PRICE 15 CENTS.

MARCH 15, 1890.

THE AMERICAN ARCHITECT AND BUILDING NEWS

VOL. XXVII. * REGULAR EDITION * NO. 742.

ARCHITECTVRE

ENGINEERING

DECORATION

CONSTRVCTION

TICKNOR & COMPANY

BOSTON MASS.

CONTENTS.

ILLUSTRATIONS.

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Entered at the Post-Office at Boston as second-class matter.

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THE Master Builders' Exchange of Philadelphia seems to have been getting the architects of that city into an excellent state of discipline, to judge from some of its recent doings. Not long ago, a firm of architects, Messrs. Furness, Evans & Company, invited estimates for a large building, all the work to be taken under one contract. Seven builders sent in proposals on this basis, but the architects, acting, as they say, under instructions from their clients, invited separate estimates from various sub-contractors. For some mysterious reason, this proceeding aroused great indignation among the builders. One of them, at a meeting held to consider the matter, said that he considered it as bad as if a man should go to a tailor, and ask him the price of a coat, and should then ascertain the price of the necessary cloth, and should ask the journeymen what their wages would be for the time required for making it up. We should have said that this was exactly what every prudent man would do in regard to matters more important than coats; but the Philadelphia builders appear to think that architects and owners ought to have souls above such sordid attempts to get their money's worth in building affairs, and Messrs. Furness, Evans & Company received a sharp admonition from the Exchange. They replied with moderation, explaining that they acted under instructions from their clients; and the Exchange then voted that all the bids should be withdrawn, until the owners of the proposed building should decide definitely whether to make one contract for the whole work, or divide it into several contracts.

WE imagine that the owners will not be quite so tractable as the architects, and that they will simply invite bids in such manner as they may see fit from builders outside of Philadelphia; and, in fact, the Exchange seems to have thought so too, for, after disposing of this matter, it turned to the architects again, as if by way of consoling itself for the unruliness of the public, and jerked them up sharply in regard to the habit now prevalent among them, of specifying particular brands of lime. Naturally, people with lime to sell, of brands either unknown, or unfavorably known, to the architects, feel annoyed when a specification restricts the contractor to a certain list of brands, of which theirs is not one; but, as we pointed out recently, this is not the fault of the architects, who always with to get for their clients the benefit of competition between several sorts of materials, known to be equally good, but of the dealers and the builders, the former of whom usually try, when no brand is specified, to unload their worthless and unsalable stock upon an architect whom they presume, from the looseness of his specification, to be ignorant; while the builders, instead of testing the lime for themselves in such cases, accept and use anything that the architect does not happen to detect and order off the ground. However, the Philadelphia architects are not to be allowed to follow their own judgment in this, any more than in other matters, and a resolution was adopted, and referred to the Committee on Architects, Plans and Specifications, ordering a "conference" with the Philadelphia Chapter of the American Institute of Architects "with a view of so arranging specifications on this point as to permit a healthy business competition by all dealers in equal grades, by specifying a particular make of lime, or grade equal thereto." We trust that the "conference" will end in the peremptory refusal of the architects of the Philadelphia Chapter to allow the dealers in lime to dictate to them how they shall write their specifications. If any dealer sells a brand of lime which is always as good and fresh as the Knickerbocker, or Cedar Hollow lime, his proper course is to prove its good qualities by showing them, patiently and persistently, to the architects, until he has won their confidence sufficiently to induce them to add that brand to their approved list. Then his market is secure, and he will by degrees come to reap the reward of those who can be depended upon for a good building material; but the attempt to force unknown and suspicious materials down the architects' throats, or to compel them to receive, at their own peril, any sort of miscellaneous stuff that the dealers choose to assert to be "equal" to some known brand, and to go through the labor and annoyance of testing it for themselves, ought to fail ignominously, and will probably do so.

THE lock-out in the freestone-cutting trade in Boston promises to be rather a serious one, the freestone cutters of that city being kept under strict subjection by their leaders, who have shown themselves to be both obstinate and unscrupulous. Curiously enough, the fight was originally one among the workmen themselves. Certain marble-cutters undertook to work on the stone for a marble building, but were hustled out of the way by the freestone-cutters, who announced that they would cut the marble themselves, and would allow no one else to do it. This seems to have been a piece of pure insolence toward the marble-cutters, who were too weak to resist, and the contractors took up their cause, and gave notice that they should defend the right of marble-cutters to work on marble buildings. Thereupon the freestone-cutters threatened rebellion, and the contractors, finding that a struggle was inevitable, added to their claim another and very just one, to the effect that skilled freestone-cutters ought to be allowed to join the Union, on complying with its rules, instead of being kept out, as is now the case, so that the present members may enjoy a monopoly of the trade, at their own prices, while the contractors and builders suffer endless delays and losses, on account of the impossibility of getting men enough to do the work offered. The leaders of the Freestone-cutters' Union seized the opportunity to display the usual Union tactics. The men were informed that the contractors did not really want to provide employment for the marble-cutters, or for more freestone-cutters, but secretly intended to reduce wages and keep up long hours of work. This assertion was, as usual, received by the workmen in the same way that the waving of a red flag would be by a herd of bulls, and apparently with about as much intelligence in inquiring into its truth as the bulls would display in ascertaining whether the red flag denoted unfriendly feeling or not. Even the poor marble-cutters, hearing that their wages were to be reduced, and forgetting that the lock-out was ordered expressly because the freestone-cutters would not allow them to work at all, joined their weak forces with those of their tyrants against the contractors who were trying to befriend them, and stone-cutting is now nearly at an end in Boston. The claim is said to have been made that all the other building trades were ready to support the freestone-cutters, but this is very unlikely. The reputation of the freestone-cutters for quarrelsomeness and violence is too well known to gain them friends among the more sober Unions, and men with common-sense will see that there is no probability in the assertion that the contractors have any sinister ends to gain by the lock-out, or any possibility of gaining them if they had such ends in view; while the demands which the contractors actually make are obviously fair and reasonable.

THE question of requiring architects to prove their professional training before they are allowed to practice is growing more and more pressing in France, and, on the suggestion of the Director of Fine Arts, M. Larroumet, a Commission has been appointed by the Ministry of Public Instruction, charged with the duty of inquiring and reporting whether an official examination, followed by the award of a diploma, would tend to improve architectural design and construction; whether it would injuriously hamper art and artists; whether it should be optional, obligatory, or obligatory only in certain cases, and whether country architects should be subjected to the same rule as those in cities. Supposing a diploma of some sort to be desirable, the Commission has next to consider whether it should be called simply a "diploma," or a "patent," "license," "degree," "certificate," or something else; whether it should be awarded only as the result of examinations, or, in part, through other considerations; what should be done in regard to architects already in practice; whether the possession of the diploma should be necessary for employment on public works, or for recognition as an expert by the courts; how, or when, a diploma should be revoked or suspended, and so on. The President of the Commission is M. Larroumet, the Director of Fine Arts, the two Vice-Presidents are Bailly and Charles Garnier, and among the members are M. Dubois, Director of the Ecole des Beaux-Arts, M. Eugène Guillaume, Inspector-General of Museums, and of Public Instruction in Drawing, and the architects André, Lisch, De Baudot, César Daly, De Joly, Normand, Mayeux, Roussi, Journoud, Chevallier, Marteau, Bourdeix, Daumet, Trélat, Hermant and Héret; besides M. Périn, a distinguished lawyer, who is noted for his skill in cases concerning building and architects; M. Mulle, also a distinguished lawyer, and Professor of Building Legislation at the Ecole des Beaux-Arts, and M. Crost, Chief of the Bureau of Museums and Teaching in the Administration of Fine Arts. It is hardly necessary to say that a better commission for the study of this extremely important question could hardly have been chosen, and the profession, particularly in our own country, where circumstances are, in this respect, very similar to those in France, will look for the result of its deliberations with the deepest interest.

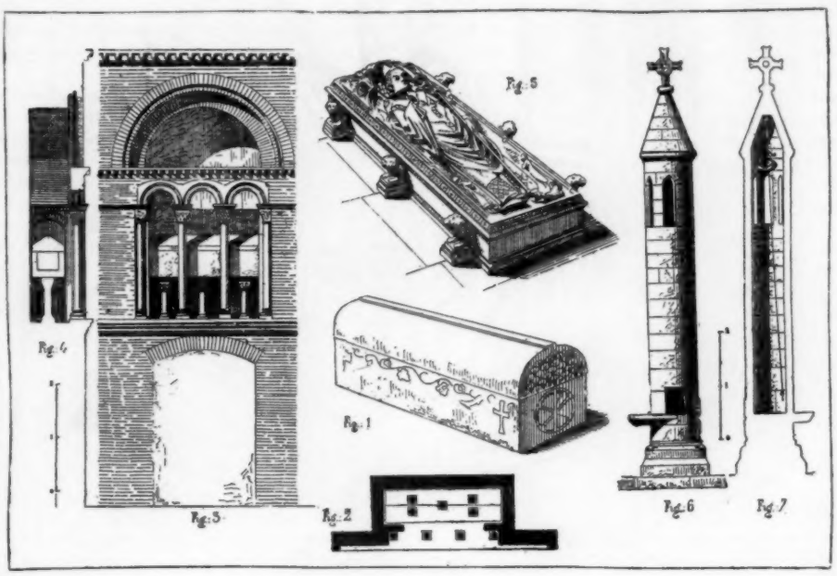
TWO or three schemes are now under discussion for clearing away the houses around the Cathedral of Cologne, so as to leave it standing in an open space. It is already much more completely detached than most churches in the Continental cities, but the plans contemplate removing the block of buildings opposite the Hôtel Ernst, and also the houses adjoining the Dom-Hotel, on the other side of the Cathedral, leaving those two hotels facing directly on the new open square, which is to be laid out with grass and shrubbery. As a finishing touch to all this modernization, one scheme proposes to destroy the large block of houses which now stand between the Cathedral and the railway, and build in place of them a grand station, facing the Cathedral square. We do not suppose that a little, piping American voice like ours would be any more regarded in Cologne than the chirp of one of the Cathedral sparrows, but we wish, just the same, that the Cathedral and its surroundings might be left alone. Most architects do not need to be told that any great building gains immensely in interest and dignity by being only partly seen beyond or above some other building, but if there are any who doubt this, they need only look at the nearest church spire, first from an open space, and then with some object interposed, to be convinced. Independently of this, however, the clustering of houses around the mediæval churches gives them a peculiar sentiment and interest; or, as we might say, helps to invest them with the light of the Lamp of Memory. Seven hundred years ago, notwithstanding all the corruption of the priesthood, the church was to the laity the entrance and image of that heaven which all, rich and poor, nobles and slaves, had frequently in their thoughts. With it was connected the sacred happiness of which their robust faith accorded them so many moments; and even after death their bodies were crowded together in the churchyard around the walls, where the drip of the rain from the blessed eaves might convey to them peace and protection from the infernal powers. In the cities, where space was limited, the houses came close to the walls, and, although the abuse of building against the church was the product of a subsequent, and more unfeeling age, nearly all the mediæval cathedrals of the Continent show that they were designed to be surrounded by narrow streets, and to have a somewhat larger space in front. Thus, in Paris, the sculpture of the side doorways is so delicate and small in scale that it can hardly be understood ten feet away, and that in front is comparatively bold, while both in front and on the sides, the cornice sculpture, the gargoyles and balustrading, which would be visible to half the thirteenth-century Paris above the surrounding houses, is on the largest and most effective scale. So in a dozen other churches; the work at the sides is perfectly adapted to close examination; that in front to a more distant view, while the upper portions are calculated for an increasing range, to the spires, which are perhaps most beautiful a mile or more away. The destruction of the conditions under which the designers of these structures expected and intended that they should be seen would be a questionable undertaking in any case, and experience shows that, where it has been carried out, the result has been unsatisfactory. It is not many years since the space in front of Nôtre Dame in Paris was cleared of buildings, just as is now proposed for Cologne, and we think that French architects agree that the Cathedral has lost greatly in effect in consequence; and there are many similar instances of the inapplicability of bald "Haussmannization" to the improvement of works of art so refined in effect, and so studied in sentiment, as the thirteenth-century churches.

AN article, signed with the well-known initials of M. Emile Rivoalen, gives, in *La Construction Moderne*, a frank but appreciative account of the late M. André's career as professor in the School of Fine Arts. It is curious to find that André himself, so noted for his fondness for large, striking effects, was a pupil, first of Huyot, and afterwards of Lebas, whom M. Rivoalen calls the Classicist *par excellence* of the architectural teachers of his time; but both Lebas and André, although Classicists to their fingers' ends, had nothing of the uninventive pedantry of some of their English and German rivals. On the contrary, they were so much at home with Roman methods and forms that they were able to use them as the Romans would; that is, with simplicity, breadth and that happy adaptation of means to ends which is the mark of the thorough architect. In 1847 André took the Grand Prize, and went to Rome, but spent a considerable portion of his five-year studentship in Greece, where he prepared, as an *envoi*, a restoration of the Theseum at Athens, which attracted much attention. Returning to France, he was appointed clerk-of-the-works, under Labrouste, on the famous Bibliothèque Nationale, and later, under Rohault de Fleury, on the Museum of Natural History, of which he became, later, the architect. This group of buildings, which has, after nearly forty years, only just been completed, was André's principal executed work, nearly all his time, since 1855, having been spent in teaching. In that year Labrouste gave up the *atelier* which he had conducted so brilliantly, and André was persuaded by the pupils to take his place. This was one of the "*ateliers libres*," outside the School proper, although licensed to instruct pupils, and for a time it was hard work to maintain it. Labrouste himself was considered something of an architectural heretic, while his successor was an almost unknown clerk-of-works, and the *atelier* had to compete with the *prestige* of those of Lebas and Questel, and the authority of the official establishments. Slowly, however, it gained in reputation, and, after twelve years of outside work, André was chosen to succeed Paccard in the direction of one of the official *ateliers*. From that time the *Atelier André* was, perhaps, the most renowned and successful in the School. Even M. Rivoalen does not hesitate to repeat the stories current in the School — that André, besides teaching and encouraging his pupils with devoted enthusiasm, did not desert them until, in the *concours*, he had gained for them rewards and mentions by sheer force of the persuasive eloquence with which he advocated the merit of their work before his fellow jurymen; but he was not the first or the only professor in the School who thought that the geese who studied in his *atelier* were all swans, and tried to make every one else think so too; and if, as the students in the other *ateliers* thought, he overrated the genius of his pupils, he at least taught them, first, to study their plans with what M. Rivoalen calls "religious care," choosing always the simplest disposition; then, to complete the composition rationally and soberly, avoiding all sketchy indications and tricks of rendering, and inclining to largeness of parts, sensible and simple construction, and as much dignity and grandeur as possible.

FUNERARY ARCHITECTURE.[1]—V.

ROMANESQUE PERIOD AND THE MIDDLE AGES.

WE have remarked the chain of circumstances which led the primitive Christians to make the burial-place of their saints one with their gathering-place for worship. When it became possible for them to erect their temples out in the open air and in the sight of the world, as a natural consequence of tradition they constructed beneath the paving of the churches underground chambers, called "confessions." These were designed to take the place of certain parts of the catacombs, and here they continued to inter persons who died in the odor of sanctity. It was looked upon as an honor to be buried within a church or even under the eaves outside.

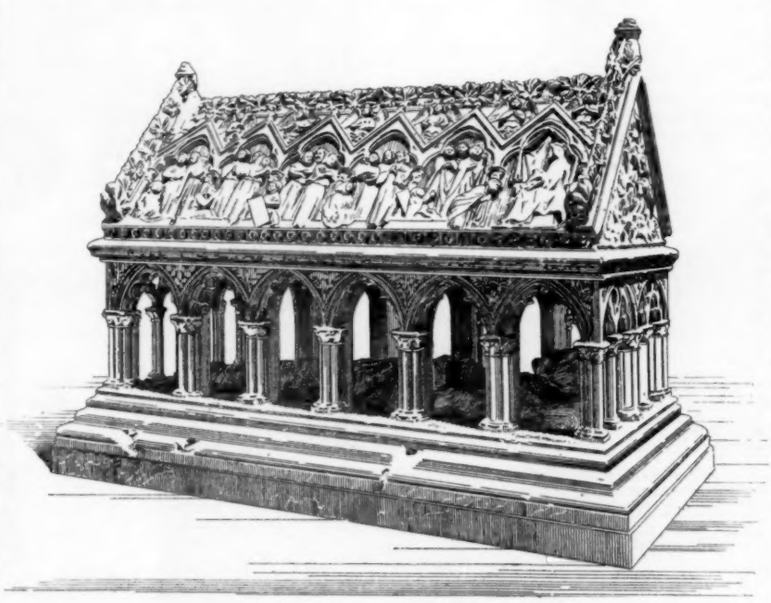


Specimens of Mediæval Tomb Architecture.

This period marks a notable change in sepulchral architecture. The tombs cease to be isolated structures, and become nothing more than tablets, or ædiculæ, raised in the interior of religious edifices. Requests for burial in the churches were, for obvious reasons, again and again combatted by the ecclesiastical authorities, and this sort of sepulture was confined to distinguished persons alone, or to prelates. But, owing to the benefits which accrued to the religious establishments from their laxness in this respect, we shall see that, in spite of all opposition, the custom was destined to prevail at length to such an extent that only the dead of the poor were relegated to the cemeteries. The latter, therefore, possessed no architectural features worthy of our attention; but, in the churches, countless tombs were erected, of such variety and interest that we find it difficult to indicate even the most characteristic examples without transcending the limits imposed upon us in this sketch.

"The tombs of the Middle Ages," says Viollet-le-Duc, "may be divided into three series: the first comprises the sarcophagi, properly so called, more or less decorated with sculptures, but with no representations of the dead. These are visible sarcophagi, placed above the ground. In the tombs of the second series the base sets over the burial-place; they sometimes bear the effigy of the dead, and are set either in a sort of niche or small chapel, or in canopied ædiculæ. The third series includes the flat tombstones laid on a level with the flooring of the churches — engraved or in bas-relief — and forming, as it were, the cover to the grave enclosing the coffin."

Great numbers of sarcophagi exist dating from the Merovingian and Carlovingian periods. The first often resembled very closely the Roman sarcophagi. Later on their forms were modified [Specimens of Mediæval Tomb Architecture, Figure 1], and in time they were transformed into cenotaphs reared above the veritable sepulchres, which were hidden from sight. When the tombs were not in the interior of the churches they were placed on the outside, between the buttresses, in niches made in the thickness of the walls, or constructed in front of the facing. Figures 2, 3, 4 give the plan and elevation of a tomb to be seen at Toulouse, in the ancient Church of the Chartreuse. This monument, dating from the twelfth century, is certainly one of the oldest of its kind. When it was built the sarcophagus still contained the body, a burial custom which the next century saw disappear.



Tomb of St. Stephen at Obazine.

Tombs of this sort exist in large number. The initial principle of their construction was always maintained, no matter what modifications were introduced into the details. They always comprise a niche with a more or less decorated vaulting, which is crowned with a gable, and shelters a sarcophagus. This disposition, which obtained, with different decorative forms, even during the Renaissance, was common in the inside as well as on the outside of churches.

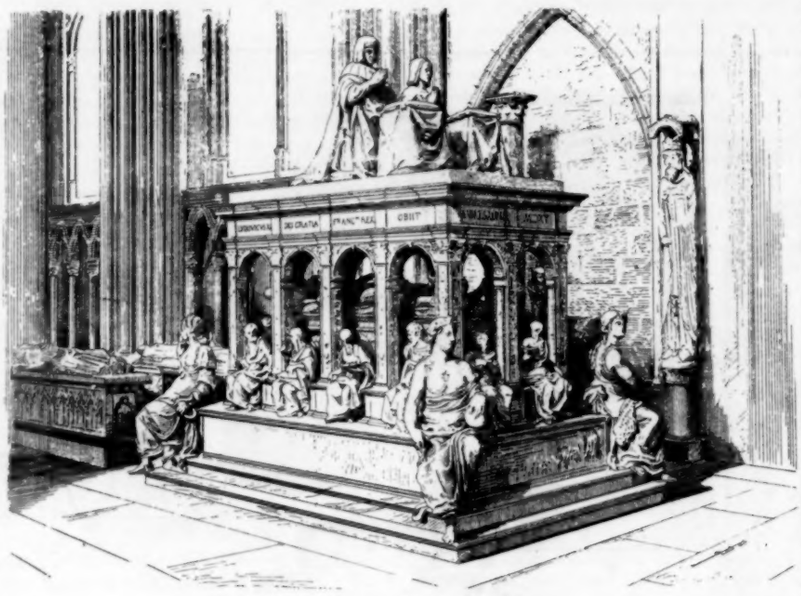
Following the classification made by the learned architect quoted above, let us now glance at tombs bearing the images of the dead, and exhibiting them, not as in life, but as they were exposed on their funeral couches. The use of effigies of this kind apparently dates back to the twelfth century. Some of the sarcophagi, on which the figures were stretched, were set in niches ranging along the walls, and presenting the same features as those just described. Others, on the contrary, were placed either uncovered in the middle of

[1] From the French of Pierre Benouville in Planat's "*Encyclopédie de l'Architecture et la de Construction.*" Continued from No. 741, page 149.

the naves and transepts, or under ædiculæ recalling in their forms the temporary catafalques which were erected above the uncovered tombs. These monuments were often very richly sculptured; the existing examples of them are as remarkable as they are numerous. Our illustration represents the Tomb of St. Stephen at Obazine (Corrèze). The saint lies under a canopy supported on open arches of very rich design; the bas-reliefs represent monks coming out of their tombs to prostrate themselves before the Virgin.

The third series of mediæval burial monuments includes all tombstones. The image of the dead is sometimes found on these in high relief, and sometimes in low relief, but oftenest it is simply engraven on a slab or stone of marble.

Effigies in high relief were generally raised on a low basement. They were quite often in metal, but, unfortunately, very few examples of these have been preserved. Figure 5 [Mediæval Tombs], copied from Viollet-le-Duc, shows the Tomb of the Bishop Évrard de Fouilloy, the founder of the Cathedral of Amiens. The recumbent statue of the prelate is of noble character, and the decorative details — the dragon on which his feet rest, the censer-bearers, and so on — are very well treated. There are six heraldic lions along the sides of the basement.



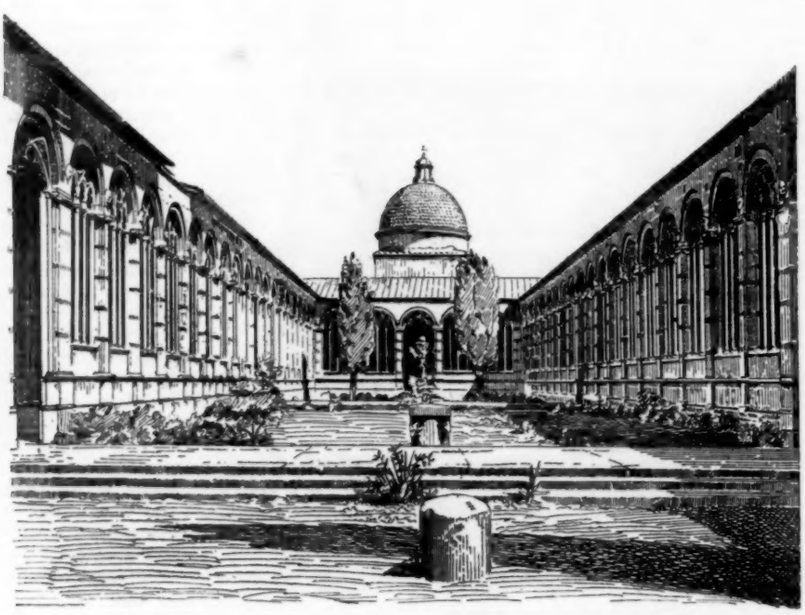
Tomb of Louis XII at St. Denis.

For certain ceremonies, cloth canopies, borne on metallic supports, were erected over tombs of this kind.

The place occupied by such monuments in the churches necessarily restricted their number. This, however, was not the case with flat, pavement tombstones, on which the figures were but slightly raised, or were merely engraven. As these did not interfere with free circulation about the edifice, they came into general use. A great many of them still exist, and are of beautiful type, being invaluable for the study of the history of costumes.

In passing, we will call attention to a curious sepulchral vault which can be seen in the chapel of the priory of Granges (Lot-et-Garonne), which is, we believe, unique. It opens on a level with the paving of the choir, and assumes the form of a human *silhouette;* it is about eight feet deep. A foot and a half downward from the choir-floor there are two stone cross-bars; a body was laid on these, and, when decomposition had completed its work, the remains fell of their own weight to the bottom of the vault, thus making way for another corpse.

The cemeteries, where mortals too poor to force an entrance into the churches were buried, were not always destitute of architectural character. Sometimes they were surrounded by porticos. They generally contained a chapel, and almost always a curious structure, known as a "Lantern of the Dead"



Campo Santo at Pisa.

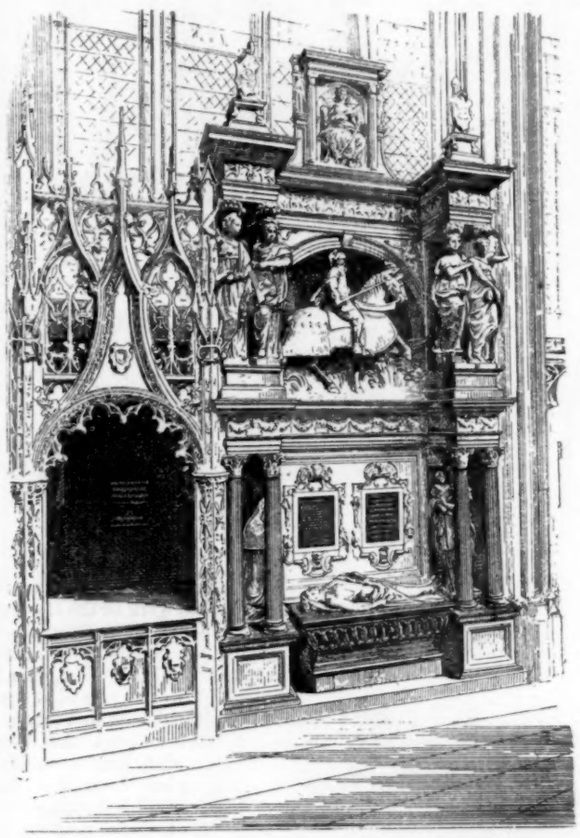
Urn containing the Heart of Francis I.

(Figures 6, 7). This was also a hollow pillar, with a receptacle near the top for the lamp, or beacon-light, which proclaimed afar the field of repose. Our figures represent the lantern at Ciron.

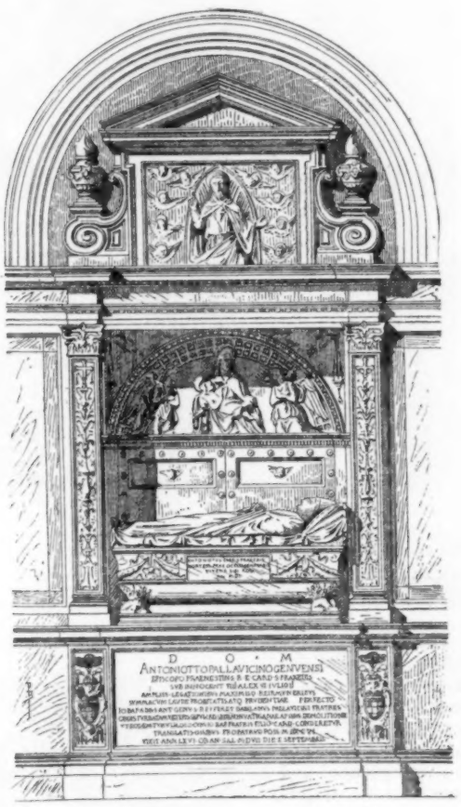
The mediæval tombs outside of France exhibit, with slight variations, notably in Italy, the same general dispositions described above. Scarcely any peculiarities are to be remarked in them except such as appear in other lines of contemporary architecture. We should, however, notice the use for sepulture, in Italian churches, of sarcophagi supported on consoles, and set at a relatively high elevation from the floor.

Although inhumation in religious edifices may have been as general elsewhere as in France, important tombs were less rare in the cemeteries of other countries.

The cemeteries themselves displayed more wealth. They were usually of mediocre extent, and were surrounded by beautiful porticos, beneath which the more pretentious monuments



Tomb of Louis de Brézé in Rouen Cathedral. Jean Goujon, Sculptor.



Tomb in Santa Maria del Popolo, Rome.

were erected. The Campo Santo of Pisa is the best known and the most remarkable of these cemeteries.

THE RENAISSANCE.

During the Renaissance, in funerary constructions as in others, the new forms were merely applied to the general dispositions adopted in the Middle Ages. One innovation was, however, made. It is on tombs of this epoch that we first find statues representing the dead as living. They are usually shown as kneeling in the attitude of prayer. Images of the dead body were, nevertheless, not abandoned, and the two forms often appear on a tomb, one above the other. A notable example of this is seen in the Tomb of Louis XII at Saint Denis. A quadrangular basement, with allegorical representations at each corner, supports a sarcophagus, or rather, a funeral couch, on which are stretched the nude figures of Louis XII and Anne de Bretagne. This is surrounded by a series of graceful arches with highly ornate pilasters, under which small figures are seated. On the upper platform, the King and Queen appear kneeling before prayer-desks. A great many tombs are modelled after this one, which deserves notice rather on account of its architectural arrangement than for its sculptures. These are by no means all equally meritorious. Despite the somewhat theatrical character of the monument, no traces yet appear of those funerary emblems which are found on the tombs of later times. The same absence of special symbols is noticeable in the graceful urn in which the heart of Francis I was deposited. Nothing in the exterior indicates its use, except a funeral torch held by one of the infants seated on the lid, and close scrutiny is required to detect this. This urn is one of the finest specimens of Renaissance decorative sculpture.

In the cathedral at Rouen, facing the tomb of the cardinals of Amboise — where the uncle and nephew are represented in a kneeling posture under a profusely decorated canopy — stands the tomb of Louis de Brézé, grand seneschal of Normandy and husband of Diane de Poitiers. The recumbent lifeless figure of the deceased appears on a sarcophagus at the bottom of the monument, while above he is exhibited clad in armour and mounted on his mailed war-horse. The architectural proportions of the tomb are most graceful, and the sculptures are beautifully executed.

Certain general features of this tomb recall only remotely mediæval dispositions, and a gradual approach to those which had already prevailed for some time in Italy is discernible.

In Italy, likewise, the number of tombs in the churches was greatly multiplied at this period. So many of these exist in all the churches of the peninsula that one finds himself embarrassed in attempting to cite those of interest. Our illustration shows the character of a tomb at Santa Maria del Popolo in Rome. It is a familiar type of Italian tomb and is especially common in Venice.

In discussing the tombs of the Renaissance, attention should be called to the growing importance given to sculpture proper, which gradually relegated architectural decoration to a subordinate place. It was given to the genius of Michel Angelo to accentuate this tendency — a tendency of which he had no reason to complain, since it furnished him the opportunity for

the production of such masterpieces as the tombs of the Medicis, his "Moses" and his "Slaves."

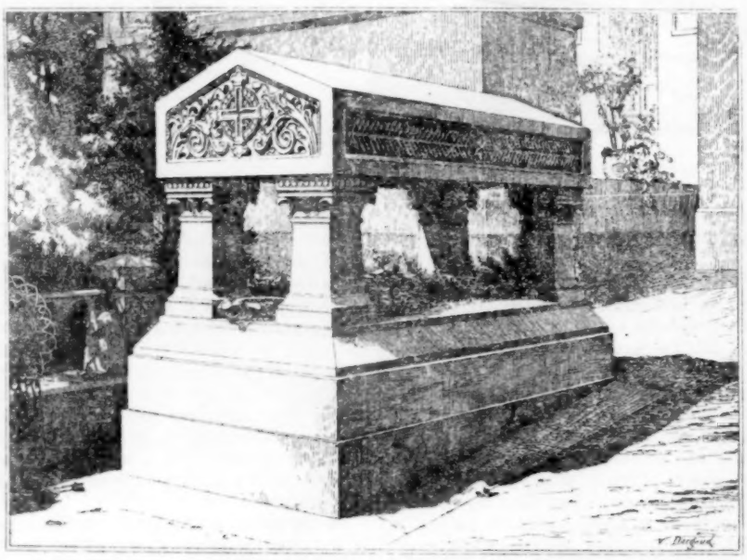
In the tombs of Michel Angelo, sculpture assuredly ranks first, but architecture holds a position of importance, which we see it rapidly lose. The tomb of Paul III offers an early but a very marked example of this transformation.

Tomb of Paul III.

Tomb of Mazarin.

MODERN TIMES.

The seventeenth century saw the tendency of which we have just spoken more and more sharply emphasized. The most important tombs became merely more or less well grouped and harmonious sculptures; all decorative and architectural forms were, so to speak, banished. In proof of this we reproduce the tomb of Mazarin. A more pronouncedly theatrical character exhibited itself in sepulchral structures, and the chief effect sought was to strike the imagination, rudely enough it is true, by a multiplication of symbols, cross-bones and skulls, grinning skeletons and reversed torches: the use of such emblems in bronze, and the contrasting black-and-white marbles contributed toward the same results; in order that all impression of grandeur should not be lost, the serene tranquillity of the sepulchral art of preceding centuries was necessarily sacrificed. This movement reached its zenith in the eighteenth century. The tomb of Maréchal de Saxe is one of its most remarkable productions. It stands in the ancient church of Saint Thomas at Strasbourg, and is the work of the statuary Pigalle. Death is represented at the foot of a pyramid of black marble opening a sarcophagus; the Marshal is descending into it with a calm air between the Genius of War, who is weeping and extinguishing his flambeau, and the Austrian Eagle, the Belgian Lion and the English Leopard, all of which are wounded or over-borne. France is endeavoring to hold back the hero with one hand, while with the other she repulses Death; leaning against the opposite side of the tomb is Hercules, overwhelmed with grief. The sculptures are, indeed, very beautiful, and there is an ampleness in the character of the whole which recalls the style of Rubens — a style, however, better suited to painting than sculpture. We confess that this sort of marble logogriph, with its multitudinous allegories, no matter how ingenious, does not satisfy us. How

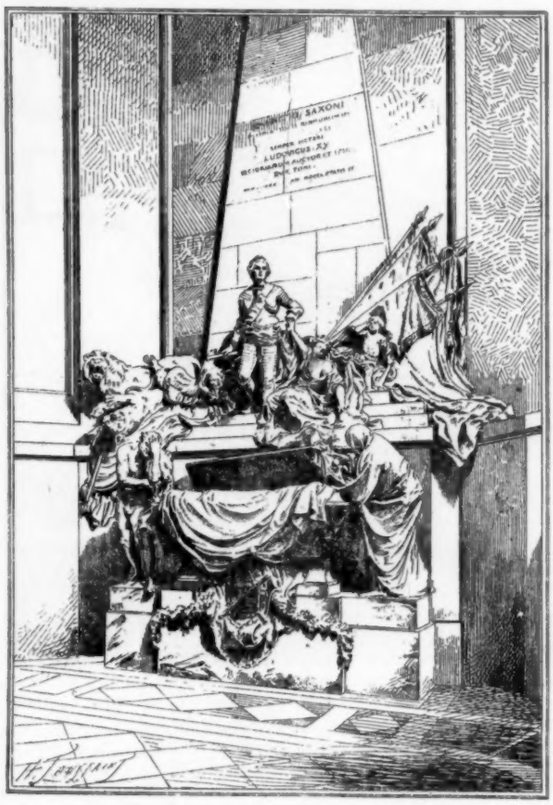


Tomb at Montmorency. M. Lucien Magne, Architect.

much nobler is the aspect of those burial monuments in which architecture wields the balancing power, tracing the main lines and leaving to the imagination of the sculptor only a field bounded by the rules of reason and taste!

During these two centuries the ***vulgum pecus*** continued to be buried near the churches, in cemeteries which were absolutely characterless. The people of the middle class, who were interred inside the churches but were unable to have marble or bronze monuments, marked their burial-places, as in mediæval times, by simple paving-slabs bearing inscriptions, with coats-of-arms or modest symbols cut into them.

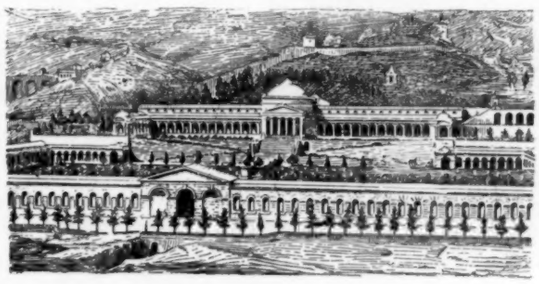
We see evidence of a struggle after theatrical effects in the



Tomb of the Maréchal de Saxe. J. B. Pigalle, Sculptor.

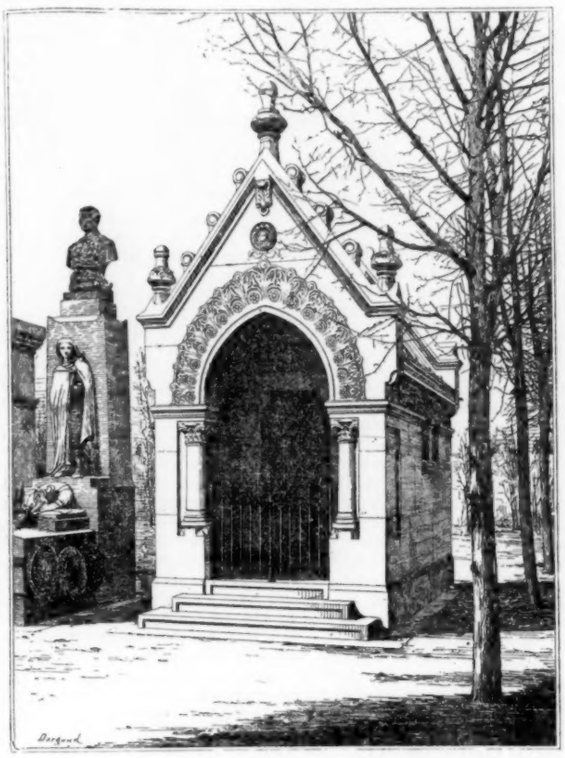
Italian tombs executed by Canova and his pupils at the beginning of the present century. Although manifestly engrossed with ancient art, the sculptors of this period were too much under the influence of eighteenth-century art not to strive after its effects.

In France the reaction declared itself less gradually: under



Campo Santo at Genoa.

the empire of the new ideas and of a legislation which proscribed burial in the churches, a kind of sepulchral architecture sprang up in which profusion made way for an affected simplicity and the adoption of heroic emblems — urns, broken columns, reversed flambeaux, hour-glasses, and wings of Time played the most important rôle among these. The Paris cemeteries, which all date from the beginning of the present century, abound in such monuments: with a few honorable exceptions, they seem to us now quite inappropriate and somewhat pretentious. They were followed by others whose designs were inspired by the study of Etruscan and Greek architecture. It would be puerile to depreciate the talent often displayed in these productions; but, alas, like all those of our time they are devoid of style proper, and are merely more or less happy adaptations of anterior styles. We must admit that the requirements made of an architect are difficult to fulfil. Cemetery lots are costly; and many an individual whose fortune permits him to acquire only the minimum plot



Sepulchral Chapel at Paris. M. Emile Vaudremer, Architect.

of ground, 3 feet by 6, none the less demands that a sepulchral chapel be erected on it that will satisfy his sumptuous tastes cheaply. The unfortunate architect, struggling with the difficulties of such a problem, will be excused for finding in it no incentive to original work, and for doing scarcely better than the marble-dealers who make a specialty of putting up such monuments.

On the other hand, it is not rare to find on the same limited space a tomb, consisting of a simple tombstone or a stela, which reveals in its author a purity of taste and a science of arrangement not incompatible with the exercise of imagination. We give here a charming example, well worthy of imitation, which was designed by M. Lucien Magne.

As for chapels, there are some very beautiful specimens, but these are generally structures built on a sufficiently large scale to allow the architect a great deal of latitude. The one shown in our illustration is from the hand of M. Vaudremer; it proves that the strictures expressed above are, by no means, universally applicable.

Among the cemeteries of Paris, Père Lachaise enjoys a special reputation for picturesqueness: this does not seem to us indisputable, and in any case it is of little importance. We openly declare our preference for cemeteries like the ***campi santi*** of Italy; these broad fields, framed-in by porticos, and cut by symmetrical avenues bordered by monuments, possess a grandeur and an aspect of calm which we seek in vain in the picturesque pell-mell of Paris cemeteries. The Campo Santo laid out a few years ago at Genoa, whatever criticisms may justly be made regarding its size and the pretentiousness of

certain of its monuments, appears to us to fulfil admirably well all requirements.

In Spain the cemetery is a sort of columbarium, open above, with cells in the walls very like the *loculi* of the catacombs.

Having rapidly reviewed the sepulchral architecture of the various civilizations, from the most primitive down to the most recent, we reach the conclusion that if an architecture peculiar to tombs has existed from all time, the distinction has always applied to general forms alone; these proceed, as we have seen, from a few primordial types. The details, the profiles, in a word, the characteristic elements of the style, have, in all cases, very nearly coincided with those adopted at corresponding epochs for religious or civil edifices. Perhaps the revival of the ancient practice of incineration may demand of architects in the near future, the creation of new forms to satisfy the seemingly innate need of the living to worship the dead.

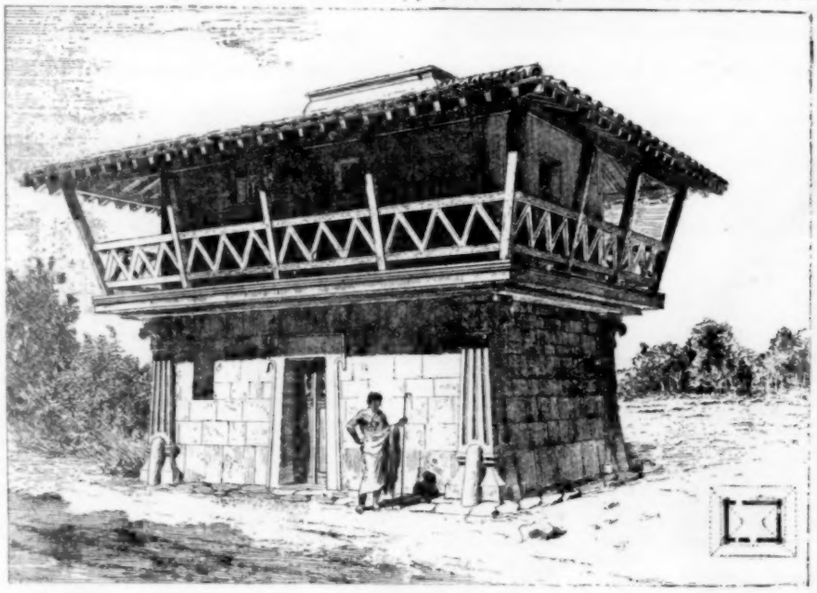
Pierre Benouville.

HISTORY OF HABITATION.[1] — II.

NOW let us consider the race of Japhet, which interests us more, not only because we ourselves are of the same race, but also because it is that which has had the longest career and of which the efforts are not yet exhausted. In the farther part of Asia, between the Caspian Sea and the Himalayas, our race had its cradle. Little by little, impelled by the sentiment of its own exuberance, this race undertook, more than three thousand years ago, a migratory movement which has not yet ceased, and which, from the banks of the Ganges, has led it as far as the Atlantic.

The history of the Aryan habitation is consequently connected with the Asiatic peoples as well as with the European. This series began, then, with a very curious Hindoo house, dated apparently from several centuries before Christ, and heavy in its general structure; while the Persian house, which stood close beside it, was remarkable for its elegance and complexity. It was composed of two parts, one of which, reserved to the females of the family, had only narrow windows, while the other part, intended for the men, was pierced with broad openings and offered easy access. We know that it was the Aryans who introduced the employment of the curved line in architecture, and it is in the Asiatic dwellings that is remarked its first appearance. This point is very important for the history of architecture, and will serve to destroy many errors and prejudices, among others that which accords the honor of having invented the arch to the Romans, and the merit of having created the pointed arch to the Goths. I saw, for instance, at the entrance of the Persian house a pointed arch, which proves that in the time of Cyrus the architects did not exclusively limit themselves to the right line, and that if later the Greeks banished from their designs all rounded forms, it was not through ignorance of the advantages and attractions that these forms might present, but because they limited themselves voluntarily to an artistic idea which would have things thus.

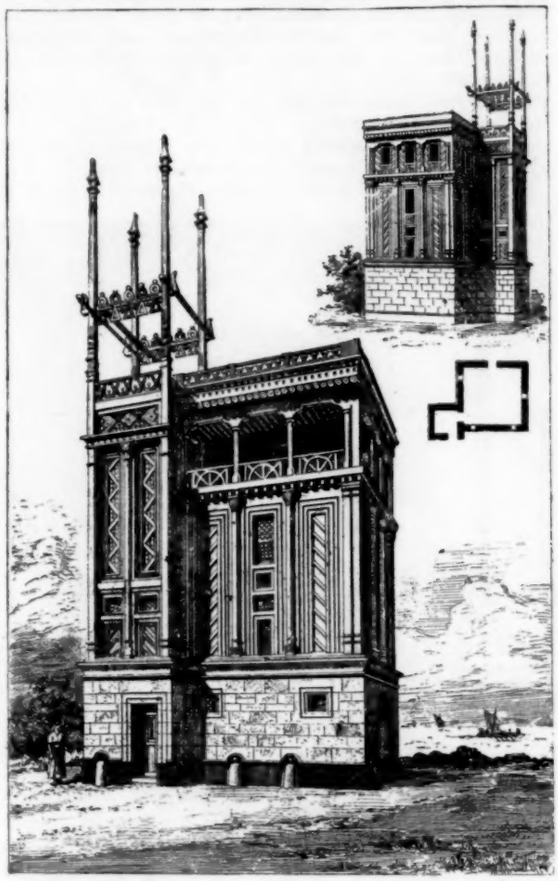
It is, besides, impossible to suppose that the reproduction of the Persian house, which inspired within me these reflections, leaves anything to be desired from the point-of-view of historic exactitude, for it was built after documents furnished by M. Dieulafoy, the celebrated French explorer of Suza.



Etruscan House: from the *Moniteur des Architectes.*

On passing to the compartment devoted to the Aryans of Europe, the progress accomplished by this predestined people, who served as the vanguard of civilization, can be studied step by step. If the Gallic and Germanic villages, composed of huts built of straw, of wood, or of roughly-hewn stone and covered with mud, indicated a state of grossness very inferior to the degree of refinement at which had arrived the Persians of the time of Cyrus, the habitations of the Greeks and Romans, who were the elect among the Occidentals, revealed to us all the perfections of a wise and gracious art.

The epoch at which the Greeks took the place of the Pelasgians



Phœnician House: from the *Moniteur des Architectes.*

in the country of Hellas dates back a thousand years before our era, yet, nevertheless, the house of the time of Pericles is enough to show us that in a span of time relatively short, and despite the fulness of the political cycles and the furor of factions, this people knew how to give its artistic genius the most ample development. One was very much impressed by the truthful character which declared itself in this structure, upon the walls of which was read, according to a custom very common at Athens, inscriptions of this style: "In this house dwells Heracles. Let nothing bad enter in."

The Romans supplanted the Etruscans in Italy, as the Greeks supplanted the Pelasgians in Hellas. The Roman wall is, like the Athenian, covered with inscriptions, and in these there is no difference except in the language employed, for they always relate to the proprietors of the building and express aspirations for his well-being, for the prosperity of the family and words of welcome for the guests; and here and there bits of wit or

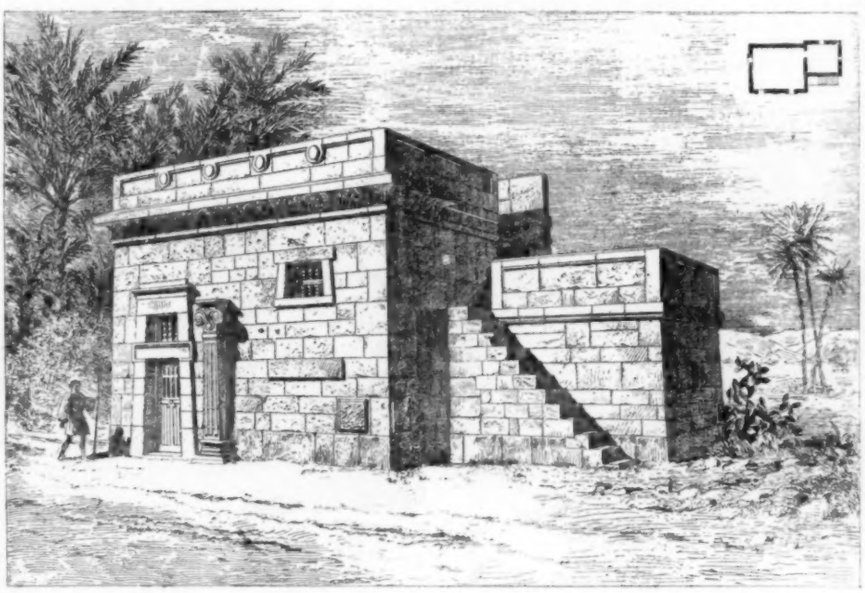
[1] Continued from No. 741, page 151.

philosophical maxims. Nevertheless, I have a bone to pick with M. Garnier for having chosen his type of a Roman house at Pompeii, which was rather a town of an international character, a place really where Roman society encountered Greek society, and where consequently the tastes became assimilated and mixed. That which is called in the Pompeiian style of decoration is neither Greek nor Roman, for the reason that it is both at the same time, and as much can be said for the architecture which prevailed in that city of the dead which archæology is disinterring little by little from its ashes.

After the Athenians and the Romans, there was, as it were, an eclipse, which endured for several centuries, and M. Garnier had the pleasing idea of making us sensible of this period of barbarism by a war-chariot of the Huns, which gave a very fair image of the savage hordes who formed, as it were, the rear guard of the race of Japhet, and who suddenly seized civilization by the throat, and with their brutal feet trampled upon all beautiful things which human genius had up to that time created. Then in its turn came the Gallo-Roman house, a dwelling of the Romanesque style, which represented a state of transition, and formed the bridge which connected the old Greco-Roman world with the Renaissance, represented by a pretty little house of a very agreeable appearance, where cut stone and brick were allied with wood, and which was relieved at one of its angles with a projecting *tourelle*. This house finished the series of the Aryan people.

An Aztec Dwelling: from the *Moniteur des Architectes.*

The last series was devoted to those nations or savage tribes, who, through different reasons have remained in a state of barbarism, like the Esquimaux or the negroes, or have established themselves in an immovable manner of civilization like the Chinese and Japanese: these without being devoid of interest, had less attraction for us. Here one looked very curiously at an encampment of American redskins at the time of the discovery of the New World, a habitation of the Aztecs, a dwelling of the Incas, those sons of the sun, whose mysterious genius was so inopportunely arrested in its upward course through the conquests of Pizarro.



Hebrew House: from the *Moniteur des Architectes.*

By a singular chance of topographical disposition, the Renaissance house, which was the terminal point of the Aryan section, was placed just at the foot of the Eiffel Tower, which reared itself there like a colossal exclamation-point, and formed at the same time the crowning, last expression of this review of human habitations, where, in an almost inextricable mingling of types and epochs, one could disentangle the different successive steps characterized by the substitution of wood for straw, and in the last place of iron for stone in architectural construction.

In spite of the lively admiration which this work of M. Garnier inspired within me, I am forced to say that in many points it seems to lack truth and exactitude; but I hasten to add that in that which especially concerns the dwellings belonging to historical epochs, the objections with which the critics assailed him were unjust and exaggerated. It is always difficult for a scholar to reconstitute, after vague descriptions, a monument of any kind, all vestiges of which have entirely disappeared. All the more it must be extremely difficult, if not impossible, to faithfully reproduce buildings which belong to far-distant times, for the simple reason that the dwelling-house is the first to disappear in great catastrophes. In the records of the writers who survive these catastrophes indications of public monuments may be found, but nothing about private habitations. What happened in the case of the Temple of Jerusalem is an example for us of the facility with which one can be led into errors in these matters. Certain modern historians have described it for us as a vast and majestic enclosure, composed of three walls surmounted with colossal towers; but lately has appeared M. Renan, who has taught us that the famous Temple of Solomon was, at the most, of the size of our Nôtre Dame de Lorette.

This has not prevented the Aristarchuses, who like to hunt for the hair in the egg, from seeking a quarrel with M. Garnier apropos of the least detail. They do not excuse him the least lapse; they have cast in his face the slightest inexactitudes; they have cried out to him that his huts were like extinguishers, that the Hindoo house does not exist as a single type, because India is a purely geographical expression which includes a hundred nations, who have customs, languages and tastes opposed and differing one with the other. They have charged it as a crime that he has attributed to the Assyrian house an ornamental symbol, the globe with its great out-spread wings, which belongs rather to the Egyptians of the time of the Pharaohs, and for having painted the Japanese house, a thing which, as it appears, is contrary to the ordinary customs of the inhabitants of Yeddo and Yokohama. After this, what? Do they mean, by chance, to pretend that in carrying out an enterprise of this importance the French architect assumed infallibility? A man who would be able to reconstitute

plastically the history of the human habitation from prehistoric age down to our days without making a blunder in any of his arrangements must know himself more things than can be contained in a hundred encyclopædic dictionaries, and possess more knowledge than the members of fifty academies can boast. If such a man as this existed, there should be erected in his honor altars, and statues of gold should be created for him, for he would be, through his genius and erudition, nearer god-hood than any man who has ever lived.

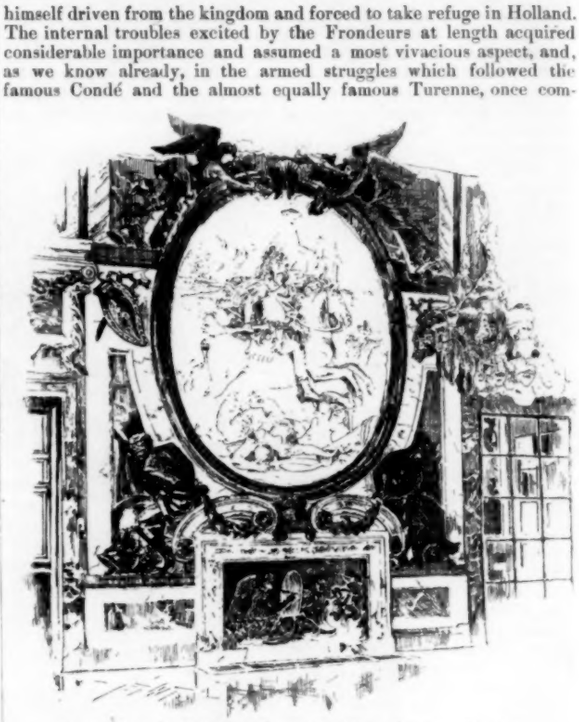
For my part, I feel that the only real mistake which M. Garnier can be reproached with having committed, as I said at the outset, is for having taken as the base of his exhibition the ethnographic standpoint, and so having made a sketch of the history of domestic morals and family customs rather than a history of architecture. It is to be hoped that some one else will rectify his error. There is talk of a great universal exhibition which shall take place shortly in the United States, where we are assured that the spirit of emulation will cause to be erected a colossal tower, in comparison with which the Eiffel Tower will be only a modest village spire. Why, have you not on the other side of the Atlantic a *savant* or corps of *savants* who will take up anew the idea of M. Charles Garnier, and rehabilitate the history of human habitation, taking for an objective point the creation of a correct history of architecture? H. Mereu.

EQUESTRIAN MONUMENTS.[1] — XXIV.

LOUIS XIV.

Louis, Carnot and Boulanger — a Parable. From *la Vie Parisienne.*

THE political sagacity of Richelieu, which enabled him by the use of money to thwart the attempts at Spanish aggrandizement, at the same time created comparative quiet in which to crush the spreading interest in Protestantism in France, and to develop to the utmost the resources of the kingdom. This he was able to do on a well-considered scheme, since the somewhat incapable Louis XIII left matters of administration absolutely in his prime-minister's hands. In taking part in the Thirty Years' War by subsidizing the Swedes, Richelieu laid the foundation for a long and stormy period during which the French found themselves forced to take a part in matters which strictly pertained rather to the interests of central Europe. Richelieu was succeeded as prime-minister by Cardinal Mazarin, who during the minority of Louis XIV was practically the master of the destinies of the kingdom, as he had unlimited control over the regent Marie de' Medici. He was by no means so successful a statesman as his predecessor, while as an individual he excited the strongest dislike on the part of many of the powerful nobles who at length formed themselves into an organized opposition, and in derision were called by Mazarin and his supporters the "Frondeurs"; but ridicule under such circumstances is not a very useful weapon, and Mazarin found himself driven from the kingdom and forced to take refuge in Holland. The internal troubles excited by the Frondeurs at length acquired considerable importance and assumed a most vivacious aspect, and, as we know already, in the armed struggles which followed the famous Condé and the almost equally famous Turenne, once companions-in-arms, were at length arrayed against each other as besieger and defender of Paris. Louis XIV at length came to the end of his short minority, ascending the throne at the age of fourteen, and very shortly began to take a personal control of matters. The consequence of this was the cessation of internal troubles, a cessation largely brought about by his address in winning back to their allegiance the discontented nobles of the Fronde; so that at length it became quite as much the fashion to support the king and his ministers as a short time before it had been fashionable to oppose in every way the representatives of the royal power.



Louis XIV, in the Salon de la Guerre, Versailles. Coysevox, Sculptor.

The Marcus Curtius, Versailles. Bernini and Girardon, Sculptors.

Louis XIV, in the Place Bellecour, Lyons. Lemot, Sculptor.

Louis had married the daughter of Philip IV of Spain, and on the death of his father-in-law he made pretensions in behalf of his wife to the Spanish possessions in the Low Countries. Pretensions of this kind could only be enforced against the hardy citizens of the Dutch Republic by force of arms, and the natural result was that France was brought into more direct personal relation with the great

[1] Continued from page 77, No. 736.

struggle between Protestantism and Catholicism in Germany than had been the case during the Thirty Years' War. The Dutch naturally sought allies amongst other Protestant countries, and a triple alliance was made between Holland, England and Sweden. The appearance of an English interest at this time was particularly disagreeable to Louis, for he had, during the preceding twenty years, built up a navy of considerable importance, and on its assistance he largely relied for a successful issue in his attempt on the Netherlands; but he knew that it would be hopeless for him to cope single-handed with the two great naval powers of the time, the Dutch and the English. Fortunately for him the light-minded Charles II was at that moment king of England, and taking advantage of his impecuniosity Louis, with the aid of certain ladies of his court, one of whom subsequently became the noted Duchess of Portsmouth, managed to detach the English from the triple alliance by making Charles his paid pensioner. The Dutch, thus deserted by the Protestant islanders, were unable to hold their own against Louis, who, in 1672, invaded Holland with 100,000 men under Turenne. The outlook was so apparently hopeless that the Dutch sued for peace: but the conditions which Louis sought to impose, namely, an indemnity of twenty million French pounds, a certain portion of the Dutch territory to be permanently incorporated in the French kingdom, but above all, the demand that the Catholic religion should be established absolutely throughout Holland, were so galling to the Dutchmen that they resolved on making one more effort. As in other instances where the Netherlands had been invaded and the inhabitants found themselves at bay, the dikes were unhesitatingly cut and large areas of the country were submerged, a step which not only put a check at those points to anything like warlike operations, but absolutely destroyed for a considerable time the value of the territory coveted by the French king.

Amongst the other German allies whom the Dutch secured at this juncture was Frederick, Elector of Brandenburg, who in his early youth had taken a minor part in the closing years of the Thirty Years' War, and since that time had devoted his attention entirely to his plans for increasing the area, the wealth and the military capacity of his electorate, so successfully that at this time the Elector of Brandenburg was a person of considerable weight in any of the affairs which impinged on the welfare of central Europe. With the aid of the Elector of Brandenburg and William of Orange, who was elected stadtholder — William who was subsequently the third William of England, the Dutch managed to repulse the French. This unsuccessful attempt to absorb Holland gave Louis a fancy for extending his kingdom to the eastward, and he at once fixed his mind on the Rhine as the proper boundary for his realm, and throughout the remainder of his reign he never lost sight of this idea. It was, therefore, according as his efforts seemed to promise success or failure that the behavior of all the other powers of Europe was adjusted during the rest of his career.

Louis XIV, in the Cour d'Honneur, Versailles, France. Petitot and Cortellier, Sculptors.

Louis was unquestionably a great man, for he had the all-important attribute of a great mind, the capacity to perceive ability in others and a willingness to employ such abilities in the best way. It was this power of judging character that gave him Colbert, Louvois, Vauban, Condé, Turenne, Luxembourg and other almost equally famous men as executive assistants. The world is now somewhat given to laughing at the airs and graces which he assumed towards the close of his reign, to mock at his pompous belief in his own infallibility — which was only the natural outcome of many years of adulation on the part of interested courtiers — and to overlooking the real capacity of the individual, forgetting what was actually accomplished in his time. To commemorate, then, such a career as his, was for Art merely to perform its proper function.

Louis XIV, in the Promenade de Peyrou, Montpellier, France. Debay and Carbonneaux, Sculptors.

At an early stage of these papers some account was given of the several equestrian statues of Louis XIV, which were destroyed during the French Revolution, but besides those which passed away at that time there are others which still exist. The best known of these is the one which stands in the Cour d'Honneur, at Versailles, where Louis is represented in the cavalier costume of the period, and not as was usual with the earlier statues in a mixture of Classic robes and sandals with modern periwigs. This bronze statue was the work of the two sculptors, Cartellier and his pupil Petitot, the first of whom modelled the horse, while the king was modelled by the latter. It was at first intended that this statue should represent Louis XV and find a place in the Champs Elysées at Paris, but for some reason it was finally made to represent his more illustrious great-grandfather. The statue which is about 21′ 6″ high is a modern one, erected in 1832, but it is

certainly not such a work of art as befits its situation. At Versailles there is also a very curious and interesting equestrian statue which now goes by the name of Marcus Curtius, and stands on the brink of what is known as the Pièce d'Eau des Suisses. In reality this statue, which is of marble, was commissioned by Louis XIV from the Italian sculptor Bernini, at a time when the king was smitten with a fancy for Italian art and artists and Bernini was getting towards his dotage. At any rate, when the statue, which is commonly believed to be the sculptor's last work, was at length received at Versailles and unpacked, the king was so thoroughly disgusted with the idea that Louis the Magnificent should be represented through the coming ages as a guy of that kind that he at once gave orders that the statue should be smashed to pieces. The sculptor Girardon, however, perceived a possibility of preserving a statue which to him seemed to have some elements of artistic worth, and he obtained permission to endeavor to make one of those transmogrifications of which we find frequent evidence in the history of different statues. The fact that the work was of marble made it possible to obliterate and change the marked and aquiline features of the great Louis and make certain minor changes, so that when the sculptor had finished his task, instead of Louis the Great ascending the Hill of Fame, the hill had been hewn into a representation of flames, and instead of Louis there was left Marcus Curtius about to plunge into the flaming gulf.

There is also, at Versailles, an interesting bas-relief of large size (about four metres high) and oval form, which forms the decoration above the mantel in the Salon de la Guerre. This bas-relief in stucco, by the sculptor Coysevox, shows Louis on horseback trampling upon his enemies, while Fame and Courage and Victory attend him. As all else in this hall is marble and gilded copper, it seems probable that the plaster-work was simply a temporary matter, and was intended to be replaced later by a copy in marble. The sculptor was paid only $270 for his work.

Besides these figures of Louis and the bas-relief by Coustou on the front of the Hôtel des Invalides and the statue on the façade of Strasbourg Cathedral, already mentioned, there also remain equestrian statues of Louis XIV at Montpellier and at Lyons, and although the work of different sculptors, there is a very marked similarity in the two groups. In both cases the rider is represented in Classic attire, and in both cases the horse is of that light build which horsemen speak of as a "Maybird," but they are both animated and rather interesting figures, and the one at Montpellier has the fortune to occupy one of the best positions for a statue in Europe.

The statue at Lyons by the sculptor Lemot was erected in 1825 by the order of Charles X who desired to banish as rapidly as possible the memory of the popular revolt that had caused the overthrow in 1792 of Desjardin's equestrian statues of Louis XIV which had stood upon the same spot. The statue at Montpellier, the work of the sculptors Debay and Carbonneaux, was erected four years later.

Better known than any of them, except possibly Cartellier and Petitot's statue, is the rearing bronze horse and its rider which stands in the Place des Victoires at Paris, an open space of such limited area that it is not possible to obtain a very favorable standpoint from which to view the statue. In 1792 there was standing upon the same site a pedestrian statue of Louis which was, of course, destroyed on that August day: it was by the sculptor Desjardin and had been set up by a single admirer, the Duc de la Feuillade. To heap the utmost scorn upon the relics and remembrances of royal rule there was, not long after the destruction of Desjardin's statue, built upon the same spot a large stone pyramid upon which were inscribed the names of Republican victories and it was the presence of this trophy that gave the place the name it still bears. In 1806 the pyramid was in its turn removed to give place to a pedestrian statue of General Desaix, and after the Restoration the effigy of the General served to furnish a portion of the metal needed for the fashioning of the equestrian statue of Henri IV on the Pont Neuf, which was cast in 1817. In 1822 the present statue, the work of the sculptor Bosio was erected, as we are told by the very simple and pleasing inscriptions, at the order of Louis XVIII: the inscription upon one face of the pedestal is simply

LUDOVICO MAGNO,

and upon the opposite side

LUDOVICUS XVIII ATAVO SUO.

It is impossible to regard this pseudo-classic group with as much disfavor as one theoretically would like to entertain for it. The seat of the rider is particularly good and the group as a whole has a sterling sculpturesque value which the groups at Montpellier and at Lyons do not share with it.

In a time when all of the greatness and magnificence was absorbed by the king, there was small chance that any of the other great men or the day would find artists to immortalize them, and the fame of the contemporaries of Louis XIV rests rather on the testimony of the historian than on such proof of greatness as a multiplicity of paintings or statues might otherwise effect.

Of Louis XV no equestrian portrait remains, and of Louis XVI none ever existed. To find equestrian statues representative of the next chronological period France must be abandoned, and attention turned to France's great present rival.

Louis XIV. — ("*Le Grand Monarque*"; "*Le Roi Soleil*"; "The Destroyer of Heresy"; "*Louis le Grand.*") Son of Louis XIII and Anne of Austria. Born September 16, 1638. Ascended the throne in his fifth year under the regency of his mother, who was directed by Cardinal Mazarin. At the latter's death (1661) governed alone. Married (1660) Maria Theresa. Invaded Flanders and Franche-Comté, 1667; revoked the Edict of Nantes, 1685; opposed the Spanish and English in 1688, and in the War of the Spanish Succession, 1700. Died August 31, 1715, after the longest and most brilliant reign in French annals. Ministers: Mazarin, Louvois and Colbert. Generals: Turenne, Condé and Luxembourg. Writers: Corneille, Racine, Boileau, Molière, La Fontaine, Bosseut and Fenelon. Artists: Le Brun, Mignard, Rigaud, Coysevox and Puget.

Petitot. — Louis Messidor Lebon Petitot, son of the sculptor Pierre Petitot, born at Paris 1794, died 1862. Pupil of his father and Cartellier. Grand Prize 1814. Among his numerous works are "Jeune Chasseur blessé par un serpent," now in the Luxembourg, a statue of Louis XIV at Caen, bas-reliefs in the Louvre and Chamber of Deputies; four allegorical figures on the Pont du Carrousel and a colossal monument at Napoléon St. Leu in memory of Louis Bonaparte, King of Holland.

Cartellier. — Pierre Cartellier. Born at Paris 1757. Died 1831. Pupil of Bridan. His principal works are upon the Louvre and Luxembourg palaces, and statues of Generals Valhubert and Pichegru, the Empress Josephine, Minerva, Modesty and (with Dupaty) the tomb of the Duc de Berri.

Bernini. — Giovanni Lorenzo Bernini, born at Naples, 1598. He was gifted with brilliant talents which he early manifested, and was taken to Rome when very young. He made busts of the Pope and various cardinals, and at eighteen had executed his marble group of "Apollo and Daphne," now in the Villa Borghese. He worked, under different Popes, for fifty years. His principal works in sculpture are the bronze equestrian statue of Constantine the Great in the portico of St. Peter's, the monuments of Urban VIII and Alexander VII in the same church, the great canopy over the high altar and the chair, supported by colossal statues of the Four Doctors of the church of St. Peter, both in St. Peter's, the "Ecstasy of St. Teresa" and the "Rape of Proserpine." He also designed the fountains in the Piazzas of Navona and Barberini, and numberless statues and sculptures. He was much employed as an architect and executed the double colonnade in front of St. Peter's, the chapel of S. Teresa, and the church of S. Bibiana, and finished the Barberini Palace, begun by Maderna. He was very prolific and possessed great talent, but was too much inclined to fall into exaggeration in his striving for effect. His style became the fashion in Italy, and was almost universally copied with bad results. His influence on sculpture was most unfortunate. He died in 1680, leaving an immense fortune, and was buried in Santa Maria Maggiore.

Debay. — Jean Baptiste Joseph Debay (the elder); born at Mechlin, Belgium, in 1779; died at Paris, in 1863. Pupil of Chaudet. He made numerous ideal and portrait statues, decorative sculptures and portrait busts.

Coysevox. — Charles Antoine Coysevox, one of the ablest sculptors of the French school. Born at Lyons in 1640. Before he was seventeen he made a statue of the Virgin, which created much attention. He then went to Paris and studied under Louis Lerambert. Author of many works at Versailles, including the equestrian relief of Louis XIV on the chimney-piece of the Salon de la Guerre. His other works are the two equestrian statues of Fame and Mercury in the Tuileries Gardens; several figures of Saints and the Virtues in the Church of the Invalides; a pedestrian statue of Louis XIV for the Hôtel de Ville; a statue of the Duchess of Burgundy as Diana; one of Maria Theresa; one of the great Condé at Chantilly; the tomb of Mazarin in the Louvre; that of Colbert in St. Eustache; Le Brun in St. Nicholas du Chardonnet, and the statue for the tomb of the Marshal de Créqui in St. Roch. Probably his busts are his finest works. Among them are those of Marie Serre, Mignard, Le Brun, Bossuet and Richelieu in the Louvre, and Colbert, Vauban, Mansart, Fenelon, Mazarin, Turenne, Marshal Villars, Girardon, Louvois and Edelinck. "Enfin on peut dire qu'il a été le Van Dyck de la sculpture." Coysevox avoided to a great extent the affectation so common in works of his period.

[To be continued.]

TEOTIHUACAN — "THE CITY OF THE GODS" — MEXICO.

QUINTUS CHURCH - MAINZ.

To inquiring minds, there is a strange, undefined attraction, in the remains of a dead civilization, especially if pre-historic, or with a history written in characters which no one can decipher. Such a history has Teotihuacan — a city of ruins, of crumbling tombs, broken idols, and silence, dominated by two stupendous truncated, terraced pyramids — built to commemorate that which we would so much like to know. The Toltecs or Nahuans the builders of the Mississippi mounds, are said to have built these, and many other pyramids in Mexico, in their migrating epoch, more than a thousand years ago. The best authorities give very poor accounts of these grand ruins — maiming poor Truth so hopelessly that they make of her another ruin. Of course, the writer is not foolhardy enough to correct the work of his betters, for, even in our times, he who would grasp the sword of Truth, must take it by the hilt of authority, or it will very likely hurt him. It is a pity, that the traveller's exploring spirit and the book-making faculty are not more often found in the same person; for it must be an arduous undertaking to make a book of travels from a library, for it can be, at best, but a palatable literary hash, as like, or unlike the real thing, as a geologist's pictured landscape of the time when the coal measures were being formed.

The two great pyramids (for there are many others) are called the "Sun" and the "Moon." The Sun is about 750 feet square and 200 high: The Moon is somewhat smaller. It seems as if both were built from the level ground, although this has not been proved. The "Sun" contains about eight million tons of material which was brought from a distance, for other pyramids. Immense embankments and the dwelling places lie close around the "Sun" and the "Moon."

At times, building was stopped; for at various heights the structure was floored over with a layer of concrete made of broken pumice and clay. The "Moon," when finished, was entirely covered with similar concrete: slopes, and terraces, top and "patios" or yards surrounding it. It stands facing a long, wide, straight street, which is defined on each side by immense embankments which were crowned

their whole length by rows of pyramids. There were steps to go from the street up the embankments, and each pyramid of the scores that stood in line had steps on its four sides, and probably a flat top. These steps were probably lined, row above row, for a mile in length, by seated spectators, on occasions of sacrificial ceremonies, processions, games, etc. It is impressive to imagine what immense faith, patience and energy went to the building of cities like this, and others much finer, which are found farther south. What splendid organization, grand communion of effort, peace and plenty! Modern times are better, of course, though "work" must have been easy to find then, work and food. They are both scarce now in most countries, perhaps because the builder no longer builds useless pyramids, but beautiful palaces and tenement houses. Plastered walls, covered drains, and concrete floors have been for ages useless object-lessons to the dwellers on the ruins, degenerate descendents of their great builders, but, since the priest, soldier and other tax-collectors have had them in hand, they no longer seem to be able to do what they once did; even churches they no longer build, nor repair those they have. Probably they would relapse into free-and-easy barbarism, were it not for the educative effect of the taxes they pay to buy ships of war, etc., to defend them; and of the fees that the priest collects on baptism, marriage and death; at the rate of one dollar for the heavenly fellowship, and fourteen for earthly bliss, while for the peace of the grave that passeth all understanding they may make the best bargain they can.

Where in the whole world can a climate be found more perfect than that which eternally blesses the valley of Mexico — it is that which all ages have sung praises of: pleasant in the sun, delightful in the shade; like a beautiful woman, a grand opera, or the embodied dream of a painter, of which one never tires: it will serve as a standard by which to judge its kind. It is worth a journey the length of a continent, or the breadth of an ocean, to view the wondrously impressive landscape from the top of the "Sun." Majestic dissolving views of sunshine and shade follow each other in solemn procession, round the circle of the enclosing mountain ranges: brilliantly light and airy in the dazzlingly strong sunshine; softly blue and hazy in the great valleys; while, in the deep shadows, the clear-cut Plutonic profiles in stern array stand outlined, roughly impressive, like gigantic idols — "*à la* Toltec." Trooping masses of fleecy clouds sweep majestically over the valley, to linger caressingly about the twin volcanoes, whose snow-crowned summits peep occasionally through a rift as silvery white as their floating visitors. Ever-green woods clothe the lower slopes of the hills, and creep down into the shimmering plains, and run along in sinuous lines, fringing the water-courses, down into the cultivated valleys, on towards the great lakes which cluster in sheeny splendor in the centre of the glorious picture.

Radiating from the pyramids, undulating over the mounds — tombs of the past, if of nothing else — run the furrows of the *Inditos'* changeless plough, the prototype of which — before the Pharaohs were — scratched into fertility the banks of the Nile. Scattered over the buried city are lush fields of "alfalfa," patches of bearded barley in their golden prime, "chile colorado" that blazons its presence as if it were a spread mantle of glowing flame, and, thriving where harvest has followed harvest for a thousand years, waves the familiar tassel of the cosmopolitan corn; the whole bordered by the sturdy "maguey" in ordered array, with bayonets fixed. A thing of beauty and a joy forever to the "pulque" drinker, is a maiden maguey. Its immense, turgid limbs — clothed in a light purple bloom, as full of juice as a luscious peach — curve boldly outwards, spear-pointed, in defence of its tender, sensitive heart. In vain. In its seventh year it is made to yield thrice daily, its vital ichor during four or five months, until its bloom and strength are sapped; then it wilts and shrivels into a tangled bunch of bleached fibres, from which springs the brood of a new generation. When not tapped it flowers splendidly — when it feels like it — once before it dies.

"Pulque" is the hourly drink of the *Inditos* of Teotihuacan, the fermented juice of the maguey, the nectar of the Aztec gods. Milk-white, as smooth as cream, as sweetly tart as new-made cider, it is the most healthy and cheapest liquor that is sold. For a few cents you can buy a bowl of it, in which an American schooner might be swamped.

Meandering lanes, palisaded by the organ cactus, and shaded by the red-berried, feathery-foliaged pepper-tree, lead to the huts where dwell the descendants of the great Toltecs, who troop out, offering for sale little clay and stone images — "*idolitos*" they call them — of which we bought a couple of hundred. The pencil-sketches accompanying this are fac-similes of some of them. Their variety is endless: duplicates there were none but those made by the unskilful descendants of their artistic forebears, who were bright of fancy, deft of hand and possessed of limitless patience. The head-dresses are chiefly interesting for the varied treatment of a few common forms, which carry one's fancy to the shores of the Mediterranean. The faces are full of character, the profiles clean-cut and most expressive. The qualities and passions that mould humanity now, as then, are easily read. The king in vacuous pride, vanity in a stone necklace, mediocrity in office; the priest in pompous self-sufficiency, greed, timidity, impudence — all the virtues and vices — are found portrayed in these little clay images, which will, when conscientiously studied, throw more light on the extinct civilization that evolved them than is to be got from the fanciful accounts of superstitious monks and brigand conquerors. Legends are good as the basis of a child's story, but their usefulness as an imposing framework on which to fasten historical fireworks glorifying the effigies of God-appointed kings is past.

What an attractive wealth of beauty there is in perfect health, even that of an "*Indita.*" We met a girl of eighteen years, strongly formed, full-sexed in splendid maidenhood, who offered, with charming timidity, a medley of grotesque "*idolitos*" in the corner of her "*reboso.*" She had a glowing face, red, yellow and brown, like the "*tuna castilla*" of her own neglected garden; luminous eyes, full red lips with a pouting droop, and a firmly-rounded form, pleasantly responsive to every whim of fancy, as a well-toned cord to the musician's skilful touch. Unless civilization is based on creeds, and not on deeds, so far it has done little good for her, and will probably do less in the future. Civilization — baldly practical, sordidly sensible, splendidly false — is trying, under the deceiving guise of charity, to lift the load from her strong and shapely shoulders; the load that gives firmness and depth to her chest, and dowers her with an enviable vitality, that makes of motherhood an added pleasure and a welcome duty. In some other countries not far from here, it is found more convenient to buy children rather than bear them. Like many more of our labor-saving devices, it is frightful to fancy where it is leading us. Yes! the pale-faced teachers of fashion and Christian charity will soon, for *pity's* sake, lift the burden from her shoulders and put it on her hips in the shape of a bustle, and on her head in the shape of amputated wings and vivisected breasts of birds, beds of flowers in a dozen colors, rivalling the war-paint of the "brave," humming-birds and beetles, tinted paper, painted stuffs, and — for, of course, she will soon grow bald — they will replace her glossy locks by disinfected hospital hair; and so, having abolished outdoor work as "unwomanly," they will constrain her to do scullion-work in a stranger's house or go to a factory. Soon, when there is no more work in her, she will be eligible to the charity-hospital or the poor-house. This is what we have already come to: these institutions — a blighting disgrace to the community that finds them necessary — are representative monuments of our times, as were the truncated pyramids of the times of the Toltecs. Listen! ye purple hills and billowy plains, monopolized by the few; ye prolific vales, once the patrimony of the many; the poor-house, that anti-climax of civilization, will soon be here in force, for nowadays the trail of the serpent of poverty is a double steel one, and the monster travels express.

In coming away, we found an assorted couple, grizzled and gray, furrowed and parched by uncounted years, who, with senile chatter, offered to sell us a skull. While they stopped digging to breathe freely, with suggestive pantomime, they explained that the lower jaw worked on a hinge. Although they assured us that it was a very ancient skull, our ardor for relics left us, for we suspected that they were delving in their family graveyard.

Although quite near the city of Mexico, the ruins have hardly been touched. This being so of Teotihuacan, the Holy City of the Toltecs, what can have been done towards investigating other ruins farther away from the centres of wealth and culture? In these days, a wonderful idol of stone, weighing twenty tons, is being taken to Mexico City from this place. There is still a grand chance in Mexico and Central America for an energetic, patient archæologist to make for himself an enviable reputation, and at the same time enjoy himself hugely.

N. DALMER.

THE ILLUSTRATIONS

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

HOUSE OF CHARLES F. BRUSH, ESQ., CLEVELAND, OHIO. MR. GEORGE H. SMITH, ARCHITECT, CLEVELAND, OHIO.

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

HEADS OF MEXICAN GODS. SKETCHED BY MR. N. DALMER, M. E.

SEE article "Teotihuacan, the City of the Gods" elsewhere in this issue.

SKETCH FOR A CHURCH. MR. EDWARD STOTZ, ARCHITECT, PITTSBURGH, PA.

DESIGN FOR PRESBYTERIAN CHURCH, MEMPHIS, TENN. MR. W. ALBERT SWASEY, ARCHITECT, ST. LOUIS, MO.

ALCOVE SLEEPING-CAR. DESIGNED BY MR. F. E. STEBBINS, SPRINGFIELD, MASS.

THE views show designs for both arched roof and clerestory cars. The end platforms are so constructed as to prevent telescoping; each platform has two compound posts made of sheet-steel and wood bolted together, and which extend from the hood below the platform where they are reinforced by sheet-steel braces.

The upper berth contracts to one-half the ordinary width and

closes perpendicularly against the car side, allowing space for high windows and making a more open car.

The bedding is placed in the alcove by day, and when removed therefrom by night ample space is afforded for dressing and undressing. Each alcove is provided with hot and cold water and wall-mirror for toilet purposes, whereby the passenger need not traverse the length of the car to reach the wash-room.

The trucks are of an entirely novel design, intended to give an easier motion than has heretofore been attained.

CHAPEL FOR ST. PAUL'S SCHOOL, CONCORD, N. H. MR. HENRY VAUGHAN, ARCHITECT, BOSTON, MASS.

This chapel with the exception of the tower from the ridge up was completed in 1888. It is now the intention of the Building-committee to finish the tower this coming summer. The external walls are of red brick and Springfield sandstone. The chapel consists of a chancel, nave, seated choir-wise, ante-chapel, organ-chamber and vestries. The altar and font are of marble. The base of the pulpit is of Carlisle stone, the upper part of oak. The stalls and benches are of oak, richly carved. Three handsome memorial windows by Messrs. Clayton & Bell, of London, are in place and others are being made by the same firm. The contractors were Messrs. Woodbury and Leighton.

THROOP AVENUE PRESBYTERIAN CHURCH, BROOKLYN, N. Y. MESSRS. FOWLER & HOUGH, ARCHITECTS, NEW YORK, N. Y.

[Additional Illustrations in the International Edition.]

THE CATHEDRAL, QUIMPER, BRITTANY, FRANCE.

[Gelatine Print.]

It may be recalled that in one of the papers on "Equestrian Monuments," the legend of King Gradlon was recited in connection with a description of the equestrian statue of the King which crowns the low west gable here shown. The view is particularly interesting because the two spires were added to the ancient edifice by M. Viollet-le-Duc some years ago.

SAVINGS BANK, LINZ, AUSTRIA. DESIGNED AND BUILT BY THE AUSTRIAN BUILDING COMPANY.

[Gelatine Print.]

A GABLE ON TAUBENSTRASSE, BERLIN, GERMANY. HERR HOLST, ARCHITECT.

[Gelatine Print.]

BLACK KNOLL, BROCKENHURST, HANTS, ENG. MR. R. T. BLOMFIELD, ARCHITECT.

JAMES STREET, BUCKINGHAM GATE, LONDON, S. W. MR. R. T. BLOMFIELD, ARCHITECT.

NORWICH, FROM THE CROMER ROAD.

The subject of this sketch might have been adapted by Nature for the use of a painter. The foreground of meadow and river is separated from the distance by a belt of trees. The rising ground beyond is also fortunately crowned by the tower of St. Giles's Church and a mill. The drawing was one of the last which Cotman made of a Norwich scene. Mr. James Reeve, to whom we are indebted for the use of the original drawing, in his memoir of the artist, says:

> The declining state of his health caused him much anxiety, and he began to feel that his duties at King's College were almost too much for his strength. He continued, however, to work on, and as the vacations drew near he looked forward with pleasurable anticipation to his usual visits to Norfolk. Some of his happiest days seem to have been spent at his work in the county and in the neighborhood of his native city. In the autumn of 1841, only a few months previous to his decease, he made a number of interesting outdoor sketches, including, besides subjects on the Rivers Yare, Bure and the Broads, some charming and vigorous effects of scenes at Cromer, Lammas, Blofield and Norwich. At the time of his visit to Norwich this year (1841) the river was unusually high. The effect produced by the flooded state of the country greatly interested him, and he went from Norwich to Yarmouth by the river, making a number of sketches on his way. These were executed on tinted paper with black and white chalk, and from the names on them, written in his usual bold hand, with the dates varying from October 9 to November 18, we are able to follow his work to the close of his life. It was the intention of Cotman to paint some of these subjects in oil on his return to London.
>
> John Sell Cotman died in London, at 42 Hunter Street, Brunswick Square, on July 24, 1842, in his sixtieth year, and, according to the register, the cause of his death, was "natural decay." He was buried in the St. John's Wood Cemetery.

CHURCH OF ST. MARTIN, SEAMER, ENG. MR. C. HODGSON FOWLER, F. S. A., DIOCESAN ARCHITECT.

This most interesting church has recently been opened after restoration. The original church consisted of tower, nave and chancel, and dated from about A. D., 1100. The north aisle, vestries, porch, with an extension of the chancel and other alterations have taken place in later times. One of the many interesting features of this church is the sanctus bell and cot, which is over the east gable of the nave. There is an old sacristy of the Perpendicular period, with a stone-groined roof on the north side of the chancel, with which it is connected by a Pointed door. The chancel arch, since the plaster has been removed and the check moulding disclosed, has a very grand effect, and the fine chancel-screen has been much improved by being raised about nine inches. During the restoration a staircase which originally led up to the rood-screen, with which it was connected by the opening on the north side of the chancel arch, was opened out. A small Norman window, with zig-zag moulding and nail-head ornamentation was also uncovered immediately above the arch leading to the vestry on the north side of the choir. There is a curious projecting figure on one of the pillars on the north wall of the nave and two similar ones on the east wall of the chancel, probably used as brackets for lights. When the north aisle was added to the church the original north wall was cut through, and part of the buttresses still remain on the piers. A new oak roof, covered with lead, has replaced the old nave roof, and a very handsome oak roof of more elaborate design has been placed over the chancel. Handsome oak choir-stalls have been placed in the chancel. An oak reredos, picked out with gold, has been erected. The nave has been reseated with open oak seats, and a handsome oak pulpit and lectern have taken the place of the old "three-decker."

THE WINTER EXHIBITION OF THE BERLIN INDUSTRIAL MUSEUM.

"All the Modern Improvements."—No. 4.

It is a question with me whether any museum in Europe is managed better than the Berlin Industrial Museum (Gewerbemuseum). I doubt even whether any American board be more alive, active and ingenious, or more earnestly bent upon using a collection exhaustively. For only to mention this one fact of the use the stores are put to — since my space does not admit of full quotations from the complete catalogues and reports — how considerable it is for students, artists and artisans on one side, and, on the other, for the general public! Regular classes are taught within its walls to profit by the specimens of perfect workmanship of all ages and countries, just as in other collections connected with art and schools; but, besides this, classes from public high and female schools, such as the Victoria Lyceum, may resort regularly with their teachers to the halls; and, what is still more, the population of the town are made into classes and are likewise taught there! It has got to be a settled plan to make announcements in the newspapers when a lecturer will be found in this or that section of the building in order to explain its stock, and the hours when the museum is closed to the tourist are employed for training home tastes. So, too, evenings when so many other galleries and museums of the world are given over to idle silence and darkness, is this of Berlin often alive with lights and audiences; the aim being to prepare consumers of a quality fit for appreciating the producers whom the industrial schools of the country educate and inspire.

On a certain scale, too, it gives the high and flattering stamp of its unsurpassable encomiums to current productions; and so keeps in feeling with manufacturers — I will mention an example or two later. They occurred in the course of the Winter Exhibition, which is an exhibition of textiles and wall tapestries.

The ordinary visitor has no idea of the riches of the Gewerbemuseum in this department, and one must be on the spot at the right moment to gain an idea. For even the method of the Germanic Museum, at Nuremburg, of setting hermetically closed-cases of embroideries and stuffs in darkened chambers is rejected as inefficient for preventing dyes from fading. The costlier and rarer specimens are hermetically packed, and the summer tourist sees nothing of them. They are exhibited in the dark winter season and, if extraordinarily susceptible or antique specimens, only for a few weeks.

When this exhibition is begun it takes place in the rooms of the inner court, and in a successive historical series, or after countries or continents: sometimes the two systems combine into an exposition that is at once a period and a local registry, since textile art has

been confined at certain dates to one particular territory, only China having kept up a certain uninterrupted production from one century through another, and from one millennium to the next.

In these occasional exhibitions, and in this winter's particularly, Oriental art takes still the foremost place. The Italian and Spanish velvets of the sixteenth and seventeenth centuries, and our modern plushes present profounder glowing tones, and some of the most happily combined fine, faint, soft colors of the Rococo speak with a sweeter intimacy perhaps to our northern, tempered sense. But it remains true that no European art has attained even at its zenith so *manifold* a decorative perfection as the old art of the East.

The thought occurs to one when realizing this point afresh, whether just the fact of ancientness does not constitute the real secret of superiority. Consider for a moment how the walls we are tapestrying now will look fifty or a hundred years from now after sun and gas-light have faded the dyes of them, and faded them unequally! I am thinking here of a room in the palace of Princess G., in Venice, hung still with its Turkish tapestries of two hundred and eighty years ago — and the princess told me once they were old already then — and I am unready to prophesy anything favorable unless they be like this room, or tapestried with Eastern stuff. For the brilliance of a Venetian sun and the burning reflections from the Canale Grande had not only left the colors comparatively unfaded, but in fading as much as they had, a harmony was still retained between the proportion or pitch of tones in the woof and in the patterns. Where is the European school which has experimented so long with dyes as to have won hundred-year-old knowledge as to the effect of time upon their hues, and to have come into secrets for preventing coarse disharmonies by their uneven rate of fading? It is safe to say that there is not such a school, firm or family in Europe. And yet without such experiences how is a monumental textile-art to grow up? Decorations depends upon surface qualities. A picture by Rubens with its mineral colors starting out with raw potency as their vegetable components evaporate or fade may remain a thing of beauty and a joy forever because of the spirit embodied in it. Considered as a decoration the same picture is faulty.

Oriental textiles teach us that a rag may be made as well worth preserving as a rock — unless, to be sure, this rock be a fragment of the Acropolis. In the Winter Exhibition was a piece of unshorn velvet of a brown color with an undershot of gold thread — a piece of weaving which modern art has not yet got the like of. A wall hung with this could last a thousand years, and be beautiful and refined in every one of the fading centuries; would show at least a yellowish-gray lichen dust, as it were, upon a solid yellow weft.

In the tapestries that are characteristically Oriental, or figured, the richness of color is kept in a harmonious scale between the pattern and *fond*, even in samples of the utmost wealth of number of colors. Secondly is the portion exemplary which is held between the kernel of a design and its flourishes or adjuncts; and thirdly, that which is maintained between the space taken up by these designs and the plain ground, and of both to the size of the frame or piece.

The oldest drawings are often of animal and vegetable forms. After the spread of Mohammedism vegetable and geometrical forms abound, animal-forms being relegated to such secondary sky rôles as birds and arboreous quadrupeds play between heaven and earth, — or in the region which escaped, through an oversight, the ban laid on artists by religious law-givers; a favorite *motif* being that of a songstress or squirrel amidst leafy branches. From the sixteenth century on, geometrical and vegetable designs supersede all others; every hint of an animal form quite vanishing.

The Orientals inherited what seems like an instinct for drawing on the flat; and the countless designs already accumulated accustomed the eye unconsciously to styling natural into decorative lines; or how else is the sheer inexhaustible fulness of happy inspirations to be accounted for in the way of both animal and vegetable contours? What a clumsy object is the pomegranate,— and yet with what marvellous tact is the problem approached of transforming it to a decorative style, and with what ease and quickness is this style modified in its turn. The Winter Exhibition contains a small multitude of specimens that date from the most remote times, on through those made in Europe in the sixteenth century at Venice and Lyons *for* the East, to those of modern times. Many represent the pomegranate and its branches as golden patterns upon deep red back-grounds.

It takes the lead, in truth, among textiles with surfaces divided into fields; no other pattern, not even that of the palm and lotus, recurring so frequently: a circumstance due to the fact of fabrics being the more easily obtainable the less old they are, and this pomegranate is a comparatively new design, or a design with a symbolism that came tolerably late into great vogue: — for a meaning is attached to plants and animals, and the imagination of Oriental peoples raised first one plant form and then another into emblematical importance, just as the Middle Ages raised first the lily and then the rose.

A form of decoration which represents the opposite to the division into fields, is that of detached flowers or sprigs. When Europe adopted it, in the seventeenth century, the original colors were gradually intensified until the utmost brilliance was arrived at, when a steady decline set-in and reached at last mere mist and butterfly powdery tints; the water-plants of the East were replaced by Dutch roses and tulips; and the large formalized patterns of the East were replaced by miniature natural-looking sprays of sweet-brier and pinks, suitable rather for baby-dresses, or at most for girls' boudoirs than for hall tapestries.

But Oriental art speaks half stutteringly in forms; its eloquence is color. The Museum displayed quantities of fabrics in which the drawing was reduced to such simplicity or heightened to such complexity as to be of very little moment: in one case square lines and quadrâts strewn upon a large space of plain ground; in the second, so many of the same figures, one inside the other, as to present mere fine lines of countless hues, — a tapestry of a *genre* similar to that of Indian and Persian shawls, and needing, like these, to be hung in ample folds. The directors introduced some contemporary textiles in this last-mentioned style from the factory of Sluck in Cracow, an old factory — as they made known to architects whom it might concern — employing descendents of Persian silk-weavers who were brought to Poland two hundred years ago. The stuffs, as hung on brazen rings, receive only a portion of the life by day which they unfold under strong gas-light, when the sharp lines of sudden shadow cut off piquantly the mannered confusion of their unfollowable and uncountable lines: like a tragic sorrow, the intrigues of an aristocratic mind.

An uncommon supply of costly textures from the farthest Orient, from China and Japan were good contrasts to those of Middle Asia, both through the style of their patterns and the *technique* of the same. The latter in China is certainly studiedly made effectful, and before a tapestry after drawings by Ho-Kusai, Raphael's and even the Turkish work of Scutari appear helplessly naïve. For Raphael's are woven with inferior thread and those of Scutari are complete as a woof. Your Chinese tapestry of the choicest sort combines weaving, painting and hand-stitching: the hand-stitch being most often the flat sketch, whether the thread be fine silk or the unwieldly, stiff wire of gold.

A crane embroidered in this stitch upon a painted background in colors to imitate nature and in a size fitted for a wall panel, was made to show both the sleek gloss of wing-feathers and the rumpled, wetted down of pin-feathers — a wonderful feat. But embroidery among the Chinese is really needle-painting, or just what the Oriental word for it implies.

Now, so great as our wealth is, shall we be likely to use much of it? Masterpieces are extremely dear even in China, and although this Exhibition shows furnishings for costly walls, it has no full number of the very rarest Chinese tapestries, but only pieces. And yet no one less than Baron von Brandt manipulated the fortune that has gone into this section,— a section recognized as one of the finest in Europe, as well as the most complete.

Contemporary German productions contain painted silk and velvet stuffs, in large Chinese patterns. A fashion already exists for them. The embroidery, however, is limited to such portions of the drawings as the rim or throat of flowers, the outlines of foliage masses, or the high lights on marine surfaces. The Winter Exhibition shows no native German imitation on a scale more ambitious in embroidery — this last luxury in decoration — than this of supererogated lines: save, of course, in small objects, such as fire-screens. We can conclude from this fact how the market stands. For it is one of the advantages of the Museum that, in want of yearly National Industrial fairs, enough additions are secured to the historical stores on hand, to initiate students and practical architects into the very newest adoptions in the world of decorative art.

COUNTESS V. KROCKOW.

THE RUNNING-EXPENSES OF THE BOSTON MUSEUM OF FINE ARTS.

A YEAR ago the Trustees of the Museum of Fine Arts found themselves compelled by the needs of that institution to appeal to the public-spirited citizens of Boston for means to carry it on.

Fifteen thousand dollars were needed for current expenses, in addition to the income of the Museum applicable to that purpose, and to provide this sum the Trustees asked for fifteen hundred subscriptions of ten dollars. The response was most generous and encouraging; 1,002 persons contributed $10 each, while larger amounts than the circular called for carried the total sum received to $12,530, thus fully justifying the confidence felt by the Trustees that there were many persons in the community who would be glad to share in the support of the Museum were the opportunity offered.

During the past year the extension of the Museum has been completed, more than doubling its previous capacity; large additions have been made to the collections, notably of casts and objects of Japanese art, and these have been incorporated with the objects previously deposited, the whole being systematically arranged throughout the galleries. This re-arrangement made it imperative that the building should be closed to the public for nearly three months, a necessity which the Trustees especially regret, as it has deprived the annual subscribers of a portion of their privileges, and their leniency is asked in view of the exceptional condition caused by the enlargement.

The increased size of the building and of the collections will greatly increase the cost of maintenance, and for the coming year the Trustees will need at least $15,000 from annual subscriptions to meet the current expenses.

The Trustees, therefore, gratefully acknowledging the hearty response to their previous appeal, venture to repeat it, and ask for subscriptions of ten dollars each. They invite all those who contributed last year to do so again, and would also ask their coöperation in obtaining new subscribers.

If each of the present subscribers were to add a new name to the list, the Trustees would have an income adequate to the support of

the Museum, and would even have some addition to their actual very limited resources for increasing the collections.

The Museum of Fine Arts receives no aid from the State or the City; it depends wholly upon voluntary contributions. It has been built and filled with precious works of art which give pleasure and instruction to thousands, solely by the liberal action of individuals, not many in number. It rests its claim for help only on the service its renders to the public; and, in again appealing to the public for a wider support, the Trustees feel that they may hope for a general and generous response.

Each subscriber will be entitled to a transferable ticket, admitting four persons to the Museum on every day in the year on which it is open, up to April 1, 1891.

NOTES AND CLIPPINGS

Convention of the Plate-Glass Works. — The advance in the price of glass in other countries has been quickly followed by a like movement in Germany. The table and lighting glass manufacturers have succeeded in forming a convention of long duration which includes all but a few small and unimportant works. The higher prices thus brought about are justified by the 15 per cent advance in the men's wages, the increased cost of coal = 50 per cent, the increased cost of chemicals averaging 20 per cent, and that of packing material as straw, etc., 90 per cent, and by the fact that work can only be carried on on 26 Sundays, instead of 52 as hitherto, whereby the continuous firing of the furnaces will increase the working-expenses. The convention has got upon firm ground, it appears to be well-organized and is connected with a bank which is prepared to take from the manufacturers for export any accumulating stocks, in order that in the event of any reserve on the part of the great inland buyers, who are not friendly to the increased prices, regular outlet may be open and in that way offers under the convention prices may be prevented. The scheme for uniting all the lighting-glass works into a large company has been definitely abandoned, as several banks had refused to participate therein and none of the other negotiations were attended with success. — *Invention.*

Electric Welding. — A few weeks since a naval board was ordered by the Secretary of the Navy to convene at Boston, for the purpose of reporting upon the advisability of generally adopting the Thomson electric-welding process, with the view to using the machines of this company in the various navy-yards and on board the government cruisers, etc. This board met in this city, and after several days' careful investigation made a unanimous report recommending the use of the machines by the navy in its various departments. In this report they state:

We are convinced that the Thomson welding process can be found of great utility to the naval service, both on shore and afloat, for the following reasons: It can be used —

(*a*) In welding breaks in rods without altering them either in length or shape.
(*b*) For welding tubes.
(*c*) For welding angles and shapes of intricate form.
(*d*) For welding copper, brass, cast-iron or other metals.
(*e*) For heating metals for forging, tempering and upsetting.
(*f*) For welding wire cables.

Under these heads the following may be mentioned as a few of the many applications that would result on shipboard: For welding broken pump piston-rods, valve-stems, etc.; for joining wires of iron, copper, or other metals or bars of the same, of similar or different shapes or sections; for making joints at angles with bars (T or Y joints); for mending chain and wire rope; for constructing or joining, end to end, pipe of all kinds, and of large or small diameter; working or joining lead pipe; welding T-connections, or elbows into lines of piping; welding safe ends to boiler-tubes; repairing boiler-tubes; welding eye-rings, and welding these again to bolts or bars; repairing, cutting and boring tools without hurting their temper; lengthening or shortening rods or bars; repairing broken cast-iron pieces of machinery or broken cast-iron or cast-brass fittings; welding copper electric mains. The system of welding thus renders easy many operations in the working of metals which with the forge and smith have hithertofore been considered impossible. It is the unanimous opinion of the Board that in the present day of ships constructed almost entirely of metals, and in which every fitting possible is made of metal, such a system as that which has been investigated by us becomes not only desirable, but a means to economy of expense, time and labor, and would add to the efficiency of the vessel under any condition of service. This system of welding occupies a position of its own; it is able to do not only a large part of the work of the forge now in use, but is capable of doing much work that was hitherto considered impossible. By its use, the large accumulation of now almost worthless boiler-tubes stored at the navy-yards could be made fit for service; and the quantity of spare tubes and of many other stores now carried by ships could be reduced.

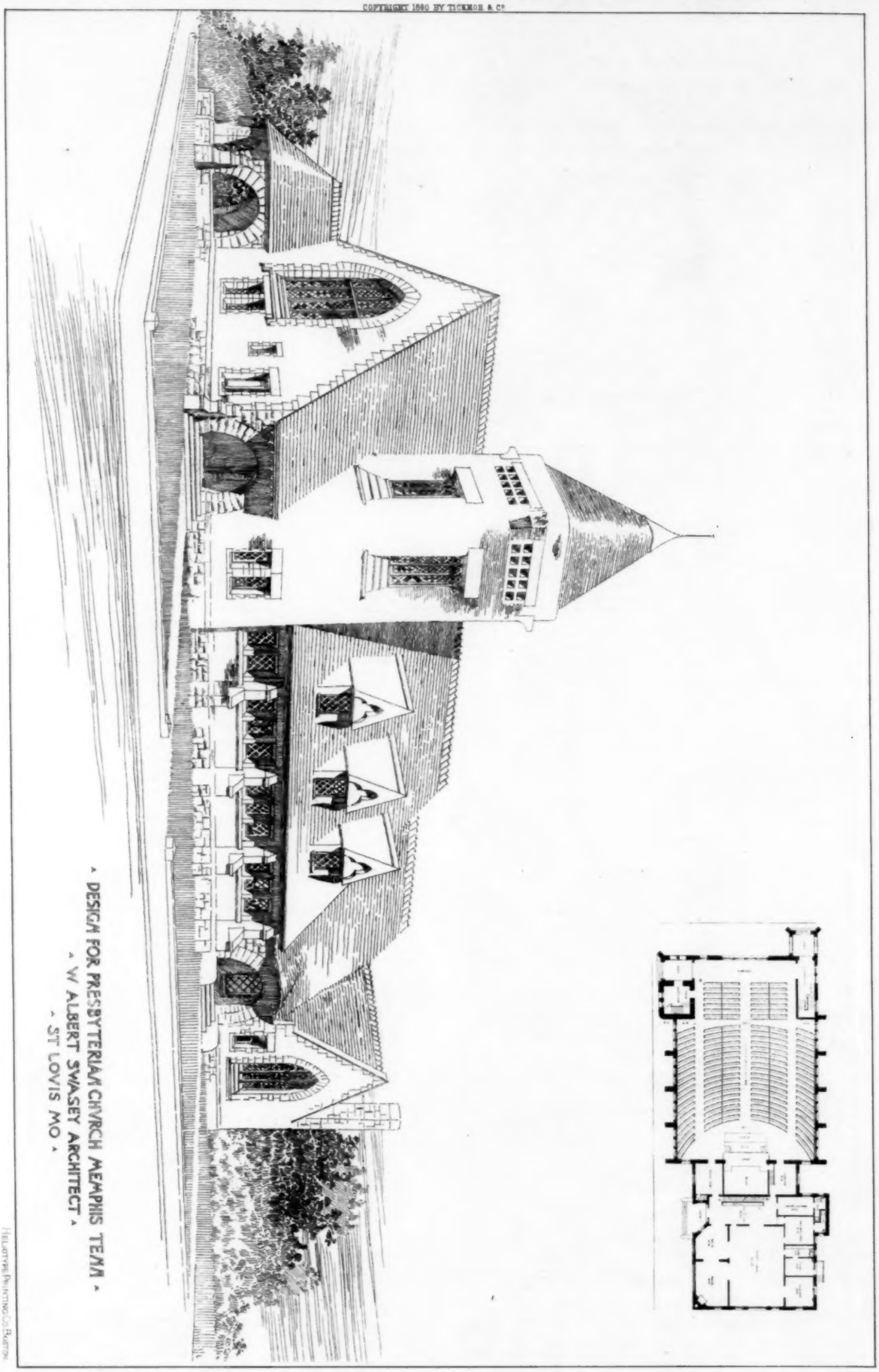
Cheap unbaked Colored Brick. — Dispatches from McKeesport, Pa., announce that the brick manufacturers of that city and Pittsburgh, are becoming interested in a patent chemical process for making brick without the usual burning which has always proved necessary. The process is that of a Western man, and it is claimed that the brick can be made and hardened in two days at a cost of two dollars per thousand, or at one-half of the average price per thousand that stock brick are made in yards where brick is burned. Another feature is, that the process will permit the brick to be made in all colors, and that the hard article for street improvement can also be made. A number of McKeesport capitalists are interested in it, and should it prove what it is they will locate a large plant to manufacture by this process. — *The Industrial World.*

TRADE SURVEYS

There is a more or less unsettled feeling among commercial, financial and manufacturing interests over the effect of a discounted decline in cost of production and prices for all commodities and services. Every one recognizes that a constant adjustment will be necessary. Ordinarily, competition and the law of supply and demand will take care of this. It has been the study of the leaders in the great avenues of trade and commerce for some time past to devise some way for getting around the operation of this law, or, at least, to protect themselves in part from its effect. One of these methods has been through combination; another, through advantages secured by legislation. The average man sees no harmful results from the sharpest possible competition, nor from the gradual decline in prices and cost of material. Those only are apprehensive who are aiming to secure a little more than what rigid competition will allow. The barricades which legislation has for years past been building up around special interests are gradually going. Never before in our history has the individual possessed so many advantages. It may be said that the enormous combinations of capital controvert this statement, but a little closer inspection will show its correctness. Business methods are simply passing out of one stage or condition into another and a higher one. As the apprentice system has disappeared from our industries, so is the system of production and exchange being modified by being placed upon a broader basis. Where there was one opportunity for one dollar to make another dollar twenty years ago, there are now manifold opportunities. It is right here that the interests of the masses are best protected against the largest possible aggregations of capital. These combinations have their place, and will develop strength and weakness, and create opportunities for smaller combinations of capital which do not now appear on the surface. The truth of this is manifested almost daily in commercial and manufacturing circles. Conditions and methods which the scholarly socialists of thirty or forty years ago wrote about and dreamed of are now growing up about us as naturally as though the soil had been especially prepared for them. The constitution of society itself seems to be changing; or rather, the elements within it are being shaped to make possible the accomplishment of results and achievements which, a few decades ago, were not dreamed of as possible or as desirable. Business is done differently to-day from what it was thirty years ago. Even banking methods are changing, and only the other day the banking world was surprised by the presentation of a proposition from one of the most prominent senators in the country to give governmental sanction to a scheme which, even ten years ago, would have been pronounced as utterly socialistic, as revolutionary, and as being at war with common-sense and the best interests of the banking and non-banking public. While such schemes may not go through now, there is no telling what may come of it.

Of one thing we may rest assured, and that is, that there is a strong popular feeling among the agricultural and industrial interests in favor of anything or any scheme that will restrict the franchise and the power of the money-lender, on the one hand, and which will facilitate the obtaining of needed loans on the other. The senator whose name has been coupled with this scheme may not comprehend the ulterior consequences of such a movement, but the flood of telegrams and letters by way of remonstrance against even the entertainment of such a proposition must convince him that the established order of things, financially speaking, will not acquiesce in any disturbance of fundamental notions. Ideas of similarly revolutionary import are cropping out in other directions; on the one hand, we find "things as they are"; on the other hand, and opposed to them, we find "things as they ought to be." A sort of Bellamy philosophy is pervading the minds of the common people; it is not necessary to waste too many words or too much space upon the new ideas, methods and systems that are shaping and evolving themselves among the masses of former wage-workers who have recently become petty or large employers, farmers, shop-keepers, and the like. A new race of thinkers is coming to the front; they are weighing everything which affects their interests by standards of their own making. Trade conditions are still satisfactory to the money-lender, the transporter, the manufacturer and the cultivator of the soil. The Northern farmers are complaining of deficient markets and low prices, while the Cotton Belt people and the Southern lumber manufacturers and iron-makers are all rejoicing over abundant business, good prices and bright prospects for continued activity. Production and consumption are adjusting themselves to new conditions. If there is any dulness in trade at present, it is due to a doubt as to whether prices during the coming ninety days will harden or weaken. A fair trade is reported in every direction. Buyers want to know whether production is to be whipped up to a mile-a-minute speed, or to be kept within bounds. A vast amount of business is being done this week and this month at prices which have been settled for the rest of the year. The action which laborers are taking may be called conservative; but they are profiting by past experience, and are avoiding extreme demands. Employers are inclined to make concessions. The disposition to do so has conciliated the wage-workers in advance. Authorities who are qualified to speak for employers in several of the larger cities have recently given it as their opinion that moderate concessions, especially in the building trades, will avert a general strike. It is a little too soon to make such a positive statement. Great activity prevails among shops and manufacturing establishments of all kinds. In all sections of the country there is an abundance of work. Locomotive-builders are especially busy. The policy of the railroad companies to improve their properties has sent an immense amount of work into equipment-shops within the past month. The farmers, notwithstanding low prices, are active buyers of implements, and a much greater agricultural area will be cultivated this year than last. After a score of ineffectual efforts the Northwestern railroad-managers think they have hit upon a plan to say how traffic shall be divided, and to agree upon the prices that shall be paid for railroad services. In the lumber trade hemlock and yellow pine have been advanced in primary markets, and the mild winter will somewhat lessen the supply from Maine and Michigan sources. In the coal trade prices have been cut from 10 to 40 cents per ton on coal sold in large quantities in Eastern markets. In Western markets no reductions have been made, as the development of new industries there about keeps pace with the increased supply. The multiplication of new industrial enterprises in the South continues without abatement, and Northern capital, which has been so well compensated in that section, is still catching at every attractive opportunity offered.

S. J. Parkhill & Co., Printers, Boston.



DESIGN FOR PRESBYTERIAN CHURCH MEMPHIS TENN.
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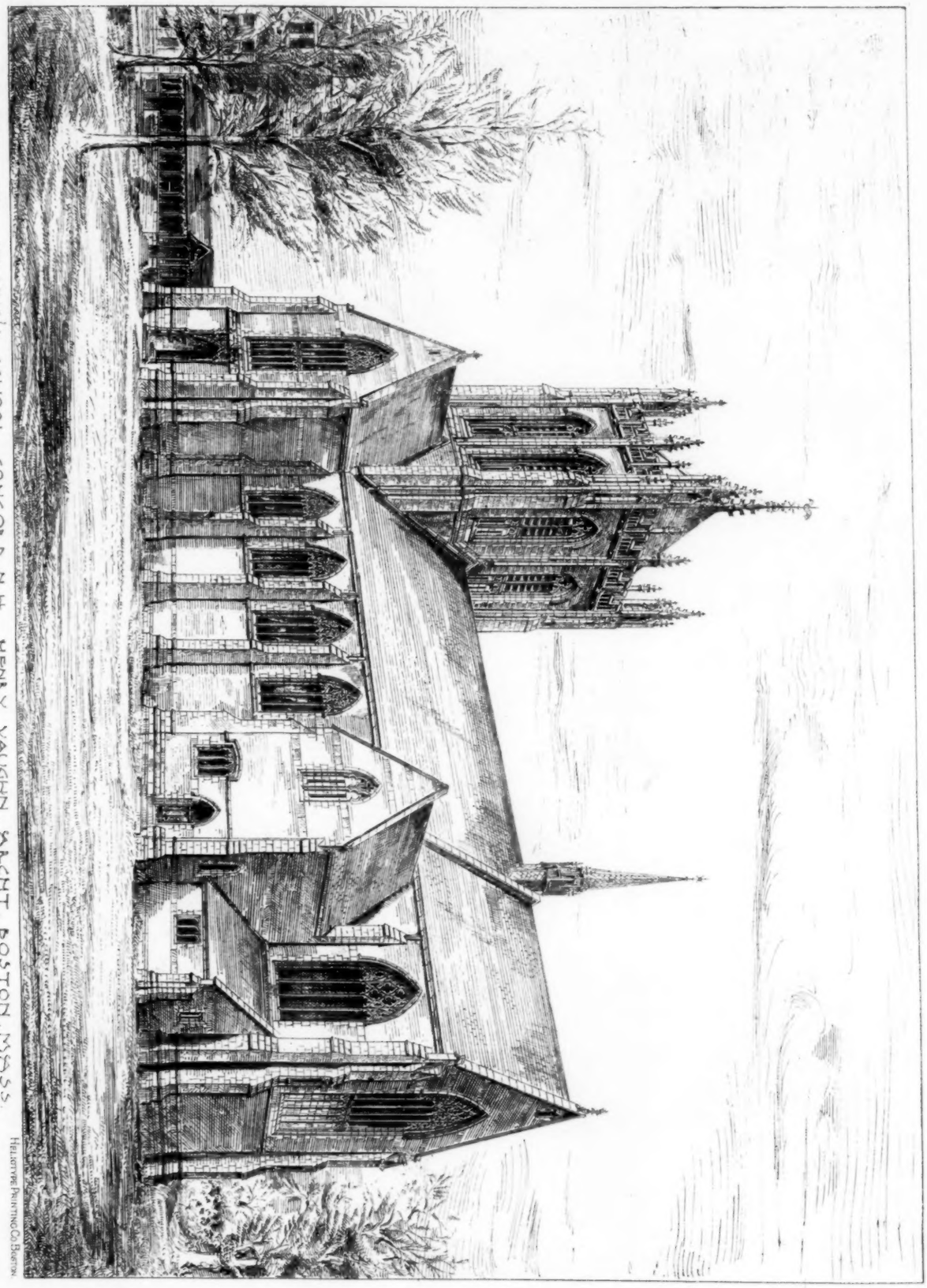

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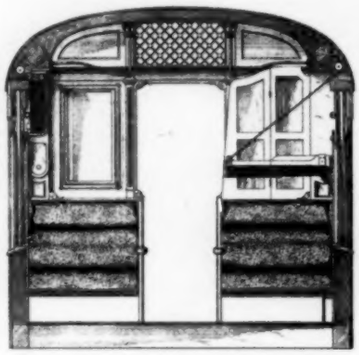
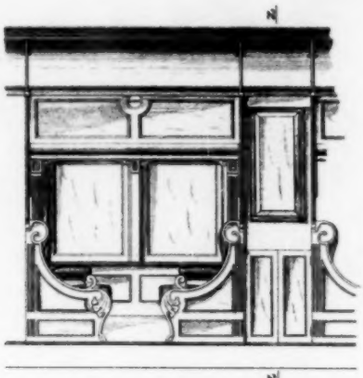
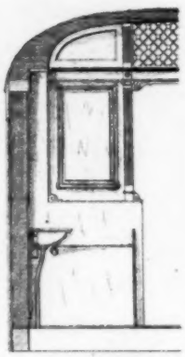


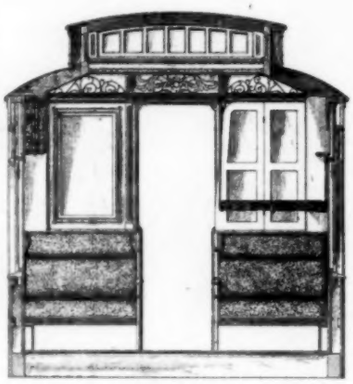
— Cross Section of Car at Y-Y —
Showing Berths in Position



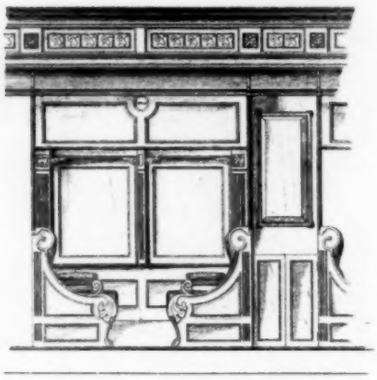
— Side Elevation of Car —
Showing Alcove & Upper Berth closed



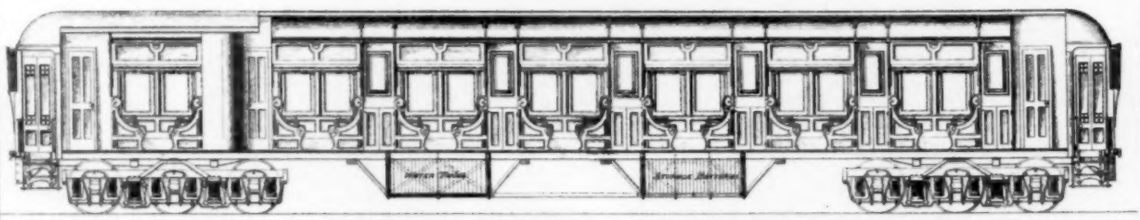
— Cross Section at Z-Z —
Through Alcove



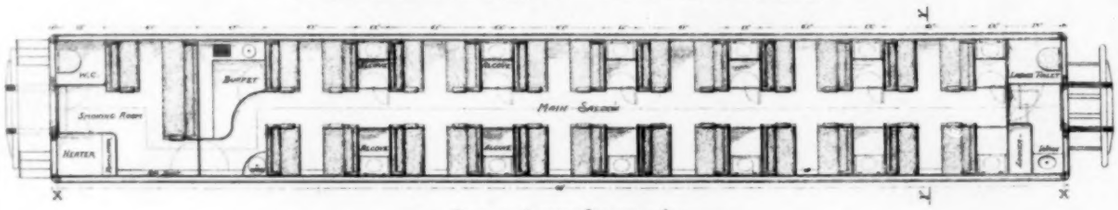
— Cross Section of Deck Roof Car —
Showing Berths in Position



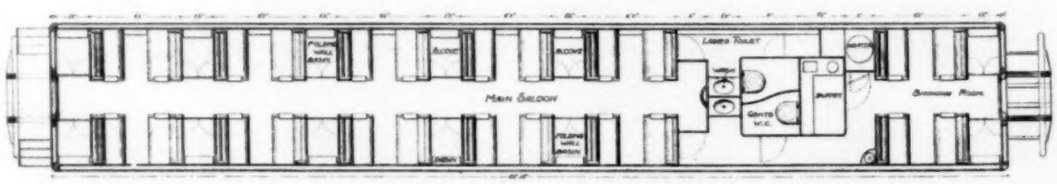
— Side Elevation of Deck Roof Car —
Showing Alcove & Upper Berth closed



— Longitudinal Section of Car through Line X-X showing Interior Finish —



— Plan of Alcove Sleeping Car —



— Plan with Noval Toilet Arrangement —

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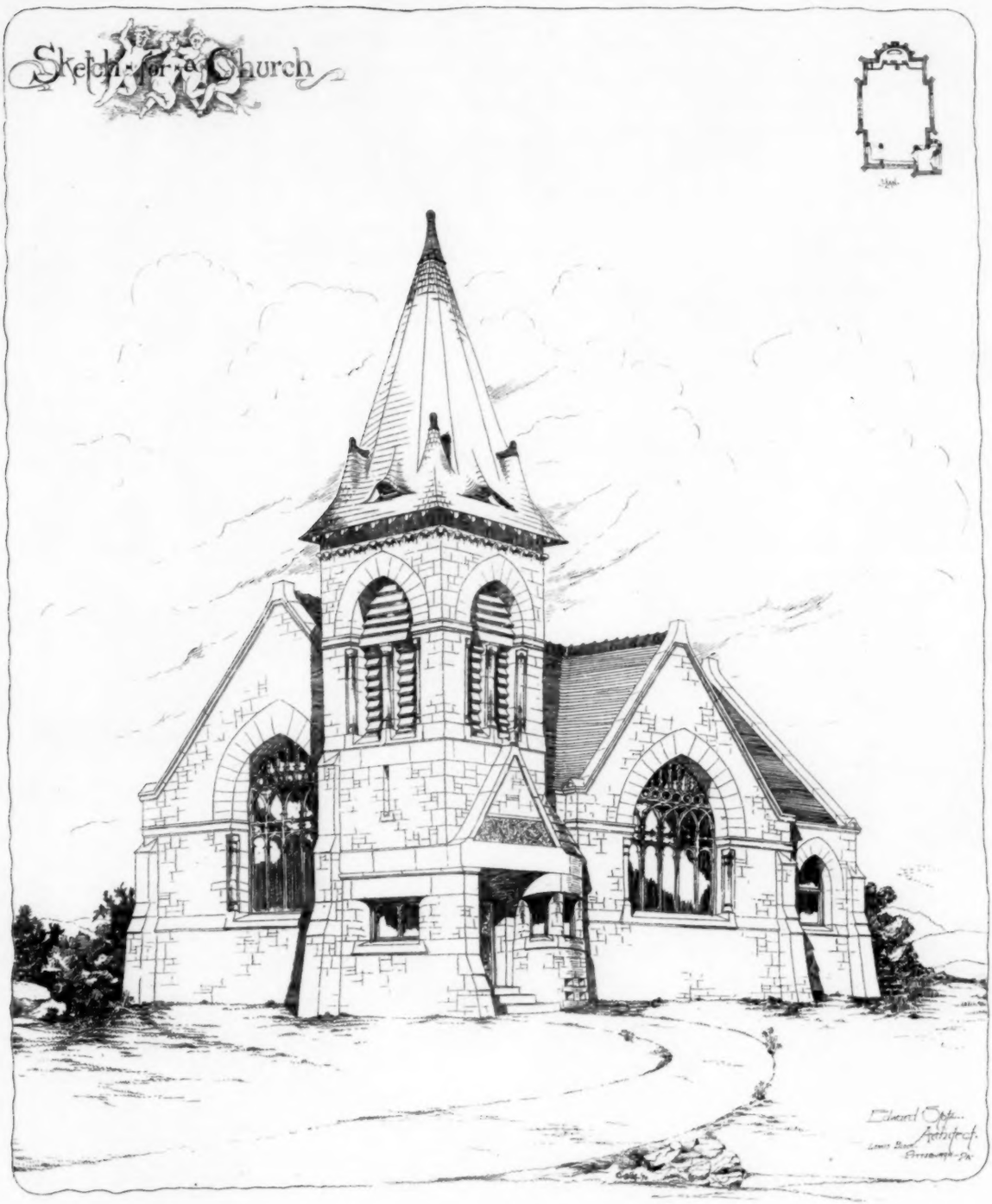
Sketch for a Church



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