakfast-tables. Some of the cities, like Louisville, eschew the river water and depend upon wells, and doubtless it must ultimately come to a question of giving up the use of the water or of keeping the sewage out of it. Considering that the towns are independent of each other, and that no means but water-carriage has yet been found which satisfactorily disposes of the sewage of a large city, the latter alternative looks unpromising for the present. Meanwhile it would seem desirable to determine, by careful observations from time to time of the water and the deposits in its shoals, whether the condition of things is not growing worse.

THE falling of elevators in buildings, with or without fatal effect, continues to be frequent. Two have fallen lately in New York, and within a day or two of our writing one has killed its man in Chicago. Considering how new the elevators are, and how few they have been till very lately, we cannot suppose that the tide of disaster has reached its flood. The prevailing habit of cheapening everything indicates that we may expect in due time to see them falling on all sides. The safest elevators, those in the form of a hydraulic press, have been abandoned on account of their cumbrousness and cost, and all those that are now put in are suspended in one way or another. As ropes wear or grow weak they will not be replaced in time; clutches and pawls which are not meant to be used till an accident occurs will be found out of order then; faulty running gear will betray itself and the cheap manufacturer by giving way. In New York there is an ordinance to govern the use of elevators, and owners are made responsible for injury from them, but still the accidents occur. The *Commercial Advertiser* recommends that the manufacturers who sell weak elevators, as well as the men who buy and use them, should be made responsible. This is sufficiently just, but experience shows the difficulty of fixing a responsibility which may be shared by two persons; the public safety is apt to be best provided for by placing it where it cannot be transferred, and enforcing it rigidly. As a measure of prevention, a system of careful inspection is the natural thing. Made strict enough and well enforced, it would unquestionably save many disasters; with ordinary care it would do some good, though when we consider the quality and results of inspection as it is now provided in the case of steam-boilers, for instance, or of buildings, we are not greatly encouraged.

MAYOR ELY, of New York, has vetoed the ordinance in favor of the Spinola steam-heating scheme, saying in his message: "I am of opinion that no such grant or privilege should be given in the absence of experimental proof of the adaptability of the proposed system of heating to our city. If it should be proved that the proposed plan is feasible, then the privilege of carrying the system into effect, which would unquestionably be one of great value, should be disposed of after public competition in such a manner as to produce the greatest amount of revenue to the city." To resist the Spinola scheme on the ground that it is a "job," as it is accused of being, would be an intelligible thing; the actual reasons given are not very convincing. The first reason offered suggests the answer that experimental proof cannot be given till an experiment is tried; the second, that although to require a royalty may be a test of the good faith or solvency of projectors, considered as an economical scheme the proposition to levy an impost which will be made up again by a tax on the citizens is a financial juggle, and might be expected not to impose on the people of a business city.

ARCHITECTS AND ORGANIZATION.

ONE hears now and then among architects in the United States, scattered as they are and the greater part of them without organization, the question, What good can I get from a professional association? The question would perhaps hardly be asked excepting in a profession in which organization was not old enough and wide enough to have its benefits generally approved by experience. Other professions have found their account in keeping up their associations. The two which in the United States have made in late years most advance in technical knowledge and skill, as well as in public confidence, the engineers and the physicians, have carried on theirs with a spirit and success which ought to be strong proof to architects of their value. In our profession abroad the examples point the same way. In England, for instance, the Royal Institute and the Architectural Association contain, the one some six or seven hundred members, and the other eight hundred or more. In the United States there is no architectural society that we know of but the American Institute, and its hundred and fifty members are numerically but a small fraction of the profession. That societies should have made so little progress is natural enough in a country where the profession is so new, its standard of attainment and its lines of demarcation hardly fixed; but it is for that reason the more to be regretted, since so many things that concern the practice of the profession remain to be determined,— things of which the determination might be at once hastened and made more satisfactory by united effort.

Of the benefit to be got from association with one's professional fellows we have at different times expressed our opinion, and we shall not dwell long on it here. As a matter of business, the direct advantage of any society depends upon what its standing is, that is, upon the quality of its membership. Indirectly, every member and indeed every outsider of the same vocation feels, or at least uses, in his practice the advantage of every successful movement of such a society to establish public confidence in his profession and define its usages. There are no architects in the country whose practice is not made easier by what the American Institute has done to fix in our chief cities the proper relation of architects to the public and to their clients; to make known their proper function, their legal rights, and their due recompense. Its efficacy in this respect has led to its being accused, unjustly enough, of being a trade's union.

But the business advantage of association is not its best side. The interchange of knowledge or experience, the stimulus of common intercourse, and the fruits of common deliberation are worth a great deal more. The more a profession is advancing, the more new problems it has to solve, the more valuable these things are. In architecture especially, where forms, processes, and materials are constantly changing, where, as with us, the best of professional attainment is constantly rising, and needs to rise, free intercommunication is most important. There are various means of such intercommunication, but none which are more efficient, none of which the energy can be more effectively pointed to any desirable mark, than organized societies. They are the meeting ground of men of varied special experience, of the old and the young practitioner; they may be the exchanges for a great fund of important technical knowledge, and directors in the investigation of the chief problems of our work. In this they depend, to be sure, altogether on what their members choose to bring to them. Hence a good way to judge of their use is to consider what one has to give. There are not many professional men so modest as to be willing to say that their experience is of no value to others; we may infer that there are not many whose arrogance or perverseness will encourage them to decide that the experience of others is not in its turn of value to them.

This leads to a different, and it may be a less selfish view of the matter. Instead of inquiring too curiously what he shall get, one may reasonably ask what he can accomplish, by professional association. The answers will be almost as many as the questions. He must be a man of narrow aims to whom his profession suggests no objects that cannot be attained within his own office or among his own *clientèle*. There are certain general interests that every professional man may be expected to wish to advance: the proper standing and respect of his profession with the public, its purification from unworthy practices, a high standard of technical excellence and of upright dealing among its members, the means of bringing its due influence to bear whenever there arises a question which it is concerned to decide, or a doctrine to promulgate, or a public movement to

forward. And almost every active-minded practitioner will have some matter of professional study or of practical bearing, which circumstance or taste has made of special interest to him, and on which his contribution to the general knowledge will be of value to his fellows; some idea or action to enforce, in which his assistance will be of importance to them, or theirs to him. The tendency of the day to specialism, the fact that in most professions the whole range of acquirement is too wide for any single person to compass, still less to increase, make the interchange of ideas and the combination of effort the more important.

These two views suggest the two chief reasons why there has hitherto been so little serious coöperation among architects in the United States. The first is a want of appreciation of the real objects of association and the benefits to be derived from it. This may be trusted to disappear with experience as the profession gains consistency, and as architects come to feel more persuasively what they all know at bottom, that the interests of the whole body of them are really the same, and that many of these can be greatly advanced by concert. The rapidity with which it will disappear must depend greatly on the wisdom and enterprise with which those who are already associated together make use of their opportunities. The second cause, and, we fear, the more obstinate, is a want of general professional interest and of public spirit among architects. The circumstances of their practice tend to maintain a business rivalry among them; and business rivalry is one of the things most hostile to concert. It is increased greatly by the method most in favor of selecting architects for work of importance, the method of competitions, a method which is unknown in other professions, except in a modified form among the clergy. The private and underhand rivalries which disfigure architectural practice are more disintegrating still. These disruptive elements make it the more desirable to foster every wholesome means of encouraging professional intercourse and keeping down a kind of antagonism which is the seed of most of the abuses of our calling. It is the praise of a professional life that it gives men something a little nobler than pecuniary success or personal aggrandizement to spend their energies upon. It is the province of an artist especially to go beyond his own private work and to interest himself heartily in the work of his fellows and whatever concerns the progress of his art. A little less of the habit of selfish isolation and a little more of a manly interest in the general well-being of their profession would be an excellent leaven for the body of our architects. To such an interest professional association is at once a stimulus and an opportunity.

We may therefore fairly recommend to architects who are doubtful whether they can secure any benefit from a professional society, and who consequently have joined in none, to take up the correlative question, and inquire whether they cannot do some good by uniting with their fellows. We may assume it to require no proof that men whose occupation is the same have the same interests, and that common interests are best forwarded by common effort. There are things enough to be done before the position of architects, and their relation to the public and their clients, will be fully and uniformly established the country over. There are points of practice and professional relations among themselves to be settled. An unlimited amount of work can be spent to advantage in a common study of professional problems which are continually occurring, and always will occur with the progress of architecture and the changing wants of the public, problems of which no one practitioner can hope to reach the best solutions, or even adequate ones. To encourage a right tone in the profession, to raise the standard of its acquirement and the technical and artistic character of its work, to give it wholesome and efficient influence where its influence ought to be felt; these things are in the special province of professional societies. Even the architect who has no desire but to secure work and to get through it successfully cannot afford to dispense with the advantage which the general welfare of his profession may afford; but we may take it for granted that to every professional man, after he has given his chief energy to his own business, there shall still be left some residuum of interest and activity for this general welfare.

NEW HAVEN REVISITED.

This is one of those American cities which are constantly growing in architectural interest, and may always be revisited with satisfaction. Upon returning after a prolonged absence one is impressed

with the thought that the great question as to whether New Haven is Yale College or Yale College is New Haven is as far from solution as ever; and as long as this supposed rivalry goes on we may safely look for a higher development of both, and be thankful that it remains an open question. For a time, while the college, or university as they like to call it now, was in a condition of comfortable repose, grinding over its old traditions from year to year and scorning any intrusion of progressive ideas, great manufacturing interests arose about it and New Haven became wealthy, while Yale planted ivies around her Tudor library. Then the wealth of New Haven began to flow into the college treasury, and she awoke from her slumber. Sheffield, Street, and others became her benefactors; Durfee turned in the wealth of Rhode Island looms, and thus capital paid tribute to learning. Yale began to shine with new departments and new architecture. But soon manufactures declined. The crisis of 1873 was almost a death-blow to New Haven industries. But Yale continued to rear her stately edifices. Architecturally considered she leads the contest.

New Haven may fairly claim a share of the interest which attaches to whatever we have of old American architecture, now rapidly passing from sight everywhere. Some of the old houses of the eighteenth century are still in good preservation, and it is not unusual to find good examples of that sort of finely-moulded and carved wood-work which was so extensively employed in New York, and which an English writer in *Loudon's Magazine* for 1838 said must have been due to the fact that a great deal of the inside work of New York houses of the last century was done by ship joiners. These old New Haven houses are models of good workmanship. They are plain brick structures in which but little stone is employed, while the decorative treatment is confined to the wood-work both of the exterior and interior. Some of them have projecting pediments on the front, supported by attenuated columns of solid wood reaching to the roof, and often decorated with the details of the Roman Doric order, but having nothing in common with its proportions. Two of the well-known churches on the green are of similar style and workmanship also, reminding one of the style so long practised by Wren.

New Haven also partook of the classic revival which left its impress everywhere, mostly in boards and stucco, and seldom in stone or marble, during the first part of the present century. Fortunately New Haven got only the boards and stucco; and as these are rapidly disappearing probably no one after this generation will be afflicted with them. Here lived one of the few known and recognized American architects of the early part of this century, with whom, for want of better ones, we associate the past glories of American architecture. This was Ithiel Town, the contemporary of Latrobe, Strickland, Haviland, and the still surviving Davis. He built numerous dwellings here, including that one occupied by Mr. Sheffield, and the State Capitol, now abandoned forever, and falling rapidly into decay and ruin. But his work was not confined to his own city. He was associated with Davis in the erection of the New York University, one of the first attempts to introduce the Tudor Gothic, and other buildings in New York and elsewhere.

The architecture of the old college buildings is on the model recommended by Professor Huxley. The "intelligent bricklayer" here had full swing and sway without the interference of impertinent and intermeddling architects. Coming down to comparatively modern times we find that the college had advanced beyond Professor Huxley's architectural ideas, and erected two buildings in the so-called Gothic style, — having insides and outsides corresponding one to the other. These must have been put up about thirty years ago. They are the Library and Alumni Hall. The former is in the style laid down in the books of the day as "Tudor," and also portrays one of those original features peculiar to Yale College architecture, which might be called the "truncated" style. This is the omission of the stone pinnacles all around the building. But with a due regard to the feelings of those who might have occasion to look at the building, models of the larger turret terminations in wood have been set up, to show what they might be if made of stone. The other building, known as Alumni Hall, but famous as the place for holding the biennial examinations, is in the same style, castellated. In this case, however, a full-sized model of the proposed machicolations and crenellations of the curtain and four great towers has been set upon the stone walls. The opportunity thus afforded for archaeological study is such as is not to be had in other similar institutions. This system of instruction has, however, been discontinued of late. Students of architecture and archaeology in the new department of Professor Weir are obliged to get the necessary information on these subjects from plates and small scale models. The illustration of the "truncate" style is therefore not interfered with, as it has been seen for ten years on the turrets of the Art Building, and is now more fully exemplified in those of the new chapel.

The college seems to have been in danger of falling into an architectural rut, until the Art Building was erected in 1864. This rut was the Tudor style, supposed to have been coordinate with scholarship, learning, and monastic mystification. With its freedom from precedent, and evident adaptation to a purpose, it seems to have commenced a new era of college architecture at New Haven. No buildings had been erected or contemplated for a number of years. The gift of Mr. Street was a surprise and an innovation. It was not only a new building but a new department of study. It was natural, therefore, that it should result in a new architecture.

With the erection of this building the record of Yale's architectural progress begins. The building itself looks as fresh and new as the day on which it was completed, or rather occupied; for its unfinished turrets cry aloud for architect and builder to come back and finish them. An unsightly coat of white paint on the great skylights makes the roof hideous to behold. This has been resorted to because the inside ground glass ceilings were never completed. Steam and water have been lately introduced under the energetic management of Professor Weir. The Ghiberti gates and other interesting models have been set up within, while the professor has started an art library which appeals to all friends of Yale to come forth and help fill the shelves of the cosy and artistically decorated room which he has fitted up.

After the Art Building was completed no additions were made to the college buildings for several years. But the seed has brought forth good fruit, and the last half dozen years have witnessed the erection of two dormitories, Farnham and Durfee, two dormitories and a chapel for the divinity school, a large addition to the Sheffield Scientific School, the Peabody Museum of Natural History, and the new college chapel, besides two new buildings for the secret societies. The new boat-house, as a legitimate nursing of the university, might also be counted in the list. The record of Yale's progress is a truly noble one, characterized as it has been by an advance no less remarkable in other directions than the encouragement of architecture pure and simple. It seems strange to hear that up to ten years ago Yale College had protested against all systems of sanitary drainage, and that the introduction of water in one of its buildings was resented as an innovation. These things must be known in order to properly estimate the strides she has taken.

Farnham dormitory, the first of the proposed front tier of buildings with rear on College Street and front on the imaginary quadrangle, is a building which shows what can be done with common brick and blue stone. This would be a good place for Professor Huxley to begin his architectural studies. Here he can see what his "intelligent bricklayer" can do, with some one to stand by and show him how to do it. Moulded bricks are here used, the first employed to any great extent since the decadence of brick architecture in America. If any one doubts this decadence let him look at the base mouldings of two of the oldest dormitories here, at Carpenter's Hall, Philadelphia, with moulded base and wall laid with Flemish bond, every header being a black glazed brick, and at the cornices of a hundred buildings in Washington and Baltimore, all of which are executed in moulded, carved, or enamelled brick. But in spite of much good detail Farnham is a gloomy building, and it was hardly wise to build its large though picturesque dormer windows of wood. Public opinion pronounces the other new dormitory, also by Mr. Sturgis of New York, to be the best of the two. There seems hardly to be a foothold for adverse criticism of this building. It will be a long time before the quiet dignity of its roof and chimneys will be surpassed anywhere. The new chapel, which stands at the corner of the quadrangle, joining the two last-mentioned buildings in a group of three, has just been completed, except that its unfinished towers have joined the chorus of those on the Art Building with sympathetic wail, keeping tune on windy nights with the moan of the condemned elms on College Street standing in line west of Farnham Hall. As Mr. Sturgis did not design the chapel until after the first two buildings had been completed, he can hardly be blamed for the incongruity of the entire grouping. The Farnham building seems to have been built with the intention either of extending it or abutting another building against it, perhaps the chapel itself, for it had a rough brick wall on that end. The Durfee building was built on a higher grade, indicating some change of the general scheme. The chapel most resembles Durfee in materials and design, yet it does not touch it, while it is put in juxtaposition with Farnham and on the same grade as Durfee. This involved the necessity of raising the water table of Farnham to grade, and shortening its basement windows. There is no resemblance or composition in the grouping of the brick Farnham with the stone chapel. The crowning feature of all these incongruities is that the apse of the chapel is towards College Street, the front is within ten feet of Durfee, and half the side abuts against Farnsworth. Hence, though it has no frontage proper on the streets, only a half of one side can be seen from the quadrangle, and only one of the four doors, the effect being meagre and unpicturesque. The only point of view from which the whole can be seen is the opposite street corner, practically in the rear. Thus this building, best in detail of all that the college has erected, and that whose object claims for it the grandest site, is pushed off to the corner and suffocated before it is born. In spite of these misfortunes the detail and part renderings are such only as could have proceeded from the hand of Mr. Babb, Mr. Sturgis's accomplished assistant in the work. The bad location could not prevent Mr. Babb from making one of the most beautiful interiors to be found in the whole range of modern American church architecture. The windows, with one or two exceptions, are out-and-out Cathedral mosaic work, without paint or enamel; the decoration is well balanced in its coloring and has the true symphonic treatment. The interior woodwork is the most noticeable feature, inasmuch as it reflects the prevailing tendency toward a revival of the eighteenth century style and workmanship; but the whole designing is so tempered as to be free from the affections of the Queen Anne school. The visitor lingers long in this charming interior, and is loath to go; but other things attract our attention.

There is the Peabody Museum, fresh with its finishing touches, or at least so much of it as we will see for the next twenty years or so; for the great scheme is to cover the whole block on High Street from Elm to the next corner west. What we see now is one wing with a high hipped roof only broken by gabled windows of brick and stone. What appears to be a wing to this structure is only the connecting portion which is to join it to the great central building which is to be. Already the wing just built overtops all the other college buildings. The style, as in all the other new college buildings, is in the advanced Gothic, the materials brick and stone. The architect has introduced considerable buff brick, and the polychromatic treatment prevails throughout the exterior to a greater degree than in any of the other college buildings which have been mentioned. The architect, Mr. Cady, of New York, has given this building a grand entrance, which is the most elaborate piece of work done for the college. The interior is plainly treated throughout, except the entrance hall and grand stairway, which are faced throughout with brick of various colors arranged as a wainscot following the line of the stairs. The stairway is of cast-iron and about as good as it could well be in that material. There is some excellent painted glass, especially about the main entrance, and in the traceried heads of the first story windows.

Three years ago Mr. Cady completed a building for the Sheffield Scientific School adjoining the main building. This was quite an innovation in its way, and being faced with buff and red bricks used in ornamental patterns, with its high, round-headed windows and machicolated cornice, has a decidedly Lombardic effect. The contrast to the adjoining buildings is startling.

The new divinity school, by R. M. Hunt, has received the accession of a new dormitory, similar in style to the old one. The entrances to the stairways are from a cloister which is decidedly original in treatment, running the whole length of the building. Mr. Hunt's Moresque building for the Scroll and Key Society is a prominent landmark among buildings of its class.

There are no new college buildings in progress, nor are any new ones now contemplated. When the turrets, iron crestings and finials, and mosaic inlays, originally contemplated for the Art Building, and the real stone spires of the chapel are completed there will be time enough left still to complete the "great quadrangle," so long dreamed of. But even without these we may be content that Yale has done her full share of good work in the revival of architecture, so much in fact as to fully exonerate her from the charge of tardiness at the beginning.

But, as was said at first, Yale College is not all of New Haven. She is only half of it, and there is some good architecture in this goodly city, which is not within her classic precincts. However, the influence of the college architecture is not to be questioned. Until the Art Building was erected, New Haven could not boast one artistic structure. She had a stereotype post-office building, and many others noted for weight rather than beauty. She had a new city hall, which, with a picturesque outline and a pleasing color effect, was a most extraordinary and incongruous thing in detail. It was the simple but earnest effort of the untutored mind to fathom the mysteries of Gothic architecture. Since then an extension to it by Mr. Brown, of New Haven, has been built in much better style. New Haven also rejoices in a good, new, and practical police building, by Mr. Russell. She would not be complete, being so near Hartford, without a great insurance building. This is supplied by an immense granite structure, on Chapel Street, opposite to the green, built of the regulation granite with the proper proportion of polished columns and galvanized iron top of dizzy height, and designed in the life insurance style of architecture. Of course it does not pay. The visitor going up Chapel Street sees another new building; this time a bank, in the regulation bank style, with many flat quoins at the angles and galvanized iron finish at top. Besides these he will see two business buildings on either side of the street, wherein color effects of varied stone with much incised carving may be seen. These are Gothic, after the manner of Mr. Brown, of New Haven. He will see that Trinity Church, now getting venerable, has a new pyramidal spire, with gilded iron crockets running up the hips and iron cross on top. If he goes inside he can see how finely an old style carpenter's Gothic church can be decorated and refitted, especially if directed and designed by a gentleman with the taste of Mr. Littell, of New York.

One of the most pleasant things in the world is to take a stroll up Hillhouse Avenue, New Haven. Another time I may tell how I enjoyed it.

W.

THE ILLUSTRATIONS.

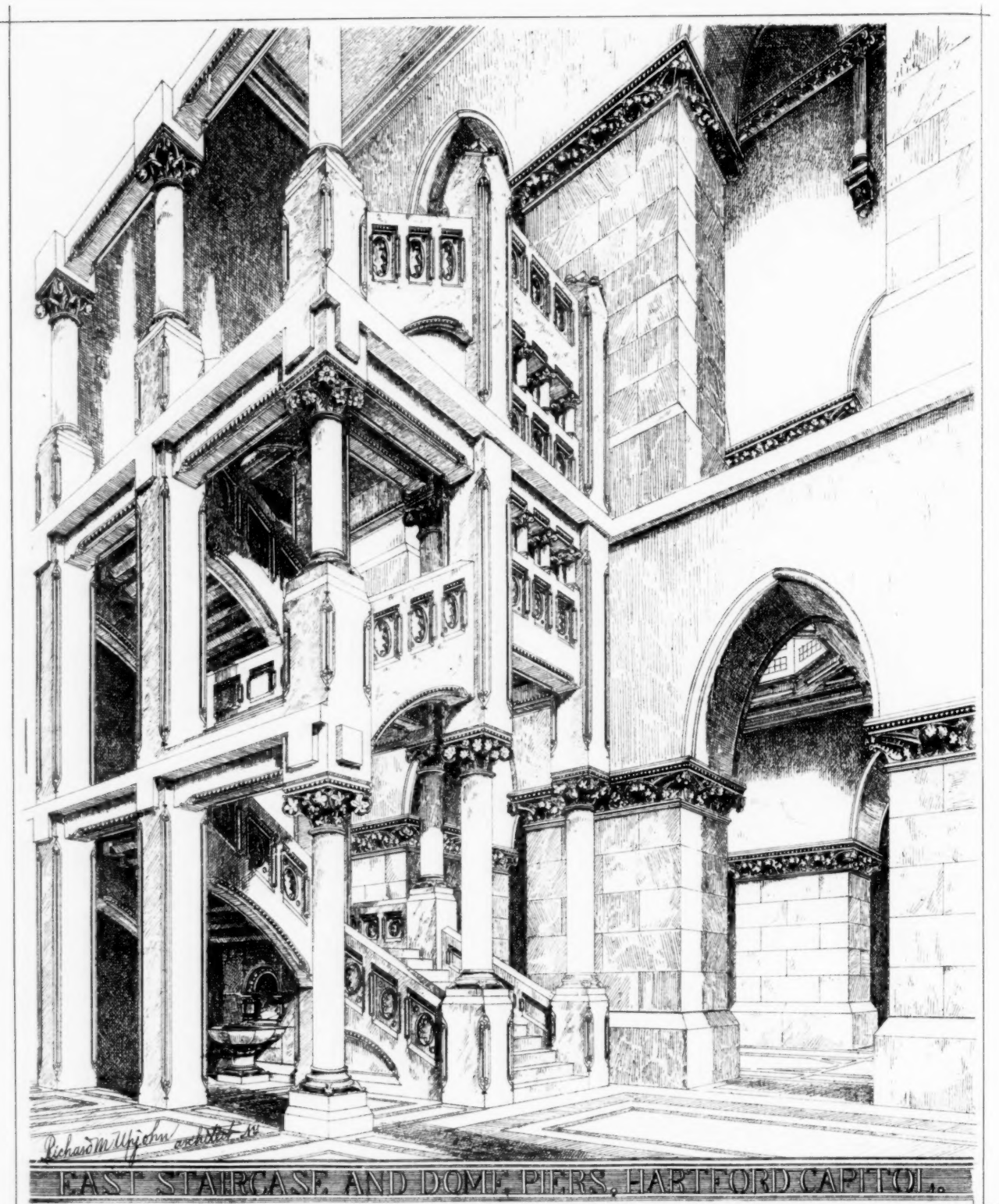
THE EASTERN STAIRCASE AND DOME PIERS OF THE CAPITOL, HARTFORD, CONN. MR. R. M. UPJOHN, ARCHITECT, NEW YORK.

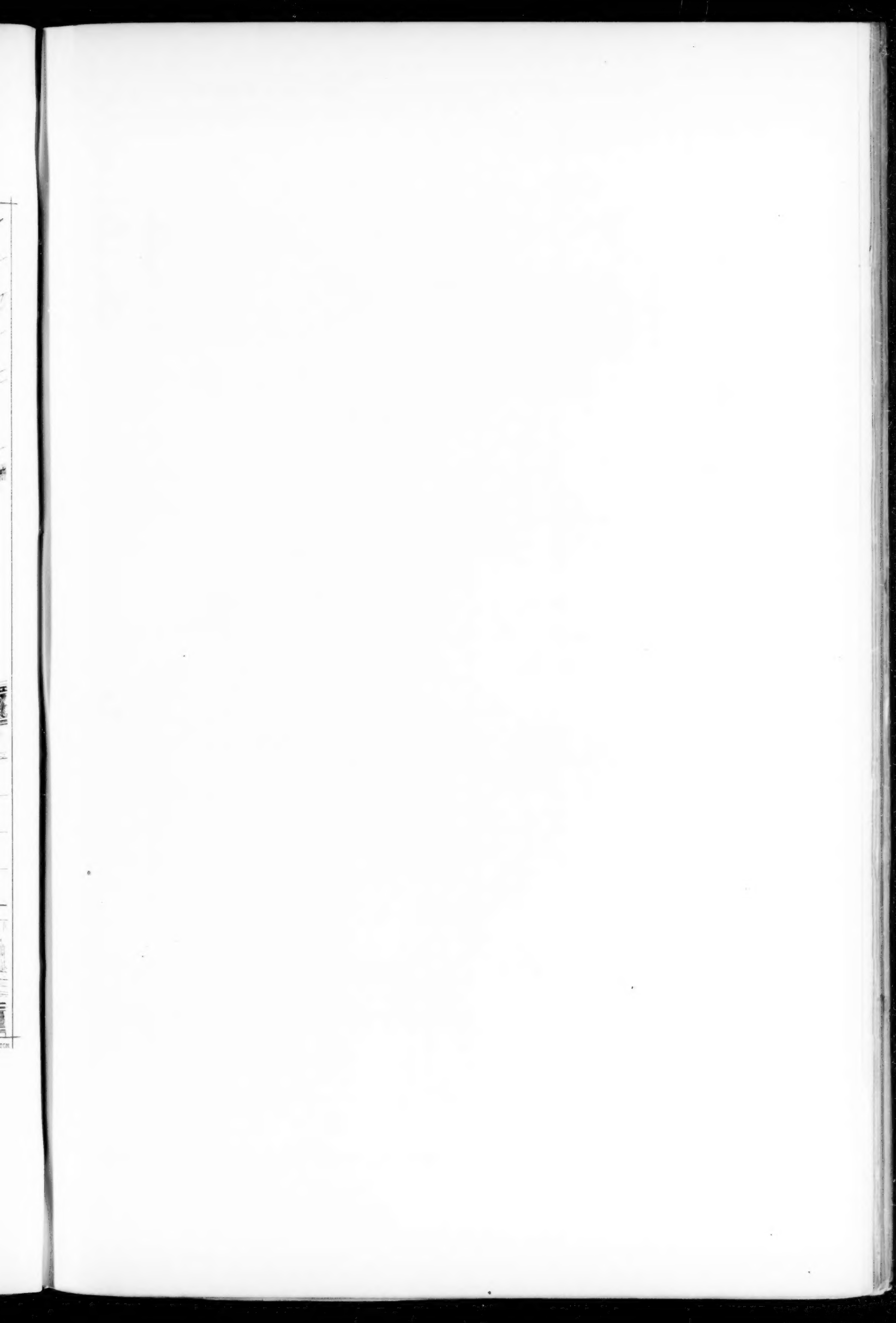
The staircases of the capitol are made of white marble with granite steps and platforms; the shafts of the columns are of polished red granite; the piers of the dome are of granite, with caps of marble.

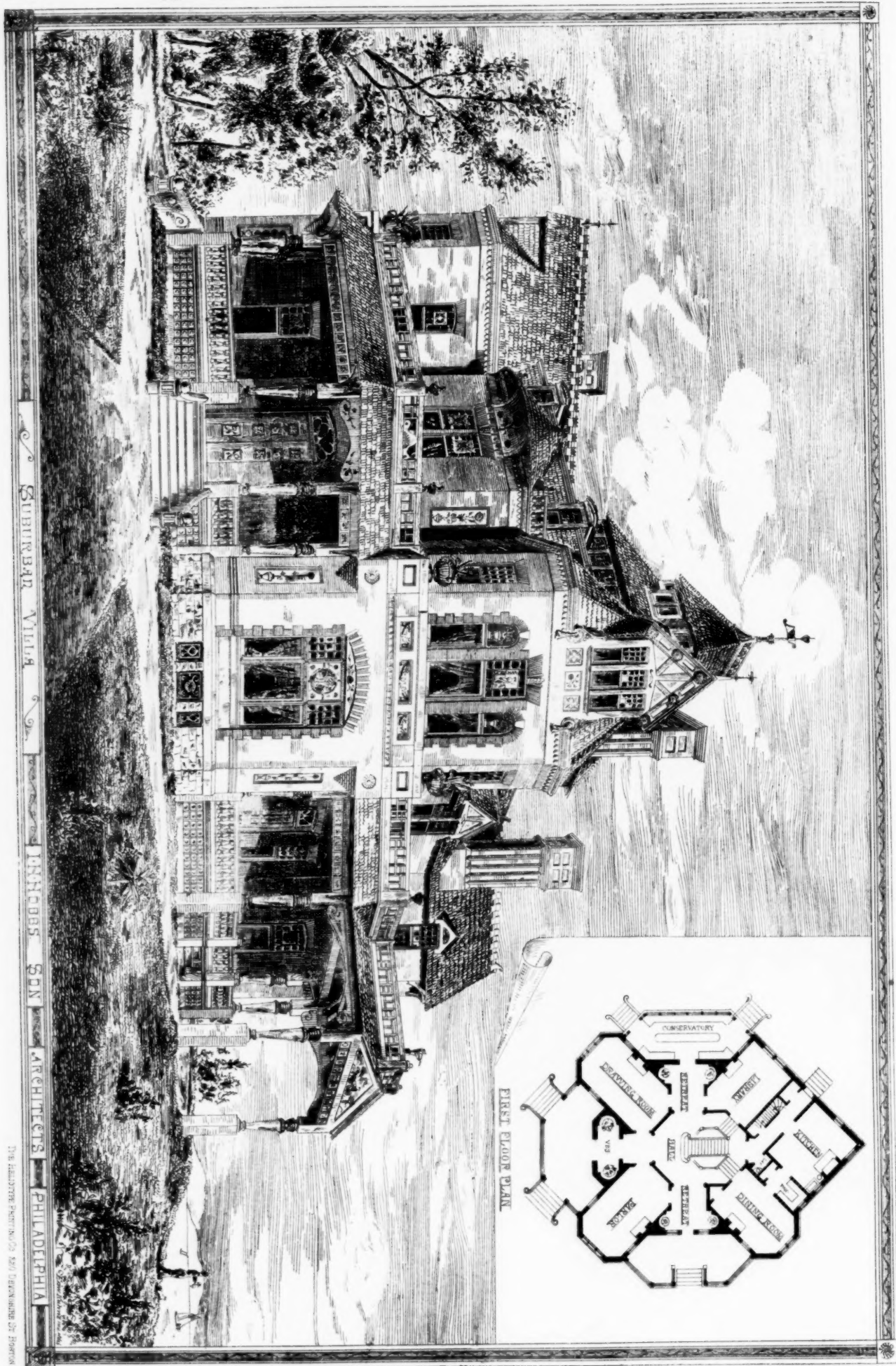
DESIGN FOR A SUBURBAN VILLA. MESSRS. I. H. HOBBS AND SON, ARCHITECTS, PHILADELPHIA.

The following extract from the architects' letter will serve as a description: "The plan was organized for Mr. Wooster, of Albany,

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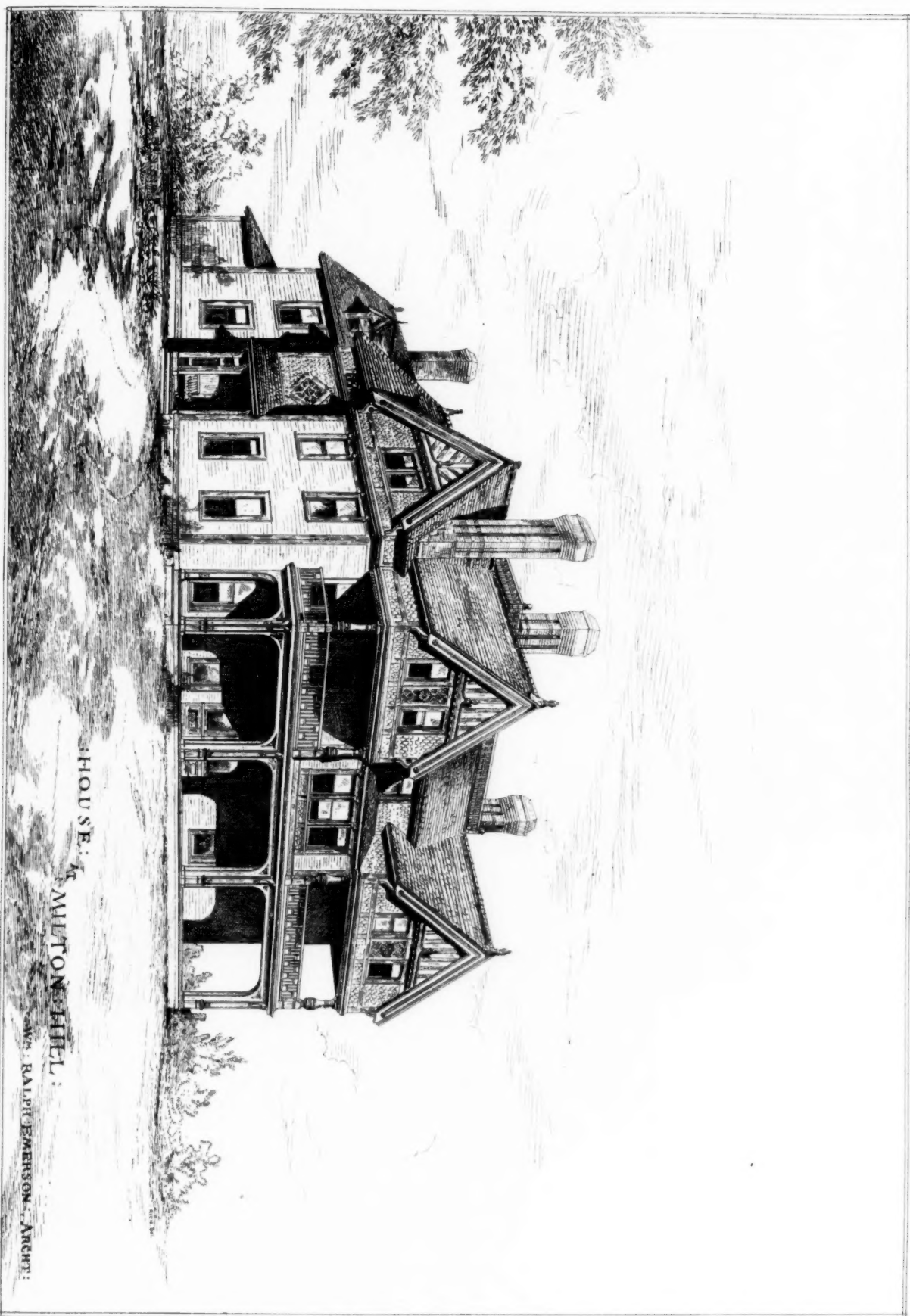




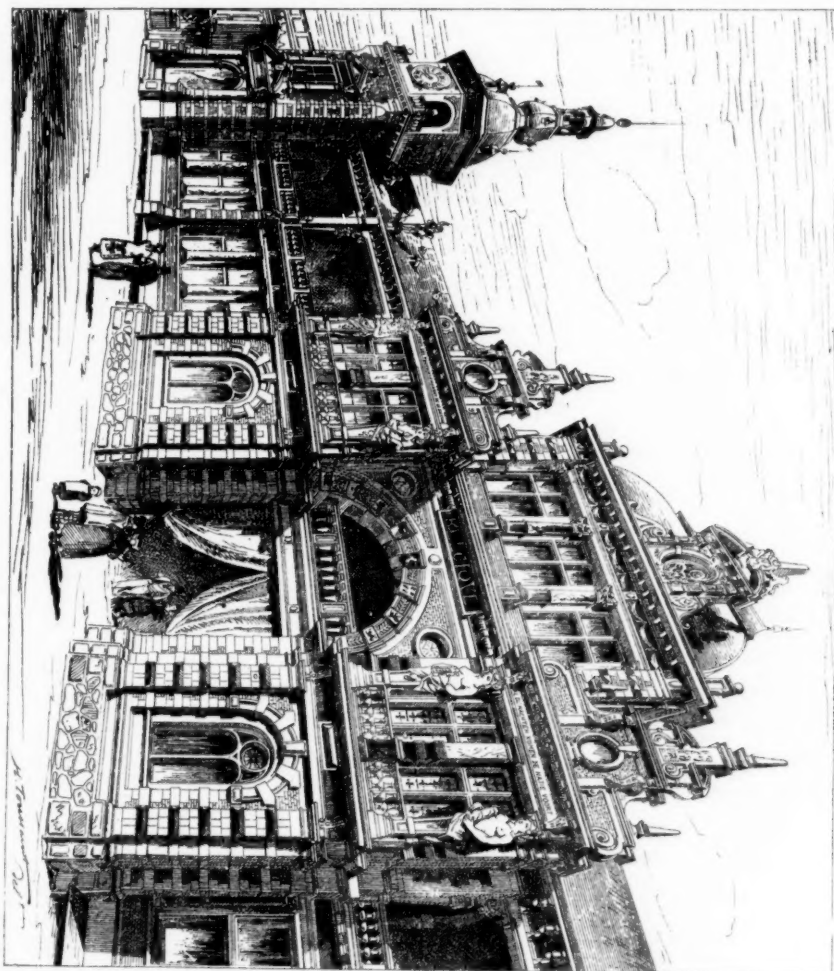


SUBURBAN VILLA
JENNINGS & SON ARCHITECTS PHILADELPHIA

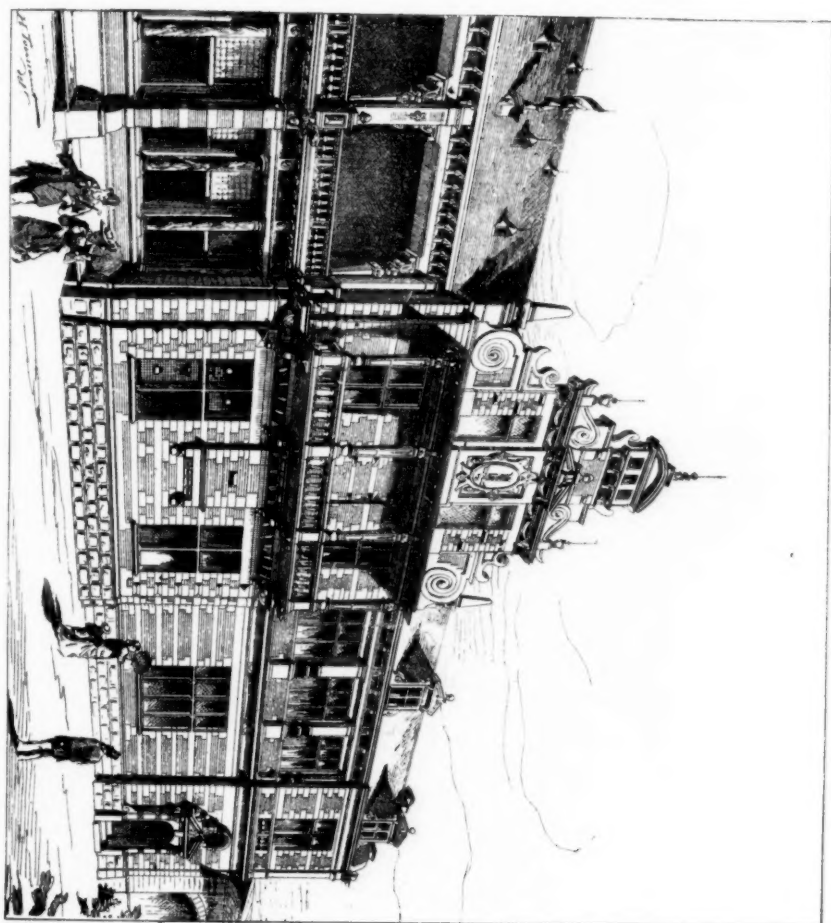
THE ILLUSTRATION PRINTED BY THE PUBLISHERS OF THE AMERICAN ARCHITECT AND BUILDING NEWS



THE BELGIUM PATENT CO. AND DEPARTMENT OF AGRICULTURE



THE BELGIAN FAÇADE AT THE PARIS EXHIBITION.
— M. JANSSEN ARCHT —



N. Y. The design was organized for a gentleman in Boston, and will probably be built, with a few alterations, near that city. It is not necessarily an expensive building, as while it has great variety in outlines it possesses much economy in construction, and the grandeur of interior effect is of the highest order. We have reliable estimates for its construction for \$20,000 by competent builders."

HOUSE AT MILTON, MASS. MR. W. R. EMERSON, ARCHITECT, BOSTON.

This house is being remodelled for Mr. John Bancroft, as is here shown.

THE BELGIAN FAÇADE AT THE PARIS EXHIBITION. M. JANLET, ARCHITECT.

We reproduce to-day from *La Semaine des Constructeurs* two designs which taken together show the façade of the Belgian section on the Street of the Nations. In this structure the materials used are all real, colored granites and marbles being used for the skeleton of the work and for the sculptured features, while brick is used as the main material. The central feature is the main entrance, a full centered archway, the voussours of whose arch bear the painted coats-of-arms of the chief Belgian cities. Across the upper part of the archway, at the level of the impost, is carried a wooden balcony which connects the second stories of the two wings. The engaged columns which divide from one another the windows above are of colored marble with gilded capitals. The Belgian arms crown the whole feature. This central archway is flanked by two pavilions which project slightly before it. On either side of the pavilions are two-story galleries, the upper story being an open loggia. The capitals of the different colored marble columns are all of polished black marble. The façade finishes on the left in a tower which somewhat resembles the old Flemish towers. Corresponding to this, on the other side, is another projecting pavilion, whose distinguishing feature is a projecting wooden balcony. Beyond this, again, the façade is continued in a wing whose architectural character is more unpretending.

SIR FRANCIS GRANT.

THE death of the President of the Royal Academy at the goodly age of seventy-five creates little surprise, though it naturally moves to concern and speculation. Sir Francis Grant has for more than twelve years ruled the world of art. His rise had been rapid; he was elected Associate in 1842, Academician in 1851, President in 1866. Artists, like the rest of mankind, may owe high position to native talent or to happy accident; perhaps the elevation of Sir Francis may have been due to both. Reverting to the past history of the Academy, we find that Sir Joshua Reynolds became first president by the supremacy of his genius; then Sir Benjamin West is said to have obtained favor by "his extreme courtesy and natural dignity of manner;" again, Sir Thomas Lawrence deserved to be popular, because from "the moment of his election he determined to win all hearts." Sir Martin Shee was deemed so fitted for the post that he had but two dissentients, and one of them, Leslie, — who, with Collins, had voted for Wilkie, — afterwards declared that Sir Martin made "an incomparable president." More recently Sir Charles Eastlake is supposed to have secured unanimity by his rare and evenly-balanced qualifications. On the death of Sir Charles Eastlake the first choice of the Academicians fell on Sir Edwin Landseer; but on his declining the honor, a substitute had to be found. Francis Grant, nothing loath to assume the duties with the dignities of the post, was thought to be the right man in the right place by reason of his address, his presence, and his social position; in short, no one could compete with him as master of the ceremonies. This brief review of the past shows that few public bodies have been so fortunate as the Academy in the selection of their chiefs. The six successive presidents appear to have clung lovingly to office; they all died in harness. Among the returns for their onerous labors there seems to have been reckoned a stately burial in St. Paul's. The first three presidents, Reynolds, West, and Lawrence, were so honored. Shee, as a Roman Catholic, found interment elsewhere. Sir Charles Eastlake was buried at Kensal Green, his widow, however, stating, "I declined a public funeral in St. Paul's Cathedral as not consonant with his wishes." Sir Francis Grant is buried to-day at Melton Mowbray, in accordance with his own desire.

The career of Sir Francis Grant, though hardly affording incident or art material for a distinct biography, has lain a little out of the ordinary routine. The future president, born in 1803, was the younger son of the laird of Kilgraston in Perthshire, the elder scion of the house being the late General Sir Hope Grant. Francis was brought up to the bar, but, disliking the profession, he took to painting at the comparatively late age of twenty-four years. His early attainments must have been of the slightest, as little is heard of his receiving tuition beyond twelve lessons in the human figure. But society rather than study was the ladder by which the youth mounted to fame. He had the happy gift of making friends, and among his helpful acquaintances was Sir Walter Scott, who sat to him for a portrait while the tyro artist of seven-and-twenty was still on his trial. Scott in his diary tells that Grant was well pleased

with his success in the full length figure seated at a table, with two noble staghounds on the right, and old armor in the background. Scott adds, "The dogs sat charmingly; but the picture took up some time." It is evident that in those early days the artist had not acquired his facile sleight of hand. In the diary of the same year (1831) Sir Walter jots down the following particulars about his friend:—

"In youth Francis Grant was passionately fond of fox-hunting and other sports; he had also a strong passion for painting, and made a little collection. As he had sense enough to feel that a younger brother's fortune would not last long under the expenses of a good stud and a rare collection of *chefs-d'œuvre*, he used to avow his intention to spend his patrimony, about £10,000, and then again to make his fortune by the law. The first he soon accomplished. But the law is not a profession so easily acquired; nor did Frank's talent lie in that direction. His passion for painting turned out better. I am no judge of painting; but I am conscious that Francis Grant possesses, with much cleverness, a sense of duty derived from the best source, — that is, the observation of really good society. His former acquaintances render his immediate entrance into business completely secure. He has confidence in his own powers, — always requisite for a young gentleman trying things of this sort, whose aristocratic pretensions must be envied."

The above extract serves as a key to the painter's career. "The expenses of a good stud" drove "a younger brother" precipitately into portrait-painting. Youth had been spent in vain upon the law, for which neither talent nor inclination was found, and then precious years of manhood, passed in the hunting-field, were devoted to the casting to the winds of a small family fortune. It is not unnatural to ask where could be found the opportunity, under such circumstances, for the study of the history, the principles, and the practice of art? Well might the "aristocratic president," when addressing the students in the Academy, look with envy on their superior advantages and their timely industry. We remember the time when the future president, still on his probation, was backed by flatterers who called up for the occasion the axiom, "Only a gentleman can paint a gentleman." Critics asked, by way of retort, Where is the artist, when the gentleman is found never to have learned to draw or paint? Sir Francis Grant had little fellowship with criticism or literature in any form, and he is known to have warned the students in the strongest terms against what he conceived to be the injurious power of the press in matters of art.

A fashionable portrait-painter has not much need of studying the internal anatomy of the human body, and Sir Francis Grant did not care to expend time and trouble without adequate return. More to his purpose was costume and drapery; he dressed well himself, and his sitters were always set off to advantage. In the case of huntsmen, when mounted on horseback, style was studied in the set of the breeches at the knees, and in the turn of the feet in the boots and stirrups. In all such matters of taste Sir Francis was a connoisseur. It has often been laid to the charge of such portraiture that the tailor makes the man; but we should rather say that the artist in the first place makes the tailor, — he suggests the suit in which the figure will look best. The most careful of the president's portraits being seldom more than a bright and pleasing reflection of society, the study of historic costume was foreign to his purpose; the treatment lay generally so much on the surface that there was no need to go further back than the newest fashion. In future times these limnings will be valued as showing the manners, the costumes, and the field sports of the upper ten thousand in the nineteenth century. It must be admitted that Sir Francis Grant acquired through long practice a ready knowledge of the human face; the likeness seems to have come to the canvas soon, and, when once caught, further elaboration was not cared for. The execution appears thin, but felicitous and facile; it had, moreover, the advantage of telling out clearly in light and silvery tones. The courtier painter proved himself specially happy in female portraiture. Grant, like Reynolds, seems to have had an intuitive insight into the graceful traits of womanhood. Among works which served to make his reputation was the likeness of Lady Glenlyon, exhibited in the Academy thirty-five years ago. This success decided him to forsake his early and more careful treatment, for the ready and lucrative style of fashionable portraiture. Among much-admired and oft-quoted works are the portraits of the Marchioness of Waterford, the Ladies Howard, Lady Rodney, and Mrs. Beauchamp.

An artist cannot reach beyond his own mental limitations, and even a portrait-painter can with difficulty do justice to qualities that lie outside his personal sympathies. It cannot be said that the late president met the first intellects of the day on equal terms, and yet before his easel sat Macaulay, Lockhart, Disraeli, Derby, Palmerston, and Russell. But when we think of Sir Thomas More by Holbein, of Sir Thomas Gresham by Antonio More, and of Thomas Hobbes by an artist unknown, we begin to feel that portraiture is on the decline, that the changes from the old style to the modern have been momentous, and that Sir Francis Grant was not quite the man to infuse new life and vigor into a manner which in his hands was daily growing more obsolete. Reynolds commends the old masters who descended upon portraiture from a higher sphere; and it is but reasonable to suppose that an artist capable of rising to the high argument of history can read and portray all the more worthily living contemporaries who are now making our modern history. Of Hay-

don it used to be said that he could not paint so much as a portrait, and therefore was unequal to history. Grant never soared into history or poetry, and hence his portraits never rise from the individual into a generic humanity.

Sir Francis Grant did not suffer seriously in the exhibition in 1868 of "National Portraits" at South Kensington; he at least shone among great masters as a star of the second or third magnitude. Looking at "The Meet of H. M. Staghounds," "The Melton Hunt," and that real masterpiece, "Field-Marshal Viscount Hardinge and Staff," we could not but regret that the painter had bartered away this careful, solid, and well-finished mode for the blandishments of fashion. Admirable, in another way, is the portrait of Lord Chancellor Truro. Sir Francis was so much of the true artist that his canvases speak with an intellect not his own; but he shared the common weakness of preferring sitters whose names threw a halo round his studio. It did not fall within the plan of his life to seek out genius in poverty and obscurity. He had not, like Reynolds, a kindly feeling for literature even when housed in a garret; but, as soon as the world had put the guinea's stamp upon the man, then the courteous painter did not withhold his best services. Lord Macaulay, having dignified the humble position of literature by a title, claimed every attention; and rarely has a head been modelled more massively or with a firmer and freer touch. Lady Stuart Wortley also filled a station to bespeak favorable consideration. Sir Francis was represented in the Kensington collection by thirteen portraits; and to say that he proved at least equal to his predecessor, Sir Martin Shee, were to mete out to him scant justice.

Though the late president maintained the dignity of the Academy, he can scarcely be said to have advanced its intellectual reputation. He stands as almost the only holder of this distinguished office who has no place in the literature — to say nothing of the science — of his country. While lectures delivered or books written by Royal Academicians — by Reynolds, Fuseli, Flaxman, Leslie, Eastlake, and Gilbert Scott — would store a library, scarcely a sentence from Sir Francis Grant will live to after-time. At the Academy banquets Sir Charles Eastlake led his hearers gracefully into paths of literature and of art; but the after-dinner speeches of the last president were chiefly deserving of attention because they gave official announcement of the progress of the masons in the new building, and of the provisions made for the comfort of visitors, including their walking-sticks. But perhaps, after all, Sir Francis Grant's epitaph is best written in the serviceable work he did within the walls of the Academy by his tact in the performance of difficult and often invidious duties. On entering office he at once set himself to appease feuds; he made conciliatory calls on one or more dissentients, and succeeded in bringing them within the pale; he manifested a friendly spirit towards rival institutions, and graciously looked in at the private views of well-meaning exhibitions. Above all, it was his good fortune to hold the reins at a turning-point in affairs when guidance was needful and urgent. His administration has been signalized by the removal of the Academy from Trafalgar Square to Burlington House; by the breaking down of old barriers; by increasing the power and adding to the number of associates; by enhancing the efficacy of the schools; and even by casting a ray of light upon the forlorn hope of innumerable "outsiders." The wisdom of some of these reforms may be questioned; they lie, however, in the direction of popularity.

Presidents, like popes, usually give the outside world premonitory symptoms of the approaching termination of their reign, and so the minds of the members of the Academy are usually turned beforehand to some possible successor. On the present occasion there are rumors, long current, which it is needless to divulge; but it may be stated generally that four or five Academicians are talked of as eligible. The members from whom the selection must be made are nearly forty in number, and therefore it would seem that one in every ten is deemed worthy of the higher dignity — a larger percentage than might have been anticipated. We are happy to know that several of the possible candidates are endowed with some, if not with all, of the desired qualifications. And yet it is obviously a hard matter to find united in the same man the good artist and the accomplished gentleman, possessed at the same time of tact and business aptitude. Artists are supposed by some persons to be the most impracticable of mortals, and yet in the government of their academy they have generally done the right thing. What at the present juncture appears to be needed is a president who in his appointed sphere shall be on an intellectual level with the presidents of the leading scientific and literary societies. — *Saturday Review*.

CORRESPONDENCE.

ENGLISH AND FRENCH ARCHITECTURE. — ENGLISH WORK AT THE PARIS EXHIBITION. — CLEOPATRA'S NEEDLE. — THE DEATH OF SIR FRANCIS GRANT. — HIS SUCCESSOR. — THE NEW LAW COURTS.

LONDON.

THE holiday season is drawing to a close; and as the sketch-book gives place once more to the T-square and the drawing-board, another year of architectural work may be said to begin. Most holiday steps have this year been directed Pariswards, where a world of art has been open for inspection. In architecture we have been just able to hold our own; the display of drawings and designs comprises

the chief of those exhibited at the Royal Academy during recent years, and calls for no very special remark. It is to be feared our foreign friends do not quite appreciate some of the work we have been doing. The style of the draughtsmanship in which we represent our designs is so different from that of our continental neighbors, that they are often misunderstood, even though there may be a fair knowledge of the architecture of the works themselves. The whole training of the French and English architect is so different that it can hardly be wondered at if the result is most strongly marked in their designs. Broadly speaking, the architecture of the Continent may be said to be more academic, and that of England more individual; hence, while in France it is more uniform in general style, here in England we have all manner of varieties, from the rudest Gothic to the richest classic. In spite of this, however, there is the broad distinction of country and climate; and whether the building be in Gothic or classic there is little chance of the architecture of the one being mistaken for that of the other; the individual character of the nation is too plainly stamped on its face for that. In that medley of fronts in "the street of all nations," really good architecture is conspicuous by its absence; strange that it should be so, but thus it is; and if the designs of British architects, as shown on paper, were not appreciated, the actual specimens as built in the "street" are not much better off in this respect. The best and only houses worth mentioning are in the so-called "Queen Anne" style, which doubtless is hardly quite understood by the classically-trained Frenchman. The house of the British Commissioners, purporting to be in the Elizabethan style, is almost below criticism; and the other two façades, in half timber work and cut brick respectively, are only very middling after all. It seems a pity that while we were at it the official building, at any rate, was not the best we could give, instead of — well, the less said about it perhaps the better. But if we have not made any great impression architecturally, it is some consolation to think that in the arts connected with architecture we certainly take a very high place, and deserve what we have won. The display of artistic furniture decoration, stained-glass, etc., has quite surprised our foreign competitors, and is on the whole well worth a studious inspection. The tendency is to over-richness, perhaps, a general fault in all exhibition work; but notwithstanding this there is much thoroughly good artistic work, especially in furniture and its accessories. Messrs. Jackson and Graham have carried off the grand prize in this department, probably from the richness of their work, and especially of the "Juno Cabinet;" but other firms have quite as good work, artistically speaking, such as Messrs. Gillow; their "dining-room," in the prince's pavilion, is remarkably good; both in design and in color it is most successful. Messrs. Johnston and Jeanes, of New Bond Street, also show very good work, notably a sideboard in Old English style, very carefully designed and well studied in detail; also a chimney-piece, though this is a little overdone with carving, etc.; the grate and fender in it, however, are very fine pieces of metal work. Then again Messrs. Collinson and Locke have a large display in the earlier styles; and Messrs. Shoolbred have a wonderful drawing-room in satin wood, most woefully overdone, however, in richness of detail and carving; though the latter is very good and very clever, there is far too much of it: it looks as if it had been designed by a carver. There are other firms, such as the Messrs. Howard, which have also sent good work; but the above firms stand out most conspicuous for the excellence of their designs and workmanship, and fairly produce work which holds its own against anything sent by their rivals at home or abroad, and which has certainly astonished the latter; at all events, not a little; and as a whole, therefore, the English decorative artists may be fairly congratulated on the success of their efforts, and the position they have so honorably won in the international race. We hear that several very good commissions have resulted from the Exhibition, and it is hoped they may prove some return for the great labor and expense some of the exhibitors must have lavished on their contributions.

Here in London the most recent and noteworthy addition to our architectural monuments has been made by the erection of Cleopatra's Needle, on the Thames embankment; the work of raising it on its new site is now finished, and the scaffolding taken down (or nearly so). Viewed from the river, or from Waterloo or Charing Cross bridges, it is a striking object, and groups very well with its surroundings. It does not look very large, though perhaps larger than was to be expected, considering the immense space of which it forms the central feature. The obelisk is very well placed on its pedestal, the position of which is about midway between the two bridges; on each side of the pedestal are to be placed bronze sphinxes cast from old examples, — rather a modern antique idea, but probably more in keeping with the obelisk itself than any new ones we are likely to design. Then on each side of the pedestal inscriptions are to be cut, giving the history, in a few words, of this wonderful stone, from its birth in the quarry at Syene, and its erection at Heliopolis by Thothmes III., about 1500 B. C., to its erection on the banks of the Thames in the forty-second year of the reign of Queen Victoria, in 1878, embracing a period of nearly three thousand four hundred years, and including such events in its career as its removal from its original site to Cleopatra's city, Alexandria, in B. C. 23, during the reign of Augustus Caesar; its presentation to the British nation in 1819, by Mohammed Ali, in memory of the victories of Nelson and Abercromby; and its transportation to England, with its loss and recovery in the Bay of Biscay during its memorable voyage

last year. The names also of those engaged in the enterprise, at the head of which stand those of Dr. Erasmus Wilson and Mr. Dixon, the engineer. We understand also the names of the brave fellows who were lost in the attempt to relieve the crew of the *Cleopatra*, during the gale in the Bay of Biscay, will not be forgotten. Thus, in a few, simple words, which will carry the thoughts of their readers through the long ages of its history from *Cleopatra* to *Victoria*, will the record tell how its destiny has been to weld a connecting link between two mighty empires. A cast of the obelisk is being taken for the South Kensington Museum, and we believe a model of the ingenious scaffolding designed by Mr. Dixon for its erection will also be made, that the *modus operandi* may not be forgotten.

Within the last week the Royal Academy of Arts has lost its president, by the death of Sir Francis Grant, at the age of seventy-five. His work was almost exclusively in portraiture, and few artists have filled the chair with more geniality and courtliness of manner. Coming of an old family (of the same stock as your late President, General Grant), and allied to more than one noble house, he was to the manner born, and has been a very popular president. He entered the Academy in 1842, was elected R. A. in 1851, and to the chair in February, 1866, receiving shortly afterwards the honor of knighthood. He was a D. C. L. of Oxford, and an honorary member of the Royal Scottish Academy, the Pennsylvania Academy of Fine Arts, and the Belgian Society of Artists. Most of the celebrated men and famous beauties of his time have sat to him for their portraits, and he received a gold medal at the Paris Exhibition in 1855.

Mr. Leighton or Mr. Millais is spoken of as the probable successor of Sir Francis. The present state of English art in general, and the relations of the Academy to other artistic circles outside its walls in particular, make the coming election of more than usual importance, as much will probably be expected from the new president, from an administrative as well as from the art point of view.

Workmen are now busy fixing the great clock on the southeast tower of the new Law Courts. It projects over the street below (the Strand), and is supported by a great carved corbel. The dials will face up and down the street, and it will be fitted with chiming bells. When this is finished and the scaffolding cleared away the whole of the eastern block may be said to be completed, and might be ready for occupation now in a few weeks' time if required. It is perhaps too early yet to criticise the general effect of the structure, but the tower looks as if it belonged to a fortress, while the block of offices is full of charming "bits," the detail of which is most excellent, both mouldings and carving being full of vigor and spirit. On the western part of the site the wells of the courts themselves and the great central hall are slowly rising from the chaos around, and considerable progress is being made with the rest of the Strand front, including the main entrance with its flanking octagonal towers, the central feature of the general façade. B.

THE MASSACHUSETTS CHARITABLE MECHANIC ASSOCIATION'S EXHIBITION. III.

Boston.

THE fair has closed, and I have as yet said nothing of the exhibits of the various educational institutes; the Institute of Technology, the State Normal Art School, the City of Lowell Free Drawing School, and the School for Modelling and Carving for Women. These collections are all in several rooms of the Tennyson Street school-house, which is joined to the gallery of the main exhibition-building by a bridge, the walls of which are hung with some large drawings of the Charles River embankment as proposed, and some large but not over interesting photographs.

The Institute of Technology has brought together examples of the work of its students in various departments, which ought to be sufficient to give the public a more general and just appreciation than I fear has yet obtained of the broad field which is occupied by that school, and of its claim to a more generous support from the State and from private bounty. Of course the greater part of its teaching is not of a sort of which any exhibition can be made on these walls; but the work of the departments of architecture, mechanical engineering, mining and metallurgy, of practical design in manufactures, and of mechanics' work, is illustrated by very full and interesting collections, which must have been seen by great numbers of people to whom the knowledge of the work of the Institute will sooner or later be of use.

The architectural department, to begin with, as we learn from a printed statement hung on the walls, exhibits seventy-seven drawings selected from the regular work of the school for a year and a half past, comprising elementary drawings, fac-simile copies of originals made in the Paris School of Fine Arts, and those elaborated from free-hand sketches of churches and other buildings in Boston. There is enough variety in the work here illustrated to satisfy any inquirer that although the teaching is confessedly modelled on that of the Paris school, there is no blind adherence to its methods. If one were inclined to cavil at too much time spent on what Viollet-le Duc calls the "impossible and impracticable problems" of the *École des Beaux-Arts*, as the restoration of a Pompeian house or a Roman villa, he would readily see in the careful drawings of the humbler buildings of to-day in our own streets that the archaic is not taught to the exclusion of the modern. The work of these classes improves visibly from year to year, both in design and in rendering.

From the engineering department are shown a series of thesis drawings of bridges and tunnelling, and portfolios of drawings on various subjects, also models and photographs of notable bridges actually built. An Ashcroft steam gauge, with a removable dial, allowing an easy inspection of the works, and a Dixwell pyrometer, are also shown. The department of mining and metallurgy exhibits a few specimens of laboratory work, with instruments and specimens; and the Lowell Institute school of practical design, a crowd of designs in color of widely varying merit, for woollens, prints, ribbons, cretonnes, table-covers, wall-papers, and the like. The nicety of these drawings always makes them interesting even to the general eye, even when a collection of the same designs in the material for which they were made would be far from entertaining. There is, too, a very notable collection of specimens of the work of the students in the technical school at Moscow, consisting of metal work, as rivetings, brazings of joints, and weldings, wooden models of heavy tools, as drills, reamers, etc., wood-turnings beautifully finished and accurate, and joiners' work of irreproachable neatness. This collection was presented by the government of the Moscow school to the Institute, when the latter was contemplating the establishment of a similar branch of teaching. This is now in full operation, and shows, beside the Moscow collection, some very creditable specimens of the work of its own pupils in the same line.

The State Normal Art School makes an imposing display of students' work in almost every department of art. There are outline drawings of foliage from nature, some excellent shaded drawings from the round object, some geometrical designs mostly from plant forms, both in outline and in color, and some examples in modelling, of which the subjects are not always of the most interesting, but which surprise one by the ease and confidence of the handling. I remember specially a very free and graceful festoon of flowers and foliage from nature. There are water-color drawings of flowers and fruit which look very little like the work of beginners, and two or three examples of time sketches, a head in water-color, from life, done in four hours. In addition to these there are some very workmanlike mechanical drawings of subjects in engineering, and a progressive series in architectural design, comprising plans and elevations of buildings from measurement, in outline and in color; detail drawings; an analysis of the historical styles of ornament, and two designs for a wooden country-house and a brick mansion, respectively, the latter showing a good deal of well directed and profitable study. It will be allowed by anybody who examines this multifarious display, that the State Normal Art School has, if the wisdom of state education in art be admitted, made good its claims to a continued and liberal support.

The City of Lowell Free Drawing-School sends also a large number of drawings, framed and in portfolios, the latter containing, as I should judge from a hasty glance, mostly indifferent work, while among the former are some very respectable architectural drawings, and others in crayon from the round of considerable merit.

The School of Modelling and Carving for Women is just entering on its third term, and here makes a very interesting exhibition of what it has done for a beginning. As might be expected the greater portion of the examples are in plaster, varying from bits of leafage, mostly naturalistic and in low relief in panels or otherwise, up to small heads, and including a lovely profile head of Mozart, also in very low relief, and a spandrel and festoon or two in conventionalized foliage. There is also some delicate and graceful wood-carving, mostly in the way of frames and screens. Vigor and boldness naturally do not yet appear, but grace and prettiness are everywhere; and that so much facility can be acquired by beginners in the brief time during which the school has been at work must be a continual surprise to the pupils themselves, as it is certainly to outsiders.

Indeed the rapid, even sudden development of the taste and talent for design among all classes of our American communities within the last ten or fifteen years is a singular phenomenon. I do not suppose any new faculty has been created in the national mind, but a new field has been opened to cultivation, and the energy and persistency with which it is worked are, to say the least, remarkable. What we see at this fair covers only a portion of the field; we must remember what is doing in all the city and town drawing-schools, at the Museum of Fine Arts, by the new societies for art needlework, and in a thousand homes in the way of china-painting and embroidery, to acquire an adequate impression of the spread of the new influence. The phenomenon is certainly extremely gratifying, and tends to awaken a feeling of complacency. It is to be hoped the enthusiasm is a wholesome one. What is to be feared is that there is somewhat too much of it, and that it partakes of the nature of abnormal development. We hear now and then a mild complaint to the effect that the city and state are spending money unwisely, if not unjustifiably, in maintaining so extensive an apparatus for the teaching of art; that the students of music or of medicine might not unreasonably ask why similar advantages should not be extended to them in their studies. Into that question I do not enter, but it has struck me sometimes, in considering the immense and rapid growth of art-studies among us, that there is in it something exaggerated and factitious, and that there is really not enough of genuine feeling for art in the national make-up to account for or to permanently sustain it.

A word of praise should be said of the extremely full and interesting exhibit made by Messrs. Prang in the various branches of lithography. Their long series of prints for crayon and stump drawing,

and also for sepia and India inks, and, perhaps even more than these, their natural history series, a most varied collection of subjects, — leaves, blossoms, and fruit, beautifully drawn and colored, and "designed as aids to object teaching," — are, I presume, as perfect examples of what can be accomplished by the lithographic process as have ever been exhibited.

It is pleasant to be assured as this fair is brought to a close that it has not only pleased and instructed its thousands of curious visitors, but has resulted in an unexpectedly large profit to the association. Let us hope the next exhibition will be held in a building of its own, more adequate in size and adornment to the quality and variety of the products, both of art and of industry, which will await its invitation.

AMERICAN INSTITUTE OF ARCHITECTS.

BOSTON CHAPTER.

THE Annual Meeting of this society took place on Friday evening, November 1, at the Massachusetts Institute of Technology. In the absence of the President and Vice-President, Mr. Ware was elected temporary chairman. The following list of officers was elected for the ensuing year: President, E. C. Cabot; Vice-President, J. H. Sturgis; Secretary, H. Van Brunt; Treasurer, W. G. Preston; Committee on Admissions, Messrs. Sears, Tilden, and Fox; Committee on Business, Messrs. Longfellow, Van Brunt, and Peabody.

The resignations of Messrs. A. C. Martin and R. G. Shaw were reported.

The following resolutions were passed: —

Resolved, That the Boston Chapter of the American Institute of Architects approves the method of levying the assessments of the Institute proposed by the committee of ways and means and adopted at the Annual Convention of 1877.

Resolved, That this society recommends that the committee of ways and means be a standing committee with power to fill its own vacancies.

A discussion was raised as to the expediency of offering the services of the society to assist in the architectural education of the draughtsmen, junior members, and students of the architectural school, by lectures or lessons during the winter. A general willingness was expressed to make some special exertions in this direction, and the matter was referred to the committee on business.

A communication was read from the secretary of the American Institute of Architects, stating that a vote had been passed by the Board of Trustees authorizing the president of each chapter, as a member of said Board, to receive and act upon all credentials required of candidates for fellowship, and to report his recommendations to the Board.

After some further especial business, the meeting adjourned.

PUBLICATIONS RECEIVED.

TILTON'S HAND BOOKS OF DECORATIVE FORM. No. I., Greek Ornament. Illustrated with twelve plates printed in the original colors. Edited by W. R. Ware, Professor of Architecture at the Massachusetts Institute of Technology. Boston: S. W. Tilton & Co. FLAXMAN'S OUTLINE DESIGNS. First Series. Boston: S. W. Tilton & Co.

AN ELEMENTARY COURSE OF GEOMETRICAL DRAWING, containing Problems on the Right Line and Circle, Conic Sections, and other Curves; the Projection, Section, and Intersection of Solids; the Development of Surfaces, and Isometric Perspective. By George L. Vose, A. M., Professor of Civil Engineering in Bowdoin College; author of "Manual for Railroad Engineers." Illustrated by thirty-eight plates. Boston: Lee and Shepard. 1878.

NOTES AND CLIPPINGS.

A CURIOUS ACCIDENT. — A Munchausen-like accident happened at Pulaskee, N. Y., Saturday night, October 26, where the floor of a stable fell and left five tied cows hanging by the neck. When found on Sunday morning they were all dead.

DUTCH AND ENGLISH PAINTINGS. — Some manuscript letters written in 1818-20 by Sir David Wilkie, the English artist, to a friend, have been acquired by the British Museum in London. The following extract is interesting for its bearing on the statements we lately made upon the destructiveness of preservation: —

"At the Hague I met with an artist who was very much surprised that so many pictures of the English school should be found to crack and fade. I told him that their reputation for fading was in some degree a gross calumny, but that for their cracking, one and all of us must plead guilty to that. He wondered what we used in our colors, for he said that a cracked picture either ancient or modern is quite unknown in Holland. From what he said of the vehicles they now use (drying oil and mastic varnish) it must be the same with ours, and the difference must be either in the purity of their oil or in a more careful use of the varnish. The Dutch and Flemish painters, however, in guarding against the effects of time have not been able to guard against that powerful auxiliary of decay, the picture cleaner. Those admirable works that have come back from Paris are now suffering after all the hazards of their journey under this terrible personage. I saw a fine picture of Vandyke at Antwerp undergoing a thorough scouring, some others were intended for the same process, and at the Hague some of the pictures of Ostade, Jan Steen, and Paul Potter had been partially rubbed into the very 'heart's core' and are now out of all harmony and keeping."

PLASTER-OF-PARIS. — M. Landrin has just communicated to the Academy of Sciences the results of long-continued studies relative to the different qualities of this substance. He finds that the more or less rapid setting of the plaster is due to the mode in which it is burned. Its properties are very different when it is prepared in lumps or in powder. The former, when mixed with its own weight of water, sets in five minutes; while the latter, under similar conditions, takes twenty. The reason probably is that plaster in powder is more easily burned than when it is in lumps, and what tends to prove that fact is, that when the latter is exposed longer than usual to the action of fire it sets more slowly. Gypsum, when prepared at a high temperature, loses more and more its affinity for water, retaining, however, its property of absorbing its water of crystallization. Plaster heated to the red, and mixed in the ordinary manner, will no longer set; but if, instead of applying the ordinary quantity of liquid, the smallest possible portion is used, say one third of its weight, it will set in ten or twelve hours, and then it is less porous and becomes extremely hard. To prepare plaster for moulding it must be burned slowly for a long time, sufficiently to drive off all its water, and for its molecules to lose a part of their affinity for the liquid. M. Landrin stated that a similar result could be obtained by other means. If the plaster is exposed to the fire of the kiln for a time short enough to allow it to retain seven or eight per cent of its water, it is useless, as it sets almost immediately. If, however, the burning is again resumed, the substance soon loses its moisture, and, if then exposed to the air, it very rapidly retakes its water of crystallization, and then absorption continues more slowly. It can then be used; it sets slowly, but acquires great hardness. — *Galignani*.

PATENTS FOR THE YEAR 1877-78. — The report of the Commissioner of Patents for the fiscal year ended June 30, 1878, shows that the receipts of the office amounted to \$734,888, and the total expenditures were \$665,906. Of the amount expended, however, \$50,000 was for the restoration of 18,563 models injured by the fire of last year, and, omitting this item, the excess of receipts over expenses appears to have been \$118,982.

THE PEACOCK HALL OF DELHI. — In Beresford's "Delhi" is to be found the following description: "Peculiarly set apart for the reception of nobility is a quadrangle of moderate dimensions. The building is a very beautiful pavilion of white marble supported on massive pillars of the same material, the whole of which, with the connecting arches, is richly ornamented with flowers of inlaid mosaic work of different colored stones and gilding. It is raised on a terrace four feet high, the floor of which is composed of flags of white marble. Between each of the front row of pillars is a balustrade of marble, chastely carved in several designs of perforated work. The top of the building is ornamented with four marble pavilions with gilt cupolas. The ceiling of the pavilion was originally completely covered with filigree work;" but in 1799 the Maharrattas, after a capture of the city, took the silver down and melted it, the value of the same being estimated at nearly a million dollars. "In the cornice at each end of the interior hall is sculptured in letters of gold, in the Persian language, 'If there is a paradise on earth, it is this.' In this hall was the famous peacock throne, so called from its having the figures of two peacocks standing behind it, their tails being expanded, and the whole so inlaid with sapphires, rubies, emeralds, pearls, and other precious stones of appropriate colors, as to represent life. The throne itself is six feet long by four feet broad. It stood on six massive feet, which, with the body, were of solid gold, inlaid with rubies, emeralds, and diamonds. It was surmounted by a canopy of gold supported by twelve pillars, all richly emblazoned with costly gems, and a fringe of pearls ornamented the borders of the canopy. Between the two peacocks stood the figure of a parrot, of the ordinary size, said to have been carved out of a single emerald. On either side of the throne stood a chattri, or umbrella, one of the Oriental emblems of royalty. They were made of crimson velvet, richly embroidered and fringed with pearls. The handles were eight feet long, of solid gold, and studded with diamonds. The cost of this superb work of art has been variously stated at sums varying from £1,000,000 to £6,000,000. It was planned and executed under the supervision of the same Austin de Bourdeaux."

NUMBERING HOUSES. — A contrivance for rendering the numbers of houses visible by night has come into quite general use in Paris. It consists of a hollow triangular prism, nine inches long, two of whose sides are formed of panes of blue glass, on which the number of the house is picked out in white; and this prism-shaped lamp glass rests against the front of the house, so that the two sides with the numbers on them can be plainly seen by the passers-by. In the interior of the prism is a gas jet, fed by a pipe from the house.

A NEW ARTIST OF THE SIXTEENTH CENTURY. — A correspondent of the London *Athenæum* says: "Mr. Ed. Fétis claims to have discovered a new artist of the sixteenth century — a painter almost of the highest order, who signed his pictures, and whose name is not to be found in any art biography. The facts relating to this worthy, collected by Mr. Fétis, are briefly these: Michael-Angelo Immenraet was, on the 22d of October, 1656, received a member of the Antwerp Confraternity of Bachelors, in 1663-64 he belonged to the Guild of St. Luke in that city, and in 1665 his subscription to a kind of burial club was paid by his wife. This, with the fact that he painted and signed a picture of very great merit on the well-known subject of the 'Continence of Scipio,' is absolutely all that is known of this artist. The picture in question has only recently been discovered in an Antwerp garret, and is so badly preserved that it is doomed to early destruction."

AN OBSERVATORY ON MOUNT ÆTNA. — The scheme for an observatory on the summit of Mount Ætna is again pushed in the English scientific journals. The atmosphere there is peculiarly clear, and it is thought that some important results might be arrived at by a series of daily observations.

REPRINTS. — Mr. John Henry Parker is preparing a fifth edition of his "Concise Glossary of Architecture," and a seventh edition of Rickman's "Attempts to Discriminate the Styles of Architecture in England."