THE CITY OF THE DEAD.

POMPEII, the buried city, whose remains are turned up, two thousand years after being overwhelmed by burning lava from Mount Vesuvius, is situated in the Neopolitan territory. It is less than two miles in circumference; and in this narrow compass of its walls, are to be found all of luxury, that man, in his most ambitious mood, can look for. Stores of glittering showiness, dwellings of luxuriant affluence, and public buildings, that in their architecture are superb, even in our day of splendid revivals.

Although this gaudy little city belonged, at its destruction, to the Roman Empire, yet was it eminently Grecian in its origin, and its style of architecture. The figures painted on its buildings are all dressed in the Greek *pallium:* the Roman *toga* is never seen. The order of their peristyles is the Greek Doric, so very different from the Roman model of that order. The many terraces are invariably Greek, in their design, as are the saloons, theatre, forum, circus, and the palaces. All of these are *petite* in scale, but exquisite in taste.

In the suburbs of Pompeii are to be seen the remains of villas, of which that of Diomedes is far the finest. From the examples here left to us, we may learn the amount of splendor in which the citizens of Pompeii lived; and estimate, at the same time, by a contrast with our own style, the comforts, or discomforts, which were theirs.

The want of glass left their gorgeously-furnished chambers in darkness; and the absence of all ideas of chimneys compelled them to use the comfortless brazier, with its sickening fumes of burning charcoal.

In their domestic life, then, the Pompeiians had not, with all their wealth and magnificence, the real luxuries, which we of this age of the world enjoy. The villa of Diomedes, to which we have alluded, may be taken as a sample, being the finest of the suburban residences of Pompeii, having three stories; whereas most of the other houses had only one. It shows the double life of those easy people, which was at once public and private. The public part is composed of the vestibule, and the *atrium*, which comprehended, nearly always in the same order, the court, the audience-room, the wings, and the corridors. The private part contained the bed-rooms, the dining-room, the sitting-rooms, the picture-gallery, the library, the baths, the parlor, and the court, set out with flowers and shrubs. All these apartments were ranged round the peristyle. Most of the small rooms, for private use, received no light, but from over the door; had no fire-places; and were very far from being comfortable.

It is evident, from the inconvenience of these rooms, that the life of the inhabitants of Pompeii was chiefly out of doors, and public; and, that, except at night and their principal meals, which were towards the evening, they passed nearly all their time at the Forum, or under the porticoes. The *atrium*, even of the house, was a kind of inner forum, in which they received their great friends and their dependents; and where they continued to live in the open air. The home of the English, the ingle of the Scotch, the *coin du feu* of the French, or the fireside of the Americans, was totally unknown to them.

In almost every house, there is some difference, in detail, from the rest; but the principal outline of the plan is the same in all. In every one, you find the hall, the tablinum, and the peristyle, communicating with each other. In all you find the walls richly painted, and with all the evidence of a people fond of the refining elegance of life.

The purity of taste of the Pompeiians in decoration, is, however, questionable. They were fond of the gaudiest colors, and fantastic designs. They often painted half of their columns a bright red, leaving the rest uncolored.

The apartments appropriated to sleep were generally so diminutive, that few, who have not seen their bed-chambers, even in the gayest mansions, can form any notion of the petty pigeon-holes—resembling nothing modern so much as the contracted bed-rooms of ocean-beach hotels—in which the citizens of Pompeii evidently thought it desirable to pass the night. The bed, in fact, with the ancients, was not that grave, serious, and important part of domestic mysteries, which it is with us. The couch itself was like a very narrow and small sofa, light enough to be transported easily, by the occupant himself. "Take up thy bed and walk," was, as Sir William Gell observes, no metaphorical expression. By the patile vases, found in their tombs, we are informed, that they had dinner-beds, of the earliest Asiatic fashion; tables of citron wood, delicately inlaid, and cærulean chairs, which Livy says were afterwards introduced into Rome.

They had flower-gardens attached to their houses; and where the latter were small, the walls were frequently tinted, to deceive the eye as to their extent, imitating trees, birds, temples, &c., in perspective; a monstrous delusion, which the graceful pedantry of Pliny himself adopted, with a complacent pride in its ingenuity; although, in this, he only paraded and praised a falsehood.

The Pompeiians, like the Genoese, had terrace-gardens on some of their houses. Such was that lively and luxurious city of the living—two thousand years ago—which, by a dire catastrophe, has been transformed into THE CITY OF THE DEAD.

ORNAMENTATION
FOR LOOKING-GLASS AND PICTURE FRAMES.

THE progress of art and science within the last quarter of a century is, perhaps, more marked than at any other period of the world's history. In their application to manifold utilitarian purposes, we question whether they have bestowed more real benefits upon mankind, than those developed by their association with the various branches of mechanism. And when we add to these agencies a new-born genius for invention, it is not surprising that the Patent Office is overburdened with business. The multiplicity of patents, accumulating each year, attests the rapid advance we are making in those facilities which lighten the burden of labor, and contribute largely to the wealth of the country. Machinery, at first imperfect, and managed with difficulty, has been so improved as to meet the highest expectations of the inventor; opening a wider field for capital, and extending the area of industry to the last footprint of civilization.

In all mechanical branches, a most radical change has been effected. There is scarcely an occupation pursued, in which the operative produces the same article by the same process adopted a few years since. Old men will tell you, that the most finished workman of the present day, would have proved wholly incompetent at one time to follow his occupation, and effect like results, with the implements then in use. We need only visit any workshop or manufactory to verify these remarks. For instance, how would it be possible to satisfy the cravings for mental food, did society depend upon the old process for printing books and newspapers? And if we

come down to the simple article of matches, housekeepers would still have recourse to the old tinder-box, with flint and steel, were it not for the rapid advances we have made, and the cultivation of those intellectual attainments which project and perfect improvements in tools and machinery.

We must admit, however, that while art and science have taken by the hand, and led forward, almost every branch of mechanism, that of ORNAMENTATION was long neglected, and left to pursue the old beaten track, far in the rear of others. And yet, no more useful—no more necessary—convenience pertains to home comfort. From the building of Solomon's Temple, to the present time, ornamentation has been inseparable from every ancient or modern structure of note. The humblest cot, the proudest mansion, the largest hall, are alike incomplete without its aid. To the critical eye, a bird without feathers, an animal without hair, or a man without apparel, would be no more repulsive, than a house destitute of ornaments, or those pleasing reliefs executed by the carver's handiwork.

Within the last twenty years, much more attention has been paid to this art than formerly. The many new styles of architecture, and the great competition has brought out a proportionate number of new ornamental patterns. Architects have, of late, given more attention to the *effect* they produce, and have become more earnest in their efforts to establish a harmony in their application. A correct taste is as essential in this department, as that required to finish a lady's toilette. There is a certain standard of grace and beauty to be attained with one as well as with the other.

One great improvement in ornamentation, may be attributed to the Daguerrean and the photographic arts. It is needless to say, that looking-glass and picture-frames are an important branch of the carving business. The various devices required by popular taste for these ornaments, created an extensive demand, and the improvements leading to increased facilities for taking "sun-pictures" of the "human face divine," of all sizes, increased that demand. Again, the inventive genius of the age was taxed to meet it, and not in vain. The superior style and finish of every description of moulding is apparent to every observer. This has been brought about by the introduction of machinery adapted to the purpose, without which, it would be almost impossible to satisfy the wants of the public. In fact, the absence of these facilities would, ere this, have placed these luxuries (for such we consider them) beyond the reach of all persons of moderate means; but now their cheapness renders them accessible to all.

A short history of the rise and progress of Ornamentation, and how it obtained its present perfection, may not be uninteresting to the readers of THE ARCHITECTURAL REVIEW AND AMERICAN BUILDERS' JOURNAL—the writer naturally supposing, that the patrons of that periodical take an equal interest, with himself, in all that develops the intellectual and material resources of the country.

Up to 1848, it was the custom to have workshops in the rear of looking-glass and picture-frame stores; where mouldings were worked out of the pine lumber by hand; using a plane and a few other tools. This was a distinct mechanical branch, which gave employment to quite a large number of workmen; and apprentices were regularly indentured to learn the trade. The frames and moulding were whitened by hand; and the preparation for gilding was considered quite a difficult task. It was necessary to apply several coats of this preparation to get a sufficient body to resist the burnishing, and to prevent its having a damaging effect on the gold-leaf. Pumice-stone, of reversed shape to the members, was used to

smooth the coating; and then scrapers, of reversed shape, of wood or iron, were used to remove the sediment made by the pumice-stone. The moulding was then dried, and pumice-stone again applied, with water, to make a still smoother surface. After this it was rubbed down with cotton or linen rags, saturated in water, and fine sand-paper applied to it.

It follows, of course, that in proportion to the number of fine members on the moulding; greater difficulty was experienced in making a proper finish. Some of them were worked out by moulding-planes; and, in those of large size, it required two hands to work those planes. The whole operation necessary to complete the article was slow and tedious; and required a care and precision, the least variation from which, would surely result in a "spoiled job."

About the year 1849, a machine was invented and constructed, which was designed to supersede a great portion of handwork. It was a carriage, to which the moulding was fastened, and reciprocated—the planes holding fast the moulding in perpendicular action. This improvement proved to be a saving of about 75 per cent. over the old hand process. The inventor was thus enabled to supply the trade at cheaper rates than they could possibly be made; and, in the course of two or three years, he built up an extensive business, because he was the first, and only one to sell fine picture and glass frame mouldings at much reduced rates.

Soon after this, another machine, known as the Woodworth Rotary Plane, which had been used a number of years for planing flooring-boards only, was so improved as to be adapted to working out mouldings. On this, 4,000 feet of moulding could be executed, in the same space of time that 150 feet could be finished by hand. This invention was so successful, that it soon came into general use, and entirely abolished all hand-work, as far as fine work was concerned. This new facility naturally disturbed the existing relations between employers and journeymen; and left the latter, for a time, without work; but many of them commenced business for themselves, by procuring the pine mouldings from the factories, and finishing the work; thus saving much labor, and the various costly planes, required to work out the different patterns then in use. This new turn of affairs allayed the wide-spread panic among the journeymen; who now regarded what they at one time esteemed a misfortune, a blessing in disguise.

But, too soon for them, they were destined to be jostled from this condition of content by another improvement for finishing the work. In 1851, a machine was invented for enameling mouldings, which produced a most sudden and complete revolution in the manufacture of picture and looking-glass frames. The importance of this invention can scarcely be estimated. It required well-skilled labor, by hand, to accomplish, with the closest application, but a mere fractional part of what this machine could finish in the same space of time. With this new facility a green hand, in the course of a few months, could execute a wider range of patterns, and of far superior finish. In fact, it could turn out a greater variety of work, with a neatness of execution that could not be approached by hand.

The latter machine became more widely known to the trade during the years 1855–6; and its power and adaptation to the business produced a profound sensation. Capitalists, without the remotest knowledge of mechanism—certainly wholly ignorant of this branch of it—at once invested their capital, and started large establishments; while those who had devoted a life-long servitude to the calling, and who were unable to procure the means to purchase a machine, were forced to abandon it. Journeymen, who had prospered, and

were steadily employed under the old order of things, were driven to other channels of labor. We may say, that this sudden change brought upon the latter many privations, and caused no little suffering, because it effectually deprived them of employment, until opportunity opened up other pursuits. These are calamities, however, following the introduction of almost all machinery; but time eventually establishes an equilibrium, and all share, to a greater or less extent, the benefit of such improvements.

As the merits of this invention became appreciated, and its efficiency established beyond all cavil, no little excitement was created throughout the country. Large factories were established in the principal cities for the purpose of supplying dealers with moulding and frames. Steam-power was applied to the machines, and the article was furnished at a still greater reduction in price, while new styles and varieties of patterns were constantly multiplying. This reduction created a demand from a large portion of the population, whose limited means heretofore prevented them from patronizing dealers in these articles. Now, however, they were placed within the reach of all, and it is not surprising that the manufactories were driven to their utmost capacity, nor that new establishments should spring up in every direction.

With this increase, came a demand for various styles of crooked work, such as oval, elliptic, and arch-top frames. The science and skill of the trade became centred in efforts to reach a higher degree of perfection, and each year brought its improvements in machinery, as well as in new styles and patterns of work.

From 1850 to 1860, a number of patents were issued for new inventions, with the view of adding still greater facilities to those already in existence. Some of these were taken out in other countries; and, up to the present period, manufacturers are striving to excel each other by experimenting and inventing with the hope of surpassing all former efforts. And yet, in view of the present most complete process, it seems almost impossible that it should be excelled. When we reflect that a frame which cost in 1850 five dollars, can now be purchased for forty cents, one would suppose that ambition and enterprise in this business had found its limit.

Up to 1855, large quantities of moulding, and other picture-frame work, were imported from abroad, because of the cheapness of foreign labor. This, for a time, caused quite a depletion of the home trade; but when the inventions we have alluded to were introduced, the reaction was so complete, as to wholly shut out foreign competition. In 1860, the American manufacturers commenced sending goods, in considerable quantities, back to their former competitors; and, from that time to this, we have continued to supply them to some extent. The exportation to Europe of mouldings and frame work, now constitutes an important trade item.

To counteract this dependence upon American manufactures, a number of foreign dealers came to this country and purchased some of our patents for the necessary machinery to manufacture it there. This has not, however, lessened the foreign demand; for the reduction which followed improved machinery, has placed the article within the reach of the European masses as it did of those in this country. Indeed, the demand at home and abroad keeps pace with the increased facilities for manufacturing; and it is reasonable to suppose that public taste will not suffer the least abatement for many years to come, if ever.

We regard the science of ornamentation as practical in its uses, and as permanent in purpose, as any other that gives comfort or lends refinement to our race, and contributes no little to the social elevation of society. It combines

utility with luxury; gives grace and harmony to the household, opens a broad channel of enterprise, and adds largely to the industrial interests of the country. The architect, the builder, the cabinet-maker, the upholsterer, and every housekeeper in the land, will agree with us, that it is also an evidence of the progress of civilization; for it shows the rapid advance we have made in all that adorns and beautifies.

It is to be regretted, that these ornaments, which give such a splendid finish to the exterior and interior of buildings, are used too sparingly, and that such as are used, are not always properly adjusted, or tastefully applied. To the critical eye, the present mode of furnishing costly dwellings is much at fault. But little or no attention is paid to the appearance or style of the furniture. Particularly is this the case with parlors containing large and costly mirrors, portraits, or choice pictures. The frames are seldom proportioned to the size, and too often lack the necessary ornaments to harmonize with the furniture or the finish of the room. A certain degree of *consistency* in the apportionment of ornaments on frames is necessary to produce a proper effect, and present an imposing appearance. All this can be attained, without excess of display, or detracting from the symmetrical richness and gorgeousness of the whole.

In regard to looking-glass frames, especially, there seems to be a defect of judgment, if not a want of information, as to their importance in giving a finish to the homestead. How often in dwellings with a neat and beautiful exterior, and surroundings to correspond, all denoting taste and elegance, is the whole effect almost destroyed, certainly made any thing but attractive, by the want of judgment in interior decoration. It is often the case that apartments are richly furnished, but the glass frames, cornices, &c., are entirely at variance with the style observed in other portions of the furniture, and unsuited to the size of the room, or the space the glass is to occupy. The result is, that however handsome the style of each, neither can look well, because they do not match, and this mars the harmony of all. It is, in point of comparison, like driving a pair of horses, one a heavy draught animal, and the other a slender, wiry, race-horse. The contrast is equally marked in both cases.

The consequence of failing to give this subject proper consideration is, that after investing a large amount of money for the purpose of having handsomely-furnished apartments, you are disappointed, and an unsatisfactory combination becomes more apparent every day Now, it is an easy matter to avoid all this trouble and vexation. After furnishing the apartment to suit the taste, with the exception of looking-glasses, cornices, &c., it would be well to visit an establishment where the manufacture of the last-named articles is made a distinct business, and select, from their many designs, such as are suitable for, and in harmony with, the furniture already purchased. This is the most certain plan of securing ornaments that will please the most critical eye, and be in keeping with both the exterior and interior of the mansion.

In reviewing the rise and progress of ornamentation, it is interesting to compare the past with the present. When we go back to 1850, we find one small shop in Canterbury, Orange county, New York, running, by water-power, the first machine ever used for this work, and employing some five or six hands. This was the only source, at that time, from which the trade of the country drew its supplies There are now about fifty large establishments, employing from fifty to one hundred hands each, with perhaps as many more of lesser capacity.

Among the former, we will mention the Looking-Glass and Picture-Frame Manufactory of Messrs. Hall & Garrison, 928, 930, and 931 and 932 North Third

street, Philadelphia, occupying buildings on both sides of the street. These extensive works contain the most useful and latest improved machinery for completing all styles and patterns. Much of it is of their own invention, for which they have secured patents. This firm has a large lumber yard attached, which is generally stocked with about 1,000,000 feet of well-seasoned walnut and pine lumber.

It became a necessity with us to visit this, or some other establishment of the kind, in order to realize, to the fullest extent, the progress made in this particular branch of business; and we are much indebted to the proprietors and gentlemanly employés, for their kindness in answering questions and giving explanations, and the promptness with which they furnished the writer a number of historical incidents connected with the trade. After looking over the attractions that meet the eye at every turn in this vast museum of art, we could scarcely restrain a smile, as our mind reverted to the little Canterbury shop.

It is proper to remark, that one of the above firm may be justly styled a pioneer in the great revolution achieved in ornamentation, as he was one of the first to apply machinery to the business, run by motive power. His priority in preparing moulding with a practical machine, and in moulding the wood by a similar process, is conceded. He was one of the few Canterbury operatives already spoken of, and has applied himself closely to the business ever since.

This firm is changing their style of ornamenting, with the view of attaining greater durability, while maintaining the same, if not a more skilful finish. For some time they used what is known in the trade as Composition or Compo, for making ornaments, which were pressed in moulds made of box or apple wood. It is needless to say that these moulds proved to be very expensive implements, because it required an immense number of different patterns to make the various styles demanded by a great diversity of taste. In fact, every enterprising firm invests several thousand dollars each year, for new moulds; and, as the fashions change with time, many are thrown entirely out of use each year to give place to others.

It was discovered that ornaments made of compo did not retain, for any length of time, their original appearance; for they exhibit, after a few years, evidence of decay, and begin to crack and crumble in small pieces,—thus destroying the appearance of the once atttractive frame. This defect becomes more apparent on large ornaments. To obviate this great disadvantage, the firm above alluded to, resorted to the use of a material known as Carton Papier, which is moulded in piece moulds made of Plaster Paris. This is an old method revived, but greatly improved, for which Messrs. Hall & Garrison have the patent, and theirs is the only establishment in which it is used. Its utility is enhanced also, from the fact that the patentee is employed by them.

These ornaments, improved as they are, will last longer, and prove more durable, than the wood itself. Indeed, it may safely be asserted that ornaments made of carton papier maintain a great superiority over compo, or any other material, known to the trade. It cannot crack, or separate, like the latter, and the mode of making ornaments out of the former, enables the operator to give the design all the relief and finish necessary to complete a handsome article. This last method of making ornaments out of carton papier will no doubt become generally used in the course of a few years, for we cannot see how it is possible to discover a more suitable material, or a better method for making the innumerable variety of ornaments now employed, as well as the numerous styles that will be designed in the future.

At one period, ornaments made of lead, it was thought, would answer every purpose. The experiment was tried, and proved a failure. The principal difficulty was caused by the gold losing its brightness, when placed on a leaden surface. At all events, it soon assumed a dull, lustreless appearance, and its use was totally abandoned. We learn that as much as 500 pounds of lead have been used in ornamenting one frame. This extravagant use of the metal would be sufficient to condemn its availability.

There was also a large amount of capital wasted in attempts to make this style of moulds out of brass; but little, if any success rewarded the efforts of those who made the experiment; and whatever may have been accomplished by this method, must become unavailable in a very short time.

Before we close this article, we would suggest to the press of the country the propriety of giving wide publicity to the intrinsic merits of Carton Papier as the best and most durable substance from which to obtain ornamentation more perfect and lasting. The gentlemen we have alluded to have turned their whole attention to this article; and in their issue of new patterns and designs, have kept in view the sole use of carton papier. As the public become familiar with this improvement, the old style of ornamentation will gradually become obsolete; for a handsome looking-glass is quite a costly article of furniture, and those inserted in frames of attractive style, ornamented with this durable material, will be generally preferred.

Latterly, solid black walnut has come into very general use in the manufacture of picture frames. This is relieved in some degree with gold, and presents a very pretty appearance.

We noticed at the establishment of Messrs. Hall & Garrison, a new machine, which they have recently invented, for making and preparing an inside, designed to be gilt and placed in front of a Walnut oval. It is well adapted to the purpose, and will no doubt be generally adopted by the trade as the most convenient facility for relieving the walnut, and giving a tasteful finish to the frame.

Cutting Timber to Last.—At the New York Farmers' Club, the question was discussed as to the best time to cut timber for building purposes, in order that it may last a long time without decay. Mr. Skinner, who has, perhaps, the largest experience in this matter of any one in the county, said he would always cut when the timber is frozen. He was aware that other seasons of the year are recommended. He had tried all seasons, and with a number of species of wood, and no timber lasted so well as that cut in winter when frozen. He said a hemlock stick used as a stringer for bridges will last longer when the bark is left on. He had observed it often, and gave as a reason, that the bark kept the wood moist. He thought the best timber for sills, or building purposes, is red elm, next in order is oak, white elm, or red beech. For pins, the raves of wood-sleds, and bolsters to wagons, there is no timber to be preferred to red elm.

Measure of an Acre.—The Maryland Farmer gives the following table of distances, by which it says an exact acre can be found:

5	yards	wide	by	968	yards	long,	contains	1 acre.
10	"	"	"	484	"	"	"	1 acre.
20	"	"	"	242	"	"	"	1 acre.
40	"	"	"	121	"	"	"	1 acre.
80	"	"	"	60½	"	"	"	1 acre.
70	"	"	"	69 1-7	"	"	"	1 acre.
220	feet	"	"	198	feet	"	"	1 acre.
440	"	"	"	99	"	"	"	1 acre.
110	"	"	"	360	"	"	"	1 acre.
60	"	"	"	726	"	"	"	1 acre.
120	"	"	"	363	"	"	"	1 acre.
240	"	"	"	181½	"	"	"	1 acre.

Through the intervention of M. Magne, Minister of Finances, the sum of 50,000fr. has been granted for the restoration of the Cathedral of Périgueux.