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CONTENTS.

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CONTENTS.

A JOINT resolution has been introduced in the United States Senate by Senator Hale, providing for the erection in Washington of a memorial building, containing a military and naval museum, and rooms for meetings of veterans and for other patriotic purposes, to be dedicated to the memory of General Grant, and to contain his grave, besides those of other distinguished Americans. Senator Hale proposes that the building shall be erected under the supervision of a commission, composed of the President of the United States, the Secretary of War, the Secretary of the Navy, the commanding officers of the army and navy, and the architect of the Capitol, in accordance with plans adopted by the commission after public competition. We hardly imagine that anything more will be heard of this scheme, but it is impossible not to wish that it might be carried out. We certainly need in this country some object around which to concentrate patriotic feeling. We have battle-fields enough, but, according to our experience, it requires a severe effort of the imagination to people a battle-field again with contending heroes, even if one knows their history accurately. We have also the graves of Washington, Jefferson, Lincoln and so on, but they lie out of reach of the objects which best express the greatness and power of the Republic which they founded and defended. The appropriate resting-place for them all is certainly Washington, where their fellow-citizens may honor them, and form good resolutions of conduct worthy to be compared with theirs. It would be hard to overestimate the influence which such associations have had over Englishmen. More than one British hero has led his men to assault, as he said, for "victory or Westminster Abbey," and we may be sure that many others have had the same thought in their minds. For Americans, who are quite as sentimental as the English, there is, so far, nothing corresponding to Westminster Abbey as a centre of patriotic enthusiasm. There is no place in which it could exist but Washington, since Washington alone is the common property of the whole country; and there is as yet nothing suitable for the purpose there. The Capitol is too much a place of business and politics for sentiment; the White House should not be made a burial-place, and no church, at least in Washington, sufficiently represents the American people. In default of any existing edifice suitable for the purpose, the alternative is to build one, and Senator Hale's resolution points out a good way of getting just what is wanted.

MR. POOLE, of Chicago, whose ideas on the subject of library-construction are well-known to architects, has taken the occasion of a visit to Boston to make some rather severe criticisms upon the new Boston Public Library. The criticisms have been followed by some equally forcible replies from persons interested, and the consequence is that "strained relations" exist at present between Mr. Poole and several other intelligent and cultivated people. The truth of the matter, so far as we can judge, appears to be that Mr. Poole, who examined the building without the aid of a guide, mistook the destination of some of the rooms, and asserted, for example, that the "book-stack" was without windows, whereas it seems, on the testimony of the superintendent of construction, that there are seventy windows in it. An error like this might have been overlooked, but Mr. Poole, with the manifest intention of conveying an unfavorable and incorrect impression, chose to call the catalogue-room a "crypt," whereas it is a room on the entrance story, resembling a crypt only in being covered with a vaulted ceiling, a noble example of the Guastavino tile-work. This rather disingenuous expression, very naturally, cast a suspicion of malice over the whole description, and excited a resentment which would not have been shown against a more sincere criticism.

APART from these points, there was, very probably, some ground for Mr. Poole's comments. It is well known that the Library Trustees who were in office when the building was first decided upon, declined to listen to any suggestions from architects on the subject, saying that they knew just what they wanted, and did not need any advice. It turned out, after ten thousand dollars had been spent on a competition upon a programme embodying their views, some of which, by the way, were so unsatisfactory that the Boston architects almost unanimously refused to take part in the contest, that the idea of a plan which they had imposed upon competitors was so crude and inconvenient that all the plans which conformed to it were thrown aside, and the Trustees then employed Messrs. McKim, Mead & White to make new designs and carry them into execution. In doing so, as Mr. Poole says, no more deference was paid to the intelligence and experience of librarians than was before paid to that of architects, and the plan, he thinks, suffers accordingly. As to this point there will probably be several opinions. No perfectly convenient large library has ever yet been built, and architects and librarians will have to put their heads together for some years longer before the ideal plan is evolved. Meanwhile, Mr. McKim's building suits, in arrangement, those who own it, and pleases those who see it by its distinction and the beauty of its detail; and an architect may well be satisfied with accomplishing so much. That the structure will be an expensive one, which is Mr. Poole's last grievance, has been obvious enough for a long time, so that the tax-payers are probably used to the thought by this time. In fact, the architects are the ones who ought most to resent the expenditure of two million dollars or so on the building. The programme issued for the original competition, after describing the sizes and shapes of the rooms, stipulated that the cost of the building should not exceed five hundred thousand dollars. As a very little calculation showed that this sum would not provide anything like the accommodation demanded, prudent architects would hardly have ventured to enter the competition, even if the terms had been acceptable in other respects; but the temper of architects is always tried when a committee, after inviting a competition, and limiting the cost of the proposed building to a sum which will provide only the barest necessaries, coolly throws aside all the designs made in the conscientious effort to fulfil the conditions, and proceeds to spend four times as much in carrying out a new design made by some one who did not enter the original competition.

WE regret very much to hear of the death of Mr. B. G. Chisolm, of the firm of Chisolm & Green, of Anniston, Alabama, at the early age of twenty-eight. Mr. Chisolm was born in South Carolina, and was educated at Union College,

N. Y., where he graduated in 1884. On leaving college, he went to Colorado, and, as student, and finally as partner, with Mr. Bishop, was concerned in the erection of several important buildings. From Colorado he went to Galveston, Texas, where he built a church and a school-house, besides other buildings; and came finally to Anniston, Alabama, where he formed a partnership with Mr. Lonsdale Green. The new firm has been prosperous, and Mr. Chisolm's death, after a short illness, removes one of the best-known members of the profession in Alabama. He was an interested member of the American Institute of Architects, as is also his partner, and both members of the young firm, as we have had occasion to know, were always glad to give and receive information on professional topics.

THE death of Mr. William Ettinger, of New York, has attracted public attention to a novel mode of making a living. Mr. Ettinger was a German who came to this country many years ago, and went into mercantile business. He was unfortunate, and failed, but he had, meanwhile, accumulated a knowledge of men and affairs which he was able to utilize. Some time afterwards, he called upon the manager of an insurance company and told him that he had a list of buildings insured in the company, which were bad risks. He refused to say how he got his information, or in what way the risks were bad, but contented himself by predicting that fires would sooner or later occur in the buildings which he mentioned. In about half of the cases, his predictions were verified; and the insurance companies began to interest themselves in the prophet. He demanded a small fee for the information which he furnished, and the managers of the companies found it for their interest to pay the fees, from which Mr. Ettinger derived, in the end, an income of about five thousand dollars a year. Some of the newspapers appear to think that his information was in some way unlawfully obtained, and that he was in league with incendiaries, but there seems to be no proof of this, and there would certainly be no need of it. We venture to say that any observant man, who could find pretexts for going over business buildings, and, particularly, for penetrating into their basements, could without difficulty note those in which destructive fires were likely to occur. Mr. Edward Atkinson, it will be remembered, a year before the great Kingston Street fire, in Boston, denounced in the newspapers the Brown-Durrell building, in which it began, as a menace to the neighborhood. We recollect visiting the same building, about a week before the fire, and being struck with the dangerous character, not only of the building itself, but of its interior arrangement. Mr. Ettinger, having an extensive acquaintance among business men, which was increased through his frequent employment in adjusting losses, could not only make notes of the buildings in which the steam-pipes were used to dry oily rags on, or where the stoves stood on wooden floors, without metal plates under them, or where the gas-jets were in the way of the doors; but could ascertain the character of a policy-holder, and judge whether he was over-insured, and form an idea as to whether the arrangement of his goods would be conducive, or not, to the rapid spread of an intentional conflagration. By putting all the probabilities together, an experienced man could make a pretty shrewd guess at the buildings in which the risk of fire was the greatest, and as Mr. Ettinger was only right in about half his predictions, it seems unlikely that he based them on anything more than a careful comparison of character and circumstances.

THE wire stone-cutting machine seems to be slowly making its way on the other side of the water, and is now extensively used in Belgium. As we have before described the system, we need only remark that experience has suggested some useful modifications of the original plan. As our readers know, the wire is used for quarrying, by making two holes in the rock, five or six feet deep, and ten or twelve feet apart. In these holes are set the vertical portions of a frame, carrying a small endless wire rope, which is driven at a speed of about twelve feet per second, and cuts the rock between, down to the bottom of the holes. The cuts may be repeated in any way desired; and the blocks so separated are then removed. Instead of drilling the holes for the ends of the cut in the usual manner, they are now, in the Belgian marble quarries, sawed by means of a cylindrical saw, of hard steel, secured to the end of a tube of sheet-iron. This apparatus, which is easily operated, cuts out a cylindrical shaft of marble, which is sold at a good price. In sawing the longitudinal cuts with the wire, it is found advantageous to have the wire rope tightly twisted; and instead of trusting to the impact of the steel wires on the stone to wear it away, the saw cut is now always fed with water and sand. The grains of sand wedge themselves in between the wires of the cord, and greatly increase the cutting effect. In ordinary marble, or limestone, a cord one-quarter of an inch in diameter will cut at the rate of four or five inches an hour, and even in porphyry, which ordinary tools will hardly touch, it will saw nearly two inches an hour. It is found that the cord slowly twists in use, so that the wear is uniform all around it. After the larger blocks are cut out, they are, for certain purposes, divided into thin slices, by means of "gangs" of cords, arranged like the blades of the ordinary marble-saw. The next operation is polishing. The wire cord does not cut so smoothly as a steel blade, although its cuts are straighter; and the marks must be polished out. For this purpose, blocks are made, of emery powder, mixed with various metals in fusion, and cast in moulds. For marble, the composition is a mixture or tin, lead and antimony, which is easily melted, the emery powder mixed with it, and the whole cast into blocks. For harder stones, brass and copper are used as the matrix of the emery powder; and for the hardest stones, cast iron is employed. In use, the blocks are set into circular discs, like those ordinarily used for polishing stone, which revolve in a horizontal plane, and can be moved over the surface of the stone to be polished; but they are driven at a much higher speed than the polishers of chilled-iron, fed with sand, usually employed for the purpose. The consequence is that in this, as in the cutting, great efficiency and speed are secured, together with economy.

M. MARCEL DALY gives, in *La Semaine des Constructeurs*, some details of the most recent archæological discoveries in Greece. The most important of these is perhaps, that of the ancient Parthenon, on the Acropolis at Athens, which was destroyed by Xerxes just before the battle of Salamis, to be replaced, soon afterwards, by the splendid building of Ictinus and Phidias. The ancient temple, which is often mentioned in the writings of the period, occupied a part of the space between the Parthenon and the Erechtheum. Nothing but the substructure is now in place, but, curiously enough, the lower step of the flight which led up to the temple, still remains in place, and retains the color with which it was painted — a greenish blue. There are several other Greek temples in which traces of color have been found on the pavements and outside steps, but this primitive Parthenon appears to be the oldest yet discovered. At Epidaurus, a large theatre has been excavated; but the most interesting investigation seems to have been that into the great tumulus at Marathon, raised to the memory of the Greeks who fell in the battle. Although, even now, tourists can pick up for themselves, on the field of Marathon, Persian arrow-heads, the mound erected to the Grecians was found to contain nothing of interest beyond some calcined bones, cinders, and a few pieces of pottery.

A STRIKE of the usual malicious sort, came to grief at Spokane Falls the other day. The Carpenter's Union had ordered a boycott against a certain lumber manufacturing company, in order to force the company to grant certain demands made by its employés. It happened that a very large wooden building was in process of construction in the town, to be used for an exhibition, which opens in October. The directors of the exhibition bought some materials from the boycotted mill company and the union carpenters at work on the exhibition building immediately struck. The directors called the carpenters to a conference, but no agreement could be reached and they then published a card in the newspapers, explaining the matters and calling upon the citizens for help. The citizens responded to the call with the characteristic energy of Westerners. The mayor of the town went to the building, in company with the president of the board of trade, the principal bankers and a host of prominent lawyers, merchants and others and the whole band removed their coats, climbed up the staging, and went vigorously at the work of shingling the roof. Non-union carpenters were obtained to help them, and, between the amateurs and the professionals, it seems certain that the building will be completed at the appointed time, notwithstanding the attempt of the union to catch the directors at a disadvantage.

RELIGIOUS ARCHITECTURE.[1] — XXVI.

THE NINETEENTH CENTURY.

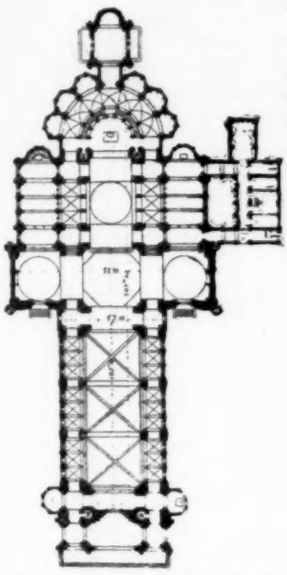


Fig. 1. Plan of the Cathedral of Marseilles.

AS the Roman Catholic church lives to-day chiefly in traditions which it seeks to perpetuate unaltered, as it strenuously opposes all progress that is deemed dangerous, so religious architecture survives only in the repetition of models bequeathed to it by the past.

Having no vitality of its own, its artists devote much research, study and ingenuity to these prototypes, without evolving anything original. It must be conceded that the creative inspiration is lacking, for there are now no new religious conceptions to be expressed. So churches are built in styles belonging to widely different ages of Christianity, just as taste, or, we might say, fashion dictates.

At the beginning of the present century the religious edifices were all temples or basilicas copied from the monuments of antiquity or those of early Christian times. The fervor of the Romantic movement led to the erection of a certain number of churches of the Gothic order. The earliest of these were clumsy imitations, but, with the progress of archæological studies, a greater degree of perfection was attained. The Gothic style, unfortunately, offered the most serious obstacles to the modern architect called upon to build an ecclesiastical edifice. If his imitation was faithful, he merely produced a copy of indifferent interest. If, on the other hand, he should fail to follow his models with scrupulous exactness, if he should endeavor to impress his own individuality on his productions, his innovations would inevitably be set down as archæological inaccuracies. Gothic art did its perfect work in its own day; we have neither the right nor the power to revive it at the bidding of inspirations which have nothing in common with the conceptions of the thirteenth century.

The difficulty was an insurmountable one. The beauty of Gothic architecture depends, in large measure, upon the statuary with which it is embellished. In those early times the sculptor, toiling perhaps for the salvation of his soul, counted his time and trouble for naught. We could not, at the present day, think of drawing upon a scanty treasury for funds wherewith to decorate our Neo-Gothic façades with the luxuriant designs which constituted the chief charm of Gothic façades. We have neither the money, nor the time, nor the inspired artists of the Middle Ages. But, it will be objected, Gothic art, at its inception, had no need to be thus lavish with its sculptural decorations; it was simple in its expression, and obtained the tranquil beauty which characterizes it in the great architectural lines. This is true, but simple as it may have been, sculptural decorations played a considerable part therein, even from the outset, and these cannot be imitated to-day. Our modern sculptors certainly work with greater accuracy, they are more familiar with the technical details of the workshop than were the artists of the thirteenth century, and, should they attempt to decorate portals and pinnacles with figures of saints — manufactured too often by the dozen — the proportions would certainly be more classical and the attitudes less grotesque; but one thing would be lacking, namely, just that charm and simplicity which constitute the characteristic element of Gothic sculptures. Now our eyes are too accustomed to that expressive awkwardness of the early Gothic sculptures, which harmonizes perfectly with the style of architecture, not to be offended by the chill insignificance of modern accuracy, and not to discover in it an unfavorable contrast to the style adopted.

The efforts of the sculptor who, artificially trained to the work, attempts to ape the artless simplicity of primitive times, are not less repugnant to our taste, for there is nothing so difficult to produce by artificial means as artlessness.

Every effort, then, to introduce the Gothic style in modern religious architecture, no matter how conscientiously undertaken, has resulted in giving an impression of coldness and hopeless poverty. The lines, profiles and proportions may be faithfully reproduced, the copy may be exact, but the charm is always wanting.

For these reasons architects early turned their attention in another direction. A compromise was fixed upon. The remains of the so-called Romanesque style are fewer, far less complete, and less known than those of the Gothic; for several years French architects have adopted the former for religious edifices, while allowing themselves great freedom in their interpretations of it.

And, in fact, just what was a Romanesque edifice? Few persons can tell exactly, and they are obliged to resort to a total restoration; examples are rare, scattered, and known only to archæologists.

While a man of taste prides himself, not without a show of reason, on knowing what a Gothic edifice is, having had a hundred opportunities to examine such structures, he is not at all disturbed by the aspect of a church constructed in an almost Romanesque style, which the architect has "mitigated" as seemed best to him. The means of comparison in this case are wanting; the anachronisms which might astound the tireless archæologist do not affect the public, who, with no preconceived notions, confront the structure with their purely instinctive impressions, and are content in merely determining whether the final arrangement is harmonious.

This fact explains the growing tendency toward the revival of a Romanesque style suited to present tastes. The choice is the better justified, because this style does not require the use of statuary proper for decorative purposes, but is satisfied with purely ornamental sculptures; and these ordinarily skilful artists can treat with taste. The insurmountable obstacle to the adoption of the Gothic style does not, then, exist in the Romanesque, and the latter seems, therefore, destined to prevail for a period at least; it is simple, inexpensive, and in accord with the modern needs of an economical administration; it is sufficiently decorative, and leaves the architect some scope for the exercise of his own originality.

Among French churches reared under Classic influence we cite first Nôtre-Dame de Lorette, built by Lebas between 1822 and 1836. The Corinthian portico and the basilican nave are

Fig. 2. View of the Cathedral of Marseilles.

Roman or early Christian. A tower with a spire was an indispensable adjunct; the taste of the times required that it should be in the rear, the disposition being Italian, which

[1] From the French of P. Planat, in Planat's "*Encyclopédie de l'Architecture et de la Construction.*" Continued from page 193, No. 770.

seemed to recall well enough the Roman arrangement. The church of St. Vincent de Paul, with an Ionic peristyle, assumed likewise the form of a Byzantine-Roman basilica, and was surmounted by two towers. It was begun in 1824, by Lapère, and completed by Nittorf in 1844.

One of the earliest examples of Neo-Gothic churches is seen in the chapel of Bon-Secours, near Rouen, built between 1840 and 1842 by M. Barthélemy. It is in the pointed style of the thirteenth century; there are three naves, a spire, and open-

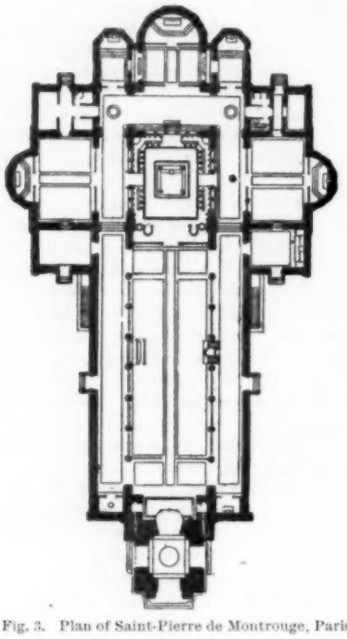


Fig. 3. Plan of Saint-Pierre de Montrouge, Paris.

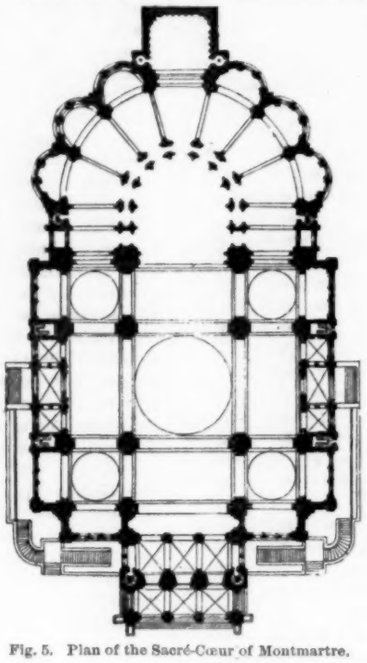


Fig. 5. Plan of the Sacré-Cœur of Montmartre.

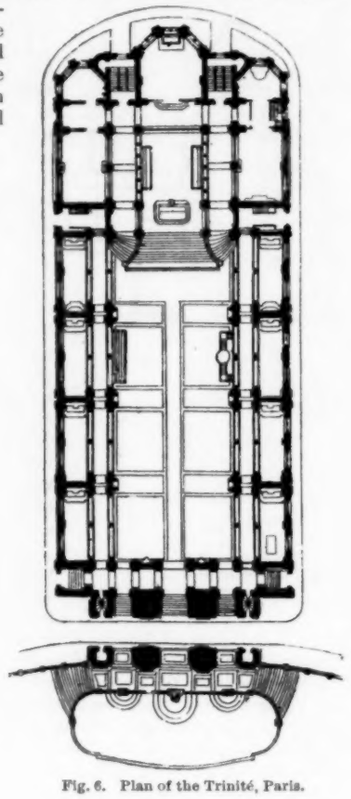


Fig. 6. Plan of the Trinité, Paris.

work pyramids. The windows are of stained glass, the manufacture of which had taken a new start just then. This chapel

Fig. 4. View of Saint-Pierre de Montrouge.

shows the inexpediency of attempting to adapt archæological restorations too strictly to modern customs; the persons who contributed of their wealth to the construction of the edifice are figured on the painted windows. The kneeling postures and pious attitudes are indeed those of the Gothic dawn; but, unfortunately, color requirements introduced into the pictures green coats, red waistcoats and sky-blue trousers, as little known to modern as to mediæval times, and which produced a sensation wholly unlooked for by the careful archæologists who directed the works after the revival of the glass-making art.

St. Clotilde, at Paris, begun by Gau in 1846, and completed by Ballu in 1857, was conceived in a sufficiently pure pointed style; but it gives merely an impression of spareness and nudity, whence, it seems evident, that it is impossible to overcome the inherent defects of imitation and anachronism. At St. Eugène, built by M. Boileau in 1855, an attempt was made to use cast metal in the architectural style of the thirteenth century. The church of St. John the Baptist, at Belleville, erected between 1854 and 1859, after the style of the same period, with openwork stone spires, and with towers and buttresses on the façade, shows that Lassus, a skilful and conscientious artist, had made a careful study of mediæval art.

To these examples must be added a number of provincial churches, notably several at Lyons, the Immaculate Conception at Les Brotteaux, St. George, and especially Nôtre-Dame de Fourvières. The greater part of these edifices were constructed after Bossan's plans.

With the cathedral of Marseilles (Figures 1, 2), begun in 1852 by Léon Vaudoyer and Espérandieu, and continued by M. Révoil, we enter a path from which there was afterward but little divergence. The plan has the form of a Latin cross, but the decoration is conceived in the Byzantine style, modified by Romanesque, and sometimes Classical, survivals.

Nôtre-Dame de la Garde, also at Marseilles, built in 1864 by Espérandieu, is of the same order. In 1866 Ballu built the church of St. Ambroise in Paris, in which he sought to harmonize the elements of the three Gothic centuries with the Romanesque precursor. St. Pierre de Montrouge (Figures 3, 4), erected between 1860 and 1868 by M. Vaudremer, is more frankly Romanesque, though modified to suit the artist's interpretations. On account of the shape of the ground, the tower was placed on the façade, and is crowned with a stone spire; aisles extend around the nave, choir and transepts; the transepts terminate in apses. The same architect, at a later period, constructed the church of Nôtre-Dame at Auteuil, on a similar plan.

Nôtre-Dame-des-Champs, in Paris, erected in 1867–1875 by

M. Ginain, is inspired from Romanesque types, though treated with freedom. The *ensemble* of some of these edifices is somewhat severe, but it is wanting neither in harmony nor strength. The cathedral of Gap, built in 1886 by M. Laisné, is likewise Romanesque.

And lastly, the Sacré-Cœur, at Montmartre (Figure 5), begun on Abadie's plans, and continued first by M. Daumet and afterward by M. Laisné, is also of the same type.

The same Byzantine-Romanesque tendency appears in the church of St. Augustin, which was constructed by Baltard, from 1860 to 1868. The triangular form of the ground was most disadvantageous; the architect endeavored to remedy this defect by establishing chapels of continually increasing depth along the sides; the choir is in a rotunda surmounted by a

Fig. 7. View of the Trinité, Paris.

dome; the ceiling is supported by ornamental arches of iron; the moulded columns, all the metallic framework, richly decorated with paintings and gildings, are fully exposed to view. The appearance is quite imposing. This bold attempt does not seem to have been as successful as the undaunted artist had hoped for, as it has found few imitators.

St. François-Xavier, at Paris, begun by Lusson and completed in 1875 by M. Richard, was planned in the Byzantine-Romanesque style, but it was completed in a style more suggestive of the Renaissance type.

To the Renaissance must be referred the Trinité (Figures 6, 7), constructed by Ballu, from 1861 to 1867. This church, with its broad flights of steps, its balustrades, and its well-proportioned and richly-decorated tower, is evidently treated in a way to satisfy the tastes of the inhabitants of a wealthy and fashionable quarter of the city. P. Planat.

A Garbage Cremator. — A garbage cremator has been bought by the city of Tampa, Florida, and will at once be put into active use. An official test of the apparatus was recently made. In about seven hours' actual running time the furnace destroyed 20 cubic yards of night soil and garbage, much of the latter being completely saturated with water, and containing a large quantity of melons and melon rinds. The fuel used was light-wood, of which about one-quarter of a cord was burned, and three-quarters of a cord of slabs and waste refuse lumber. The operation of the furnace showed that it would destroy at least 40 cubic yards of material in twelve hours, and would require about three-quarters of a cord of light-wood during that time. — *N. Y. Commercial Advertiser.*

ANCIENT ARCHITECTURE FOR STUDENTS. — I.

INTRODUCTION.

Architecture, the oldest of the arts, has its origin in the necessities of humanity. Its origin is in fact coeval with the fall of man, when the offended Creator, in righteous indignation, drove our first parents from the Garden of Eden, and they were compelled to gain their livelihood by the sweat of their brows. But the Great God gave them such instruction, that all creation, animate and inanimate, might be subservient to their requirements, thus mitigating the severity of the curse and ordaining a means by which man through patience and suffering might work out his redemption.

Man learned to make use of the materials at hand, whether of wood, stone or clay, for purposes of shelter from the weather and from beasts of prey, which he now had to fear; and he was taught not merely to put them together, but gradually to arrange and distribute them that there should be a certain beauty of form obtained.

As may be understood by one glance at nature, God loves that which is beautiful. Indeed, it has been well said of that which is beautiful, that "beauty is the expression of the mind of God, seen through a material medium." Perfectly marvellous is the wonderful variety in creation and the beauty of every created thing. Only those who devote their lives to the study of nature can really comprehend, how beautiful are all the forms, colors and varieties and combinations of both exhibited in God's handiwork; and the Creator instilled into man's soul a love for the beautiful, an instinct altogether separate from his intellectual capacity, an instinct requiring for its development the highest exercise of the intellect endued with the Spirit of God.

Harmony is the key of all art; it is therefore natural harmony in the human soul with the things of nature that makes nature beautiful in the eyes of man. Without that spirit of harmony it would be impossible to know what beauty is, and of what it consists. It is the harmony that is beautiful in music, not the discord; it is harmony of detail with the mass of construction that is architecture, that "chiselled music," the life and vivacity of inanimate creation. Where harmony does not exist there is no art, and where, in the presence of art, there is no harmony in the soul, there is no talent in a man's composition. Architecture is so essentially an art, and the possession of talent so absolute a gift, that no one can comprehend its spirit who has not been born with talent. There may be innate talent which needs development, and where this is the case it soon shows itself by unmistakeable signs — by an interest taken in things belonging to art, by a desire to understand the connection of the details in reference to them, and above all by an appreciation of that which is beautiful.

Art, then, being divine in its origin, its development has been in the direction of religion, and religion has exercised a natural influence upon architecture. The benighted heathen, struggling in their darkness, have striven after the development of beautiful forms. In the pervading notion of the propitiation of a supreme being, beauty has been a prominent factor.

Canon Farrar, in his "*Primitive Manners and Customs*," says: "Few results of ethnology are more interesting than the wide-spread belief among savages, arrived at purely by their own reasoning faculties, in a creator of things. The recorded instances of such a belief are indeed so numerous as to make it doubtful whether the instances to the contrary may not have been based on too scant information. . . . A belief in a future life — a belief perhaps first suggested in that rude state of culture where dreaming and waking life are clearly distinct and both equally real, appears to prevail so generally among the lower races that it is more difficult to find instances where it is *not* found than instances where it is. The dead who visit the living in their sleep are not thought of as dead but as simply invisible, and for this reason, all over the globe, it is common to bury material things in the graves of the departed, to serve them in that other world which is so vividly conceived as but a continuation of this one."

In these quotations the "savages" referred to are especially those now living, but the remarks apply equally to the heathen of all ages. Each of the early tribes had its own custom and its own method of procedure with regard to the treatment of the bodies of their dead, but the same thought regulates the habit of each. The custom of embalming the dead, and the manner in which this was effected, with more or less care and efficiency, together with the ceremonies in connection with the disposal of the mummy, may be taken as characteristics of each nation; those of peculiarly high religious feeling, like the Egyptians, paying the utmost attention to details to ensure a lasting result; while others, like the Phœnicians, who were an eminently practical people, although preparing a costly sarcophagus for the reception of the mummy, were very careless as to the durability of the mummy itself.

The Egyptians went farther than others, and it became the greatest object of the life of each wealthy person to prepare a place for the reception of his body, — a place not only suitable to his rank and station, but as absolutely indestructible as all the ingenuity and labor at his command could make it; and then, not satisfied with these results, images of the deceased were made by surviving friends and relatives, and stowed away carefully, so that in the event of the destruction of the mummy, by accident, there should still be some portraiture of the dead existing to the day of his awakening to eternal life — for the absence of such portraiture, mummy or figure meant with the Egyptians the annihilation of the soul.

Religious sentiment, where faith in the one God was unknown, has ever demanded something tangible as an object of worship, so much so that it is hardly possible to credit to what lengths this desire has carried man. As an example, witness the case of the Children of Israel, who, at the foot of the very mountain upon the summit of which the Almighty had descended and manifested His Awful Presence, made and worshipped the golden calf.

The notion of the necessity of propitiation of a supreme and wrathful being is another phase of savage religion, no less widespread than the belief in a future state. The best of the possessions of the worshippers must be given up; their highest faculties must be fully exercised, and the best results of their intellects must be bestowed for this purpose. Hence it is that in the *tomb* and in the *temple* the earliest architectural remains are to be found.

As man developed, groping on in the darkness, following gods of his own imagining, getting accustomed to the absence of the awful and direct superhuman interference with the state of nature which he naturally so greatly feared, becoming more "worldly" as he gained power over his associates, he became less religious and less careful for the things of his soul — the only notion of which he had in his superstitions concerning the living spirits of the dead around him; the tomb is neglected, the temple reduced to the position of an insignificant addition to the palace to which the monarch now applied all the resources of his empire. We have a significant example of this state of things in the history of the Chaldeans and Assyrians, who ultimately suffered such complete annihilation at the hands of the Almighty.

A glance at the characteristics of the architecture of the various countries shows unmistakably what a great variety of influences are at work in the formation of any style. Not merely the materials to be found at hand, and a unity of purpose with regard to the use of these materials on the part of the people, but the manners and customs of the natives according to their disposition, whether peaceable or warlike, that they have inherited from their progenitors, who were influenced by the nature of the land in which their forefathers had lived: the religion, superstitions and traditions they had received twisted about and handed down to their descendants, and also, and very particularly the influences of climate. Of all these influences we shall see the effect as we proceed.

To study the subject thoroughly we must go back to man in a primitive state of existence, and examples of the manner in which he sought protection from the elements and from his natural enemies are to be seen to this day in almost every country in the world. It is easy to imagine the first attempts of a people inhabiting a well wooded country: the twisting of branches and intertwining of twigs, soon formed a very passable retreat and shelter. But others lived in rocky lands, in caves and holes in the mountains, which they deepened and enlarged by manual labor wherever the soil was of a suitable character. Driven from these habitations in pursuit of food or water, they would stray into flat countries, and here they dug holes in the ground, covering them over at the level of the ground with boughs and branches, so forming a retreat not easily to be espied by an enemy. Such excavations are still to be seen, and where they occur are generally known as "the prehistoric village." The excavations, circular on plan, averaging about nine feet in diameter, have sloping sides and a flat bottom about four feet in diameter just large enough for a man and his "squaw" and children to huddle together in. We can then imagine them desiring greater height, and raising the covering for easier access and greater convenience, and the next step to this would be raising on the ground without excavating beneath, a tent-like arrangement of branches under which the owner could creep. Men would follow the idea of raising the "tent" propping it up on posts and filling in the interstices with branches so as to form a wall. Wooden posts would give way to mud walls and stone, according to the character of the place and, strange to say, stone walls for such dwellings may still be seen a few feet out of the ground. Every tribe would have its chief or leader, perhaps first the head of the family, and a single post, bough or trunk of a tree would be stuck up on end to mark the chief's hut or wigwam, and this custom of setting up a post or a rock to mark a particular site or event, has come down from time immemorial, and exists even in our day in a more ornate fashion: it gave rise to the Egyptian obelisk, to the monumental column, to the peculiar round towers of Ireland and minarets of India, and all other structures of a similar character.

From the circular form of habitation the square and the oblong would soon be reached. Increase in width in the oblong necessitated additional support from the interior for the roof, and in the introduction of posts to meet this requirement we have the origin of the pillar for constructional purposes.

The natural and innate desire for ornamentation which leads the savage to decorate his naked person by means of tattooing with lines and patterns — often developed to a considerable degree of beauty — led him to attempt the decoration of his abode. The rude posts would be gradually shaped, and common objects, such as flowers, foliage, stalks, fibres and shoots of plants, and even textures of clothing and shavings of wood, would give suggestions for decorative treatment.

Mere form was not sufficient in this matter. Form must be, and was emphasized by color. Color exists in all natural objects; it was therefore to be adapted to the artificial. The grotesque and the exaggerated is always easier to accomplish than a correct copy or imitation. Exaggeration in tone and color was a natural beginning, for the art of decoration required as much development as the science of construction.

As an instance of climatic influence upon architecture the country of Egypt will serve us very well. Its architecture, so solid in its solidity, so gigantic in its proportions, its massiveness and its heaviness — what could be more suitable to the character of the country: the arid deserts stretching on immeasurably, without break or rest for the eye; the glaring cloudless sky of impenetrable blue, the brilliancy of the sunlight, the intensity of the heat, the awful silence, stillness and solemnity of the desert? No wonder that with strong contrasts of light and shade outside, so much use is made of strong bright colors in internal decorative works: bright colors boldly applied to large surfaces, but still arrayed instinctively in perfect harmony with the surroundings.

Look at the exquisite pile of a Gothic cathedral, every detail the reverse of Egyptian, all aspiring heavenwards; the quiet repose of its simple grandeur, the absence of color unheeded consequent upon the absence of that brilliancy of light characteristic of the south, elaborate carvings and mouldings, gentle undulations and intricate detail, absence of unadorned surface; all so suitable to a land of green fields, woods, rivers, lakes and hills, with a softness of light and coolness of shade. What could be more incongruous than a change of places — a Gothic cathedral in a parched and arid desert, and an Egyptian pyramid in a lovely valley of Western Europe?

Where there is no history we have to fall back upon tradition, and the traditions of various tribes often concur in pointing to a particular event in such a manner as to leave little doubt that that event took place, although its date may be utterly lost. Tradition associates the foundation of a city with fratricide, and this is a common tradition with most nations of the earth, of "strictly primitive origin anterior to the dispersion of the great civilized races, and it may be traced almost everywhere; it would be a curious study to follow it through all its variations, beginning with Cain who built the first city, Hanok, after slaying Abel, and ending with Romulus who laid the foundation of Rome in the blood of his brother Remus."[1] Then came the deluge wiping out everything that went before that was of man's workmanship; after which it is believed that Babel was the first city erected, somewhere about 5000 B. C.

R. W. Gambier-Bousfield.

[To be continued.]

Depredations in French Cemeteries. — For some time past complaints have been made by friends of those interred in the Paris cemeteries, of the frequent robberies committed in them, the bouquets of fresh flowers placed on the graves, as well as the wreaths and other objects, being carried off, despite the vigilance of guardians, for the sake of the trifling sum they could be made to realize. Latterly, busts and other works of art ornamenting the graves have disappeared, the Montparnasse cemetery in Paris especially suffering. The busts of several eminent men interred there have been carried off, and many of the more portable works of art surmounting the remains of the dead have shown signs of attempts to remove them having been made with a lever. There is something peculiarly repugnant in this class of larceny; and it must be satisfactory to the relatives of the dead buried in Paris cemeteries to know that one of the offenders is at length caught. He was arrested in the middle of the night, just as he was in the act of scaling the wall, taking with him a heavy marble bust stolen from one of the graves. He was recognized by the guardians as a frequent visitor to the cemetery, where he spent hours ostensibly in pious meditation. It is to be hoped that, as a salutary example to other rascals of a similar class, this robber of burial-grounds will be severely punished. — *London Standard.*

[1] *Beginnings of History,*" Lenormant.

A WORD MORE ABOUT DECORATIVE TAPESTRIES.

"All the Modern Improvements." — No. 19.

THE present exhibition of decorative tapestries in the Austrian Museum of Vienna is extensive and rich; but the most noticeable fact about its establishment, perhaps, is the proof which the undertaking affords of the rapid culmination of interest in Gobelins as a feature of house decoration. This is the fifth large exhibition of the kind opened since the beginning of the year, in various German cities, and I see names of new manufacturing firms at each successive display.

Vienna contains the town palaces of a great number of old princely families, — a far greater number than Berlin, and of much more opulent fortunes, — and these palaces, Austrian, German, Hungarian, Bohemian, Polish, Markish, Carinthian and Italian, have given up some of their treasures, for the nonce, to enrich the Academy's collections or to fill a gap in the historical displays; a circumstance to which the visit of a portion of the unusual crowd that fills the academies and museum halls must undoubtedly be credited. There are always persons whose curiosity is piqued as much by the ownership of an object of art as by the intrinsic qualities of the object. But deducting this quota of idle gazers in the case of the Vienna exhibition, the impression grows firmer, nevertheless, that in the getting-up of these repeated tapestry shows, directors of public art-schools are responding to a public want.

New houses often have now a "tapestried room," though the tapestry may be poor, painted imitations of Gobelins; but the mere ambition is sufficient for proving the direction of fashionable taste. Owners of old castles, furthermore, who have hitherto inhabited contentedly rooms with naked panelled walls, order the empty fields in the panelling filled with modern arras, or the daughters of the house leave their embroidery, for hanging stiles, and stitch hangings with their own needles, moquettes, high-warps and low-warps, these grounds for tapestry stitching being now in the market, together with every sort of wool and silken thread. For designs they resort to sample-books, and then order a cartoon made in natural size of some mediæval piece; or an order is given for cartoons containing a design of a recent episode in the national or family history. The style in the latter case follows our modern notions of decorative drawing, or is conceived in the spirit of the eighteenth-century Gobelins, or the spirit and false perspective of mediæval Bayeux.

Of two such pieces of amateur work in the exhibition (those by Baroness von J.), one commemorates a martial achievement of an ancestor at Katzbach, and the figures are represented in the uniforms of Frederick the Great and Maria Theresa; while the second is an essay copy of a Biblical scene, with colossal figures.

Then another proof of lay interest, if more proof is looked for, can be found in the studios, where tapestry painting, which was unheard of a few years ago, is become one of the most popular occupations of professionals and dilettanti, of both sexes and of all ages. Much of the work is on coarse linen, and is used for the summer hangings of doors. The rest is on rep, and imitates the manufactured imitations of old Gobelins.

Now, such being the state of affairs as respects the public, what has the architect to do? His advice is sure to be asked in some cases, and is certain to be needed in a great many.

Where his patron is the owner of great wealth, genuine tapestry, probably, will come under consideration: stitched hangings, such as were produced in France, Italy and the Netherlands, and are being freshly produced in Belgium and Paris, and by numerous manufacturers in south and central Germany. Every style is offered. The sizes of different pieces vary even more than was the case in the seventeenth century, when tapestries, from being looked upon as the peculiar decoration of churches and palaces, were adapted, for the first time, to the homes of untitled citizens.

There is a wide choice. If the older and most famous styles are selected it will fall on large pieces, however, for large pieces are connected, in the history of fashion and decoration, with the most aristocratic names and princely walls. Such pieces must be reserved, then, for the most spacious rooms. They are figure-pieces, and the figures are more than life-size. They must be stretched flat. Three-fourths of the whole extent of the walls will be taken up by them and their framings. No lofty furniture can be introduced into the same room. Furniture must be replaced by architecture—if a dining-hall, in the architectural development of the chimney and buffet; if a society-room, in a monumental development of the mirrors and settings for the wall candlebra. German taste admitted Gothic furniture into tapestried rooms, and the Dutch not only cut off the lower portion of tapestry pictures by the high backs of chairs and cupboards, but hung prints and paintings on the face of them.

Italian taste, and the sure, firm decorative instinct of the French, refrained from such a practice as a rule. They admitted tall furniture only where the ceiling was vaulted in Gothic style, and where such furniture, for the most part, stood in the middle of the room. Where the middle space of an apartment was kept empty to allow of dancing or promenading, and where numerous seats against the wall were necessary, they introduced divans and low-backed chairs.

For cases where tall furniture and cabinet pictures were to be used in one and the same room, Gobelet — I think it was Gobelet — designed flower-pieces, somewhat after Oriental fashion, to replace figure tapestry. They were called "*verdures*," and the Vienna Exhibition contains several fine originals from the palace of Prince Lichtenstein. The rage for getting cartoons of celebrated painters, which was at its height in Raphael's times, degenerated into a furious ambition, on the part of tapestry-makers, for rivalling the color and accuracy of paintings in general. Popular pictures were copied, no matter what dearth there might be in them of pure decorative qualities. Even the border of arabesques, flowers and grotesques, masks, the last remnant of decorative fancy, was at last sacrificed. Gobelin became a name for copies in wool and silk of the canvases of the day. Tapestry lost its character as an independent art production. It was a handmaid to oil painting, and not even a capable handmaid; for the stitched imitations of the brush remained wanting in airiness, atmosphere, radiance, and melting, soft contours. The mad attempt to acquire the qualities only heightened the cost of production, and raised an idea of such cost being both inevitable and stupendous, utterly beyond the means of any but royal and public or state purses.

The Expositions of 1867 and 1878 were still filled by tapestry of this sort. But of late years *verdures* have been taken up again, and several Parisian manufacturers are making a specialty of them.

The clearer conception becomes, the more decidedly the fact is felt that the function of tapestry is to serve as an ornament. The materials of which it is made excludes the possibility of its being made the vehicle of pictorial or plastic perfection, and, therefore, of ideal elevation. The material conveys chiefly the idea of sensuous warmth, and it is along the line of cheerfulness and cosiness that the best victories of tapestry are scored. They toned the marble halls and stone churches of the Middle Ages to something like a *fragmentary comfort*. Their destiny in modern houses is to *complete* the sense of comfort.

In middle-sized rooms, intended for familiar and constant occupancy, such Gobelins are suitable that go into small fields. The general tone of the fabric may correspond with the ceiling and the woodwork of the walls, or be chosen to contrast with these. The final decision can only be given after the whole of the architecture and the furniture, added to the architecture, have been taken into consideration. In every case, however, the figures in the tapestry should be only life-size. For small cabinets and boudoirs the size may be less than in nature, especially if they, the figures, are set in landscapes. An exemplary folk for the designers of small-sized tapestries is the fantastic world of fairies, naiads, nymphs, loves, cherubs, peri, elfs, dwarfs and brownies. They are representatives of our intimate moods and whims, just as the historic and mythologic heroes of great tapestries set forth our open, public ambitions and ideas.

Painted tapestry is to be recommended for summer houses and for dancing or ball rooms. The effect is cooler than that of stitched tapestry. The Oriental sorts are almost as dear as the most expensive Gobelins; and some modern examples at the exhibitions, of European make, show backgrounds, or partial backgrounds, of gold, in imitation of certain Chinese fabrications on the one hand, and on the other hand of pressed-leather tapestry. The cheaper sorts are in better taste, as a rule, than the more costly sorts. If one is going in for elaborate painting, let it be a regular oil or water-color painting. In the Orient, where painted tapestry is sought for, the native patrons do not have easel-pictures to choose from — a fact which may be quoted to Westerners as an inducement to buy the lightly-sketched products that fill German and French markets. They are always to be preferred to wall-paper or lime washes.

Leather, of course, will remain expensive. But isn't there a field to be opened in this direction by American industry? If anything in the way of decorative art is aboriginal, so to speak, on our continent, it is the Indian art of coloring leather, decorating it with many-hued designs and using it for the house or tent. Look at wigwams, fancy the primitive drawings on them developed to consistency and decorative richness, and could a more original and valuable addition be made to existing styles of tapestry? A fortune and a name

would be acquired by the man who would buy up the tents of the redmen and transform them into tapestries for the walls of our hunting club-houses, our smoking-rooms and libraries.

The earliest tapestry was dyed skins. And it was a fact curious enough to be noted that no other tapestry has kept so invariably to its primitive use as a decoration of the surroundings of the master of the family. Silks, wools and linens have been extended indiscriminatingly on the walls of every sort of room; but leather has never yet got into a lady's boudoir nor farther from his Honor's den than to his dining-hall.

In conclusion let it be remembered, that however much tapestries of any and all kinds are to be recommended, they are to be recommended as adjuncts to our old materials. They cannot come up to stucco for certain rooms, nor to wainscoting, nor to marble. The new taste, therefore, is to be hailed as an enrichment rather than as a revolution. Its functions are limited like those of all other decorative objects.

Countess v. Krockow.

EQUESTRIAN MONUMENTS.[1] — XXIX.

THE STUARTS.

A Cupids' Chariot-race: From a Sarcophagus.

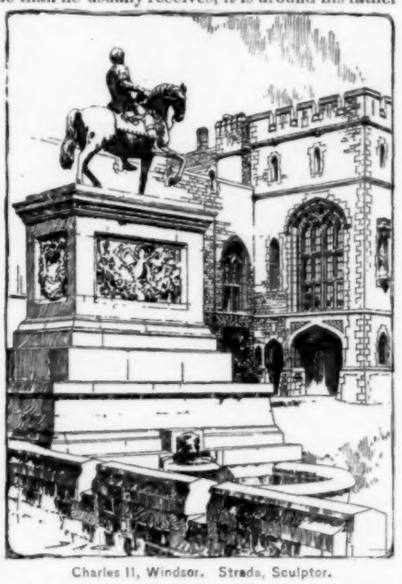
THE stand taken by William the Silent, Prince of Orange, in the matter of the right of Protestants to practise their own rites of worship and the success that attended it had fixed the leadership of Northern Protestants in the hands of the Princes of Orange. It was quite a matter of course, then, that the English Protestants, who regarded with justifiable apprehension the persistent efforts of James II to reëstablish Catholicism in Great Britain, should turn for help to the ruling Prince of Orange, even if there were no more cogent reasons for seeking his aid and advice in thwarting the schemes of

Charles I, Charing Cross, London. Le Soeur, Sculptor.

the Papistical king. But there was a more influential motive in the fact that William's wife, Mary, was the eldest daughter of James by his first wife, Anne Hyde, daughter of the Duke of Clarendon, and consequently was heir-apparent to the English throne; for the birth of a son to James's second wife, Mary of Modena, later known as "The Pretender," was disputed, seemingly with an abundance of supporting evidence[2], on the ground that no such birth had ever taken place, but that a new-born infant had been smuggled into the queen's room and by her declared her own child for obvious State reasons. Mary, William's wife, was a Protestant by individual conviction, and her own opinions were strengthened and supported by those of her clear-headed and assertive spouse, so the Protestants had everything to gain in maintaining that the so-called son of Mary of Modena was a spurious offspring.

Because Mary was eldest daughter of James and so, as the Salic law does not obtain in England, heir-apparent to the throne, one is apt to overlook the fact that William himself might be considered heir-presumptive to the same throne in virtue of the fact that his mother Mary was the eldest daughter of Charles I and Anne of Denmark.

In spite of the fact that, without exception, the members of the House of Stuart were pig-headed individuals, their histories cannot fail to quicken the sympathies of those who follow them through their romantic and devious windings, but while one reads with quickening pulse of the wanderings of the Pretenders, both old and young, and feels that the jovial and generally well-intentioned Charles II is deserving of less blame than he usually receives, it is around his father that centre those vivid feelings which are excited to equal degree only by the fate that fell upon some of the victims of the bullying vindictiveness of the eighth Henry and his unlovely daughter, the gloomy, blood-stained Mary. Charles Stuart had the misfortune to be the most conspicuous victim in the long quarrel between the people and the aristocracy which began in 1215 with the signing of Magna Charta by King John, and which seems likely to advance another step in our own day through the abolition of the House of Lords.



Charles II, Windsor. Strada, Sculptor.

Firm believer in the divine right of kings and lacking the mental shrewdness of James I which enabled him to trim his sails in time to avoid the entire wrecking of the Ship of State, Charles, in a manner, was solely responsible for the fate that overtook him, forebodings of which had early, if the statue at Charing Cross may be trusted, lent to his countenance a melancholy cast. This statue, which is seen — or rather not seen — by more people than any other statue in the world, has an interesting history. In the first place it has stood since 1674 on the spot where once stood the last of the Eleanor crosses, erected where Queen Eleanor's bier rested the last night before the final entombment of her body in Westminster. Only a few years before the statue of King Charles was set up, the same spot, from which the original Eleanor's cross had disappeared at the order of the Long Parliament, gave footing to a vastly different but equally historic structure, the scaffold upon which the regicides, Harrison, Peters, Jones, Carew, Scott, Scroope and Cook were hanged, drawn and quartered in October 1660. Upon the same spot, too, was later set up the booth of the parent of the modern Punch-and-Judy show — dear to all English children — the Italian puppet-player Punchinello. In those days there was no Trafalgar Square, called by that or any other name, no Nelson's Monument with Landseer's vague but impressive lions at its foot, no National Gallery, but in place of all these stood the Royal Mews — a word which Londoners, and all Englishmen to some extent, have adopted as the generic title of a city stable, but which at that time was the special title of this particular stable, so-called because since the time of Richard II the royal mews or training establishment for falcons was placed here.

As the busy crowd to-day pass in and out of that main artery of London, the Strand, those in vehicles hardly give the statue a thought save to curse it for being in the way, while those afoot only think of it as a convenient harbor where they can seek refuge from the dangers of the constant stream of traffic. Now and then some one, stranger more often than native, may stop to admire the fine pedestal which is generally attributed to the prolific chisel of Grinling Gibbons, but which is really the work of the master-mason to the Crown, Joshua Marshall, who, to be sure, may have executed Gibbons's design, just as some pupil of Rubens's did the greater part of some painting that the master finally signed with his own name. If now and then some passer finds a chance to lift his eyes as high as the

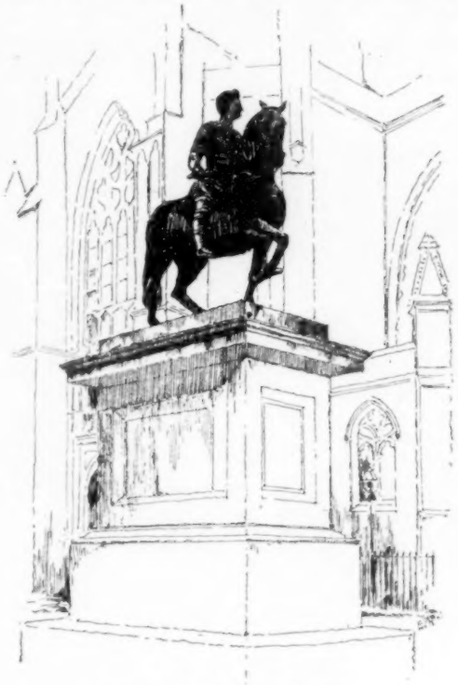
[1] Continued from page 168, No. 768.

[2] One of the most interesting pieces of evidence in support of the Pretender's claim is the remark of Sir Godfrey Kneller, a noted portrait painter of those days, which Horace Walpole quotes as follows: —

"His father and mother have sat to me about thirty-six times apiece and I know every line and bit of their faces. Mine Gott! I could paint King James now, by memory. I say, the child is so like both that there is not a feature in his face but what belongs either to father or mother, this I am sure of and cannot be mistaken — nay, the nails of his fingers are his mother's, the queen that was. Doctor! you may be out in your letters [illegible], I cannot be out in my lines."

statue itself, about all he finds time to take in, is the fact that here is an exceeding black and grimy, short-legged gentleman on a very short-barrelled steed which has a voluminous tail, all of which is undoubtedly very interesting, but unquestionably just as droll, when judged by present standards. Yet it has a good claim to hold a respectable position in the ranks of sculpture in England both for its intrinsic merits and for its associations. In the first place, it is the oldest extant equestrian statue in England, and very likely the first made there. It is, too, among the first statues anywhere in which the costume of the period replaced the time-honored Classic robes or armor. It, also, in some sense marks the beginning of modern English art. For reasons of personal vanity Henry VIII cherished Holbein and to a certain degree appreciated his work. In her turn Elizabeth patronized art to the extent of sitting for her portrait, but she was too much taken up with the petty gallantries of Essex, Raleigh and others, to do much to establish art in England, though she did much for literature. To James the First, art was probably simply incomprehensible. On the other hand, Charles, by reason of his travels in Europe and his lengthened sojourns in the Spanish and French courts, had been thrown much into the society of artists and those who appreciated their work, and had grown to be a good deal of a connoisseur himself and to feel that his court, too, ought to shine with similar artistic lustre, and in his efforts he was supported amongst others, by the Earl of Arundel. Charles established Vandyck as court-painter and continued Inigo Jones in his appointment as architect to the Crown. He secured the famous cartoons of Raphael now at South Kensington and procured various masterpieces of Correggio, Titian, Raphael, Guido Reni and others.

Amongst the foreign artists whom Charles, after the manner of Francis I, invited to come to his court — a long list and one containing many noted names — was Hubert Le Soeur, a French sculptor



Charles II, Parliament Square, Edinburgh.

said to have been a pupil of John of Bologna, who reached England in 1630 and almost immediately was commissioned by Lord Howard of Arundel, or by the Lord Treasurer Weston, to make a bronze equestrian statue of the king. The contract made with the Lord Treasurer is for the "casting of a Horse in Brasse bigger than a greate Horse by a foot: and the figure of his Maj. King Charles proportionable full six foot." This latter statue was to be placed in the private garden of the Lord Treasurer at Roehampton, but there is evidence that tends to show that Le Soeur made only one equestrian statue of Charles and that, the "Horse in Brasse" mentioned in the contract, is the one that eventually was set up at Charing Cross.

Recalling the many years that John of Bologna and other great artists consumed in completing a statue, one may, as he feels inclined, argue that because Le Soeur modelled and cast at Covent Garden, his horse and "King Charles proportionable" in less than four years, then was he either greater artist than they, or less. But though the statue was cast in 1633 it was not then set up. Probably a long time was needed for "finishing" the casting and before that part of the work was done Charles and his admirers had entered on troublous days, and it was not a propitious time to excite further hostile feeling by setting up a statue to tottering royalty; so it remained in seclusion; and after Charles had taken that short and melancholy walk from the window of the banquet-hall of Whitehall — that fine fragment of a stupendous and magnificent whole which Inigo Jones, faithful purveyor of masques, and skilful in the discharge at Charles's court of the functions performed by Boucher at the court of Louis, hoped to create — it was remembered by some malignant Roundhead, and an edict was issued that the new statue should be destroyed. Accordingly, with wise thrift, it was sold to one Rivett, a brazier by trade, who was strictly enjoined to demolish Le Soeur's work; but no committee was appointed to watch him, and so he was free to give himself the luxury of privately proving his loyalty to the cause of the Stuarts or of exercising his commercial cunning to his own profit. At any rate, he did not destroy the statue, but hid it in a vault in Covent Garden Churchyard and produced to the proper official certain fragments of old brass as evidence that he had discharged his commission and that the simulacrum of the godless Charles was no more. Then from these spurious fragments he made a large number of handles for knives and forks, which were eagerly purchased by Royalists and Roundheads alike; by one party being treasured as sacred relics, and by the other as one more palpable token of the dawning of new and better times for the people.

The action of Parliament in decreeing the destruction of the statue at once invested it with a political value and significance which people were not slow to realize, when once it was actually set up fourteen years after the Restoration; and not only was it for many years afterwards decorated with oak boughs on Restoration Day, May 29 — in commemoration of the successful hiding of Charles II in the Royal Oak — but it was made the butt of political lampoon and satire on every occasion, these being cast sometimes in prose, often after the fashion of the day in verse. Thus even before the statue was erected Andrew Marvel writes:

> "No, to comfort the heart of the poor cavalier,
> The late king on horseback is here to be shown;
> What ado with your kings and your statues is here!
> Have we not had enough, pray, already with one?
>
> "Does the Treasurer think men so loyally true
> When their pensions are stopp'd to be fool'd with a sight?
> And 'tis forty to one, if he play the old game,
> He'll reduce us ere long to rehearse forty-eight."

There is a pretty strong intimation of high treason in this which it takes all the poet's license to excuse.

A quatrain in the Harleian MS., which was written about the same time, shows that contractors for public works were as dilatory in those days as they are now, for the unknown writer, some busybody, like Pepys, who probably took his morning stroll by Charing Cross, asks

> "What can the mistry be why Charing Crosse
> These five months continue still blinded with boards,
> Deare Wheeler impart, we are all at a losse,
> Unless Punchinello is to be restor'd."

Cast in 1633, and not very long after ready for erection, hidden by the cunning Rivett in 1649, the statue was lost to sight and memory till quite by accident the Earl of Portland, son of the Lord Treasurer Weston, heard in 1660 that it was in existence and sought to secure it. Rivett, however, declined to give it up. The Earl therefore petitioned the House of Lords that they should lay an injunction upon the brazier forbidding him to either destroy or remove the statue from its known place of storage, and the sheriff of London was ordered to replevin the statue. The brazier, however, would not give up his property without a fight, and a long one, which seems to have resulted in his favor, for Strype records that he finally presented the statue, not to the Earl of Portland, but to King Charles, and that it was finally set up at Charing Cross in 1674, about forty years later than the intended date of its erection.

As the sculptor had ventured from the beaten track in modelling Charles in contemporary in place of the canonical Classic costume he may naturally have felt anxiety that his work, whatever it might lack in artistic quality, should at least be true to nature, so when the "press" of the day were invited to a first view he challenged any one, so the story goes, to find any defect, and his chagrin was so great when some one pointed out that the saddle had no girth that he shortly afterwards committed suicide. The present condition of the statue — whether it now has or does not have a girth to the saddle — will not help to prove this story apocryphal, for though bronze is to a great degree imperishable, it is subjected to severe trial by the smoky, acid-laden air of London, and as there are parts of an equestrian statue, particularly the trappings on the horse, which have to be hand-wrought and soldered to the main casting, it is possible that a girth may once have been attached and later fallen away in decay. At any rate there is proof of similiar dilapidations having befallen the statue, for there is record that in 1810 the sword and its supporting straps fell to the ground. Restored to place, the original sword was finally stolen during the ceremonies of Queen Victoria's coronation in 1838, at which time tiers of seats were built up about the pedestal.

This statue is one of the few of which the actual measurements are recorded and these were made in 1853, when Brucciani made a plaster model of the group for the Crystal Palace at Sydenham. In making this cast fifteen tons of iron were used in the frame-work which supported the thirty-seven tons of plaster consumed in the cast, including the pedestal. The size of these figures seems to indicate that the plaster cast was quite or nearly a solid mass and so

very likely exceeded the weight of the hollow original. The measurements taken at that time are as follows:

Pedestal, — 13 feet 8 inches high; 9 feet 11 inches long; 5 feet 7 inches wide.

Statue, — Height from foot to top of horse's head, 7 feet 8 inches.

Plinth to top of figure 9 feet 2½ inches.

Plinth to neck of horse 6 feet.

Plinth to top of hind-quarters 5 feet 10 inches.

Length from head to tail 7 feet 9 inches.

Circumference of horse from back of saddle-cloth 8 feet 2 inches.

Measure round chest and hind-quarters 16 feet.

Upon the left fore-foot is cast the inscription.

HVBER(T) LE SVEVR(FE) CIT. 1633.

These figures show the statue to be very little more than life-size: indeed there must daily pass it by horses that are larger than the bronze horse above, and that it does not bear the impress of great littleness upon it says much for the statuesque qualities of Le Soeur's work.

able wealth and taking a leaf out of his master's book he conceived, perhaps, that the price of Charles's furthering his future well-being was some act of adulation which should particularly please his susceptible majesty. Instead of hunting around as Sir Robert Viner did for a second-hand statue that could be altered over at a bargain, Toby determined to have his bribe as free of taint as possible, no matter what it might cost and manfully placed a commission with Stada, and when the bills came to hand paid down one thousand pounds — most of which in justice ought to have reached the hands of Gibbons. Apparently the king or some one else was not satisfied at first and Toby, with good courage still, had certain changes made which cost him three hundred other pounds. Not only did he pay for this statue but also for the pedestrian images of Charles and later of James which still exist at Chelsea and at Whitehall.

The statue at Windsor is after the Roman manner and upon one side of the pedestal is the inscription;

CARLO SECUNDO.
REGUM OPTIMO
DOMINO SUO CLEMENTISSIMO,
TOBIAS RUSTAT,
HANC EFFIGIEM HUMILIME

Parliament Close, Edinburgh.

This was the only equestrian statue of Charles I and earlier in these papers we have seen how the poetasters of the time endowed the bronze horse with the powers of speech that it might flout at the equestrian marble image of the second Charles, standing in the Stocks Market a couple of miles away. When this marble statue of Charles II finally disappeared it left behind in England another equestrian image of the king who believed — as his experience gave him a right to believe — that every man and every woman had a price at which he could purchase them, body and soul.

At Windsor in the upper court or ward was erected in 1679 an equestrian statue, in copper, of Charles II upon a pedestal of white statuary marble designed and carved by Grinling Gibbons, while the statue appears to have been the work of one Josias Ibach Stada, of Bremen. In this case more than in any other the great artistic value of the pedestal wholly overshadows or obscures the deficiencies of the statue itself. The statue was the grateful offering to his majesty of his faithful servant Toby Rustat, who began his career as a "page of the back stairs" — and in that capacity must have seen some curious things out of which he was enabled to make profit through the simple expedient of holding his tongue — and finally became Yeoman of the Robes and Keeper of Hampton Court. Taking shrewd advantage of his opportunities he gathered a consider-

DEDIT ET DEDICAVIT.
ANNO DOMINI MDCLXXX.

Until 1827 the statue stood where it was placed, above a deep well in the upper court; it was then moved to the foot of the mound but seems to have been brought back again to the castle.

There could have been no Restoration if fanatical veneration for the Stuart family had not led the Scotch Royalists to sacrifice everything for the sake of restoring to power the descendants of the Scottish kings, and the same reverent feeling led them to erect an equestrian statue to their beloved master after he had come back from "over the water." As the artistic leaven which Charles I had introduced into Great Britain had hardly worked so far north as Edinburgh there were no native sculptors who could lovingly undertake the task, and so the projectors of the memorial had to resort to alien talent, and as no one so well as a Scotchman understands the value of a bawbee the frugal-minded committee went to that market where their hard-earned money could be made to produce the greatest return. So the provost, magistrates and council, or their proxies proceeded to Rotterdam and there laid out upon a leaden statue of his majesty — it does not appear that it was a ready-made affair they procured — the very respectable sum of £2580, only they were pounds Scots not sterling, in which latter coinage the sum expended

would be represented by but £215, a price which does not leave much for the artist when the cost of the raw metal is subtracted from it. This masterpiece of an unknown Dutch sculptor which still exists in the Parliament Square at Edinburgh is shown in a

Charles II, Green Vaults, Dresden. Leigeber, Sculptor.

curious painting of the Old Parliament Close in the possession of the Corporation of Edinburgh, here translated into line after an old mezzotint engraving because of its architectural interest and the curious history which attaches to the painting itself. The unrestored Cathedral of St. Giles is shown in the background, encumbered about its sides with booths and shops that had gradually been allowed to cluster about it: upon the left is the Parliament House and on the right the Goldsmith's Hall: these portions of the painting were the joint work of Peter Gibson and John Wilson; the statue of King Charles was painted in by Abraham Cooper, R. A.; the many figures in the painting, all accurate portraits of Edinburgh notables, were then worked in by Alexander Fraser, R. S. A., and to complete this work of joint authorship David Roberts, R. A., touched up the sky and background in 1827.

Perhaps the reason that the grossly flattering Latin inscription[1] which the pedestal now bears was not actually used until 182–, when the statue was restored to its original position, may lie in the fact that Charles had discovered that in 1659 the provost, magistrates and council — officially if not individually the same as the promoters of the project to honor his majesty — had gone so far in their preparations to erect on the same spot a colossal statue of Oliver Cromwell, that the roughly-hewn stone, some eight feet high, which was to form the upper part of the statue, was actually brought by sea from the quarry to Leith. Charles may have indicated his appreciation of the turn-coat loyalty of the powers at Edinburgh, and they in revenge may have forborne to make use of the inscription already cut although they could hardly omit erecting the statue itself without incurring the ill-will of the king. The marble slabs were accordingly stored in the cellar of the Parliament House and lost sight of until, following the rebuilding of that edifice after the fire of 1824, they were discovered and added to the pedestal as originally intended, although the pedestal itself was not the same as the original one, which was probably destroyed at the time the statue was, during the rebuilding of the Parliament House, stored in Calton jail. In re-erecting the statue, its place in what is now the paved Parliament Square, formerly the church-yard of St. Giles, was slightly shifted so that it is believed now to stand over the grave of John Knox.

Although in these days the bonds of sympathy between subject and master have slackened, yet, as local customs survive in Great Britain with much tenacity, it may still be the habit of the boys of Heriot's Hospital to decorate this statue with laurel leaves when the royal birthday makes its perennial appearance.

The lampoonists of the time had a turn at this statue of Charles as they had had at the others, for in 1767 the statue and pedestal were painted white, a piece of inartistic economy which brought out this rebuke:

> "Well done my lord! with noble taste
> You've made Charles gay as five and twenty
> We may be scarce of gold and corn
> But sure there's lead and oil in plenty;
> Yet for a public work like this
> You might have had some famous artist;
> Though I had made each mark a pound
> I would have had the very smartest.
> Why not bring Allan Ramsay down
> From sketching coronet and cuskion?
> For he can paint a living king
> And knows — the English Constitution.
> The milk white steed is well enough;
> But why thus daub the man all over
> And to the swarthy Stuart give
> The cream complexion of Hanover?"

So far as history discloses there was nothing particularly saint-like in Charles's demeanor towards the fair sex; but where royalty is

James II, Newcastle. Lawson, Sculptor.

concerned flattery acknowledges no bounds and so Gottfried Leigeber chose to represent his "swarthy" majesty in the character

[1] Augustissimo magnificentissimo
CAROLO SECUNDO,
Britanniarum Galliarum & Hibernie
Monarchæ
Invictissimo

Cujus Natalitijs providentia arrisit Divina Asterisca Meridiano eodem momenti conspicua qui postquam adolescentiam in acie sub patre, exegisset illo demum, obtruncato, jus finim. per biennium strenue quidem sed improspere vindicavit Rebellioni namq; sæpius victrici impar, solum prope per decennium vertere coactis ess in exteris autem Regionibus divinis excubijs.

Pactis dolis minis armis incubatoris non obstantibus
Nunitus, & custoditus, instar solis tandem, clarioris e nubibus, in regna sua sine cæde expostliminio reversus Ecclesiam politiam Civilem pacem Commercium erexit, auxit, firmavit et stabilivit. Bello dein Batavico insignis, stative devenit inter bellantes vicinos belli pacisque Arbiter Rebellione denique pristina nuper repullulante Palladis non Martis ministerio Basiliscum in ipso ovo compressit contudit et conculcavit hinc ergo miraculorum principi summa in pace et gloria.

The following translation of this inscription is found in "*The Life, Prophecies and Times of Alexander Peden.*"

"To the Most August, Most Magnificent, and Most Unconquered Charles II, Monarch of Great Britian, France and Ireland, at the moment of whose birth Divine Providence smiled auspiciously, by causing a bright star to shine forth at noonday; who after having spent his youth in arms under his father (and the latter being beheaded), strenuously, but without success, contended for nearly two years for his rights. But, unequal to cope with rebellion, too often victorious, he was compelled for about ten years to retire into foreign countries. Yet guarded and defended by divine protection, in spite of the proffered guiles, threats and arms of the usurper, at length, after the Restoration, he arose brighter, just as the sun when he emerges from the obscuring clouds, and returned, without bloodshed, to his kingdom and to his rights. He erected, augmented, remodelled, and strengthened the Church, the civil polity, the peace, and the commerce of his kingdoms. After this he shone forth illustriously in the Dutch war, waged between neighboring belligerents, and became the arbiter both of peace and war. Finally, when the old rebellion sprang up anew, he struck it down — trampled it in the dust, more by the assistance of Pallas, the goddess of wisdom, than by Mars, the god of war; and thus crushed the basilisk (or cockatrice) in its eggs. To this prince of miracles, therefore, be the highest glory now that he is in the enjoyment of peace."

of St. George overwhelming a hydra-headed dragon. The sculptor could plead that his lapse from the paths of propriety was only a very little one, for the subject is only a minute statuette nine inches high and weighing fourteen pounds. Still, small as it is, it is one of the notable articles in the famous collections in the Green Vaults at Dresden. Why it is remarkable is not that it is a King Charles or a St. George but that it is of iron, hand-wrought, in 1667, from a mass of metal that originally weighed sixty-seven pounds, by a master who was at that time famed throughout Europe for the exquisite finish of the arms and armor he fashioned.

In all the jibes and sneers directed at Charles II there seems to show itself a good natured tolerance, if not personal affection, for the third of the Stuarts that no one would dream of feeling for his brother James when he in turn came to the throne.

Like his father, James II seems to have been honored with but a single equestrian statue and this the work of a sculptor named William Lawson, was set up on the Sand-hill at Newcastle shortly before the revolution that brought Mary and her husband William to the throne of Great Britain. The sole testimony to the artistic merits of the group is borne by the interesting engraving in Brand's "*History of Newcastle*." Here the horse is shown posed in a rearing attitude and although there seems to be no resemblance between it and the statue of Philip IV at Madrid, it is not a far-fetched inference to suppose that Tacca's work had attracted James's attention when, in 1655, he served in the Spanish army and presumably was entertained in the Spanish court as became his rank. Like the balancing of an egg on end after Columbus had shown how he conceived the solution, the erection of rearing statues was found to be not a difficult problem after Gallileo had demonstrated the way, and Lawson may have followed Tacca's method, yet as the two statues must have been erected not so very many years apart it is possible that Lawson may have invented his own means of supporting the group without ever having heard of the Madrid example, and the fact that at Newcastle the tail was not used as a support rather bears out this theory.

The group, of copper and about the size of the one at Charing Cross, was placed upon a pedestal of white marble, the whole composition meeting the approval of Sir Christopher Wren, who appears to have thought the £800 the monument cost the town judiciously expended.

It had only a short existence, for in November 1688, Newcastle declared for the Prince of Orange and it was not to be expected that the statue of a king who had earned such unpopularity would be allowed to parade itself to the view of his rebellious subjects. It was not, however, until May 11, 1689, that a mob encouraged by soldiers and their officers gathered about the statue and with the aid of ropes pulled the group from the pedestal, abused it, and finally dragged it to the river and threw it in.

How much loss art sustained through this baptism by proxy of the papistical king can only be guessed, for the illustration in Brand's book is based on an engraving which was published in 1742, more than fifty years after the statue disappeared in the Tyne. As the group was not ordered by the corporation until March 31, 1686 and was destroyed three years later it was probably of indifferent merit seeing that the making of a good statue of its size usually requires a longer time. In one point at least the sculptor was well advised: James, who won the recognition of his merits as a soldier by Turenne and Condé under whom he had served, was represented as a soldier in the armor of the period.

Charles I. — Charles I, second son of James I of England (VI of Scotland) and Anne of Denmark, was born at Dumfermline, November 19, 1600. At his baptism he was made Duke of Albany, in 1605 he was created Duke of York, and in 1616 Prince of Wales. In 1625 he succeeded to the throne of England, and the same year married Henrietta Maria, daughter of Henry IV of France. His father's favorite, Buckingham, was made chief minister, and gained a complete ascendancy over the King, which proved most unfortunate for Charles, who became involved in a contest with Parliament, which was averse to granting supplies without obtaining redress of grievances, in the first year of his reign. Between 1625 and 1629 three Parliaments were successively assembled and dissolved, and then Charles decided to govern without their aid, and did so for eleven years. Buckingham was assassinated by Felton in 1628, and a war with Spain, which had brought no glory to British arms, was ended in 1630. After Buckingham's death, Archbishop Laud and the Earl of Strafford were the chief advisers of the King. In 1637, John Hampden became famous through his resistance to the illegal levy of ship-money; and in 1638, by his attempt to force the use of the Episcopal liturgy on the Scottish people, Charles provoked a rebellion and civil war in Scotland. A new Parliament was brought together in April, 1640, but was violently dismissed the next month. In August the victorious Scottish army invaded England, and Charles was compelled to call another Parliament, which met in the following November, and was known afterwards as the Long Parliament. Strafford was executed at the demand of Parliament in 1641, and in 1642, Charles, by his rash but unsuccessful attempt to seize five members of the House of Commons whose opinions had become obnoxious to him, precipitated a civil war between King and Parliament, which began in August of that year, when the King raised his standard at Nottingham. At first the Royalists were victorious, but the tide was turned at Marston Moor in 1644, and the defeat of Charles at Naseby in the following year was decisive. Archbishop Laud was beheaded in 1645. In 1646 he delivered himself up to the Scottish army, which the next year surrendered him to the English Parliament. After a form of trial as a traitor, he was condemned to death, and was beheaded in front of Whitehall on January 30, 1649. Though tyrannical and deceitful as King, Charles was of high morality in private life, a scholar and a man of taste, and a munificent and discriminating patron of the fine arts. His generosity to such artists as Rubens, Van Dyck and Inigo Jones, and his purchase of the magnificent collection of paintings belonging to the Duke of Mantua in 1628, are well-known.

Charles II. — See note on page 224 of the *American Architect*, November 10, 1888.

Le Soeur. — Hubert Le Soeur, a French sculptor who came to England about 1630, was probably born about 1580. He was a pupil of John of Bologna. He executed a number of works in sculpture for King Charles I and members of his court, some of which have been destroyed or lost sight of. Among these were some statues cast from the most famous ones of antiquity, such as the "Borghese Gladiator," which stood in the garden of St. James's Palace, and pedestrian statues and busts of King James I and Charles I. His extant works, besides the equestrian figure of Charles I at Charing Cross, include a bronze statue of William, Earl of Pembroke, now in the Picture-Gallery of the Bodleian Library at Oxford, and the monument to Sir Thomas Richardson and Lady Cottington in Westminster Abbey. Le Soeur is thought to have died about 1670 in London.

Gibbons. — Grinling Gibbons was born at Rotterdam in 1648. It does not appear at what time he went to England, but we find that he lived for some time in Belle Sauvage Court, Ludgate Hill, London, and then removed to Deptford and set to work on a copy of Tintoretto's great picture of "The Crucifixion" at Venice, which contained more than a hundred figures, and was encased in an elaborate frame of flowers and fruit. While at work on this carving he was discovered in 1671 by John Evelyn, who lived near by. Evelyn, being astonished and delighted with the wonderful ability of young Gibbons, obtained the King's permission to show him Gibbons's work, and this was the means whereby his genius became known and his success assured. Charles patronized him largely, and he did much work for Sir Christopher Wren in St. Paul's and several other of the city churches. He was made master-carver in wood to the crown, which position he held from the time of Charles II to that of George I. Although Gibbons's greatest achievements were his wood-carvings, his works in marble and bronze entitle him to distinction as a statuary. These include the tomb of Viscount Campden at Exton; the bust of Sir Peter Lely on his tomb in St. Paul's, Covent Garden (destroyed by fire in 1795); the font of St. Margaret's, Lothbury; and the statues of Charles II at the Royal Exchange and at Chelsea Hospital, and of James II at Whitehall. The wooden throne at Canterbury Cathedral was carved by Gibbons; also the choir-stalls of St. Paul's, and his work is to be found at the palaces of Windsor and Kensington, and at Chatsworth, Blenheim, Burghley, Cassiobury, Petworth and many other great houses of the nobility. Gibbons died in London in 1720.

Leigeber. — Gottfried Leigeber, the most famous German worker in iron of the seventeenth century, was born in Silesia. He was at first a common armorer, and brought himself into notice by his ingenious compositions, and particularly by his delicate finish. In the Chamber of Arts at Berlin and the Historical Museum at Dresden may be seen sword-hilts of his, the workmanship of which is wonderfully elaborate. He also made a large number of bas-reliefs in iron. In the Green Vaults at Dresden is his equestrian statuette of Charles II, and in the Chamber of Arts at Berlin the statuette of Frederick William the Great as Bellerophon, mounted upon Pegasus and conquering the Chimæra. Leigeber worked at Nuremberg, and died at Berlin in 1683.

James II. — James II, King of England, born in London, 1633. He escaped from the Parliamentarians in 1648, and remained on the Continent until the Restoration. He commanded the English fleet against the Dutch in 1664-72; declared himself a Roman Catholic; ascended the throne, 1685; endeavored to fasten the Catholic religion upon England, and persecuted the Protestants until, abandoned by the nobility and gentry, he left England on the approach of William of Orange in 1688. After an unsuccessful attempt in Ireland to regain his kingdom, he lived in France until his death, in 1701.

Lawson. — This sculptor is spoken of as both Lawson and Larsen, and may be the same man as noticed in the following extract, which is taken from Nagler's "*Biographical Dictionary of Artists*": "Georg Larsen, sculptor, a Hollander, did some work in England. In 1654 he went to Berlin and modelled some figures of children for the Schlossgarten."

[To be continued.]

THE STORY OF A LABOR TRUST.

COMPANY of glass-blowers from Belgium landed at Castle Garden last June, only to be at once arrested and sent back under the charge of having violated the contract-labor law. These men were from the vicinity of Charlevoix, which is the centre of the glass industry of Belgium, and were all skilled workmen. This incident caused some stir at the time, because of the vigorous protest of the men, and their demand for a trial, or an opportunity to disprove the charge against them, and because of the return of some of them from the steamer on which they had begun their return passage. When these glass-blowers reached Belgium they set to work to find out if possible how it happened that their arrival at New York was anticipated, and their demand for a hearing refused. This inquiry has unearthed a conspiracy in the interest of a labor "combine" or trust, which it is worth while to expose.

District Assembly 300 of the Knights of Labor is composed exclusively of glass-workers, and includes practically all the glass-blowers in the country. Its head is a man named Campbell, and its purpose is to absolutely control the supply of this class of labor in this country. To this end they successfully demanded that a condition of being allowed to work in any glass factory in this country shall be membership in their organization, and have also arbitrarily limited the number of apprentices who shall be allowed to learn the trade. Having completed their "corner," so far as this class of labor in this country was concerned, they have turned their attention to preventing any access to the supply from foreign countries. They could already keep non-union labor out of American factories, therefore they ordered that no foreign workman should be allowed to go to work until he had been in this country six months; then, if the assembly chose to admit him, he might become a K. of L., upon payment of $50; otherwise, he might go and starve, and his family with him for all that this "brotherhood" cared. This plan worked very well, but the corner was not quite complete; foreign laborers might still come in and keep the supply somewhere near the demand. Therefore the law which should prohibit, under heavy penalties, the coming into this country of any one under contract to do any kind of labor, was presented to Congress, it is said, by this very D. A. 300.

Fear of the labor vote, and the argument that, if the manufacturer was entitled to protection, so were his men, carried the bill through Congress, and it became a law. This completed the "corner," and thenceforth masters as well as men were at the mercy of D. A. 300. The number of men has been kept below the real needs of the market, until there are not to-day, we are informed, enough good blowers in the country to man the factories. Wages have been put where D. A. 300 dictated, and rules and regulations governing factory work adopted which take no account of the interest of the employer. One danger to the continuance of this satisfactory condition

of affairs to the men, has been the possible arrival of foreign glass-workers not under contract.

It is, therefore, the policy of the D. A. 300 to denounce all such arrivals as violators of the law; and, that none may slip in unobserved, spies are employed at the trade centres of Europe to give notice of the embarkation of any glass-blower to this country. Thus it happened that a cablegram from one Delwarte of Charlevoix, head of one of the Belgian unions, preceded these men who arrived in June. Delwarte had no proof that the Belgians were under contract, indeed there is no evidence of any kind that such was the case. These very men upon their return from New York denounced Delwarte in the public press as a liar and a calumniator, and offered him 500 francs to prove that they were under any kind of a contract whatever. Moreover, they as openly charge that if they had chosen to bribe this Delwarte, D. A. 300 would not have known of their coming, and evidence of their freedom from contract would have been at their disposal.

This story is certainly illuminating. It demonstrates the gross injustice done these Belgians by the superintendent and inspectors of immigration at New York. It as well illustrates such an absence of true "brotherhood" as will impeach this labor organization, at the same time teaching the public how little idea professional labor-agitators have of using their great power justly and wisely. In this case, too, the glass manufacturers are the victims of a combination organized to limit the supply and put up prices, an attitude which they have held toward the public; but so far as the men are concerned this story estops them from complaining of the iniquities of "trusts" and "combinations." D. A. 300 is a labor trust, pure and simple, and as such is as much a public enemy as the sugar trust, or the lead trust, or any other similar combination.— *N. Y. Daily Paper.*

THE LEGEND OF THE STEEPLE OF ST. MENOUX.

THE Priory of St. Menoux is a Roman church of the tenth century, which began to fall into ruins towards the end of the fifteenth. Although it was the third daughter of the Abbey of Cluny, it was so poor that Don Cholet, its minister, did not know how to meet the repairs which decay rendered necessary. He was very much embarrassed then, when a sudden inspiration seized him: he would go to the Pope, who still resided at Avignon, and obtain some indulgences. This favor, which only cost a signature, was easily obtained. Four copies, stamped with the Papal seal, were put into the hands of four monks, the most vigorous that could be found. They went away the same day, at the same hour, from the same place, walking in the direction of the four cardinal points of France. A year afterwards they returned, bringing back four hundred thousand francs. Then the monks commenced the work of repair. Gothic flourished as if it were grafted on the Roman architecture, and soon spread its ornaments around the natural stem. As was the custom at this period of instinctive and Christian art, each sculptor undertook a niche, a pillar, or a chapel; and a young architect, named Diaire, the only one whose name has been preserved, took for his task the steeple, which was to lift its head from the midst of the ten spires with which the roof of the church was to be decorated. He had commenced his work with the faith of a Christian and the ardor of an artist, when he was chosen by Duke Gilbert de Montpensier, who was accompanying King Charles VIII to the conquest of Naples, to form part of his retinue. This was unfortunate, for the architect had as much dislike for war as he had attachment to his own art; accordingly, at the fourth halt he disappeared from his company. The captain reported the circumstances to the Duke Gilbert, who wrote to his domains, ordering that if the refractory person should be caught he was to be hanged without mercy, whatever excuse he might make for his desertion. This direction having been given, he continued his route and arrived at Pouzzoles, where he died loyally and was buried. In the meanwhile the deserter had returned to his family, and was living concealed with one of his brothers. During this time, also, the architects, his companions, had finished their spires. Diaire's steeple alone, which, nevertheless, ought to have been the loftiest and the most handsome, showed, shamefully enough, only one layer of stone, the sculpture of which scarcely showed the mark of the chisel. This was a singular disgrace to the church; so that, after a deliberation on the subject, it was decided that the completion of the work should be entrusted to whichever of the other architects should offer the plan most in harmony with the part already done. The day after this decision was made known, it was observed with astonishment that the steeple appeared to have increased in height during the night by an entire course of stone. However, not much attention was paid to it, when, during the following night, the miracle was repeated in so evident a manner that there could no longer be any doubt upon the subject. An invisible hand was employed in this nocturnal work, and from the superior boldness with which it was executed, and the fineness of the sculpture, people began to think that some superhuman workman had undertaken the work, and that the fairies who had built the church of Sauvigny wished to form a pendant to it by completing in so miraculous a manner that of St. Menoux. This opinion acquired additional credence from its being remarked that it was only during dark nights that the mysterious architect devoted himself to his task; as long as the moonlight lasted, on the other hand, the work ceased, only to be resumed when the revealing orb had completely disappeared from the heavens. In the meanwhile one of the architects, whose faith was less firm than that of his brethren, resolved to elucidate the fact. He ascended his particular steeple in the evening, concealed himself there like a sentinel in his box, and it was not long before, in spite of the dark, he could distinguish a being decidedly material, who lifted up certain stones ready cut and sculptured onto the church, which he afterwards arranged in their proper places. He thus beheld the work of this man until the day was about to break, when the nocturnal workman disappeared, leaving his steeple increased in height by another row of stones. The following night each spire had its man: so that directly the mysterious workman made his appearance he was surrounded and seized. A dark lantern was held to his face, and the deserter Diaire was recognized. The artist had not been able to keep away from his steeple; when near it he had not the courage to let another person finish it, and had continued his work at the risk of his life. Diaire's sentence had been already pronounced. His trial, therefore, did not occupy much time, and he only demanded a respite of one month to finish his steeple, which was accorded to him. The day after the steeple was finished Diaire was hanged. — *A. Dumas, in the Architect.*

THE SCHOOL OF INDUSTRIAL ART IN PHILADELPHIA.

SLOWLY, and with much hesitation we are learning one or two lessons in industrial economy and in education, and whether on general grounds it is the best way or not, we are rapidly finding out that under present conditions the *only* way to train the rising generation to that skill in craftsmanship, the knack of which, as everybody knows, we of to-day have mostly lost, is by means of the appliances of the organized school.

For a long time we talked about Schools of Design as if we thought that all that was wanted was more designers, and as if it were an easy enough matter to get things done if we only had some one to design them, and the attempt to transplant to America the idea on which our English neighbors have fooled away so much money in the last forty years — the idea that everybody could and should be made to "design" — has proved already one of the most dismal failures that our enterprising educators are responsible for.

Not that the recognition of drawing as a fundamental in general education was a mistake, or its introduction into the common schools a failure. Not at all; on the contrary, these are among the most sensible things we have ever done in the schools; the mistake was in ordering the instruction in drawing as if everybody were to be a designer, and in emphasizing on every occasion, and in every way, the idea that all we wanted was more designers, and although a dozen mills or so are enough to supply the country with wall-papers and calicoes, the school children by the million must be set to work to "design" these fabrics and the hour or two a week that was given to drawing, instead of being devoted to training the pupil's sense of perception and powers of expression, were spent in multiplying stupid little patterns that nobody would ever think of using for any purpose under the sun.

And in most of the Schools of Design the case was not so very different. Every architect, for example, knows well enough how much easier it is to get anything designed than it is to get it made in anything like a becoming manner and for anything like a reasonable price, and the wonder is that the truth which is slowly dawning on our minds that what was needed was ability to *do* things rather than to design them, should not have been thought of before.

Moreover, and this may seem to many the most important consideration, we do not learn to design things in any other way so well as by doing them, and it is perhaps the secret of the supreme dignity of art, that power in invention and ability in execution are so inseparable and so mutually, inextricably dependent the one upon the other and the effect on both. And so it is that industrial improvement must be sought among us in the cultivation of these associated powers, as one of the most unfortunate of modern movements has been the tendency to separate them.

The Philadelphia School is dominated by this idea. It is a school not only of design but of thorough and masterly execution. If the pupil studies design for textile fabrics, for example, he learns to intelligently direct every process on which the execution of his design depends, from the chemistry which concerns the nature of his materials — the cleansing of his fibre and the tests of its quality, as well as the nature and use of the dyes employed — to the smallest mechanical appliance used in its manufacture. And he does not learn these processes except by following them. He makes not only the patterns but the goods themselves. Surely it is along such lines as these that art and industrial education must progress. The student's powers of perception and conception are developed by the pursuit of art, pure and simple; by making him as much of an artist as it is in him to be. He draws and paints and models and acquires in this way the only point of view which is worth anything so far as matters of taste are concerned, in very much the same way after all as he acquires the judgment which on the executive side makes him a practical and well-informed man.

At present the Textile Department is the best developed and most complete of the special schools into which the work of the institution divides itself, after the general training in art to which the first year

is devoted, but this is only because this branch has been most fortunate in securing the appreciation and support of those directly interested in the industry with which it is concerned. Others are needed quite as much and will be added as fast as the necessary encouragement and support are given. The managers hope to be able to establish schools of pottery, of glass and mosaic and of ornamental work very soon. Very nice work in furniture is done already as something inseparable from that in carving, as that in turn goes hand-in-hand with modelling.

The central purpose of the School is artistic, of course, but direction is given to such energy of this kind as the instruction develops by practical, industrial and scientific work, which actual production in the several crafts is obliged to concern itself with and on whose intelligent and economical ordering, all success in a business way, of course, depends.

ILLUSTRATIONS

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

ENTRANCE TO THE PALAIS DE JUSTICE, BRUSSELS, BELGIUM. M. JOSEPH POELAERT, ARCHITECT.

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

Of course the prime object in going to Brussels was to secure a negative of this famous building, and equally of course the only negative which met with a catastrophe in developing was the general view of it. Fortunately, a happier fate attended the negative of the main entrance, a view of which is published this week. Critics are divided as to the merits of this building which the architect had, unknown to the authorities, designed in full, years before the commission was actually placed in his hands and which, after fifteen years' labor, death prevented his completing. Although familiar with the building through prints and photographs, we had never regarded it as anything other than a "study of the orders," such as one sees hundreds of in the exhibitions of the students at the Ecole des Beaux-Arts; but as soon as the building itself came in view the architect's purpose was clear at once and the conviction took the form of the mental exclamation, "Why! the man's theme is Indian!" The pyramidal form of the building, the thickly crowding and vigorous horizontal lines, the depth of the openings and the character of the detail are just the results that a capable architect would achieve in clothing an Indian conception in Neo-Grec detail. Poelaert apparently, was just the man to undertake such an attempt as this and carry it out successfully. His Church of St. Catherine in another part of the city is a successful *tour de force* of a similar kind and is calculated to deceive the unwary, now that the stonework has become discolored and weather-stained. Upon seeing St. Catherine's the architect feels at once that here is the last link in the evolutionary chain which connects Gothic with Renaissance work, for here is a building Gothic in spirit and intention, yet whose every detail is Classic. No man not possessed of real architectural genius could have carried out such a programme consistently.

TRAFALGAR SQUARE, LONDON. AFTER AN ETCHING BY JOSEPH PENNELL.

This etching, which the courtesy of the publishers Messrs. Keppel & Co., enables us to reproduce in connection with the paper on "Equestrian Monuments," elsewhere in this issue, has the peculiarity that Mr. Pennel, for some reason of his own, did not etch his plate back-handed, and consequently the church of St. Martin in the Fields appears upon the left of the plate instead of upon the other side where it belongs.

DESIGN FOR A HOUSE AT CLYDE, N. Y. MESSRS. T. & E. B. NOLAN, ARCHITECTS, ROCHESTER, N. Y.

DESIGN FOR A TWELVE-ROOM SCHOOLHOUSE, SOMERVILLE, MASS. MESSRS. PHIPPS & LORING, ARCHITECTS, BOSTON, MASS.

HOUSE FOR FRANK SIDDALL, ESQ., ATLANTIC CITY, N. J. MR. R. G. KENNEDY, ARCHITECT, PHILADELPHIA, PA.

SAMUEL NOBLE MEMORIAL INSTITUTE DORMITORY, ANNISTON, ALA. MESSRS. CHISOLM & GREEN, ARCHITECTS, ANNISTON, ALA.

DESIGN FOR A COUNTRY CHURCH. MR. R. H. ROBERTSON, ARCHITECT, NEW YORK, N. Y.

[Additional Illustrations in the International Edition.]

Correction. — We regret to have to point out a typographical blunder in our last issue, which can hardly have escaped notice. The gelatine print of the group of columns at Monreale was actually printed as being at "Mourcale," a place unknown to any geographer.

A MONUMENT AT PRAGUE. HERR. J. MYSLBECK, SCULPTOR.

[Gelatine Print.]

THE CHURCH OF SS. PIERRE ET PAUL, MALINES, BELGIUM.

[Gelatine Print.]

THE GALLERY OF THE CHATEAU DE LA FERE-EN-TARDENOIS.

[Copper-plate Engraving.]

With this, is completed the publication of the suggested restoration of this building, so remarkable for the gallery built upon an immense arcade which crosses a veritable valley and so forms the principal and perfectly secure entrance to the fortress beyond. It is to these magnificent constructions with which the soil of France teems that is due the fame of the French Renaissance that has, with tenacity, survived long after the disappearance of many of the most famous buildings. The following statements from M. Boitte, the author of the suggested restoration, will give much desirable information.

Between Soissons and Château-Thierry and thirty-two kilometres from the latter place lies the domain of Fère-en-Tardenois, the ancient Fara, a name which marked a town or an estate, long inhabited by Gallic families, around which gradually gathered the beginnings of a Roman settlement. This place lying beside the old road leading from Paris to Rheims, judging from the discoveries made by M. Frederic, seems to have been a point of strategical importance. Moreover, the local legend records that Clovis himself at one time possessed the place, and gave it to Sainte Geneviève to aid her in the journeys she was in the habit of making to Rheims. She, in turn, bestowed it upon the monks of St. Rémy. After having passed through divers other hands the domain passed into the hands of the Counts of Champagne in 1188. It was in the time of Robert II that the fortress was built, but at his death it was not finished. At the marriage of Anne de Montmorency, Grand Constable of France, Louise of Savoy, its then possessor, gave it to him as a wedding gift. It was at his instance that Jean Bullant designed and built this bridge-gallery. We find few examples of such architectural importance in Europe: its arrangements, nevertheless, coincided with those often employed in the châteaux of the period, particularly in the case of those belonging to the king or often visited by him. Fère was one of those castles where Francis I loved to visit an old companion-in-arms. Better than any words could do it the plans show clearly the three epochs of the building. We notice that the château or that portion of it which is properly called the fortress, was remodelled at the dawning of the Renaissance; later the bridge-gallery under Francis I, and finally, the dependences under Henry II. It is easy to see the difference between the first attempts at restoration in 1539, the date of the entrance, and the changes in the interior court with the decorative treatment applied to the bridge-gallery and its entrance. The delicate grace of this architectural treatment is one of the first successes of a style which drew its inspiration from old Roman work; but nevertheless it is free from plagiarism: it is the apogee of the work of that school which under Philibert Delorme and his contemporaries gave us so many beautiful variations. The Constable Anne de Montmorency, having shortly afterwards caused Jean Bullant to build his château at Ecouen, only made use of Fère on rare occasions. These two buildings and the family tomb in the church at Montmorency near Paris, to-day represented by fragments at the Ecole des Beaux-Arts at Paris, show details inspired from the same source yet nevertheless indelibly imprinted with the stamps of Bullant's genius. The sculptures on and about the central arcade of the bridge, as well as about its entrance, are after the manner of Jean Goujon. The work is due to the collaboration of the greatest artists of the time, and on consideration it is easy to see that it could not have been accomplished by men less great. At the present time a restoration of the bridge-gallery would be easy and inexpensive. Recent winters have seriously damaged the building and it is to be hoped that the Commission on the Preservation of Historic Monuments will turn its attention to the preservation of a work of the best period of the Renaissance.

PORTION OF WEST FRONT, CORK CATHEDRAL, W. BURGES, A. R. A.

TYMPANUM, CENTRE DOOR, WEST FRONT, CORK CATHEDRAL. W. BURGES, A. R. A.

GLENDOWER, DITTON HILL, SURBITON, S. W. MR. J. NIXON HORSFIELD, ARCHITECT, KINGSTON-ON-THAMES, ENG.

The accompanying illustration represents a residence with stabling, lately completed for the owner. The ground story is built of red bricks and the upper story of bright stocks with red dressings, while the gables are plastered. All exterior woodwork except window-frames is of teak, merely oiled, and the roofs are covered with Broseley tiles. The house has a light dry basement, and on the ground floor a large hall, three entertaining rooms, billiard-room, kitchen and many offices; and on the upper floors a spacious landing

and about twelve bedrooms. The interior is executed principally in pitch-pine, varnished.

CROOKSBURY, FARNHAM.

The view of this house, now reproduced, was exhibited this year at the Royal Academy.

INTERIOR OF THE BAPTISTERY, FLORENCE.

This illustration is taken from a drawing by Mr. A. N. Paterson, which was exhibited this year at the Royal Academy.

SOCIETIES

AMERICAN INSTITUTE OF ARCHITECTS.

ACCORDING to previous notice, the Convention of the American Institute of Architects will be held in Washington, beginning on October 22, and continuing until the business has been completed.

It is very important that the Committee of Arrangements be informed as to the number of Fellows who will attend the Convention, so that proper arrangements can be made for their comfort and entertainment. Papers on art, construction and kindred topics are solicited from the members. The titles of such papers should be forwarded to the Committee by October 8th, so they can be arranged for in the Order of Proceedings.

The Arlington Hotel has been selected as the headquarters of the Convention. The managers have made a special rate of four dollars per day for the occasion. Ample room will be furnished in this hotel for meetings and committee rooms. A complete Order of Proceedings will be sent out early in October.

John W. Root, Chicago,
Wm. M. Poindexter, Washington,
Glenn Brown, Washington,
Committee of Arrangements.

COMMUNICATIONS

[*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.*]

THE GRANT MONUMENT COMPETITION.

To the Editors of the American Architect: —

Dear Sirs, — Now that the final decision of the Grant Monument Commission has been made, can I ask you to call the attention of your readers to the lesson conveyed by the following — as it is one of the little incidents which lead some architects to avoid entering any competition of the character of the first Grant Monument contest? Disclaiming any intention to reflect in any way on the successful architect, whose ability in design is shown in the Brooklyn Memorial Arch, placing him in the front rank of monumental designers, the point to which I desire to call attention is this: the design recently selected has all of the essential features of interior and exterior, and is similar, in many ways, to the one published in *Harper's Weekly* of October 5, 1889, among the five designs which finally received prizes in the first competition, under the nom-de-plume of "Let us have Peace," and finally awarded fourth place. Now if among the sixty-five designs presented in the first competition, a design was presented which, judging from their final decision, met their desires so nearly as did this one submitted by "Let us have Peace," why should it be quietly ignored, and when similar ideas are presented in a select competition among five chosen men, why should the same ideas be so much more worthy of their attention, and finally be awarded the highest honors?

It seems that the trustful sixty-five met, at the hands of some eminent business men of New York, a quiet scorn of their confidence, for when a final competition was instituted not one of those who were awarded prizes in the first competition were asked to compete, although among these five designs it seems there was the material the committee was looking after, as subsequent events have proved. Is it not time that architects take lessons in the so-called "business methods" of committees of "eminent men." Architects have often been accused of not being "business like," but should they imitate the "business" methods laid down by this committee?

This competition, started in 1888 and dragged through three years, must certainly have convinced the Commission ere this that in order to receive good professional work it is necessary to satisfy the demands of the profession who are asked to compete, both in reference to compensation and a fair, honorable and square conduct of the competition throughout.

This is a *sine qua non* which is every year growing harder to find. In closing the communication, permit me to mention merely as incidents of the competition, how, when competitors handed in their drawings in November, 1888, they were told at the Secretary's office that the time had just been extended till January 2, 1889, and how the competitors were surprised to see the designs published before the award was made, and how, throughout the long delay, the press of the country has made the Grant Monument "*affair*" a by-word — and how, after all these years, it was only the threatened action of a National Congress which awakened this committee from their masterly inactivity. Can the committee and the public wonder at the lack of interest and contributions, and are not the architects of this country justified in their suspicions of this competition from the first?

S. P. Q. R.

WILLIS ON VAULTS.

Providence, R. I.

To the Editors of the American Architect: —

Dear Sirs, — Your correspondent who asks about Willis's paper on "*The Vaults of the Middle Ages*" will find a French translation of the essay in Daly's "*Revue de l'architecture*," for the year 1843.

Respectfully, Draughtsman.

IS THIS A KEY TO WESTERN ARCHITECTURE?

Bridgeport, Conn., September 30, 1890.

To the Editors of the American Architect: —

Dear Sirs, — I am in receipt of the enclosed letter, which seems to me so extraordinary in character, that I have thought that should you choose to give it a space in your valued journal, it might enlighten the profession at large, as to where some of the designs of the so-called "Practising Architects" of the country are prepared.

Very truly yours, Warren R. Briggs.

We undertake no work except through a practising architect.

New York, September 27, 1890.

W. R. Briggs, Esq., Bridgeport, Conn. —

Dear Sirs, — I desire to draw your attention to the advantages offered to Architects by this company. During the two and one-half years we have been doing business in this city and vicinity, we have constantly received requests from Western Architects for assistance in one form or another and these requests have been steadily increasing in number.

Designs: — Many Western Architects find it policy at times to vary their designs and we have consequently received many orders for this class of work. We are prepared to furnish designs for *Public Buildings* or *Private Residences* on the shortest notice and in any period or style, with plans, working-drawings, interiors, etc., for same.

Perspectives: — We make a specialty of this work rendered either in *Color* or *Ink* and complete them within a few days of receipt of instructions.

Charges are strictly moderate and are arranged on receiving instructions.

Secrecy.— We maintain the strictest privacy in all matters entrusted to us and do not even permit our draughtsmen to know for whom we are working.

Trusting we shall shortly have an inquiry from you,

Yours faithfully, ———

P. S. — When sending orders please give us full particulars together with rough outlined sketch of building for which design is required.

NOTES AND CLIPPINGS

"That beats Balloons." — The following tale from the *Fall River Globe* is a good example of that species of American humor that foreigners cannot understand: — A boy with a wonderful capacity for cold water made a kind of Noah's-ark time of it last evening for people who dwell around the South Park. There is a tall stand-pipe near the park where the sprinkling-carts load up, and the pressure from the pond at that point is something like a million pounds to the square inch. Just what possessed that aforesaid boy to climb that stand-pipe while the band was playing gayly in the band-stand will probably never be known. Possibly he had found life too slow at the drinking-fountain, and it may be that he didn't think he could do the stand-pipe any harm. At any rate he shinned up and began monkeying with the cap on the top. A full-grown man with steel appliances would undoubtedly have experienced considerable difficulty in unfastening the cap, but the foot-high urchin found it easy enough. His accomplishment will surprise him to the end of his days. He was bending directly over the pipe, stomach down, when the last thread of the cap-screw was loosened. There was a swish and a roar and a million-pound pressure sent a mighty volume of water a thousand feet into the air. It would have been a magnificent spectacle but for one feature which froze the blood in the veins of the assembled multitude. As far as the eye could reach, and almost at the very top of this tower of water, a tiny speck slowly revolved. It was the small boy, helpless, and feebly waving his hands and feet in his terror. Fortunately the tremendous force supported him, and the centrifugal power convexing towards the sides of the torrent, kept him in the middle. It was wet work looking on, but for a few seconds nobody dared to move. Then a brave

member of the Police Department recovered his presence of mind and darted to the Park House telephone. A little later Superintendent Kiernan of the water-works arrived on the scene, pale but determined. The same thought seemed to inspire the crowd at the same moment, for five hundred voices exclaimed: "You must let him down easy." Superintendent Kiernan needed no such warning. He knew that to shut off the supply suddenly meant a terrible fall for the half-drowned lad, who had ceased to move up there among the stars, and with a touch as light as a woman's he began to turn back the swift tide in the main artery. Inch by inch the tower of water diminished; inch by inch that small spec of humanity descended. The excitement was at concert pitch. Everybody spoke in hoarse whispers. Finally a joyous cheer rang out. The urchin was thirty feet from the ground, and scores of arms were outstretched to receive him. "Stand steady," was the order, and the last spoonful of water was turned off, and the boy dropped safely into the network of hands. "That beats balloons," he said, as he wiped his face with his dripping sleeve.

The Iron Gates of the Danube. — The "Iron Gates" have been attacked at last, and, with perseverance, the works inaugurated by M. Baross, the Hungarian Minister of Commerce, will be the means of facilitating greatly the navigation of the Danube. Long have these masses of rock been an obstruction to the river, and not only to the waters themselves, causing dangerous rapids, but to commerce on their surface. Vessels of no great tonnage will be able at some future date to pass up and down the river; but it is expected that in years to come the new canals will be made wider and deeper, after the system followed in the construction of the Suez waterway. It is curious to reflect that seventeen centuries ago Trajan seems to have had an almost identical plan for the removal of the Iron Gates to that to be followed now, and for which the Hungarian Parliament passed a bill two years ago. The old Roman Emperor, indeed, is stated to have commenced actual work, traces of which, it is said, are still to be seen, for the construction of a large navigable canal on the right bank of the Danube, so as to avoid the Iron Gates. The end in view seems to have been the removal of rocks, the cutting of canals, and the formation of dams where the rocks were too numerous. The present scheme practically embraces the proposals of Trajan, and will be worked out from details of operation planned by Willandt, the Hungarian engineer. Of the several canals required to be formed, one on the Servian bank of the river will have a length of over two kilometres. The works are doubtless to be very heavy at times, and it would be interesting to know the *modus operandi* proposed by Trajan and his engineers, without unlimited kilogrammes of dynamite, or, so far as we know, any other blasting agent. Possibly they would, by slow and laborious degrees, have diverted the waters, now here, now there, and commenced a process of rock-removing akin to the grubbing of tree stumps. Vastly more to the credit of the old Romans would have been the work if carried out than to the engineers of to-day with their dynamite and other scientific aids unknown to the ancients; and I suppose it is these scientific short-cuts to great ends that deprive modern engineering of poetry and wonder, and their absence that induces us to look at works of antiquity with a feeling akin to awe. — *The Building News.*

Jarrah Wood. — The last number of the *Kew Bulletin* contains a note on the properties and uses of the jarrah wood, a species of eucalyptus, native to Western Australia. The main difficulties in connection with its use in this country are the cost of freight for such heavy timber from Australia and its intense hardness, which makes it difficult for ordinary English carpenters' tools to work it. The tree which produces it grows generally to a height of 100 feet, and sometimes 150 feet. It is found only in Western Australia, extending over the greater portion of the country from the Moore River to King George's Sound, forming mainly the forests of these tracts. According to Baron Mueller, when selected from hilly localities, cut while the sap is least active, and subsequently carefully dried, it proves impervious to the borings of insects. Vessels constructed solely of it have, after twenty-five years' constant service, remained perfectly sound, although not coppered. It has been tried at three places in the Suez Canal, and after having been down seven years, the trial samples were taken up in order that a report on their condition might be sent to Paris. From certain correspondence between Kew and some London vestries, it appears that jarrah has lately been used by the Chelsea Vestry for paving the King's-road, and by the Lambeth Vestry in the Westminster-bridge-road. — *Journal of the Society of Arts.*

The "Watkin Tower." — It is a long time since we have heard anything of the proposed "Watkin Tower"; but nevertheless the London correspondent of the *Manchester Courier* hears that all the preliminaries of the scheme have been settled, and, what is more, the capital for the undertaking is assured. Already a new station is being built at Wembley Park, near Harrow, where the company has purchased a site of 150 acres. The construction of the tower itself will begin early in the new year, and it is hoped to complete the work within eighteen months — that is, in six months' less time than was occupied over the Eiffel Tower, and this notwithstanding than the Watkin will be very much bigger than its Parisian rival. It is the intention of the company to make the tower only one of the many attractions at Wembley Park, and the extensive grounds will be laid out as pleasure-gardens, in which there will be music, a switchback-railway, and other outdoor entertainments, not to mention a concert-hall and a large building for exhibitions, after the style of those now held at Earl's-court. In short, it is hoped Wembley will become a popular rendezvous with Londoners. Special railway facilities will be afforded by the Metropolitan line, which, running right through London in connection with the District Railway, will render this new pleasure-resort easily accessible. — *Invention.*

The Breakage of Plate Glass. — "You would be surprised," says a plate-glass insurance agent, "if you knew how some large plates of glass are broken. Sometimes a pebble is caught under a street-car wheel in such a way as to be shot against them with sufficient force to puncture a hole like a rifle-ball would. A few years ago a pebble was thus pinched under the wheel of a street-car and shot out, breaking a glass worth $75. Another time a man was trying to wreak his vengeance on a saloonist. He took a brick and hurled it at the window, but it did not break it. Some of the brick adhered to the glass. He then took up a heavy bowlder and this time succeeded." — *Exchange.*

A New Crime. — The Buffalo Central Labor Union yesterday expelled some members of the Bakers' Union for the high crime and misdemeanor of working on Labor Day. This is a new doctrine. You must take a holiday, by order of the Union, whether you want one or not. "Labor" has been defined as "the doing of any involuntary act." The same definition will now fit "pleasure." Which set of bosses is the more tyrannical — the bosses who pay your wages, or the walking-delegates who live off your wages? — *Buffalo Express.*

The Obelisk not Crumbling. — Prof. R. Ogden Doremus, Col. James Gillespie, and Prof. Newberry, with others, were asked some time ago by the Park Board to ascertain what treatment the Obelisk in Central Park needed to preserve it. Prof. Doremus appeared before the Park Commissioners yesterday and contradicted the rumor that the Obelisk was crumbling to pieces. He said that the committee had come to the unanimous conclusion after six months' investigation that the paraffine treatment was adequate. The stone of which the Obelisk is composed absorbed the melted paraffine by capillary action. This was demonstrated by practical experiments. "The Obelisk received a coat five years ago," he said, "and is as sound to-day as it was then. All that is required is to continue the preserving process by soaking the paraffine in a little deeper in certain parts." The board decided to ask the Board of Estimate for $2,800 for treating the stone as Prof. Doremus suggests. — *N. Y. Times.*

TRADE SURVEYS

There is a stronger undercurrent in the direction of an expansion of trade and manufactures than most writers on commercial and financial topics seem to be aware of. The managers of financial, commercial, manufacturing and railroad-building enterprises speak of this strong undercurrent, and many of them incline to the opinion that, great as has been the increase in our producing-capacity, there will be a greater increase during the next year or two. The evidences of this cannot be clearly set forth on paper, but are visible chiefly to the clear business vision of experienced business men. A good many signs are visible suggestive of an improvement, of broader trade, of the building of stronger foundations, and of an enlarging consumptive capacity, but these do not go to the length of the predictions or anticipations of some of those who think they see and know more from the high places in the business world they occupy. Manufacturing interests anticipate grand results from the new tariff, now in its final stage of legislation. Foreign manufacturing and commercial interests dread it. After all, it is an experiment, but one which political considerations demanded be made. Among the estimates as to probable new investments that the new tariff law will induce is one which states that over fifty million dollars will be put into new enterprises as soon as plans can be completed and material secured. It may prove to be a difficult and somewhat contradictory problem to build a high-tariff wall around the country, and yet develop our trade through reciprocity. Yet this is the new programme to be carried out. Financiers confess to astonishment at the extraordinary demand for money in the West, and plans are now under consideration in Eastern financial centres for the more complete supplying of these demands without such complete dependence on the East. There is a drifting of Eastern capital into Western States, and it may result at last in the establishment of one or more new and independent financial centres there. Advices from many Western and Eastern manufacturing centres indicate great activity and strong prices. The possibility of higher prices is recognized in trade and manufacturing circles, and this is given as the explanation of the recent improving demand. The iron trade is very active North and South. Lumber dealers have made very heavy sales, coal-producers report a sharp improvement in trade, especially in anthracite, the production this year being, according to latest summary, 24,169,370 tons, or within a half-million tons of last year's production. The demand for bituminous and semi-bituminous coal is very heavy, the improvement over last year being shown pretty well by the increase in the coal and coke traffic of the Pennsylvania Railroad, amounting so far this year to over one and a half million tons in a total production of some twelve million tons. There is a rapid development of mining properties throughout the coal-mining States, as well as in the regions yielding precious metals. Evidences of this are furnished in the extraordinary increase in the demand for mining machinery and equipments. Electrical equipment companies are crowded with engagements for materials and supplies, extending in some cases months ahead. There are more contracts now in process of execution for the erection of electrical plants than the companies ever had, and electrical engineers say that the tendency is from steam and cables wherever practicable. This testimony is strengthened by reports just received from manufacturers of machinery. While electricity is making headway, the use of steam is expanding in a multitude of little directions that keeps steam-machinery capacity oversold. The nail-makers, hardware manufacturers, tool-makers and agricultural implement-makers are oversold for two or three months. Builders in Western cities and towns are overrun with autumn work, according to reports of Western architects. The farming interests are turning good crops into cash at good prices. Cotton continues to sell quickly and at higher prices to growers than a year ago. The agricultural interests generally are thriving, and the indications are that the coming season will be even more prosperous than this. Labor agitations will set-in in the building trades and possibly on some railroads, but the compact organization of employing interests is an assurance that no serious ruptures will take place.

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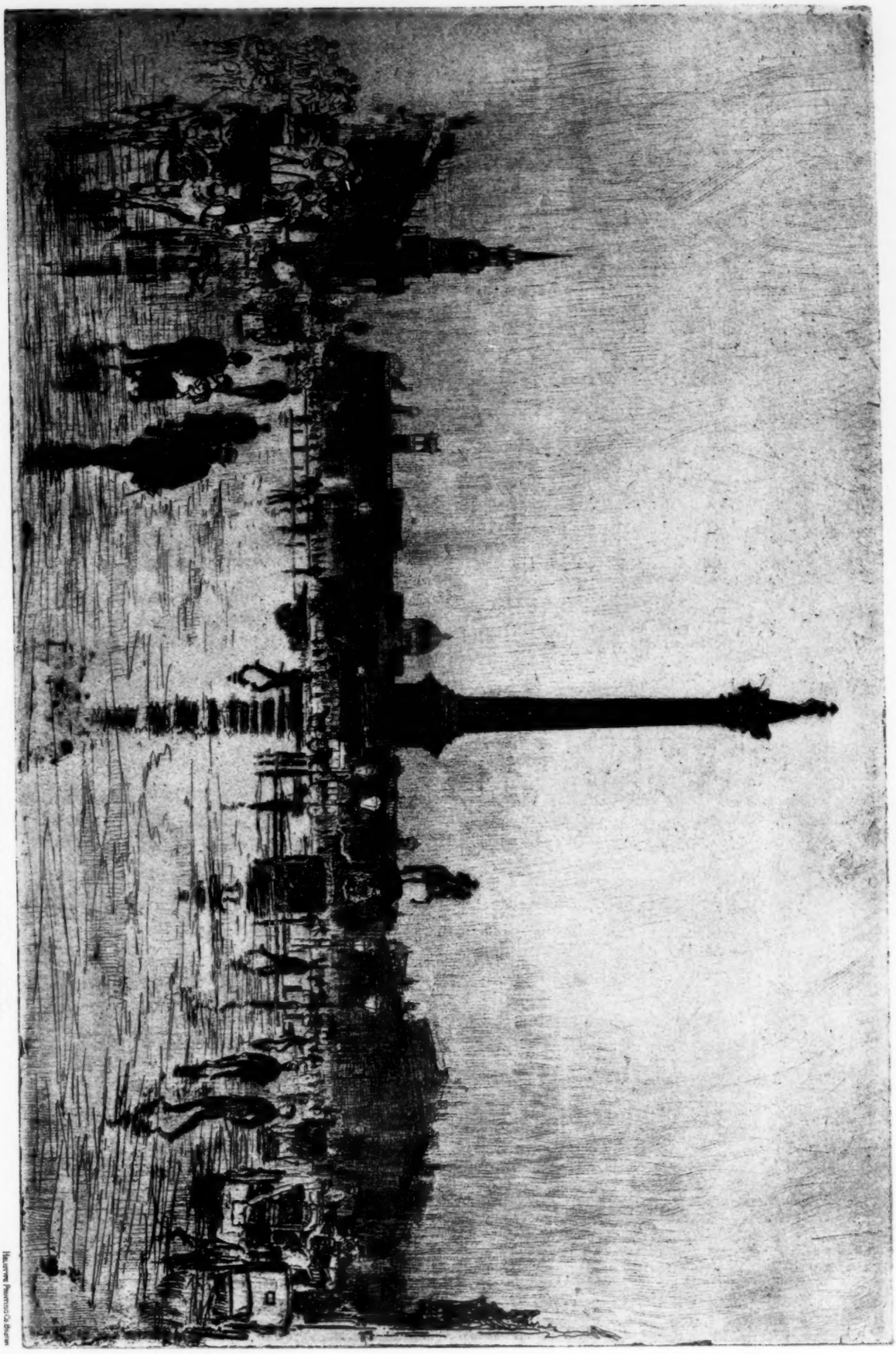

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