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[Gelatine Print.]

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MARCH 14, 1891.



SUMMARY:—

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THE final drawings for the Cathedral of St. John, in New York, were handed in on March 4. Of the four competitors selected at the preliminary competition, Messrs. Potter & Robertson were at one time reported to have withdrawn from the competition quite at the last moment, owing to the comment which has, quite unnecessarily, as we think, been excited by the relationship of one member of the firm to the Bishop of New York. As to the three other competitors, Mr. William Halsey Wood, Messrs. Heins & LaFarge, and Messrs. Huss & Buck, it is understood, we believe, that other persons, whose names do not appear, are associated with some or all the competitors. No decision has yet been reached in the final competition, and it is intended by the Trustees, with the considerate deference to what appears to be the public wish which has characterized all their proceedings, to place the designs on exhibition, if the competitors will consent, so that, as has been strongly urged by many people, the public may have an opportunity to interest itself in the work. There seems to be little doubt that the consent of the competitors will be obtained, and that the exhibition will be held, but the time and place are of course uncertain as yet.

MEANWHILE, the public may content itself with the descriptions given of the plans by the reporters of the daily papers, who have, apparently, not only seen them, but studied them with an intensity and elevation of thought which puts to shame the gross and material spirit in which architects contemplate such works. In regard to Mr. Wood's plan, we are told that "Jerusalem the Golden" is the "underlying motive of the design." We should say that the timid members of the congregation would prefer to think that their church was based on a judicious application of the laws of gravitation and resistance which prevail in this sublunary sphere, but, as it also appears that "the Ten Tribes, the Twelve Apostles, the Seven Churches, the Holy Gift of the Holy Ghost, the Four Evangelists, the Two-fold Nature of Our Blessed Lord, Law-giving and the Beatitudes," are "among" the analogies which have entered into the plans, we may hope that "Jerusalem the Golden," after all, is not to serve instead of rock beneath the walls, but is only to appear as a subject of decoration somewhere upstairs. It would seem that the foregoing list might comprise motives enough for one building, but we are

informed that in the choir the "symbolism of seven" is to prevail. As the choir is said to be seventy feet wide, and one hundred and thirty-five feet long, and contains one hundred and fifty stalls on each side, we suppose that the "symbolism of seven" is a little interrupted on occasion, but there are seven "chantries" attached to the choir, which shows that it is not altogether forgotten. The "chantries," which we take to be more properly chapels, as well as the nave chapels, have organs over the doorways, and we are assured that there is also to be a "great organ," which the reporter seems to confuse with a "choir organ," divided into two parts, which are to be placed respectively in the "north and south entrance towers." As the church runs north and south, and is four hundred feet long, the reporter appears to be quite right in thinking that, "with supplemental orchestras effectually placed in the open places adjacent to the choir," and the "keyboard on the floor of the transept," the effect of the music will be "unprecedented."

THE same reporter seems to have devoted a part of his genius to the interpretation of Messrs. Heins & LaFarge's plans. In these, we are told in one place, "the nave as a whole is to represent the Old Covenant." A little below, we learn that the "Church Militant" is "typified" in the nave, and, when we come to detail, we find that various portions of the nave are to be "devoted" to the Creation, the Last Judgment, the History of the World, the Messiah, and various other things, so that we conclude that the architects have really only taken the sensible course of arranging the decoration of their building in accordance with some connected scheme, without losing themselves in the clouds of "symbolism" which float around newspaper reporters during their contemplation of plans of churches. Whether in pursuance of a scheme of decoration, as we suppose to be the case, or through some lofty spiritual inspiration, which reporters can best comprehend, Messrs. Heins & LaFarge's idea is to have the crossing, which, it will be remembered, is surmounted by a dome, devoted to the Revelation, and they will certainly have a magnificent opportunity there to display the power of colored decoration, with such a theme as the Apocalypse furnishes. The choir decorations will show the fulfilment of prophecy in the Saviour. This design, as architects will have concluded from the simplicity of its forms, evidently relies for its interior effect upon color, and it is one of the most interesting on that account. As to the "symbolism," we will do all the architects the justice to believe that, if such a thing occurred to them at all, it must have been an afterthought, as no respectable building was ever yet erected without primary reference to the earthly materials of which it was to be built, whatever Father Durandus may have imagined. Speaking of earthly things, we are reminded to make the suggestion that even architects have an earthly as well as a heavenly part, and that, as there is little probability that any considerable work will be done on the cathedral for a long time to come, it would greatly conduce to the maintenance in good order of the material portion of the competitor whose design is chosen, and, indirectly, to the health of his spiritual part, if some arrangement should be made by which a reasonable salary could be paid him during the long period of waiting for means to carry out his plans. Nothing is much more unattractive to an architect than an idea grown cold, and the Trustees of the Cathedral could do nothing better for the work they have in charge than to have all the drawings completed at once, and paid for, while the designer is still full of his inspiration, and his thoughts are ready to follow each other in a connected train.

TWO of the oldest French architects, François Uchard and Albert Lenoir, died recently, almost on the same day. M. Uchard was a winner of the Prize of Rome in his student days, and built several important structures in Paris, among others, the church of St. François Xavier. He died in his eighty-second year. M. Albert Lenoir, who had reached his ninetieth year, was an officer of the Legion of Honor, and member of the Institute, and architect to the Cluny Museum. He was for many years professor in the School of Fine Arts, and Secretary of the School; and was well known for his important contributions to the literature of architecture and archæology.

A GREAT Austrian architect, Baron Von Hansen, the celebrated architect of the Parliament House and the Exchange at Vienna, as well as of an immense number of other buildings, has followed his rival, Schmidt, to the grave, at the ripe old age of seventy-eight. Hansen had been for many years an honorary member of the American Institute of Architects, and died possessed of all the rewards which are so liberally bestowed upon successful architects abroad.

TO the brief notices of the death of these foreign architects, we must, with great regret, add another, in memory of Mr. Emlen T. Littell, of New York, who died at his home in that city a few days ago, at the age of fifty-three. Mr. Littell was born in Philadelphia, and was a graduate of the University of Pennsylvania. He removed to New York soon after his graduation, and had lived there ever since, practising his profession, in which he devoted himself particularly to church architecture. Perhaps his most important work in New York was the beautiful Church of the Incarnation, on Madison Avenue. He was highly esteemed in society and in the profession, and was for many years President of the New York Chapter of the American Institute of Architects, and a member of the principal standing committees of the Institute.

THE *Wiener Bauindustrie-zeitung* gives a very interesting account of the late Friedrich von Schmidt, whose death was announced some time ago. Schmidt was the son of a poor clergyman in Wurtemberg. In his eighteenth year, he was employed as a stone-carver on Cologne Cathedral, then being slowly carried on under the architect Zwirner. His immense energy advanced him rapidly from place to place, and, fifteen years later, he was chosen Professor in the Academy of Fine Arts at Milan. Our readers know how he was called thence to Vienna, where he spent the remainder of his life, constantly engaged in the most important work; but it is interesting to learn that Schmidt himself attributed to his close acquaintance, first with German Gothic, and then with Italian Renaissance, the nondescript style which characterized his own work. In point of fact, he seems to have been an architect much after the way of our own Richardson. Extremely energetic, and convinced of his own capacity, he accomplished an immense amount of labor, and solved the most difficult problems successfully and easily. Like Richardson, he cared little for detail, but, while his buildings often have weak and eccentric ornament, they show also power and originality, with great constructive skill. On his elevation to the rank of Baron, he adopted, as his motto, the Latin sentence, "*Te sora loquuntur*," which well expresses his taste in design. He died at the comparatively early age of sixty-six, covered with titles and honors, which were showered upon him from nearly every part of the world.

MR. A. E. HUNT, of the Pittsburgh Reduction Company, recently read a paper on "Aluminium" before the Society of Arts of the Massachusetts Institute of Technology, in which he gave an estimate of the actual cost of making aluminium by the processes used under his direction. According to him, to produce one pound of aluminium, two pounds of alumina are required, costing three cents a pound; one pound of carbon electrode, costing two cents, is consumed by a current amounting to twenty-two electrical horse-power, excited for one hour, which, water-power being the motive-force, costs only five cents. Labor, superintendence and chemicals cost four cents more, and general expenses, interest and repairs three cents; making the total cost of one pound of aluminium twenty cents. Of course, the price at the Pittsburgh works is much higher than this, as the production is only three hundred and seventy-five pounds a day, and probably dividends on stock, and interest on cost of plant, royalties to patentees, and so on, amount to several times the cost of the metal; but there seems to be no question that, sooner or later, aluminium will be produced and sold in the metal market for twenty-five or thirty cents a pound. At that price, it would be far cheaper, bulk for bulk, than copper or zinc, or, possibly, even than tin-plate, and might be expected to take the place of all those metals for roofing, flashings, tank-linings, plumbing-pipes, door-knobs, and other builders' hardware, and an immense number of other purposes. As it would be much more lasting, even than copper, for such purposes, its introduction would be a great step toward economy and durability in house-building. As it resists a very high temperature, without change, it is not too much to suppose that

the parlor stoves, at least, of the future, will be made of it, as well as all smoke-pipes, oven-linings and other sheet-metal work connected with stoves and furnaces. As aluminium is by far the most abundant metal known, its ores forming a large part of the entire surface of the earth, its general use in the arts is now simply a question of the improvement and cheapening of the processes of extracting it.

M. DU CLEUZIOU writes a rather savage article in *La Semaine des Constructeurs*, about practical and theoretical explorers of antiquities, the former being the ones who plan, and excavate, and collect objects, while the latter sit in their comfortable rooms, in some official capacity, and write reflections upon other people's discoveries. Unfortunately, as he thinks, while the former do the work, it is the latter who reap the reward. Schliemann was a signal example of the working archaeologists, and, in accordance with the usual rule, made the most interesting and important discoveries ever yet described in connection with Greek archaeology only to be ridiculed, and treated with insulting contempt, by those who ought to be best able to appreciate the value of his work. It seems now that Schliemann, after his extraordinary discoveries at Ilios, made a formal presentation of his whole collection of objects excavated there to the Louvre. No answer whatever was received to his letter informing the authorities of his gift—not even so much as shipping-directions for his cases; and, after waiting several years for the slightest evidence that his offer had reached the Directors of the Louvre, he withdrew it, and sent his collection to Berlin, where it forms one of the most interesting exhibits in the Museum. A reception nearly similar was accorded to a gift of the same sort made by the celebrated Prisse d'Avennes, the author of the great work, "*L'Art Arabe*," which is familiar to architects, and a similar book on "*L'Art Egyptien*." Prisse d'Avennes, while exploring in and about Thebes, for his own pleasure, came across multitudes of splendid painted bas-reliefs in the tombs and elsewhere. He longed to secure them, but could not devise any way of doing so, until he found that the Turkish viceroy wanted stone blocks for paving the streets of Alexandria. Prisse d'Avennes undertook to supply a quantity, and, with great zeal, pulled out the sculptured stones that he wanted, had the bas-reliefs sawed off, and hastily packed away, and shipped the remaining portion of the blocks to Alexandria. When a convenient opportunity came, he got his sculptures into boxes, and brought them, at his own expense, to Paris, as a gift to the Bibliothèque Nationale. The Turks were much less instructed then than they are now about the value of the antiquities found in their dominions, but, even at that time, if the ingenious Frenchman had been caught in his operations, he would probably never have done any more exploring. On his arrival in France, Prisse d'Avennes was received with respect, almost with interest, by the archaeologists, and his boxes were stored in the court-yard of the Library, to await unpacking; and, much encouraged, he started again for Thebes, to collect new treasures for his grateful country. Three years later he returned, laden with additional spoil, to Paris, and hastened to the Bibliothèque, to see his precious bas-reliefs in their new home. They were nowhere to be seen; and, perhaps guided by an intuition, he made his way to the court-yard, where he discovered them, buried under a deep layer of snow, in their original boxes, just as they were piled when they arrived from Egypt. M. du Cleuziou says that Prisse d'Avennes used to recount this experience almost with tears in his eyes. He adds to it an adventure of his own, which is not without point. During the Exhibition of 1867, in Paris, he met, in the Gallery of Scientific Explorations, a company of working archaeologists and explorers of the highest distinction, who had been requested to assemble there, to be questioned by an official commission, with a view to the distribution of honorable recompenses for their work. There was one from the centre of Africa; another from the plateau of Thibet; a third who had crossed South America from ocean to ocean; a fourth, who still trembled with a fever which he had brought from India; and others from various parts of the world. Seated modestly on benches, they awaited the arrival of an official *chef de bureau*, who came at last, and questioned each briefly about his researches. At the close of the Exhibition, each of the working explorers was gazetted as the happy recipient of the decoration of the Academy, a trifling matter, while the *chef de bureau*, who asked them where they had been, was promoted to the grade of Officer of the Legion of Honor, "for exceptional services."

ENGLISH ARCHITECTURE.¹—IV.

Fig. 48. St. Mary's Church, Edinburgh.

THE dreams of happiness indulged in by the European aristocracy were destined, as we all know, to be dispelled ere long. Agitations for democratic reforms rudely disturbed the sense of security enjoyed by the English nobility. Confidence was succeeded by fear, and fear by reaction. Feeling their privileges slipping from their grasp, the ruling classes, that is, those possessed of rank and wealth, sighed for the good old days when the lord was everything and the "villain" nothing. Out of these conditions sprang a cult of the Middle Ages in all its phases. In literature, this homage produced the romances of Sir Walter Scott; in religion, it put a check on free-will Protestantism, parent of so many revolutions, and a powerful party was formed in the very bosom of the national church to revive the ceremonies and dogmas of the church of Rome; in architecture, it led to a *renaissance* of the Gothic style, the style of the ideal period of the privileged orders. Many striking facts bear witness to the earnestness of this enthusiasm for mediæval ideas and art. Thousands of neglected and abandoned churches have been restored by the aid of public subscriptions: thousands of new churches in the style of the Middle Ages have been built during the

reign of Queen Victoria. In no other period has activity in ecclesiastical architecture been carried to such an extent as during the fifty years just elapsed.

The high-priest of Gothic architecture was Pugin (1812-1852), the son of a manufacturer of church ornaments, and a native of Lausanne, Switzerland. After having travelled extensively for the purpose of study, Pugin published a remarkable work on the Gothic architecture of Normandy; the beauty of his drawings, the accuracy of his descriptions, the warmth of his plea, and, above all, the timeliness of his publication won for him a throng of enthusiastic followers, both from the general public and from the ranks of the young architects. Pugin's travelling-sketches are unequalled, it seems to me, for poetry of design; but his architectural compositions do not reach the same level of excellence. Pugin was succeeded by Scott (1811-1878), Street (1824-1881) and Burges (1827-1881). The first of these had a broad field for his activity; he built or restored more



Fig. 50. Fountain at Cardiff Castle.

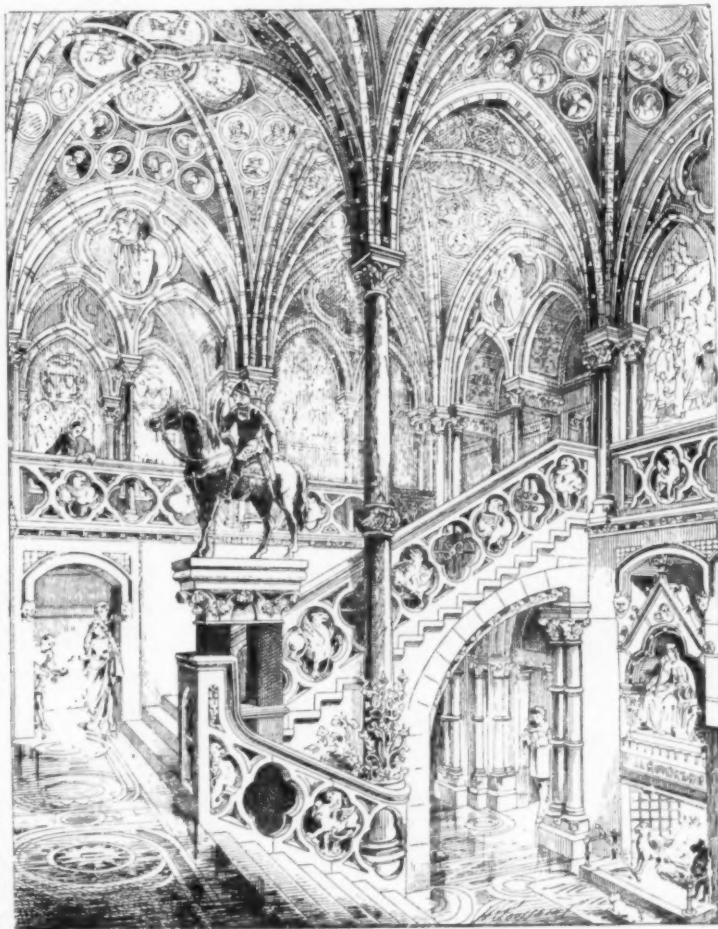


Fig. 49. Stairway at Cardiff Castle.

than fifty churches, besides his numerous civil constructions; among the latter may be cited the Albert Memorial, the St. Pancras railway-station and hotel, and the Foreign Office. Scott treated the Gothic style in a reasonable fashion, retaining all features that were of practical advantage and rejecting all eccentricities; his plan for the cathedral of Edinburgh (Figure 48) gives a good idea of the way in which he worked. In a word, Scott was entirely modern in spirit. Street, on the other hand, belonged by nature to the Middle Ages; of a mystical and super-refined temperament, the monuments which he has bequeathed to his country possess originality, but are out of place in these times; such, for example, are the New Law Courts in London. Of all the band of Gothic architects, Burges had the most genius; full of imagination, a consummate painter and draughtsman as well as architect, he had all the artistic qualities requisite for success; but, unfortunately, he was lacking in business capacity. His field of action was very

circumscribed, but Cardiff Castle, which he practically rebuilt for the Marquis of Bute, is a masterpiece of mediæval architecture and decoration. We give the grand

¹ From the French of Lawrence Harvey, in Planat's "Encyclopédie de l'Architecture et de la Construction." Continued from page 149, No. 733.

staircase from it (Figure 49), and a bronze fountain (Figure 50).

In the domain of domestic architecture, the Gothic proved in the end a very inconvenient style, owing to the influence of archaeological pedantry. About fifteen years ago, several

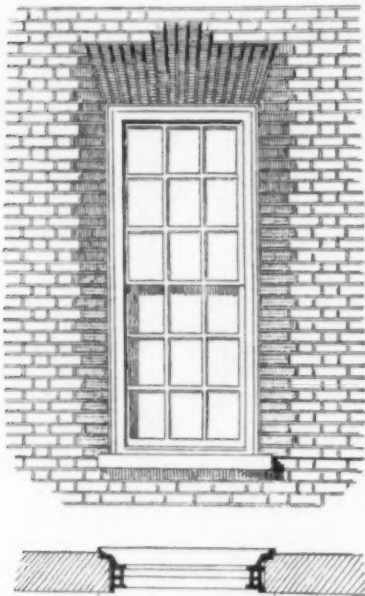


Fig. 51. Window of the Time of Queen Anne.

architects, among others the distinguished artist Norman Shaw, determined to free themselves from this tutelage, and with this end in view they invented what is known as the Queen Anne style. After the expulsion of the Stuarts (1689), Holland sent us William of Orange and at the same time bestowed upon us her architecture in unfaced brick. The Dutch structures, pretty and cheap, and exactly suited to the needs of the bourgeoisie, obtained peculiar favor during the reign of Queen Anne, who followed William and Mary. The dwellings of that period are especially remarkable for their windows framed-in by red brick (Figure 51), and with wooden casings painted white in imitation of stone. Queen Anne's reign (1702-1714) having been particularly happy, the architects of to-day have adopted her name for their new-fashioned architecture, for the sake of gaining popularity for it; but aside from the use of unfaced brick, the modern Queen Anne style has little in common with the older style; it bears a much closer resemblance to the Flemish Renaissance (Figure 52). Moreover, the modern Queen Anne artist is granted complete license; he is free to employ Gothic mouldings or Classic details; he is under no restrictions as to symmetry or outlines. This freedom makes it possible to adapt the dwelling to the comfort and even to the caprices of the occupant; the Queen Anne style is therefore the style *par excellence* for a country-house (Figure 53) or a private residence.

This style has, on the other hand, been the ruin of the architecture of public buildings. At the beginning of the century, architects were accustomed to design on a grand scale for their aristocratic clients, and they were able also to plan public edifices on a grand scale; but the architects of to-day, working in a petty fashion for their bourgeois patrons [the aristocracy is bourgeois at present], for want of experience, find themselves incapacitated when confronted by the requirements of a public monument.

In this *résumé* of the history of English architecture, I have endeavored to indicate the relationship existing between the evolutions of art and the political and social evolutions of the nation. It may be said that up to the moment of the rupture between England and the Church of Rome, a genuinely national art, responding to the material and moral needs of the country, flourished in Great Britain. But when architecture ceased to minister to religious wants, it fell from its position as a national



Fig. 52. Insurance Company's Building.

art and became the property of a coterie of rich and vain-glorious persons. Since then art has been a matter of fashion in England, imported sometimes from Germany, sometimes from Flanders, sometimes from France, sometimes from Italy. This business of importation is still going on. About thirty



Fig. 53. House in Sundridge Park.

years ago Owen Jones introduced the Moorish art of the Alhambra; this fad lasted several years. The "Casa d'Oro" and other Gothic structures were transplanted from Venice to London by other architects; then the style of Francis I became the fashion, and it is to-day, much in favor. Lastly, since the occupation of Egypt, the Arab art of Cairo has been zealously cultivated, and has made the fortune of certain upholsterers and decorators. Just at the present moment we are looking for a new style; the Greek, revised and corrected, is suggested by some; others prefer the Byzantine, others the Indian; still others think to have discovered the germ of the architecture of the future in the palace of Diocletian at Spalato!

What will be the outgrowth of English architecture in the future? Broadly speaking, the English aristocracy is Norman



Fig. 54. Private Dwelling.

in race and traditions, while the common people are of Anglo-Saxon stock. The monuments and history of the Normans show that they resemble the Romans in the grandeur of their conceptions, whether in politics or art. The Anglo-Saxons, on the contrary, have from all time been incapable of comprehending the idea of *ensemble*, in any domain whatsoever. I infer from all this that, with the decline of the aristocracy in England and the accession of the democracy to power, public architecture will lose more and more that sentiment of grandeur and

unity which belongs to it; but, on the other hand, the architecture of the private English dwelling (Figure 54) will become the model for architecture of its kind the world over.

LAWRENCE HARVEY.

A NOVEL DOOR.—A novel door, specially intended for the economy of space, has just been patented. The door is an adaptation of the principle of the roller-top desk and cover, and consists of a series of slats about one and one half inches wide and three-quarters of an inch thick, joined together by wooden spindles, one revolving within another. In the roller-top desk the slats are joined by ribbons of steel or canvas. When the door is open it is wound upon a spiral drum at top and bottom, and all is enclosed within the door casing. A three-foot door winds up in a roll seven inches in diameter. Ordinarily a three-foot door occupies about fourteen square feet in swinging, and the new rolling door enables the builder to economize all that space.—*New York Evening Telegram*.

THE DARK AGES IN BOSTON.



THE purpose of art is supposed to be to give pleasure, and the pleasure given by architecture is more general and more permanent than is that of any other art—provided, of course, that architecture gives any pleasure, which may reasonably be doubted in view of many constructions which are now posing as architectural achievements. Presumably, no man erects a building that is wholly repugnant to his taste, even when economic considerations force the employment of intractable materials and awkward forms, therefore it is safe to assume that the taste of some of the members of the architectural profession can be readily impugned. There always exists a class of men who juggle with the accessories of their work, who are amused by tricks which they consider *tours de force*, who delight in nothing so much as in the display of “lightning changes,” of extravaganzas, of deploying the flotsam and jetsam of their minds. These are patchwork men, who esteem a kaleidoscope and find a simple tint dreary—who commend anything “well broken up,” and cannot refrain from fretting a surface. In everything but architecture, their work quickly disappears beneath the surface of a stream of oblivion so profound that it is not even dredged to the surface as a curiosity—but in architecture, this contemptible, irritating mediocrity, this worse than useless thing, is allowed to multiply upon every highway and stand for years the ignorant, arrogant expression of an untrained mind. It is one of the chief vices of this type of work that it is never twice alike, that it is not even uniform in its eccentricity—but expresses an itching desire to employ every conceivable material, form and color. It has no style, it scorns constructive expression, it enjoys being irrational to such an extent that if an analogous sort of work were done in literature, it would be dubbed drivelling idiocy. It only amuses itself by combining architectural factors as a child would pile up its blocks.

This philippic is the result of two things, the sight of Boylston Street and the desire that something may be done to prevent the possibility of the repetition of much more of such work elsewhere in the city. Boylston Street in the past was a continuous row of houses, of greater or less pretension in size and in size only—all in brick and most with the usual Boston bow-window. They were not of great architectural merit, but they were simple, quiet and gave a general character to the entire street. An occasional doorway, with richer detail than others about it, was the only evidence that the owner desired to outclass his neighbors. The skyline, viewed across the Public Gardens, was sufficiently irregular to satisfy a moderate desire for picturesqueness, if such a desire existed in the mind of the observer, and yet did not indulge in any sudden freaks of attitude or of bizarre form. Now, Boylston Street, from Boylston Place to Park Square, is a collection of mongrel crazy fronts, each one of which seems more uncouth than its neighbor, and Boylston Street below Park Square shows signs of worse dissolution. It is sufficiently bad to have Park Square—which, squalid and mean as it now is, will certainly be before many years one of the important entrances to the centre of the city—flanked by two investments which have not even the merit of apparent stability, to have Church Street opposite the side entrance to the Public Gardens, also flanked by a glass and copper construction on one side and the Hotel Thorndike on the other—but farther down the street has appeared a front whose surface crepitates in a different way upon each story, and, another of which the second story mourns in black the frivolity of the first. As for such slight things as general scheme of treatment, of concentration of ornament, of integrity of constructive lines, of harmony of materials, of study of silhouette and skylines, of any proportions, no matter how hampered by expediency—all of these seem to have been respected but by neglect. Far better than this sort of harlequinade is the apotheosis of the cube which is to be found in so many American office-buildings, and which has the merit of simple mass. And after all “simplicity is still the soul, of all that time deems worth the sparing.”

We have now an Art Commission which is to exercise its judgment upon sculpture in the city, but it is undoubtedly Quixotic and Utopian to hope for any sort of authoritative action in regard to the sort of

buildings which shall not be erected in this city. Unquestionably, no owner, and but few architects would submit to dictation upon the kind of architecture that their combined money and designing skill should produce. At the same time, if, in any way, professional advice of acknowledged value could be placed at the disposal of those that wished it, advice which would be cautionary, which would tend to simplify, to eliminate, and to refine work, what might not be accomplished! People are so fond of anything that is gratuitous, that such advice might be of some avail. It would have to be authorized advice, and confined to some few men. It would be a thankless task to those men; they would get unlimited abuse from many sides, and it would argue to most minds unqualified conceit for them to attempt to exercise any such function—but what seems conceit to the world at large, is merely the indication of real knowledge to the trained mind. Of course this is a vague suggestion and probably worthless, but it would be well to bring some sort of restraining influence to bear upon the phantasies of some of the architects, whether by public opinion or professional criticism.

The district at the corner of Lincoln and Bedford Streets can be now congratulated upon the possession of a number of unusually good business buildings, which are comparatively unfretted by desire for too much ornament and are frank in their masses. The building which occupies the site of the Bedford Street Building has a totally different character from its predecessor, being much lighter in masses and in color; in fact, if any criticism were to be made, it would be that the large arches are a little thin and the white marble seems at present in rather sharp contrast to the brick. The use of Pompeian (so-called) brick in the opposite building raises the doubt in regard to that brick which constantly recurs, namely, that in trying to gain variation of color we have gone too far and produced too mottled a surface, and that many varieties of the brick are too hot in tone.

Back of the Lincoln Street Ames Building is a small building on the narrow street which is one of the very best brick business buildings in the city—and it has an excellent brick cornice.

The building on the corner of West and Tremont Streets is approaching completion and a capital building it is, simple, refined, of excellent color, and with a satisfactory cornice—it only needs a longer façade on Tremont Street.

The building on the corner of Mason and Tremont Streets and the adjoining building serve to excite a desire that both fronts should have been done by one or the other of the architects. They are the same in height, and there has been an attempt to carry the lines through on the facades, and to keep the cornices similar; but otherwise, though nearly the same in color, the materials are different, and the scheme of each is totally at variance with the other. In the corner building the idea has obtained of making two glass stories at the base of a building, instead of one—which was bad enough, in all conscience. This idea is of very doubtful expediency, as the second-story windows seldom are of use as show-windows, and are hot in summer and cold in winter. The copper bay in the building next the corner is one of the few that prove that copper can be made to serve an artistic as well as a useful purpose. Near the corner of Boylston Street is a quiet and refined new front, a little warm in color, perhaps, but of excellent character.

The apartment-house has evidently come to stay. Modern life is gregarious and, so far as consistent with old traditions, cooperative and communistic. The elevator has made it possible to hold vast numbers of people in strata which have a limited superficial area, and the stratified masses called apartment-houses are one of the present architectural problems. It is impossible to make them look like homes, but they can at least be made to look like hotels and not like telescoped private houses.

New Beacon Street promises additional horrors. The speculator is abroad and the kind of building of which the design for the front is obtained in some occult manner from an architect's office and the plan and details are developed by the intelligence of the builder is becoming more and more frequent.

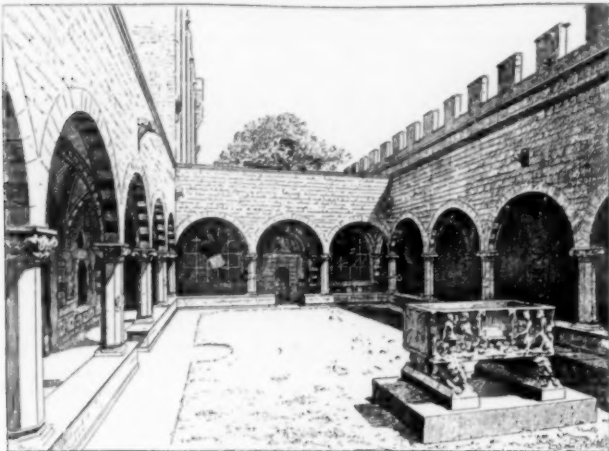
Probably people of cultivated tastes are no better tenants than the vulgar, but it would seem that worldly wisdom might recognize the fact that even the vulgar discriminate, and appreciate the difference, though they cannot analyze it, between work that has merit and work that has none, and that fashion is led ultimately not by the choice of the uneducated, but by the example of the sophisticated. If this fact were taken at all into account by the real-estate improver, there would be less for criticism in the result of his labors.

It is mortifying to acknowledge that the architectural attempts of to-day are even inferior to those of the darker ages of thirty and forty years ago—but a group of stone houses near Cottage Farm station which were apparently built at sometime in the forties or fifties have a quiet dignity about them that puts to shame our modern struggles. It is true they are mere copies of English originals which may be seen about Shrewsbury, Warwick and Oxford, but the style has virtues—which are not necessarily confined to it—of simple masses and studied proportions. There have blossomed on Cypress Street, in Brookline, two flowers of Queen Anne cottages which are not doomed to blush unseen, but by form and color are very evident to the public.

In fact, many of the suburban streets are becoming excellent examples of toy-picture-book land, which only goes to prove once again that we are all children of a larger growth.

C. HOWARD WALKER.

ETRUSCAN ART. — I.

Court-yard of the Chateau de Vincigliati. From *L'Art*.

THE house of Firmin-Didot of Paris, which has made for itself an enviable reputation in the special publication of great illustrated works of art, has recently enriched its list of such publications with a new volume which will occupy an important place in the critical history of the century. This volume is due to the pen of M. Jules Martha, Maitre des Conférences to the Faculty of Letters at Paris. This distinguished writer has already drawn attention to himself by very interesting researches into the art, archaeology and architecture of Etruria; but the work which I have just mentioned far surpasses everything which has been written up to the present time on the origin and character of this people, as yet so little and so ill understood. It has been "crowned" by the Académie des Inscriptions et Belles-Lettres, which invited competition upon the following subject: "A Critical Study upon the works of Etruscan art which we possess; the origin of this art; the influences which it had on Roman art." M. Martha had the gratification of seeing his memoir crowned by the Academy, and it is this memoir which the house of Firmin-Didot has published, enriched with more than 400 engravings, representing the most interesting specimens of the art, ceramic art and architecture of Etruria. The book contains no less than 600 pages, and deserves a place in every well-ordered library. We already possess some useful publications upon the Etruscans, which can be consulted. Among others, that of Dennis, called, "*The Cities and Cemeteries of Etruria*," which dates from 1878; "*L'Etrurie et les Etrusques*," by Noël des Vergers, 1862, which I mention for those who may desire to read-up on the subject. But these works, already somewhat out of date, were partly drawn from the voluminous compilations of Micoli on Italian antiquities, and from which M. Martha also has made numberless extracts; but M. Martha has had the ability, the patience and the good faith to consult the bulletins of the archaeological societies of Italy, wherein the latest discoveries have been described, and on reading his book it will be seen that, besides doing this, he has taken the trouble to go to the places himself, to visit the museums, to examine the excavations and to inform himself completely as to the value and the significance of the documents brought to light in recent times by the pickaxe of the Italian archaeologist upon both sides of the peninsula. This is what makes his work the most complete which has appeared until now upon this still obscure and complex matter. The author will allow me to be sincere, and to find, for example, that in the course of his work, everywhere so remarkable from one end to the other, he has a little lost sight of one of the principal points of the programme, and that he ought to have confined himself to fixing the influence which Etruscan Art exercised over Roman Art. In his place, I should even wish to extend my task and attempt to define also the influence which the contact with Grecian civilization produced upon Etruscan manners and customs. It would certainly be useful to know if the corruption and degradation of this people was antecedent to, or ulterior to the invasion of the Hellenic elements; but I willingly recognize that even in its present form the work of M. Martha constitutes a document of the first rank, and casts a great light upon many points of history, which even yesterday appeared undecipherable to the most attentive investigators.

The learned professor of the Faculty of Paris began his work by a succinct and complete study into the origin of the Etruscans, who, according to ancient traditions, inhabited the part of the peninsula comprised between the Arno and the Tiber. It has been wrong to confine until now the circle of Etruscan domination to these limits. The most recent discoveries, on the contrary, permit us to affirm that the influence of this people radiated over not only all of Italy, but it extended far beyond, and it is probable that it spread over the Occident the first glimmerings of civilization. Unfortunately, it met on its way the Roman people—who had the knack of effacing all civilizations encountered by them, the brilliancy of which cast a shadow on their own—who allowed only the scattered relics of Etruscan society to remain, vestiges quite insufficient for the rehabili-

tation of its history. It had been ascertained long ago, rather by induction than by the support of categorical documents, that the Romans had borrowed from their neighbors, amongst others from the Etruscans, some important notions as to monumental architecture; but the latest excavations made in several localities, and especially at Marzabotto, near Bologna, have shown that the fundamental rule of Roman municipal life was borrowed from the Etruscan nation. The structure and the divisions of the houses, pavements, subterranean passages, everything which goes to constitute the arrangement of a city, was imported into Rome by architects who came from every part of the peninsula. The Etruscan race was evidently a people ripe with cultivation at the time when Roman grandeur was still in its cradle. But what was, in truth, the origin of this people? Was it aboriginal, or migratory? To solve this problem it will be necessary to have more precise information as to the characteristics of the first inhabitants of the peninsula than those which we possess.

In ancient times, Italy often changed its name according to the people who held sway at the time. It was called Enotria by the Enotri inhabitants of Lucania; Hesperia, by the Hesperides; Ausonia, by the Ausonians; Umbria, by the Umbrians; Saturnia, by the people of Latium; then the Pelasgians, the Raseni, and the Samnites in their turn predominated; but the thing which tradition establishes in indisputable form is that the autochthones of the earliest times led a nomadic and pastoral existence. This allows us to conjecture that the Etruscans were invaders, and that they brought with them not only the artistic disposition which later had a great development, but also the spirit of political organization and the warlike instinct which permitted them to reign, at a given moment, over all Italy and afterwards to become masters of Corsica, Sardinia and the island of Elba, and to dispute with the Carthaginians and Syracusans the empire of the Mediterranean. Titus Livius, who wrote according to traditions fresh in his time, affirms that the Etruscan hegemony stretched from the Alps to Sicily.

As to the political constitution of the Etruscans, the ideas which have prevailed until yesterday must be greatly modified. It used to be believed that the nation was a confederacy of twelve races, each one of which had its capital city. As studies have developed, people ended by discovering a score of great Etruscan cities, each having every indication of being a capital, and for my part I incline to the belief that the Etruscan nation was formed of several communities or federations, of which the Romans, who were the first to come in contact with that nation, only knew a single one—one which had great importance as the outpost city placed on the spur of the Cimean mountains which overlook the Mediterranean—Tarquinia, and which also counted among the great confederated cities Chiusi, the home of King Porsenna, and Volsinia built at the very place where Orvieto stands to-day. This confederation belonged to the Tiberine region. The cities which, like Pisa, Fiesole, Volterra, are found in the neighborhood of the Arno, must have formed another confederation, and the same with those which were found on the other side of the Apennines, and so on. I am not far from believing that the heart of Etruria was in the region of the Arno. It is inadmissible that a people whose rule extended from the foot of the Alps, and who canalized the Po and Tiber and the whole sub-Alpine territory, committed the imprudence of fixing its political centre at Tarquinia, that is to say, at the very frontier of its State.

All this, however, does not tell us whence came the Etruscans. The ancients, who heard them mentioned from a nearer standpoint than ours were not agreed on this point. Hellenicos said that the Pelasgians and the Etruscans were one and the same. Herodotus believed that they were Lydians. Anticiles of Athens shared these two beliefs, and affirms that the Etruscans are Pelasgians, who, for the purpose of coming over to Italy, joined with the migratory Lydians. Denys of Halicarnassus disputes all these hypotheses and pretends that the Thyzzeneens were the autochthones. Modern historians are not less divided than the ancients as to the origin of the Etruscans, who have been attributed to every source. They have been made, turn in turn, Pelasgians, Italiotes, Greeks, Iberians, Celts, Goths, Slavs, Phœnicians, Japanese, Armenians, Hebrews, Hittites, Tartars, etc. M. Martha points out this multiplicity of hypotheses with a little trace of malice; and, yet, since his book has been written, new studies have come out to reinforce the supposition that the Etruscans formed a detached branch of the Armenian race. We do not yet possess the exact Etruscan language, but multiplied observations have permitted us to decipher the words which are most commonly found in the inscriptions in the necropoli and upon amphoræ. M. Sophus Bugge, professor at the University of Christiania, who in 1875 maintained that the Etruscan was a language of Indo-Germanic origin, has just been converted to the idea put forward in 1861, by Sir Robert Ellis, in his remarkable work called "*The Armenian Origin of the Etruscans*." In a memoir of recent date, M. Bugge has arranged a series of Etruscan words absolutely identical with corresponding words in the Armenian language, among others "erus" and "luxnai," "sun" and "moon," which in Armenian are "areo" and "lunskey." "Vand," the name of an Etruscan divinity, corresponds to the Armenian verb "vandem," which means "annihilate." "Turce" and "talce" are vocables which are often found in Etruscan inscriptions, signifying "gift," vocables which have their correspondents in the verbs "tur" and "tal," which in Armenian express the act of giving.

The dispute is not nearly finished, and in proportion as the research extends suppositions only become the more various, so the fact is

very well noted by M. Martha that we shall know the truth concerning Etruscans only on the day when we shall know what idioms they used in speech. Unfortunately, we are still very far from that day, for until now this idiom has not revealed to us its secret. It is known that it was, like all the Mediterranean alphabets, derived from the Phœnicians, but our knowledge does not go beyond that. Thanks to the rare bilingual inscriptions engraved in Etruscan and Latin, we know the signification of some words; other words which are often met with have been guessed by a process of induction; but between this and the reconstruction of the entire language there is a wide gap. The confusion and uncertainty of all the ideas which were held concerning this people are such that the learned professors of the Faculty of Paris have gone so far as to ask themselves whether there really ever existed an Etruscan people, and if this name did not serve to give a political indication to a nation composed of different ethnographic elements—a supposition which, after all, would afford an as ingenious as expeditious method of solving the problem.

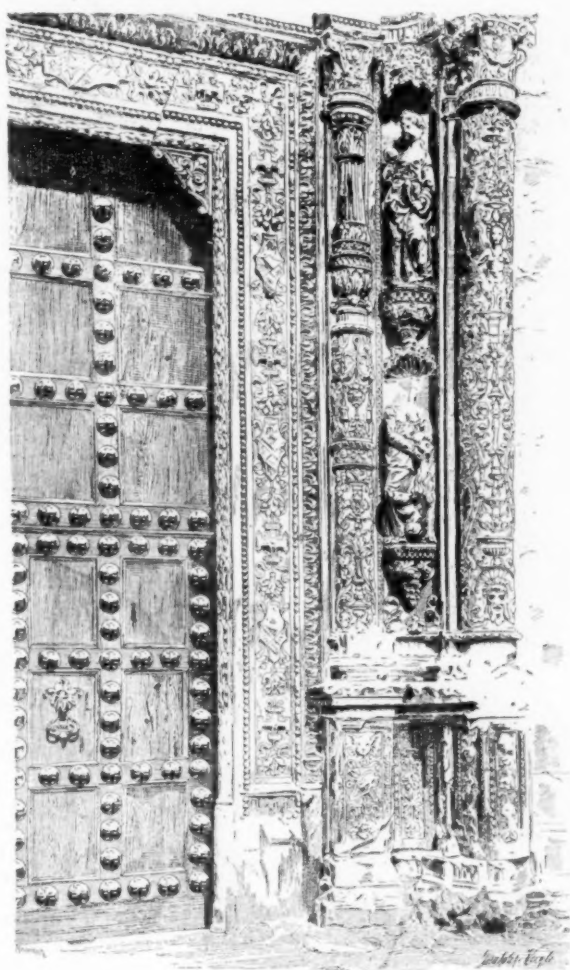
Many dissertations have been written, and dissertations are still being written on the question whether the Etruscans appeared in Italy upon one or the other side of the peninsula. Almost all the Greek authors maintain the first hypothesis; but Niebuhr, who was a man worthy of credit in such a matter, believes that they invaded the peninsula from the North. Helbig, who shares Niebuhr's opinion, goes so far as to pretend that the arrival of the Etruscans coincided with that of the Italiotes, who descended from the Rætian Alps, and that this great event was contemporaneous with the advance of the Siculi towards the southern extremity of the peninsula, which would bring the date to about the eleventh century before our era. It would take too long to enumerate here all the arguments which plead in favor of these numberless hypotheses; but I cannot omit remarking that Helbig's supposition, which seems also shared by our author, would promise to affirm that at the moment of their arrival in Italy the Etruscans were a semi-barbarous people, for at this epoch there was civilization only in Egypt and the Orient. The Etruscan people did not begin to be civilized until later, when they found themselves in contact with merchants who brought by sea the products and teachings of more cultivated races. At the beginning of Roman grandeur there was already achieved a certain degree of maturity, since it furnished several kings to the growing city. The Tarquins and Servius Tullius were Etruscan patricians, and it was the expulsion of these kings which brought about the conflict between Rome and the branches of the Etruscan nation established on its frontier. It was this contact, too, which brought about the ruin of the Etruscans, condemned to disappear like all those whose force and cohesion was displeasing to Roman ambition. But in fine, we do not know anything positive either as to the cradle of the Etruscan race, or as to the route they followed to reach Italy, where they were to be extinguished.

Controversy upon these two points dates from the moment when people began to speak of the Etruscans. It was already open at the time of Plutarch, of Denys of Halicarnassus, of Titus Livius, of Tacitus, and it still continues. I even dare to assert that it will last to doomsday, and that from certain points of view it is a perfectly idle discussion. People have wished, for example, at one time to see a bond of relationship between the Etruscans and Egyptians; but this induction could not easily be supported. In Egypt all the personages devoted to the observance of religious rites were carefully shaven, while the Etruscans wore beards like the Roman augurs, the haruspices and sacrificial agents. Now we know that, in antiquity especially, it is the religious practices which serve to fix the character of a nation. After all, if it should be proved that the Etruscan people came from the borders of the Nile, it would be logically necessary to discover what was the origin of the Egyptian race, and if one succeeded in proving, as certain savants pretend can be done, that the people of the Pharaohs were issue of the Ethiopians, then it would be necessary to determine what was the civil condition of the Ethiopians, and so on. These long and sterile researches make useless the efforts of the investigators, which would be more profitable if they were applied to an end more immediate and more reasonable. It is much more simple, is it not, to say that the Etruscans were Etruscans? As to the matter of knowing whether they crossed the Alps or passed over the Straits of Messina to come and establish themselves in Italy, it is as worthy a subject of quarrel as the crowd of pedants usually have. The answer that can be made to this question can neither add nor subtract anything from the merit of the art works, almost all mutilated, moreover, which have been left to us. When we speak of Etruscan art, it is merely a fashion of speech. For a long time, judging by some specimens which had been found here and there, people dreamed of the existence of a vast treasury of art works buried under the ruins and dust of centuries, and they flattered themselves that by means of intelligent and deep excavations this treasure could be brought to light. Excavations have been made, and what is to-day known, authorizes us to say that these fair hopes have been deceptive, and that the Etruscans were, as artists, unworthy of the reputation which had been made for them in anticipation of these discoveries. In truth, these people had no monumental architecture, and it is difficult that a people who do not possess the feeling for grandeur, as shown in the construction of temples, public edifices and private dwellings, can excel in the other branches of art. One cannot think of carving statues and painting pictures in those places where there was a lack of the monuments in which such statues and such paintings could be used as ornaments. I do not say absolutely, that the Etruscans were totally lacking in taste and genius, but their

artistic patrimony is lacking in originality and breadth. They have left us some tombs, magnificent in their luxury and arrangement; but really, these tombs lack architectural merit. They are, after all, only caves, whatever may be the splendor of the paintings which decorate the walls and the accessories found about these caves. We are far from the tombs of Hadrian and Augustus, the Roman hypogæa, the pyramids of the Pharaohs, and all the grand sepulchres in which other people have left the mark of their incontestable genius. Etruscan ceramics certainly present a singular and delicate beauty. I have seen in the museums bits of plate, pieces of jewelry and specimens of metal-work, which demand a certain admiration. But all this is not worth the trouble which people take to place the Etruscan people by the side of those who, like the Greeks and Romans, have so profoundly impressed the mark of their artistic temperament upon the works which, mutilated as they are by time, still present a proof of grandeur in favor of their authors. It would be too much honor to the Etruscans, who, up to the present time, have been too abundantly praised to believe that their principal works have perished, and that we cannot judge them at their proper worth, since the documents which might plead in their favor have disappeared. It is really the absence of these documents which condemns them. H. MEREU.

[To be continued.]

SGRAFFITO.¹



THE Italian words *graffiato*, *sgraffiato*, or *sgraffito* mean "scratched"; and scratched work is the most ancient form of graphic expression and surface decoration used by man.

The term "sgraffito" is, however, specially used for decoration scratched or incised upon plaster or potter's clay while still soft; and for beauty of effect, depends either solely upon lines thus incised, according to design, with the resulting contrast of surfaces, or partly upon such lines and contrast, and partly upon an undercoat of color revealed by the incisions; while again, the means at disposal may be increased by varying the colors of the undercoat in accordance with the scheme of design.

Now, it would be a curious and an interesting piece of research to trace this simple form of craft, from the rude but graphic scratchings of primitive man, down to the present custom of scratching mock stone joints on stuccoed walls, but such a review would be quite beyond my scope, and would belong rather to archaeology than to art.

¹ A paper by Mr. Heywood Sumner read before the Society of Arts, February 10, and published in the *Journal of the Society*.

My present purpose is to approach sgraffito from the craftsman's point of view, and to record my experience of that branch of sgraffito work which deals with plastered wall-surfaces. With this end in view, I shall first try to explain the method—making precept visible in practice upon this duly-prepared panel—then to mention some possible and preventible causes of failure in the work; and, finally, to say a few words respecting the manner of design which seems to be permitted or suggested by the method under consideration.

First, then, the method.

Let us suppose the surface intended to be treated is an inside bare brick wall. Rake and sweep out the mortar joints thoroughly, so that there may be no mortar dust lying in the raked-out joints to weaken the adherence of the coarse coat to the sides of the bricks, then give the wall as much water as it will drink. If you do not thoroughly satisfy the suction of the wall, it will absorb the moisture from the coarse coat, and consequently the cement will not have sufficient water to enable it to revert to its stone-like nature by process of crystallization. It will not set, but merely dry, in which case it will be worth little more than dried mud.

Special care should be taken that the cement and sand,¹ which compose the coarse stuff, should be thoroughly mixed, otherwise its strength will be unequal—in one place there will be too much sand, in another too much Portland; possibly shrinkage cracks will result, and certainly you will not obtain what you require—an even suction for your finishing coats. Special care should also be taken that the surface of the coarse coat should be well roughened or friezed up, so as to give what is called a good "key." This coat should be got on some days before you begin your work, so that it may have time to set thoroughly.

Supposing this to have been done, you will then space out the wall according to your scheme of decoration, and, having decided where to begin operations, give the wall in such place as much water as it will drink; then the color coat should be laid, observing just the same precautions as to thoroughly mixing cement, sand, and color,² and as to leaving plenty of key upon the finished surface.

You should calculate how much surface of color coat it may be advisable to get on to the wall, as it is better to maintain throughout the work the same duration of time between the laying of the color coat and the following on with the final surface coat: for this reason, that if the color sets hard before you lay the final coat, you will never be able to get up the color to its full strength wherever it may be revealed in the scratching of your decoration.

When the color coat is quite steady and firm, and all shine has passed from its surface, follow on with the final coat,³ only laying as much as may be finished in a day's work; and when this has been trowelled up to your satisfaction, and has "gone off" properly, you can get to work upon your ground and should scratch your decoration as quick as you can before the plaster has time to set.

In cleaning up the ground of color which may be exposed, care should be taken to obtain a similar quality of surface all through the work, by which means you will get a broad effect of deliberate and calculated contrast between the trowelled surface of the final coat and the scraped surface of the color coat.

Thus far precept. And now in turning to practice, I am confronted by the same difficulty as met the clowns in "Midsummer Night's Dream," when they wished to bring in a wall. "Some man or other must present wall," says Bottom; "and let him have some plaster, or some loam, or some rough-cast about him to signify wall." Somewhat in the same spirit I have to tell you that this panel, covered with rough-cast and plaster, has been treated in the manner I have been describing, and it is thus that I present wall.

(Here followed a demonstration, in which a method of polychrome sgraffito was shown and explained).

While speaking of method I should like to call attention to the great methodical success of the experiments in sgraffito made at South Kensington Museum some twenty years ago, under Mr. Moody. Both at the Science Schools and at the Music Schools the work seems to stand perfectly; and surely such achievements as these, and the many works executed under the skilful guidance of Mr. G. T. Robinson, are sufficient witness that the method is practical, notwithstanding the changes of our climate and the mischances of fog and smoke.

I now turn to the second part of my task, namely the mention of some possible but preventible causes of failure in sgraffito work.

Sometimes we find a perfectly sound method falls into bad repute, owing to some condition or precaution having been neglected which should have been observed as a matter of course, had there been a tradition of craft experience in custom. For example, I was told only the other day, "What a pity that Gambier Parry's spirit-fresco method does not stand in our climate." The reason given for this statement being that a certain fresco executed in this method, showed signs of decay. So it did; but the reason of the failure was that an overflow of rainwater had been trickling down the outside wall behind the painting, owing to the stoppage of a carelessly placed

pipe, a mischance that certainly might have been avoided by that common-sense foresight which is bred of a sound methodical custom. So in sgraffito work there is no popular craft tradition to avert chances of failure owing to damp walls, and, consequently, the reputation of the method suffers. I believe there is no method of wall decoration that will stand, unless you first make sure of a dry wall.

An inside wall is damp either because the pointing is defective, or because the material of which it is built is porous, or because the rain is not properly carried from the roof to the ground, or because there is a body of damp earth against some portion of the wall.

To re-point with Portland cement is a simple matter, but a wall built of porous material should always be looked upon with suspicion. Where practicable, the best thing to be done is to build a four-inch brick wall inside, in front of the damp wall, leaving a space for ventilation between the two walls.

Professor Church tells me that he has applied a silicate wash to porous stone, and has obtained successful results thereby; or, again, the difficulty may be met by an outside coat of stucco.

As to the danger of which I have already spoken, namely, the arrangement of the rain-water pipes, each case must suggest its own remedy; the main object in all, however, being to prevent the chance of an overflow running down the outside of your decorated wall.

If you are troubled by ground damp, it should be remembered that moisture arises more from the earth against the walls than from that beneath the foundations, consequently a damp course should always be placed above the top level of the ground line. Where possible, it is better that the earth should be cleared away, say, two feet from the wall, down to below the level of the footings, and then such trench filled in with concrete or stones; if with the latter, the drainage should be properly provided for.

Care should be taken in using Portland cement that it should not be quite fresh from the kiln, in which case a certain shrinkage may attend its setting, and cracks appear on the work. Specially may this be the case if the wall-surface which you are plastering should be uneven, and your coarse coat consequently vary in thickness. It is perhaps well to add that you should only get cement from the best makers.

Imperfect adherence of the coarse coat to the wall arises either from not properly cleaning out the mortar joints or from not giving the wall sufficient water, or, in the case of an uneven wall, and consequently a coarse coat of increased thickness, from the stuff "bagging"—that is being forced from the wall by pressure from above. Such a defect may always be found out by sounding the surface of the coarse coat when set, and the wall should be thus tested before following on with the other coats. Should you discover such fault as I have been describing, it is best to cut out the faulty spot with a sharp chisel, and then make good. In any case of cutting about a wall after the plastering is on, no hammering or knocking about should be permitted, as the key of the plaster by which it is clenched to the wall may be seriously shaken by such rough usage. Imperfect adhesion of the final coat may also be discovered by sounding the wall surface in the manner suggested, and the remedy must be the same.

Draughts and summers' sun are dangers which must be guarded against, as they tend to dry out the plaster before it has time to set. On the other hand, your plaster will sometimes "go off" too slowly, that is, not get sufficiently steady and firm to take its proper face; and it is very trying to your patience to be obliged to sit and wait till your ground is ready for you. However, plaster should always be allowed to take its own time; and more haste will mean worse speed, should you try to begin "scratching" too soon.

I fear that this portion of my paper must sound very depressing to my audience. But since all the above causes of failure may with certainty be prevented by methodical foresight, perhaps this gloomy narration may be of service to future workers in sgraffito. Failures, properly considered, are but the first steps towards success. "The man who never made mistakes never made anything." So said Mr. Phelps. And this saying is just as true of workers in the arts and crafts as of workers in statecraft.

And now, in conclusion, I would say a few words respecting the manner of design which seems to be permitted or suggested by this simple method.

That the manner should be founded upon a frank acceptance of line, and upon simple contrasts of light against dark or dark against light, is a saying that will scarcely be discussed; but as to the results to be achieved by means of sgraffito—that is to say, by means of incised work—here designers will be divided, and we shall find ourselves taking sides.

Shall our centre of aim be the production of a sumptuous background, in the manner of such and such a style, and keeping rigidly to one plane? Or shall a more graphic manner be adopted, and the artist express his sense of the joy of life, or the sorrow of life, or the beauty of life within the limits imposed by his simple means of expression?

One side seems to say, "Be not deceived; you are but foolish fellows who think to produce anything new in the ancient arts of design. It has all been done before. The designer who most cunningly plies his scissors in the beautiful storehouse of the past, and who most judiciously applies paste to the results of his labors, he is the man to represent the scientific self-conscious art of the waning nineteenth century."

The other side seems to say, "Beware of scissors and paste. Fresh

¹ Gauge of coarse coat: 1 of Portland to 3 of sharp, coarse sand.

² Gauge of color coat: 1 of old Portland, 1 of sifted silver sand, 1 of powder distemper color; Indian red, Turkey red, ochre, umber, lime blue, lime blue and ochre for green, oxide of manganese for black, may all be depended on. In using lime blue its violet hue may be overcome by adding a little ochre to your gauge; it may also be noted that it sets much quicker and harder than the other colors named—a point to be remembered in making your calculations.

³ For gauge of final coat—inside work; parian, airslaked for twenty-four hours to retard its setting; or Aberthaw lime and Selenitic, sifted through a fine sieve. For outdoor work; Selenitic and silver sand, sifted as above.

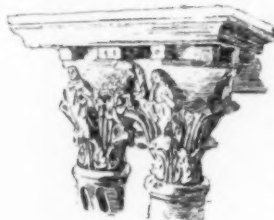
feeling or perception is the test which decides whether a design is a vital expression or a scientific exercise. Let us use the methods of the past as a medium, just as a poet of to-day uses the metrical language of tradition to express his present perceptions of the joy, the sorrow, or the beauty of life. It is good that the poet should be skilled in all methods of versification, but it is not the one thing needful. It is not his centre of aim. So for designers, it is good that we should study the glorious achievements of the past, and thereby learn certain guiding principles true for all time; but our own manner of production must first depend upon Mother Nature, seen with fresh feeling or perception."

Indeed, the motive of all most beautiful graphic expression springs from fresh vision, wonder, and enjoyment; and this is a counsel of perfection which he who lingers may learn from the fragments of bygone arts which have survived the decay of time and the destruction of man. Splendid story-telling art has been produced in the past by means of incised surface decoration, as well as sumptuous backgrounds (the cypress-wood chest-fronts and graffiati-ware at South Kensington Museum bear witness to my meaning); and should the craft of sgraffito become more popular in the future than it is at present, and should men again strive for that combination and unity of the arts in production which give genius to a locality and fresh spirit to generations of beholders, I hope that more artists will then recognize the fair field that sgraffito affords for design that is not restricted to repeats, though its means may be scanty, and that may be made truly to belong to the place for which it is specially intended, and where it is actually executed.

But the manner of doing this — there lies the difficulty. It is easy to throw out a suggestion or to recognize the wide permission of treatments granted by past examples of surface decoration, but to achieve real, ideal results in any art or craft is quite a different matter; and truly it is not from choice that workers talk, for they know well the difference between practice and precept, and they fear lest the truth of their professions may fail owing to the shortcomings of their own performances.

THE BYZANTINE MOSAICS OF SICILY.¹—IV.

CATHEDRAL OF MONREALE. — I.



From the Cloister.

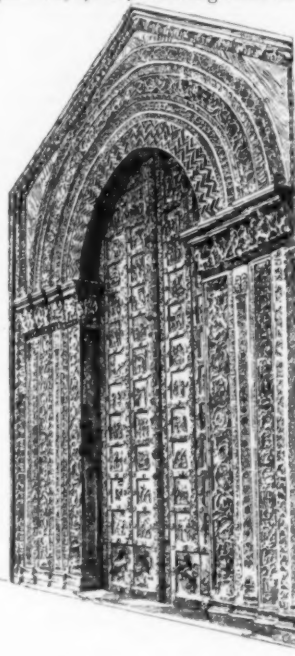
WITHIN a few kilometres from Palermo, above this beautiful plain which was so fertile that it was called "Conca d'Oro," is a hill about three or four hundred metres high where the Norman kings formerly had one of their favorite hunting-parks; and for this reason it was called Monreale (Royal Mount). The legend tells us that King William II, falling asleep one day, dreamed that he saw the Virgin appear to him;

the Virgin exhorted him to work for the glory of the Catholic faith, and indicated to him where a treasure was buried. This treasure had been buried there by his father; but in exchange for this knowledge he must devote the whole treasure to the building of a church. When he awoke the Prince had the indicated place excavated, and having found a very large amount of treasure, the whole of it was used to build the Benedictine Abbey and the Church of Monreale. Whether the legend be true or not, the edifice, begun in 1174, was almost finished in 1182; and it is a fact that at that date the King showed his gratitude by numerous donations, and that the Pope, at the request of the sovereign, created an archbishopric at Monreale. Even to-day, at the very doors of Palermo, the archbishop of Monreale sustains his ancient authority.

The Cathedral, as it stands now, has kept very little of its primitive decoration, on the exterior, at least. The front, in particular, except the great portal, is greatly modified by successive restorations, and the great conflagration of 1811 has brought about many changes. The apse alone remains untouched, and its elegant ornamentation seems to show that new principles presided at the construction of the edifice, for amid the incrustations rows of pointed arches cut and cross each other. In fact, at Monreale a very large use is made of architectural elements coming from the north. The plan has the shape of a Latin basilica, with three naves and great development of the arms of the transept. As in the churches of the north, two high square towers flank the front, and, although the general shape of the choir is the one adopted by the Greek church, nevertheless the Byzantine dome has entirely disappeared. It is in the accessory parts of the edifice, and, above all, in the decoration, that Monreale reveals that foreign hands have worked at it. In the general plan, the Latin clergy, more powerful every day, and every day more hostile to foreign elements, exercised a decisive influence.

The principal entrance to the Cathedral of Monreale and the north side entrance are decorated with doors of bronze, which are of the same epoch as the edifice itself. It was one of the common luxuries of the churches of Southern Italy: Amalfi and Monte Casino, San Angelo in Monte Gargano, Atrani and Salerno, without mentioning St. Paul at Rome, were decorated in the same manner at the

end of the eleventh century — a decoration which was ordered and executed at a very large expense in the foundries of Byzantium. But, after the twelfth century, native masters applied themselves to imitating the Byzantine style. Roger d'Amalfi, at Canosa (1110), and Oderisius of Beneventum (1119), at Troja, tried to produce original work, and, following their example, the masters who worked

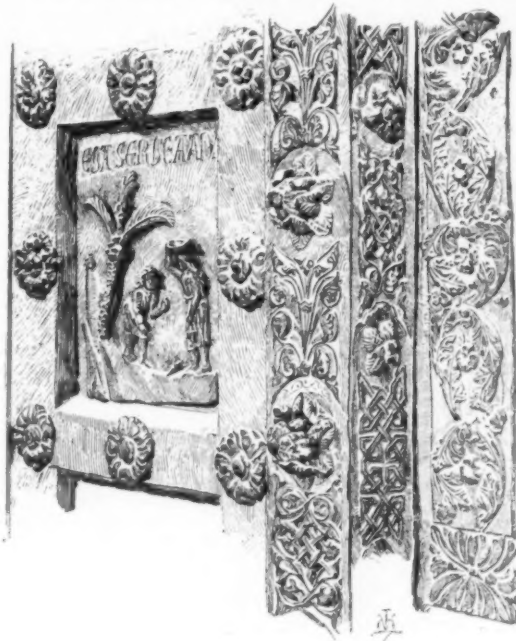


Main Entrance. (12th Century.)

at Monreale tried to disengage themselves from the Oriental influences. Both of them were considered as the most renowned founders of the times. Bonannus, of Pisa, who executed in 1186 the principal door of the Cathedral, had already made a similar work in 1180 for the Cathedral of Pisa; Barisanus of Trani, who decorated the side door, had chiselled some almost similar works in 1779 for Trani and Ravello. In these works, where native art appears as it was formed and influenced by the school of Byzantine teachers, the technique already shows to what researches of originality the artists were incited.

While the Byzantine doors are made of plates of damascened bronze with the carved outline of the figures touched up or vivified afterward with gold or silver inlaid into the hollow parts, here, on

the contrary, can be found some true bas-reliefs, sometimes very coarse, but stamped with true originality. In the principal door are forty-two compartments representing scenes from the Old and New Testaments, from the patriarchs and the prophets. There are Latin inscriptions above each subject: Eve serving Adam; Noah planting vines; Abraham receiving angels and many others; every one being stiff in attitude but evincing originality in composition. The side door is greatly superior as a work of art; the movements are more free, the draperies more skilfully arranged, the figures better placed. Barisanus of Trani is a less bold innovator, he disengages himself



Detail of Main Door.

less vehemently from the traditions of the Byzantine school. As, at Trani and Ravello, although the saints represented by him are accompanied with Latin inscriptions, several at least of these saints are among the most venerated of the Greek church; and, not mentioning the archers' costumes after the Oriental fashion which are met with in his works, two scenes at least are exactly conformable to the traditions of Byzantine composition, namely, the removal from the cross and the celebrated episode of the descent of Christ

¹ A paper by M. Ch. Diehl in *L'Art*. Continued from No. 793, page 159.

into hell, well known in Byzantine art under the name of "Anastasis." Greek inscriptions also explain both of these representations.

The inside of the edifice is of prodigious splendor, and the effect produced is as overpowering as astounding. The height of the vaults, the great width of the main nave (which is three times wider than either of the lateral aisles); the bold ascent of the arches supported by beautiful columns of granite; the enormous proportions of the edifice, which is about one hundred and two metres in length, give the impression of unequalled grandeur; while the plates of marble which line the whole circumference of the building and the mosaics which decorate the walls and naves astonish by their incomparable richness and splendor. However, it has, in no sense, the exquisite, spiritual, and almost mysterious fascination of the Palatine Chapel. In this immense pile at Monreale the sight remains dazzled and the admiration confused. One is dumb and almost overwhelmed by the greatness of the work; the colossal beauty is appreciated less easily. The eye is lost among these numerous mosaics which cover a surface of more than six thousand square metres; one becomes thunderstruck at the sight of these enormous figures arrayed in solemn majesty about the circumference of the apse, at the sight of this gigantic and austere Christ, which fills the back of the edifice: in this impressive ensemble the eye is neither attracted nor captivated. One is astounded by its immensity and feels the power, the grandeur, the infinity of religion—its unspeakable mildness is less appreciated. God, as represented at Monreale, is the Master of the world, the powerful Lord, who claims the homage and worship of all His servants; it is not the merciful God whose love is spread out over all



Mosaics in the Apse.

His creatures. At Monreale one bows to offer the Lord respectful prayers; at the Palatine Chapel one forgets oneself in unspoken communings, as if one were speaking to Him face to face.

Besides, the mosaics themselves bring out the idea of this unequal greatness of the Divinity: in this colossal work a conception of the whole directs all the parts, and leads then toward the representation of the triumphant Church. In the main nave scenes of the Old Testament are reproduced, from the Creation to Jacob's wrestling-bout with the angel, which forebodes the coming of the Messiah; a long series of prophets and ancestors of Christ are represented at the curve of the arches of the transept; in the choir is shown the earthly life of the Saviour from the scenes of infancy, which occupy the central part, to the miracles and the sorrowful history of the passion, which cover the walls of the transept. Finally on the main apse, is the triumph of the Church, Christ, ascending to Heaven and hovering above the world. This latter is the most beautiful part of the vast decoration. At the top of the vault, the Christ Pantocrator, represented half length, holds in his hand the Scriptures and raises the right hand in benediction; under this is a beautiful Madonna, indicated as the Immaculate Virgin by a Greek inscription, with the

Holy Son on her lap; at either side are placed two archangels and the twelve disciples of the Lord; a step lower, figures of saints decorate the circumference of the hemicycle, while at the vault seraphim and archangels bow before the throne of God. In the lateral apses the two great apostles Saint Peter and Saint Paul are represented, together with the principal scenes of their apostleship; in the lateral naves episodes of Christ's life and especially his miraculous cures are represented. Finally in the choir, two mosaics (placed above the royal throne, and the archiepiscopal seat) show, at the left, the Saviour crowning William II, and at the right, the sovereign presenting the Virgin with the church he has founded.

[To be continued.]

THE GUELPH EXHIBITION.—I.



Sculpture at St. Odile. From "L'Alsace et les Alsaciens."

AN exhibition of portraits and relics of the unfortunate House of Stuart, which was held in London in 1889 to gratify what may be called the romantic yearnings of its numerous sympathizers,

evoked so widespread an interest as to induce the promoters to make arrangements for similar exhibitions of the other royal houses of Great Britain, beginning with the Tudors.

An account of that very interesting exhibition, held last year, appeared in this journal. We now propose to give some description of the Exhibition of the House of Guelph, as the Queen desires it should be called, instead of its more common name of Hanover, the period embraced in which is 123 years, comprising the reigns of the four Georges and William IV, it being proposed to illustrate that of Queen Victoria next year. It is well-known that to the last Queen Anne spared no efforts to have as her successor her half-brother, the Pretender; also, that she had an unconquerable aversion to the whole Electoral family, like Queen Bess, who said: "I'll be Queen of England as long as I live. What! do you think I want to see my grave-clothes always before my eyes?" The Whigs, feeling the importance of the crisis, prevailed on the Electress Sophia to write to the Archbishop of Canterbury, offering to come to England should the Queen or Parliament be willing. To this letter Anne replied with her own hand, warning the Electress "that such conduct might imperil the succession"; the whole tone of her letter being so violent that the day after its receipt Sophia had a fit of apoplexy and died, just missing by a few weeks her chief desire, viz, to live long enough to have inscribed on her coffin: "Here lies Sophia, Queen of England." She was a most amiable and accomplished woman, and her portrait, unsigned, depicts her in her prime, handsome in face and figure, wearing her fair hair in large curls on her temples.

In Kneller's "George I" we plainly recognize the Stuart features, as well as his own natural timidity. His wife, Sophia Dorothea of Zell, is next him, with little but her sufferings to commend her to us; while their daughter, the mother of Frederick the Great, is dignified in carriage, but her face terribly careworn, owing to the inhumanity with which she was treated by her husband.

Of two portraits of George II, both equestrian, one, a small one, has been called "a statue on canvas"; the other, life-size, with fat, red face, wearing a scarlet military cloak and the ribbon and star of the Garter; in the background is a view of the battle of Dettingen, at which he commanded, the last occasion on which a king of England has done so. Near it hangs a picture, by Hudson, of no artistic merit, Queen Caroline of Anspach with her little son, very like our Prince of Wales. He was afterwards the notorious Duke of Cumberland, "the Butcher of Culloden." Caroline was a handsome woman, of commanding appearance, and her life did not belie it, for during the ten years she was Queen Consort she was virtually Queen, as George II, besides being engaged in foreign wars, paid long and frequent visits to his palace of Herrenhausen, which was always kept *en grande tenue*, Caroline on these occasions being appointed Regent. A lampoon of the period shows the popular opinion:

"You may strut, dapper George, but 'twill all be in vain,
We know 'tis Queen Caroline, not you that reign.
You govern no more than Don Philip of Spain.
Then if you would have us fall down and adore you,
Lock up your fat wife, as your dad did before you."

Lord Hervey tells us that on her coronation Caroline not only wore her own valuable jewels, but borrowed pearls from ladies of quality at one end of the town, hiring diamonds from Jews at the other. Nothing was left of Queen Anne's jewels but one pearl necklace; the rest had gone to Kilmansegg and the others.

We must specially notice two portraits of their daughter Anne,

afterwards Princess of Orange. One, most delicately painted by Netscher, shows a full-length slim figure in white brocade holding a little spaniel. She looks, however, less of a princess and more charming and natural as she smiles to us out of her portrait by Allan Ramsay. This painter, whose father wrote "*The Gentle Shepherd*," and who was at first self-taught, is said to have been, perhaps, superior to most of the immediate predecessors of Sir Joshua Reynolds, and was a favorite of George III.

The Countess of Burlington's portrait of her dear friend, Princess Amelia, a daughter of George II, in hunting costume, recalls the strange manners of the time, as she spent much time in the stables, took large quantities of snuff, and was Ranger of Richmond Park! She was never a favorite with her nephew, George III, yet a writer of the present day tells us that "it is only justice to her memory to say that, in the dull, coarse atmosphere in which she was brought up, she shone like a sunbeam in a cloudy day. The education of royal ladies was then as defective as their lives were narrow, but the princess won the affections of all who experienced her goodness of heart." We know that George II hated books so much that his wife had to read by stealth.

Of George III the Queen sends two portraits: one, by Reynolds, painted in 1759, is three-quarter length, showing the King at the age of twenty-one, in a blue coat embroidered with gold, red mantle, and the ribbon and star of the Garter; the second is a full-length by Gainsborough. Both these, it is needless to say, have the touch of a master, for we have now reached the era of undoubted art. In this later portrait, executed when the King was forty-three, his want of mental vigor is very apparent in every line both of form and feature.

A remark of Lord John Russell's may, perhaps, not be out of place here when thinking of the small amount of intellectual power noticeable in the heads of George III and his sons as they hang side by side. Speaking of a certain foreign royalty then designated as suitable for a vacant throne, a colleague pointed out to Lord John that he had a "very stupid head." He replied: "A very good head for a constitutional sovereign."

The companion portrait, also by Gainsborough, of Queen Charlotte, shows her to have been a very small, insignificant woman, but in white dress richly embroidered with gold, worn over the large hoop of the period, her powdered hair dressed very high, and her dignified pose shows that she stands a queen. This picture, carefully finished in every detail, was painted twenty years after her marriage; it is faded, but attracts considerable attention.

Of their numerous family, the portraits of the princesses were painted by Sir W. Beecher, who lived at court as their instructor, and who, from his knowledge of them, may be supposed to have left good likenesses. That of Princess Amelia, the favorite of her father, must be singled out both for the charming expression in her fine face and the evident care bestowed on the painting. What is deservedly described as one of Copley's finest pictures in arrangement and color is a large one, from Buckingham Palace, of the children of George III: the Princess Mary, holding a tambourine, is drawing her two little sisters in a small carriage, while a dog frisks around them; in the background, a view of Windsor Castle. The King told West that the children were quite weary of it, as Copley had been so long about it; but there is no sign in the picture of this weariness, as they all have the appearance of being painted unawares.

Of George IV we have several portraits, but he looks handsomest and best as Prince of Wales, at the age of twenty-one, painted by Gainsborough, and wearing a pale green coat faced with pink and a lace cravat. Conway's allegorical picture, representing him being crowned by three Classical deities, looks absurd. There is, of course, the one in coronation robes, by Lawrence, of which George was so very proud that he gave engravings of it to so many people that it was said "one cannot eat one's dinner anywhere without seeing it."

There is a fairly good portrait of the Duchess of Kent by Dawe, and a rather better one of Queen Adelaide, wife of William IV; she wears the large cap with broad bows of gauze ribbon of the period. Queen Caroline, by Lonsdale, presented by her to the Corporation of London, has nothing specially noticeable; but quite otherwise is that of her daughter, the universally beloved and lamented Princess Charlotte, unhappy in her life and in her too early death. It is unsigned, but shows care in the delineation of the open, intelligent face.

We have devoted so much space to the royal portraits more for their historic interest than for the excellence of the technique. As for the originals, the majority were a sorry lot.

Walter Savage Landor gives a strong but truthful opinion of the "four Georges" in the following lines:

"George the First was always reckoned vile,
But viler George the Second:
And what mortal ever heard,
Any good of George the Third?
When from earth the Fourth descended,
Heaven be praised! the Georges ended."

Turning now to the statesmen and others represented in the Guelph Exhibition we find as a general rule that one description holds good—more or less mediocrity until the advent of Sir Joshua and Gainsborough. Some of the portraits have been abominably kept and worse "restored." Merely mentioning Battone's skied portrait

of the intriguing Bolingbroke; an unsigned one of Harley; a good one by Dahl of Charles Mordaunt, the brave and romantic Earl of Peterborough, who penned sentimental couplets to the end of his days, and walked about Bath with the cabbage he had cheapened under one arm, and perhaps a chop under the other, we come to the Duke of Marlborough who deserves more than a passing word.

Unfortunately, there is only a small allegorical picture by Kneller and Price Ryat representing him on horseback holding his marshal's baton, and being crowned by Victory, two or three other figures assisting; the portrait is good—all the rest, an "elaborate piece of flummery." Marlborough was known in the French camp, as "the handsome Englishman"; while in French homes "Malbrook" was the bogey of the nursery. His manners were as winning as his person, and Chesterfield said "he engrossed the graces." As great a statesman as soldier he was cool and self-possessed both in cabinet and on battle-field. In spite of his greed he married the penniless Sarah Jennings, and never parted from her without a pang. Lent by the Duke of Marlborough and painted by Kneller is the portrait of the redoubtable Sarah, seated at a card-table with her dear friend Lady Fitzharding, who ostentatiously holds up the nine of diamonds, called the "curse of Scotland." Though shockingly re-varnished, it deserves notice for the excellent grouping and coloring. The "Termagant" as she was called, is a fairly good-looking buxom dame, lively and fond of her own way.

The first of all the statesmen, taking all in all, as he certainly was the best, is Sir Robert Walpole, who held the seals of office longer than any minister, except Lord Burleigh. Van Loo has depicted a masterful man, with bright, sincere-looking eyes, and a full, red face, in fact pretty much what he was said to be, "a vulgar, country squire; a hard rider and drinker, loving neither writing nor reading, and who, even in times of peril, would open his gamekeeper's letter first!" But with all his faults, the country owed a good deal to Walpole in its increased commercial prosperity; to which end he endeavored to preserve peace—his only reward being the nickname of "the cur-dog of Britain and spaniel of Spain," with lampoons from Pope and Johnson. "He was faithful to his friends, and not inveterate to his foes." Earl Stanhope, by Kneller, looks quite a freebooter with his haughty red face and black wig. The crash caused by the bursting of the South Sea bubble broke him down utterly and he died in 1721.

Attributed to A. Ramsay is the very fine portrait of the first Earl of Hardwicke, in his robes as Lord Chancellor; a man so famous for the justice of his decisions, that none of them was ever set aside—rare praise in so corrupt an age, [1690-1764]. Walpole described him as a "most comely personage, with a fine voice."

Painted by Hudson—the teacher of Sir Joshua—we have the half-length portrait of that inscrutable cynic, the fourth Earl of Chesterfield; which though life-like, is unpleasing, his selfish worldliness showing itself in every line. George II, who hated him, said, "he is a little tea-table scoundrel, that tells little womanish lies, to make quarrels in families"; and Lord Hervey, if we mistake not, that "no sex, no age, no friendship, no relation, no obligation, was a shield from those weapons that merely shone to the passer-by, but cut deep into those they touched."

Lord Onslow sends a "View of the House of Commons, 1730," containing apparently good portraits of Speaker Onslow, Walpole, Godolphin and others, and painted by Sir William Thornhill and Hogarth. Another picture shows the House fifty years later, showing Fox speaking, and is probably a companion to one—not exhibited—with Pitt addressing the House. "The Mall," doubtfully attributed to Hogarth, is interesting as a sketch of the manners and morals, both of high and low, about the middle of the century.

A good full-length portrait of the Duke of Newcastle, depicts him in complete Garter dress. One of Henry Pelham is inferior; both are by Hoare. Sir Richard Steele by Kneller is also poor, he wears the full large wig then used. Sir N. Dance has given us a fine picture of Lord Clive, that Heaven-born general and statesman, with worn, hungry-eyed but resolute face, he is in military dress and wig, wearing the ribbon of the Bath; a military camp in the background. Another splendid portrait is Reynolds's "Twelfth Earl of Suffolk," from whose calm and earnest face, we should never suppose that he was an absolute cripple from gout. At George III's coronation he carried the second sword.

Equally good is the interesting half-length portrait by Rising, of William Wilberforce, marked by the refinement and intense earnestness which characterized that distinguished philanthropist.

Unfortunately the portraits of the "Great Commoner," as William Pitt was called, are badly executed and preserved.

Leaving the royal room we continue our notice of the statesmen of the Georgian period. Reynolds's "George Selwyn and the Earl of Carlisle" is a very successful composition of light and color. The characters of the men are distinctly marked; the confirmed dissipation and shrewd wit of the elder man, while in the Earl, thirty years his junior, we see promise of future greatness. Selwyn, to whom nearly all the current *bons-mots* of the day were attributed, used to amuse the House of Commons during a long debate, by snoring in unison with Lord North, who never could keep awake, even while being abused. The Earl of Carlisle, though a dissipated gambler, became ultimately quite reformed, owing to his intense love for his wife. Later in life he became guardian of Lord Byron and was also appointed as principal commissioner to inquire into and settle the divisions in the North American colonies—as this was in 1778 it was

rather late in the day! He and Fox were considered the best dressed men of the day.

Two portraits may awaken an interest in our readers. One of Thomas, second son of William Penn, a rather austere looking man, in drab coat and knee-breeches, long, white satin waistcoat, ruffles and sword, standing in the doorway between two rooms; through the window of that behind him, is seen a most noticeable tree beautifully painted, standing in extensive grounds, was painted as a memorial of his marriage with Lady Juliana, daughter of the Earl of Pomfret, whose picture is near. She wears a handsome white satin dress, over an enormous hoop. This painting derives its chief interest from giving a view of a typical eighteenth-century room with high doorway and chimney-piece, on both of which stand blue china. A very large handsome jar filled with flowers, taking the place of the grate. Both these are by P. Vandyk.

The Provost of Eton sends Reynolds's wonderfully interesting portrait of Charles James Fox as a young man, in whom we recognize the peculiar eyes and brow of his family. The pallor and expression of his face suggest his having sat for it after one of those tremendous and habitual losses at play, by which at the age of thirty he had ruined himself and half his friends.

Three portraits of boys must not be overlooked. One is that of a boy reclining on a bank, and is marked in the catalogue as being the younger Pitt; but in the adjoining portrait of Alexander, Duke of Hamilton, about two years older, the face is so similar as to suggest the idea that he is the original of both. In each we see a handsome boy in a red coat, with long brown curls falling on his shoulders. The last of the trio, each a born ruler, is George Canning at the age of fourteen, just after leaving Eton. He is in fancy dress, Vandyk black velvet coat slashed with white, and lace cravat, the dark love-locks falling over his forehead, forming a fit setting for the keen, handsome face. This portrait is a capital Gainsborough.

Of the numerous portraits, by this master, of the younger Pitt, the two exhibited are not, perhaps, the best; still the dignity of the slight, graceful figure, the thin, calm, determined face and clear eye, all recall the king among men, who could "silence his opponents with a look of scorn, or hush the House with a word." Opie's capital half-length of Burke shows great force of character in the clear-cut features, and with sarcasm in the curl of the lip. His long speeches gained him the *soubriquet*, in the House, of "Dinner-bell," and the story goes that on one of these occasions Selwyn, going out into the lobby, met a nobleman, who said: "Is the House up?" "No," said Selwyn, "but Burke is."

Warren Hastings, by Morier, is among the noticeable pictures, taken in old age, probably during or after his trial. There is in his face and bearing much of that force of character which saved for England her Indian possessions.

Grouped together, we remark the calm majesty of Speaker Addington, as shown in one of Copley's latest works; the talented Lord Lyttleton, in chancellor's robes, by West; Reynolds's Lord Rockingham; and a fine portrait of Sir William Blackstone, showing all the legal acumen of the brilliant author of the "*Commentaries*," by T. Kettle. There is nothing particularly noteworthy in a portrait of Sheridan, by Hickel, from Hampton Court; but of that by Reynolds, depicting him when young and unassuming, Walpole wrote: "Praise cannot overstate the merits of this picture: it is not canvas and color, it is animated nature." Worthy of its place next to Reynolds's masterpiece is Sir T. Lawrence's magnificent portrait of William Wyndham, who was Secretary of War under Pitt, and was a warm partisan of Warren Hastings in the impeachment.

The author of "*Vathek*," the magnificent rebuilder of Fonthill Abbey, William Beckford, that "compound of fire and air," as the Earl of Chatham described him, is here in a characteristic portrait by Sir Joshua. Two more lawyers may be noticed: Lord Chancellor Thurlow, by T. Phillips, and Lawrence's exceedingly interesting portrait of Lord Eldon, in whose grave, earnest face is fully borne out Sir Samuel Romilly's eulogium in the House of Commons: "There never presided in the Court of Chancery a man of more deep and various learning, and in anxiety to do justice that court had never seen his equal."

Two portraits of Boswell show nothing noteworthy in the man, to whom, nevertheless, we owe so much. Burch's half-length of John Howard gives us the keen-eyed and intelligent face of this indefatigable philanthropist. Strange to say, there are no portraits of churchmen, save four, and they are best known as writers; but surely there must be some portraits of the Wesleys and George Whitfield, who must be taken into account when we consider what may be called the forces of civilization during the eighteenth century.

[To be continued.]

MONOLITHIC SHAFTS.—A great monolith of granite, large enough to dress to a pillar 6 feet in diameter by 45 feet long, has been already quarried near Petersburg, Va., and is tendered for a Confederate soldiers' monument for the sum of \$10,000. The stone in the rough is said to weigh 200 tons. It is alleged that this would be the second largest monolithic round pillar in the world, the largest being Pompey's Pillar, 61 feet high by 9 feet in diameter. This may be so, but there are a dozen or more known obelisks of greater dimensions, ranging downward from 158 x 11.8 feet to Cleopatra's Needle (67.1 x 8.1 feet), the mate to which is in Central Park, New York. The largest monolith ever known to have been quarried is a block at Baalbec, 14 x 16 x 69 feet, measuring 15,456 cubic feet against only 1,620 cubic feet in the Petersburg block; which shows that in this art we have still something to learn. — *Engineering News.*

EMMANUEL FRÉMIET.¹—IV.



Roman Cavalryman.

IN 1862, Frémiet received a commission for two equestrian statues, one of a Roman cavalryman, and the other of a Gallic chieftain, half life-size, from Nieuwerkerke who at the same time offered the sculptor the use of his studio in the Tuileries, at the corner of the Rue de Rivoli. The price fixed for the plaster models of these works was the lordly sum of six hundred dollars each.

The sculptor began his task with his usual energy, having for models the horses of the Emperor, which were led to the studio over the great marble stairway, and the armor and trappings from the museum of the Louvre. The statues were cast in bronze, and are now well placed, though practically buried so far as the public is concerned, in the arcades of the museum of St. Germain. "The Chieftain," was exhibited in the *Salon* of 1863, in plaster, and the next year in bronze. The group of "Young Faun and Bears," was also in the *Salon* of 1864, in plaster. It, too, was made in the Count's studio, and by him bought for the Luxembourg gallery, for six hundred dollars, for the plaster model, the State bearing the expense of cutting it in marble.

Thoré could find nothing worthy of notice in the horse and rider, but he breasted the very billows of poesy concerning the latter group. "A very noticeable and pleasing group is that of a little faun playing with young bears, by M. Frémiet, pupil of Rude. All was very amusing, I will own, in the good old times of mythology. This childish play between a little savage and these pretty little bears makes one wish to go into the depths of the forest, and hunt hares in their holes and birds in their nests, or to fish for gudgeons on the banks of some simple stream, and go on enjoying the pleasures of the woods." Nor was that superb representation of a ravaging race and age, the "Chieftain," mentioned in the *Salon* articles of the *Revue des Deux Mondes*, for 1863, but in 1864, the following compressed expression of enthusiasm was made by Maxime de Camp. "Le Chef Gaulois," is in just and excellent proportions."

The Roman cavalryman was shown in the *Salon* of 1866, in bronze.

In 1866-7, a competition was opened by the government for an equestrian statue of Napoleon I, to be erected at Grénoble. Nieuwerkerke desired Frémiet to enter it, but the latter disliked to do so, because he had very little confidence in such methods of procuring art. But after a good deal of pressing by the Count, the sculptor decided to make a model, and he received the commission. It was his first full-size equestrian statue, being about fifteen feet high. It was made in a studio provided by the State, and the sculptor received for the bronze the sum of sixteen thousand dollars. A small model of it was exhibited in the *Salon* of 1868. When the war of 1870 broke out everything connected with the Bonapartes was hurried out of sight, the "Napoleon I" included.

¹ Continued from No. 792, page 137.

There was no sympathy in art matters between Blanc and Frémiet, and whenever they met the latter was subjected to the annoyance of an art discussion invariably begun by the former. Fortunately, on one occasion, the subject of antediluvian animals came up, and as that was one about which there could be no great difference of opinion, and in which both were interested, Blanc said, "Make a plesiosaurus." "Why?" replied Frémiet, "It will come to nothing. However, if you will give me an order, I'll try it." "Very well, go ahead," answered the minister. "Make a sketch any way." The object made represented a saurian, with a long neck, in the act of swallowing a fish, and getting choked in the attempt. It pleased the minister immensely, and he ordered it to be executed, eight feet high. By the time the work was nearly completed in clay, the professor of paleontology at the Jardin des Plantes heard of this attempt to reconstruct natural history, and being annoyed because he had not been consulted, as well as jealous of any artificial expression connected with his department of science, which he fondly believed was all his own, hurried to the minister and protested against such a sacrilegious innovation. "I can't corroborate the correctness of this thing," he exclaimed, "and I don't want anything in the garden that I cannot swear to. Science is too sacred to become the plaything of art." Blanc listened to the voice of scientific exactitude, and the poor saurian, choked on all sides, was left to his fate.

"It's a pity," said Blanc, "but I'll give you something else to do," and he ordered a bronze horse, life-size, ridden by a figure of Cupid,



CHEF GAULOIS
Gallic Chief.

which finally appeared in the *Salon* of 1868 under the title of "Metamorphosis of Neptune on horseback; consecrated in the festivals to Ceres." He received for the whole work the sum of twenty-six hundred dollars. It was consigned to a government warehouse and has remained there ever since.

Very soon afterwards Frémiet received an order from the State for a horse, in bronze, to be sent to the Veterinary School at Alfort. A fine animal of the Percheron breed was modelled, with a broken leg tied in splints, his eyes blinded, ready to be killed. On the plinth was a rat smelling anxiously around in prospective hope of a good meal. When the work arrived at its destination, the Directors sent back word that they wanted a horse that would show that they could cure broken legs, not one illustrating their inability to do so. In accordance with this judgment this poor creature, too, went the way of its predecessor.

It would seem that the sculptor must have been pretty busy in order to execute all these large commissions, yet he found time to continually add little bronzes to his now fast-growing collection, as well as to make, in 1866, a lot of decorations for a furniture manufacturer, who was preparing an important exhibit for the great Exhibition of 1867. Then it was at this time that he received his first and only commission from the city of Paris, the bronze sea-horses for the great fountain of the garden of the Luxembourg. Horses! Horses! Horses! How Frémiet revelled in horses.

Chatting with Nieuwerkerke, in 1868-9, while Viollet-le-Duc was repairing the Château of Pierrefonds, he said, "Let us make an equestrian statue of the builder of the château, the Duke of Orleans, for

the court-yard." "Capital idea," responded the Count. "Go ahead and do it." Meeting the architect soon after, Frémiet thought that he would be glad to hear of this agreeable scheme, and, so, enthusiastically told him about it. "O, to the devil with your equestrian



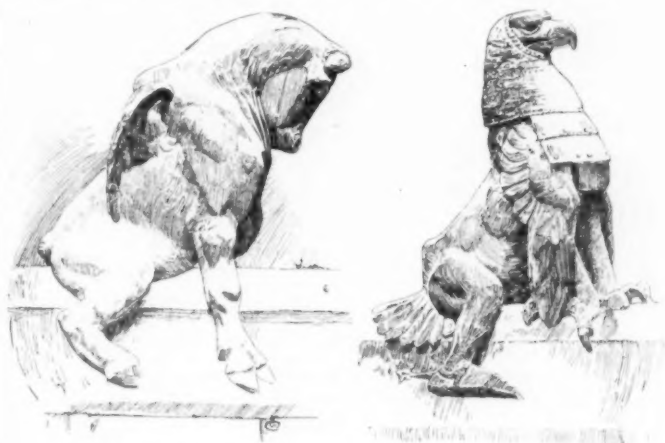
Napoleon I, Grenoble, France.

statue. What can I do with it. And why should you meddle with my work," impatiently exclaimed Viollet-le-Duc.

"It is precisely what you want, both as a proper commemoration of the personage, and a needed piece of decoration for the court," answered the sculptor. "It may be as you say," said the architect, "I will think it over." He thought about it, and finally became delighted with the idea, and was glad to design a good pedestal for it as well as engage the sculptor to make some work for the stairway. The statue is life-size, and cost, in bronze, four thousand eight hundred dollars. Reduced copies, as also of the Napoleon I, were made for the sculptor's collection.

The *Salon* of 1870 contained the statues of the "Duke of Orleans," and the "Sea Horses."

When the Franco-German war broke out, Frémiet and his family went to Poitiers, and stayed until its close. On their return they



Sculptures from the Château de Pierrefonds.

found their house still standing, though somewhat injured by the occupation of Prussian soldiers. It was a hard time for art, and the sculptor needed work very much, but M. Blanc came to his rescue and gave him a commission for the statue, larger than life, which appeared in the *Salon* of 1882, under this title "Man of the Age of Stone, reconstructed on human fragments of the epoch—head, feet, etc.,—in plaster." No professor of natural history, uneasy of rivalry, interposed his protest against the execution of this vigorous figure, but *The Popular History of Art*, in its department of Prehistoric Archaeology, gave it the following item, accompanied with a miserable wood-cut:—"M. Frémiet, professor in the museum of Natural History, has produced a remarkable work of sculpture, representing the pre-historic man of the Age of Stone. The primitive man is there about as science shows him to us; he has killed a bear, whose bloody head he holds, and happy in his victory he dances and

howls. The skin band around his body holds his stone axe and other objects in bone and stone."

Among the more liberal-minded and advanced artists this statue was received with the greatest enthusiasm, and pronounced at once, as it deserved to be, one of the greatest pieces of sculpture of the age, if not the very greatest single figure. "Barye has never surpassed it," was an encomium often heard, while occasionally it was affirmed, that he had never equalled it. Frémiet had hitherto been classed



The Duke of Orleans in the Court-yard of the Chateau de Pierrefonds. From the *Gazette des Beaux-Arts*.

exclusively as an *animalier*, or maker of animals, who had not excelled in making the human figure, but here was a work of contrary evidence, one of stupendous force, surprisingly original in subject, masterly in composition and thoroughly understood. And such vigor of modelling!

T. H. BARTLETT.

(To be continued.)



[Contributors are requested to send with their drawings full and adequate descriptions of the buildings, including a statement of cost.]

Y. M. C. A. BUILDING, RICHMOND, VA. MESSRS. COPE & STEWARDSON, ARCHITECTS, PHILADELPHIA, PA.

[Gelatin Print issued with the International and Imperial Editions only.]

PLANS and description of this building may be found in the *American Architect* for Nov. 14, 1885.

COMPETITIVE DESIGN FOR CITY-HALL, ST. LOUIS, MO. MR. T. C. LINK, ARCHITECT, ST. LOUIS, MO.

This design is particularly worthy of attention from the fact that the committee did not find it worthy of consideration because of its simplicity.

SECOND REFORMED CHURCH, NEWARK, N. J. MESSRS. WALGROVE & ISRAELS, ARCHITECTS, NEW YORK, N. Y.

GATE-LODGE FOR HENRY A. PAGE, ESQ., MONTROSE, N. Y. MESSRS. ROSSITER & WRIGHT, ARCHITECTS, NEW YORK, N. Y.

HOUSE FOR P. W. MCADOW, ESQ., DETROIT, MICH. MESSRS. JOHN SCOTT & CO., ARCHITECTS, DETROIT, MICH.

PORTION OF THE TOWN-HALL, SEVILLE, SPAIN.

PORTION OF THE CONSERVATOIRE DE MUSIQUE, BRUSSELS, BELGIUM. M. CLUYSNAAR, ARCHITECT.

GYMNASIUM AND EXHIBITION HALL FOR THE HIGH-SCHOOL, NEWTON, MASS. MESSRS. KENALL & STEVENS, ARCHITECTS, BOSTON, MASS.

[Additional Illustrations in the International Edition.]

A MARQUISE.

[Copper-plate Etching.]

THIS plate shows an interesting example of the method which the French have long employed to prevent the darkening of vestibule or hall by the shade caused by the presence of the protecting porch or the still more obscuring *porte cochère*, as we call our covered carriage-porches. In French cities protection is afforded by a glass roof supported by ironwork, which, when well designed, often has a graceful air, though it is not capable of adding to the architectural effect as our own solid-roofed porches do.

ARCH AND CAPITALS IN THE NAVE OF THE CATHEDRAL, MONREALE, SICILY.

[Gelatin Print.]

SEE article on "The Byzantine Mosaics of Sicily," elsewhere in this issue.

THE APOLLO FROM THE HOFBURG THEATER, VIENNA, AUSTRIA. HERR CARL KUNDMANN, SCULPTOR.

[Gelatin Print.]

"THE INTERDICT."

THIS plate is taken from a fine painting by M. Albrecht de Vriendt, the new director of the Antwerp Academy. It represents with dramatic force, but without exaggeration, one of those scenes when Church and State came into collision. They were more common on the Continent than in England, and, as is suggested in the picture, a prince who was not possessed of powerful allies and most loyal subjects was likely to be overcome through apprehension of the consequences which followed ecclesiastical denunciation.

It is hardly necessary to state that interdicts did not always assume the same character, and were varied according to circumstances. Personal or local interdicts related to a limited number of persons, such as the inhabitants of a city or diocese, or even to one or a few individuals, while others fell upon the people of a kingdom. Particular places, such as a church or its dependencies, and especially a cemetery, might also be the subject of an interdict. Among the causes through which interdicts were fulminated we may name offences against the Church as an institution; the retention of ecclesiastical property; failure to carry out obligations for preserving the immunity of the Church; invasion of an ecclesiastical building, and seizure of those who possessed the right of sanctuary. Physicians who neglected to inform their patients of the approach of death, and did not summon the clergy to invalids, were liable to an interdict. The disturbed condition of Mediæval society is also suggested when it is found that any of the clergy who took part in the murder of a bishop fell under an interdict. Great care had to be taken in the announcements. If, for example, the laity alone were named, it was concluded that the clergy did not come under the prohibition; if a church was interdicted in a parish, the people were allowed to go elsewhere for worship; if a city was interdicted without special mention of the churches, they could be used for service, but with closed doors, and neither singing nor ringing of bells was allowed; even in cases when a cathedral came under the ban, it did not follow that the parish churches were to be closed. All these exemptions suggest that as an interdict bore with great severity on the common people, much was done to lighten the punishment. For it must be remembered that any of the clergy who celebrated office, or assisted at burials in a place that was interdicted, were thereby interdicted for their irregularity. The same stern regulation applied to the administration of some of the sacraments. In issuing an interdict the term during which it was to prevail was sometimes prescribed, but in most cases the removal was conditional on the cessation of the disorders which led to the decree. As civil power grew in strength the interdicts lost their power. In France, although the King was titular the eldest son of the Church, an attempt to issue an interdict was considered as an encroachment on the liberty of the kingdom and treated accordingly. Any one who may desire to know the conditions under which the process of interdiction was undertaken will find several examples in the history of Beauvais. In one famous case, which arose in 1232, it is related that, in spite of the vigorous exercise of his authority by St. Louis, the King, the interdict had to be annulled. The Bishop of Beauvais appealed from the decision of the bishops of the province, who were against the interdict, to the Pope. Gregory IX did not side with him, he retired to Rome and died there. His successor replaced the interdict, and he also died when he found that the Pope was with the

people. In the beginning of the next century, when an interdict was imposed by Bishop Simon, an order was sent by Philip IV, directing that an end should be put to the oppression. On investigation it was found that the community, as well as the bishop, had acted illegally, and the King inflicted fines of six thousand livres Paris on both parties. The decision brought peace, because the monarchy was then strong enough to enforce it. It is common in representations of a similar display of ecclesiastical authority to represent bishops as if they were indifferent to the fate of a king and his subjects. M. Albrecht de Vriendt has read history with more fairness. Church dignitaries could not cease to be men, and they must have felt it was hard to punish the innocent for the sake of the guilty. The painter in this case represents the prelates as if the exercise of authority was not so pleasing, but had to be gone through like other disagreeable duties. The consternation of the Prince is not exaggerated, for in such cases there was always a risk of rebellion, and when subjects were discontented there was always a danger of invasion. The attitude of the Princess recalls many instances where womanly fortitude was exhibited.

DESIGN FOR A TOWN MANSION. MR. J. A. SLATER, ARCHITECT.



THE BROOKLYN ARCHITECTURAL SKETCH CLUB.

THE Architectural Students' League of Brooklyn was organized in the spring of 1889, with the object in view of bringing together young draughtsmen, residents of the city, for the purpose of study and the cultivation of "architectural sociability." Its success has justified its existence, and inspired the belief that its field of action could be enlarged with resulting benefits to its members, a belief which came to a fruition in a resolution to reorganize the Club on a more liberal basis.

This was finally accomplished at a meeting held on Wednesday evening, February 24, when the name of the society was changed to the "Brooklyn Architectural Sketch Club," a name significant of its purpose, and it was decided to confine its membership not alone to those engaged in the practice and study of architecture, but to invite all who are interested in architecture or the allied arts to become members.

As it has generally proved that a long and binding constitution is a great detriment to the success of such a movement, one simple and direct in form has been adopted, and the expenses will be kept as low as the necessities of the Club will allow.

The members will meet at stated intervals for the purpose of sketching or discussing in an informal manner topics of general interest, and as the membership increases the course adopted in other clubs will be followed by the establishment of classes in all branches of artistic work, which may be useful to the members.

Competitions in design and rendering will also be held, and prizes offered for the best work, and in general a policy adopted of keeping thoroughly awake and up to the times by introducing new and attractive features as time goes on or the occasion seems to demand.

No doubt every architectural student of Brooklyn has at some time felt the need of such a society, and the promoters of this enterprise believe that there is room in Brooklyn for a club of this character, which if properly conducted ought in the near future to equal in the character of its work and usefulness to its members, many clubs of like nature in other cities whose success has made them known throughout the land.

If it interests you, you are invited to join with us. A meeting will be held on Tuesday evening, March 17, at 626 Carlton Avenue, to which you are cordially invited, or if impossible for you to attend the Secretary will gladly correspond with you and answer all questions.

JOHN J. PETIT, *President*.

ALFRED F. EVANS, *Secretary*, 174 Fort Greene Place.

H. C. PITTMANN, *Treasurer*.

A MATTER OF FALSE PRETENCE.

IN our issue of February 14 we answered, under the above caption, a question which was couched in such a form as to show that it was the writer's expectation that the identity of the questioner would not be revealed. Unfortunately, in the hurry that always attends "getting the last form to press," we did not notice that the questioner's name, as well as his question, had been set in type. This blunder converted an innocent question into what had the air of being an ill-veiled attack upon the questioner's late partner, who naturally has felt aggrieved, and has asked us to relieve him from the odium thrown upon him.

As this gentleman was not mentioned by name, it has seemed to us that he will be best served by not having it now introduced in this connection to the public at large, while the few who connected him with the matter in the first place will equally understand now that this explanation refers to him.

Affidavits have been placed in our hands which go to prove that the design in dispute was one worked up in partnership, but based very largely upon the design for his own house prepared by the partner who has been accused of misappropriating the authorship of a design. Moreover, the articles of dissolution of partnership contain this special clause:

"The cuts and illustrations belonging to the firm are to be equally divided, each party to have duplicates as far as possible; and it is mutually agreed that each party shall have the right to use the same cuts on individual work, and, by the way of advertising, in any manner which he may see fit, together with the use of the copyrights of the firm."

Each partner, moreover, mutually reserved the right to copy any of the drawings which, in the division, fell to the share of the other partner.

The evidence seems to show that, in spite of the fact that the design was greatly changed, and carried out under the sole charge of our questioner, his former partner had a certain moral interest, as it might be called, in the design; but this interest is not so strong that many architects would care to adopt as their own the impulsive act of a draughtsman who erased the name upon a reproduction of the altered design, and, substituting for it his employer's name, hung it up in the reception-room of that employer's offices.

There is probably more or less of reason and right upon each side, as there usually is in partnership differences, but, of course, the public prints are not the places to discuss such matters, and we cannot go into this one in detail, even though a blunder, which we sincerely regret, has confronted our correspondent and his former partner with a situation which changes as one looks at it from one side or the other. — EDS. AMERICAN ARCHITECT.



[The editors cannot pay attention to demands of correspondents who forget to give their names and addresses as guaranty of good faith; nor do they hold themselves responsible for opinions expressed by their correspondents.]

RE-ENFORCEMENT OF FOUNDATIONS.

NEW YORK, N. Y., February 27, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—The following account may be of interest to engineers as a quick piece of work, and instructive to architects as a means of re-enforcing or underpinning the walls and piers of buildings. It will be seen that, for this latter case, the method has many applications, and that, with some calculation and careful regard to the direct and cross strains and construction of details of the connections, it is very practical and economical for many cases where stories are to be added to the building, where local settlements need to be checked, where alterations have concentrated extra weight upon certain piers, and where there is no authentic record of the old footings and foundation soil. Many an architect will recall cases such as this last one, where any method would have been welcome that would have avoided the long, expensive and cumbersome system of shoring and underpinning.

Three years ago, we were called in to discover and correct the sticking and warping of the ends of an iron draw span.

Several attempts had been made to correct the trouble, but with only temporary success. The track had been lined-up over every pile with wedges and plates, from time to time, but the span was again out of true.

A level was strapped to the middle pile of the draw-pier, and the level of the track taken. The profile of the track shows the irregularities discovered.

Careful investigation showed that there had been a considerable increase in the scouring action of the river at this point, arising from the reduction of the cross-section of the river by the piles of the bridge, and the addition of fenders, and bunches of guard-piles above and below the bridge. The river-bed was sand, underlain by a bed of ferruginous gravel at varying depths, and the piles had been sunk by both hammer and hydraulic jet, and in some cases without shoes (where hard ground had been encountered); therefore, the foundation was not uniform, and the loss of skin friction by scour around some of the piles, together with the effect of vibration on those driven without shoes, was sufficient to cause continuous and irregular settlement.

The bridge was a double-track highway-bridge and subject to a great amount of travel, and, also, to great demands upon the draw from passing vessels. The bridge overhung the circular piles in the draw-pier, and the draw-pier was surrounded and made rather inaccessible by a heavy fender and bracing.

It was decided to be impracticable to stop traffic or the opening of the draw for more than a few minutes at a time, or for more than an hour during the night; also, that any new work must be of iron; therefore, without great expense, it was impossible to substitute new piles with greater bearing surface or deeper penetration.

The method adopted was to drive a new pile outside of each old

one, then to fit a bracket on to each old pile, and transfer some of the weight to the new ones by means of set screws, and then level up the drum and track.

The brackets were made as shown, and secured to a shoulder on the old piles, as shown at "A," the bracket bearing on the shoulder by means of a lip, cast to fit accurately, as shown at "B." The brackets were made of extra-tough cast-iron—Messrs. J. B. & J. M. Cornell giving special attention to the mixture, the perfection of the castings, and the fitting. The re-enforcing piles were made of double-extra-heavy pipe-line pipe, thoroughly tarred and driven to place, and then pumped out and filled with cement, the cap put in place, the bracket swung around over the same, and the straps tightened, and the set bolts set to place with 6-foot wrenches. It was calculated that about 30 per cent of the weight on the old pile was transferred to the new.

The most difficult part of the undertaking was to drive the piles and no contract could be let for the same. It was finally decided to have special shears made, and to attach them to the railing of the

side, representing the eight principal winds. A copper triton, at the top of the tower, was so constructed as to point with a rod, as it turned with each wind, to that image which represented it.

DELVER.

A CHANCE FOR A SAN FRANCISCO DRAUGHTSMAN.

SAN FRANCISCO, CAL., March 2, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Being a layman and having no use for my magazine after reading it through, I would be glad to know of some young architect who cannot afford a subscription and who would appreciate your excellent publication, to whom I could send my copy each week.

If you know of such a person in this city, he could call for it at my office every Monday, or, if the recipient will pay the postage, I will be pleased to mail it regularly to any address.

My subscription began with the January number and all those up to date, as well as each number as it comes to me, is at the service of such deserving person as you may name.

Yours very truly,

G. TASHEIRA.

OUR POLYGLOT ARTICLE.

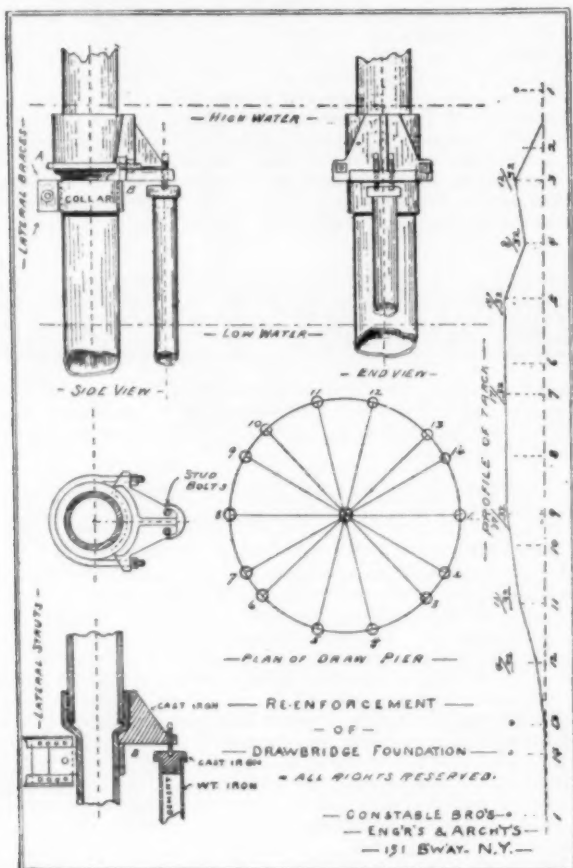
NEWBURYPORT, MASS., March 5, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—The polyglot article in your last issue fills a "long felt want"; it is an agreeable stimulus to the study of French, which I have for a long time intended to resume but was as far from it as ever.

Very respectfully yours,

GEO. P. TILTON.



draw-span, and brace to the trusses, and transfer the two-thousand-pound hammer to them, to locate the driver at the end of the fender, out of the way of the channel, and lead the hammer rope through snatch-blocks to the engine-drum.

The shears were put up one afternoon, and the men of the driver notified to be on hand at 7 P. M. Men were stationed at the ends of the bridge to give notice of any approaching traffic, and the draw was swung around over each pile, or closed, on signal.

At 8 o'clock the next morning the fourteen piles were driven, much to the surprise of the contractor, who rather expected two weeks of extra work. When the track was levelled, the bridge came back to its proper bearings, and has worked well ever since.

Some little trouble had been experienced from the bridge being harder to open during the heat of the day than at night. An experiment was tried by painting the upper chord of the bridge white, which resulted quite satisfactorily.

CONSTABLE BROS.

Engineers and Architects.

THE COCK AS A WEATHER-VANE.

BOSTON, MASS., February 28, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—In your reply to Mr. Fleming, published February 21, you overlooked one of his questions.

The earliest weather-vane of which there is any record appears to have been that which surmounted the Tower of the Winds, at Athens, a considerable portion of which structure still remains. It was built about 100 B. C. by Andronicus of Cyrrhus, a Greek astronomer, and was of octagonal form, with figures carved on each

side, representing the eight principal winds. A copper triton, at the top of the tower, was so constructed as to point with a rod, as it turned with each wind, to that image which represented it.



RAPID transit in cities is one of the interesting progressive features of the day. Schemes for rapid transit are now being developed in no less than twenty large cities. In some of them preparations have gone far enough for the delivery of material; in some few, work of construction is already underway. It is evident that rapid transit will become a very popular thing in municipalities all over the country. Western towns and cities are taking the lead, and there are schemes for rapid transit looming up where it would appear the population was scarcely able to carry such enterprises. The Eastern cities have gotten along with street-cars and cable-roads long after their necessities demanded more rapid means of communication. Western roads are taking time by the forelock because of cheap iron and steel, and because of the advantages to be secured in the expansion of real-estate values, and are already taking steps to supply themselves with means of getting around quickly. Constructing engineers who are giving special attention to this feature say that there is a vast amount of work of this kind in contemplation, and that it will add materially to the activity in iron works this year. There is no doubt of this fact; a departure is about being made. It is figured out that these roads, although costing a good deal at the outset, will be the cheapest in the end, because of the advantages resulting. Another favorable indication is a multiplication of large machine-shops and manufacturing establishments in the new States, especially in the West. Still another favorable feature is the establishment of commercial houses which will render traders measurably independent of the larger commercial centres in the East. The establishment of these large manufacturing and commercial centres in the far West and South means much more than it appears to mean on the surface. The returns of clearing-houses have recently shown that while business, as measured by the week and month at New York and other Eastern cities, has declined, that business has increased in the West. This is the natural result of the changing conditions and the new tendencies. Traders, instead of buying in Fall River, Boston, New York, Cohoes or Philadelphia, are now finding themselves as well supplied in their immediate vicinity. Commercial enterprise is hard at work in this direction. Long railroad hauls will be supplanted by shorter ones; the decentralization of industries which has been going on for years past is now being followed by a corresponding movement in the commercial world. The tendency is natural; it means greater independence, and greater dependence in another. The merchants, manufacturers and traders in the regions west of the Mississippi and south of the Ohio are finding it possible to buy most everything they need nearer at hand than in years past. All sorts of manufacturing establishments are springing up, and goods of almost every description are being stored for immediate distribution. The manufacturers of agricultural implements started this movement, and it has been gradually taken up by other interests, until now they are started all over the States—a multitude of new commercial and manufacturing centres, which make Boston, New York and Philadelphia less important to them than heretofore. The country is becoming, in a sense, homogeneous. Sources of supply are being multiplied, and demand is being increased by reason of the greater facilities for obtaining supplies of all kinds thereby furnished. Those who look ahead see that the inevitable result behind this tendency is in the direction of lower protective duties. The multiplication of little manufacturing throughout the far West means simply this: that when their trade is once established it will be virtually independent of foreign competition, which has been the sanction for decades past of high-tariff duties. The volume of business for the past week or two has fallen way below that of last year. Clearing-house returns, especially for Eastern cities, show a diminution in business; some Western cities show an advance. Manufacturers everywhere are watching the market demand very closely. Prices are at a standstill. Strikes are threatened here and there, but there is nothing serious in view. Heavy building operations are being begun in a good many cities, and, so far as expressions of intentions have gone, there will be as much building undertaken this spring as last. There is no accumulation of goods or products going on beyond what is safe. Building material of all kinds is being abundantly prepared. Collections are reasonably prompt.

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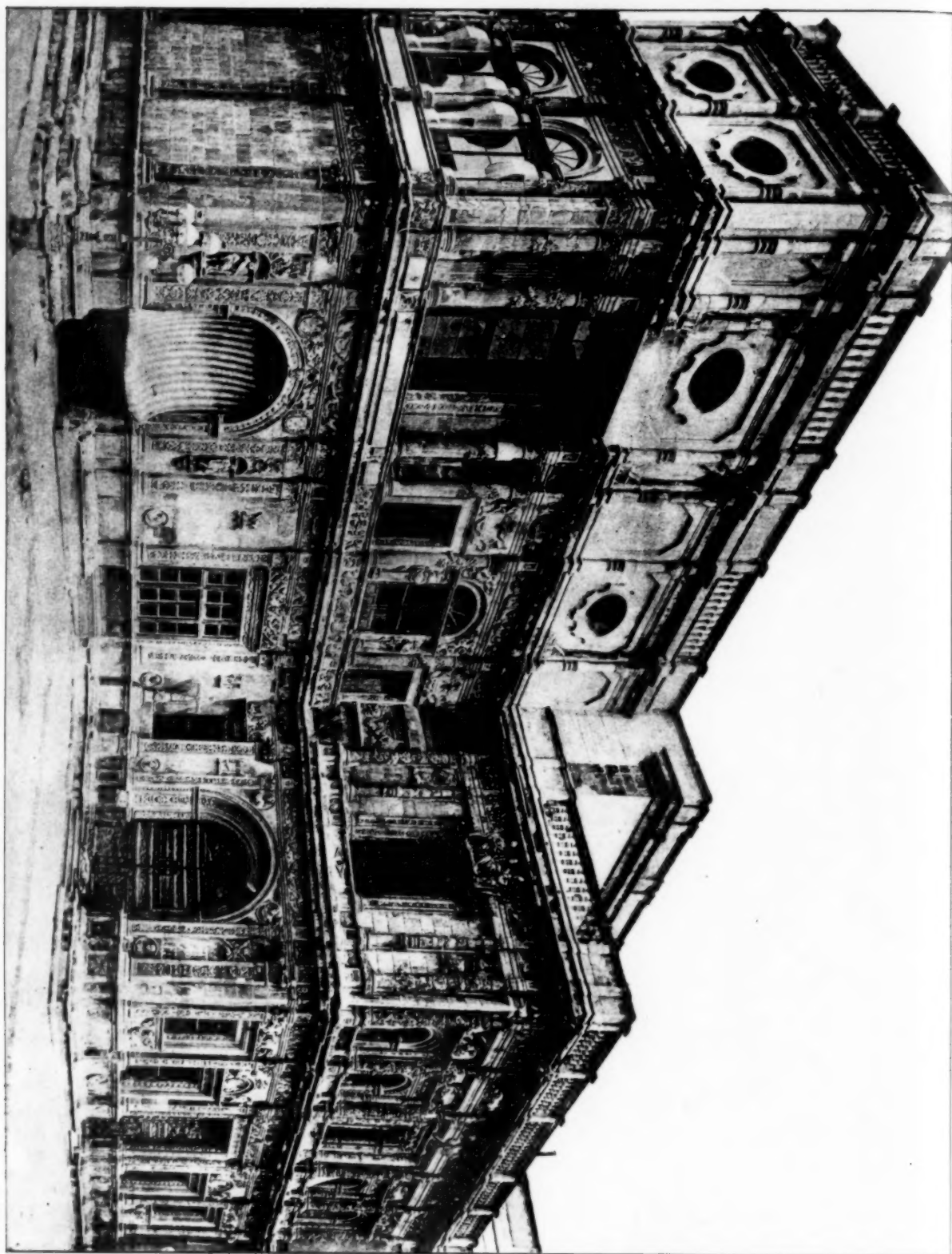
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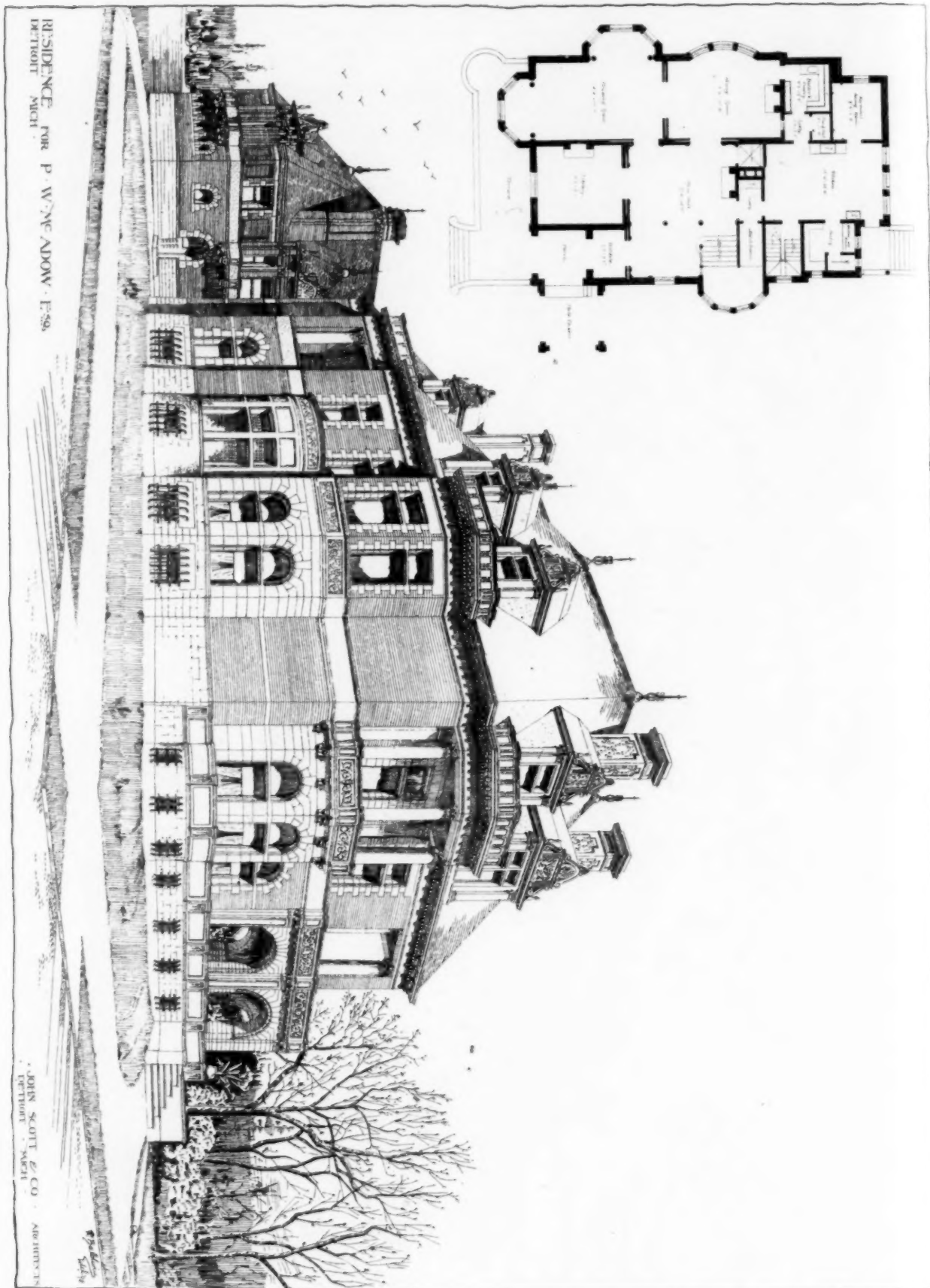
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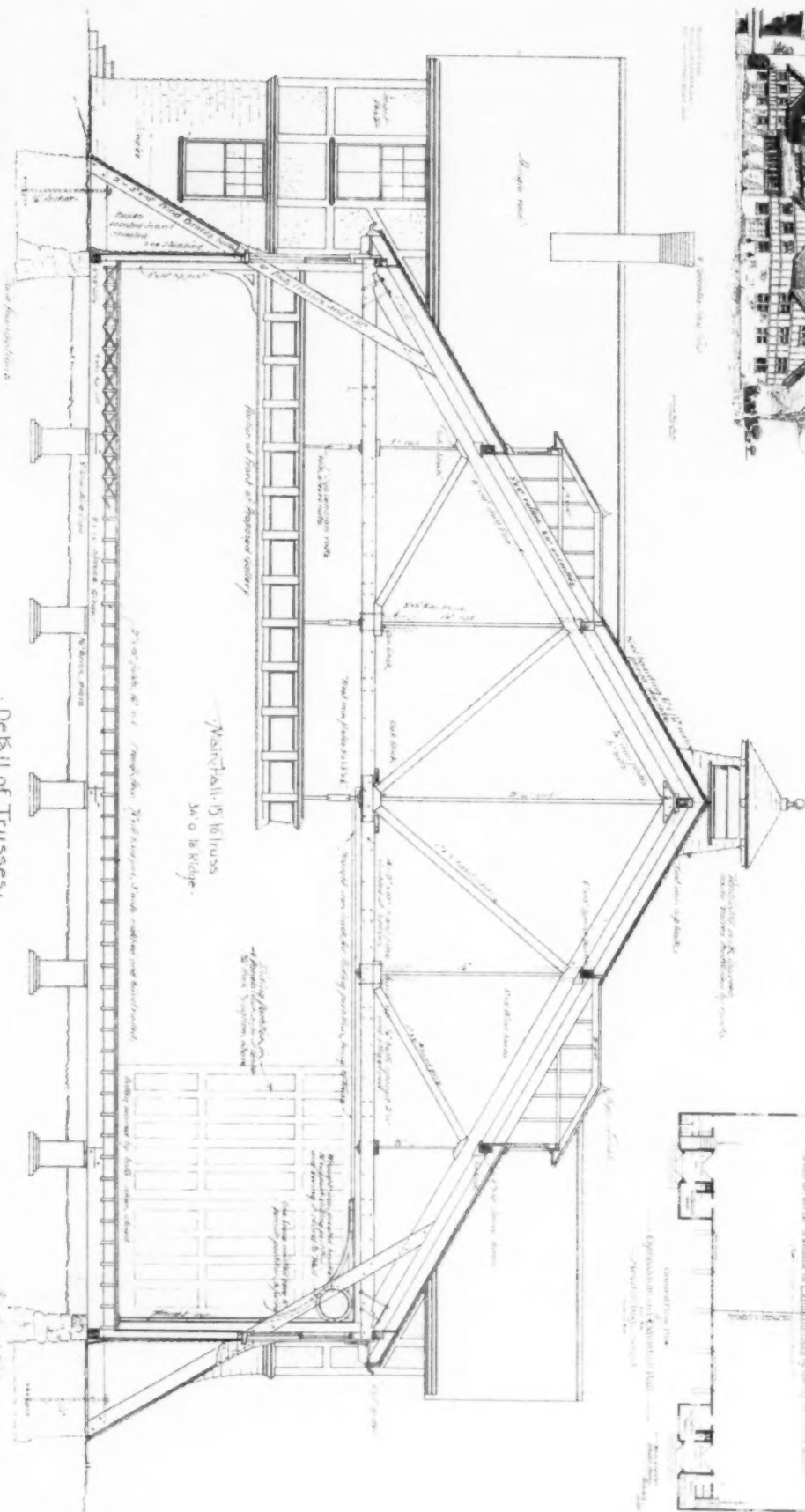
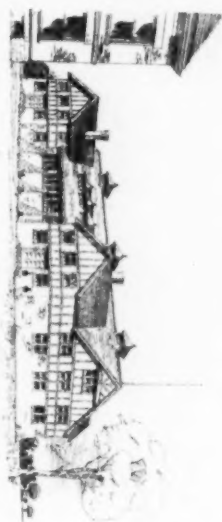




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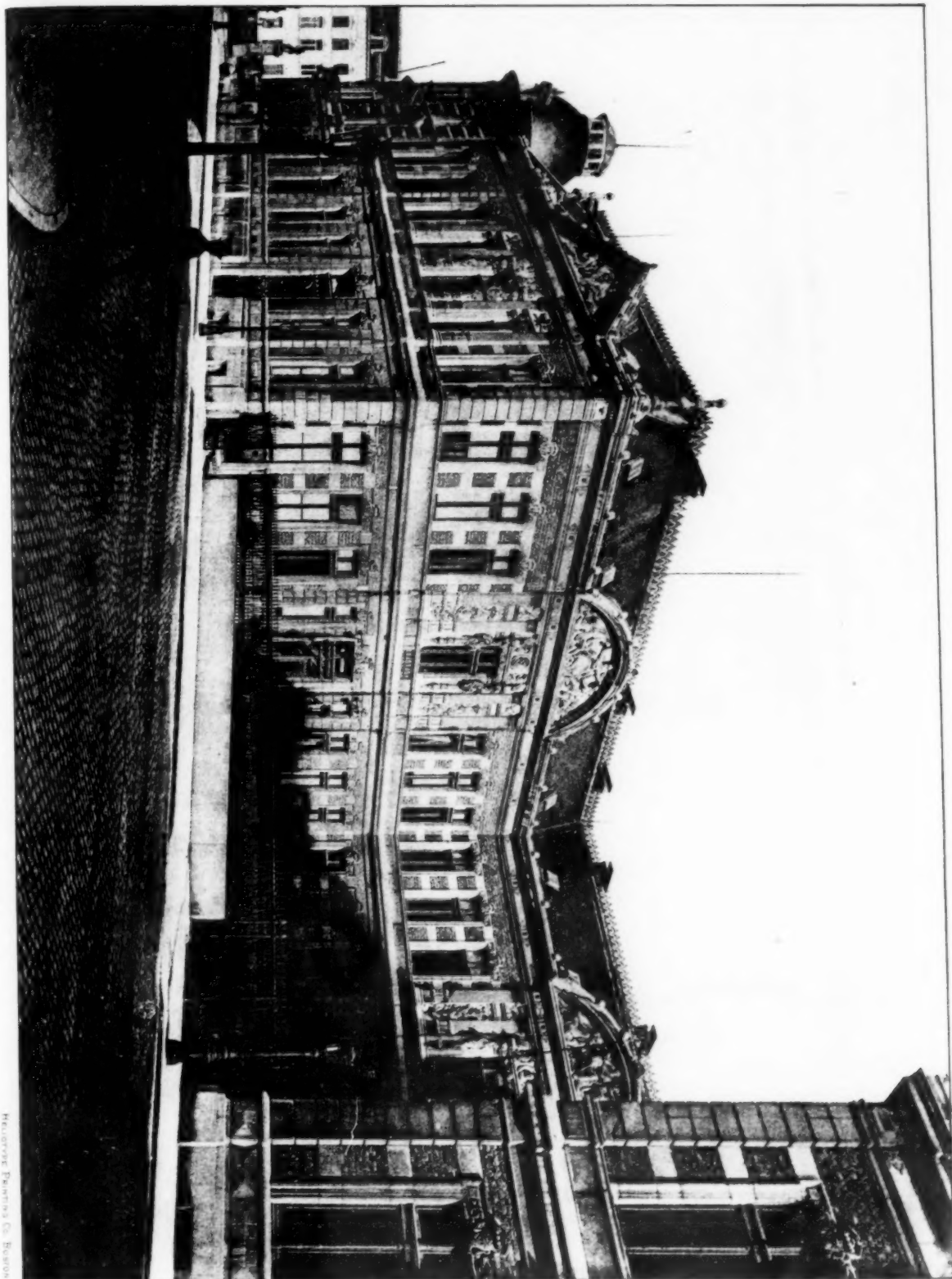
Detail of Trusses.
of
Gymnasium and Exhibition
for the
Newton High School.
Scale 1"=4'-0"

Henry H. Kendall
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