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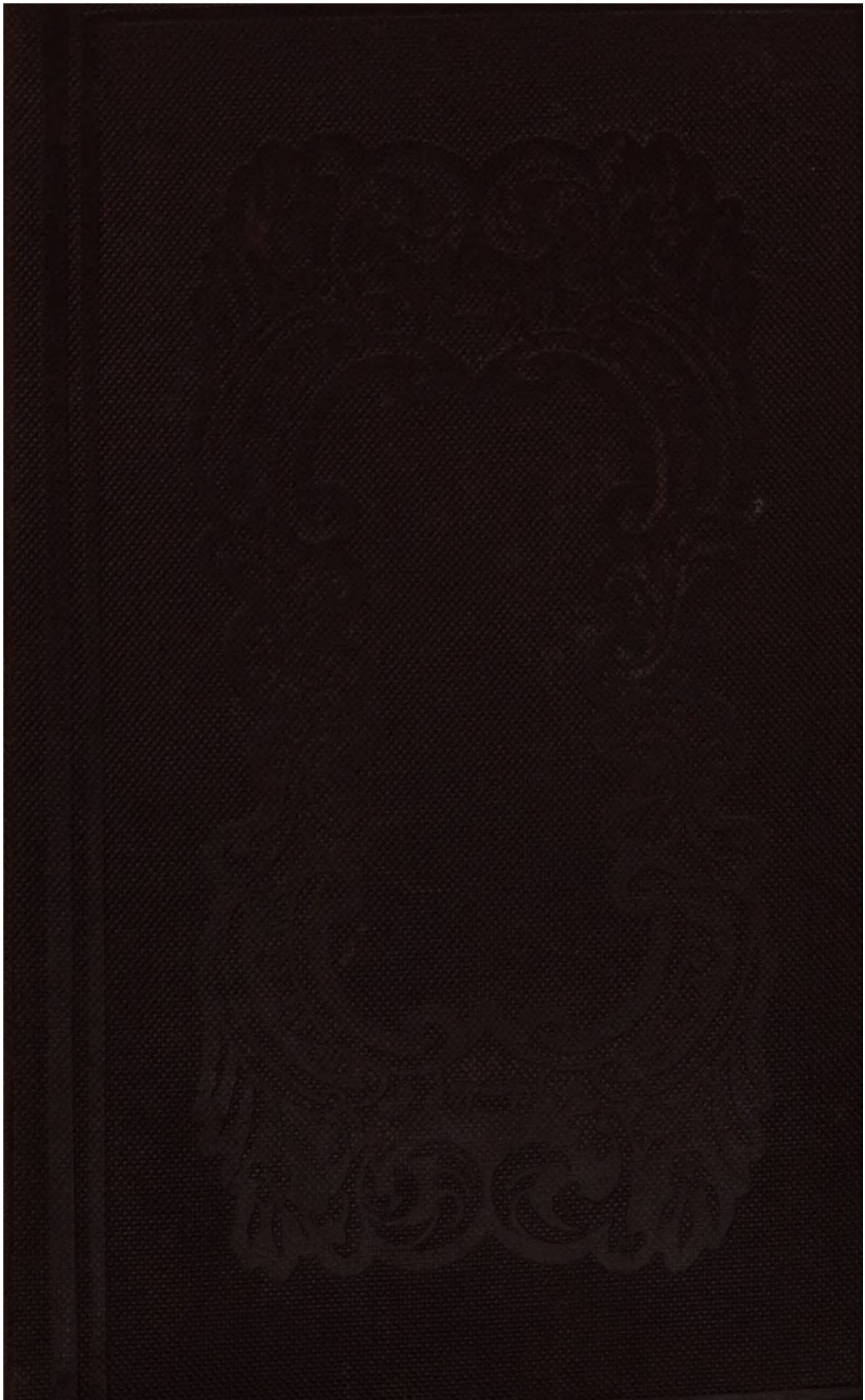
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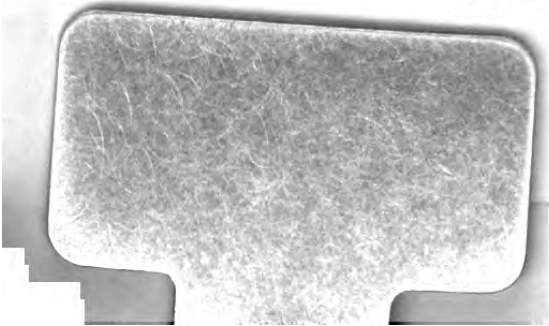


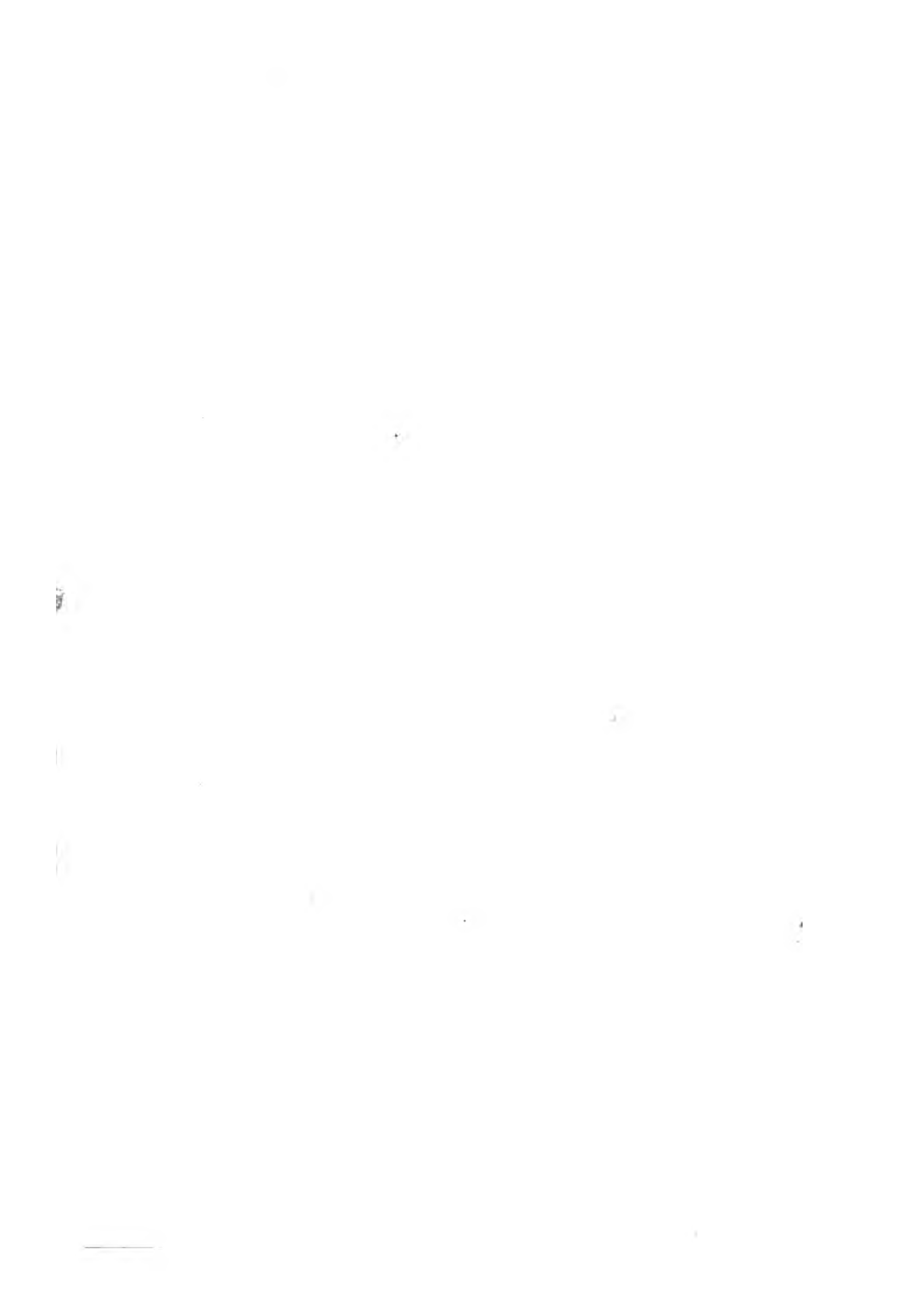
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POMPEII.

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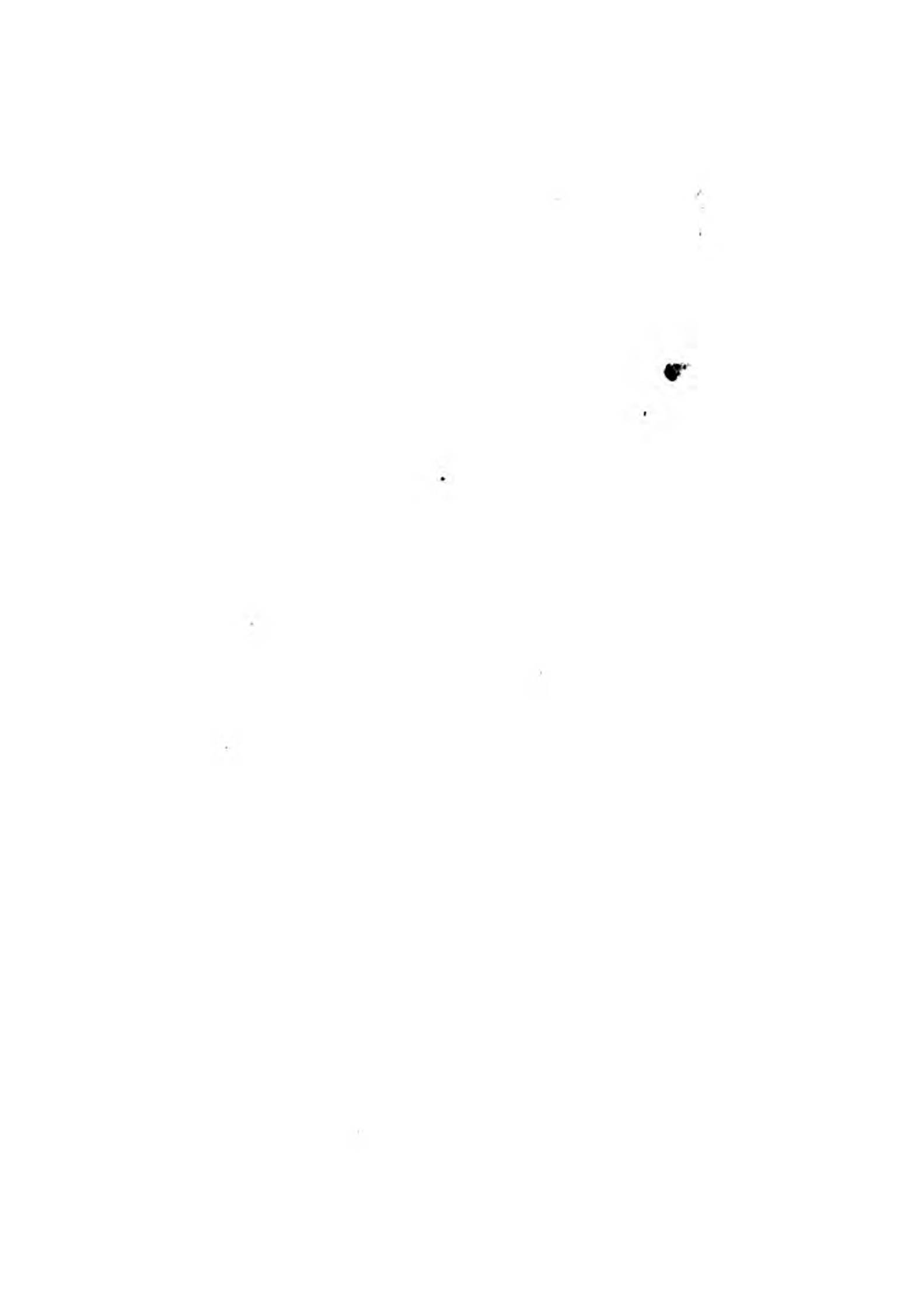
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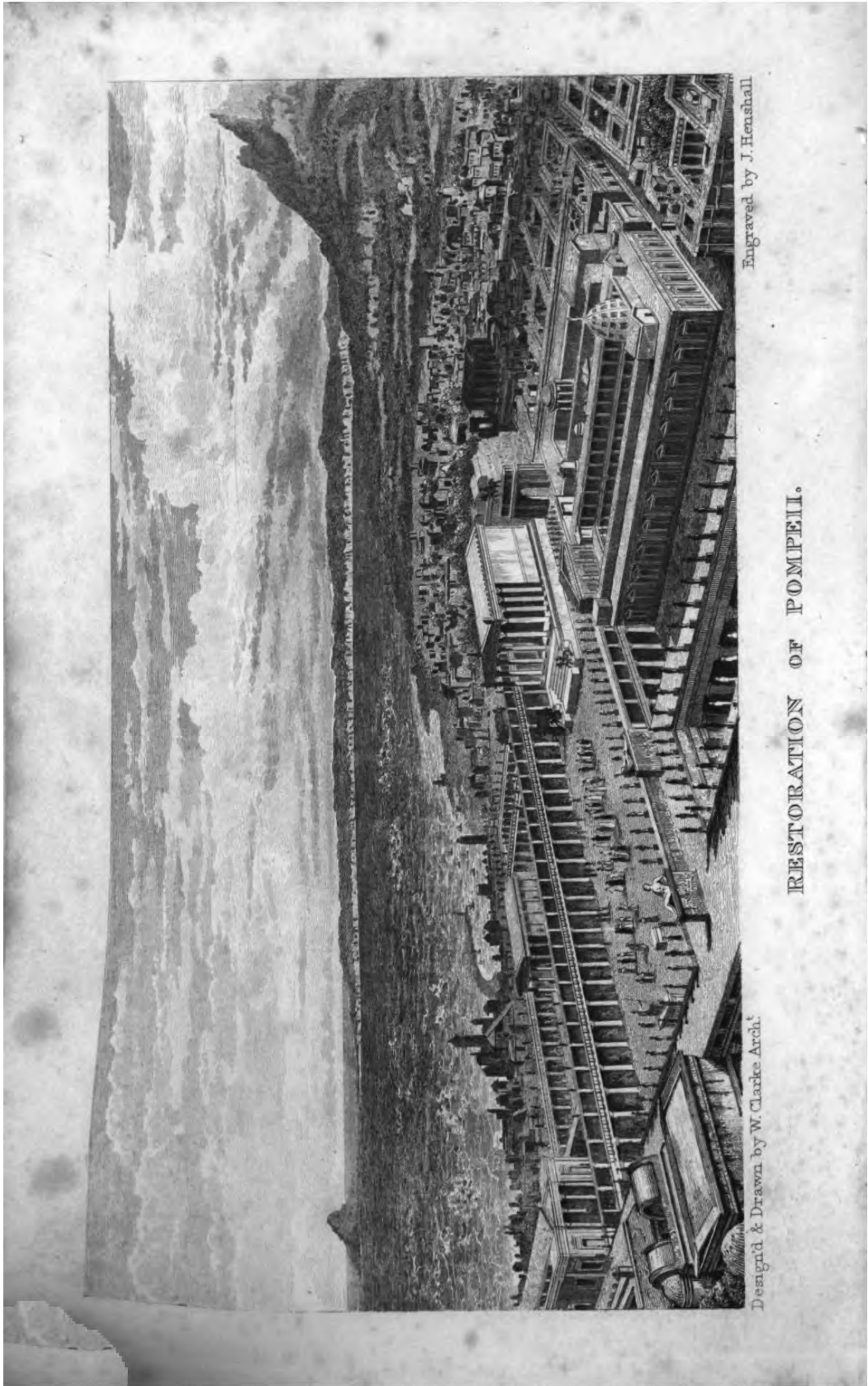
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RESTORATION OF POMPEII.

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1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for consistent data collection procedures and the use of advanced analytical techniques to derive meaningful insights from the data.

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4. The fourth part of the document addresses the challenges associated with data management, such as data quality, security, and privacy. It provides strategies to mitigate these risks and ensure that the data remains reliable and secure throughout its lifecycle.

5. The fifth part of the document concludes by summarizing the key findings and recommendations. It stresses the importance of ongoing monitoring and evaluation to ensure that the data management processes remain effective and aligned with the organization's goals.

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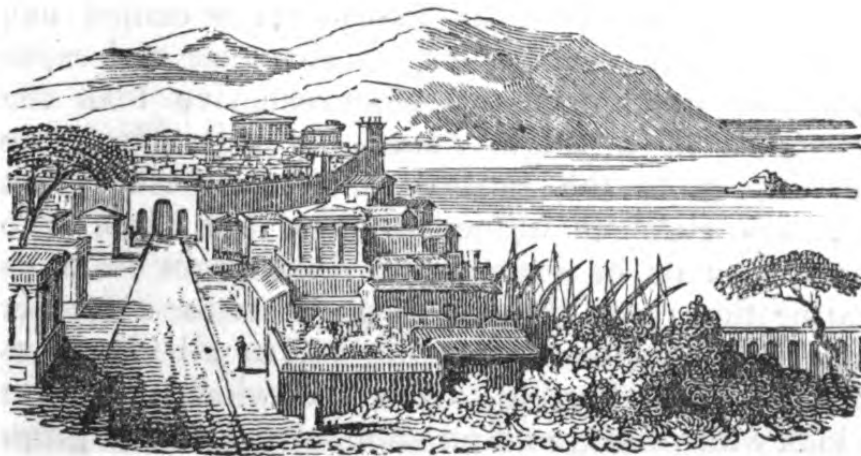
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POMPEII.



Vignette from Mazois' view of the city at the gate of Herculaneum.

INTRODUCTION.

THE minute studies of antiquaries have been a very favourite subject of ridicule with those who have not followed them—sometimes with, sometimes without reason. In this, as in every other pursuit, men are apt to forget the value of the object in the pleasure of the chase, and run down some incomprehensible or untenable theory about some matter that never was and never will be of importance, with a zeal and intensity of purpose which might have been better bestowed upon a better end. But notwithstanding the many jokes, good and bad, deserved and undeserved, which have been levelled at this branch of learning, it is one in which all inquiring minds (and no mind that is not inquiring can be worth much),

not entirely engrossed by some favourite occupation, will feel more or less of interest. If we could look into the future, the past would probably lose much of its importance in our eyes ; and our curiosity would be much more strongly excited to ascertain the state of the world a thousand years hence, than its state a thousand years ago. But this power is denied us ; and to form an estimate of the character and capabilities of mankind more comprehensive than the experience of a single generation can afford, we must apply to the retrospect of the past. Not that this curiosity influences none but those who might wish or be expected to draw profit from its gratification ; on the contrary, it seems a temper natural, in greater or less degree, to all alike, reflecting or unreflecting. It is that which causes us to look with pleasure on an antiquated town, to grope among ruins, even where there is evidently nothing to repay us for the dirt and trouble of the search, and generally, to invest every thing entirely out of date with a value which its original possessors would be much puzzled to understand.

But time works constantly, as well as slowly ; and therefore, however antiquated the appearance, and however old-fashioned and changeless the habits of any place or people may seem to be, they are sure to present a very imperfect type of what they were even a single century ago. We have often wished, in various parts of England, that we could recall for a moment the ancient aspect of the country ; reclothe the downs of Wiltshire with their native sward, and see them studded with tumuli and Druid temples, free and boundless as they extended a thousand years ago, before the devastations of the plough and Inclosure Acts ; recall the leafy honours of Nottinghamshire and Yorkshire, and repeople the neighbourhood of Sheffield and the Don with oaks instead of

steam-engine and manufactory chimneys; or renew the decayed splendour of those magnificent monasteries whose ruins still strike the beholder with admiration. If the romantic fictions of the middle ages could be realized, which tell of mirrors framed with magic art to represent what had formerly passed, or was passing, in distant parts of the earth, the happy discoverer might soon make his fortune in this age of exhibitions. What exhibition could be found more interesting than a camera-obscura, which should reflect past incidents of historical or private interest, and recall, with the vividness and minuteness of life, at least the external characteristics of long-past ages.

Such fancies are but idle speculations. The past can only be recalled by the imagination working upon such details as the pen or the pencil of contemporaries may have preserved; yet, in one single instance, the course of events has done more to preserve a living picture of a former age—one, too, in which the civilized world is deeply interested—than we could reasonably have hoped for. Deserted places are usually too much dilapidated to convey more than a very imperfect idea of the minutiae of their arrangement, or of the manners of their former occupiers: places which have been preserved by being inhabited, are, of necessity, changed more or less to suit the changing manners of those who tenant them. It was, therefore, matter of no ordinary interest when it was known that a buried Roman city had been discovered; a city overwhelmed and sealed up in the height of its prosperity, and preserved from the ravages of the barbarian conquerors of Italy, and the sacrilegious alterations and pillagings of modern hands. But the hopes which might reasonably have been formed upon the discovery of Herculaneum, at the beginning of the last century, were frustrated in great measure by the depth and hardness of the volcanic products

under which that city was buried. The process of clearing it was necessarily one of excavation, not of denudation ; and to avoid the labour of raising the quarried matter to the surface, from a depth of 70 or 80 feet, former excavations have been filled up with the rubbish of new excavations, and now the theatre is the only building open to inspection, and that an unsatisfactory and imperfect inspection by torch-light. Museums have been profusely enriched with various articles of use or luxury discovered at Herculaneum, which might serve to illustrate the Latin authors, and throw light upon the private life of Italy ; but no comprehensive view could be obtained, and consequently no new idea formed of the disposition and appearance of a Roman city. Fortunately, the disappointment was repaired by the discovery of Pompeii, a companion city overwhelmed in the great eruption of Vesuvius A. D. 79, together with Herculaneum, and destined to be the partner of its disinterment as well as its burial. There was, however, this difference in their fate—that, owing to its greater distance from the volcano, the former was not then and never has been, reached by the streams of lava which have successively flowed over Herculaneum and elevated the surface of the earth from 70 to 100 feet. Pompeii was buried by a shower of ashes, pumice, and stones, forming a bed of variable depth, but seldom exceeding 12 or 14 feet, loose and friable in texture, and therefore easily removed, so as completely to uncover and expose the subjacent buildings.

The upper stories of the houses, which appear to have consisted chiefly of wood, were either burnt by the red-hot stones ejected from Vesuvius, or broken down by the weight of matter collected on their roofs and floors. With this exception, we see a flourishing city in the very state in which it existed nearly eighteen centuries ago :—the buildings as they were originally

designed, not altered and patched to meet the exigencies of newer fashions; the paintings undimmed by the leaden touch of time; household furniture left in the confusion of use; articles, even of intrinsic value, abandoned in the hurry of escape, yet safe from the robber, or scattered about as they fell from the trembling hand, which could not pause or stoop for its most valuable possessions; and, in some instances, the bones of the inhabitants, bearing sad testimony to the suddenness and completeness of the calamity which overwhelmed them. "I noticed," says M. Simond, "a striking memorial of this mighty interruption in the Forum, opposite to the temple of Jupiter. A new altar of white marble, exquisitely beautiful, and apparently just out of the hands of the sculptor, had been erected there; an enclosure was building all round; the mortar, just dashed against the side of the wall, was but half spread out; you saw the long sliding stroke of the trowel about to return and obliterate its own track—but it never did return: the hand of the workman was suddenly arrested, and, after the lapse of 1800 years, the whole looks so fresh and new that you would almost swear the mason was only gone to his dinner, and about to come back immediately to smooth the roughness."

It is unnecessary to expatiate upon the interest of these discoveries: yet notwithstanding their interest the subject has been hardly accessible to the English reader. The excavations have been prosecuted to a considerable extent, since the elegant work of Sir W. Gell was published, which describes only the buildings, leaving untouched one interesting branch of inquiry connected with the numerous articles which have been found, throwing light upon the private life of the Italians in the first century. There are foreign works of great research and magnificence, but these, from their value, are only accessible

to a very small class of readers; and therefore little has been generally known of Pompeii, except what may be gathered from the short and scattered notices of travellers. This work is intended as an attempt to supply the deficiency. It is proposed, first, to give a detailed account of the ruins as they now exist, together with a description of their former state, as far as it can be made out; with occasional digressions upon points connected with the history or antiquities of the place, and notices of the most curious and important articles which have been discovered. The first volume will contain the public edifices, so far as they have yet been disinterred: the second will be devoted to the houses and private habits of their tenants.

The chief authorities which have been consulted, are—the great work of M. Mazois on Pompeii; the Museo Borbonico, a periodical work now in course of publication at Naples; Sir W. Gell's Pompeiana; and Donaldson's Pompeii. We have also had the advantage of numerous observations made on the spot by Mr. William Clarke, architect, by whom the materials for this work have been collected, and the drawings made, either from the originals or from plates in the above works.



Glass bottle. partially destroyed by the heat of the lava, found in Herculaneum.

CHAPTER I.

HISTORY OF VESUVIUS.

BEFORE commencing the account of Pompeii itself, it will not be out of place to give a short description of the ancient state of the neighbourhood in which it stood, together with a sketch of the history of Vesuvius.

The Bay of Naples, anciently called Crater (the Cup), was known to the ancients at an early period. The remarkable appearance of its shores struck their fancy; and they named them Phlegra, or Phlegræi Campi, Burnt Fields, from the traces of igneous action every where visible, and accounted for these natural appearances by the fabled battle between the giants and the gods, assisted by Hercules, in which the former were cast down and destroyed by Jupiter's thunderbolts. The earth, riven, scorched, and thunderstained, bore enduring witness to the destructive power of these weapons. Here was the celebrated lake Avernus, the mouth of hell, according to the Italian poets, over which no bird could complete its flight, but dropped, overcome by the sulphureous exhalations. This is one, probably, of that numerous tribe of legends which have been framed to fit or to explain a name. Its Greek name is Aornos, literally Birdless; its dreary and terror-striking appearance when its precipitous sides were thickly clothed with wood, suggested the notion that it was the opening of the nether world; hence the story of the fœtid atmosphere, and its deadly effects. Yet even here there may be some foundation of truth; for we have the authority of Sir William Hamilton for stating

that while wild fowl abound in other pools and lakes in this quarter, they shun Avernus, or pay it but a passing visit*. Diodorus derives the name of Phlegra from Vesuvius, which, he says, like Ætna, used to vomit fire, and still retains traces of its former eruptions †. He spoke from observation of the mountain, not from tradition, for tradition recorded no eruption previous to the Christian era; but he probably erred in the derivation of the name. Traces of volcanic action were as evident round Baiæ and Puteoli as on Vesuvius; and the ancients appear to have had some record of eruptions in this quarter, since they fabled that the giant Typhon, who threw stones to heaven with a loud noise, and from whose eyes and mouth fire proceeded, lay buried under the neighbouring island of Inarime or Pithecusa, now called Ischia ‡. A similar fable accounted for the eruptions of Ætna.

By turns a pitchy cloud she rolls on high,
 By turns hot embers from her entrails fly,
 And flakes of mounting flames, that lick the sky.
 Oft from her bowels massy rocks are thrown,
 And, shivered by the force, come piecemeal down.
 Oft liquid lakes of burning sulphur flow,
 Fed from the fiery springs that boil below.
 Enceladus, they say, transfixed by Jove,
 With blasted limbs came trembling from above;
 And where he fell the avenging father drew
 This blasted hill, and on his body threw.
 As often as he turns his weary sides
 He shakes the solid isle, and smoke the heavens hides.

DRYDEN, *Æn.* lib. iii. 572.

We need hardly say that the poets vary in these stories: Ovid places Typhon under Ætna.

* Campi Phlegræi. Mr. Lyell is also inclined to admit the story, and adduces instances of similar mephitic exhalations.

† iv. 22.

‡ Strabo, lib. v.

In the superstitions of the middle ages, Vesuvius assumed the character which had before been given to Avernus, and was regarded as the mouth of hell. Cardinal Damiano relates the following stories, in a letter addressed to Pope Nicholas II. "A servant of God dwelt alone, near Naples, on a lofty rock hard by the highway. As this man was singing hymns by night, he opened the window of his cell to observe the hour, when, lo, he saw passing many men, black as Æthiopians, driving a large troop of packhorses laden with hay; and he was anxious to ask who they were, and why they carried with them this fodder for cattle? And they answered, 'We are evil spirits, and this food which we prepare is not for flocks or herds, but to foment those fires which are kindled against men's souls; for we wait, first for Pandulphus, Prince of Capua, who now lies sick; and then for John, the captain of the garrison of Naples, who as yet is alive and well.' Then went that man of God to John, and related faithfully that which he had seen and heard. At that time the Emperor Otto II., being about to wage war on the Saracens, was journeying toward Calabria. John therefore answered, 'I must first go reverently and meet the Emperor, and take counsel with him concerning the state of this land. But after he is gone I promise to forsake the world, and to assume the monastic habit.' Moreover, to prove whether the priest's story were true, he sent one to Capua, who found Pandulphus dead; and John himself lived scarce fifteen days, dying before the Emperor reached those parts; upon whose death the mountain Vesuvius, from which hell often belches forth, broke out into flames, as might clearly be proved, because the hay which those demons got ready was nothing else than the fire of that fell conflagration prepared for these reprobate and wicked men; for as often as a reprobate rich man dies

in those parts, the fire is seen to burst from the above-named mountain, and such a mass of sulphureous resin flows from it as makes a torrent which by its downward impulse descends even to the sea. And in verity a former prince of Palermo once saw from a distance sulphureous pitchy flames burst out from Vesuvius, and said that surely some rich man was just about to die, and go down to hell. Alas for the blinded minds of evil men! That very night, as he lay regardless in bed, he breathed his last. There was also a Neapolitan priest, who wished to know more of things not lawful to be known, who, when that infernal pit belched flames more fiercely than usual, with presumptuous boldness resolved to visit it. So having solemnized the mass, he went on his way, armed, as it were, with the sacred vestments; but this rash inquirer, approaching nearer than men use to go, never reappeared, being unable to return. Another priest, who had left his mother sick at Beneventum, as he travelled through the bounds of Naples, and was intent upon the up-streaming flames, heard a voice of one bewailing, which he perceived evidently to be the voice of his mother. He marked the time, and found it to have been the hour of her death*." This passage is taken from a letter from Cardinal Damiano to Pope Nicholas II., written about the year 1060. The superstition was natural enough; and similar ones were entertained at a much later date concerning *Ætna* and the island of *Stromboli*, in which there is a volcano in almost constant activity. There is a story told somewhere of an English captain, who, while lying off the island, saw a London merchant, with whose person he was well acquainted, running round the crater, pursued by certain ominous looking followers, who finally caught him, and plunged with

* *Damiani Epistolæ*, lib. i. 9.

him into the abyss. The captain exclaimed in surprise, "There is old ——!" On returning to London, he found that the man was dead. We have no accurate recollection of the story, and do not know where to look for it; but our impression is that the captain, on relating these circumstances, and of course drawing his own conclusions, was actually prosecuted for libel.

Strabo, who wrote some part of his work at least in the reign of Tiberius about the commencement of our era, thus describes the Phlegræan Fields:—"After doubling Misenum, next comes a lake (now Mare Morto), beyond which the coast falls back in a deep bay, where stands Baiæ and its warm baths, useful both for purposes of pleasure and for the cure of diseases. The Lucrine lake borders upon Baiæ; within it is lake Avernus. Here our ancestors placed the scene of Homer's Nekuia *; and here, they say, was an oracle, where answers were returned by the dead, to which Ulysses came. Avernus is a deep hollow with a narrow entrance, in size and shape well suited for a harbour, but incapacitated for that purpose by the shallow Lucrine lake which lies before it. It is enclosed by steep ridges, which overhang it every where, except at the entrance, now highly cultivated, but formerly enclosed by a savage trackless forest of large trees, which threw a superstitious gloom over the hollow. The inhabitants farther fabled, that the birds which flew over it fell down into the water, destroyed by the rising exhalations, as in other places of this sort, which the Greeks call Plutonia, or places sacred to Pluto; and imagined that Avernus was a Plutonium, and the abode where the Cimmerians were said to dwell. Here is a fountain of fresh water by the sea; but all persons abstain from it, believing it to be the

* The title of the XIth book of the Odyssey, the scene of which is laid among the dead.

Styx; and somewhere near was the oracle. Here, also, as they thought, was Pyriphlegethon*, judging from the hot springs near lake Acherusia. The Lucrine lake in breadth reaches to Baiæ, being separated from the sea by a mound, about a mile long, and wide enough for a broad carriage-road, said to have been made by Hercules as he was driving Geryon's oxen. Being much exposed to the surf, so as not to be easily traversed on foot, Agrippa raised and completed it. It admits light ships †, is useless as a naval station, but affords an inexhaustible supply of oysters. Here, according to some, was the lake Acherusia, but Artemidorus makes it the same with Avernus. Next to Baiæ come the shores and city of Dicæarchia, formerly a port of the Cumæans, placed on a hill. During the invasion of Hannibal, the Romans colonised, and called it Puteoli, from (*putei*) the wells; or, as others say, they so named the whole district, as far as Baiæ and the Cumæan territory, from the stench (*putor*) of its waters, because it is full of sulphur and fire, and hot springs. Some think that this is the reason why the country about Cuma is called Phlegra, and that the thunder-riven wounds of the fallen giants pour out these streams of fire and water. Immediately over it is Vulcan's assembly-room (Hephæsti Agora, now the Solfatara), a level space surrounded by burning heights, with numerous chimney-like spiracles, which rumble loudly; and the bottom is full of ductile sul-

* Pyriphlegethon, burning with fire; one of the three rivers which encompassed hell. Styx was another. It is doubtful whether the Acherusia here meant was Avernus, the Lucrine lake, or the Lago di Fucino, about two miles from Avernus and close to Cuma. There was another lake of the same name in Epirus.

† Strabo has before said that Agrippa cut through this mound, and thus established a communication between Avernus and the sea. What he says here is entirely contrary to the later author, Dion Cassius, who asserts that in the hands of Agrippa, Avernus became an excellent port. This whole passage is in many parts very obscure, and may be suspected to be corrupt.

phur. Next to Dicæarchia, is Neapolis; next to Neapolis, Herculaneum, standing on a promontory remarkably open to the south-west wind (*Libs*), which makes it unusually healthy. This city, and its next neighbour, Pompeii, on the river Sarnus, were originally held by the Oscii, then by the Tyrrhenians and Pelasgians, then by the Samnites, who in their turn were expelled by the Romans. It is the port of Nola, Nuceria, and Acerræ, being situated on the river Sarnus, which is suited for the exportation and importation of cargoes. Above these places rises Vesuvius, well cultivated and inhabited all round, except its top, which is for the most part level, and entirely barren, ashy to the view, displaying cavernous hollows in cineritious rocks, which look as if they had been eaten in the fire, so that we may suppose this spot to have been a volcano formerly, with burning craters, now extinguished for want of fuel*."

It will occur at once to the reader, that this description is totally inapplicable to Vesuvius as it now exists. The general form of the mountain is too well known to need description, and certainly its elevated cone can by no stretch of words be characterized as a level top. It seems probable, from various considerations, that this cone is of comparatively recent origin. It stands within a circular volcanic ridge, called Somma, broken away to the south, where there is still a projection, called the Pedamentina, apparently marking the continuation of Somma. The most experienced observers seem agreed that this ridge is the remains of an ancient volcano, much larger than the existing one, and was once surmounted by a cone like that of *Ætna*, which, being subject to constant degradation, and requiring constant supplies of fresh

* Strabo, lib. v. Such parts of the original as do not bear on our subject have been omitted.

materials to maintain its height, sunk down into the earth, in the long period of inactivity which we know to have occurred antecedent to the Christian era. Parallel instances may be found in the lakes of Avernus and Agnano, which are evidently the sites of ancient volcanic cones which have fallen in, not craters of eruption. The reawakened fires of Vesuvius soon blew out the mass of materials which choked their former vent, and have formed around that vent a second cone, concentric with and similar to its predecessor, but of smaller dimensions. Instances exactly similar to this also occur: we may mention Barren Island, in the bay of Bengal, where an active volcano rises out of the sea, in the centre of what is evidently a sunken cone. The cone of the peak of Teneriffe also rises in the middle of a circular enclosure, like Somma, and a process analogous to the formation of the cone of Vesuvius may now be frequently observed going on within the crater of that mountain, in which, during its periods of activity, a minor mountain is continually rising*. Finally, some volcanic mountains are known to have fallen in or to have been dispersed, as Papandayang, in the island of Java, which, in the year 1772, was reduced in height from 9000 to about 5000 feet. So also, in the province of Quito, a great part of the crater and summit of Carguirazo fell in during an earthquake in 1698 †.

Supposing, therefore, that the present cone is based upon the ruins of a larger mountain, it probably did not exist when Strabo wrote the above description, but was thrown up, in the first recorded eruption, in the year 79, or at some later period. This will agree with the negative testimony of other authors, who make no mention of it, or speak cursorily of it; not

* Campi Phlegræi, pl. 2, where there is a minute representation of the changes thus produced in the form of the mountain.

† Lyeil, Principles of Geology, ch. xxv. p. 436, 445.

as we might expect them to mention so prominent a feature as it now is in the much admired scenery of Baiæ and Naples. In Virgil, the name only occurs once; and then it is introduced to commend the fertility of the soil. It was on Vesuvius that Spartacus encamped, with his army of insurgent slaves and gladiators. "The Romans besieged them in their fort, situate upon a hill that had a very steep and narrow ascent to it, and kept the passage up to them: all the rest of the ground round about it was nothing but high rocks hanging over, and upon them great store of wild vines. Of these the bondmen cut the strongest strips, and made thereof ladders, like to ship-ladders, of ropes, of such a length and so strong that they reached from the top of the hill even to the very bottom: upon those they all came safely down, saving one that tarried above to throw down their armour after them, who afterwards by the same ladder saved himself last of all. The Romans mistrusting no such matter, these bondmen compassed the hill round, assailed them behind, and put them in such a fear, with the sudden onset, as they fled every man, and so was their camp taken*." This passage also is totally inconsistent with the present state of Vesuvius. Its lofty summit would be ill suited for an encampment, nor could the wild vine ever have flourished there; but both Plutarch and Strabo will be clear, if we suppose that the even summit of Somma, then probably more perfect than it now is, was the highest part of the mountain, and that it was only accessible by a chasm, such as that which gives admission to Avernus. While the Romans were guarding this spot, they might reasonably feel confident that the enclosed enemy could find no other outlet.

After many centuries of repose, the volcano broke

* North's Plutarch, Crassus.

out with great violence, and in its first eruption destroyed Herculaneum and Pompeii. This calamity is described by an eye-witness, the younger Pliny, whose narration will form part of the next chapter. It is also mentioned more than a century later by Dion Cassius. The passage seems to indicate, as far as it is intelligible, that the present cone did not exist when he wrote; and is further curious, as proving that the old fables of the Battle of the Gods and Giants, and of the inhumation of the latter, were not forgotten even in the third century.

“ During the autumn, a great fire broke out in Campania. Vesuvius is a mountain on the coast near Naples, which contains inexhaustible fountains of fire; and, formerly, it was all of the same height, and fire rose in the middle of it (for the only traces of fire were in the middle), but the outer parts remain unscathed to this day. Hence, these continuing uninjured, but the centre being dried up, and reduced to ashes, the encircling crags still retain their ancient height: but the burnt part being consumed in lapse of time has settled down and become hollow, so that to compare small things to great, the whole mountain now resembles an amphitheatre. And the top is clothed with trees and vines, but the circular cavity is abandoned to fire; and by day it sends up smoke, and by night flame, so that one would think all sort of incense vessels were burning there. This continues always with more or less violence, and often, after any considerable subsidence, it casts up ashes and stones, impelled by violent blasts of wind, with a loud noise and roaring, because its breathing holes are not set close together, but few and concealed*.

“ Such is Vesuvius, and these things take place in it almost every year. But all eruptions which have

* This description is not very clear, but neither is the Greek.

happened since, though they may have appeared unusually great to those even who have been accustomed to such sights, would be trifling, even if collected into one, when compared to what occurred at the time of which we speak. Many huge men surpassing human stature, such as the giants are described to have been, appeared wandering in the air, and upon the earth, at one time frequenting the mountain, at another the fields and cities in its neighbourhood. Afterwards came great droughts and violent earthquakes, so that the whole plain boiled and bubbled, and the hills leapt, and there were noises underground like thunder, and above ground like roaring, and the sea made a noise, and the heavens sounded, and then suddenly a mighty crash was heard as if the mountains were coming together, and first great stones were thrown up to the very summits, then mighty fires and immense smoke, so that the whole air was overshadowed, and the sun entirely hidden, as in an eclipse.

“ Thus day was turned into night, and light into darkness, and some thought the giants were rising again (for many phantoms of them were seen in the smoke, and a blast, as if of trumpets, was heard), while others believed that the earth was to return to chaos, or to be consumed by fire. Therefore men fled, some from the houses out into the ways, others that were without, into their houses; some quitted the land for the sea, some the sea for the land, being confounded in mind, and thinking every place at a distance safer than where they were. Meanwhile, an inexpressible quantity of dust was blown out, and filled land, sea, and air; which did much other mischief to men, fields, and cattle, and destroyed all the birds and fishes, and besides buried two entire cities, Herculaneum and Pompeii,

while the population was sitting in the theatre*. For this dust was so abundant that it reached Africa, Syria, and Egypt, and filled the air above Rome, and overclouded the sun; which caused much fear for many days, men neither knowing nor being able to conjecture what had happened. But they thought that every thing was to be thrown into confusion, the sun to fall extinguished to the earth, the earth to rise to the sky. At the time, however, these ashes did them no harm, but subsequently they produced a pestilential disease †."

It does not appear that any lava flowed from Vesuvius; the ejected matter consisted of rocks, pumice, and ashes, which seem, from the operations at Pompeii and Herculaneum, to have been partly changed into liquid mud by torrents of rain. Being reawakened, the volcano continued in pretty constant activity. It is evident, from the passage just quoted, that from this year until the commencement of the third century, when Dion wrote, eruptions of more or less violence were continually recurring. Other eruptions are mentioned in the fifth and sixth centuries. Procopius, who died about the middle of the sixth, speaks of the mountain emitting rivers of fire †. He describes it in terms which correspond somewhat with a cone and crater; and, like Dion, conveys the idea of its being constantly at work. "Vesuvius is very precipitous below, encircled with wood above, terribly wild and craggy. In the centre of its summit is a very deep chasm, which we may suppose to reach quite to the bottom of the mountain, and it is possible to see fire in it, if a man

* The wording leaves it doubtful which theatre is meant. The theatres of both cities have been explored, and no remains found. The eruption may have come on while the people were assembled, but they were not destroyed in the theatres.

† Dion Cassius, lib. lxvi.

‡ Bell. Goth. iv. 35.

dare peep over. Usually, the fire feeds upon itself, (*ἐφ' αὐτὴν στρέφεται,*) without molesting those who live in its neighbourhood, but when the mountain utters a roaring noise, in general it emits soon after a vast body of cinders." He adds, that these ashes were often carried a vast distance, even to the coast of Africa and Byzantium, in which city so much terror was once caused by the phenomenon, that a solemn supplication was established in consequence, and continued yearly*.

The first stream of lava of which we have authentic account, broke out in the year 1036, during the seventh eruption from the resuscitation of the volcano. Another eruption occurred in 1049, another in 1138 or 9; after which there was a pause of 168 years, till 1306. From this year, to 1631, there was a cessation, except one slight eruption in 1500. During this long pause, a remarkable event occurred in another part of the Phlegræan fields. In little more than twenty-four hours, a new hill, called Monte Nuovo, was thrown up to the height of 440 feet above the level of the sea, its base being nearly a mile and a half in circumference. It stands partly on the site of the Lucrine lake, which has now dwindled into a shallow pool †.

Bracini descended into the crater of Vesuvius shortly before the eruption of 1631. He gives the following account of it: "The crater was five miles in circumference, and about 6000 paces deep, its sides were covered with brushwood, and at the bottom there was a plain, on which cattle grazed. In the woody parts boars frequently harboured. In the midst of the plain, within the crater, was a narrow passage, through which, by a winding path, you could descend about a mile among rocks and stones,

* Procop. Bell. Goth. ii. 4

† Lyell, Principles of Geology, chap. xix.

till you came to another more spacious plain, covered with ashes; in this plain were three little pools, placed in a triangular form, one towards the east, of hot water, corrosive and bitter beyond measure; another towards the west, of water salter than that of the sea; the third of hot water that had no particular taste*."

This account, in spite of its minute enumeration of pools of water and points of the compass, is not very intelligible, and may fairly be presumed not to be very accurate. Judging from the size which he ascribes to the crater, far larger than any which we know to have existed in the present cone, one would suppose that he meant its boundary to be the ridge of Somma, and that the valley between Somma and Vesuvius, now called Atrio de' Cavalli, the hall of horses, (because it is here that visitors to the summit of the mountain leave their horses to wait while they ascend the cone on foot,) is the plain where cattle grazed. Still this is inconsistent with the farther descent in the centre of that plain, unless we suppose that where the cone now stands there was then a chasm; and surely the present cone cannot have grown up within the last two centuries unobserved and undescribed. We have, therefore, but a choice of difficulties in explaining the passage; and a farther one occurs in the great depth attributed to the crater, which, according to this statement, must have been accessible at a depth far below the level of the sea. Still, so far as we can form any opinion on it, the mountain, after this long pause, appears to have approximated considerably to the state in which it afforded a safe refuge to Spartacus, as described by Plutarch, and the passage thus furnishes a fresh presumption that the modern cone did not then exist. We may add Sir W. Hamilton's authority to the reasons already

* Campi Phlegræi, page 62.

given, for supposing Somma to be the ancient Vesuvius. "I have seen ancient lavas in the plain on the other side of Somma, which could never have come from the present Vesuvius*."

A brief period of repose followed the eruption of 1631, but it lasted only till 1666; from which time to the present, there has been a series of eruptions, at intervals, rarely exceeding ten years, generally recurring much more frequently. Those of 1776 and 1777 are more than commonly celebrated, from having been described at large by an eye-witness, Sir William Hamilton, in his splendid work, entitled 'Campi Phlegræi.' The eruption of 1779 was also described by him, and is remarkable for the beauty and grandeur of its phenomena. During the whole month of July, the volcano gave the usual warnings of an approaching paroxysm, by internal rumbling noises, and frequent jets of smoke and red-hot stones. On August the 5th it was in a state of violent agitation: white and sulphureous smoke issued continually from the crater, and lay piled up cloud upon cloud, resembling bales of the whitest cotton, until a mass of them was accumulated above the summit, four times the height and size of the mountain itself. In the midst of this, stones and ashes were continually shot up to a height of 2000 feet or upwards. At this time a quantity of lava was heaved up high enough to clear the mouth of the crater, and took its passage down the side opposite to Somma.

On Friday and Saturday the 6th and 7th of August, the mountain was less violently disturbed, but at twelve o'clock on the night of the latter day, its fermentation increased greatly. "I was watching its motions from the mole of Naples, which has a full view of the volcano, and had been witness to several picturesque effects produced by the reflection of the

* Campi Phlegræi, p. 63.

deep red fire which issued from the crater of Vesuvius, and mounted up in the midst of the huge clouds, when a summer storm, called here a Tropea, came on suddenly and blended its heavy watery clouds with the sulphureous and mineral ones, which were already like so many other mountains piled over the summit of the volcano. At this moment a fountain of fire was shot up to an incredible height, casting so bright a light that the smallest objects could be clearly distinguished at any place within six miles or more of Vesuvius. The black stormy clouds passing over, and at times covering the whole or a part of the bright column of fire; at other times, clearing away and giving a full view of it, with the various tints produced by its reverberated light on the white clouds above, in contrast with the pale flashes of forked lightning that attended the Tropea, formed such a scene as no power of art can ever express." One of the king of Sicily's gamekeepers, who was out near Ottaiano in this storm, was surprised to find the drops of rain scald his hands and face, a phenomenon occasioned, probably, by the clouds having acquired a great degree of heat in passing by the above-mentioned column of fire.

On Sunday, Vesuvius was quiet till towards six o'clock in the evening, when the smoke began to gather over its crater, and the usual jets of stones and ashes commenced and continued to increase. "At about nine o'clock, there was a loud report which shook the houses at Portici and its neighbourhood, to such a degree as to alarm the inhabitants and drive them out into the streets; and, as I have since seen, many windows were broken, and walls cracked by the concussion of the air from that explosion, though faintly heard at Naples. In an instant, a fountain of liquid transparent fire began to rise, and gradually increasing, arrived at so amazing a height as to strike

every one who beheld it with the most awful astonishment. I shall scarcely be credited, when I assert that, to the best of my judgment, the height of this stupendous column of fire could not be less than three times that of Vesuvius itself, which rises 3700 feet perpendicular above the level of the sea.

“ Puffs of smoke, as black as can possibly be imagined, succeeded one another hastily, and accompanied the red, transparent, and liquid lava, intercepting its splendid brightness here and there by patches of the darkest hue. Within these puffs of smoke, at the very moment of their emission from the crater, I could perceive a bright, but pale electrical fire, briskly playing about in zig-zag lines. The wind was S.W., and though gentle, sufficient to carry these detached clouds or puffs of smoke out of the column of fire, and a collection of them by degrees formed a black and extensive curtain, if I may be allowed the expression, behind it; in other parts of the sky it was quite clear, and the stars were bright. The fiery fountain of so gigantic a size upon the dark ground above-mentioned, made the most glorious contrast imaginable, and the blaze of it reflecting strongly upon the surface of the sea, which was at that time perfectly smooth, added greatly to this sublime view. The liquid lava, mixed with stones and scoriæ, after having mounted, I verily believe, at the least 10,000 feet, was partly directed by the wind towards Ottaiano, and partly falling almost perpendicularly, still red hot and liquid on Vesuvius, covered its whole cone, part of the mountain of Somma, and the valley between them. The falling matter being nearly as vivid and inflamed as that which was continually issuing fresh from the crater, formed with it one complete body of fire, which could not be less than two miles and a half in breadth, and of the extraordinary height above-mentioned, casting a heat to the distance of at least six

miles around it. The brushwood on the mountain of Somma was soon in a blaze, which flame being of a different tint from the deep red of the matter thrown out by the volcano, and from the silvery blue of the electrical fire, still added to the contrast of this most extraordinary scene”

Another remarkable eruption occurred in 1793, while the late Dr. Clarke was at Naples, and gave him the opportunity of making minute and repeated observations on the mountain. No pen is better calculated to explain these great operations of nature, and to describe their awful magnificence. We shall extract a passage of some length from his journal, illustrative chiefly of those phenomena which we have not yet noticed.

“It was in the month of February that I went with a party to the source of the lava for the first time, to ascertain the real state in which the lava proceeded from the volcano that created it. I found the crater in a very active state, throwing out volleys of immense stones transparent with vitrification, and such showers of ashes involved in thick sulphureous clouds as rendered any approach to it extremely dangerous. We ascended as near as possible, and then crossing over to the lava, attempted to coast it up to its source. This we soon found was impossible, for an unfortunate wind blew all the smoke of the lava hot upon us, attended at the same time with such a thick mist of minute ashes from the crater, and such fumes of sulphur, that we were in danger of being suffocated. In this perplexity I had recourse to an expedient recommended by Sir W. Hamilton, and proposed immediately crossing the current of liquid lava to gain the windward side, but felt some fears, owing to the very liquid appearance the lava there had so near its source. All my companions were against the scheme; and while

we stood deliberating, immense fragments of stone, and huge volcanic bombs, that had been cast out by the crater, but which the smoke had prevented us from observing, fell thick about us, and rolled by us with a velocity that would have crushed any of us, had we been in their way. I found we must either leave our present spot, or expect instant death; therefore covering my face with my hat I rushed upon the lava, and crossed safely over to the other side, having my boots only a little burnt, and my hands scorched. Having once more rallied my forces, I proceeded on, and in about half an hour gained the chasm through which the lava had opened itself a passage out of the mountain. To describe this sight is utterly beyond all human ability. My companions shared in the astonishment it produced; and the sensations they felt, in concert with me, were such as can be obliterated only with our lives. All I had seen of volcanic phenomena before did not lead me to expect such a spectacle as I then beheld. I had seen the vast rivers of lava that descended into the plains below, and carried ruin and devastation with them; but they resembled a vast heap of cinders or the scoriæ of an iron-foundry, rolling slowly along, and falling with a rattling noise over one another. Here a vast arched chasm presented itself in the side of the mountain, from which rushed with the velocity of a flood the clear vivid torrent of lava, in perfect fusion, and totally unconnected with any other matter that was not in a state of complete solution, unattended with any scoriæ on its surface, or gross materials of an insolvent nature, but flowing with the translucency of honey, in regular channels cut finer than art can imitate, and glowing with all the splendour of the sun.

“The eruption from the crater increased with so much violence, that we proceeded to make our expe-

riments and observations as speedily as possible. A little above the source of the lava I found a chimney of about four feet in height, from which proceeded smoke, and sometimes stones. I approached and gathered some pure sulphur, which had formed itself upon the edges of the mouth of this chimney, the smell of which was so powerful, that I was forced to hold my breath all the while I remained there. I seized an opportunity to gain a momentary view down this aperture, and perceived nothing but the glare of the red-hot lava that passed beneath it. We then returned to examine the lava at its source. Sir W. Hamilton had conceived that no stones thrown upon a current of lava would make any impression. We were soon convinced of the contrary. Light bodies of five, ten, and fifteen pounds weight made little or no impression even at the source; but bodies of sixty, seventy, and eighty pounds were seen to form a kind of bed on the surface of the lava, and float away with it. A stone of three hundred weight that had been thrown out by the crater, lay near the source of the current of lava. I raised it upon one end, and then let it fall in upon the liquid lava, when it gradually sunk beneath the surface and disappeared. If I wished to describe the manner in which it acted upon the lava, I should say it was like a loaf of bread thrown into a bowl of very thick honey; which gradually involves itself in the heavy liquid which surrounds it, and then slowly sinks to the bottom. The lava itself had a glutinous appearance, and although it resisted the most violent impression, seemed as if it might easily be stirred with a common walking-stick. A small distance from its source, as it flows on, it acquires a darker tint upon its surface, is less easily acted upon, and as the stream gets wider, the surface having lost its state of perfect solution grows harder and harder, and cracks into innumerable

fragments of very porous matter, to which they give the name of scoriæ, and the appearance of which has led many to suppose that it proceeded thus from the mountain; itself being composed of materials less soluble than the rest of the lava, lighter, and of course liable to float continually on the surface. There is however no truth in this. All lava at its first exit from its native volcano flows out in a liquid state, and all equally in fusion. The appearance of the scoriæ is to be attributed only to the action of the external air, and not to any difference in the materials which compose it, since any lava whatever, separated from its channel and exposed to the action of the external air, immediately cracks, becomes porous, and alters its form. As we proceeded downward this became more and more evident, and the same lava which at its original source flowed in perfect solution, undivided, and free from encumbrances of any kind, a little farther down had its surface loaded with scoriæ in such a manner, that upon its arrival at the bottom of the mountain the whole current resembled nothing so much as a heap of unconnected cinders from an iron-foundry."

Aug. 22, 1793.—"There was to-day a most singular appearance in the mountain; on opening the shutters to view it, I perceived the crater to be in great agitation, puff after puff impelling each other with the greatest violence. I could perceive thousands of stones and scoriæ thrown into the air, and falling in all directions. The clouds from the crater were as white as the purest snow; on a sudden, as I was looking at these, a column of smoke rushed impetuously out of another mouth behind the crater, as black as the deepest ink; and rising in curling volumes to a vast magnitude, formed a pillar perfectly unconnected with the smoke from the crater, and presented a striking contrast by opposing its jet black to the

snowy whiteness of the other. These appearances continued at intervals the whole day. Sometimes the two columns of different colours rose together, as if emulating each other, and striving which should rise the highest and display the greatest magnitude, but never mixing or interfering with each other." . . .

Aug. 30.—“The lava which was last night so great, this evening suddenly stopped; hardly a trace of it was visible. But the crater displayed such girandoles of fire, such beautiful columns of light red flame, as I think I never saw before. Millions of red-hot stones were shot into the air, full half the height of the cone itself, and then bending fell all round in a fine arch. As soon as I got home I fixed the telescope. Sometimes in the middle of the clear flame, another and another still more bright and glorious displayed itself, breaking on the eye like the full sun; so that the interior was always the most luminous. The interior and bright attendants upon the principal column seemed to be lava in perfect fusion, which boiled and bubbled up above the crater's edge; and sometimes falling over it, I could perceive splash upon the cone, and take its course gently down the side of the mountain. Sometimes, and more usually, it fell again into the crater. I write this with the burning mountain now before my eyes. All the top of the cone is covered with red-hot stones and lava. The flame of the crater continues without intervals of darkness, as usual. It is always in flame, or rather the clouds of smoke, tinged with the boiling matter within, are like burnished gold, and as bright as fire.”

Sept. 5.—“Vesuvius continues to throw most superbly; the lava flows again: at sunset he showed that Tyrian hue which he assumes sometimes, and which has a glow beyond description. I had undressed myself and was prepared to get into bed

when a violent shock from the mountain agitated the door of my room, so as to startle me not a little. I went into my sitting-room, and, upon opening the window toward the mountain, I perceived all the top of the cone covered with red-hot matter. At the same time such a roaring was heard as made me expect something more than common. In an instant a column of lucid fire shot up into the air, and after ascending above half the height of the cone itself, fell in a glorious parabolic girandole, and covered near half the cone with fire. This was followed after an interval of about thirty seconds, by a shock which agitated the doors and windows, and indeed the whole house, in a most violent manner; immediately after this shock, the sound of the explosion reached us louder than the greatest cannon, or the most terrible thunder, attended with a noise like the trampling of horses' feet, which, of course, was nothing more than the noise occasioned by the falling of so many enormous stones among the hard lava. The shock of this explosion was so violent, that it disturbed many things I had left on my table, such as brushes for painting, &c. I dressed myself again, and remained in the balcony above an hour, during which time I had the pleasure of beholding Vesuvius in his terrific grandeur, and more awfully sublime than I had ever before seen him. The consul, Sir James Douglas, has just been observing to me that he never saw the mountain so agitated since the great eruption of 1779*."

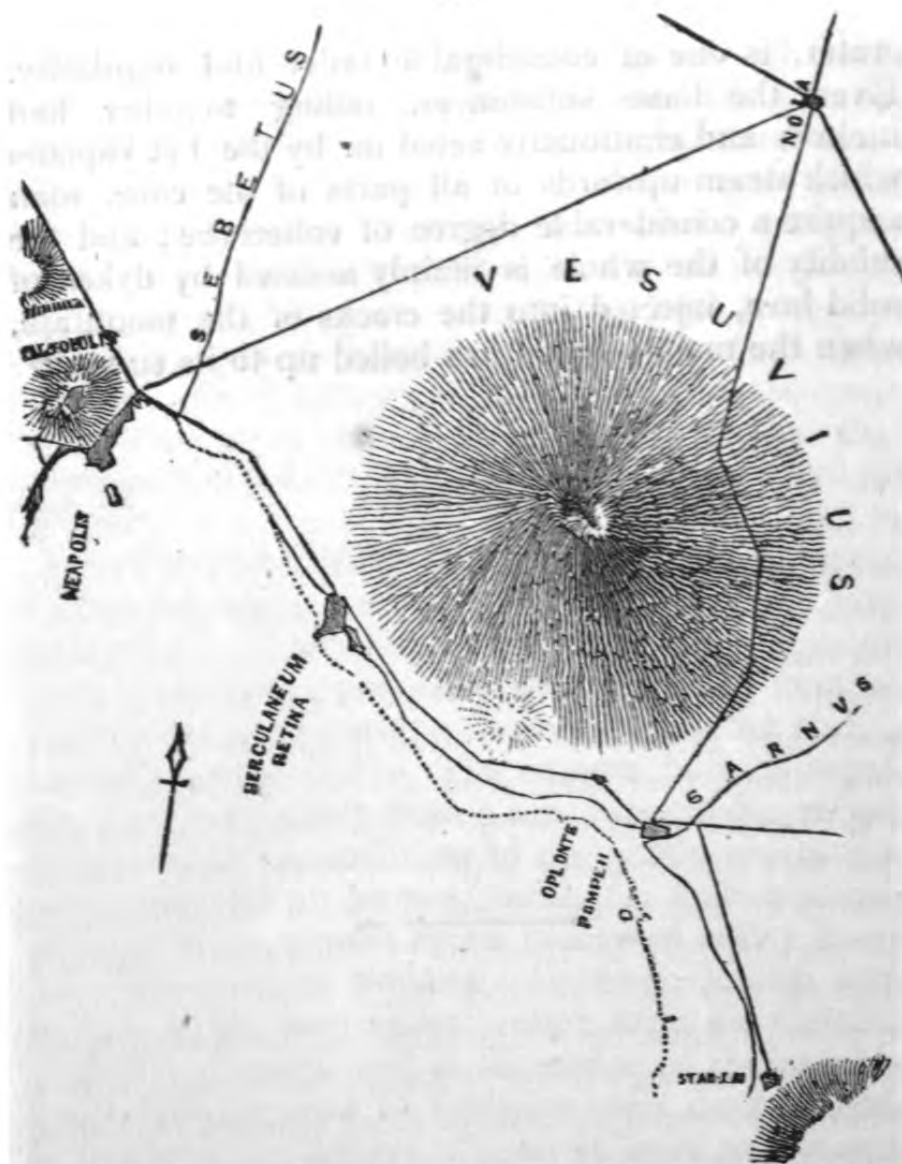
Between the end of the 18th century and the year 1822, the crater of Vesuvius had been gradually filled by the boiling up of lava, and the crumbling down of the upper part of the cone. In place, therefore, of a regular cavity, was a rough and rocky surface covered with blocks of lava and scoriæ. But this state of things was totally changed by the eruption

* Life of E. D. Clarke.

of October, 1822, when the whole accumulated mass within the crater, together with a large part of the cone itself, was blown out, so as to leave an irregular gulf about three miles in circumference, when measured along the winding edge of its margin, but somewhat less than three-quarters of a mile in its largest diameter. The depth has been variously estimated, from 2000 feet to less than half that quantity. More than eight hundred feet of the cone was carried away during the eruption, so that the mountain was reduced in height from about 4200 to 3400 feet.

Vesuvius now consists of a double mountain, upon an extended base, from thirty to forty miles in circumference. Upon this stands the long ridge of Somma, so often mentioned, bending in the form of a crescent, with its convex side presented to the N. E., its points to the S. W. The western horn is separated by a deep valley from a lower mountain, called Cantaroni, which, inclining to the south, meets the lower projection, or terrace, called La Pedamentina. This is again separated by an excavated valley from the eastern horn of Somma. Between Somma and Vesuvius is the deep valley, called Atrio de' Cavalli, the Hall of Horses, and in the centre of the amphitheatre rises the cone of Vesuvius itself, dark, sterile, and desolate; to the eye, a mass of loose scorix and ashes, without order or coherence. This however on inspection is proved not to be the case. It consists of alternate layers of sand or ashes, scorix, and lava, inclining outwards at an angle of from 45° to 30° with the axis of the cone. The strata of course are partial and irregular in extent and thickness, as circumstances have determined the fall of the ejected matter, or the flow of the lava; but the irregularities of these numerous beds compensate for each other, and the general effect, on viewing the interior of the

crater, is one of considerable order and regularity. Even the loose substances, falling together half melted, and continually acted on by the hot vapours which steam upwards in all parts of the cone, soon acquire a considerable degree of coherence; and the solidity of the whole is mainly assisted by dykes of solid lava, injected into the cracks of the mountain, when the molten liquid has boiled up to its summit.



Plan of the Bay of Naples, showing the relative situations of Pompeii and Herculaneum. The inner line of coast is the ancient, the outer the modern line.

CHAPTER II.

HISTORICAL NOTICE OF POMPEII.

POMPEII is situated in that district of Italy, named by the ancients Campania, comprised between the mountains of Samnium and the Tyrrhenian sea, and bounded on the north by the river Liris, and on the

south by the Silarus. The line of coast included between these points is broken by two far projecting capes, Misenum and the promontory of Minerva, between which lies a deep recess, called from its shape Crater, the Cup, or the Gulf of Cumæ, and known in modern times as the Bay of Naples. At the bottom of this bay stood Pompeii, about thirteen miles south-east of Naples, and five from Vesuvius. Of its history very little is known. It is related to have been founded by Hercules, as well as its neighbour and fellow victim, Herculaneum. Solinus says, that the name of Pompeii is derived from Pompè, in allusion to the pomp with which Hercules celebrated his victories, while awaiting his fleet at the mouth of the river Sarnus. Being furnished with so respectable and credible an origin, it would be waste of time to inquire any farther*. An almost impenetrable darkness hangs over these remote ages; and when men are driven to take refuge in mythology, it is plain that they can find little satisfaction in history. Strabo, however, asserts that these towns were founded by Pelasgians and Tyrrhenians†. The first inhabitants that we can trace on this coast, are the Osci, who appear to have been the same as the Ausones, and of Pelasgian extraction. At an early, but still an unknown period, a colony from Chalcis in Eubœa founded the town of Cumæ. Parthenope, afterwards called Neapolis, now Naples, was an offset from thence, or from a kindred colony of Eretrians. Pompeii and Herculaneum also fell into their power; but their establishments seem to have extended no farther in this direction.

Campania, where, in Pliny's words, all imaginable delights were in constant rivalry, has always been

* An Italian author, who has written an account of Pompeii, has filled a large folio volume with speculations on the origin of the city and its name.

† Niebuhr, p. 37.

celebrated as tempting by its riches the arms of strangers, and punishing the cupidity of its conquerors by enervating, and subjecting them in their turn to some sterner enemy; in consequence, it has experienced a rapid succession of masters. The Cumæans were driven out by the Etruscans, who are said to have taken possession of twelve towns conquered or founded by their predecessors, and to have formed a sort of federal republic, of which Capua was the capital, and Pompeii a member.

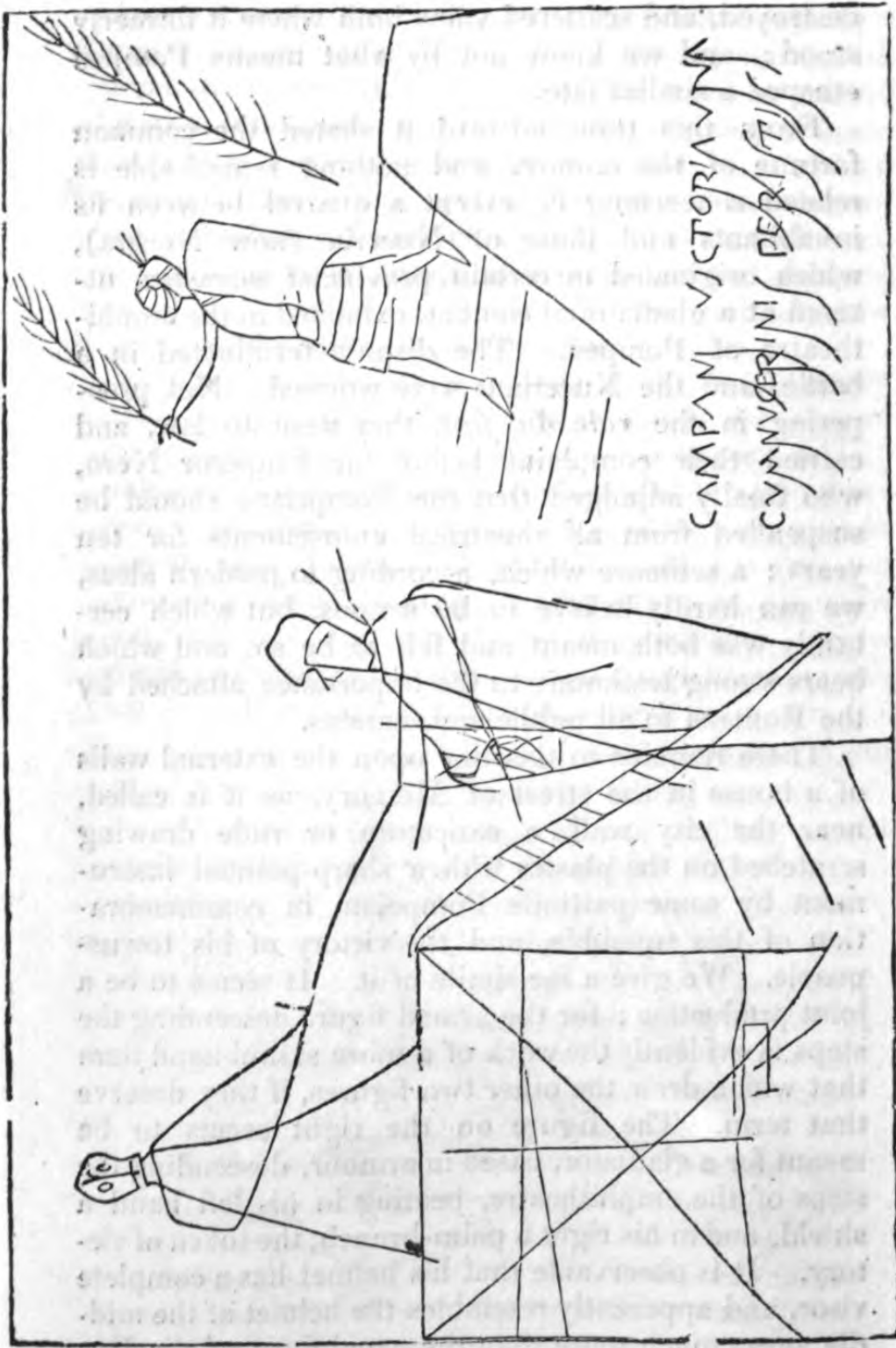
About 440, B. C. the Samnites made themselves masters of the coast as far as the Silarus. Capua, then called Vulturnum, made peace, on condition of receiving a colony and sharing her territory with the victors. A mixed people thus arose, the first to whom the name of Campanians was applied. About eighty years later, the Campanians, being pressed in war by the Samnites, threw themselves for protection into the arms of Rome, and of course were swallowed by that all-devouring Charybdis, which sucked up every thing within the circle of its influence, and disgorged nothing. In the second Punic war, B. C. 216, Campania revolted, and joined Hannibal, who proposed to make Capua the capital of Italy. His long stay in this delightful climate proved fatal to the discipline even of his victorious troops; and when he was compelled to abandon Italy, the incensed Romans took a terrible revenge on their revolted subjects. Neither on this occasion, however, nor on their first occupation of the country, is mention made either of Herculaneum or Pompeii.

In the Social, or Marsic war, which broke out B. C. 91, the Campanian towns raised the standard of revolt, and Pompeii among them. At the end of that war, Capua was severely punished; its inhabitants being dispossessed, and a colony sent from Rome to cultivate their fertile territory. Stabiæ, a town within four or five miles of Pompeii, was entirely

destroyed, and scattered villas built where it formerly stood ; and we know not by what means Pompeii escaped a similar fate.

From this time forward it shared the common fortune of the empire, and nothing remarkable is related concerning it, except a quarrel between its inhabitants and those of Nuceria (now Nocera), which originated in certain provincial sarcasms, uttered at a gladiatorial combat, exhibited in the amphitheatre of Pompeii. The dispute terminated in a battle, and the Nucerians were worsted. Not prospering in the *voie du fait*, they went to law, and carried their complaint before the Emperor Nero, who finally adjudged that the Pompeians should be suspended from all theatrical amusements for ten years : a sentence which, according to modern ideas, we can hardly believe to be serious, but which certainly was both meant and felt to be so, and which bears strong testimony to the importance attached by the Romans to all public amusements.

There remains to this day upon the external walls of a house in the street of Mercury, as it is called, near the city wall, a caricature or rude drawing scratched on the plaster with a sharp-pointed instrument by some patriotic Pompeian, in commemoration of this squabble, and the victory of his townspeople. We give a fac-simile of it. It seems to be a joint production ; for the armed figure descending the steps is evidently the work of a more skilful hand than that which drew the other two figures, if they deserve that term. The figure on the right seems to be meant for a gladiator, cased in armour, descending the steps of the amphitheatre, bearing in his left hand a shield, and in his right a palm-branch, the token of victory. It is observable that his helmet has a complete visor, and apparently resembles the helmet of the middle ages, much more than the usual form of the Roman helmet. The abortive figures on the left probably

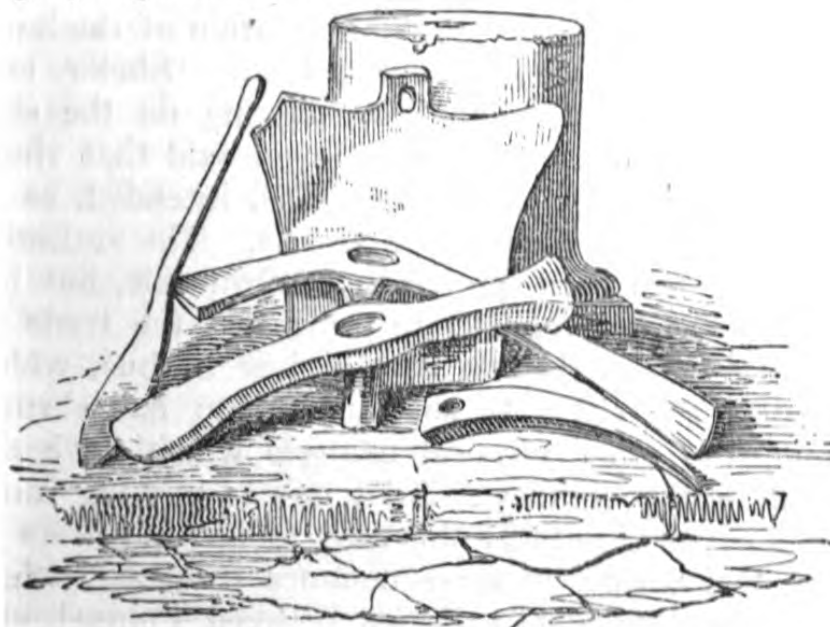


Fac-simile of a rude drawing on the walls of a house in the street of Mercury.

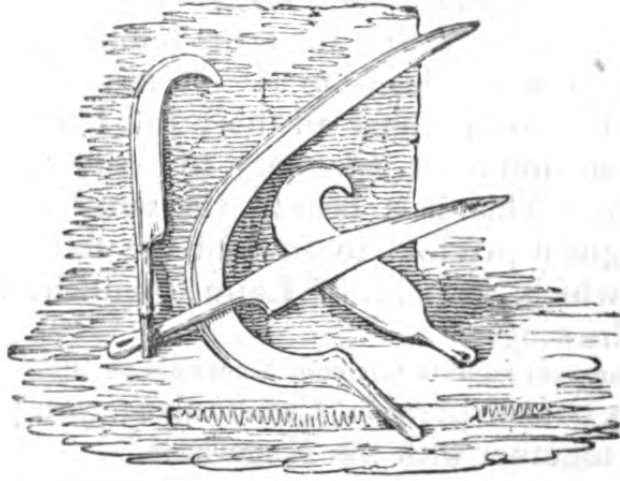
represent one of the victors, on some elevated spot, dragging a prisoner, with his arms bound, after him up the ladder which leads to it. It might not have been very easy to decipher all this; but like the sign-painter who found it necessary to write under his production, "This is a bear!" the artist or artists have thought it prudent to subjoin the following inscription, which, in point of Latin, is much on a par with the drawing,

Campani victoria una cum Nucerinis peristis,
which may be interpreted, 'Campanians, you perished in victory together with the Nucerians.'

This occurred A. D. 59. Four years after, an earthquake nearly destroyed Pompeii, and the inhabitants had scarcely recovered their alarm, and had not restored the buildings damaged by the shock, when it was overwhelmed by that greater calamity, which, consigning it to a temporary oblivion, has communicated to a trivial town of the Roman empire a power to interest, unequalled except by that of the mighty capital itself.



Implements used in building.



Implements used in husbandry.

CHAPTER III.

THE POSITION AND TERRITORY OF POMPEII, AND ITS DESTRUCTION AND RE-DISCOVERY.

POMPEII was originally situated close to the sea, although, owing to the gradual elevation of the land, it is now at some distance inland. Shells and sea-sand have been found by digging on the side adjoining the coast; and it is even said that rings have been found close to the ruins, intended, as is supposed, for the mooring of vessels. The authority of Strabo has been quoted to confirm this, but his words go at least equally to prove that the trade of the place was carried on by the river Sarnus, which ran past the city. If so, this stream has shrunk among the other physical changes which have occurred in the country; for it now is nothing more than a rivulet, entirely unsuited to any purposes of trade, which runs at some distance from its ancient course, and falls into the sea between Pompeii and Stabiæ. From the position of the town and the

discoveries made by the excavators, it is clear that only three principal roads could have led to it. The first, which was on the western side, led to Naples along the coast through Oplontis, Retina, and Herculaneum; the second joined the Popilian way at Nola; and the third crossed the Sarnus, and afterwards divided into two branches, of which the principal led to Nocera, and the other to Stabiæ.

The city stood on an insulated spot formed by lava which seems to have burst from the ground in that place, as in others around the foot of Vesuvius; for this country has been affected by subterranean fires from the remotest antiquity. Thus situated, it appeared to possess all local advantages that the most refined taste could desire. Upon the verge of the sea, at the entrance of a fertile plain, on the bank of a navigable river, it united the conveniences of a commercial town with the security of a military station, and the romantic beauty of a spot celebrated in all ages for its pre-eminent loveliness. Its environs, even to the heights of Vesuvius, were covered with villas, and the coast all the way to Naples was so ornamented with gardens and villages, that the shores of the whole gulf appeared as one city; while the prodigious concourse of strangers who came here in search of health and recreation, added new charms and life to the scene. But these advantages were dearly purchased. An enemy, at that time unknown, was silently working its destruction: an enemy which from time to time still desolates the modern towns which stand upon the buried and long-forgotten cities of antiquity.

Seneca has recorded an earthquake already mentioned, antecedent by sixteen years to the great eruption of Vesuvius, which took place on the 16th February, A. D. 63, threw down a great part of Pompeii, and considerably injured Herculaneum. "A herd,"

he says, "of six hundred sheep were swallowed up, statues were split, and many persons lost their reason." The following year another earthquake took place whilst Nero was singing at Naples ; the building, unfortunately, fell immediately after the emperor had left it. Vestiges of the injury done by these shocks may even now be seen in the houses which have been excavated at Pompeii, where the mosaic floors are often much out of their level, twisted and broken ; and show the repairs which had been made by the inhabitants themselves.

These alarms, the usual presages of a near eruption, were from time to time repeated until the 23d of August, A. D. 79, the day on which, after a cessation of ages, the first recorded volcanic paroxysm of Vesuvius occurred.

By an unusual good fortune we are in possession of a faithful narrative, furnished by an eye-witness of the catastrophe which overwhelmed Pompeii, and provided a subject for this volume. It is contained in two letters of Pliny the younger to Tacitus, which record the death of his uncle, who fell a victim to his inquiring spirit and humanity.

"Your request that I would send you an account of my uncle's death, in order to transmit a more exact relation of it to posterity, deserves my acknowledgments ; for, if this accident shall be celebrated by your pen, the glory of it, I am well assured, will be rendered for ever illustrious. And notwithstanding he perished by a misfortune, which, as it involved at the same time a most beautiful country in ruins, and destroyed so many populous cities, seems to promise him an everlasting remembrance ; notwithstanding he has himself composed many and lasting works ; yet I am persuaded the mentioning of him in your immortal works will greatly contribute to eternize his name. Happy I esteem those to be, whom Pro-

vidence has distinguished with the abilities either of doing such actions as are worthy of being related, or of relating them in a manner worthy of being read; but doubly happy are they who are blessed with both these uncommon talents; in the number of which my uncle, as his own writings and your history will evidently prove, may justly be ranked. It is with extreme willingness, therefore, I execute your commands; and should indeed have claimed the task, if you had not enjoined it. He was at that time with the fleet under his command at Misenum. On the 24th of August, about one in the afternoon, my mother desired him to observe a cloud which appeared of a very unusual size and shape. He had just returned from taking the benefit of the sun*, and after bathing himself in cold water, and taking a slight repast, was retired to his study. He immediately arose and went out upon an eminence, from whence he might more distinctly view this very uncommon appearance. It was not at that distance discernible from what mountain this cloud issued, but it was found afterwards to ascend from Mount Vesuvius †. I cannot give a more exact description of its figure, than by resembling it to that of a pine-tree, for it shot up a great height in the form of a trunk,

* The Romans used to lie or walk naked in the sun, after anointing their bodies with oil, which was esteemed as greatly contributing to health, and therefore daily practised by them.

† About six miles distant from Naples. Martial has a pretty epigram, in which he gives us a view of Vesuvius, as it appeared before this terrible conflagration broke out :

“ Here verdant vines o’erspread Vesuvius’ sides;
 The generous grape here pour’d her purple tides.
 This Bacchus lov’d beyond his native scene;
 Here dancing satyrs joy’d to trip the green.
 Far more than Sparta this in Venus’ grace;
 And great Alcides once renown’d the place:
 Now flaming embers spread dire waste around,
 And Gods regret that Gods can thus confound.”

which extended itself at the top into a sort of branches ; occasioned, I imagine, either by a sudden gust of air that impelled it, the force of which decreased as it advanced upwards, or the cloud itself being pressed back again by its own weight, expanded in this manner : it appeared sometimes bright and sometimes dark and spotted, as it was more or less impregnated with earth and cinders. This extraordinary phenomenon excited my uncle's philosophical curiosity to take a nearer view of it. He ordered a light vessel to be got ready, and gave me the liberty, if I thought proper, to attend him. I rather chose to continue my studies ; for, as it happened, he had given me an employment of that kind. As he was coming out of the house, he received a note from Rectina, the wife of Bassus, who was in the utmost alarm at the imminent danger which threatened her ; for her villa being situated at the foot of Mount Vesuvius, there was no way to escape but by sea : she earnestly entreated him, therefore, to come to her assistance. He accordingly changed his first design, and what he began with a philosophical, he pursued with an heroic turn of mind. He ordered the galleys to put to sea, and went himself on board with an intention of assisting not only Rectina, but several others ; for the villas stand extremely thick upon that beautiful coast. When hastening to the place from whence others fled with the utmost terror, he steered his direct course to the point of danger, and with so much calmness and presence of mind, as to be able to make and dictate his observations upon the motion and figure of that dreadful scene. He was now so nigh the mountain, that the cinders, which grew thicker and hotter the nearer he approached, fell into the ships, together with pumice stones, and black pieces of burning rock : they were likewise in danger, not only of being aground by the sudden retreat of

the sea, but also from the vast fragments which rolled down from the mountain, and obstructed all the shore. Here he stopped to consider whether he should return back again; to which the pilot advising him, 'Fortune,' said he, 'befriends the brave; carry me to Pomponianus.' Pomponianus was then at Stabiæ*, separated by a gulf, which the sea, after several insensible windings, forms upon the shore. He had already sent his baggage on board; for though he was not at that time in actual danger, yet being within the view of it, and, indeed, extremely near, if it should in the least increase, he was determined to put to sea as soon as the wind should change. It was favourable, however, for carrying my uncle to Pomponianus, whom he found in the greatest consternation: he embraced him with tenderness, encouraging and exhorting him to keep up his spirits, and the more to dissipate his fears, he ordered, with an air of unconcern, the baths to be got ready; when, after having bathed, he sat down to supper with great cheerfulness, or at least (what is equally heroic) with all the appearance of it. In the meanwhile, the eruption from Mount Vesuvius flamed out in several places with much violence, which the darkness of the night contributed to render still more visible and dreadful. But my uncle, in order to sooth the apprehensions of his friend, assured him it was only the burning of the villages, which the country people had abandoned to the flames: after this he retired to rest, and it is most certain he was so little discomposed as to fall into a deep sleep; for being pretty fat, and breathing hard, those who attended without actually heard him snore. The court which led to his apartment being now almost filled with stones and ashes, if he had continued there any time longer, it would have been impossible

* Now called Castel a Mar di Stabia, in the gulf of Naples.

for him to have made his way out; it was thought proper, therefore, to awaken him. He got up, and went to Pomponianus and the rest of his company, who were not unconcerned enough to think of going to bed. They consulted together whether it would be most prudent to trust to the houses, which now shook from side to side with frequent and violent concussions; or fly to the open fields, where the calcined stones and cinders, though light indeed, yet fell in large showers, and threatened destruction. In this distress they resolved for the fields, as the less dangerous situation of the two; a resolution which, while the rest of the company were hurried into by their fears, my uncle embraced upon cool and deliberate consideration. They went out then, having pillows tied upon their heads with napkins; and this was their whole defence against the storm of stones that fell around them. It was now day every where else, but there a deeper darkness prevailed than in the most obscure night; which, however, was in some degree dissipated by torches and other lights of various kinds. They thought proper to go down farther upon the shore, to observe if they might safely put out to sea; but they found the waves still run extremely high and boisterous. There my uncle, having drunk a draught or two of cold water, threw himself down upon a cloth which was spread for him, when immediately the flames, and a strong smell of sulphur, which was the forerunner of them, dispersed the rest of the company, and obliged him to rise. He raised himself up with the assistance of two of his servants, and instantly fell down dead; suffocated, as I conjecture, by some gross and noxious vapour, having always had weak lungs, and being frequently subject to a difficulty of breathing. As soon as it was light again, which was not till the third day after this melancholy accident, his body was found entire,

and without any marks of violence upon it, exactly in the same posture that he fell, and looking more like a man asleep than dead. During all this time my mother and I, who were at Misenum*—But as this has no connexion with your history, so your inquiry went no farther than concerning my uncle's death; with that, therefore, I will put an end to my letter: suffer me only to add, that I have faithfully related to you what I was either an eye-witness of myself, or received immediately after the accident happened, and before there was time to vary the truth. You will choose out of this narrative such circumstances as shall be most suitable to your purpose; for there is a great difference between what is proper for a letter and a history; between writing to a friend, and writing to the public. Farewell †!"

"The letter which, in compliance with your request, I wrote to you concerning the death of my uncle, has raised, it seems, your curiosity to know what terrors and dangers attended me while I continued at Misenum; for there, I think, the account in my former broke off.

'Though my snocked soul recoils, my tongue shall tell ‡.'

"My uncle having left us, I pursued the studies which prevented my going with him, till it was time to bathe. After which I went to supper, and from thence to bed, where my sleep was greatly broken and disturbed. There had been, for many days before, some shocks of an earthquake, which the less surprised us as they are extremely frequent in Campania; but they were so particularly violent that night, that they not only shook everything about us, but seemed indeed to threaten total destruction.

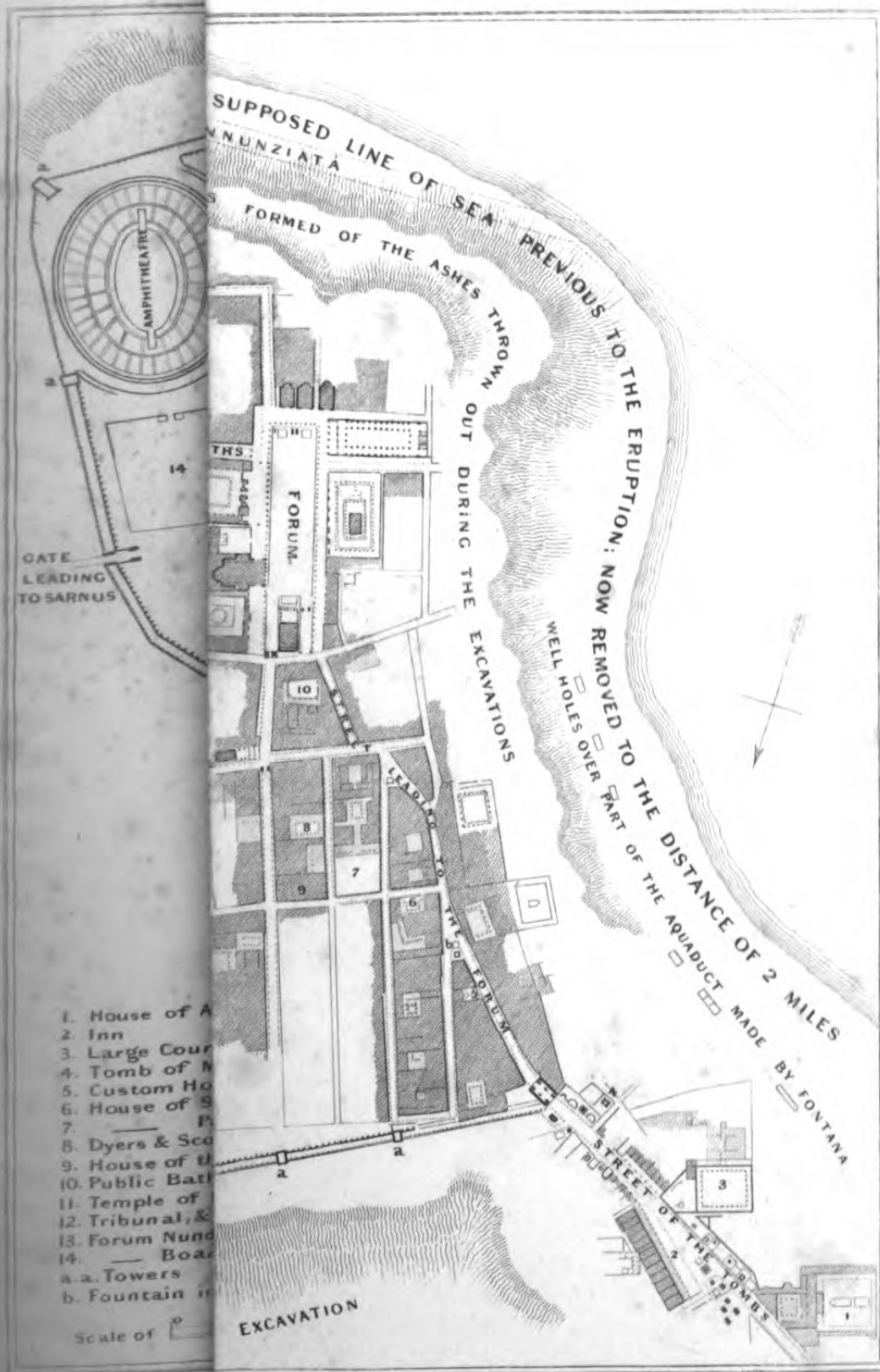
* See this account continued, in the following Letter.

† Pliny's Letters, Melmoth's Translation, vi. 16.

‡ Virgil, book ii.

My mother flew to my chariot as I was rising, in order to avoid the sea, which separated the sea from the town. It was that time but eighteen years ago, whether I should call my mother's conduct a generous juncture, courage or a prudent retreat. Livy, and amused myself with reading the author, and even making extracts from him. In this posture, a friend of mine came from Spain to pay his respects, observing me sitting by my mother's hand, greatly condemning her conduct at the same time that he reproved my mother's security. Nevertheless, I was not an author. Though it was now a day, exceedingly faint and languid, the ground around us tottered, and though the ground, yet, as the place was not so high, there was no remaining time for flight, great danger: we therefore fled to the town. The people followed us with sternation, and, as to a miracle, every suggestion seems more than probable. Being got at a convenient distance, we stood still, in the midst of a dreadful scene. The chariots were to be drawn out, were so crowded forwards, though upon the shore we could not keep them steady, they were pushed back upon themselves, and to be driven back by the convulsive motion of the sea, at least the shore was considerably raised, and sea animals were left upon it.

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RECENT EXCAVATIONS, 1831.

My mother flew to my chamber, where she found me rising, in order to awaken her. We went out into a small court belonging to the house, which separated the sea from the buildings. As I was at that time but eighteen years of age, I know not whether I should call my behaviour, in this dangerous juncture, courage or rashness ; but I took up Livy, and amused myself with turning over that author, and even making extracts from him, as if all about me had been in full security. While we were in this posture, a friend of my uncle's, who was just come from Spain to pay him a visit, joined us ; and observing me sitting by my mother with a book in my hand, greatly condemned her calmness, at the same time that he reproved me for my careless security. Nevertheless, I still went on with my author. Though it was now morning, the light was exceedingly faint and languid ; the buildings all around us tottered, and though we stood upon open ground, yet, as the place was narrow and confined, there was no remaining there without certain and great danger : we therefore resolved to quit the town. The people followed us in the utmost consternation, and, as to a mind distracted with terror every suggestion seems more prudent than its own, pressed in great crowds about us in our way out. Being got at a convenient distance from the houses, we stood still, in the midst of a most dangerous and dreadful scene. The chariots which we had ordered to be drawn out, were so agitated backwards and forwards, though upon the most level ground, that we could not keep them steady, even by supporting them with large stones. The sea seemed to roll back upon itself, and to be driven from its banks by the convulsive motion of the earth ; it is certain at least the shore was considerably enlarged, and several sea animals were left upon it. On the other side a

black and dreadful cloud, bursting with an igneous serpentine vapour, darted out a long train of fire, resembling flashes of lightning, but much larger. Upon this our Spanish friend, whom I mentioned above, addressing himself to my mother and me with great warmth and earnestness: 'If your brother and your uncle,' said he, 'is safe, he certainly wishes you may be so too; but if he perished, it was his desire, no doubt, that you might both survive him: why, therefore, do you delay your escape a moment?'—We could never think of our own safety, we said, while we were uncertain of his. Hereupon our friend left us, and withdrew from the danger with the utmost precipitation. Soon afterwards the cloud seemed to descend, and cover the whole ocean; as indeed it entirely hid the island of Capreæ* and the promontory of Misenum. My mother strongly conjured me to make my escape at any rate, which, as I was young, I might easily do: as for herself, she said, her age and corpulency rendered all attempts of that sort impossible. However she would willingly meet death, if she could have the satisfaction of seeing that she was not the occasion of mine. But I absolutely refused to leave her, and taking her by the hand, I led her on: she complied with great reluctance, and not without many reproaches to herself for retarding my flight. The ashes now began to fall upon us though in no great quantity. I turned my head, and observed behind us a thick smoke, which came rolling after us like a torrent. I proposed, while we had yet any light, to turn out of the high road, lest she should be pressed to death in the dark by the crowd that followed us. We had scarce stepped out of the path, when darkness overspread us, not like that of a cloudy night, or when there is no moon, but of a room when it is shut up,

* An island twenty miles from Naples, now called Capri.

and all the lights extinct. Nothing then was to be heard but the shrieks of women, the screams of children, and the cries of men; some calling for their children, others for their parents, others for their husbands, and only distinguishing each other by their voices; one lamenting his own fate, another that of his family; some wishing to die from the very fear of dying; some lifting their hands to the gods; but the greater part imagining that the last and eternal night was come, which was to destroy the gods and the world together*. Among these were some who augmented the real terrors by imaginary ones, and made the frightened multitude falsely believe that *Misenum* was actually in flames. At length a glimmering light appeared, which we imagined to be rather the forerunner of an approaching burst of flames, as in truth it was, than the return of day. However, the fire fell at a distance from us: then again we were immersed in thick darkness, and a heavy shower of ashes rained upon us, which we were obliged every now and then to shake off, otherwise we should have been crushed and buried in the heap. I might boast that, during all this scene of horror not a sigh or expression of fear escaped from me, had not my support been founded in that miserable, though strong, consolation—that all mankind were involved in the same calamity, and that I imagined I was perishing with the world itself! At last this dreadful darkness was dissipated by degrees, like a cloud of smoke; the real day returned, and even the sun appeared, though very faintly, and as when an eclipse is coming on. Every object that presented itself to our eyes (which were extremely

* The Stoic and Epicurean Philosophers held, that the world was to be destroyed by fire, and all things fall again into original chaos; not excepting even the national gods themselves from the destruction of this general conflagration.

weakened) seemed changed, being covered over with white ashes, as with a deep snow. We returned to Misenum, where we refreshed ourselves as well as we could, and passed an anxious night between hope and fear; though indeed with a much larger share of the latter; for the earthquake still continued, while several enthusiastic people ran up and down, heightening their own and their friends' calamities by terrible predictions. However my mother and I, notwithstanding the danger we had passed, and that which still threatened us, had no thoughts of leaving the place till we should receive some account from my uncle.

“ And now you will read this narrative without any view of inserting it in your history, of which it is by no means worthy; and indeed you must impute it to your own request if it shall deserve the trouble of a letter; farewell*.”

Pompeii was not destroyed by an inundation of lava; its elevated position sheltered it from that fate: it was buried under that shower of stones and cinders of which Pliny speaks. Much of this matter appears to have been deposited in a liquid state; which is easily explained, for the vast volumes of steam sent up by the volcano descended in torrents of rain, which united with the ashes suspended in the air, or washed them, after they had fallen, into places where they could not well have penetrated in a dry state. Among other proofs of this, the skeleton of a woman was found in a cellar, enclosed within a mould of volcanic paste, which received and has retained a perfect impression of her form. In the great eruption of 1779, minutely described by Sir William Hamilton, Ottaviano, a small town situated at the foot of Somma, most narrowly escaped similar destruction. The pheno-

* Pliny's Letters, vi. 20; Melmoth's translation.

mena, then observed may be presumed to correspond closely with those which occurred at Pompeii.

“ On the night of the 8th of August, when the noise increased, and the fire began to appear above the mountain of Somma, many of the inhabitants of this town flew to the churches, and others were preparing to quit the town, when a sudden violent report was heard, soon after which they found themselves involved in a thick cloud of smoke and minute ashes ; a horrid clashing was heard in the air, and presently fell a deluge of stones and large scoriæ, some of which scoriæ were of the diameter of seven or eight feet, and must have weighed more than one hundred pounds before they were broken by their fall, as some of the fragments of them, which I picked up in the streets, still weighed upwards of sixty pounds. When these large vitrified masses either struck against one another in the air, or fell on the ground, they broke into many pieces, and covered a large space around them with vivid sparks of fire, which communicated their heat to everything that was combustible. In an instant the town and country about it was on fire in many parts ; for in the vineyards there were several straw huts, which had been erected for the watchmen of the grapes, all of which were burnt. A great magazine of wood in the heart of the town was all in a blaze ; and had there been much wind, the flames must have spread universally, and all the inhabitants would infallibly have been burnt in their houses, for it was impossible for them to stir out. Some who attempted it with pillows, tables, chairs, the tops of wine-casks, &c., on their heads, were either knocked down, or soon driven back to their close quarters, under arches and in the cellars of their houses. Many were wounded, but only two persons have died of the wounds they received from this dreadful volcanic shower : to add to the horror of the scene,

incessant volcanic lightning was whisking about the black cloud that surrounded them, and the sulphurous heat and smell would scarcely allow them to draw their breath. In this miserable and alarming situation they remained about twenty-five minutes, when the volcanic storm ceased all at once*." It is evident that if the eruption had continued for a brief space longer, Ottaiano must have perished like Pompeii.

This last-named city, however was not buried to its present depth by a single eruption. Successive layers are clearly to be traced, (Simond counted eight of them,) and the lowest has evidently been moved, while the others are untouched; a plain proof that some interval elapsed between their deposition, and that the inhabitants returned to seek after their most costly property. That so few articles of intrinsic value have been found, is attributed, with much probability, to this cause †.

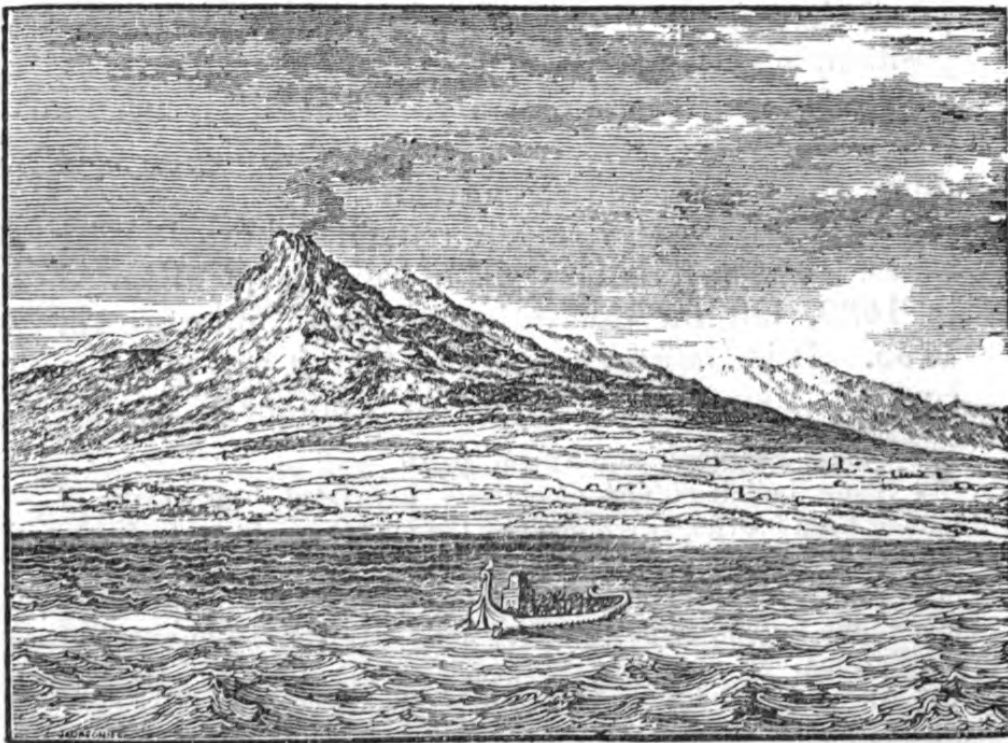
For 1676 years Pompeii remained buried under ashes. The first indications of ruins were observed in 1689, but the excavations did not commence till 1755. It is, however, singular that it was not discovered sooner, for Dominico Fontana ‡, having

* Campi Phlegræi, supplement, p. 19.

† Some buildings now completely excavated bear marks of having been previously searched by the ancients. In such places, all valuable effects and materials have been carried away, as, for instance, the columns of the portico of Eumachia, a building adjoining the Forum, to be described hereafter, and the furniture of the Basilica.

‡ An eminent architect of the sixteenth century. He executed many splendid works by the commands of Pope Sixtus V.: among which are the library of the Vatican, and an aqueduct, fifteen miles long, supported upon arches. But that which gained him the highest reputation was the erecting that vast obelisk which stands in front of St. Peter's; a feat which many of Sixtus's predecessors had meditated, but none had ventured to attempt. After the death of this pontiff he removed to Naples.

been employed in the year 1592 to bring the waters of the Sarno to the town of Torre dell'Annunziata, cut a subterraneous canal across the site of Pompeii, and often met in his course with the basements of buildings. The excavations, to which the attention of Europe is constantly directed, have produced, and continue to produce the most interesting results. Unfortunately some of the most important monuments are rapidly perishing; and being already half destroyed by the burning cinders, shaken by earthquakes, and built originally of the worst materials, oppose but a feeble resistance to the destructive agency of damp and frost.



Supposed appearance of Vesuvius and the face of the country after the eruption.

CHAPTER IV.

OF THE WALLS AND GATES OF POMPEII.

THE most ancient specimens of fortification with which we are acquainted are the Cyclopean walls of Tiryns, Mycenæ, and other places in Greece and Italy. Closely akin to these, but of a more artificial structure, are the walls of Cortona, Fiesole, Volterra, and other cities built by the Tyrrhenians, or Etruscans, from whom this second style, though naturally and evidently derived from the former, and of frequent occurrence in Greece as well as Italy, has obtained the name of the Etruscan style. To this a large part of the walls of Pompeii appears to belong: it will not therefore be irrelevant to prefix to this chapter some account of the peculiarities of this species of architecture.

The Cyclopes are most generally known as mythological personages serving as journeymen to Vulcan, and chiefly employed in forging Jupiter's thunderbolts. They seem to have enjoyed the same sort of reputation that Julius Cæsar and the Devil enjoyed in the middle ages, and much later among the uneducated peasantry of Europe; that is, most works of remote antiquity and unusual magnitude were ascribed to them. Who they really were, and by what race the buildings ascribed to them were erected, are questions which cannot be treated but at considerable length, and in a way not likely to interest the general reader. We shall therefore proceed

at once to describe these remains : which are impressive from the solidity of their construction and the massive grandeur of their parts, and venerable from the extreme antiquity which they boast. Not less than three thousand years have elapsed since the fortifications of Tiryns and Mycenæ were built ; yet they still remain, apparently as perfect as when visited by Pausanias sixteen centuries ago, and seem to defy the wasting hand of time, when unassisted by the destructive agency of man.

The reader, if at all acquainted with the north of England, is sure to be familiar with the dry stone walls which serve for fences throughout that district. These walls are used, not merely because stone is the cheapest material, but as the readiest way of disposing of the loose stones which cumber the surface of the earth, especially in the mountainous parts, where we continually see large rocks projecting from the earth, built into, and forming part of the wall, which is composed of fragments of all shapes and sizes laid together without mortar in as close order as the skill of the workman and the tractability of the material has permitted. These are Cyclopean walls in miniature. This term applies properly to a peculiar species of building composed of huge polygonal masses of rock piled upon each other, without any artificial adaptation of their sides, but the interstices at the angles filled up with small stones. The most celebrated Cyclopean remains in Greece are those at Tiryns and Mycenæ. They consist in both places of a wall, or fortification, inclosing the summit of a nearly insulated rock, the Acropolis, in the language of later Greece ; the enclosure of which was at once a palace, a fortress, and a temple. The remains of Tiryns seem to be the older of the two. They are related to have been built by the Cyclopes for Prætus,

whose reign is placed, in Blair's System of Chronology, about 1379 B. C. This date is probably much too remote, but they certainly existed anterior to the age of Homer, who adopts the epithet 'walled,'* as characteristic of the city; and from the pristine rudeness and solidity of their construction, we cannot doubt the identity of the existing ruins with the fortifications which attracted the poet's admiration in their perfect state. The enclosure is two hundred and twenty yards in length, and sixty in its extreme breadth†. It approximates to a parallelogram, deeply indented on one side, and occupies nearly the whole summit of a low eminence, which rises precipitously, but not more than forty or fifty feet above the plain. It had three gates, the principal one flanked by a solid tower, and accessible only by a flight of steps, which at first running parallel to the wall, turned at right angles before it reached the gate; thus encircling two sides of the tower, and giving every facility of defending this most important point. In several of our earliest specimens of castellated architecture, the entrance is protected in a similar way, the door being elevated several feet above the ground, and accessible only by a steep and narrow stair. The walls consist chiefly of the unwrought masonry described above; yet the art of shaping stones seems not to have been entirely unknown, for certain curious galleries, which perforate a considerable part of them, are roofed with a sort of pyramidal arch, formed by cutting away the superincumbent blocks at an angle of about 45° with the horizon. Pausanias gives the following brief ac-

* Wally rather, if the word were legitimate. *Τίρυνθα τε τις χιόισσαν.* Il. b. 559.

† Gell, Argolis, or Itinerary of Greece, p. 56. This work contains a detailed account of Tiryns and Mycenæ, with numerous plates, to which we have been much indebted.

count. "The walls, the only part which remains, are said to have been built by the Cyclopes. They are composed of unhewn stones*, so large that a pair of mules could not move the smallest from its place. Other stones have been fitted in between them, so that the large ones might adhere the better." This statement respecting the size of each stone is of course to be understood only of those masses of rock which form, as it were, the skeleton of the building. The largest observable of these is nine feet six inches long, four feet broad, and three feet ten inches deep: the usual dimensions are about seven feet by three. The greatest present height of the wall is forty-three feet; formerly it appears to have been about sixty feet high, judging from the quantity of displaced blocks. A portion of the masonry is represented in page 59, taken from Sir W. Gell's Argolis.

Still more striking are the remains of Mycenæ, distinguished by Homer for the excellence of its building†, as well as Tiryns. They now consist of an irregular enclosure, in its extreme length and breadth about 330 by 200 yards. In the eastern side a remarkable gateway still exists, called the Gate of Lions, from two lions rudely sculptured over the lintel. It is flanked by walls, which form a court about fifty feet deep in front of it, and these, together with the front of the gate, are built with blocks, which evidently have been rudely squared. The back of the gate is said to exhibit the rough masonry‡ which we have called Cyclopean; and hence a question may arise, whether the gate itself, with the front walls, were a later structure, or whether the

* λίθων ἀργῶν. ii. 25.

† Μυκῆνας, εὐκτίμενον πολίεθρον. Il. b. 569.

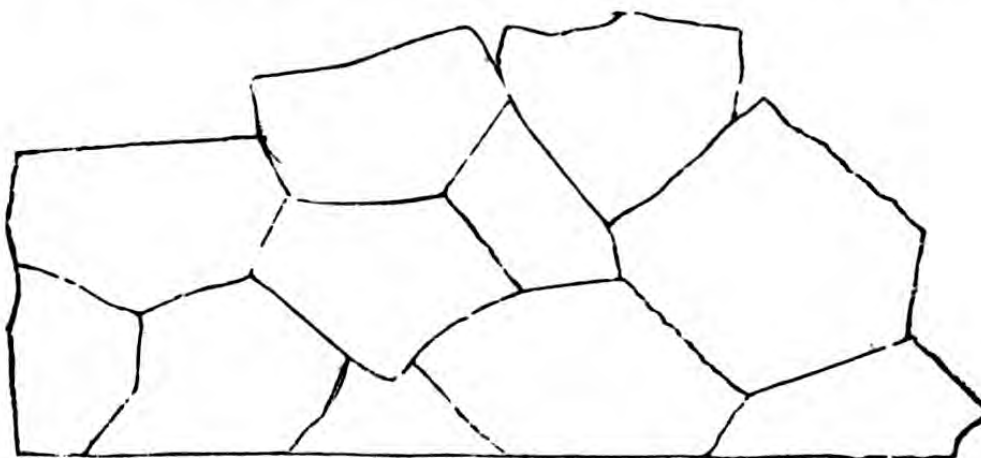
‡ Dodwell, Travels in Greece, vol. i. p. 241.



Cyclopean gallery at Tiryns.

regular and the polygonal construction were not employed at the same period, the former for the

rough service of war, the latter for edifices of sanctity or splendour. The greater part of the walls consists of polygonal blocks, well fitted to each other, as in the following cut, given by Mr. Hughes from a



Walls of a temple in Epirus.

temple in Epirus* ; but specimens occur as rude as those at Tiryns, and, as we have already said, there is also an approximation to regular masonry of hewn stone. Thus, in this one example we find the two stages of the Cyclopean, and that which is usually called the Etruscan style. The durability of these remains may be estimated from Pausanias, who visited them sixteen centuries ago, yet his brief notice might serve a modern traveller: "A gateway over which stand lions, and other parts of the wall are still left †". They have defied, not only time, but the still more destructive hand of man; for when the Argians demolished Tiryns and Mycenæ, B. C. 468, "they could not break down the walls of Mycenæ, by reason of their strength, for they were built by the Cyclopes, after the manner of those of Tiryns ‡." The walls of Norba, in Latium, are said to be on a still more gigantic scale.

* Hughes, Travels in Greece, &c. vol. i. p. 214. † ii. 16.

‡ Hughes, Travels in Greece, vii. 25.

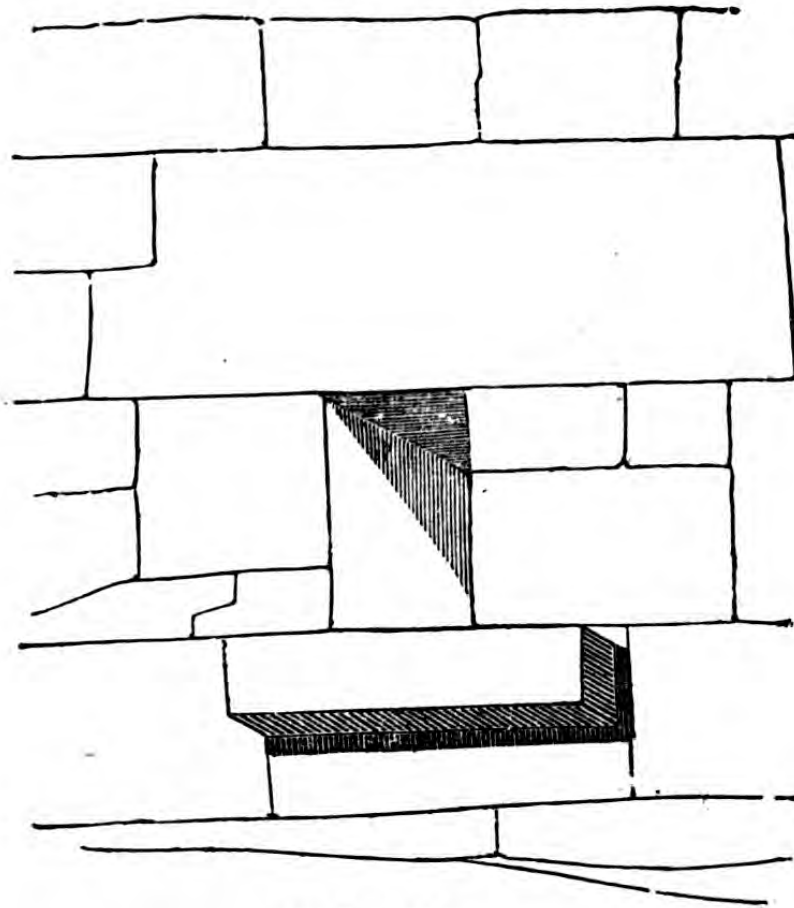


Cyclopean Walls at Tiryns.

Of the rudest style of Cyclopean architecture, very few specimens now exist; the most celebrated one is the citadel of Tiryns. The second style, which is prevalent at Mycenæ, is a natural and obvious improvement of the former. The improvement consists in fitting the sides of polygonal blocks to each other, so that exteriorly the walls may present a smooth and solid surface. Specimens of this occur in most of the fortified cities of ancient Greece; we may instance, in addition to the unequalled remains of Mycenæ, the walls of Mantinea and Chæroneia, and the Pnyx at Athens*. In the third style the courses are horizontal, with more or less irregularity, but the joints not vertical. Cement was not employed in any of these buildings: the massiveness of the parts rendered it unnecessary, even if its use was known to the builders. An approximation to this third style is visible, as we have said, at Mycenæ; but it is seen in perfection in the cities of Etruria, many of which even

* Hughes, Travels in Greece, vol. i.

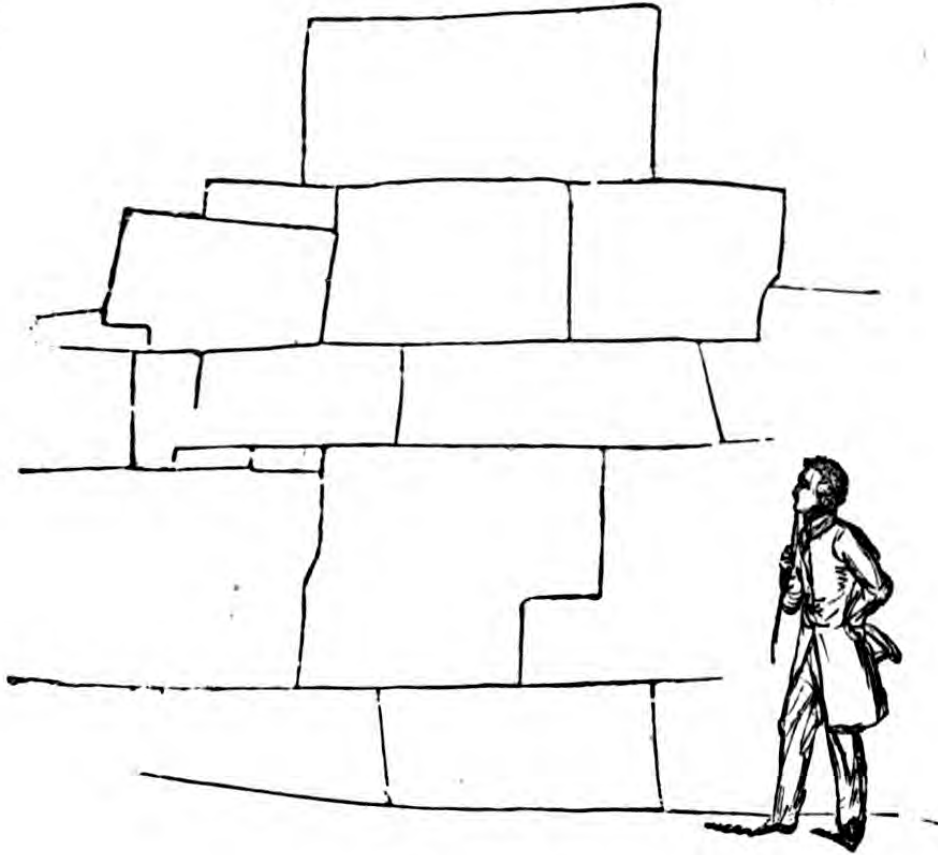
now retain their ancient walls. We may name Volterra, Fiesole, Cortona, Populonia, Roselle, and



Walls of Volterra.

others. In all these, according to Micali*, the horizontal style prevails; the only exception, in Etruria, is at Cosa, which offers a fine example of the second style. It is remarkable that this place, which is characterized by a ruder architecture, appears to be of decidedly later date than those above-mentioned. A short account of Roselle, where vast ruins still exist, may serve as a specimen of all the others. It is situated, like all the ancient cities of this region, upon

* Micali, *L'Italie avant la Domination des Romains*, Atlas, Description de Planche X.



Walls of Fiesole.

a hill, northward of the river Ombrone; the walls are one mile and two-thirds in circumference, built of enormous masses of travertine, or coarse limestone, having the exterior surface worked to an even plane. Many of them are fourteen or fifteen feet long, and so thick, that two, placed back to back, form the thickness of the wall. Almost the entire walls of Cosa exist near Orbitello to this day. The engravings which we have given will point out the comparative skill with which the surfaces and angles of blocks were joined, and retained in their places without cement. It has been conjectured that this mode of building was derived from the Egyptians, but it does not resemble the character of their architecture, nor

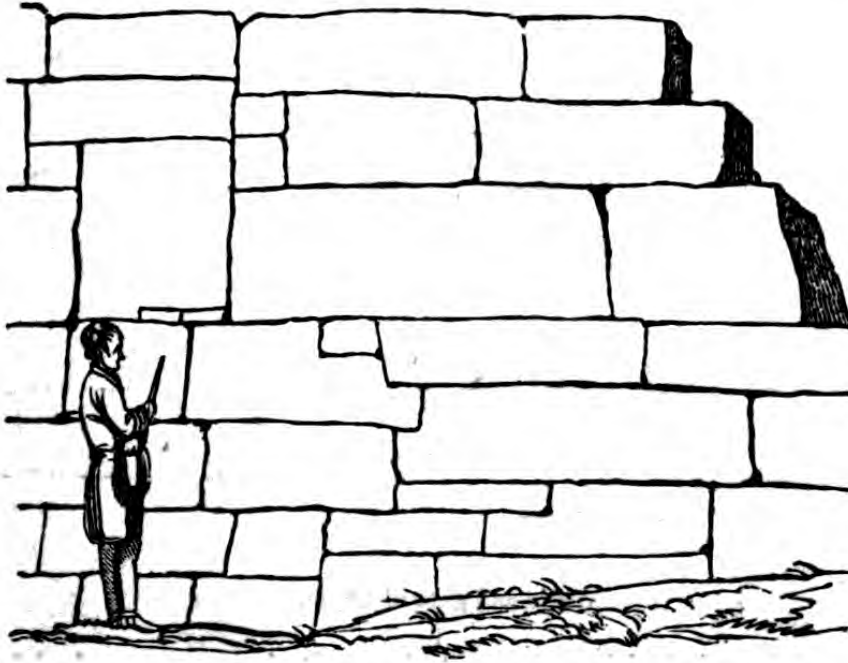


Walls of Cosa.

that of any of the Eastern nations, except the Phœnicians, who built their walls of large stones, but united by cement. This tends to support the theory that the Cyclopes were Phœnician artificers, who introduced this method of building into Greece, together with other useful arts, as the forging of metals. Euripides speaks of the walls of Mycenæ as built in the Phœnician method*

While on this subject, we may mention, as among the most remarkable of ancient walls, those of Luna, a maritime establishment of the Etruscans. They were built with solid blocks of pure white marble, taken probably from the neighbouring quarries of Carrara. Rutilius Numatianus, a writer at the close of the fourth century, praises the white walls of Luna;

* Herc. Furens, 944.

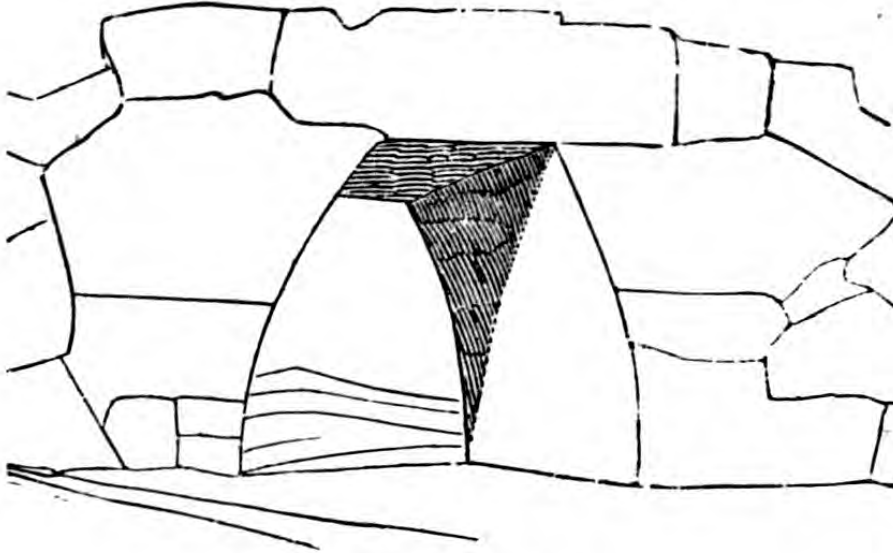


Walls of Populonia.

and one Cyriac of Ancona, in a letter written in the year 1442, speaks of their remarkable appearance. They are now almost entirely destroyed, to allow their site to be employed for tillage*.

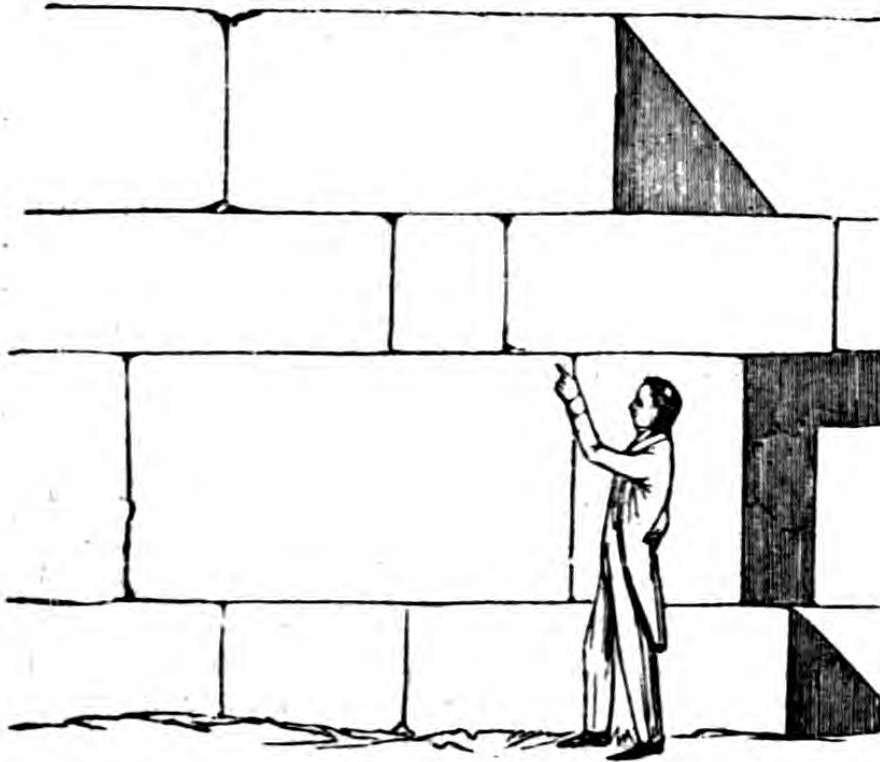
It has been suggested, with much appearance of probability, that all these structures are essentially Pelasgic; that when the Etruscans penetrated into central Italy, and occupied the district named from them Etruria, they formed a nation of military nobility, like the Normans in England, or the Hellenes in Greece, enslaved the ancient Pelasgian inhabitants, and compelled them to execute the massive works which now bear the Etruscan name. This conjecture is strengthened by the numerous remains of the polygonal style which exist in Latium, at Præneste, Norba, Segni, and other places. These certainly are not Etruscan; probably they belong to the ancient

* Micali, vol. i. chap. x.



Walls and gate of Segni.

Pelasgian inhabitants,—at least it is a remarkable circumstance that we find these walls nowhere, except where Pelasgians have been. Cosa, in Etruria, has been already mentioned, where the city, as an Etruscan city, is of comparatively late date, yet the walls are of the older construction. Micali argues from hence that the polygonal walls cannot be considered necessarily anterior to the Etruscan style; but it appears easier to suppose that Cosa was an ancient Pelasgian city, colonised and re-occupied by the Etruscans, than that its builders retrograded from a more advanced to a less advanced style of building. The walls of Todi are laid in horizontal courses, and similar to the isodomon or regular masonry of the Greeks. Whatever be the origin of these Etruscan walls, those of Pompeii are evidently of kindred structure. They consist, where the original structure still remains, of courses of stone laid rudely horizontal, but the joints inclined to the perpendicular, so that the surface of each stone is usually a rhomboid or trapezium. Some of the stones are



Walls of Todi.

dovetailed into each other,—a distinguishing mark of what is called the Etruscan style. On many of the stones, however, certain characters are found, intended, apparently, as directions to the workmen, which are said by M. Mazois to be either Oscan, or the most ancient forms of the Grecian alphabet. If this be so, the walls must be referred to a period antecedent to the Etruscan occupation of this part of Italy; and we shall have another reason for believing this method of building to be, if not Pelasgic, at all events not necessarily Etruscan.

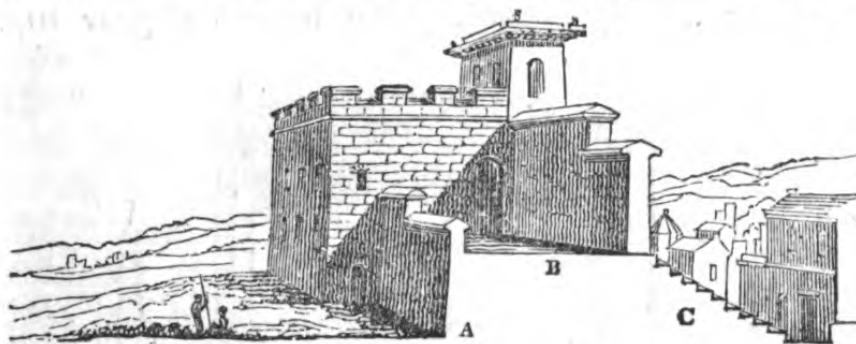
The course of the walls has been traced and ascertained by excavation. They surrounded the city, except upon the western or seaward side, where no remains of them are to be found. For the greater part of their circuit they are curvilinear, avoiding all sharp

angles as much as possible, in accordance with the principle of fortification laid down by Vitruvius, that it is desirable to avoid sharp angles, as offering more protection to the besiegers than to the besieged*. Some of the gates, like the Gate of Lions at Mycenæ, are set considerably back, to give the greatest possible security to these vulnerable and important points. Within this external wall, with towers at intervals, the usual defence of the most ancient Italian cities, there was thrown up an agger or earthen mound, which Vitruvius considered, when properly combined with masonry, proof against the battering-ram, or mining, or any known method of assault. His directions for constructing it are as follows. A ditch is to be dug as large and deep as possible, the sides perpendicular and walled. The earth is heaped up on the inside, and supported both within and without by walls strong enough to bear its thrust, bonded together, for farther security, by internal cross walls, between which the excavated material must be firmly rammed down, that it may still offer substantial resistance, even when the external masonry has been ruined. A considerable breadth is to be allowed for this raised platform, so that cohorts may have room to fight along its whole extent, as if ranged for battle †. This construction does not extend to the south side of the city, which was less exposed to the attack of military engines, and therefore required less strength. On the north and north-east, the ramparts of Pompeii consisted of an earthen terrace (B) fourteen feet wide, walled and counter-walled, which was ascended from the city by flights of steps (C), broad enough for several men abreast. The external face (A), in-

* Directly the reverse is recommended by Vegetius, who further advises that towers should be placed at the salient angles, for the advantage of taking the enemy in flank.

† Vitruv. i. 5.

cluding the parapet, was about twenty-five feet high ; the inner wall was raised some feet higher. There is



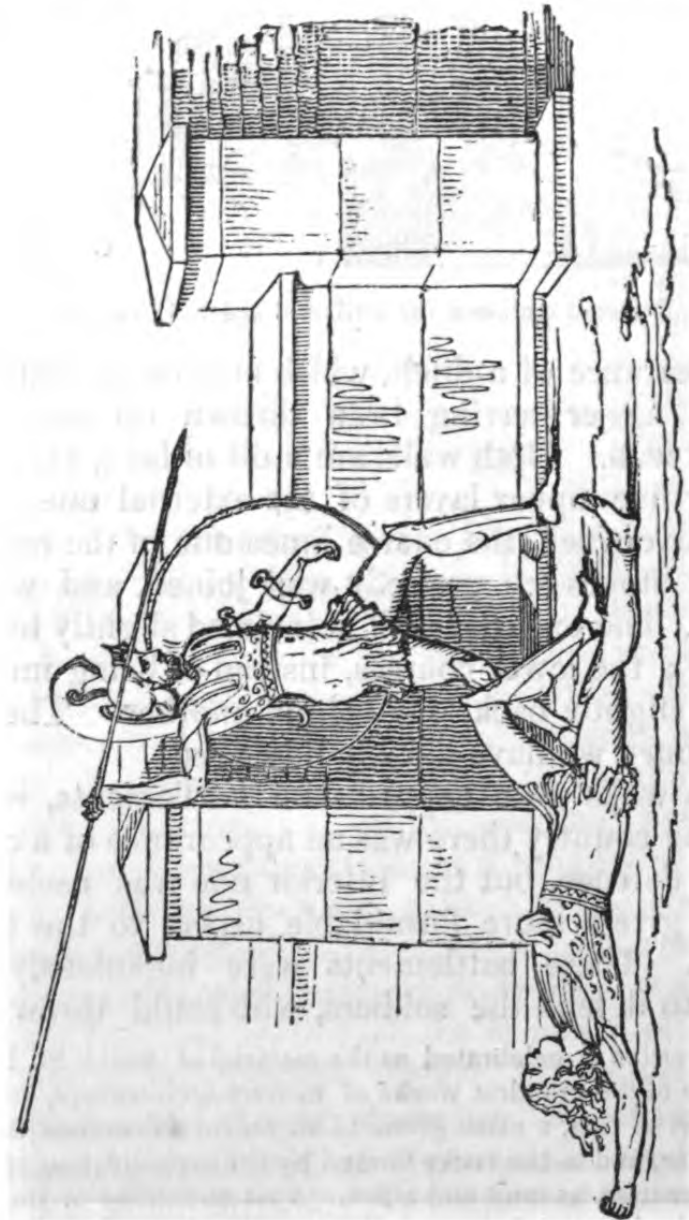
Restored section of the walls and agger of Pompeii.

no appearance of a ditch, which may be accounted for by the agger having been thrown up within the ancient wall. Both walls are built of lava, except the four or five upper layers of the external one, which is of travertine*, the coarse limestone of the country. All the stones are perfectly well joined, and without mortar. The external wall is inclined slightly towards the city ; the lower courses, instead of being inclined, are set slightly back, one behind another. The style of masonry we have already described.

Both walls were capped with battlements, so that from the country there was an appearance of a double line of defence, but the interior one was useless except to give a more formidable aspect to the fortifications. These battlements were ingeniously contrived to defend the soldiers, who could throw their

* Travertine is celebrated as the material of which St. Peter's, and some of the grandest works of modern architecture, are built. It is a sort of tufa, a name given to all recent calcareous deposits from water, and to the rocks formed by the consolidation of loose volcanic matter, as mud and ashes. Vast quantities of travertine are deposited by the Anio, and all around Tivoli ; and the limestone districts of England furnish a similar rock. The hot springs of volcanic countries usually deposit tufa with great rapidity. Travertine is remarkably durable ; there is now at the end of the Corso of Rome, a monument, called that of Bibulus, the surface of which is as fresh and perfect as the day it was put up

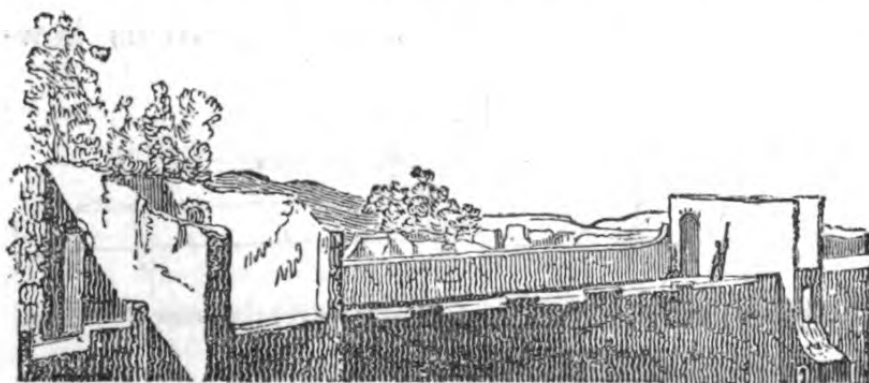
missiles through the embrasure in comparative safety, being protected by a return or shoulder of the battlement projecting inward. The towers appear to be



Interior of the battlements restored.

of less ancient date. They are constructed with small rough pieces of tufa, and are stuccoed and decorated on the sides, but plain in front. They are quadrangular, contrary to the rule laid down by

Vitruvius, who says that towers ought to be circular or polygonal. "Square towers are sooner breached, because the battering-ram breaks their angles; round ones it cannot hurt, but merely drives the stones, which should be cut wedge-like, towards their common centre*." He also recommends that they should be placed at no greater intervals than the cast of a javelin, so as to give each other mutual support, and flank the enemy in case of assault. This principle has been adhered to near the western gate, where they are only eighty paces distant from each other, but towards the east the distance is two, three, and even four hundred and eighty paces. We may suppose, therefore, that the ground in this quarter presented some difficulty to the approach of machines. All of them have archways, allowing a free passage along the agger, and are furnished with a sallyport; all are alike, and each consists of several stories. The



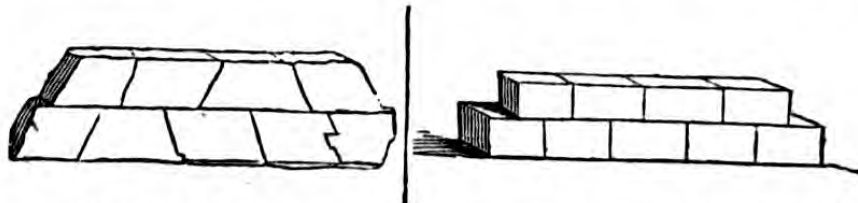
View of the wall and towers from without.

walls and towers are much ruined. It is impossible to attribute this entirely to the earthquakes which preceded and accompanied the eruption of 79. The outer wall of the towers seems invariably to have fallen. Sir W. Gell conjectures that this was done by Sylla at the end of the Social War, as the readiest

* Vitruv. i. 5.

means of rendering the fortifications useless. Probably the place had been dismantled at different periods, as various breaches and repairs seem to indicate. For some time before its first catastrophe, defences seem to have been thought unnecessary, for if they ever existed, as most likely they did, on the seaward side, they had been thrown down, and handsome houses, often four or five stories high, erected on their site. The long peace which Italy enjoyed under Augustus and his immediate successors, rendered fortifications useless, and it is probable that during that period it became convenient to enlarge the city even at the cost of its security.

The construction of the upper part of the walls, and the battlements of the ramparts, evince an improved knowledge in the science of building, and point out a period much more modern than that of the lower part; being composed of the isodomon, or regular masonry of the Greeks, above the more ancient Etruscan basis. Some portions how-

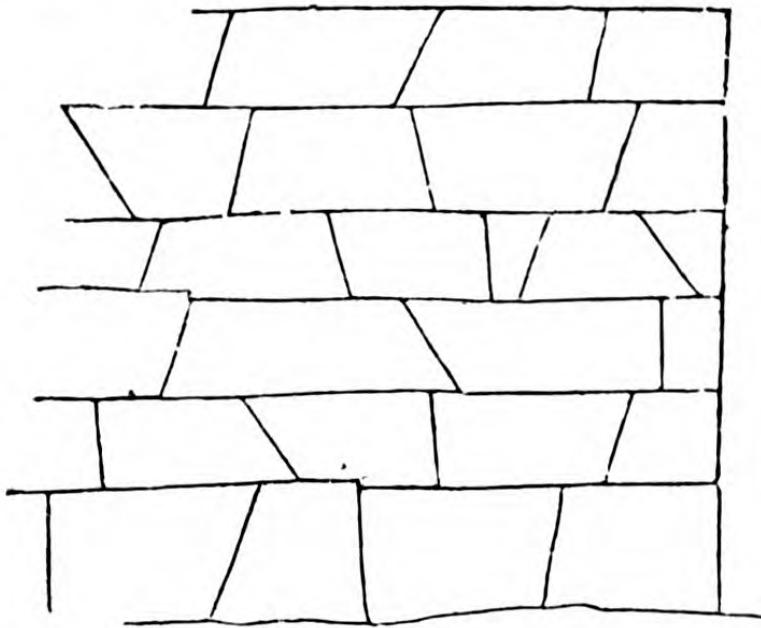


Masonry of Pompeii.

Isodomon, or regular masonry of the Greeks.

ever of the upper wall consist of masonry of that kind called by the ancients *opus incertum*, composed of small rough pieces, placed irregularly, and imbedded in a large quantity of mortar, resembling the flint and rubble masonry of our castles and churches. The difference of construction observable in the wall and towers shows that the latter are of much later date. This is what we should expect. The most ancient Greek fortifications, those of Tiryns and Mycenæ, are

without towers*; in those more recent, as at Orchomenus and Daulis, towers occur, but at considerable distances, and of small elevation. It was not until a much later period that they were built at regular intervals, and of commanding height, as at Plataea, Messene, and other cities†.



Greek wall, similar in construction to the walls of Pompeii ‡.

* Except at Tiryns, where the gate is flanked by a solid tower; it is hardly more, however, than a projection in the wall. See the Ground Plan, in Gell's Argolis. We give a representation of some remains of Greek walls and towers at Messene, from Stuart's Athens, vol. iv.



† Mazois.



‡ Dodwell's Travels in Greece.

There are six gates in the length of wall which now exists. The first and most important stood near the sea, at the north-western angle of the city, and led to Herculaneum by a branch of the Appian way. For about a furlong from the entrance the road is bordered with tombs, as is the Appian way where it issues from Rome. The gate is double, so that



Gate leading to Herculaneum restored*.

when the first doors had been carried, the assailers could be attacked from a large opening above, and destroyed while attempting to force the second. Strong buttresses of stone sustain the lateral pressure of the earthen rampart, which is ascended from the interior by ten very high and inconvenient steps. This gate in its arrangement resembles Temple Bar: there is a large central and two small side entrances, which, instead of being open to the sky, like the central road, were vaulted through their whole length. The inner gate consisted of folding doors, as the holes in the pavement, in which the pivots turned which served for hinges, evidently show; the outer

* This cut has been reversed by mistake so that the niche and wall on the left should be on the right, and vice versa.

defence was formed by a portcullis. The archway is constructed in brick and lava, in alternate layers, and covered with a fine white stucco. It is evidently a work of the Romans. This, although the principal entrance to the city, is not striking for its beauty, and is small in its dimensions. The stucco is covered with nearly illegible inscriptions of ordinances, &c. The centre archway is in width fourteen feet seven inches, and might, perhaps, have been eighteen or twenty feet in height; but its arch does not remain. The smaller openings on each side for foot passengers were four feet six inches wide, and ten feet high: in size, therefore, it scarcely equals Temple Bar. The road rises considerably into the city. On the left, before entering the gate, is a pedestal, which appears to have been placed for the purpose of sustaining a colossal statue of bronze, some fragments of bronze drapery having been found there. We may suppose it to have been the tutelary deity of the city*. Without the gate there is a small niche for a soldier, whose skeleton, still grasping a lance, was found here, together with the usual accoutrements and arms. The other gates are alike, both in plan and construction; the first leads to Vesuvius, the second has only the upper part excavated, the third led to Nola, the fourth was the gate of Sarnus, and the fifth communicated with Stabiæ and Nocera: they are for the most part of stone, in a very ruined state, but apparently, from their similarity of construction, coeval with the walls. The gate of Nola is ornamented on the interior with a head in the key-stone, by the side of which is placed an Oscan inscription †.

Having described the fortifications of the place, it will not be irrelevant to give a short notice of the

* Sir W. Gell, p. 93

† Engraved by Sir William Gell, p. 133.

methods of attack which they were meant to resist. Before the invention of artillery, men who fought behind stone walls possessed a vast advantage over those who fought in the open field; and after witnessing the pains and expense bestowed on these bulwarks, and the magnitude of the result, it might seem hopeless to reduce them except by the slow but certain operation of famine. This, indeed, was not only the last but the frequent resort of a general. Lines were drawn round the invested place, with a prodigality of labour, to which modern soldiers are little accustomed. A double rampart, frequently miles in length, between the inner and outer walls of which the assailing army was encamped, and thus protected both against assaults from without, and from the desperate sallies of the cooped-up garrison, deep fosses, both within and without, strong palisades, chevaux de frise (*cippi*), pit-falls set with stakes, arranged in rows (*lilia*), and planks buried in the earth, thick set with tenter-hooks and iron spikes (*stimuli*); all these were not thought too much to secure the capture of a single city, impregnable, from the strength of its situation, by open force*. At other times, a vast mound was erected against the very walls, and the bravery and ingenuity of both parties were taxed to the utmost to retard or forward its elevation to the level of the battlements †.

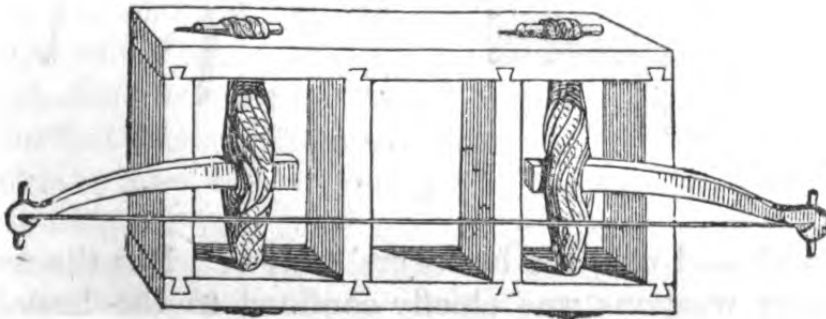
The first attempt, when the fortifications were such as to offer any chance of success, usually was to carry the place by assault. To this end the Romans surrounded the place with troops, distracted the attention of the garrison by a variety of feints, or endeavoured to alarm them by the mingled clamour of

* All these methods were employed by Cæsar at Alesia. Bell. Gall. vii. 72, 73.

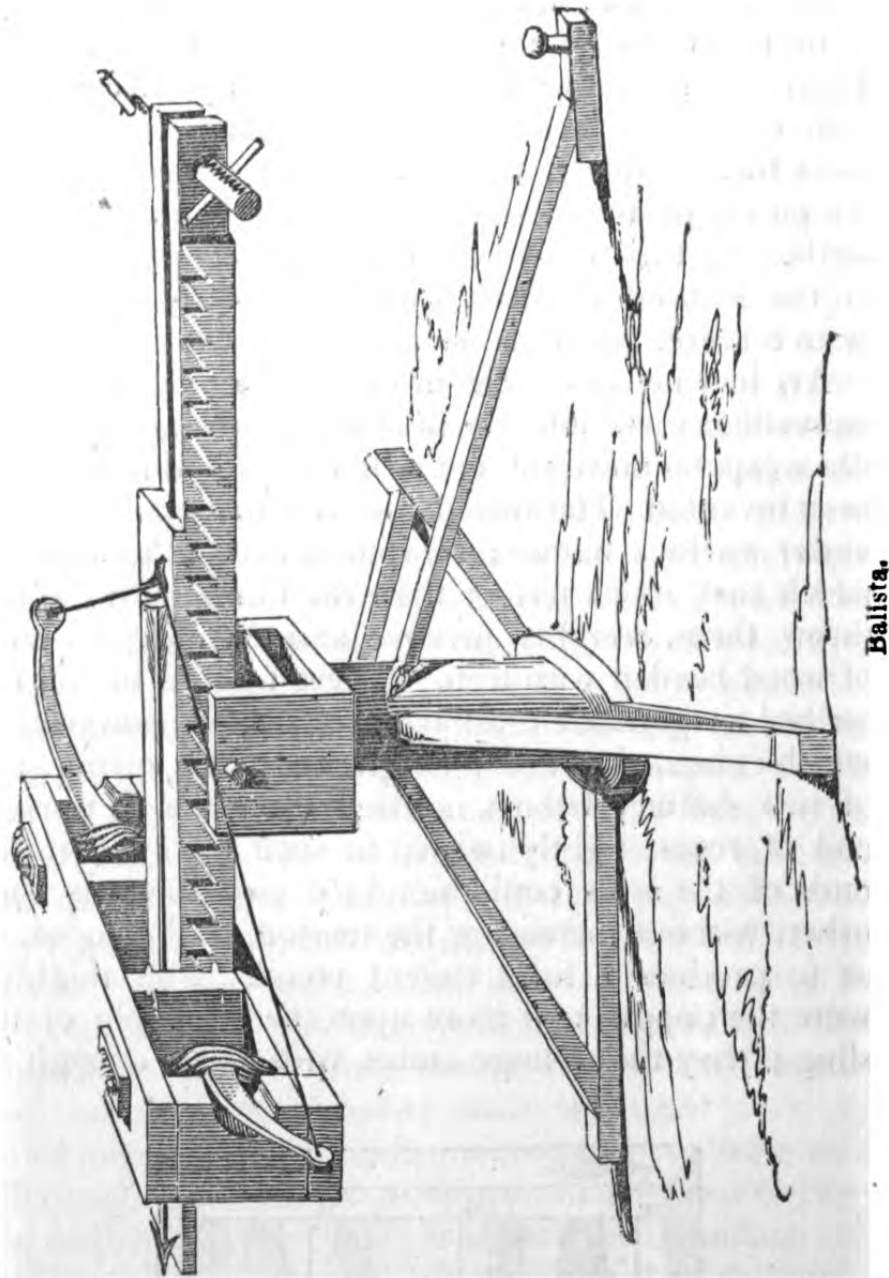
† See the Siege of Avaricum, Bell. Gall. vii. 22, seq.; and that of Plataea, Thucyd. ii. 75—77.

men's voices and military music, and to drive them from the walls by a storm of arrows and javelins. Then the storming column rushed up, their shields held over their heads, and overlapping each other, so as to resemble (*testudo*) a tortoise, ready to burst the gates, or to undermine, if possible, or scale the walls. If this trial failed, it was necessary to resort to the method of circumvallation already described, or to a scarce less operose and expensive process.

Art had not been idle in devising means to render unavailing these massive bulwarks, although no missile weapons powerful enough to effect this had yet been invented. The ancients, indeed, had many engines under various names; scorpions, catapultæ, balistæ, which cast, much farther than the human arm could throw them, weighty javelins, and even large beams of wood headed with iron. These may be briefly described as gigantic cross-bows, the most powerful of which consisted not of a single beam or spring, but of two distinct beams, inserted each into an upright coil of ropes, tightly twisted in such a way, that the ends of the arms could not be drawn towards each other, without increasing the tension of the ropes, so as to produce a most violent recoil. Still mightier were the onagri, and more upon the principle of the sling; they threw huge stones with force enough to



Balista.

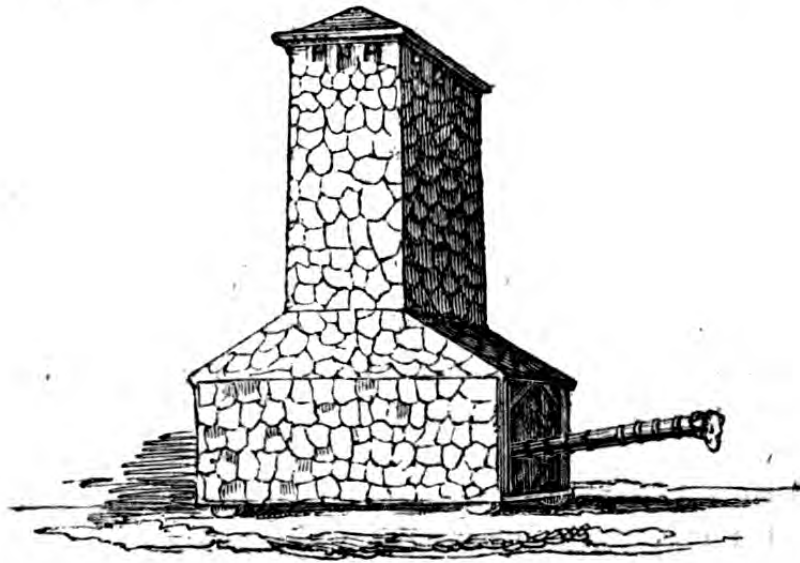


break and ruin the besiegers' towers. But the use of these weapons was chiefly confined to the besieged. As walls, therefore, could not be breached from a

distance, as in modern war, it was necessary to employ manual force, and various machines were invented to diminish the assailants' danger, and render their attack more effectual. We may class these under three heads; those meant merely to protect the approach of soldiers, those intended to ruin the walls, and those intended to supersede the process of destruction, by overtopping them. Of the first class are the machines called *Vinea*, *Pluteus*, and *Musculus*. The first were covered galleries formed of hurdles, or wicker-work, stretched on a wooden frame, beneath which the soldier could approach with comparative security, to undermine the walls, or do whatever else was required. Each *vinea* was eight feet high, seven broad, and sixteen long. *Pluteus* was a moveable gallery on wheels, for the protection of archers, who were stationed in it to clear the walls with their shot, and thus facilitate the approach of storming-parties, and the erection of scaling-ladders. *Musculus* was a small machine of the same description, sent in advance of the large towers, which are next to be described, to level the way for them, fill up the ditch if necessary, clear away rubbish, remove palisades, and make a solid road to the very foot of the walls. The Romans believed that a close alliance subsisted between the whale (*balæna*) and a smaller species of the same tribe, called *musculus*, and that when the former became blind, from the enormous weight of its eyelids dropping over and closing up the organ, the latter swam before, and guided it from all shallows which might prove injurious*. Hence this machine was called *musculus*, as exploring and smoothing the way for the larger engines. All these were covered with raw hides, or some similar material, to obviate the danger of their being set on fire.

* Pliny, Hist. Nat. lib. ix.

To des'roy the walls they used terebræ, or borers, and falces, crooked irons to draw out stones, when once an opening was made. But the ram was by far the most important and efficacious instrument, and the only one which it is worth while to describe.



Battering-ram and tower*.

It is said to have been first employed, in its most simple form, by the Carthaginians, to demolish the walls of Cadiz, after they had taken the place. Wanting proper iron tools for this purpose, a number of men took up a beam, and by their united force shook down the masonry. Pephasmenus, a Tyrian artificer, is said to have perceived the economy of power obtained by suspending the beam from a mast, or triangle. Cetras, of Calchedon, conceived the idea of mounting it on wheels and a platform, and protecting those who worked it by a roof and sides. He called it (*testudo*) the tortoise, from the slowness of its motion, or because the ram thrust in and out its head like a tortoise from its shell. To cap the beam with iron was an obvious improvement; and

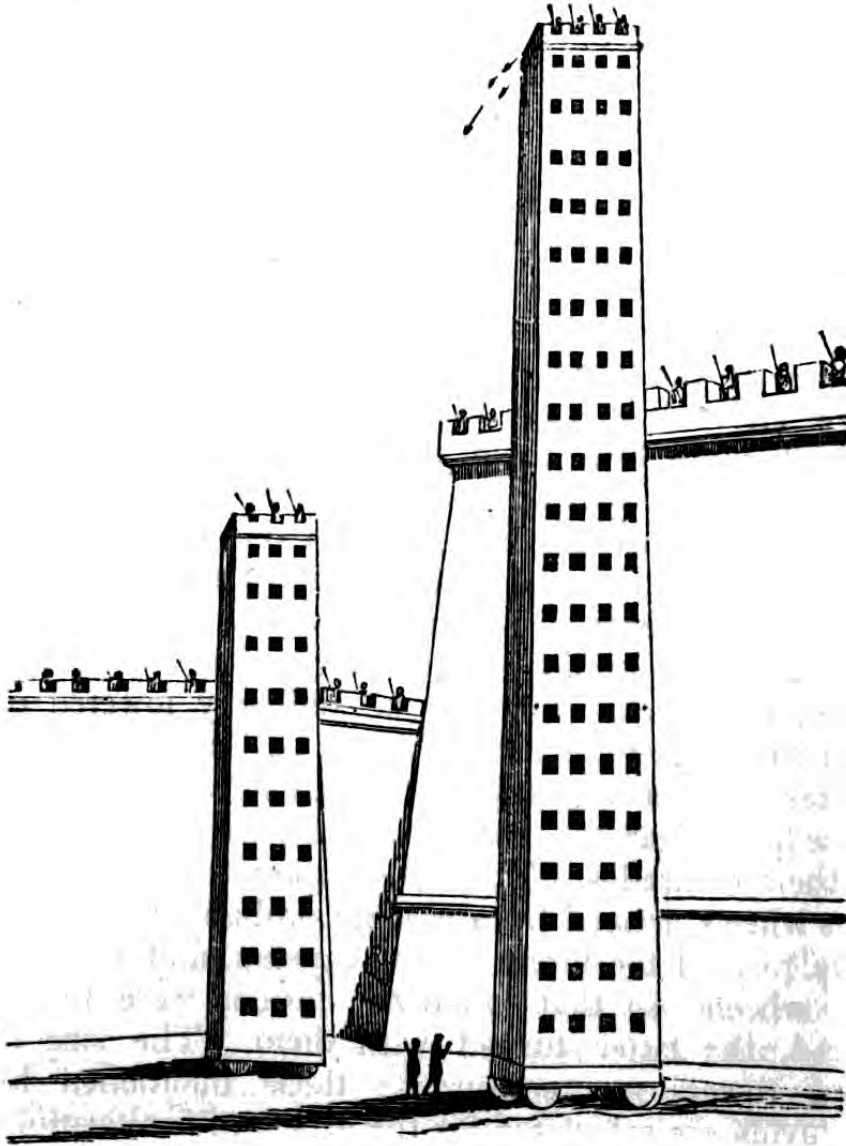
* From the plates to Newton's Vitruvius.

the way in which a ram butts with its head readily suggested the form usually given to the instrument, as well as its name. Vitruvius gives the dimensions of a tortoise employed by Philip of Macedon at the siege of Byzantium. The body was forty-five feet long, and thirty-four high. Above this, a turret was built four stories high, and not less than eighteen feet wide; the upper part armed with scorpions and catapults, the lower filled with water lest the enemy should succeed in setting the wood-work on fire. Another was eighty feet long and eighteen wide, the ram one hundred and four feet long, a foot square at the head, and something bigger at the lower end. It was worked by one hundred men*.

Still more formidable were vast moving towers, often, but not necessarily, combined with the ram. A city was in imminent danger when one of these was brought within reach of the walls. On the ground floor the ram exerted its destructive energy. In the middle was a bridge, the sides guarded by wicker-work, constructed so as to be suddenly lowered or thrust out upon the very battlements. In the upper stories soldiers with all sorts of missile weapons were placed, to clear the wall and facilitate the passage of their comrades. They were mounted on numerous wheels, moved from within; probably their axles were pierced for levers like a capstan, and fixed in the wheels, so that when the former were forced round, the latter turned with them. The size of these towers was enormous; those mentioned by Vitruvius are calculated for the attack of fortifications of a very different scale from those of Pompeii. He directs the smallest of them not to be less than ninety feet high, and twenty-five broad, the top to be a fifth smaller, and to contain ten stories each, with windows. The largest was one hundred and eighty feet

* Vitruv. x. 19.

high and thirty-four broad, and contained twenty stories*. These engines were emphatically named Helepoleis, or city-takers, by the Greeks.



Towers.

* These numbers are so enormous, so much beyond our notion of the height of any wall, that we would suspect error in the reading, but for their coherence. One cannot allow much less than nine feet for a story.

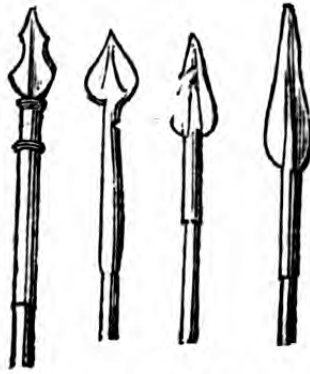
The methods of defence are less easily described, because they might be varied infinitely according to local circumstances, to the plans of attack, and the ingenuity of the defenders. The siege of Syracuse is especially celebrated for the mathematical and mechanical knowledge employed by Archimedes in the defence of his city. The following are some of the means of annoyance. The soldiers were attacked with darts and arrows: the smaller machines, the vineæ and plutei, ruined by stones let fall from the battlements or discharged from balistæ. The attack of the ram was baffled by suspending wool-packs, or the like, as

“ Featherbed twixt castle wall,
And heavy brunt of cannon ball,”

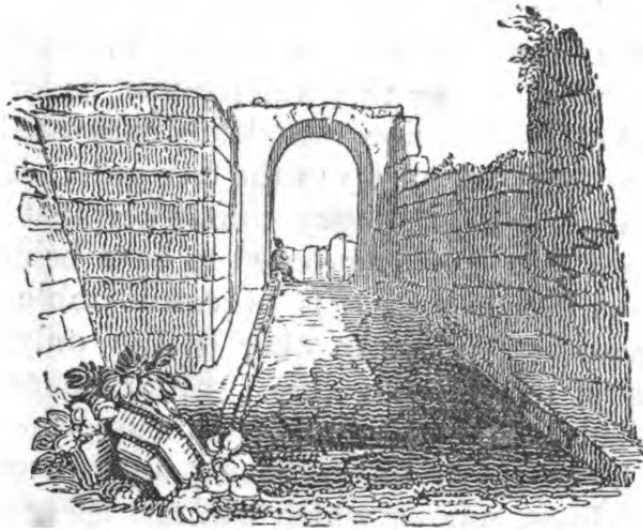
or nooses were cast over them, and then drawn up by main force, until the ram broke or the tortoise was upset. But more especially they placed their hopes in burning the larger engines, and with this view prepared bundles of hemp and pitch fastened to arrows (*malleoli*), and weighty spears tipped with a composition of bitumen, sulphur, and other combustibles, which, when discharged from the balistæ, struck deep into the woodwork. They excavated hollows in the path of the approaching towers, leaving a crust of earth apparently solid, yet sure to yield to the weight, and overturn or half-bury the monster in the cavity. Mines were countermined: mounds raised against the wall were undermined, so that the upper part continually sunk in, and whatever quantity of fresh material was brought, the work advanced not. And if, in spite of these precautions, a mine was carried within the city, or the gates, or any other point seemed likely to be forced, boiling water, oil, pitch, and even less savoury ingredients*, were pro

* Lib. x. c. 22.

fully prepared for the salutation of the assailants. Many curious instances of the skill of the engineer are collected by Vitruvius, which are worth the reader's attention, but would lead us into too long a digression from our main object.



Spear heads found at Pompeii



Entrance to Pompeii through the gate of Nola.

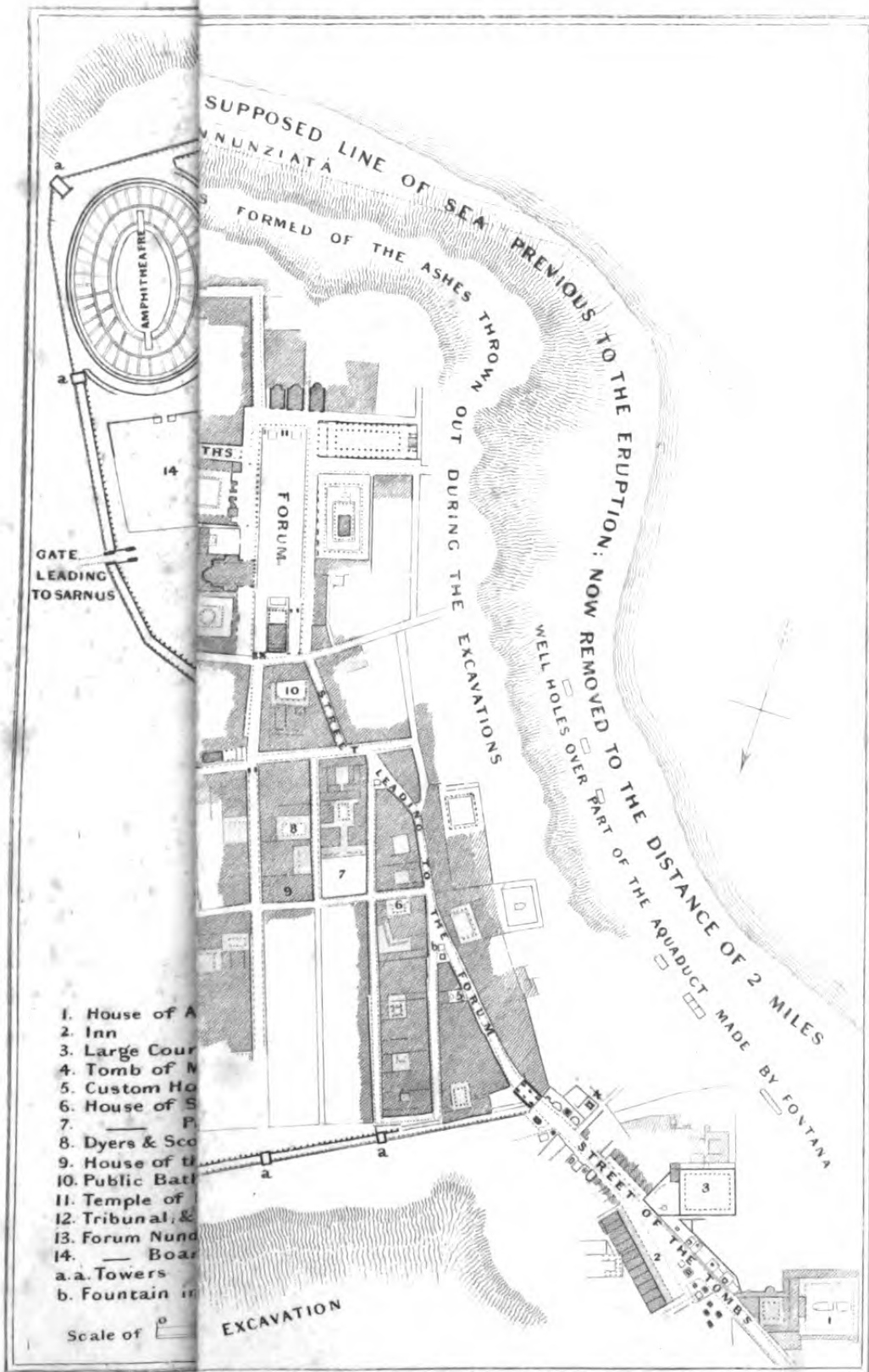
CHAPTER V.

PUBLIC ROADS—STREETS OF POMPEII.

IN going from Naples to Pompeii, the visitor follows the road to Nocera, through Portici, Resina, and Torre del Greco, until he comes to Torre dell' Annunziata, distant about eleven miles from Naples, and one mile and a half from the object of his curiosity. From hence he may proceed either by the new road to Salerno which runs close past the southern wall of the city, go across the country to the northern suburb, called the Street of Tombs. The latter route is in all respects preferable, and the more so, because it was the ancient route from Rome and Herculaneum, and the chief entrance of Pompeii. From Torre dell' Annunziata he walks across irrigated cotton fields, partially shaded from the burning sun of Italy by patches of the tall Indian corn, or sheltered by umbrageous willows on the banks of a watercourse,

which conducts the stream of the Sarnus to fertilize these fields, and supply the wants of 'Torre dell' Annunziata. Following this watercourse, he arrives at the Street of Tombs, now completely excavated, which rises by an easy ascent up to the city gate. The first striking object, at the very commencement of the excavations, is a house supposed to have belonged to one Arrius Diomedes; it is of considerable extent, and is singular and interesting as the only perfect specimen of a suburban villa. From hence to the gate, called the Gate of Herculaneum, the road is flanked by tombs of much beauty and interest, and other buildings, among which we may specify an inn or hostelry of considerable extent, and another villa, called the suburban villa of Cicero. This has been in part filled up again. Opposite is a large exhedra, or covered seat, of a semicircular form: and a little further on there are others, on the opposite side of the road, and behind them the tomb of Mamia, who erected them for the public convenience. Adjoining these, and close to the city gate, is a niche for a sentinel. On entering, the visitor finds himself in a street, running a little east of south, which leads to the Forum. To the right, stands a house formerly owned by a musician; to the left, a Thermopolium or shop of hot drinks: beyond is the house of the Vestals; beyond this the custom-house, and a little further on, where another street runs into this one from the north at a very acute angle, stands a public fountain. In the last-named street is a surgeon's house; at least one so named from the quantity of surgical instruments found in it, all made of bronze. On the right or western side of the street by which we entered the houses are built on the declivity of a rock, sloping down to where the sea formerly came, and are several stories high.

The fountain is about one hundred and fifty



RECENT EXCAVATIONS, 1831.

100

100

100

100

100

yards from the city gate. About the same distance, further on, the street divides into two, the right-hand turning seems a bye street, and is but partially cleared, the left-hand turning conducts you to the Forum. The most important feature in this space is a house called the house of Sallust, or of Actæon, from a painting in it representing that hunter's death. It stands on an area about forty yards square, and is encompassed on three sides by streets, by that namely which we have been describing, by another nearly parallel to it, and by a third, perpendicular to these two. East of this island of houses is an unexcavated space, beyond which is another broad street, running parallel to the first, the limit of the excavations in this quarter. Between these two are indications of another street, which is cleared out, south of the transverse street. Still farther south these streets all terminate in another transverse street. Thus the whole quarter already described is divided by four longitudinal and two transverse streets, into what the Romans called islands, or insulated masses of houses. One of these is entirely occupied by the house of Pansa, which with its court and garden is about one hundred yards long by forty wide. The average interval between the western and eastern street is not more than one hundred and fifty yards. The island immediately east of the house of Pansa has three houses of considerable interest, called the house of the tragic poet, from dramatic paintings on the walls; the cloth-dyer's house, from paintings illustrating the processes and utensils of that trade; and the house of the mosaic fountains.

From the transverse street, which bounds these islands on the south, two streets lead to the two corners of the Forum; between them are the baths occupying nearly the whole island. Among other

buildings are a milk-shop and gladiatorial school. At the north-east corner of the Forum was a triumphal arch. At the end of the broad eastern street, and higher up in the same street, another triumphal arch is still to be made out, so that this was plainly the way of state in to the city. The Forum is distant from the gate of Herculaneum about four hundred yards. Of it we shall give a full description in its place. Near the south-eastern corner two streets enter it, one running to the south, the other to the east. We will follow the former for about eighty yards, when it turns eastward for two hundred yards, and conducts us to the quarter of the theatres. The other street, which runs eastward from the Forum, is of more importance, and is called the Street of the Silversmiths. About two hundred yards in length have been excavated, at the end of which a short street turns southwards, and meets the other route to the theatres. On both these routes the houses immediately bordering on the streets are cleared; but between them is a large rectangular plot of unexplored ground. Two very elegant houses at the south-west corner of the Forum were uncovered by the French general Championnet, while in command at Naples, and are known by his name. On the western side of the Forum two streets led down towards the sea: the excavations here consist almost entirely of public buildings, which will be described hereafter.

The quarter of the theatres comprises a large temple, called the Temple of Hercules, a temple of Isis, a temple of Æsculapius, two theatres, and two spacious porticoes, enclosing open areas. On the north and east it is bounded by streets; to the south and west, it seems to have been enclosed partly by the town, partly by its own walls. Here the continuous excavation ends, and we must cross vine-

yards to the amphitheatre, distant from the theatre about five hundred and fifty yards, in the south-east corner of the city, close to the walls, and in an angle formed by them: on the other sides are traces of walls supposed to have belonged to cattle-markets. Near at hand, a considerable building, called by the Italians the palace of Giulia Felice, has been excavated and filled up again. A considerable distance to the westward is the first excavation made near the centre of the city; it is surrounded by vines, which hang in festoons from the poplars on which they are trained; it is small, and appears to have been abandoned on account of the few coins and vessels discovered. From the amphitheatre, we will return along the Street of Silversmiths, towards the Forum; but before we arrive at the latter, turn up a street running parallel to it. Arriving at the end of it, we turn to the right, and soon reach the triumphal arch of the Forum, having now traversed the whole excavated portion, except a few insignificant streets.

The city was anciently surrounded by walls, of which the greater portion has been traced. Six gates and twelve towers may be counted. At the gate of Nola, the third westward from that of Herculaneum, part of the street has been excavated; but the houses proved to be of the lower class, and it was not prosecuted. The general figure of the city is something like that of an egg, whose apex is at the amphitheatre: its circuit is nearly two miles, the greatest length little more than three quarters of a mile, and the breadth less than half a mile. Even Arrius Diomedes, who lived at the extremity of the suburb, would only have had about six hundred yards to walk to the Forum for his business, and less than a mile to the amphitheatre for his pleasure. The area of the city is about one hundred and sixty-one acres; the excavated part, which forms a

slip along the western side, is about a quarter of the whole, and has been eighty-three years in excavating. Portions have been begun and finished with energy and rapidity at different times, especially by the French, who during their occupation of Naples made great exertions; and to them we are indebted for the most interesting parts yet discovered. Had Murat retained his throne, probably ere now the whole would have been disinterred. The parsimony of the present royal family, who by a grant of a few hundred dollars out of their privy purse are enabled to excavate a house annually, and whose great ambition it is to carry away in their pockets a few coins, or to put in their ears the rings snatched from the ashes of some defunct Pompeian, may delay the completion of the work for centuries. There are now excavated about eighty houses and innumerable small shops, the public baths, two theatres, two basilicæ, eight temples, the prison, the amphitheatre, and other public buildings of less note, fountains, and tombs. What remains of interest we know not; but it is reasonable to hope that houses in size and elegance equal to any yet found may exist to reward the inquirer: for public buildings, it is not probable that any still to be discovered are equal in splendour to those around the Forum and the theatres.

The chief approach to Pompeii was, as we have already said, through Naples and Herculaneum, along a branch of the Appian way. It is well known that the Romans constructed with great solidity, and maintained with constant care, roads diverging from the capital to the extremities of the empire. The good condition of these was thought to be of such importance, that the charge was only intrusted to persons of the highest dignity, and Augustus himself assumed the care of those in the neighbourhood of Rome. The expense of their construction was enormous, but they were built to last for ever, and to

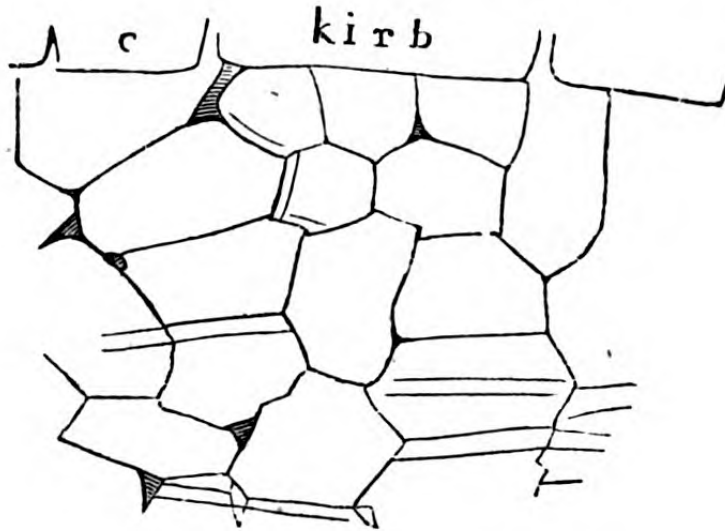
this day remain entire and level in many parts of the world, where they have not been exposed to destructive violence.

They usually were raised some height above the ground which they traversed, and proceeded in as straight a line as possible, running over hill and valley with a sovereign contempt for all the principles of engineering. They consisted of three distinct layers of materials; the lowest, stones, mixed with cement (*statumen*)*; the middle, gravel or small stones (*rudera*)†, to prepare a level and unyielding surface to receive the upper and most important structure, which consisted of large masses accurately fitted together. It is curious to observe that after many ages of imperfect paving we have returned to the same plan. The new pavement of Cheapside and Holborn is based in the same way upon broken granite, instead of loose earth which is constantly working through the interstices, and vitiating the solid bearing which the stones should possess. A further security against its working into holes is given by dressing each stone accurately to the same breadth, and into the form of a wedge, like the voussoirs of an arch, so that each tier of stones spans the street like a bridge. This is an improvement on the Roman system: they depended for the solidity of their construction on the size of their blocks, which were irregularly shaped, although carefully and firmly fitted. These roads, especially in the neighbourhood of cities, had, on both sides, raised foot-ways (*margines*), protected by curb-stones, which defined the extent of the central part (*agger*) for carriages. The latter was barrelled, that no water might lie upon it.

* Statumen, that which supports any thing. Vitruvius uses it for the coating of a floor.

† Rudera, rubble, rough stone, or broken pottery.

The most ancient and celebrated of all was the Appian way, called *Regina Viarum*, the Queen of Roads. It was constructed by the censor, Appius Claudius, in the year of the city 441, and extended from Rome to Capua. Afterwards it was continued to Brundisium. At Sinuessa it threw off a branch called the Domitian way, which ran along the coast to Baia, Neapolis, Herculaneum, and Pompeii. Let the reader suppose himself pursuing this road, then as he approaches the latter city, both sides of the way, for nearly a furlong before he reaches it, are occupied by tombs and public monuments intermixed with shops, in front of which were arcades. The chariot-way is narrow, seldom exceeding ten feet in width, except within the gate at the commencement of the great street, where it is upwards of twenty feet across; the foot-ways are two or three feet wide, and elevated from eight inches to a foot above the road, having a curb and guard stones. The traveller, passing through the Street of Tombs, enters the city by the gate of Herculaneum, already described. Here a long tortuous street presents itself to his view, having on either side broken walls of lava plastered and decorated with arabesques, paintings, mingled with inscriptions written in the peculiar letter then in use. The streets are paved with large irregular pieces of lava joined neatly together, in which the chariot wheels have worn ruts, still discernible; in some places they are an inch and a half deep, and in the narrow streets follow one track; where the streets are wider, the ruts are more numerous and irregular, as shown in the annexed illustration, presenting a facsimile of the pavement. In those places where several pieces of lava met in one point, and where, in process of time, a hole was made, the ancients have repaired the injury with pieces of iron, which still remain in the angles. This method has generally been adopted throughout the city. In most places

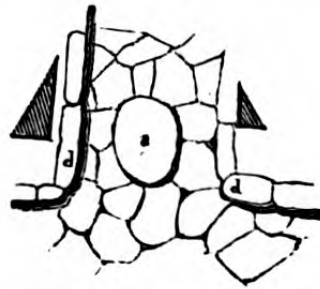


Plan of the pavement, showing the ruts, &c.

the streets are so narrow, that they may be crossed at one stride : where they are wider, a raised stepping-stone has been placed in the centre of the crossing. This, though in the middle of the carriage-way, did not much inconvenience those who drove about in the biga, or two-horsed chariot, because, the width of



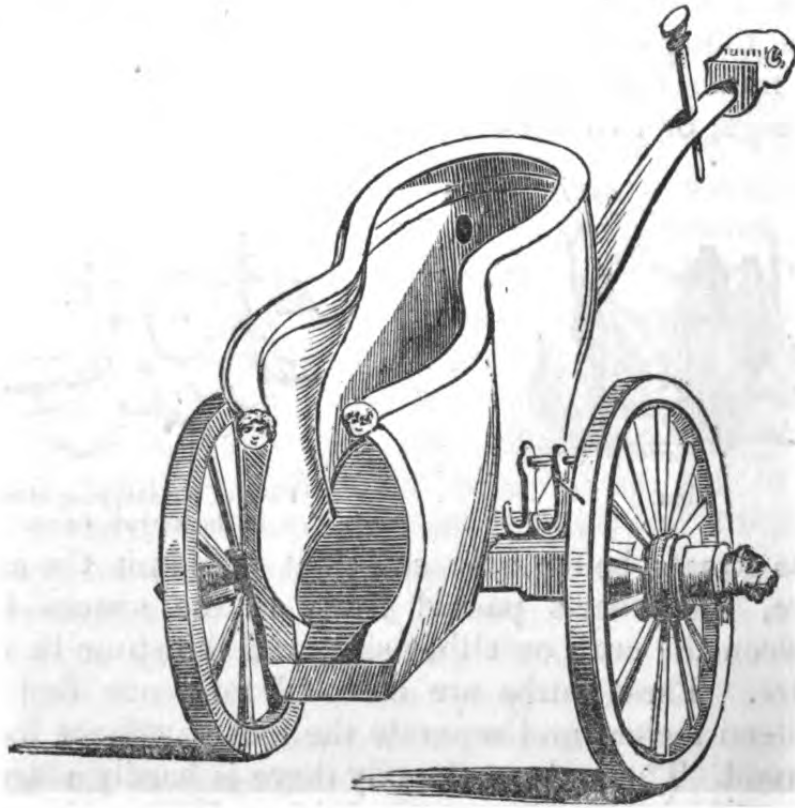
Biga.

Plan of the stepping-stone
in the narrow street.

these streets being only sufficient to admit the carriage, the wheels passed freely in the spaces left between the curb on either side, and the stone in the centre. These curbs are elevated from one foot to eighteen inches, and separate the foot-pavement from the road. Throughout the city there is hardly a street unfurnished with this convenience. Where there is

width to admit of a broad foot-path, the interval between the curb and the line of building is filled up with earth, which has then been covered over with stucco, and sometimes with a coarse mosaic of brick-work. Here and there traces of this sort of pavement still remain, especially in those streets which were protected by porticoes.

The area of the Forum or principal square was not paved like the streets, but was covered with large regular slabs of marble. These were joined together and laid with great accuracy; but very little now remains, and what there is, is so covered with an accumulation of fine ashes blown from the carts which transport the earth from the excavations (the road being through the Forum), that it is scarcely to be discerned.



Ancient biga covered with leather, in the Vatican.

CHAPTER VI.

ORIGIN AND USE OF FORUM.—ARCHITECTURAL CLASSIFICATION OF BUILDINGS.—DESCRIPTION OF FORUM OF POMPEII.—TEMPLE OF JUPITER.

IN describing a Roman city, our attention is first drawn to the Forum, the focus of business, the resort of pleasure, the scene of all political and legal contention. In the early ages of Rome, one open space probably served for all the public meetings of the people, whether for the purposes of traffic, for the administration of justice, or for meetings to deliberate upon public affairs. So in Greek the same word, *Agora*, derived from *ageiro*, I collect, signifies equally a market, a place of assembly for citizens, and the assembly itself. As wealth and splendour increased, and business became more complicated, it was found inconvenient to have so many different occupations carried on together, and two classes of fora arose;—*Venalia*, mere markets, as the *Forum Boarium*, or ox-market, *Piscarium*, fish-market, &c.,—and *Civilia*, those devoted to the other purposes of a place of assembly, of which however, until the time of Julius Cæsar, there was but one. He built a second of extraordinary splendour, the area alone of which cost the enormous sum of £800,000*, from which we may imagine the expense and splendour of the superstructure; and others were afterwards constructed by the Emperors. For the country, however, at all events in small places like *Pompeii*, a single forum continued to be sufficient.

Some difference existed between the Greek and Roman fora, derived from the difference of the uses

* H. S. millies. Suet.

to which they were to be applied. The Greek were built square, with columns near each other, to give as much shelter as possible. On these was placed a marble architrave, supporting an upper ambulatory, or gallery for walking. This gallery the Romans retained (there appears to have been one at Pompeii), but the area, instead of being square, was oblong, and the pillars set at considerable intervals. These variations seem to have been made to give the greatest possible convenience for viewing shows of gladiators, which, previous to the building of amphitheatres, were exhibited in the Forum. In its simple state it was merely an open area, surrounded by a colonnade, a sort of exchange; but in the period of Roman splendour it was usually encompassed by a series of splendid public buildings, on which all the riches of architecture were lavished. Basilicæ, or courts of justice,—curiæ, or places of assembly for the senate or local magistracy,—tabularia, where the public records were kept,—temples, prisons, public granaries, all things necessary for the public pleasure or convenience, were here collected in immediate neighbourhood to each other. Various trades were exercised under the porticoes; the money-changers had their stalls below: the management of the public revenue was usually carried on in the gallery above. At one end, or in an adjoining basilica, the prætor usually administered justice; within, were the rostra from which orators addressed the people. The liveliness and tumult of the scene, where all these employments were carried on, may well be imagined.

It may be convenient, however, and may prevent repetition, if, before we enter upon a particular description of the buildings which usually composed this quarter of the town, a short account be given of the general structure of temples, the most important and interesting, unless we except the baths, of Roman

buildings, together with an explanation of the terms employed by Vitruvius in characterising them. These are universally derived from the disposition of the pillars, the distinguishing feature in all ancient architecture. Technical terms appear hard to those who are ignorant of their meaning; but when once understood, they express much in a small compass, and unless unreasonably multiplied, convey the clearest idea of the object to be described. The body of the temple was usually quadrangular, oblong, and enclosed by walls; this was called *cella*, the cell: it was adorned on the exterior with columns, varying in their proportions and design, forming porticoes on the front, or on the sides, or both: and from the number of columns employed, and the intervals at which they were placed, the building took its architectural denomination. A temple was said to be built in *Antis*, when square columns (*antæ*) were placed at the angles and along the sides, with two round columns in the front between the *antæ**. If built with a detached portico in front, consisting of any number of columns, it was termed *Prostyle* †: if both ends were thus ornamented, it was termed *Amphiprostyle*; if the colonnade extended all round, it became *Peripteral* ‡; and *Dipteral*, when built in the most expensive and magnificent shape, when a double range of pillars ran all round. A variety

* Example, St. Paul's, Covent Garden.

† *Prostyle*, from *πρῶ*, before, and *στύλος*, a column, with columns in front. *Amphiprostyle*, from *ἀμφί*, on either side, *prostyle* at each end. *Peripteral*, winged all round, from *περὶ*, round, and *πτέρων*, a wing. *Dipteral*, double-winged, from *δῖς*, twice. *Pseudodipteral*, false double-winged, from *ψεύδης*, false. *Monopteral*, nothing but wing, from *μόνος*, only. *Pseudoperipteral*, falsely winged. *Hypæthral*, open to the sky, from *ὑπὸ*, under, and *ἄιθρα*, a serene sky.

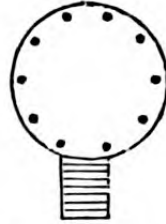
‡ Examples, the Bourse at Paris, or the circular temple of *Vesta* at *Tivoli*.

Pycnostyle...● 1½ ●
 Systyle● 2 ●
 Eustyle.....● 2¼ ●
 Diastyle ...●.. 3 ..●
 Aræostyle.●... 4 ...●

} The five styles of inter-
 columniation employed
 in temples.



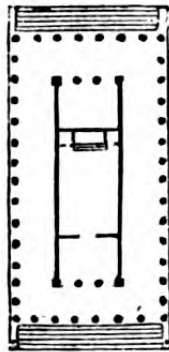
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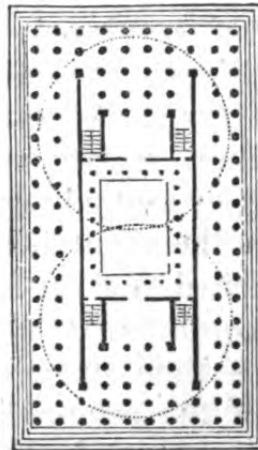
MONOPTERAL



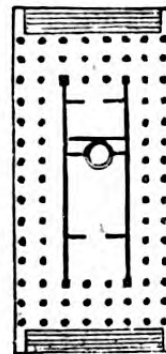
PROSTYLE



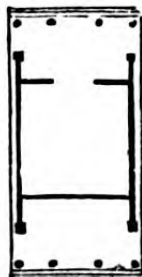
PSEUDO DIPTERAL



HYPÆTHRAL



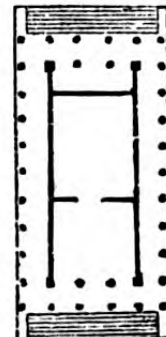
DIPTERAL



AMPHIPROSTYLE



PERIPTERAL



PERYPTERAL

of this style was called Pseudodipteral*, in which the porticoes projected as far from the cell as in dipteral temples, but the interior range of columns was omitted. This was considered an improvement, both as giving more room under the portico, and being less expensive. Another variety consisted merely of a circular colonnade, without a cell, but only an altar in the centre, this was called Monopteral; in another †, where the cell was required to be large, the walls were thrown back, so as to fill up the intercolumniations, whence it was called Pseudoperipteral. The two latter were especially devoted to sacrifices. Hypæthral temples were so named, because the cell was open to the sky. These were usually of the largest and most magnificent description. The type of them given by Vitruvius consists of a portico of ten columns at either end; it is dipteral, and has within the cell a double range of columns, one supporting the other, detached from the wall. Folding doors opened into it at each end. There was no example of this style at Rome ‡. It originated probably in the difficulty of roofing over so large a space, and of sufficiently lighting the interior, windows not being usually admitted in these buildings. The religious ceremonies performed in these vast temples probably did not require much shelter; and a partial shelter was given by the colonnade within the cell, which was ceiled and roofed, and probably was added with a view to this convenience. The building, called the Temple of Jupiter, or by others the Senaculum, may be conjectured, from its interior colonnade, to have been hypæthral.

Buildings were further classified with regard to the intercolumniations, or space from one column to

* Example, St. Martin in the Fields.

† Vitruv. iv. 7.

‡ Vit. iii. 2.

another. They were called Pycnostyle*, when the columns were placed in the closest order practised, that is, when one and a half diameters apart; Systyle, when two diameters apart; Eustyle, when two and a quarter diameters apart; Diastyle, when three diameters apart; and Aræostyle when the interval was greater than this. Vitruvius objects to the Systyle arrangement as inconvenient, "because, when matrons going with their families to the temple have ascended the steps, they cannot pass arm in arm between the pillars, without going sideways." This objection holds good against the temples of Pompeii, which for the most part are on a small scale. In the diastyle, he thinks that the pillars are too far apart, and that in consequence the stability of the entablature is endangered. The reader is aware, that in Grecian architecture the arch was not used; neither were the ancients acquainted with the means employed by our own architects, to cramp together separate stones into one solid body. Blocks therefore were required of sufficient size to stretch from the centre of one column to that of the next; and these, where the interval was large, and the material tender, were subject to break even under their own weight, much more with that of the entablature added. In the Aræostyle neither stone nor marble architraves could be used, but beams of timber rested on the columns. Buildings of this description, he says, are low and heavy, and the architraves ornamented with pottery, or brazen mouldings. The portico surrounding the Forum at Pompeii was of this description. The Eustyle was, as its name imports, the most perfect, uniting con-

* Pycnostyle, close-columned, from *πυκνός*, close, and *στύλος*, a column. Systyle, near-columned, from *σύν*, together. Eustyle, well-columned, from *εὖ*, well. Diastyle, open-columned, from *δια*, apart. Aræostyle, thinly-columned, from *ἄραιός*, scattered.

venience, beauty, and strength. In this, the central intercolumniation in front of the temple was of three diameters, displaying to more advantage the door of the cella, with its ornaments, and affording a more ample space for ingress and egress.

“An essential feature in the temples of Pompeii, as distinguished from those of Greece, is to be observed in the podium*, or basement, on which they were elevated. In the religious edifices of an early age, no such character appears: they were placed upon two or three steps only, if steps they should be termed, when evidently not proportioned for convenience of access to the interior, but calculated rather with a view to the general effect of the whole structure†.” By thus raising the floor to a level with or above the eye, the whole order, from the stylobate, or continuous platform on which the columns rest, to the roof, was brought at once into view. The steps, Vitruvius says, should be of an odd number, that the right foot, being planted on the first step, may also first be placed on the pavement of the temple. To enter with the left foot foremost was considered unlucky. With regard to the proportions of the interior within the porticoes, the breadth is directed to be half the length, and the cell to be a fourth part more in length than in breadth. The building is directed to stand east and west like our churches, and the statue of the presiding deity to be elevated above the altar, that the suppliants and priests might decently look up to the object of their worship. Thus an hypæthral temple would present a most splendid scene; the worshippers addressing their vows, the image apparently rising to behold them, and the building itself boldly projected on the eastern sky. It will be recollected that these are merely

* Diminutive of *πῶς*, the foot.

† Gell, p. 227.

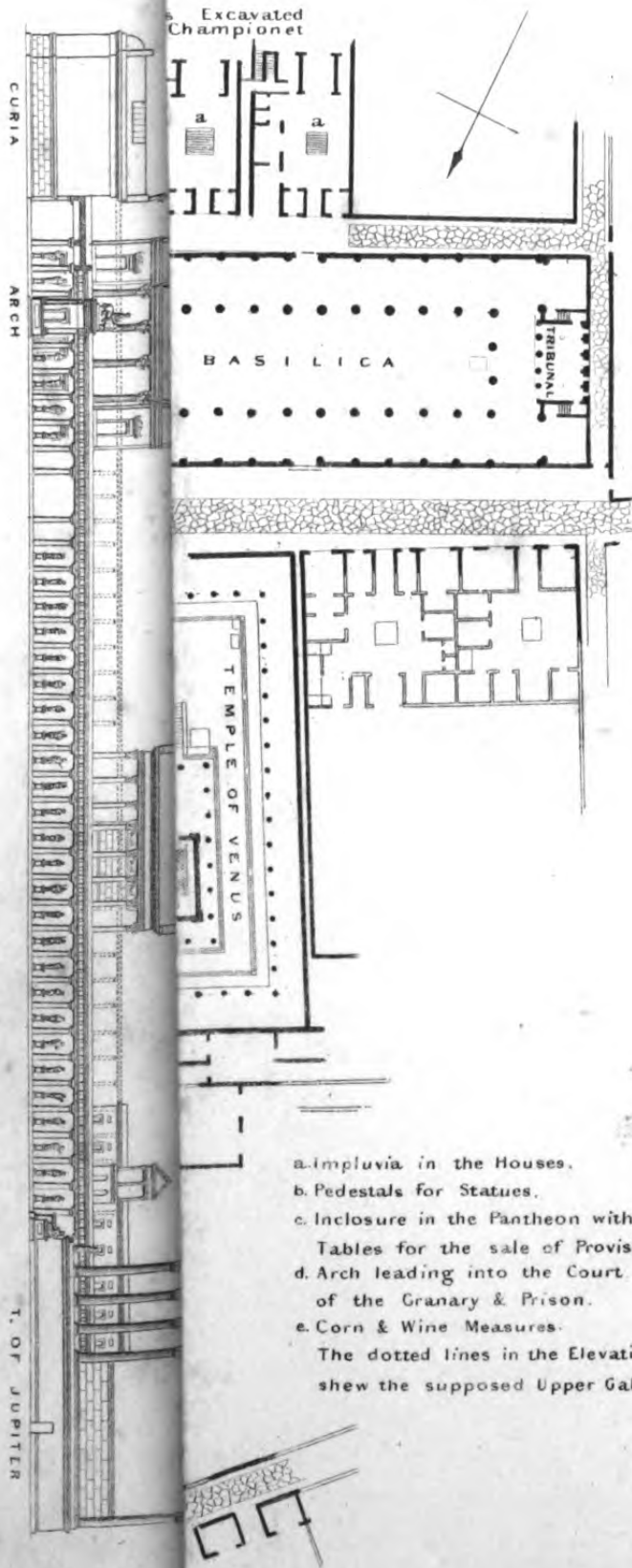
the rules laid down by Vitruvius; it does not follow that they were always observed.

We now proceed to describe the Forum of Pompeii. Entering at the gate of Herculaneum, the main street of the town leads the visitor to the north-west corner. Here he gains admittance by a flight of steps, leading downwards through an arch in a brick wall, still partially retaining the stucco by which it was covered. Remains of iron gates were found at several of the entrances, from whence it is inferred that they were closed at night. There is a smaller passage to the right of the arch just mentioned, and between them a public fountain, attached to the wall. The annexed plate contains a ground-plan of the Forum restored from the remains now existing. An examination of this will afford a correct idea of the arrangement of the several edifices.

Upon entering the spectator finds himself in a large area surrounded by columns and the ruins of temples, triumphal arches, and other public buildings, the particular uses of which can in general only be conjectured. The red masses of brick, divested of their marble casings, the brown and yellow tints of the tufa, the fragments of white stucco attached to the shattered walls of the different edifices, and the pedestals, which once supported statues commemorating those who had deserved well of their country, are all that now remain to attest its former beauty and magnificence.

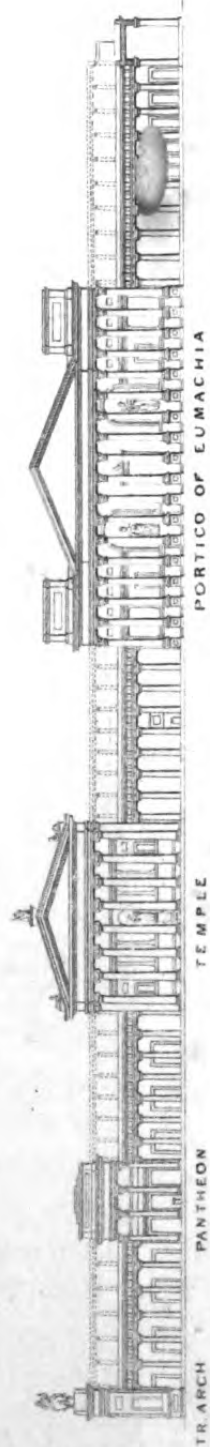
Around the west, south, and east sides there runs a Grecian Doric colonnade, uninterrupted, except on the east, where the porticoes of the surrounding buildings in some instances come flush up to the colonnade, and in some places break the line of the upper gallery, preserving an uninterrupted communication below. Where this was the case, stairs ran up to the gallery: but probably there was also some communication between these several divisions

ELEVATION OF THE BUILDINGS IN THE FORUM RESTORED



- a. Impluvia in the Houses.
 - b. Pedestals for Statues.
 - c. Inclosure in the Pantheon with the Tables for the sale of Provisions.
 - d. Arch leading into the Court of the Granary & Prison.
 - e. Corn & Wine Measures.
- The dotted lines in the Elevations shew the supposed Upper Gallery.

ELEVATION OF THE BUILDINGS IN THE FORUM RESTORED





(1)

of it, without descending to the ground. True it is, that as no vestige of this upper story remains, it may seem rash to assert its existence so boldly: but the traces of staircases, combined with the authority of Vitruvius, are sufficient to warrant us in doing so. Probably it was built of wood; this would account for its total disappearance. The diameter of the columns was two feet three and a half inches, their height twelve feet, the interval between them six feet ten inches. On the eastern side there still remains a portion of an older arcade, which the inhabitants, at the time of the eruption, were in the course of replacing by the Doric portico. The pillars are of three materials; of fine white caserta stone, resembling marble; of ancient yellowish tufa; and of brick plastered.

The wall by which we have entered is connected with the back of a building called by some the Temple of Jupiter, by others the Senaculum, or council-chamber. It is prostyle, and of the Corinthian order; the columns are pycnostyle, and the portico is pseudo-dipteral and hexastyle, or having six columns in the front. A row of columns runs on each side along the interior of the cella, which, as has been observed, leads us to suppose that it was hypæthral. It is probable that there were two ranges of columns within the cella, one above another, as at Pæstum, the floor of a gallery resting on the lower tier, since the height of the exterior was such as to require two orders in the interior (where the columns were smaller) to reach the roof, the object of the columns being support, and not mere decoration. A narrow staircase at the back of the temple, concealed behind three small chambers at the end of the cella, the walls of which rise to the height of the first order of columns, confirms the belief that there was formerly a gallery. The

clear space of the cell, within these chambers and the colonnade, was about forty-two feet by twenty-eight feet six inches. The interior has been painted; red and black are the predominant colours. Diamond-shaped pieces of marble form the centre division of the pavement, which is enclosed within a broad border of black and white mosaic. In the centre of the door-sill there are traces of holes for the bolts of folding doors. Upon the pavement fragments of a colossal statue were discovered. This temple is placed on an elevated basement or podium, which was ascended by many steps. Those nearest the columns are carried along the whole front of the portico, while the steps near the ground are narrow, and sunk in a low parapet forming a basement to the upper flight. Greater breadth of effect and grandeur is communicated to the whole edifice by this mass of solid wall beneath the large columns which it seems to support. A magnificent example of this method of construction is to be seen in the portico of the London University. The dye* of the basement inclines inwards; it is moulded above and below, and in front formed into pedestals, which are oblong, and adapted to receive equestrian statues. Near one of them a sun-dial was found. Pedestals were also added in front, at the angles of the basement of the portico. On the south-east a side door in the basement leads to vaults beneath the temple. The whole of the building, constructed as it is of stone and lava, has been covered with a fine white cement made of marble, still retaining great hardness. The workmanship does not appear to be very good or exact. The columns, and the spaces between them, vary, none of them being equidistant. The diameters of the columns are three feet

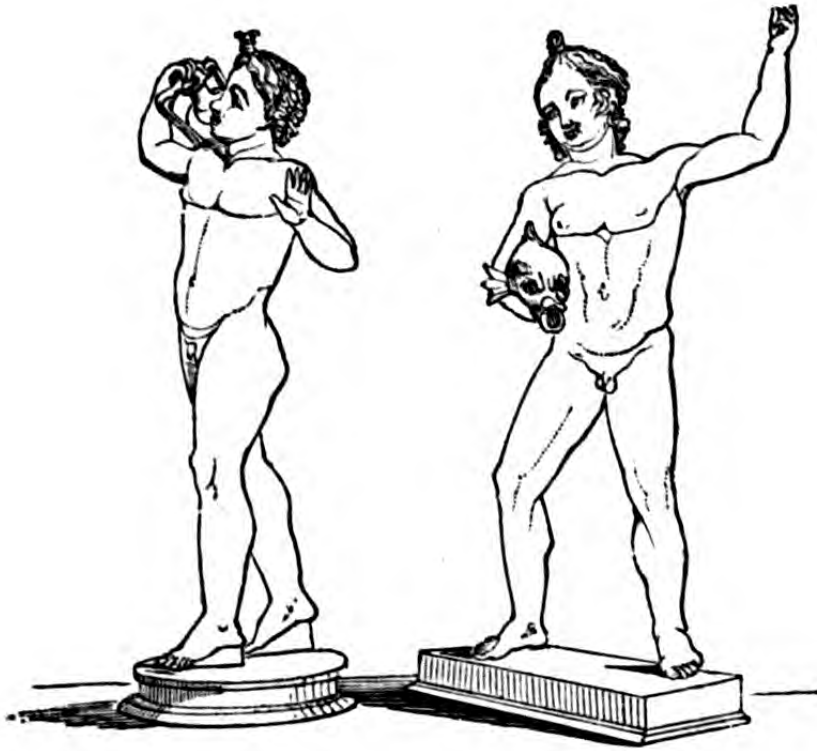
* The dye is that part of the basement which is placed between the under and upper moulding of the whole; it is generally a plain surface.

seven inches, and three feet eight inches, making their height, according to the proportions observed, approach to thirty-six feet, about the size of the lower order of St. Paul's cathedral, so that the whole height of the building was, including the basement, about sixty feet. Without the walls its breadth was forty-three feet, and its length a hundred to the end of the portico. Add twenty feet for the flights of steps, and the total length is one hundred and twenty feet.

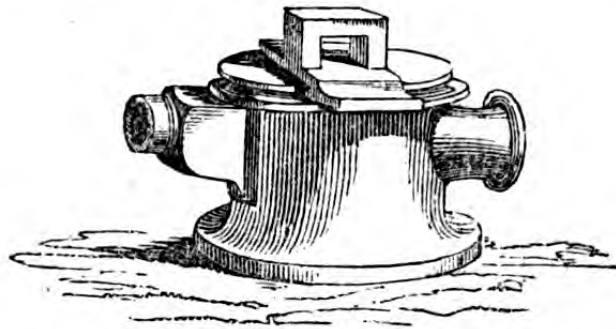
Adjoining the south-western end of the basement stand the ruins of an arch, built of brick, and cased with slabs of white marble, fastened on the brickwork by iron cramps. This is conjectured to have been triumphal; but from its being connected with the temple of Jupiter by a low wall, reaching to the height of the adjoining basement, it is more probable that it was only the entrance to a court in front of what may have been the public granaries. This wall evidently proves that the whole was constructed, not for show, but use. Had the arch been triumphal, it would have been more solidly built, isolated, and not disfigured by a small piece of wall attached to one side only, disfiguring also the basement of the most commanding building in the city. It may be presumed, therefore, to have formed the entrance to a court-yard before the granary and prisons, which are here situated at the north-west corner of the Forum; such a convenience being almost necessary to the former, for the unloading the grain apart from the crowd in the Forum; and to the latter as an outlet where prisoners, it may be supposed, were allowed to take exercise under the eyes of their guards. That the prison stood here there can be no doubt*; indeed its exact spot is determined by the skeletons of two men, left to perish in the general confusion. Their leg-bones were found still within the shackles, and, with these bracelets, are still pre

* *Vide* Donaldson's Pompeii.

served in the Museum at Portici. With regard to the other apartment, there certainly is not such convincing evidence to prove that it was the public granary. It is well suited to such a purpose; but the strongest evidence of its destination is to be found in the immediate neighbourhood of the public measures. We may further observe, with regard to the arch, that it is not sufficiently substantial for the purpose which is assigned to it, nor would the plane surface on the top be broad enough either for an equestrian statue or a triumphal car. But attached to the north-east angle of the temple of Jupiter there is a gateway, having the character of a triumphal arch. The massive piers, and part of the columns that adorned them, still remain. In each pier were two attached fluted Corinthian white marble columns, of good workmanship. In the centre of each pier, between the columns, are square-headed niches, in one of which there was a fountain, as is evident from the lead pipes which were here discovered. Statues, most probably, were placed in the four niches, and the fountain formed in one of them may have flowed through a cornucopia, or some other appropriate vessels, held in the hands of the figure. Statues, applied to these purposes, were commonly placed at the fountains in Pompeii. Among others have been found two boys of beautiful workmanship, carrying vases on their shoulders, and two others with masks in their hands, the masks and vases resting on pedestals. Water was conveyed up through the figures, and issued from the masks and vases. These statues, and many others intended for the same use, are made of bronze. Conduits of lead were frequently used in Pompeii, to conduct the water to the public fountains and private baths. These, however, the Neapolitan government have caused to be torn up, and sold for their value as old metal.



Not the least interesting relic of antiquity, contained in the Museum at Naples, is the bronze cock of a reservoir, discovered at Capri during the excavations which were made in the palace of Tiberius. Time having firmly cemented the parts together, the water in its cavity has remained hermetically sealed during seventeen or eighteen centuries. Travellers

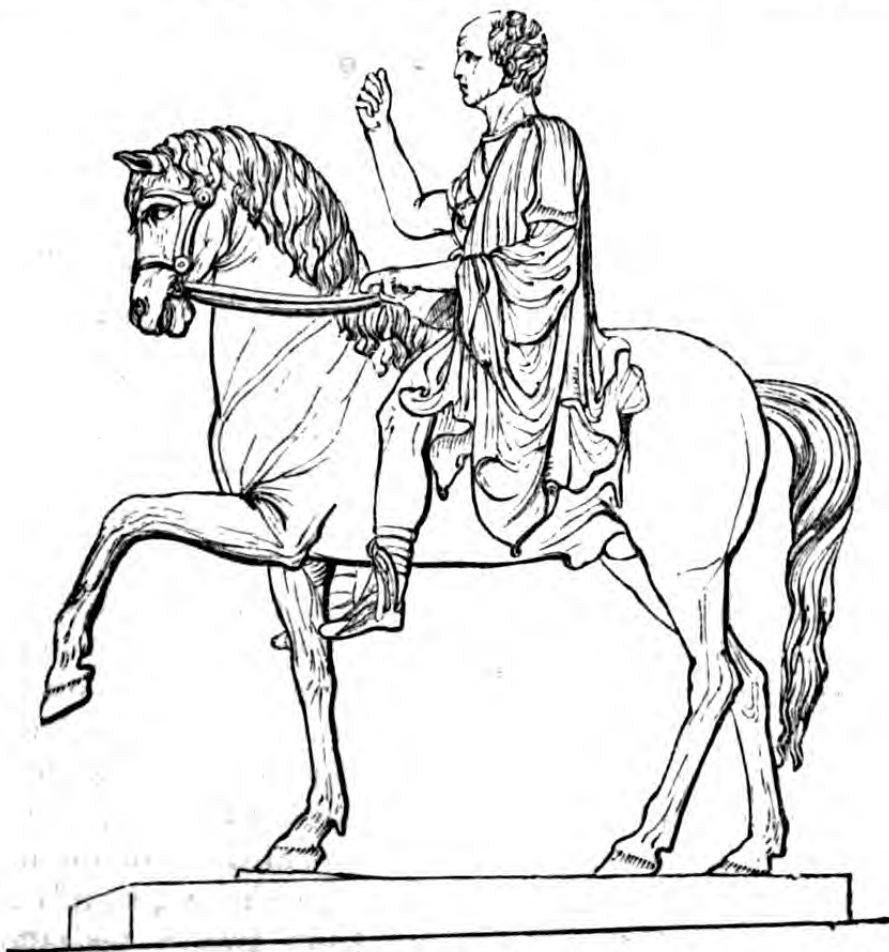


Bronze cock found in the island of Capri.

are shown this curious piece of antiquity, which being lifted and shaken by two men, the splashing sound of the contained fluid is distinctly heard.

The arch from which this digression has led us, had, without doubt, an attic or low wall above the cornice, on which was placed either an equestrian statue or a car, the appropriate finish to such a structure. That either one or the other did surmount the attic, may be inferred from the fragments of a bronze statue of a man, and part of the legs of a horse, of the same metal, having been found in the immediate vicinity. It is built of bricks and lava, and has been covered with thin plates of marble, a method of construction in use among the ancients ; and, from a principle of economy, much practised, not only in Pompeii, but even in Rome, where the brick walls, despoiled of their costly coatings, alone remain. Presuming that the Forum was closed for security, the opening of this arch must have had gates ; these, however, no longer exist : possibly they were of wood, or if of bronze, they may have been

carried away by the Pompeians. An additional proof that the Forum was shut up at night is to be found in the small pier attached to the north-west angle of the arch, evidently built to receive the iron or wood-work of a gate closing the foot-entrance by its side. Had it not been necessary to close the Forum, this small pier would have been useless, and the deformity of it would have been avoided. This leading to the great western gate, and being also contiguous to the baths, near which there was another triumphal arch, may be considered the principal entrance to the Forum, and, as such, was chosen for the site of a public monument. On the triumphal



Equestrian statue of M. Nonus Balbus from Herculaneum, executed in marble.

arch near the baths was placed an equestrian figure, the fragments of which were found during the excavation. The figure of the man is perfect, with the exception of one leg, but of the horse only two of the feet and the tail were found. The action of the statue resembles that of M. Aurelius in the Campidoglio at Rome, but it is of very inferior workmanship. Here was also found a skeleton, with sixty silver, and two copper coins.



Marble bas-relief found in Pompeii, representing a warrior, and a black slave driving his biga.

The buildings hitherto described, with the exception of the granary and prisons, form the north side of the Forum. We will now take those on the east side, and, describing them and their probable uses in the order of their succession, proceed along the south and west sides, back to the granary. Adjoining the pedestrian entrance, already mentioned, at the north-eastern angle of the Forum, stands an edifice called the Pantheon, from twelve pedestals placed in a circle round an altar in the centre of its

area, which are supposed to have supported the statues of the *Dii Consentes*, or *Magni**, the aristocracy of Italian mythology. The area, one hundred and twenty by ninety feet, is bounded by the back walls of shops on the north and west sides ; by the *Ædícula* (a small temple, or shrine), raised to the founder or patron, and two enclosures on the east ; and by the numerous cells belonging to the fraternity of priests on the south. Within, perhaps, a rectangular portico or gallery enclosed the twelve pedestals, or they may have been covered with a wooden temple, in the light style of architecture depicted on the walls of Pompeii. No traces, however, remain of such constructions ; and if any existed, they must have been destroyed in the fire which consumed the town, of which traces are continually found in the charred timber turned up in the excavations. In front of this building, under the portico of the Forum, are seven shops, possibly the *Tabernæ Argentariæ*, or shops of money-changers ; the pedestals of some of the tables still remain. The entrance to the Pantheon is by a small vestibule in the centre of the area. There are four pedestals in front of it, and one at the end of each party-wall between the shops. They probably were meant to receive columns. At the end of the shops was a staircase, which may have led to the upper ambulatories. Near the entrance ninety-three brass coins were found.

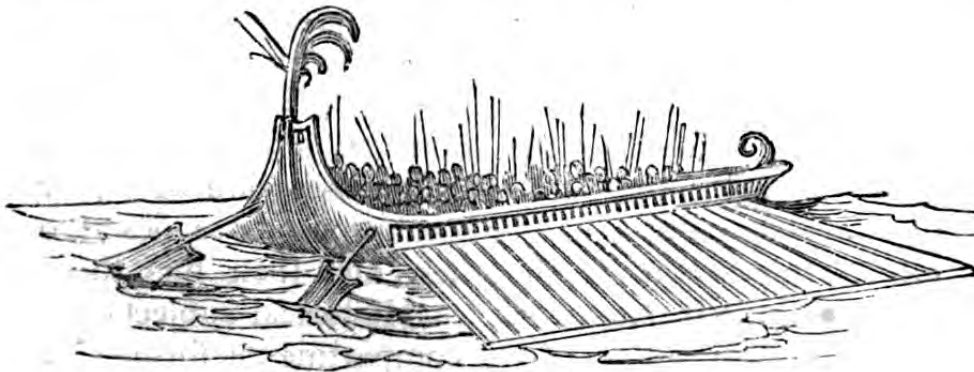
In the centre of the vestibule stood a small altar, which still remains, with doors opening on each side

* Jupiter, Juno, Minerva, Vesta, Ceres, Neptune, Venus, Vulcan, Mars, Mercury, Apollo, Diana. These, with others called *Dii Selecti*, were entitled *Dii Majorum Gentium*, of the greater tribes ; the rest, *Dii Minorum Gentium*, of the lesser tribes ; in allusion to the distinction between the senators appointed by Romulus, and those appointed afterwards by Tarquinius Priscus, and others. The former were called *Patres Majorum Gentium* ; the latter, *Patres Minorum Gentium*.

into the area beyond. Behind the altar was a niche, on which the statue of some one of the gods was placed, so that the devout Roman had an opportunity of leaving his offering as he entered, and propitiating the presiding deity. On the right side, as you enter, are arranged the cells of the priests; over these were other apartments, as the holes in the side walls for the reception of joists indicate. Here are also holes in the piers in front of these cells, for the joists and floor of a gallery which gave access to the upper apartments, as in the old inns still existing in London and elsewhere. The staircase has been entirely destroyed, so that its site cannot be ascertained; it is however most natural to suppose it near the vestibule. There were other entrances; one in the centre of the north side, and another at the end of the cells, both leading into streets without the Forum. The farther end of this building was divided into three compartments. That in the centre was an *ædicula*, containing niches, in which were statues of Nero and Messalina. On the right, a door-way, between two columns, gave admission to a refectory for the use of the priests, or, as some have supposed, a place for the sale of such provisions as they had reserved from the sacrifice. Here there is a low platform, round three sides of the room, which may have been meant either for tricliniary couches, or have served as a place on which the provisions for sale were exposed*. Round the inside runs a marble gutter, to carry off the water

* The Romans, it is well known, reclined at their meals, apparently an inconvenient fashion, but not so inconvenient to persons who used no knives and forks, as to us who require two hands to get our food comfortably to our mouths. Three couches were usually placed in a dining-room, one at each side of the table, leaving the fourth open to the servants. Hence the word triclinium, *τρῆς κλίνας*, three beds, which is given both to the couches and to the room. The distance between the sides of this podium,

and refuse when the place was cleansed. On the other side of the *ædicula* an enclosure has been formed with columns on the exterior, similar to the entrance of the refectory. Within it is a small *ædicula*, before which stands an altar. This apartment has been twice stuccoed and painted, the first design having been replaced by a series of arabesques. This style of decoration, common to all the public and private buildings of Pompeii, has been condemned by Vitruvius; yet, even in defiance of his authority, we feel disposed to admire their bold and harmonious colouring, and the lightness, elegance, and variety of their design. The paintings in this edifice are worthy, for their beauty, of especial notice; the various designs are well composed, and the colours are as brilliant as when first laid on; among the figures, not the least interesting is one of the paintress herself, holding in one hand an oval white palette, apparently of silver, in the other, brushes tinged with several colours. Her five fingers appear to grasp the palette, through as many holes perforated in the metal.



Painting of a Galley on the walls of the Pantheon.

The art of fresco painting is still practised, but the secret of employing a medium so durable as to withstand the opening in the east side of it, as represented in the plan, together with the gutter surrounding it, make the second account of it the more probable.

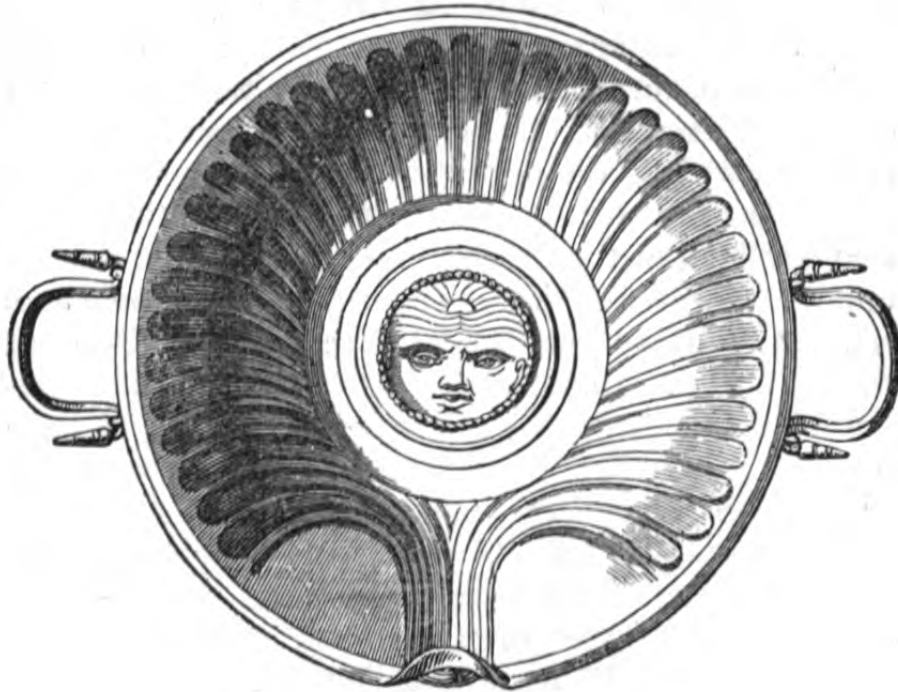
stand, first fire, and afterwards the damp of so many ages, is unknown to the moderns. It has been supposed, that the medium employed to liquefy the pigments, used in these paintings, was wax mixed with oil. Supposing that wax, than which nothing is more lasting, were used, it may be imagined that the object of a silver or metal palette was to retain so much heat as would liquefy the menstruum, without being inconvenient to the artist. The paintings consist of architectural compositions of long aerial columns, vistas through doorways, showing the ornamented ceilings, an abundant variety of figures and borders of flowers, with an almost endless detail of enrichment, painted for the most part with dazzling colours, among which, bright vermilion, jet black, deep crimson, azure blue, and golden yellow, usually form the ground. To these are added a variety of mixed tints, more delicate as the objects are supposed to recede from the eye. The latter consist principally of light greys, pink, purple, and green. It must however be confessed, that good taste did not hold exclusive sway in Pompeii; for in that case a proprietor would hardly have painted the exterior of his house with chequers resembling the sign of a modern ale-house; or have covered the external walls with a decoration similar to the infantine amusement of a child, who, for the first time in possession of a pair of compasses and a colour-box, proceeds to describe circles intersecting each other, and then fills them with a coloured patchwork*. Historical subjects are painted in the centres of the compartments formed by the arabesques; one of these represents Ulysses in disguise meeting Penelope on his return to Ithaca.

Another theory has been adopted by an ingenious Neapolitan architect, Carlo Bonnucci, with regard to

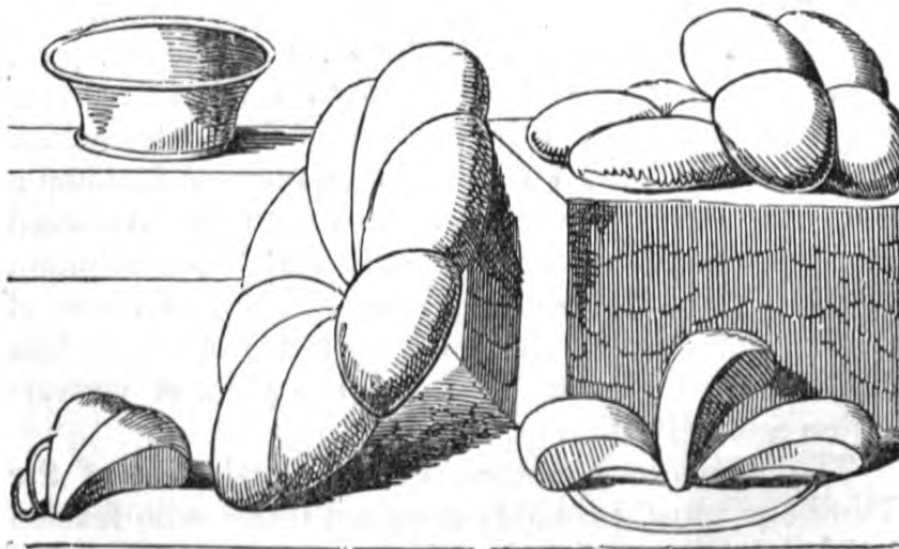
* It has been imagined that the occupier was a worker in mosaic, and that this patchwork was a sort of sign.

this building. The temple at one end he calls the temple of Augustus, and the remainder he sets apart for the banquets of the Augustals; and he cites Vitruvius as authority for such a situation as that chosen. Vegetius tells us that the Augustals were in high esteem: the order was founded by Augustus, and their duty was to lead the troops in battle; they also presided at the feasts called Augustalia, kept in honour of the founder. The numerous inscriptions relative to these personages discovered at Pompeii would lead us to infer that they were of some importance, and from one of these they appear to have been six in number. Sir William Gell, following the opinion of Bonnucci, says, "that the Augustals were possessed of funds which supplied them with the means of feasting and inviting their fellow-citizens to partake in their banquet, for which purpose the building now called Pantheon was so well calculated, that, whether belonging to a particular order, or the common property of all the inhabitants of Pompeii, it may be safely considered as a place of feasting or carousal under the protection of some deity, who, from his more elevated sacellum, was supposed to overlook and patronise the banquet. That such was the destination of this edifice, and that it differed but little in its uses from that which the Greeks called *Lesche*, and the modern Italians a *trattoria* and coffee-house, seems to be rendered more probable by many of its internal decorations; while its proximity to the Forum, the chief resort of the inhabitants of the city, would point out this situation as the most eligible for a place of conversation and refreshment."

The shops in the street on the north side of the Pantheon most probably supplied those who feasted with dainties; and it has been called the Street of Dried Fruits, from the quantity of raisins, figs, plums,



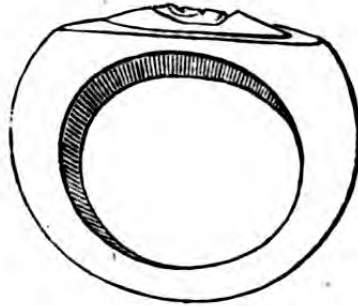
Bronze pastry mould.



Bread, from a painting on the walls of the Pantheon.

and chesnuts, fruit of several sorts preserved in vases of glass, hempseed, and lentils. Scales, money, moulds for pastry and bread, were discovered in the shops; and a bronze statue of Fame, small, and delicately executed, having golden bracelets round the arms.

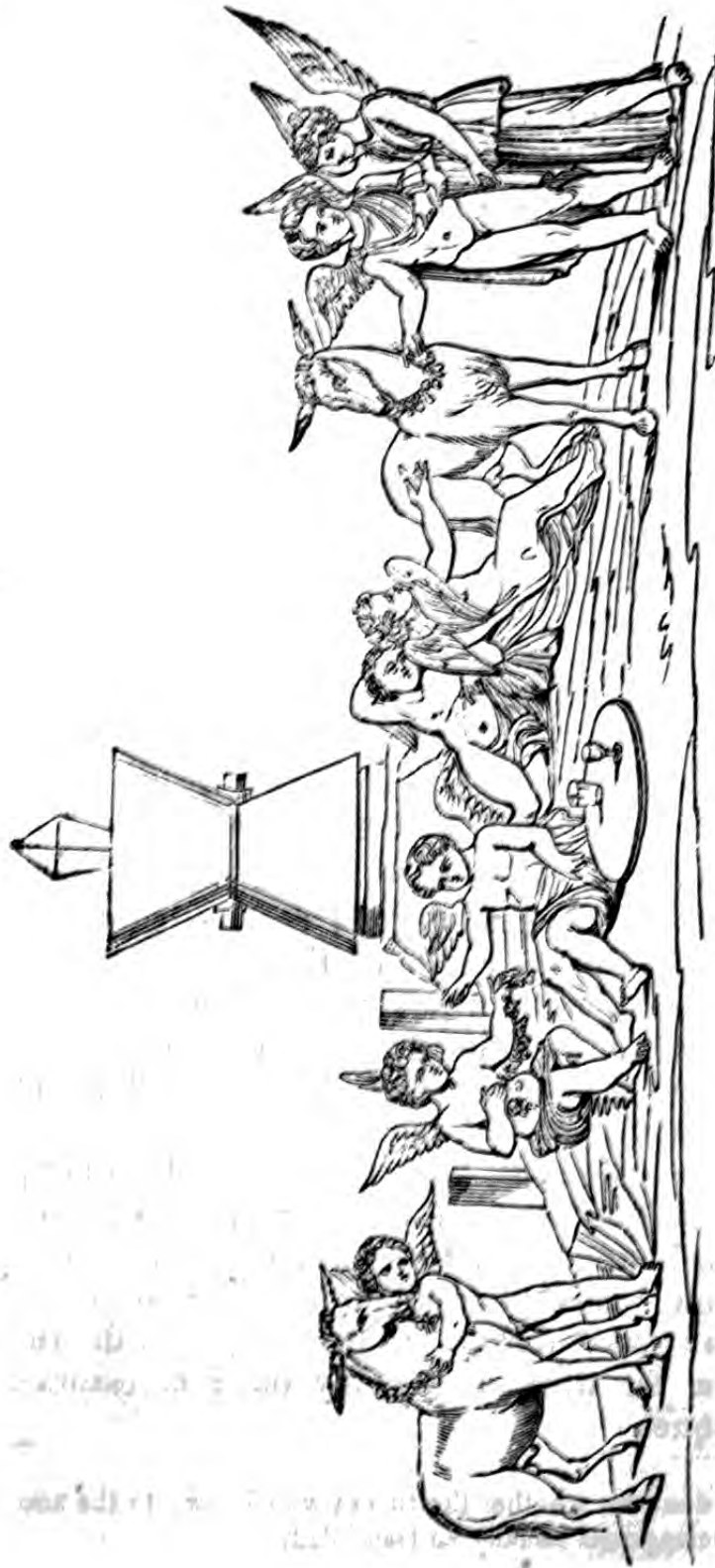
In the northern entrance to the Pantheon the name CELSVM is written on a pilaster; near it was found in a box a gold ring with an engraved stone set in it, forty-one silver and a thousand and thirty-



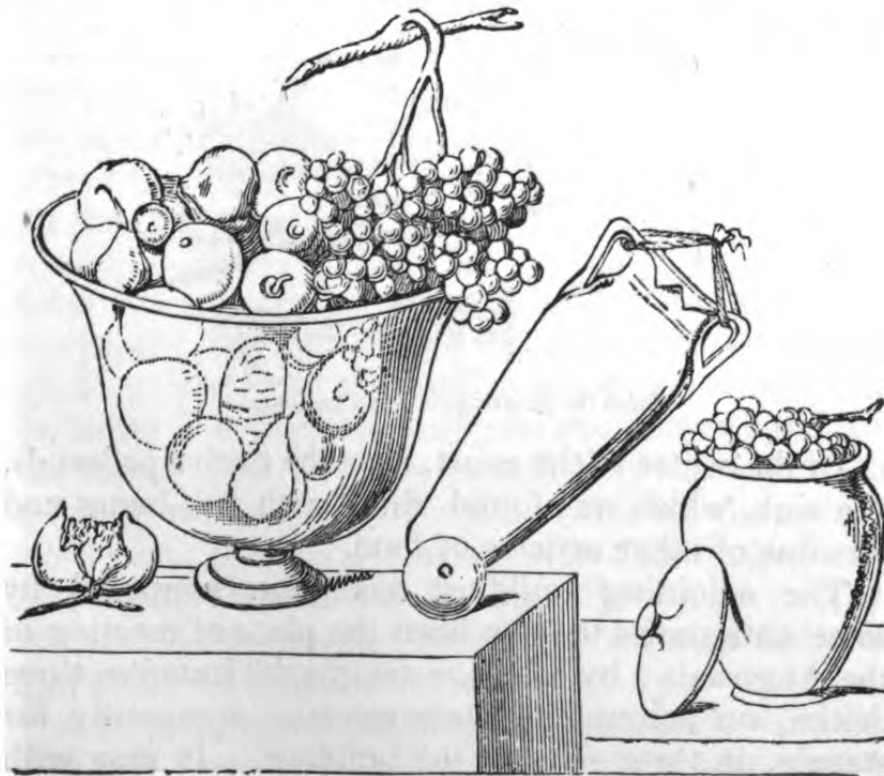
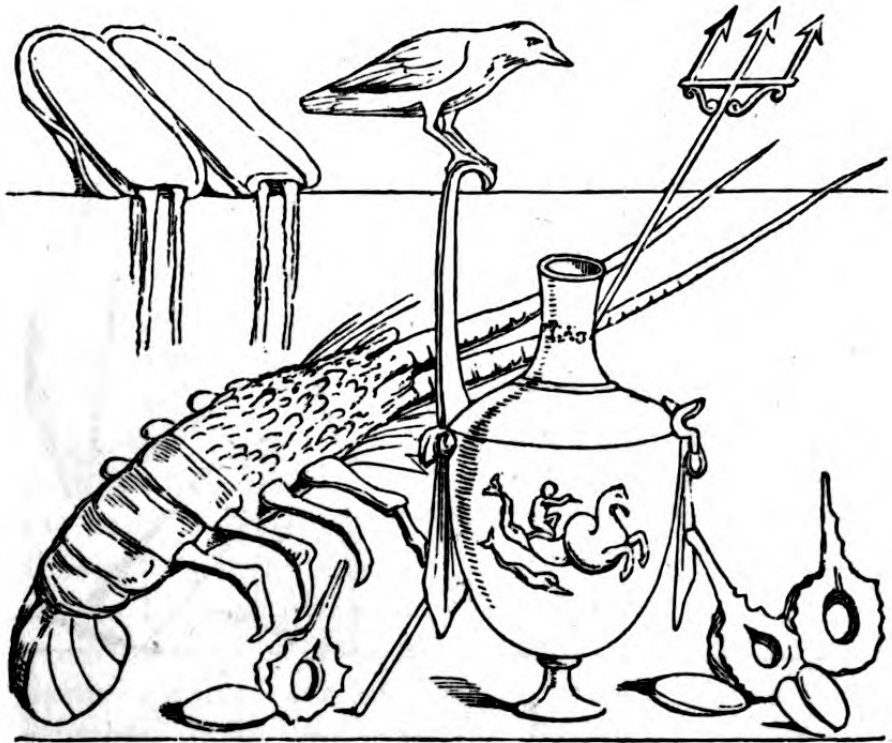
Gold ring with an engraved stone.

six brass coins. Here also on both sides of the walls are representations of Cupids making bread. The mill is placed in the centre of the picture with an ass on each side, from which we may infer that these animals were used in grinding the flour. At the entrance to the south a hatchet is painted as necessary for cutting up the meat, and the picture is filled up with boars' heads, fish, hams, &c. In other parts of the building, above the elegant paintings already mentioned, are geese, turkeys*, vases of eggs, fowls and game ready plucked for cooking, oxen, sheep, fruit in glass dishes, a cornucopia with various amphoræ for wine, and many other accessories for the banquet.

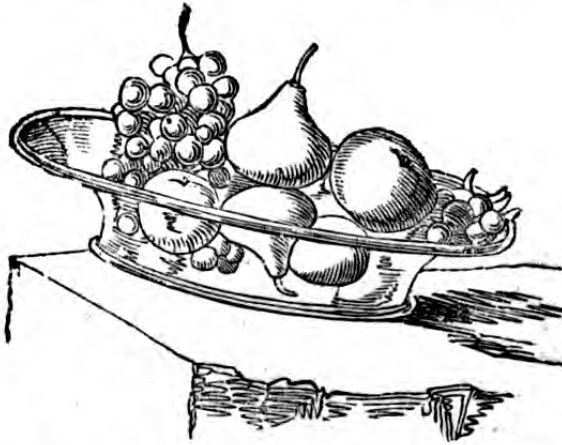
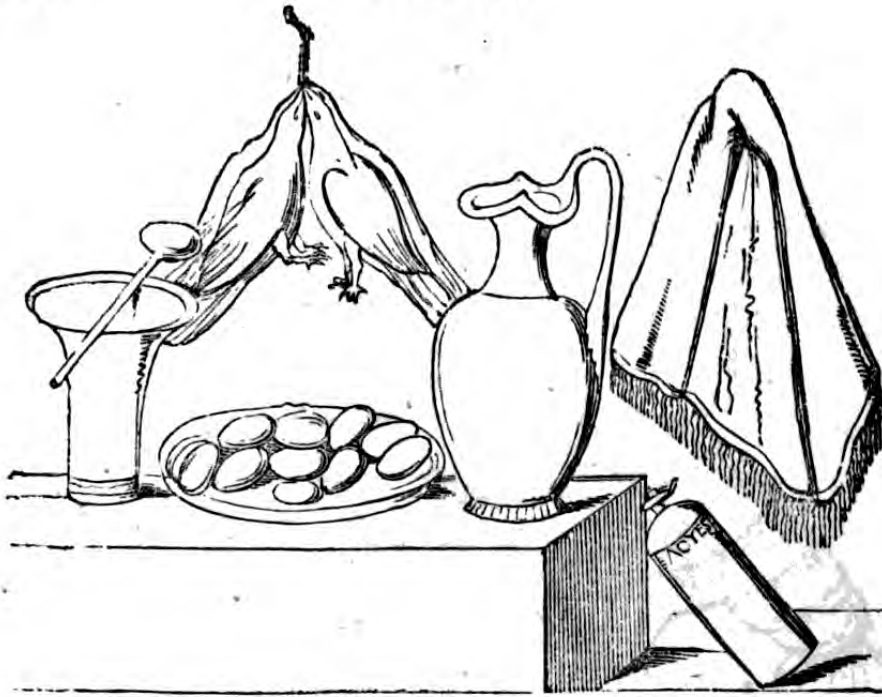
* It is doubtful whether the turkey was known to the ancients, though meleagris is usually so translated.



Cupids making bread.



From the paintings on the walls of the Pantheon.



From the paintings in the Pantheon.

In the centre of the court, near the twelve pedestals, is a sink, which was found filled with fish-bones and remains of other articles of food.

The adjoining building has been supposed by some antiquaries to have been the place of meeting of the Augustals ; by others, a temple dedicated to three deities, on account of three recesses, apparently for statues, in three sides of the building. It may with ore probability be considered the Senaculum, or

place of meeting for the senate, or town council: its spacious area, eighty-three feet by sixty, adapts it well to this purpose, and the niches in the wall may have been meant to receive statues of distinguished senators and magistrates. The portico of this edifice was composed of fluted white marble columns, of the Ionic order, its front ranging with the portico of the Forum, without interrupting the promenade below. There was a staircase at the north end of it, which probably led to the upper gallery, or ambulatory; and a passage may also have been formed over the immediate entrance to the Senaculum, communicating with the ambulatory on the other side. The columns of this portico were of course larger and loftier than those of the Forum. Within, the pavement of the area is raised above the level of the portico. On each side, upon entering, are two large recesses, with pedestals attached to the centre of the back wall, possibly destined to support the effigies of the gods to whom the place was sacred. The altar stands in the centre of the area, nearly in front of each statue. The building is terminated at the end by a semicircular recess, where there is a raised seat for the chief magistrates. At the side of one of the recesses is a chamber for records. This building, for convenience, may have been entirely covered, and the light admitted through the portico. Whether light was also admitted through glass casements in the roof or not must remain conjectural; but that the ancients were acquainted with the use of glass windows is sufficiently proved by the quantity of flat glass discovered during the excavations; and also by its having been found ingeniously fitted (as will be seen in the sequel) to those rare and minute openings which were dignified with the name and office of windows in Pompeii.

Adjoining to the building last described, within an area fifty-seven feet six inches by fifty feet seven inches, stands a small temple elevated on a basement. It is



View of the small temple of Mercury, called by others of Quirinus.

approached through a narrow covered vestibule, communicating between the court and the Forum. On each side of the basement are steps leading to the platform of the cella; in front of it, in the centre of the court, is an altar of white marble, bearing an unfinished bas-relief which has been imagined to represent Cicero sacrificing, from a supposed resemblance in the principal figure to that great orator



Bas-relief on the altar, representing a sacrifice.

The victim is led by the servant (*popa*), whose office it was to take its life, naked to the waist, bearing his sacrificial axe (*malleus*); he is clothed round the middle with a short cloth, which does not descend to the knees. The sacrificer appears to be a magistrate;

he is crowned with a wreath, and his robes partly cover his head. He holds in his hand a patera, as if about to sprinkle the victim, and thereby cleanse it from its impurities before offering it to the gods. The *papa* and an attendant are also crowned with wreaths. A boy follows the principal personage, holding in his hands a vase and patera, or plate, and having the sacred *vitta* or fillet hanging from his neck; near him is a figure holding a patera filled apparently with bread. Another figure appears to be sounding the *tibia*, or double flute, followed by lictors, with their *fascies*. The temple is represented in the background decorated with garlands. On the eastern and opposite side is a wreath of oak-leaves bound with the *vitta*, having on each side young olive-trees sculptured; and on the north and south are the various implements and ornaments of sacrifice, as the vase, the patera, *vitta*, garlands, the incense box, a ladle, and a spiral instrument, the use of



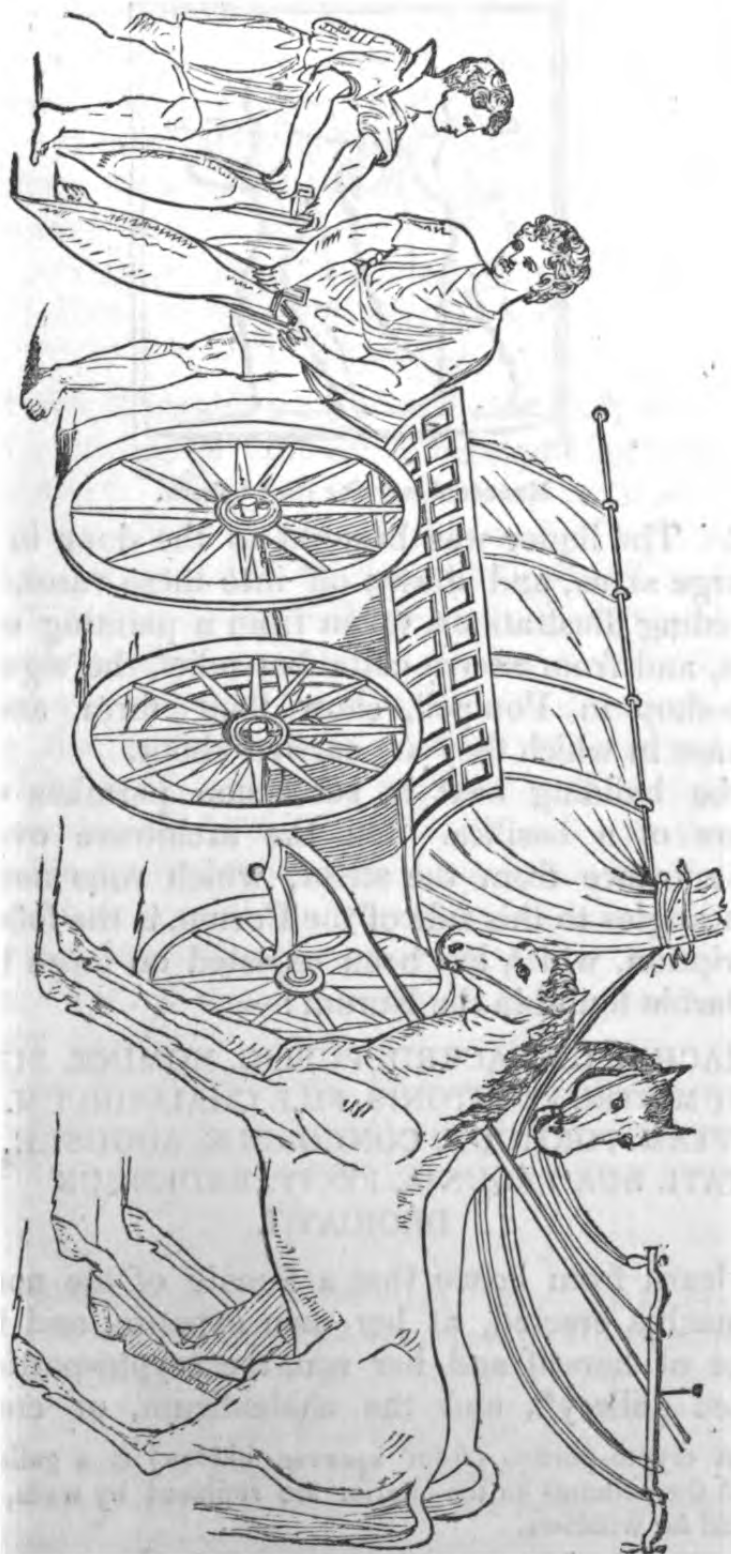
Utensils used in sacrificing.

which is unknown, unless it belonged to the *haruspex*, who inspected the bowels of the victims, and prophesied of the future according to the appearances presented to him. Enriched mouldings decorate both the upper and lower part of the altar. The temple is built of stone and decorated on the outside with pilasters; its external dimensions are but fifteen feet six inches by thirteen feet eight inches, so as not to admit much more than the statue whose pedestal still remains. The *peribolus*, or wall surrounding the whole, is constructed of brick, divided by pilasters into compartments, in which are sunk panels, surmounted at the top by a running ornament consisting of a series of triangles and segments of circles placed alternately. This brickwork having

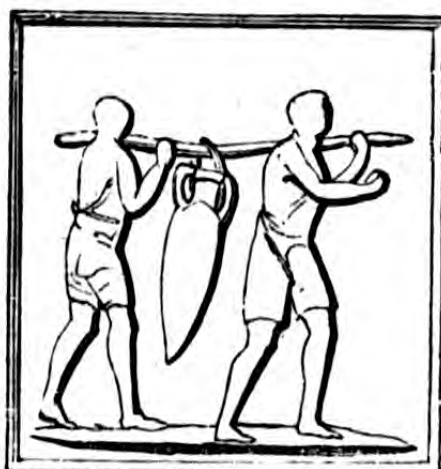


Ornaments of sacrifice on the sides of the altar.

never been covered with stucco, and the altar being unfinished, a conjecture has been formed, that the Pompeians were disturbed by the eruption of Vesuvius while they were rebuilding this very temple, which had perhaps been destroyed by the previous earthquake. Here also, as in almost every building destined for religious purposes, were apartments for priests, and in them a store of amphoræ was found. These were large earthen vessels in which wine was



Representation of a wine-cart, and the manner of filling the amphora.



Manner of carrying the amphora.

kept. The liquor was brought to the door in carts, in large skins, and drawn off into these vases. The preceding illustrations, taken from a painting on the walls, and from a terra-cotta bas-relief, the sign of a wine-shop in Pompeii, show their form and the manner in which they are carried about.

The building next in succession partakes of the nature of a basilica. On the architrave over the side-entrance from the street, which runs nearly at right angles to this side of the Forum, is the following inscription, which has been repeated on large blocks of marble found in the Forum :—

EUMACHIA. L.F. SACERD. PUBLIC. NOMINE. SUO. ET.
M. NUMISTRI. FRONTONIS. FILI. CHALCIDICUM.
CRYPTAM. PORTICUM. CONCORDIÆ. AUGUSTÆ.
PIETATI. SUA PEQUNIA. FECIT. EADEMQUE
DEDICAVIT.

We learn from hence that a female of the name of Eumachia erected, at her own expense, and in the name of herself and her son, the crypto-portico, or walled gallery*, and the chalcidicum, or enclosed

* A crypto-portico (from *κρυπτος*, hidden) is a gallery, in which the columns on the interior are replaced by walls, merely pierced for windows.

space at the end of the area*, in the centre of which is a large semicircular recess. Immediately behind this recess, painted green and red, stands her own statue, five feet four inches in height, on a pedestal placed in a niche in the centre of the wall, with this inscription :

EUMACHIA. L.F.
SACERD. PUBL.
FULLONES

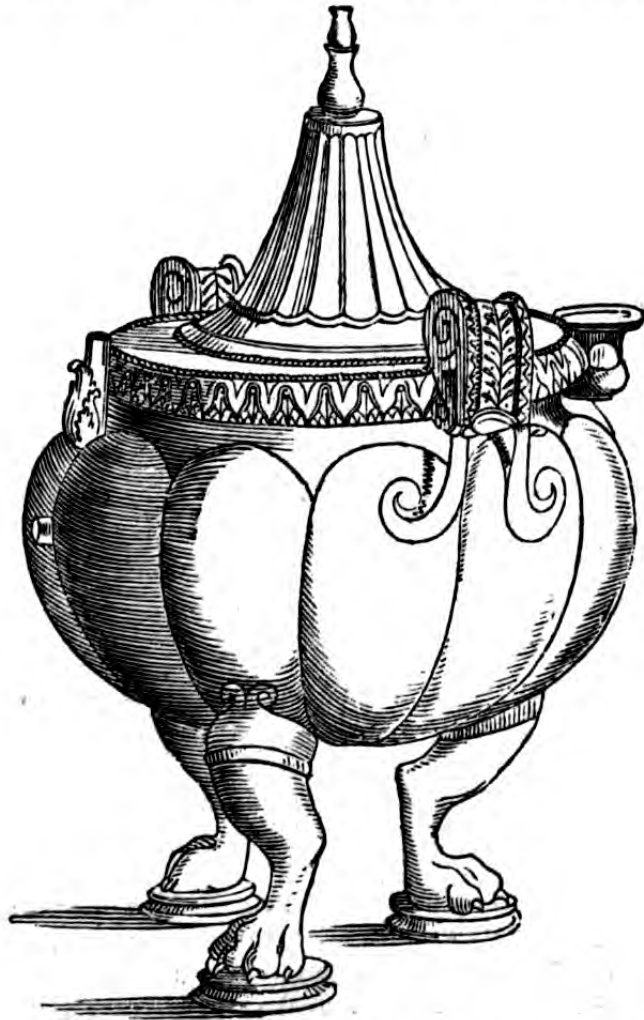
from which it would appear that the cloth-scourers† had, in gratitude to Eumachia, erected this statue to her memory. The whole structure consists of a large area, about one hundred and thirty feet by sixty-five, surrounded by a double gallery, and has in front a pseudo-dipteral portico of eighteen columns, elevated on pedestals. Under its centre was the great public entrance, which was closed with folding doors, turning in sockets of bronze, and secured by bolts shot into the holes still remaining in the marble threshold. This entrance was flanked by two large circular recesses, one on each side, and beyond these again, at the extreme end of the building, by raised platforms, the staircases to which still remain. Hence orators might have harangued an audience sheltered under the portico, and edicts relative to commerce might have been publicly read.

The entrance to the area is through a passage, on each side of which are other passages, with a staircase

* Chalcidica are apartments separated by a partition from the body of a basilica, or other large building. The name, Festus says, is derived from the city Chalcis. Vitruvius directs that chalcidica should be constructed at the ends of a basilica, if the area is disproportionately long. It seems to signify, also, any large portico. "Avet animus atque ardet in chalcidicis illis magnis atq: in palatiis cœli deos deasq: conspicerè intectis corporibus." Arnobius, l. iii. p. 105. Facciolati.

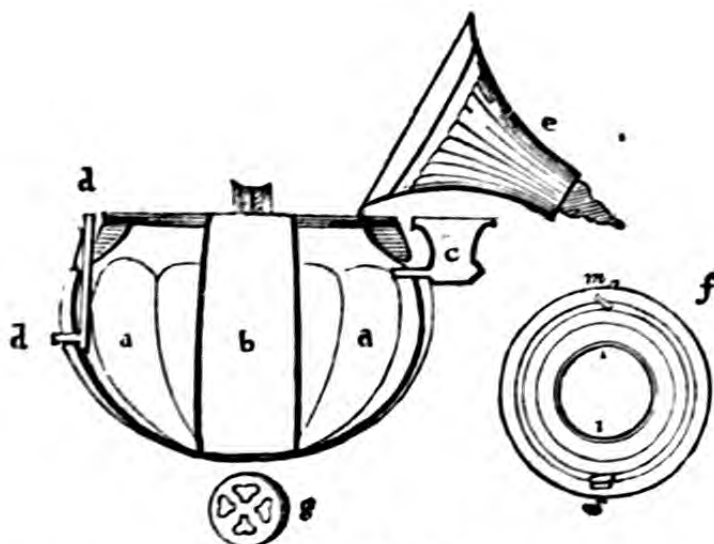
† A scouring shop has been lately excavated, of which an account will be given in the course of the work.

on the right leading to galleries above. The entrance to the chalcidicum is from the Street of the Silver-smiths, forming the southern boundary of the building. Here is a small chamber for the door-keeper, through which is seen a flight of steps ascending to the floor of the chalcidicum and crypto-portico; the walls on each side of the steps are painted in black panels, divided by red pilasters. Under the staircase are the remains of a thermopolia, or shop where warm water and warm decoctions were sold*. A



Urn for warm decoctions drank in the Thermopolia.

* Donaldson's Pompeii.



Section of the urn.

curious vessel for making these preparations has been discovered something like a modern urn, but much more complicated. This figure shows a section of the urn with its conical cover: *a a*, is the body of the urn, *b*, a small cylindrical furnace in the centre: it has four holes in the bottom, as shown in the plan at *g*, meant to let the ashes fall through, and to create a draught; *c*, a vase-shaped mouth, by means of which the water was poured in, serving also for the escape of steam; *d*, a tube which, by means of a cock, served to let off the fluid. It is placed thus high to prevent the pipe being stopped up by the ingredient decocted. *e*, a conical cover, the hollow of which is closed by a thin plate somewhat concave; *f*, a moveable flat cover, with a hole in the middle, which closes the whole urn except the mouth of the small furnace; *m m*, nuts and screws which fasten this moveable cover on the rim of the urn; *i i*, rim, convex on the outside, and concave within, which, the cover being put on, receives into its concavity the rim of the mouth of the furnace.

The edifice erected by Eumachia has a peristyle or uninterrupted colonnade of white marble Corinthian

columns, admirably executed. Unfortunately, only a small portion of one pillar remains, still their plan and disposition is exactly determined by the marble stylobate, on which they were placed. Their total disappearance has been accounted for, by supposing that the Pompeians themselves had dug up and carried off these expensive ornaments subsequent to the demolition of their city. Behind this peristyle the crypto-portico ran round three sides of the building, forming the external boundary on the north, south, and east sides. It was lighted by windows placed at regular intervals, having marble lintels, to which moveable windows were temporarily fixed; but these openings do not always front the spaces between the columns of the area. The east end must have been darker than the north and south sides, from the light being intercepted by the chalcidicum; it appears, however, that this inconvenience was obviated by a borrowed light through that building itself, the back and front of which were pierced with apertures. There were most probably wooden galleries above the colonnade and crypto-portico, and the upper cornice seems to have projected far into the area, thus protecting numerous little tables built of lava, and covered with marble, which served for the purpose of displaying the goods which were here exhibited and sold; for it appears probable that this building was for the use of the Pompeian manufacturers of cloth, whose gratitude to Eumachia is expressed by the statue and inscription above-mentioned. On one side of the niche, where the statue of Eumachia is placed, is a false door, six feet wide, and ten and a half high, painted on the stucco to correspond with the opening on the other side; it is of a yellow colour, and framed with styles and panels, like those now in use. It is divided perpendicularly into three compartments. This door may be presumed to be similar to the door at

the entrance to the chalcidicum from the Street of Silversmiths. To make the representation more exact, the ring which served for a handle has been imitated. The walls of the crypto-portico are also divided into large panels, painted alternately red and yellow, and decorated in the prevalent fashion, not the least singular part of which, as demonstrative of their horticultural taste, are the representations of borders of flowers along the bottom of the walls, representing a plant similar to the iris, except that the colour of the flower is vermillion. In the centre of each panel is a small figure or landscape.



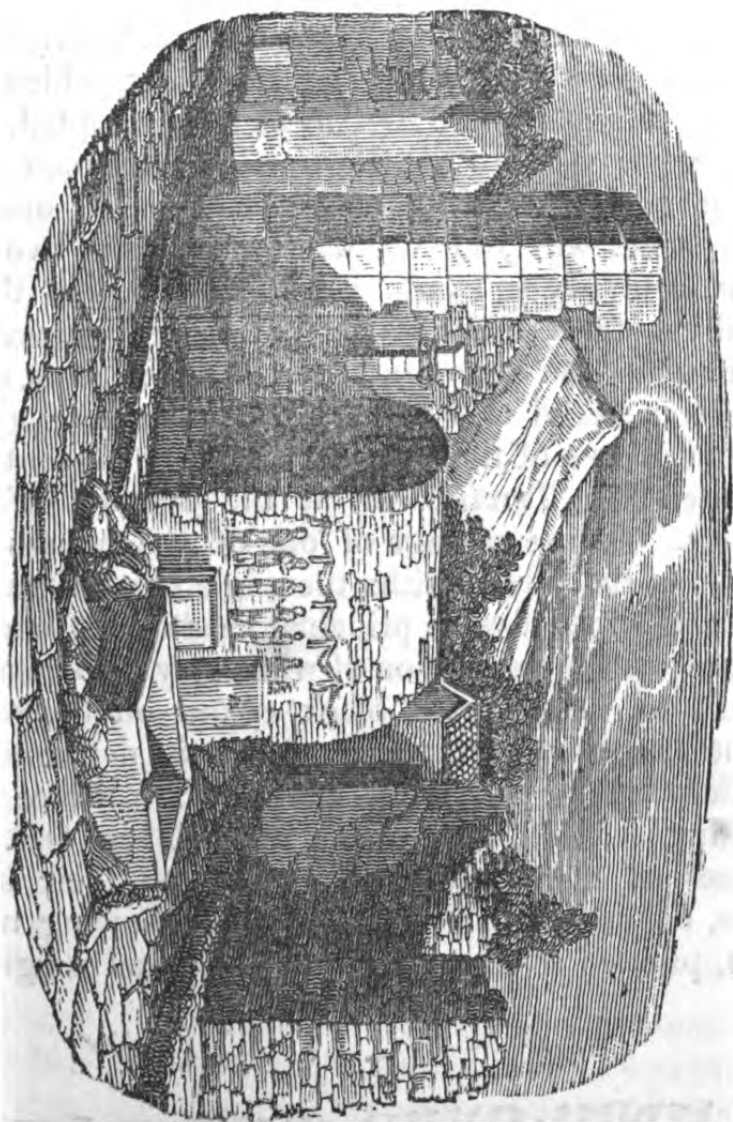
Statue of Eumachia and false door.

The chalcidicum is raised above the level of the area, and must have had temporary steps of wood; it is divided into two parts by the recess already mentioned, which may have served for a civil tribunal. Near this was found a statue without the head; the robe with which it was draped was edged with a gilded or red stripe. There can be no doubt that this part of the building was the chalcidicum mentioned in the inscription, from the passage already quoted from Vitruvius, which directs chalcidica to be cut off from one or both ends of a basilica, if the area is longer than it ought to be. Such an enclosed space was

almost necessary (if we are right in considering it as a sort of cloth-market) for the safe custody of goods which remained unsold; as were the tables under the projecting cornice for the display of goods, and the crypto-portico, or enclosed gallery for the transaction of business during the winter. The recess in the centre may also have been occupied by a magistrate, who ratified the sale, received the impost, if any was levied, and settled all disputes arising from the commercial transactions. It may be mentioned here, that the basilica of Paulus Æmilius at Rome had also a semicircular recess at one end for the tribunal. The building appears to have been repairing at the time of the eruption, as a piece of marble was found on the spot, with a line drawn in charcoal, to guide the chisel of the mason.

On the external wall of the crypt is a notice of a gladiatorial show, as well as an inscription, tending to prove the opulence of the city; it is to the effect that "all the goldsmiths invoked Caius Cuspius Pansa the Ædile."

Along the south side of the chalcidicum runs a broad street, more regularly built than any other in Pompeii. It is called the Street of the Silversmiths, from articles of jewellery having been found in some of the shops. These are constructed of masonry, neatly executed, and ornamented with elegant pilasters. Pilasters also flank the doorways. The style of domestic architecture observable in this street is purely Grecian. The entablature is adorned with dentils, or small oblong blocks, placed at intervals on a horizontal line immediately under the cornice: these dentils were formed originally by the projecting beams which supported the roof and floor of any building. The most singular part of the construction of the houses in this street arises from the courses of masonry, and the mouldings being inclined with the



Fountain in Trivii, near the gate of Herculaneum.

very gentle slope of the street ; this singularity has hitherto escaped the notice of the numerous writers on the antiquities of Pompeii. This method appears to have been adopted to avoid breaking the horizontal lines of the architecture, and thus ruining the uniformity of the street. The inclination of the ground fortunately is very slight, or the expedient, which is we believe unique, could not have been adopted. The carriage-way up to the Forum is interrupted by the platform under the colonnade being raised one step. The street was supplied with water from two fountains, a luxury so common in Pompeii, that there is hardly a street without one. They were generally ornamented, and kept constantly supplied from a large reservoir placed near them. We have here given a sketch of one of these fountains in its present state, situated "*in Triviis*," or at the junction of three streets. In the passage of one of the houses in the Street of the Silversmiths there is a coarsely executed painting of the twelve principal Gods and Goddesses, and also a representation of what may be presumed to be Pluto, drawn with black colour on the wall by some indifferent artist ; this latter is not unlike the modern vulgar notion of the devil, a fierce black-looking fellow, with horns and cloven feet. The names of the owners are written on their houses. One, belonging to Vettius, has the following inscription, painted over another still older and illegible, in

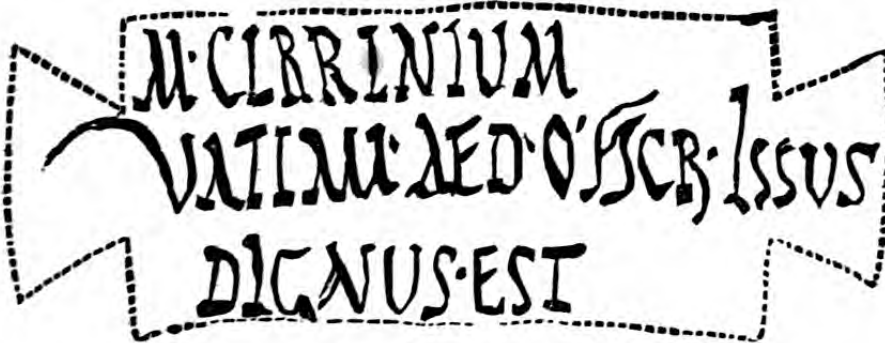
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AEDILIS·FAMILIA·GLADIATORIA·POMPEI
PR·X·IVNIAS·VENATIO·ES·VELA·ERVNT
VETIIVM·AED

Fac-simile inscription on the walls.

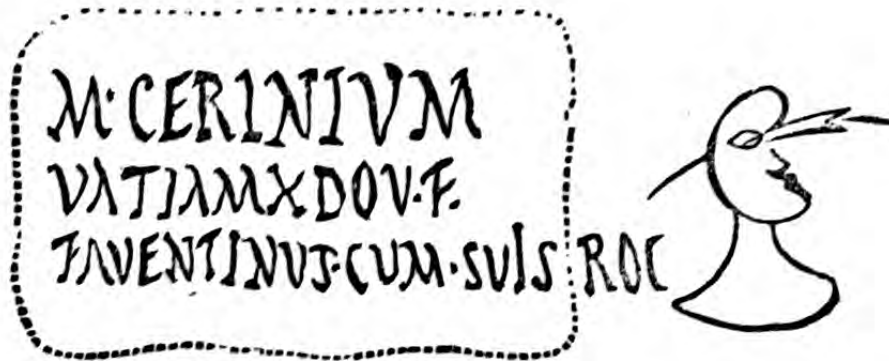
the peculiar careless character then in use. The upper line is part of the older inscription: they were usually done in black or red; some were merely scratched on the wall. The Album of the Latins (*λευκωμα* of the Greeks) is often to be met with on the external walls of the houses of Pompeii exactly as Suidas describes it; that is to say, a piece of the wall whitened, fit to receive inscriptions relative to the affairs of the citizens. Sometimes the taste of the inscriber led him to enclose this album, or whitened wall, with a border, in the form of the ancient tabellum or tablet used to write on; which practice has been handed down to us, and may be often seen on the canisters in the shops of grocers, tobacconists, chemists, &c. One of these inscriptions runs thus:—

MARCUM. CERRINIUM. VATIAM. ÆDILEM. ORAT. UT.
FAVEAT. SCRIBA. ISSUS: DIGNUS. EST.



Fac-simile inscription.

Which may be translated—"The scribe Issus beseeches Marcus Cerrinius Vatia, the Ædile, to patronise him: he is deserving." This appears to be equivalent to our "Patronised by His Royal Highness," &c. Faventinus, most probably another scribe patronised by the same Ædile, gives a portrait of himself with his pen behind his ear. At the farthest end of this street was discovered a skeleton, supposed to have been a priest of Isis. It was covered with pumice-



Fac-simile.

stones, and other volcanic matter. In the hand* was a bag of coarse linen, not entirely destroyed, containing three hundred and sixty silver coins, forty-two of copper, and six of gold; and near him several figures belonging to the worship of Isis, small silver forks, cups, pateræ in gold and silver, a cameo representing a Satyr striking a tambourine, rings set with stones, and vases of copper and bronze. On the south side of this street stands a building, the last on the eastern side of the Forum, devoid of all ornament or inscriptions that might mark its use. The naked walls furnish nothing on which we may even found a conjecture. A double colonnade runs along the front of this building and the southern end of the Forum. At the south-eastern angle another street runs on to the Forum, but a raised step at the end denies entrance to carriages: on the centre of this step there is a fountain.

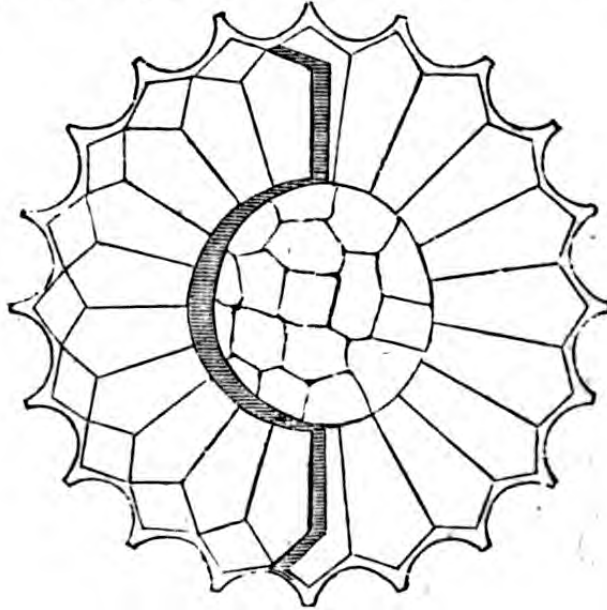
The names of owners of houses are painted on the stucco at the sides of the doors. In several of these houses, skeletons with rings, bracelets, necklaces, and other ornaments, together with many coins, were found. The kitchens were built under ground, which is not common in Pompeii, and indeed nowhere else observable, except on the side next the sea, where the declivity of the rock is so great that the offices are ne-

* The hand, with the cloth, is now in the Museum at Naples.

cessarily placed below the ground floor, to bring that floor to a level. The south end of the Forum is occupied by three buildings, which much resemble each other in their plan, and are nearly of the same size. In the absence of all inscriptions, we have supposed two of these to be curiæ, or places of assembly for the magistrates, and the central one an Ærarium, or treasury. They have undoubtedly been highly decorated with marble statues and columns, fragments of which, together with pedestals for the latter, still remain on the floors; and it is said that many gold, silver, and copper coins were found in one of them. The floors are elevated above the colonnade, and are reached by steps: they have a circular recess at the end for a tribunal, where a magistrate might preside over the meetings in the curiæ, and a quæstor attend to his duties in the public treasury. These buildings strike the eye of the traveller upon first entering the Forum, from the high dark-red masses of brick contrasting with the verdant mountains at their back, and the low, limy buildings around them. We are inclined to think that they were divided into two stories, from traces of stairs which would have led to the upper floor, and also to the wooden gallery above the Forum. There is a narrow passage between the western curia and the ærarium.

On the western side of the Forum are the basilica, a temple supposed to be dedicated to Venus, and the public granaries and prisons, which latter have been already noticed. The basilica, or court of justice, is the largest building in Pompeii: it is of an oblong form, two hundred and twenty feet in length by eighty, and corresponds in some particulars with the usual ancient description of that building. It is placed on the warmest side of the Forum, at its south-west angle; and is entered through a vestibule having five doorways of masonry, in which grooves have been cut

for the insertion of wooden door-jambs. From the vestibule the area of the basilica is reached by a flight of four steps, leading through five doorways, as in the vestibule. The roof was supported by a peristyle of twenty-eight large Ionic columns, con-



Plan showing the construction of the columns of the Basilica.

structed of brick : thus the space between the exterior walls and the peristyle was converted into a covered gallery, where the suitors were sheltered from the weather, while the light was admitted hypæthrally from the centre of the peristyle. The tribunal was placed at the farthest end of the building, and on each side of it were two square chalcidica ; a smaller order of half columns was attached to the walls, and four whole columns flank and divide the principal entrance ; at each corner of the building two columns are joined together, something in the manner of a Gothic pier. This we believe to be a unique example of columns being thus united in Grecian architecture. Upon this smaller order the joists of the upper gallery must have rested at one end ; the other most probably was let into the shaft of the larger column, as the smaller is

placed immediately behind it. The gallery projected as far as the centre of the large columns. Along the intercolumniations ran a pluteum, or parapet, high enough to prevent persons from falling over: this was most probably repeated all round the back of the gallery, on the face of the lateral walls, upon which, as a basement, a second order was raised. The aggregate height of the two smaller orders was most probably equal to that of the larger order of the peristyle, and the roof was sustained, as has been before mentioned, by the lateral walls and the columns of the peristyle, which rose to the same height.

The second gallery was reached by a staircase, placed without the building; the roof also may have inclined inwards, and the water have been carried away by channels sunk round the marble floors; but there are no remains of these floors, and as the place bears evident marks of having been excavated by the ancients, possibly for records of important trials, it would appear that they had, at the same time, availed themselves of the opportunity afforded them to carry away the pavement of the building, of which only the pozzuolano, in which it was bedded, remains. In the centre of the lateral wall are two entrances, near which are wells. At the farthest end was raised the tribunal for the prætor, or judge, which must have been ascended by wooden steps: it is decorated with small columns, between which, at the back, were small apertures, and at the sides closets, probably for their robes of office. Beneath were temporary dungeons for the accused; and there are two holes in the floor, through which orders were transmitted to the person in charge of the prisoners. In front of the tribunal was a pedestal, on which the legs of a bronze statue were found. On each side of the tribunal were two enclosed apartments, intended probably for the use of suitors and their advocates, or the officers,

lictors, and necessary attendants of the courts. The external walls are quite plain; but in the interior, courses of masonry are represented in stucco, painted with various colours in imitation of marble. Inscriptions have been faintly scratched on these walls by the loiterers in the courts, by no means remarkable for correctness either in style or sentiment. The large fluted columns which support the roof are singularly constructed with bricks and pieces of tufa, radiating from the centre, as may be seen in the foregoing plan, showing two alternate layers. All, whether of stone or brick, are covered, as well as the walls, with a fine marble stucco of great hardness. The opinion here expressed, that the lateral walls reached to the height of the larger order, varies from that adopted by Sir W. Gell, who thinks that the peristyle alone supported the principal roof, called *testudo*, and that it rose above the rest of the building. He also thinks that the roof of the gallery, or portico, round the *testudo* inclined inwards, resting against the shaft of the large columns of the peristyle, and thus cutting in two parts the most important feature of the whole building. We dissent from this, because, had the construction been such as Sir W. Gell supposes, the whole would have been covered; and such ingenious architects as the Pompeians employed would hardly have built the roof of the surrounding gallery so as to throw its drippings into the area within the peristyle, which, being covered, would have been the favourite place of assembly. Next to the basilica, which is an isolated building, and separated from it by a street communicating with the Forum, is a temple, said to be dedicated to Venus. It is peripteral and amphiprostyle, and is elevated on a podium, or basement. The portico in front of the cell is tetrastyle and pseudodipteral, and the columns are set aræostyle. Within the cell, which was very small,

part of a female statue, its pedestal, and a beautiful mosaic border, were found: hence it has been called



Mosaic border.

the temple of Venus, a supposition confirmed by the following inscription :—

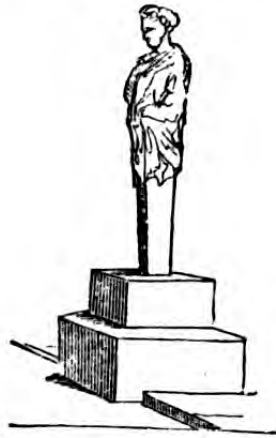
M . HOLCONIVS . RVFVS . D.V.I.D. TER.
 C . EGNATIVS . POSTHVMS. D.V.I.D. TER.
 EX . D.D. IVS . LVMINVM .
 OPSTRVENDORVM . HS . ∞ ∞ ∞
 REDEMERVNT . COL . VEN . COR .
 VSQVE . AD . TEGULAS .
 FACIVND . CCERARVNT . *

‘ Marcus Holconius Rufus, and Caius Ignatius Posthumus, duumvirs of justice for the third time, by a decree of the Decurions, bought again the right of closing the openings for three thousand sesterces, and took care to erect a private wall to the college of the incorporated Venereans up to the roof.’ It is very possible that these openings were between the thick piers on the side next the colonnade of the Forum, and that, previous to their being closed, the public could see into the area surrounding the fane of Venus. It is easy to understand why the magistrates should deem it proper that they should be closed up.

The temple stood in an open area, one hundred and fifty feet by seventy five, surrounded by a wall and portico. At the north end was the priests’ apartment, having an outlet into the Forum; the public entrance was at the south. Opposite the latter, bronze ornaments resembling the heads of large nails were found, with which the door might have been decorated, according to a practice common among the ancients. The columns of the temple were Corinthian, fluted, and in part painted blue; those of the colonnade were originally Doric, but afterwards altered to Corinthian, varying in detail, very ill designed, and badly executed. A perforation has been made in one of the latter to receive a pipe, through which water for the sacrifices flowed into a

* Donaldson.

basin placed upon a circular fluted pedestal. The lower third of them is painted yellow, the rest is white. The details, or characteristic ornaments of the original Doric order, are added with tiles and stucco, and the surface of the architrave is painted with an endless variety of ornament. Both a consular and a terminal figure were found here, and it has



Terminal figure in the temple of Venus.



Dwarfs, from a painting at Pompeii.

been supposed that one of the latter was placed before each column of the colonnade. Channels were formed round the area, under the cornice of this colonnade, to carry off the water from the roof, which inclined inwards like a shed. The ascent to the cell of the temple was by a flight of steps, on each side of which were pedestals; near one of them lies an Ionic votive column, with a tablet carved in relief upon its shaft, meant to receive the inscription, stating by

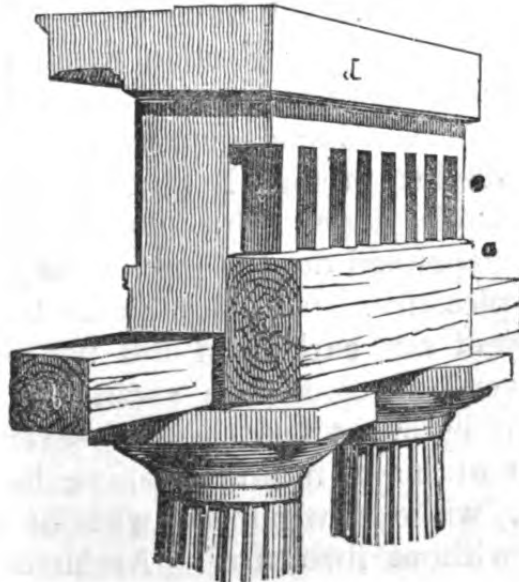
whom, and on what occasion it was consecrated. The cell had a pilaster at each of the external angles, and the walls were stuccoed in imitation of masonry. In front of the steps was the great altar: a piece of black stone placed upon it has three receptacles for fire, on which the ashes of the victims were found. An inscription on the east side, which is repeated on the west, records that the Quartumviri, M. PORCIUS, L. SEXTILIUS, CN. CORNELIUS, and A. CORNELIUS, erected the altar at their own expense. The walls under the colonnade are painted in vivid colours, principally on a black ground, representing landscapes, country-houses, and interiors of rooms with figures. The groups of figures consist of dancers, sacrificers to Priapus, battles with crocodiles, &c.; one represents Hector tied to the car of Achilles, another the dispute between Achilles and Agamemnon, and near the ground is a long series of dwarfish figures. In the apartment of the priest was found a very beautiful painting of Bacchus and



Painting of Bacchus and Silenus, in the apartment of the priest in the temple of Venus.

Silenus. This had been removed by the ancients from some other place, and carefully fastened with iron cramps and cement in its present situation. In a recess, at the north-east end of the temple, under the colonnade of the Forum, stood the public measures for wine, oil, and grain. These consist of nine cylindrical holes cut in an oblong block of tufa; there are five large for grain, and four smaller for wine: the former had a sliding bottom, that the grain when measured might be easily removed. The latter are provided with tubes to draw off the liquid. These measures are placed near what we have already supposed to be the horrea, or public granaries.

Having thus completed the circuit of the Forum, it only remains to mention a few less important matters. A portico, as we have often had occasion to mention, surrounds three sides of this space; we now will speak more particularly of its construction. The columns are twelve feet high, and two feet three inches and a half in diameter; they were set aræostyle, about three

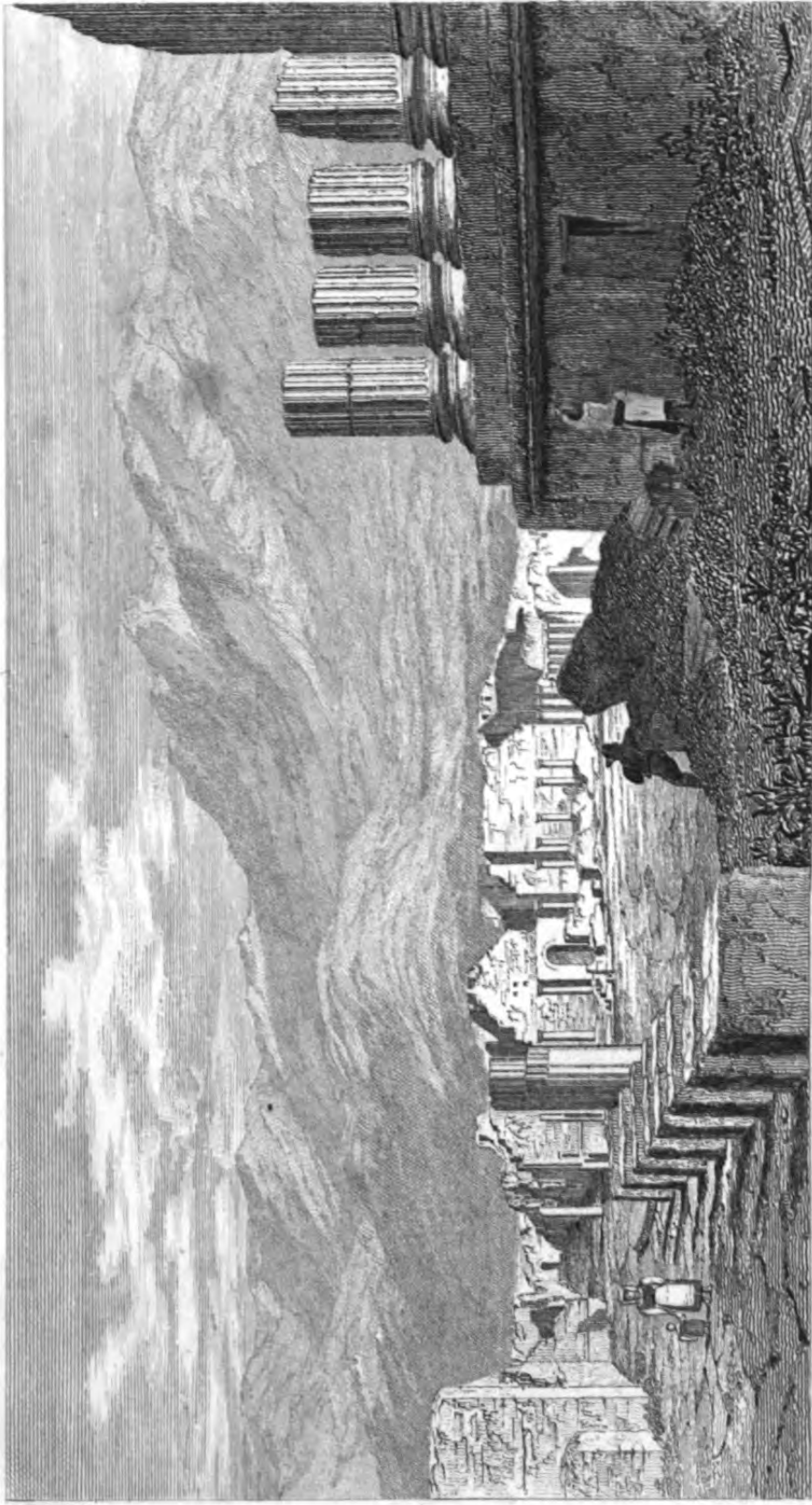


Construction in wood and stone of the aræostyle portico of the Forum.

and a half diameters, or eight feet six inches apart. It has been already mentioned as an objection to this width of intercolumniation, that, except where masses of stone of unusual size could be commanded, the architraves were necessarily either flat arches, or beams of wood (*b*). Here the latter material was used, and a stone entablature (*d*) raised upon it, as represented in the annexed engraving. Above this, there probably was a gallery* ; such at least, we learn from Vitruvius, was the general practice ; and this gallery was usually appropriated to the use of those who had the management of the public revenue.

The area of the Forum was adorned with pedestals, for the statues of those who merited or could procure this distinction. Some are of the proportion adapted to equestrian statues. They are all of white marble, ornamented with a Doric frieze ; and appear to have been still in process of erection, to replace an older set of pedestals, at the time when Pompeii was destroyed. At the south end is a small isolated arch, on which possibly the tutelary genius of the city might have been placed. Such was the construction of a Roman forum ; the reader will not be at a loss to appreciate its combined utility and magnificence. Some surprise may be felt at the expense lavished so prodigally on public buildings in an inconsiderable town. But the Romans lived in public, and depended on the public for their amusements and pleasure. "A Roman citizen," says M. Simond, "went out early, and did not return home until the evening repast ; he spent his day in the forum, at the baths, at the theatre,—every where, in short, except at his own home, where he slept in a small room, without windows, without a chimney, and almost without furniture." Architectural splen-

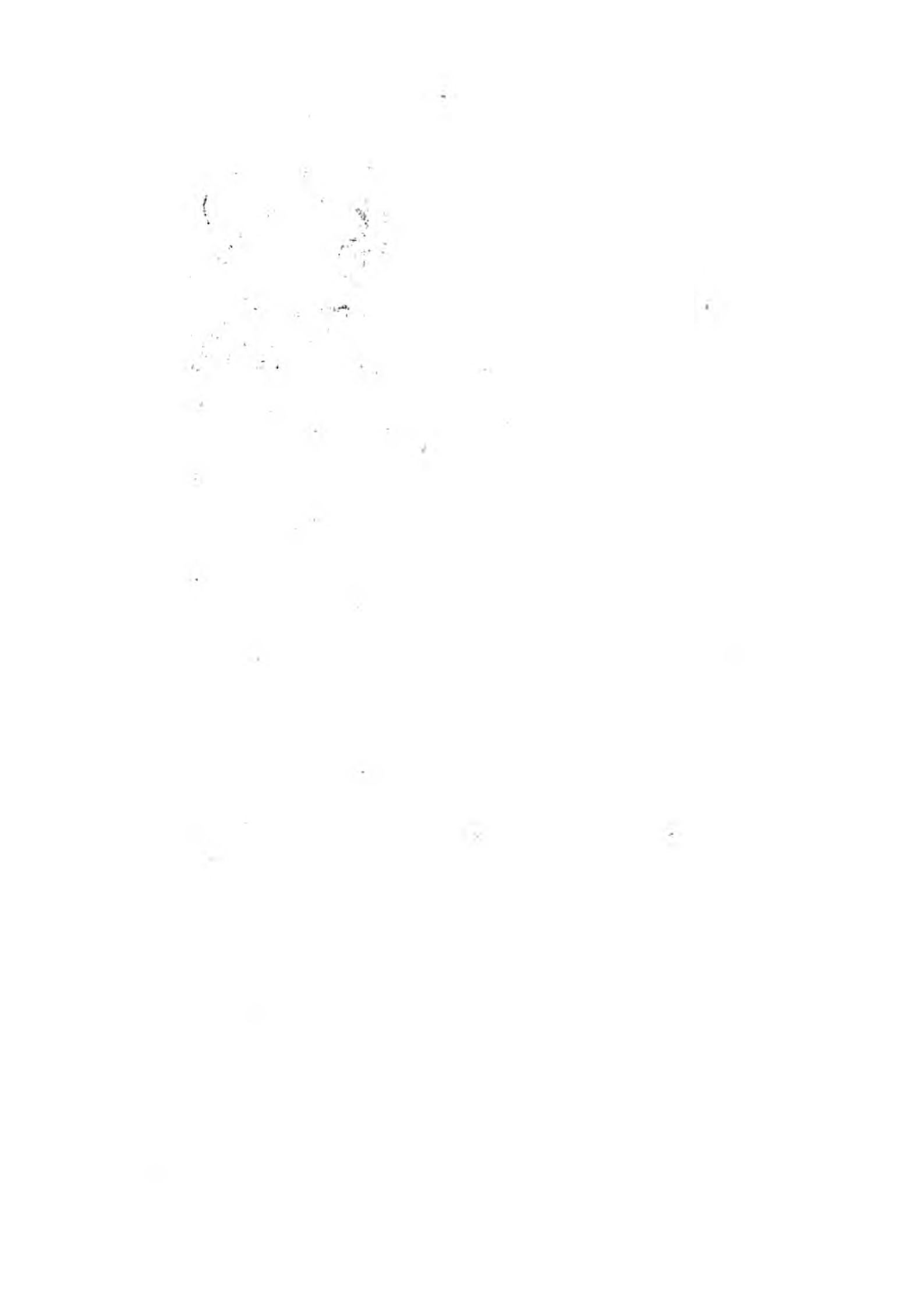
* In the holes at *c* the joists of the floor of the upper gallery were most probably fixed.



T. BRADLEY SC.

W. B. CLARKE DEL.

V I E W O F T H E F O R U M .



dour therefore, both in places of public business and of public pleasure, was far more studied and of far greater importance than it now is ; and money, both public and private, was lavished upon such purposes with a profuseness far more than commensurate, according to modern notions, with the objects to which it was directed. We may add, to explain the motives which induced individuals to bestow their money so freely in increasing the splendour of their city, that there was no surer road to power and influence, either in the capital, or in the smaller sphere of a provincial town, than by gratifying the taste of the people for splendour, either in public buildings, or in the amusements of the stage or the amphitheatre.

The architecture of Pompeii is not always in the best taste ; yet there is much to admire in it, both for the design and the execution. The restoration of the Forum, which forms the frontispiece to this volume, will convey to the reader some idea at once of the artificial and natural beauties of that city.



Male Centaur and Bacchante.

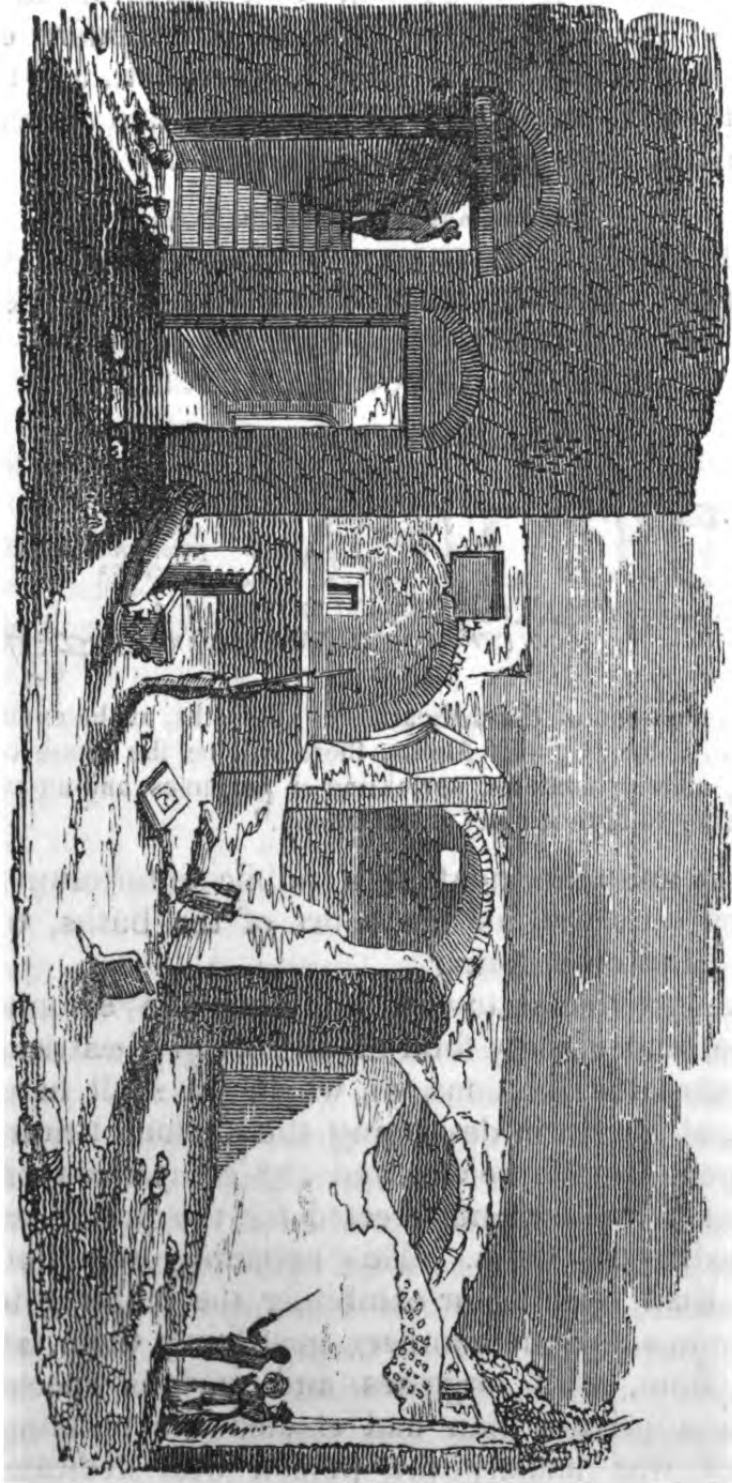


Female Centaur and Bacchante.

CHAPTER VII.

BATHS EXCAVATED IN THE YEAR 1824.

AFTER the excavations at Pompeii had been carried on to a considerable extent, it was matter of surprise that no public baths were discovered, particularly as they were sure almost to be placed in the most frequented situation, and therefore probably somewhere close to the Forum. The wonder was increased by the small number of baths found in private houses. That public baths existed, was long ago ascertained from an inscription discovered in 1749, purporting that one Januarius, an enfranchised slave, supplied the baths of Marcus Crassus Frugi with water, both fresh and salt. At length an excavation, in the vicinity of the Forum, brought to light a suite of public baths, admirably arranged,



Exterior of the Baths.

spacious, highly decorated, and superior to any even in the most considerable of our modern cities. They are fortunately in good preservation, and throw much light on what the ancients, and especially Vitruvius, have written on the subject.

Inscription in the Court of the Baths.

DEDICATIONE . THERMARUM . MUNERIS . CNÆI .
ALLEI . NIGIDII . MAII . VENATIO . ATHLETÆ .
SPARSIONES . VELA . ERUNT . MAIO .
PRINCIPI . COLONIÆ . FELICITER.

Fac-simile of the above inscription.

DEDICATIONE ^{POLY} MAIO ^{PRINCIPI COLONIAE} FELICITER
..... RYM MVNERIS CNALLEI NIGIDI MAI
..... VENATIO ATHLETÆ SPARSIONES VELA ERUNT

“On occasion of the dedication of the baths, at the expense of Cnæus Alleius Nigidius Maius, there will be the chase of wild beasts, athletic contests, sprinkling of perfumes, and an awning. Prosperity to Maius, chief of the colony.”

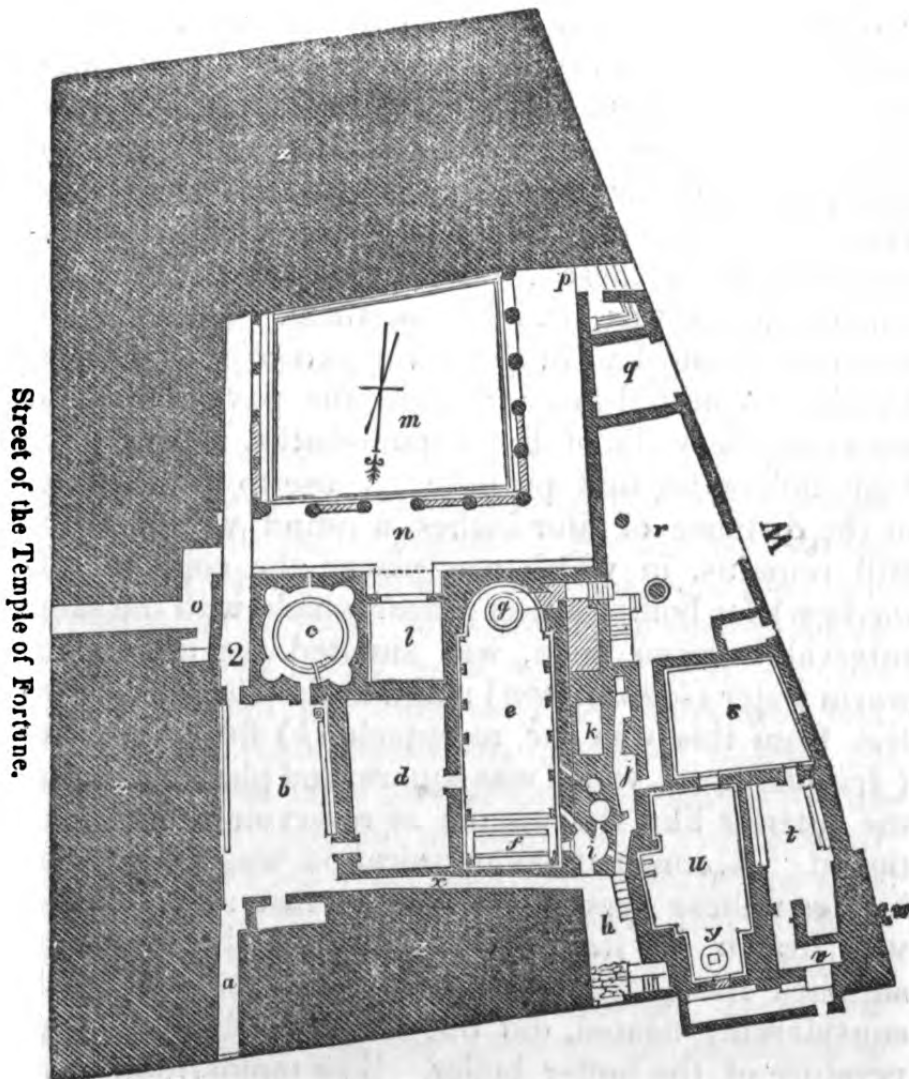
This announcement of a public entertainment is written on a wall of the court of the baths, to the right hand on entering.

The provincial towns, imitating the example of Rome, and equally fond of all sort of theatrical and gladiatorial exhibitions, of which we shall hereafter speak at length in describing the various theatres of Pompeii, usually solemnized the completion of any edifices or monuments erected for the public service by dedicating them. This ceremony was nothing more than opening or exhibiting the building to the people in a solemn manner; gratifying them, at the same time, with largesses and various spectacles. When a private man had erected the building, he himself was usually the person who dedicated it. When undertaken by the public order, and at the

public cost, the citizens deputed some magistrate, or rich and popular person, to perform the ceremony. In the capital vast sums were expended in this manner, and a man who aspired to become a popular leader, could scarcely lay out his money to better interest than in courting favour by the prodigality of his expenses on these or similar occasions. It appears, then, that upon the completion of the baths, the Pompeians committed the dedication to Cnæus Alleius Nigidius Maius, who entertained them with a sumptuous spectacle. There were combats (*venatio*) between wild beasts, or between beasts and men, a cruel sport, to which the Romans were passionately addicted; athletic games (*athletæ*); sprinkling of perfumes (*sparsiones*); and it was further engaged that an awning should be raised over the amphitheatre. The convenience of such a covering will be evident, no less as a protection against sun than rain, under an Italian sky; the merit of the promise, which may seem but a trifle, will be understood by considering the difficulty of stretching a covering over the immense area of an ancient amphitheatre. We may observe, by the way, that representations of hunting, and of combats between wild beasts, are common subjects of the paintings of Pompeii. A combat between a lion and a horse, and another, between a bear and a bull, have been found in the amphitheatre. The velarium, or awning, is advertised in all the inscriptions yet found, which give notice of public games. *Athletæ* and *sparsiones* appear in no other. We learn from Seneca, that the perfumes were disseminated by being mixed with boiling water, and then placed in the centre of the amphitheatre, so that the scents rose with the steam, and soon became diffused throughout the building. There is some reason to suppose that the completion and dedication of the baths preceded the destruction of

the city but a short time, from the inscription being found perfect on the wall of the baths ; for it was the custom to write these notices in the most public places ; and after a very short season they were covered over by others, as one bill-sticker defaces the labours of his predecessors. This is abundantly evident even in the present ruined state of the town, especially at the corners of the principal streets, where it is easy to discover one inscription painted over another. But to return to the Baths : they occupy a space of about a hundred square feet, and are divided into three separate and distinct compartments. One of these was appropriated to the fireplaces and to the servants of the establishment ; the other two were occupied each by a set of baths, contiguous to each other, similar and adapted to the same purposes, and supplied with heat and water from the same furnace and from the same reservoir. The apartments and passages are paved with white marble in mosaic. It is conjectured that the most spacious of them was for the use of the men, the lesser for that of the women. It appears, from Varro and Vitruvius, that baths for men and women were originally united, as well for convenience as economy of fuel, but were separated afterwards for the preservation of morals, and had no communication except that from the furnaces.

The Piscina, or reservoir, is separated from the baths themselves by the street (W), which opens into the Forum. The pipes which communicated between the reservoir and the bath passed over an arch (*w*) thrown across the street. This arch was perfect when the excavation was made, now only the shoulders remain, in which the pipes above-mentioned are still visible. There were three entrances to the furnaces which heated the warm and vapour baths. The chief one opened upon a court (*r*), of an irregular



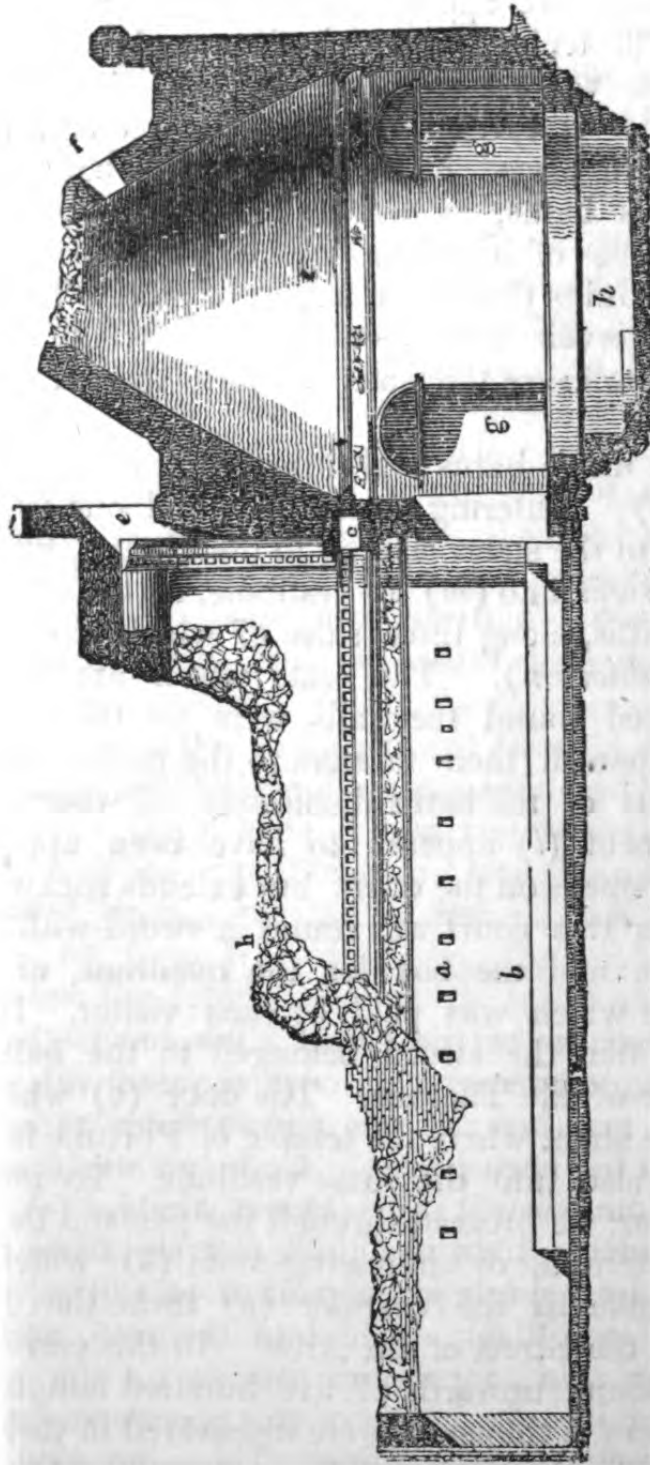
Plan of the Baths.

figure, fit for containing wood and other necessaries for the use of the establishment, covered in part by a roof, the rafters of which rested at one end on the lateral walls, and at the other on two columns, constructed with small pieces of stone. From hence a very small staircase led to the furnaces and to the upper part of the baths. Another entrance led to a small room (*h*) (*præfurnium*), into which projects the mouth of a furnace (*i*). In this room were the

attendants on the furnace, or stokers (*fornacarii*), whose duty it was to keep up the fires. Here was found a quantity of pitch, used by the furnace-men to enliven the fires. The stairs in the room (*h*) led up to the coppers. The third entrance led from the apodyterium of the men's baths by means of a corridor (*x*). It is to be remarked that there is no communication between these furnaces and the bath of the women, which was heated from them. The furnace was round, and had in the lower part of it two pipes, which transmitted hot air under the pavements and between the walls of the vapour-baths, which were built hollow for that purpose. Close to the furnace, at the distance of four inches, a round vacant space still remains, in which was placed the copper (*caldarium*) for boiling water; near which, with the same interval between them, was situated the copper for warm water (*tepidarium*); and at the distance of two feet from this was the receptacle (*k*) for cold water (*frigidarium*), which was square, and plastered round the interior like the piscina or reservoir before-mentioned. A constant communication was maintained between these vessels, so that as fast as hot water was drawn off from the caldarium, the void was supplied from the tepidarium, which being already considerably heated, did but slightly reduce the temperature of the hotter boiler. The tepidarium, in its turn, was supplied from the piscina, and that from the aqueduct; so that the heat which was not taken up by the first boiler passed on to the second, and instead of being wasted, did its office in preparing the contents of the second for the higher temperature which it was to obtain in the first. It is but lately that this principle has been introduced into modern furnaces, but its use in reducing the consumption of fuel is well known. It is necessary to apprise the reader that the terms *frigidarium*, *tepidarium*, and

caldarium, are applied to the apartments in which the cold, tepid, and hot baths are placed, as well as to those vessels in which the operation of heating the water is carried on. The furnace and the coppers were placed between the men's baths and the women's baths, as near as possible to both, to avoid the waste of heat consequent on transmitting the heated fluids through a length of pipe. The coppers and reservoir were elevated considerably above the baths, to cause the water to flow more rapidly into them.

The men's baths had three public entrances (*a*, *o*, and *p*). Entering at the principal one (*p*), which opens to the street leading to the Forum, we descend three steps into (*m*) the vestibule, cortile, or portico of the baths, along three sides of which runs a portico (*ambulacrum*). The seats which are to be seen arranged round the walls were for the slaves who accompanied their masters to the baths, and for the servants of the baths themselves, to whom also the apartment (*l*) appears to have been appropriated, which opens on the court, but extends backward from it. In this court was found a sword with a leather sheath, and the box for the quadrans, or piece of money which was paid by each visitor. It is probable that the sword belonged to the balneator or keeper of the Thermæ. The door (*o*) which opens on the street where the temple of Fortune is situated, leads also into the same vestibule. By means of a corridor, we proceed through the passage (2) into the apodyterium, or undressing-room (*b*), which is also accessible by the corridor (*a*) from the street now called the Street of the Arch. In this corridor alone were found upwards of five hundred lamps, and upwards of a thousand were discovered in various parts of the baths during the excavations. Of these the



Section of the Apodyterium and Frigidarium.

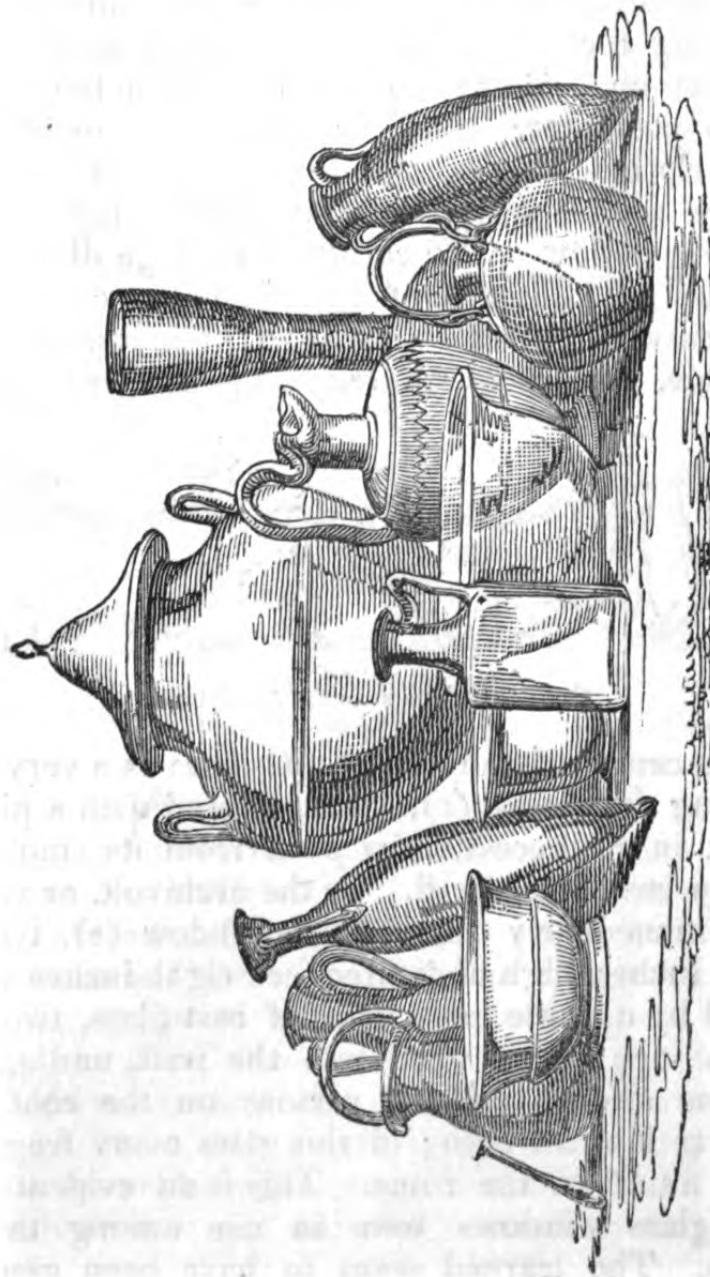
best were selected, and the workmen were ordered to destroy the remainder. The greater number were of terra-cotta, some had an impression of the graces on them, and others the figure of Harpocrates,— both of inferior execution. The ceiling of this passage is decorated with stars. The apodyterium has three seats, marked (*b*, *d*) in the preceding and the following section, made of lava, with a step to place the feet on. Holes (*a*) still remain in the wall, in which pegs were fixed, for the bathers to hang up their clothes. This chamber is stuccoed from the cornice to the ground; it is highly finished, and coloured yellow. The cornice is of large dimensions, and has something of an Egyptian character; below it is carved a frieze, composed of lyres, dolphins, chimeræ, and vases, in relief, upon a red ground.



Ornamented frieze in the Apodyterium.

In the centre of the end of the room is a very small opening or recess (*c*), once covered with a piece of glass: in this recess, as is plain from its smokiness, a lamp has been placed. In the archivolt, or vaulted roof, immediately over (*c*) is a window (*e*), two feet eight inches high and three feet eight inches broad, closed by a single large pane of cast glass, two-fifths of an inch thick, fixed into the wall, and ground on one side to prevent persons on the roof from looking into the bath: of this glass many fragments were found in the ruins. This is an evident proof that glass windows were in use among the ancients. The learned seem to have been generally

mistaken on the subject of glass-making among the ancients, who seem to have been far more skilful than had been imagined. The vast collection of bottles, vases, glasses, and other utensils, discovered at Pompeii is sufficient to show that the ancients were well acquainted with the art of glass-blowing. Un-



Glass vases found in Pompeii.

derneath, a large mask is moulded in stucco, with curling hair and a most venerable floating beard.

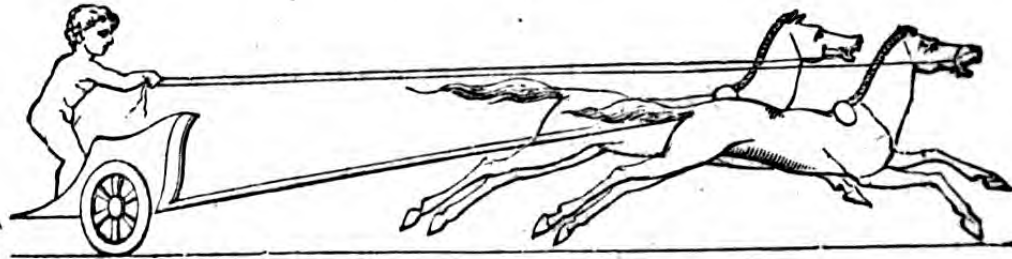


Transverse section of the Apodyterium.

Water is sculptured flowing from the locks of hair, and on each side two Tritons, with vases on their shoulders, are fighting ; there are also dolphins, who encircle with their tails the figures of children struggling to disengage themselves. All these are ornaments appropriate to baths, and of a whimsical invention to symbolize water and bathing. The floor is paved with white marble worked in mosaic, and the ceiling appears to have been divided into white panels within red borders. It has six doors : one leads to the præfurnium (*h*) ; another into the small room, perhaps destined for a wardrobe ; the third, by a narrow passage (*a*) to the Street of the Arch ; the fourth to the tepidarium (*d*) ; the fifth to the frigidarium (*c*) ; and the sixth along the corridor (2) to the vestibule or portico of the bath.

The frigidarium (*c*), or cold bath, is a round chamber, encrusted with yellow stucco, with indications here and there of green, with a ceiling in the form of a truncated cone, which appears to have been painted blue. Near the top is a window (*f*),

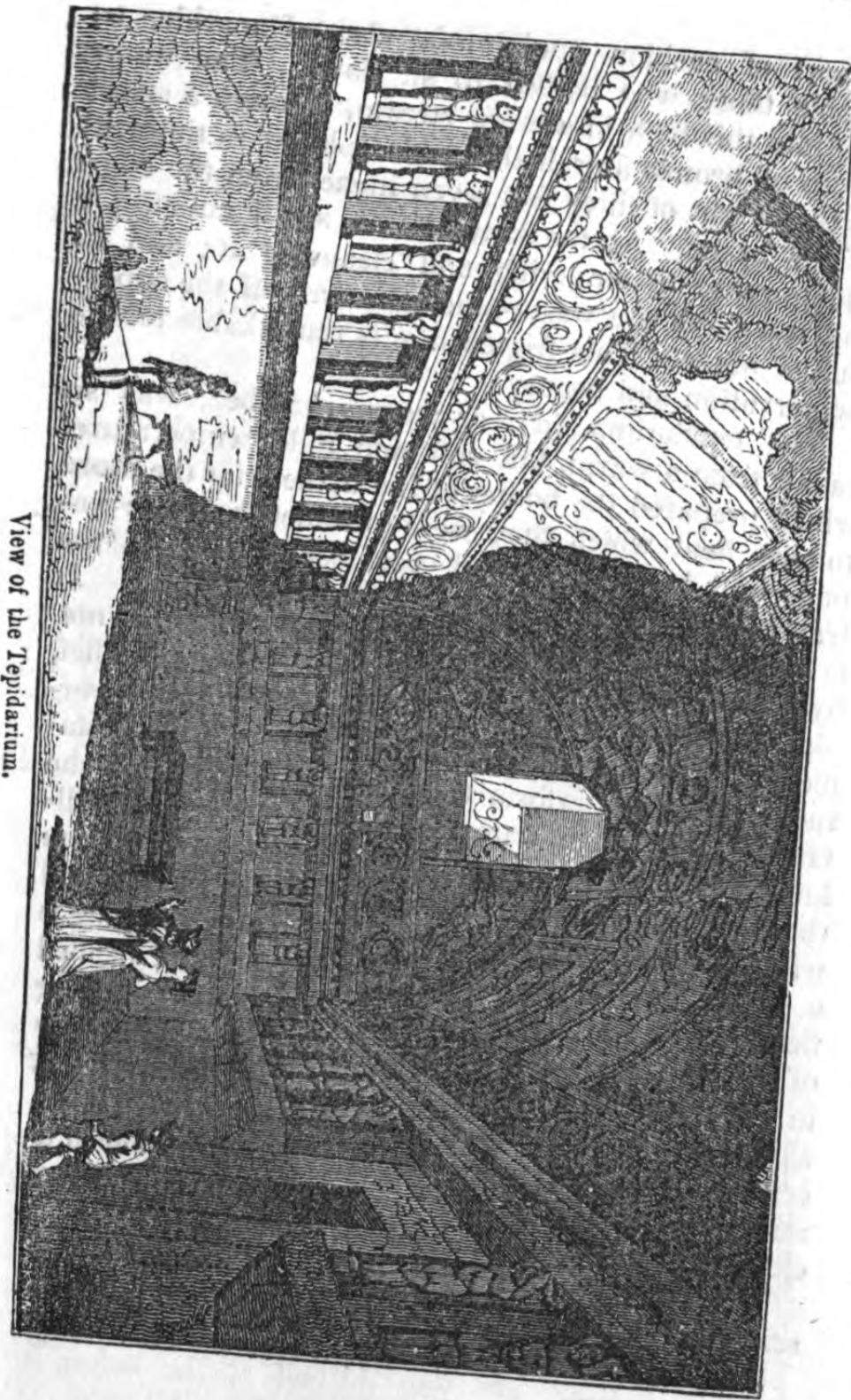
from whence it was lighted. In the cornice, which is coloured red, is modelled in stucco a chariot-race of cupids, preceded by cupids on horseback and on foot.



Chariot-race of Cupids in the Frigidarium



The plinth or base of the wall is entirely of marble. The entrance is by the undressing-room. There are four niches (*gg*), disposed at equal distances, painted red above and blue below. In these niches were seats (*scholæ*) for the convenience of the bathers. The basin (*alveus*) is twelve feet ten inches in diameter, and two feet nine inches deep, and is entirely lined with white marble. Two marble steps facilitate the descent into it, and at the bottom is



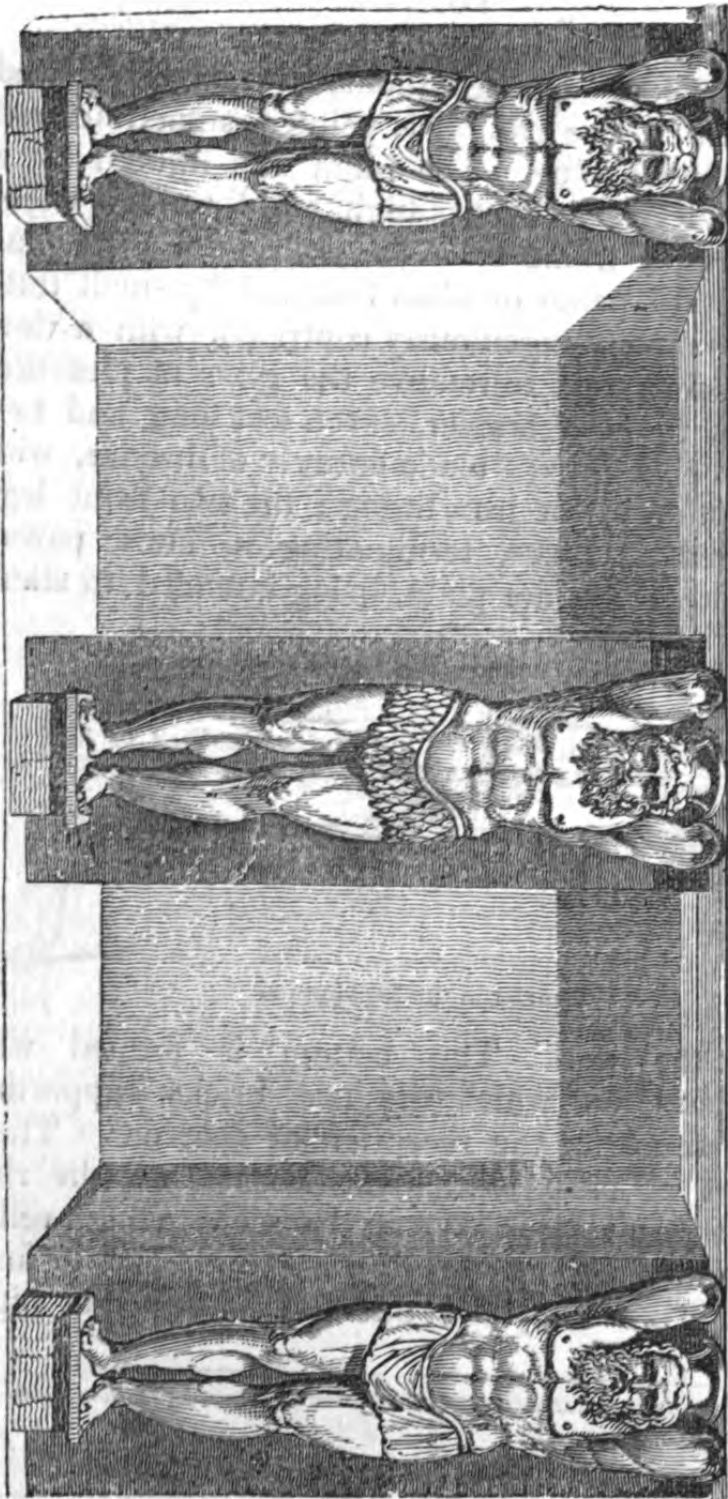
View of the Tepidarium.

a sort of cushion (*pulvinus*), also of marble, to enable those who bathed to sit down. The water ran into this bath in a large stream, through a spout or lip of bronze four inches wide, placed in the wall at the height of three feet seven inches from the edge of the basin. At the bottom is a small outlet, for the purpose of emptying and cleansing it; and in the rim there is a waste-pipe, to carry off the superfluous water. This *frigidarium* is remarkable for its preservation and beauty.

The *tepidarium* (*d*), or warm chamber, was so called from a warm, but soft and mild temperature, which prepared the bodies of the bathers for the more intense heat which they were to undergo in the vapour and hot baths; and, *vice versâ*, softened the transition from the hot bath to the external air. It is divided into a number of niches, or compartments, by *Telamones**, two feet high, carved in high relief, placed against the walls, and supporting a rich cornice. These are male, as *Cariatides* are female statues, placed to perform the office of pillars. By the Greeks they were named *Atlantes*, from the well-known fable of Atlas supporting the heavens. Here they are made of terra-cotta, or baked clay, incrustated with the finest marble stucco. Their only covering is a girdle round the loins; they have been painted flesh-colour, with black hair and beards; the moulding of the pedestal, and the basket on their heads, were in imitation of gold; and the pedestal itself, as well as the wall behind them and the niches for the reception of the clothes of the bathers, was coloured to resemble red porphyry. Six of these niches are closed up, without any apparent reason.

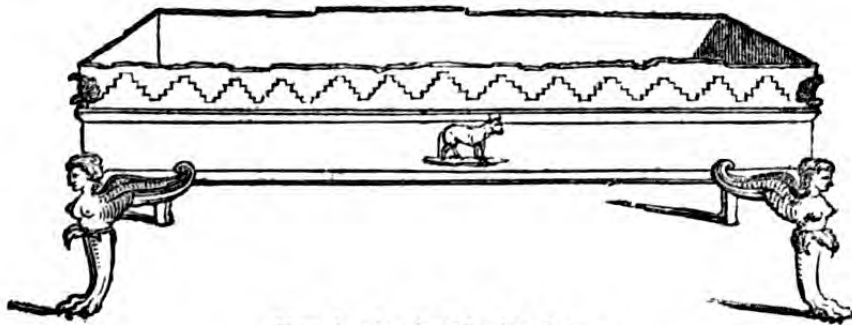
The ceiling is worked in stucco, in low relief, with scattered figures and ornaments of little flying genii,

* So called from the Greek *τληναι*, to endure. The etymology of Atlas is the same.



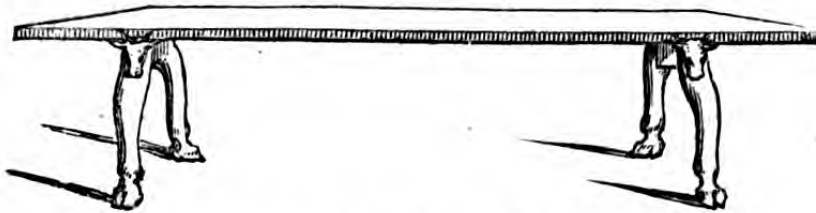
Telamonnes in the Epidarium.

delicately relieved on medallions, with foliage carved round them. The ground is painted, sometimes red and sometimes blue. The room was lighted by a window two feet six inches high, and three feet wide, in the bronze frame of which were found set four very beautiful panes of glass fastened by small nuts and screws, very ingeniously contrived, with a view to their being able to remove the glass at pleasure. In it was found a brazier, seven feet long and two feet six inches broad, made entirely of bronze, with the exception of an iron lining; the two front legs are winged sphinxes, terminating in lions' paws; the two other legs are plain, being intended to stand



Brazier in the Tepidarium.

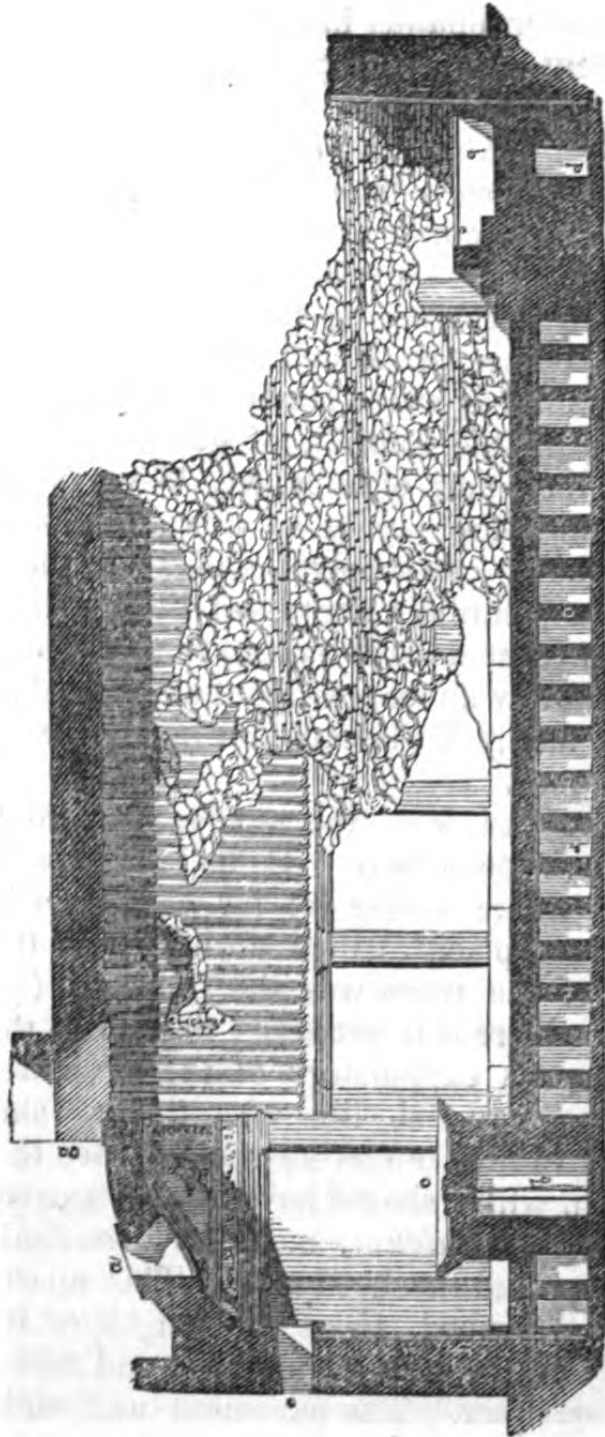
against the wall. The bottom is formed with bronze bars, on which are laid bricks supporting pumice-stones for the reception of charcoal. There is a sort of false battlement worked on the rim, and in the middle a cow to be seen in high relief. Three bronze benches also were found, alike in form and pattern. They are one foot four inches high,



One of the three bronze seats found in the Tepidarium.

one foot in width, and about six feet long, supported by four legs, terminating in the cloven hoofs of a cow, and ornamented at the upper ends with the heads of the same animal. Upon the seat is inscribed, M. NIGIDIUS. VACCULA. P. S. Varro, in his book upon rural affairs, tells us that many of the surnames of the Roman families had their origin in pastoral life; and especially are derived from the animals to whose breeding they paid most attention. As, for instance, the Porcii took their name from their occupation as swine-herds; the Ovini from their care of sheep; the Caprilli, of goats; the Equarii, of horses; the Tauri, of bulls, &c. We may conclude, therefore, that the family of this Marcus Vaccula were originally cowkeepers, and that the figures of cows so plentifully impressed on all the articles which he presented to the baths, are a sort of *canting arms*, to borrow an expression from heraldry, as in Rome the family Toria caused a bull to be stamped on their money.

A doorway led from the tepidarium into the caldarium, or vapour-bath. It had on one side the laconicum, where a vase (c) for washing the hands and face was placed, called labrum. On the opposite side of the room was the hot-bath (q) called lavacrum. Here it is necessary to refer to the words of Vitruvius as explanatory of the structure of the apartments, (cap. xi. lib. v.). "Here should be placed the vaulted sweating-room, twice the length of its width, which should have at each extremity, on one end the *laconicum*, made as described above, on the other end the hot-bath." This apartment is exactly as described, twice the length of its width, exclusively of the laconicum at one end and the hot-bath at the other. The pavement and walls of the whole were hollowed to admit the heat. Vitruvius never mentions the laconicum as being separated



Section of the Caldarium.

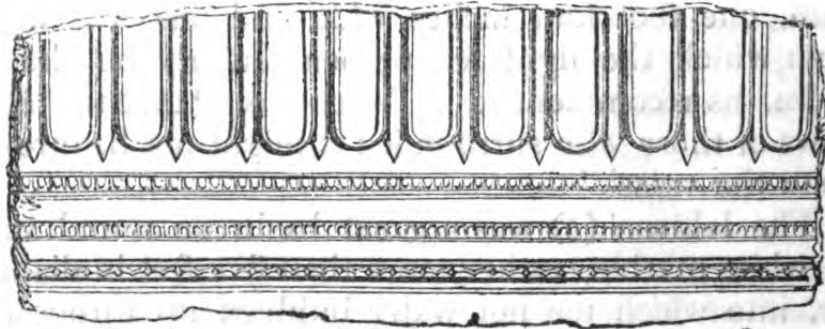
from the vapour-bath; it may, therefore, be presumed to have been always connected with it in his time, although in the Thermæ constructed by the later emperors it appears always to have formed a separate apartment. In the baths of Pompeii they are united, and adjoin the tepidarium, exactly agreeing with the descriptions of Vitruvius. The laconicum is a large semicircular niche, seven feet wide and three feet six inches deep, in the middle of which was placed a vase or labrum. The ceiling was formed by a quarter of a sphere; it had on one side a circular opening (*a*), one foot six inches in diameter, over which, according to Vitruvius, a shield of bronze was suspended, which, by means of a chain attached to it, could be drawn over or drawn aside from the aperture, and thus regulated the temperature of the bath. Where the ceiling of the laconicum joined the ceiling of the vapour-bath, there was, immediately over the centre of the vase or labrum, a window (*g*), three feet five inches wide; and there were two square lateral windows in the ceiling of the vapour-bath, one foot four inches wide and one foot high, from which the light fell perpendicularly on the labrum, as recommended by Vitruvius, "that the shadows of those who surrounded it might not be thrown upon the vessel."

The labrum (*c*) was a great basin or round vase of white marble, rather more than five feet in diameter, into which the hot water bubbled up through a pipe (*b*) in its centre, and served for the partial ablutions of those who took the vapour-bath. It was raised about three feet six inches above the level of the pavement on a round base built of small pieces of stone or lava, stuccoed and coloured red, five feet six inches in diameter, and has within it a bronze inscription, which runs thus:—

GNÆO . MELISSÆO . GNÆI . FILIO . APRO . MARCO .
 STAIO . MARCI . FILIO . RUFO . DUUMVIRIS . ITERUM .
 IURE . DICUNDO . LABRUM . EX DECURIONUM DE
 CRETO . EX . PECUNIA . PUBLICA . FACIENDUM .
 CURARUNT . CONSTAT . SESTERTIUM . D.C.C.L.

Relating that "Gnæus Melissæus Aper, son of Gnæus Aper, Marcus Staius Rufus, son of M. Rufus, duumvirs of justice for the second time, caused the labrum to be made at the public expense, by order of the Decurions." It cost 750 sesterces, about 6*l*.* There is in the Vatican a magnificent porphyry labrum found in one of the imperial baths; and Baccius, a great modern authority on baths, speaks of labra made of glass.

This apartment, like the others, is well stuccoed, and painted yellow; a cornice, highly enriched with stucco ornaments, is supported by fluted pilasters placed at irregular intervals. These are red, as is also the cornice and ceiling of the laconicum, which is worked in stucco, with little figures of boys and animals. The ceiling of the room itself was entirely



Part of the ceiling of the Caldarium †.

carved with transverse fluting, like that of enriched columns, a beautiful ornament, and one but little used for this purpose; no other instance occurring

* Museum Borbonicum, vol. ii.

† The latter ornament has been employed with success by the King's architect at Naples in the vaulted ceiling of a ball-room.

except in certain ruins of villas on the shores of Castellone, the ancient Formiæ. The hot-bath (*f* on the plan) occupied the whole end of the room opposite to the laconicum and next to the furnace. It was four feet four inches wide, twelve feet long, and one foot eight inches deep, constructed entirely of marble, with only one pipe to introduce the water, and was elevated two steps above the floor; while a single step led down into the bath itself, forming a continuous bench round it for the convenience of the bathers.

The Romans, who, according to Vitruvius, called their vapour-baths *caldaria* or *sudationes concameratæ*, constructed them with suspended or hollow floors and with hollow walls*(d), communicating with the furnace, that the smoke and hot air might be spread over a large surface and readily raise them to the required warmth. The temperature was regulated by the *clypeus* or bronze shield already described.

In the Pompeian bath the hollow floors are thus constructed. Upon a floor of cement made of lime and pounded bricks, were built small brick pillars(o), nine inches square, and one foot seven inches high, supporting strong tiles fifteen inches square. The pavement was laid on these, and incrustated with mosaic. The hollow walls, the void spaces of which communicated with the vacuum of the suspended pavement, were constructed in the following manner. Upon the walls, solidly stuccoed, large square tiles were fastened by means of iron cramps. They were made in a curious manner. While the clay was moist some circular instrument was pushed through it, so as to make a hole, at the same time forcing out the clay and making a projection or pipe about three inches long, on the inside of the tile. These

*The Italians call these floors *vespajo*, from their resemblance to a wasp's nest.

being made at the four corners, iron clamps passed through them and fastened them to the wall, the interval being regulated by the length of the projections. The sides of the apartments being thus formed, were afterwards carefully stuccoed and painted. The vacancy in the walls of the Pompeian baths reaches as high as the top of the cornice, but the ceilings are not hollow, as in the baths which Vitruvius described, and which he distinguishes for that reason by the name of *concameratae*. The following wood-cuts will convey an idea of the style of ornament which is lavished upon the ceilings of the apartments which we have just described. The first is a winged child or genius, riding on one sea-horse and accompanied by another, preceded by a similar child guiding two dolphins. This occupies the centre of the ceiling of the tepidarium. Other ornaments are dispersed around it, from which we have selected some of those that are best preserved. The design is generally better than the workmanship, for they have not been carefully finished, on account, perhaps, of the height at which they were to be placed. A curious piece of economy is visible in these decorations. Those low down on the walls are executed in relief, but the higher ones are painted as it were in a very liquid stucco; so that the child who sounds a cymbal (see the cut, p. 170) in one of the medallions, has one leg, one arm, and the head of



Ornament of the Tepidarium.



Stucco ornaments in the ceiling of the Tepidarium.



Ornaments of the Tepidarium.

stucco, while the wings, the other leg, and the cymbal, which, if also executed in stucco, would have been in lower relief, are either laid on with a brush in this liquid stucco, or left white when the ground was painted. It is so done, that at a certain distance, and to one who does not consider it with nicety, the whole appears to be relieved. The same is to be observed in the bow, which has the two ends formed of goats' heads.

The women's bath resembles very much that of the men, and differs only in being smaller and less ornamented. It is heated, as we have already mentioned, by the same fire, and supplied with water from the same boilers. Near the entrance is an inscription painted in red letters. All the rooms yet retain in perfection their vaulted roofs. In the vestibule (*v*) are seats similar to those which have been described

in the men's baths as appropriated to slaves or servants of the establishment. The robing-room (*t*) contains a cold bath ; is painted, with red and yellow pilasters alternating with one another, on a blue or black ground, and has a light cornice of white stucco, and a white mosaic pavement with a narrow black border. There is accommodation for ten persons to undress at the same time. The cold-bath is much damaged, the wall only remaining of the alveus, which is square, the whole incrustation of marble being destroyed. From this room we pass into the tepidarium (*s*), about twenty feet square, painted yellow, with red pilasters, lighted by a small window far from the ground. This apartment communicates with the warm-bath (*u*), which, like the men's, is heated by flues formed in the floors and walls. There are in this room paintings of grotesque design upon a yellow ground ; but they are much damaged, and scarcely visible. The pavement is of white marble laid in mosaic. The room (*u*) in its general arrangement resembles the hot-bath of the men ; it has a labrum (*y*) in the laconicum, and a hot-bath contiguous to the furnace, as may be seen by the plan. The hollow pavement and the flues in the walls are almost entirely destroyed ; and of the labrum, the foot, in the middle of which was a piece of the leaden conduit that introduced the water, alone remains. On the right of the entrance into these women's baths is a wall of stone of great thickness and in a good style of masonry.

These baths are so well arranged, with so prudent an economy of room and convenient distribution of their parts, and are adorned with such appropriate elegance, as to show clearly the intellect and resources of an excellent architect. At the same time some errors of the grossest kind have been committed, such as would be inexcusable in the most

ignorant workmen ; as, for instance, the symmetry of parts has been neglected, where the parts correspond ; a pilaster is cut off by a door which passes through the middle of it : and other mistakes occur which might have been avoided without difficulty. This strange mixture of good and bad taste, of skill and carelessness, is not very easily accounted for, but it is of constant recurrence in Pompeii.

Vitruvius recommends the selecting a situation for baths defended from the north and north-west winds, and forming windows opposite the south, or if the nature of the ground would not permit this, at least towards the south, because the hours of bathing used by the ancients being from after mid-day till evening, those who bathed could, by those windows, have the advantage of the rays and of the heat of the declining sun. For this reason the Pompeian baths hitherto described have the greater part of their windows turned to the south, and are constructed in a low part of the city, where the adjoining buildings served as a protection to them from the inconvenience of the north-west winds.

Having thus minutely described the baths, as they exist at Pompeii, we shall proceed to consider the subject more generally, and give some account of those far more splendid edifices which were constructed in the great cities of the empire, and especially in Rome itself. The subject is one of considerable interest, for it is intimately connected with ancient manners ; and an acquaintance with it will explain very many passages in the Latin authors. To them and to their countrymen the bath was a daily necessary, rather than a luxury, though it was combined with luxury to the greatest possible extent. In the magnificent *Thermæ** erected by the emperors,

* *Θερμαί*, hot springs, so named because they were principally constructed with a view to warm bathing, though furnished with cold baths also.

edifices in which architectural magnificence appears to have been carried to its extreme point, not only was accommodation provided for hundreds of bathers at once, but spacious porticos, rooms for athletic games and playing at ball, and halls for the public lectures of philosophers and rhetoricians were added one to another, to an extent which has caused them, by a strong figure, to be compared to provinces, and at an expense which could only have been supported by the inexhaustible treasures which Rome drew from a subject world. There were many of these establishments at Rome, built mostly by the emperors, for few private fortunes could suffice to so vast a charge. They were open to the public at first on the payment of the fourth of an as (*quadrans*), which is less than a farthing. Agrippa bequeathed his gardens and baths to the Roman people, and assigned particular estates for their support, that the public might enjoy them gratuitously. The splendid edifice now known as the Pantheon, served as the vestibule to his baths. At a later period the bathers in some *Thermæ* were supplied gratuitously even with unguents; probably it was so in all those built by the emperors. The chief were those of Agrippa, Nero, Titus, Domitian, Antoninus Caracalla, and Diocletian; but Ammianus Marcellinus reckons sixteen of them, and other authors eighty.

These edifices, differing of course in magnitude and splendour, and the details of the arrangement, were all constructed on a common plan. They stood among extensive gardens and walks, and often were surrounded by a portico. The main building contained extensive halls for swimming and bathing; others for conversation; others for various athletic and manly exercises; others for the declamation of poets and the lectures of philosophers; in a word, for every species of polite and manly amusement. These

noble rooms were lined and paved with marble, adorned with the most valuable columns, paintings and statues, and furnished with collections of books for the sake of the studious who resorted to them*. Their costly decorations have long vanished, and the gradual accumulation of earth and ruins has choked up the vaults, and buried the floors; yet enough still remains to enable us to trace the general distribution of their parts with tolerable accuracy, and to intimate that the descriptions of ancient writers are not exaggerated. Those in the best preservation are the baths of Titus, Antoninus Caracalla, and Diocletian. Their present state is thus described by an eloquent modern writer:—" Repassing the Aventine hill, we came to the baths of Antoninus Caracalla, that occupy part of its declivity, and a considerable portion of the plain between it, Mons Cœliolus, and Mons Cœlius. No monument of ancient architecture is calculated to inspire such an exalted idea of Roman magnificence, as the ruins of their Thermæ or baths. Many remain in a greater or less degree of preservation, such as those of Titus, Diocletian, and Caracalla. To give the untravelled reader some notion of these prodigious piles, I will confine my observations to the latter, as the greatest in extent, and as the best preserved; for though it be entirely stripped of its pillars, statues, and ornaments, both internal and external, yet its walls still stand, and its constituent parts and principal apartments are evidently distinguishable. The length of the Thermæ was 1840 feet, its breadth 1476. At each end were two temples, one to Apollo, and another to Æsculapius, as the tutelary deities (*genii tutelares*) of a place sacred to the improvement of the mind, and the care of the body. The two other temples were dedicated to the

* We are told that the Ulpian library, founded by Trajan, was afterwards transferred to the baths of Diocletian.

two protecting divinities of the Antonine family, Hercules and Bacchus. In the principal building were, in the first place, a grand circular vestibule, with four halls on each side, for cold, tepid, warm, and steam baths: in the centre was an immense square for exercise, when the weather was unfavourable to it in the open air; beyond it a great hall, where 1600 marble seats were placed for the convenience of the bathers; at each end of this hall were libraries. This building terminated on both sides in a court surrounded with porticos, with an Odeum, for music, and in the middle a spacious basin for swimming. Round this edifice were walks shaded by rows of trees, particularly the plane; and in its front extended a gymnasium, for running, wrestling, &c. in fine weather. The whole was bounded by a vast portico opening into exedrae or spacious halls, where the poets declaimed and philosophers gave lectures to their auditors. This immense fabric was adorned within and without with pillars, stucco-work, paintings, and statues. The stucco and paintings, though faintly indeed, are yet in many places perceptible. Pillars have been dug up, and some still remain amidst the ruins; while the Farnesian Bull, and the famous Hercules, found in one of these halls, announce the multiplicity and beauty of the statues which once adorned the Thermæ of Caracalla. The flues and reservoirs of water still remain. The height of the pile was proportioned to its extent, and still appears very considerable, even though the ground be raised at least twelve feet above its ancient level. It is now changed into gardens and vineyards, its high massive walls form separations, and its limy ruins, spread over the surface, burn the soil and check its natural fertility*.”

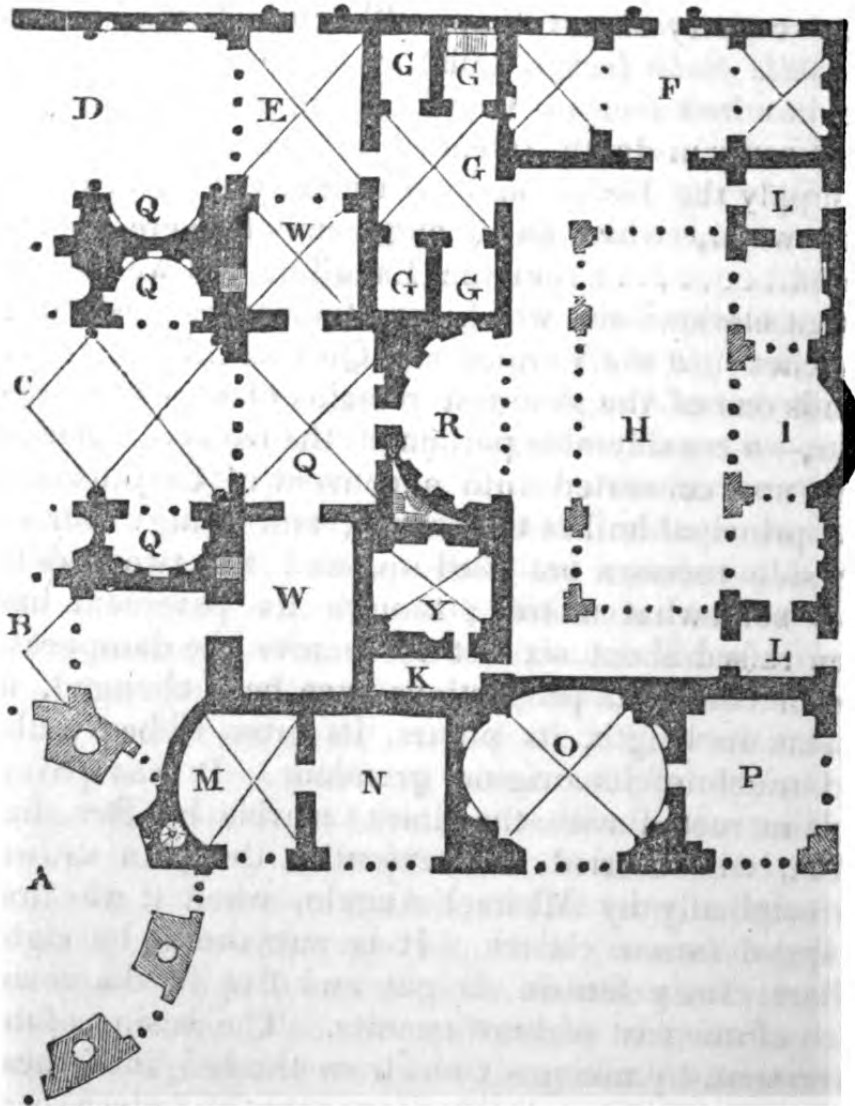
* Eustace, vol. i. p. 226

“Proceeding over the Esquiline mount, we stopped at the Baths of Titus, an edifice once of unusual extent and magnificence, though on a smaller scale than the Thermæ of Caracalla. Part of the theatre, of one of the temples, and of one of the great halls, still remain above, and many vaults, long galleries, and spacious ruins, underground. Some of these subterraneous apartments were curiously painted, and such is the firmness and consistency of the colours, that notwithstanding the dampness of the place, the lapse of so many ages, and the earth which has filled the vaults for so long a time, they still retain much of their original freshness. Many of the figures are scratched on the plaster, and supposed to have been so originally, to imitate basso-relievo; but on a close examination, the little nails, which fastened the gold, silver, and bronze that covered these figures, are perceptible, and seem to prove that they were all originally coated over in a similar manner. Many of the paintings are arabesques, a fanciful style of ornament, observed on and reprobated as unnatural and ill-proportioned by Vitruvius, but revived and imitated by Raphael..... Titus’s Baths are, as I have observed before, inferior in extent to those of Caracalla and Diocletian; but, erected at a period when the arts still preserved their primeval perfection, they must have surpassed all later edifices of the kind in symmetry, decoration, and furniture. Every person of taste must therefore lament that they are not cleared and opened. The famous group of Laocoon was found in an excavation made there not many years ago, and several pillars of granite, alabaster, and porphyry, have since been discovered in many partial researches. What precious remnants of ancient taste and magnificence might we find, if all the streets of this subterraneous city (for so these Thermæ may be called) were opened, and its recesses

explored. At present, the curious visitor walks over heaps of rubbish, so high as almost to touch the vault,—so uneven, as to require all his attention at every step; and whilst he examines the painted walls by the faint glare of a taper, he is soon obliged by the closeness of the air to retire and content himself with a few cursory observations. To these baths belong the *Sette Salle* (seven halls), vast vaulted rooms of one hundred feet in length by fifteen in breadth and twenty in depth, intended originally as reservoirs to supply the baths, and occasionally the Coliseum, with water, when naval engagements were represented. From the Esquiline hill we passed to that elevated site which, as it advances westward, branches into the Viminal and Quirinal hills. On it stands one of the grandest remains of ancient splendour,—a considerable portion of the baths of Diocletian, now converted into a convent of Carthusians. The principal hall is the church, and though four of the side recesses are filled up, and the two middle ones somewhat altered; though its pavement has been raised about six feet to remove the dampness, and of course its proportions have been changed, it retains its length, its pillars, its cross-ribbed vault, and much of its original grandeur. It was paved and incrustated with the finest marble by Benedict XIV., who carried into execution the plan drawn up originally by Michael Angelo, when it was first changed into a church. It is supported by eight pillars, forty feet in height and five in diameter, each of one vast piece of granite. The raising of the pavement, by taking six feet from the height of these pillars, has destroyed their proportion, and given them a very massive appearance. The length of the hall is three hundred and fifty feet, its breadth eighty, and its height ninety-six. Notwithstanding its magnificence, the mixture of Corinthian and Composite

capitals shows how much the genuine taste of architecture was on the decline in the time of Diocletian*.”

The annexed plan, which comprises one half of the baths of Antoninus, will convey to the reader an idea of their general arrangement.



Half of the plan of the baths of Antoninus Caracalla.

A. A circular room called the Solar Cell, used to contain the numerous labra of the baths, 111 feet in diameter. Spartianus describes it thus:—
“Caracalla left magnificent Thermæ, which went by his own name; the

* Eustace, vol. i. p. 231.

solar cell of which could not be equalled by the best architects of that age. The window lattices are said to have been overlaid with brass or copper, of which materials the whole vault was made; and so vast was its extent that learned mechanicians declare it impossible to make one like it."

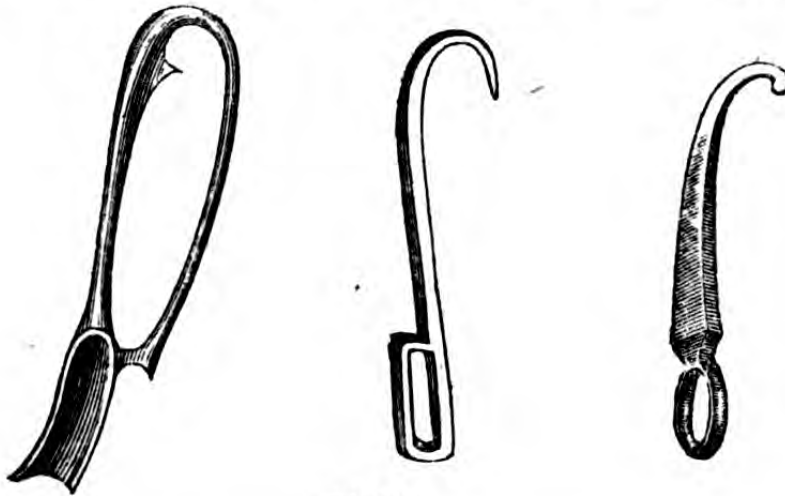
- B. The Apodyterium.
- C. Xystos, or portico, for the athletæ to exercise under in bad weather.
- D. Piscina, or large reservoir for swimming.
- E. Vestibule for spectators, and the clothes of those who were bathing.
- F. Vestibules on entering the Thermæ: on each side were libraries.
- GG. Rooms where the athletæ prepared for their exercises.
- H. Peristyle, having in the middle a Piscina for bathing.
- I. Ephemium, or place for exercise.
- K. Elæothesium, or room for oils.
- LL. Vestibules.
- M. Laconicum.
- N. Caldarium.
- O. Tepidarium.
- P. Frigidarium.
- Q Q Q Q. Various halls or recesses, for the use of those who frequented the baths.
- R. Exedrae, or large recesses, for the use of the philosophers.
- W. Rooms for conversation.
- Y. The Conisterium.

The other half of the building is exactly similar to this. An extensive enclosure surrounds the whole, in which are temples, a vast theatre, academies, numerous covered baths, for those who wished to bathe more privately; and a variety of accommodations which we cannot particularize. In this enclosure, and at some distance from the main building, was the castellum, or furnace for heating the water, of which we shall speak largely hereafter.

On entering the Thermæ, where there was always a great concourse of people, the bathers first proceeded to undress, when it was necessary to hire persons to guard their clothes: these the Romans called Capsarii. They next went to the unctuarium, where they anointed all over with a coarse cheap oil before they began their exercise. Here the finer odoriferous ointments, which were used in coming out of the bath, were also kept, and the room was so situated as to receive a considerable degree of heat. This chamber of perfumes was quite full of pots like an apothecary's shop: and those who wished to anoint and perfume the body received perfumes and

unguents. In a representation of a Roman bath, copied from a painting on a wall forming part of the baths of Titus, the *elæothesium* appears filled with a vast number of vases. These vases contained perfumes and balsams, very different in their compositions, according to the different tastes of the persons who perfumed themselves. The *rhodium*, one of those liquid perfumes, was composed of roses; the *lirinum* of lily; *cyprinum* of the flower of a tree called *cypria*, which is believed to be the same as the privet; *baccarinum*, from the foxglove; *myrrhinum* was composed of myrrh. Perfumes were also made of the oil of sweet *majoram*, called *amaracinum*; of lavender, called *nardium*; of the wild vine, called *ænanthinum*. There was also the *cinamominum*, made of cinnamon, the composition of which was very costly; oil made from the iris, called *irinum*; the *balaninum*, or oil of ben; the *serpyllinum*, wild thyme, with which they rubbed their eyebrows, hair, neck, and head; they rubbed their arms with the oil of *sisymbrium* or watermint, and their muscles with the oil of *anarcum*, or others which have been mentioned. An amusing story relative to this practice of anointing is related by Spartianus. "The Emperor Hadrian, who went to the public baths and bathed with the common people, seeing one day a veteran whom he had formerly known among the Roman troops, rubbing his back and other parts of his body against the marble, asked him why he did so. The veteran answered that he had no slave to rub him, whereupon the Emperor gave him two slaves and wherewithal to maintain them. Another day several old men, enticed by the good fortune of the veteran, rubbed themselves also against the marble before the Emperor, believing by this means to excite the liberality of Hadrian, who perceiving their drift caused them to be told to rub each other." When anointed,

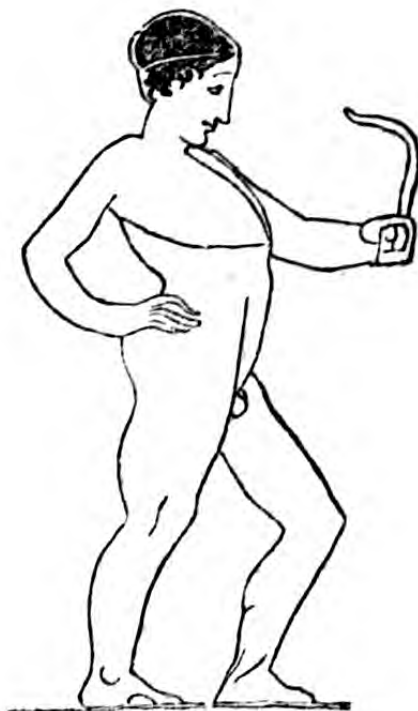
they immediately passed into the sphæriterium, a very light and extensive apartment, in which were performed the many kinds of exercises to which this third part of the baths was appropriated; of these the most favourite was the ball. When its situation permitted, this apartment was exposed to the afternoon sun, otherwise it was supplied with heat from the furnace. Both Pliny and Lucian speak of this part of the baths as considerably warm at this time of day. After they had taken what degree of exercise they thought necessary, they went immediately to the adjoining warm bath, wherein they sat and washed themselves. The seat was below the surface of the water, and upon it they used to scrape themselves with instruments called strigiles, most usually



Strigiles.

of bronze, but sometimes of iron; or this operation was performed by an attendant slave, much in the way that ostlers treat horses when they come in hot. It was not a very agreeable operation; and Suetonius mentions that the Emperor Augustus was a sufferer by having been too roughly used*.

* The Turks use a sort of bag or glove of camel's hair, which without pain peels off the perspiration in large flakes, and leaves the skin in a most luxurious state of softness and polish.—*Sir W. Gell.*



Slave with a strigil, from an Etruscan vase.

In the collection of vases found lately on the estate of Lucien Buonaparte at Canino, there is one which exhibits the use of the strigil so plainly, that we shall describe it. The vase of which we speak is one of those large shallow cups commonly called tazze by the Italians. Both within and without there are paintings representing persons employed in bathing and in the use of the strigil. Within, there are only two figures in the centre surrounded by a border, one of which standing upright stretches out one arm while he throws the other over his shoulder and rubs his back with his hand; the other stoops a little forward, resting his body on one leg, and rubs his outstretched arm with the other hand. On the underside of the vase there are ten figures of bathers, five on each side of the handles of the cup. The

first is scraping his outstretched arm with a strigil, the second stands idle with one hand resting on his hip, the third is feeling the edge of a strigil with the finger of the other hand to ascertain its sharpness; from which we may infer that the instrument was by no means blunt. The fourth figure is scraping his throat. The fifth and last figure in the group stands with his strigil hanging in his hand, having to all appearance completed the operation. On the other side of the handles we are introduced to the bath-room, where those who have been scraped are being finally washed either by means of a small labrum on legs, or by having water poured over them. The bathers are represented with the attendants: one of the former stands with his arms folded ready to be washed, while another is on his knees receiving the water poured over him by an attendant from a vase or pitcher with a handle moveable like that of a pail. Two other figures stand near the labrum, apparently conversing. None of these figures have the strigil. There is also a long shallow vase near the labrum, from which the attendants probably supplied themselves with water, and not from the labrum, which it is supposed was only used for the face. Thus we learn from the drawings on this vase, that the bathers used the strigils themselves, after which they rubbed themselves with their hands, and then they were washed from head to foot, by pails or vases of water being poured over them*. They were then carefully dried with cotton and linen cloths, and covered with a light shaggy mantle, called gausape. Effeminate

* We regret that we cannot give a drawing of these curious scenes from the jealousy of the proprietors, who are of opinion that the publication by a drawing would injure their value; the cut given has the same kind of strigil as the vases.

persons had the hairs of their bodies pulled out with tweezers, when they were thoroughly dried, and their



Tweezers.

nails cut : young slaves then came out of the *elæothesium* carrying with them little vases of alabaster, bronze, and terra-cotta, full of perfumed oils, with which they had their bodies anointed, by causing the oil to be slightly rubbed over every part, even to the soles of their feet. After this they resumed their



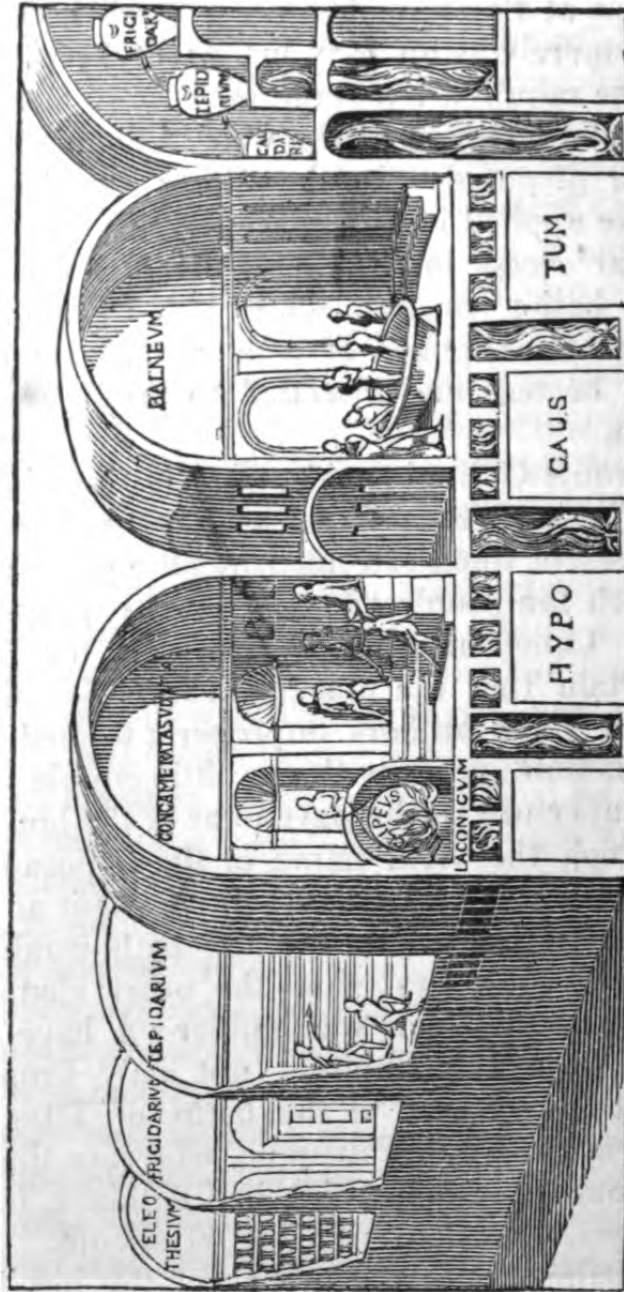
Vases for Perfumes.

clothes. On quitting the warm bath they went into the tepidarium, and either passed very slowly through, or staid some time in it, that they might not too suddenly expose their bodies to the atmosphere in the frigidarium ; for these last rooms appear to have been used chiefly to soften the transition from the intense heat of the caldarium to the open air. It does not appear that the water of either the tepidarium or

frigidarium was used for bathing in these larger baths, although it probably was so used where the accommodation, as at Pompeii, was on a more contracted scale; but merely as an easy means of keeping the rooms at the required temperature.

The proper meaning of the word *Laconicum* has been much disputed. In describing the baths of Pompeii, we applied it, as the reader will remember, to a circular recess in the chamber which contained the warm bath; in describing the baths of the emperors, we have spoken of it as a separate chamber, highly heated, and intended to produce violent perspiration.

The Marquis Galiani speaks of it in the following terms: "The *laconicum*, as far as I know, has been, up to the present time, esteemed by all a great chamber, in which the people entered for the purpose of sweating." Cameron adds to this, "I for myself hold it certain that the apartment for this purpose has been by some authors improperly termed,—the *laconicum* is nothing more than a little cupola which covered an aperture in the pavement of the hot bath, through which the vivid flame of the hypocaustum or furnace passed and heated the apartment at pleasure. Without this means the hot bath would not have had a greater heat than the other chambers, the temperature of which was milder; I have been induced to form this opinion, not only from the ancient paintings found in the baths of Titus, but also by the authority of Vitruvius, who says that the hot bath (*concamerata sudatio*) had within it, in one of the corners, or rather ends, the *laconicum*. Now if the *laconicum* was in the corner of the hot bath, it is clear that it is not the bath itself, but merely a part of it; and if, as others have thought, it was the hot bath itself, to what purpose served the *concame-*



Representation of Baths, from the paintings discovered in the Baths of Titus.

rata sudatio?" Probably an explanation of these inconsistencies may be found in supposing the word to have been differently used at different times. In the later baths, calculated for the accommodation of enormous numbers, it might be necessary to have a distinct room dedicated to a purpose for which a part of the hot bath was sufficient in the time of Vitruvius. The ancient painting above alluded to, discovered in the baths of Titus, in some degree corroborates the opinions of both Cameron and Galiani. It represents the several apartments which we have described; but has the bath in a chamber separate from the *laconicum*, or *concamerata sudatio*; while at the same time the *laconicum* itself is represented as a small cupola, as described by Cameron. And as the number of figures makes it evident that the painting is intended for a public bath, we may draw from hence a further reason for supposing that the *laconicum* and hot bath itself (which Vitruvius calls *concamerata sudatio*) were separated in consequence of the increasing numbers who attended them.

The Russian baths, as used by the common people, bear a close resemblance to the *laconicum* of the Romans. They usually consist of wooden houses, situated, if possible, by the side of a running stream. In the bath-room is a large vaulted oven, which, when heated, makes the paving-stones lying upon it red hot; and adjoining to the oven is a kettle fixed in masonry for the purpose of holding boiling water. Round about the walls are three or four rows of benches one above another, like the seats of a scaffold. The room has little light, but here and there are apertures for letting the vapour escape; the cold water that is wanted being let in by small channels. Some baths have an antechamber for dressing and undressing; but in most of them this is done in the

open court-yard, which on that account has a boarded fence, and is provided with benches of planks. In those parts of the country where wood is scarce, they sometimes consist of wretched caverns, commonly dug in the earth close to the bank of some river. In the houses of wealthy individuals, and in the palaces of the great, they are constructed in the same manner, but with superior elegance, and convenience. The heat in the bath-room is usually from 32° to 40° of Réaumur, or 104° to 122° of Fahrenheit, and this may be much increased by throwing water on the glowing hot stones in the chamber of the oven. Thus the heat often rises, especially on the uppermost bench, to 44° of Réaumur, equivalent to 132° Fahrenheit. The persons that bathe lie quite naked on one of the benches, where they perspire more or less in proportion to the heat of the humid atmosphere in which they are enveloped; while to promote perspiration and more completely open the pores, they are first rubbed, then gently flagellated with leafy bunches of birch. After remaining for some time in this state, they come down from the sweating-bench, and wash their bodies with warm or cold water, and at last plunge over head in a large tub of water. Many persons throw themselves immediately from the bath-room into the adjoining river, or roll themselves in the snow, in a frost of ten or more degrees. The Russian baths are therefore (*concamerata sudatio*) sweating-baths; not of a moderate warmth, like the Roman tepidaria or caldaria, but very violent sweating-baths, which, to a person unhabituated to the practice, bring on a real, though a gentle and almost voluptuous swoon. They are vapour-baths, not water nor yet dry sweating-baths; differing in this respect from all the baths of antiquity, as well as

from those of the modern orientals; and in this consists their essential excellence, that they are beneficial in such a variety of cases, where hot-water baths would be useless or even pernicious. They are farther salutary as they promote cleanliness, assist the perspiration, and render the skin soft and smooth. Neither do the same objections apply to them which may be alleged against the Greek and Roman baths. All the inventions of effeminacy and luxury are entirely obviated; and of anointing after the use of the bath, indispensable in those, the Russian is wholly ignorant. Instead of this, the sudden transition from heat to a rigorous frost hardens his body, and adapts it to all the severities of climate, and to every vicissitude of weather; a transition which seems to us unnatural or dangerous, merely from the prejudices of a soft and effeminate age*.

Mr. Tooke adds, that without doubt the Russians owe their longevity, their robust state of health, their little disposition to certain mortal diseases, and their happy and cheerful temper, mostly to these baths; though climate, aliment, and habits of living, likewise contribute. It appears also that even the savage tribes of America are not wholly unacquainted with the use of the vapour-bath. Lewis and Clarke, in their voyage up the Missouri, have described one of these in the following terms:—"We observed a vapour-bath, or sweating-house, in a different form from that used on the frontiers of the United States or in the Rocky Mountains. It was a hollow square of six or eight feet deep, formed in the river bank by damming up with mud the other three sides, and covering the whole completely, except an aperture about two feet wide at the top. The bathers descend by this hole, taking with them a number of heated stones and jugs of water; and after being seated

* Tooke's Russia.

round the room, throw the water on the stones till the steam becomes of a temperature sufficiently high for their purposes. The baths of the Indians in the Rocky Mountains are of different sizes, the most common being made of mud and sticks, like an oven; but the mode of raising the steam is exactly the same. Among both these nations it is very uncommon for a man to bathe alone; he is generally accompanied by one, or sometimes several of his acquaintances; indeed it is so essentially a social amusement, that to decline going in to bathe when invited by a friend, is one of the highest indignities that can be offered to him. The Indians on the frontiers generally use a bath which will accommodate only one person, and is formed of wicker-work, about four feet high, arched at the top, and covered with skins. In this the patient sits till, by means of the heated stones and water, he has perspired sufficiently. Almost universally these baths are in the neighbourhood of running water, into which the Indians plunge immediately on coming out of the vapour-bath, and sometimes return again and subject themselves to a second perspiration; and the bath is employed by them either for pleasure or health, being in esteem for all kinds of diseases."

But to return to the baths of the Romans. Below is the hypocaustum, or furnace, which has not yet been described; at the side are the boilers, as described by Vitruvius. A far different apparatus was required to supply the rivers of water consumed in the baths of Antoninus Caracalla and Diocletian. The laconicum at Pompeii however does not exactly correspond with the laconicum represented in this picture, and described by Vitruvius: there is no cupola, or aperture in the floor, although the flue in the hypocaustum runs beneath it; and the brazen shield is applied to regulate the escape of heat through the

roof, not to admit or exclude the smoke and flame coming direct from the furnace; a clumsy and dirty way of heating a room, and strangely at variance, if it were really practised, with the finished elegance and luxury prevailing in every part of the Roman baths. Where this cupola did not exist, the room probably was heated, as at Pompeii, by a large brazier. The one found there has been described; it seems to have been filled with braize, or small charcoal, which was lighted without, and, when it burnt clear and bright, brought into the *concamerata sudatio*, and placed under the opening in the hemispherical ceiling of the *laconicum*.

It is probable that the Romans resorted to the *thermæ* for the purpose of bathing, at the same time of the day that others were accustomed to make use of their private baths.

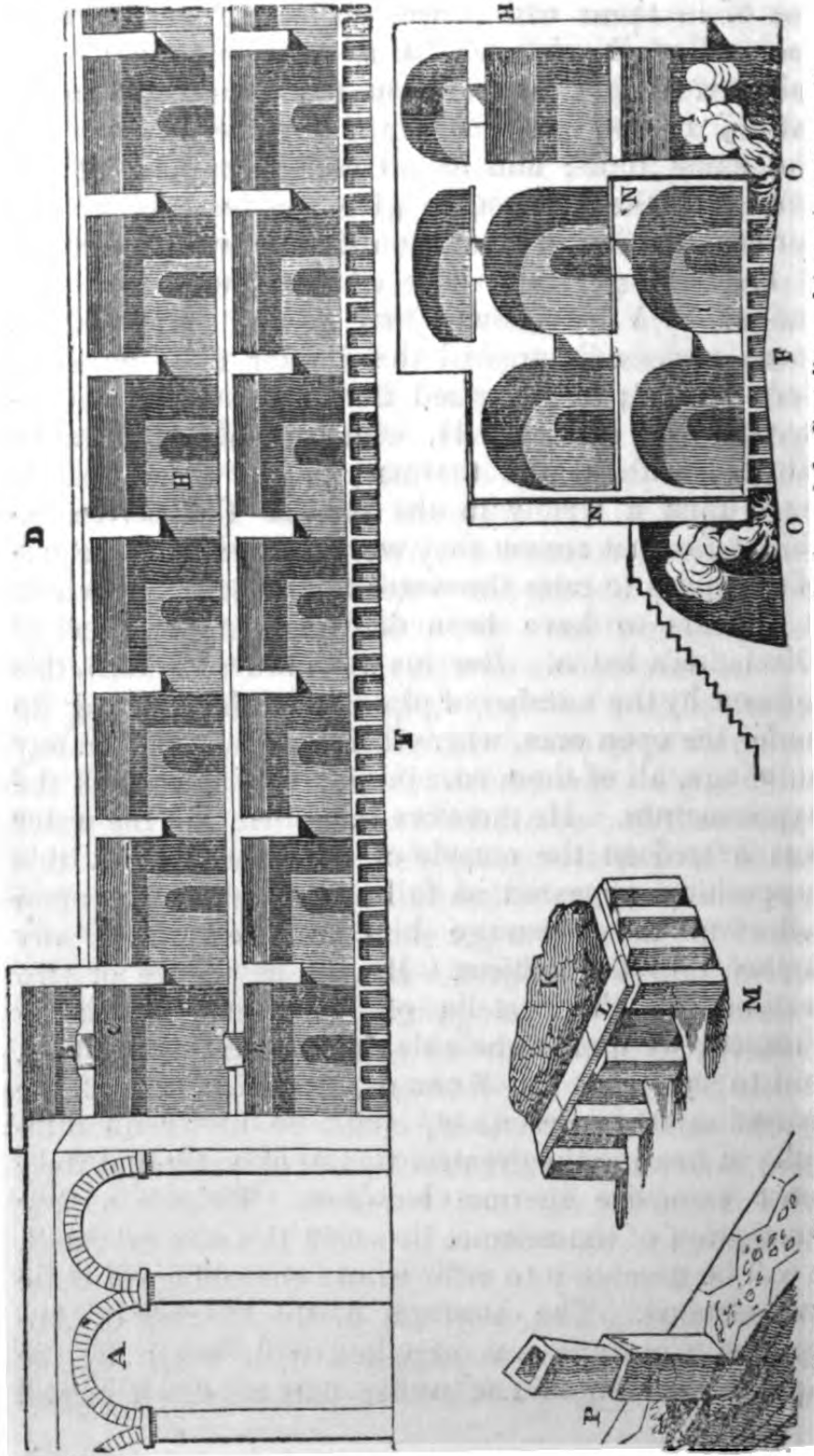
This was generally from two o'clock in the afternoon till the dusk of the evening, at which time the baths were shut till two the next day. This practice, however, varied at different times, as we shall have occasion to remark hereafter. Notice was given when the baths were ready by the ringing of a bell; the people then left the exercise of the *sphæristerium* and hastened to the *caldarium*, lest the water should cool. But when bathing became more universal among the Romans, this part of the day was insufficient, and they gradually exceeded the hours that had been allotted for this purpose. Between two and three in the afternoon was, however, the most eligible time for the exercises of the *palæstra* and the use of the baths. It must be understood that we are now speaking of the days about the equinoxes; for as the Romans divided their day, from sunrise to sunset, into twelve hours, at all seasons of the year, the hours of a summer's day were longer, and those of a winter's day shorter,

than the mean length,—continually varying, as the sun approached or receded from the solstice. Hadrian forbade any but those who were sick to enter the public baths before two o'clock. The thermæ were by few emperors allowed to be continued open so late as five in the evening. Martial says, that after four o'clock they demanded a hundred quadrantes of those who bathed. This, though a hundred times the usual price, only amounted to about nineteen pence. We learn from the same author, that the baths were opened sometimes earlier than two o'clock. He says, that Nero's baths were exceeding hot at twelve o'clock, and the steam of the water immoderate. Alexander Severus, to gratify the people in their passion for bathing, not only suffered the thermæ to be opened before break of day, which had never been permitted before, but also furnished the lamps with oil for the convenience of the people.

From this time it appears that the Romans continued equally attached to the practice of bathing until the removal of the seat of empire to Constantinople; after which we have no account of any new thermæ being built, and may suppose that most of those which were then frequented in the city of Rome, for want of the imperial patronage, gradually fell into decay. It may likewise be remarked, that the use of linen became every day more general; that great disorders were committed in the baths, a proper care and attention in the management of them not being kept up; and that the aqueducts by which they were supplied with water were many of them ruined in the frequent invasions and inroads of the barbarous nations. All these causes greatly contributed to hasten the destruction of the baths.

Nothing relating to the thermæ has more exercised the attention of the learned, than the manner of supplying the great number of bathing vessels made

use of in them with warm water. For supposing each cell of Diocletian's baths large enough to contain six people, yet, even at that moderate computation, 18,000 persons might have been bathing at the same time; and as no vestiges remain of any vessels in the thermæ, to give the least foundation for conjecturing in what manner this was performed, it has been generally believed that the method described by Vitruvius was that in use. Baccius has more professedly treated this matter than any modern author; he imagined that the water might be derived from the castella, which he observed to be situated without the thermæ; but as those castella were upon a level with the thermæ themselves, he thinks for that reason they were obliged to make use of machines to raise the water to the height at which it appears to have been delivered in the ruins of Diocletian's baths. Baccius was induced to form this opinion by the number of pipes which he saw dug up under the open area, where there had never been any buildings, all of them surrounded with flues from the hypocaustum. He therefore imagined that the water was heated on the outside of the thermæ; but this supposition appeared so full of difficulties, as upon reflection to discourage him from enquiring any farther into the subject. By the assistance of two sections of the castella of Antoninus, given by Piranesi, we hope to be able to clear up this mystery, and to show that the Romans, from the time of the invention there described, could be under no difficulty in heating the greatest bodies of water that their most extensive thermæ required. To have a clear conception of the manner in which this was executed, it will be necessary to refer to the engravings of these two sections. The castellum of the thermæ of Antoninus Caracalla was supplied with water by the aqueduct of Antoninus, under part of which passed



Sections of the Castellum of Antoninus Caracalla.

Floors in the Floors and Walls.

the Via Appia; two of the arches of this aqueduct are represented at A. B. is a cistern which received the water from the aqueduct. C. is an aperture for permitting the descent of the water from the receptacle to the chambers below. D. is a reservoir with a mosaic pavement, wherein the water was exposed to the heat of the sun. E. is another aperture through which the waters passed into the lowest chambers placed immediately over the hypocaustum. F. the hypocaustum. O. O. doors for introducing the fuel. A transverse section through the middle of the castellum is given at H. By the plan of this castellum it appears that there were twenty-eight of these vaulted rooms placed over the hypocaustum; they were arranged in two rows, fourteen on a side, and all communicated with each other. The sections show that over these were twenty-eight other rooms, having likewise a communication with each other, although only one of them had any communication with the chambers below, through the aperture at E. already mentioned. Upon the top of all was a spacious reservoir, not very deep, but extending the whole length of the castellum, in which the water was considerably heated by the influence of the sun, before it passed into the several chambers. This reservoir received its water from the cistern B., and not immediately from the aqueduct. This arrangement seems to have been meant to promote a more gentle flow of the water into the reservoir, that its surface might not be ruffled, nor the power of the sun to heat its contents diminished. Where there was no efflux from the inferior chambers, there could be no demands for water from the reservoir, which would have been liable to overflow but for an aperture in the side of the cistern, through which the waste water ran off in a different direction from that which was used for bathing. The twenty-eight vaulted chambers

placed immediately over the hypocaustum would now begin to be heated, which heat they would acquire so much the quicker as only one of them had any communication with the external air by the apertures C and E. Flues (N N) also ran up through the side and party-walls of these chambers, to increase the facility of heating so vast a body of water. The chambers (H H) were also supplied with flues from the hypocaustum, and served as a reservoir of tepid water for those below. The water they received was likewise heated by the sun. When the time for bathing was come, the cocks were turned to admit the hot water from the lower chamber into the labra of the baths, to which it would run with great velocity, and ascend a perpendicular height in the thermæ, level with the surface of the receptacle in the castellum. The current would be accelerated by the expansive force of the steam confined in the castellum. To prevent the water cooling as it passed through the tubes under ground, they were all carefully surrounded with flues from the præfurnium; and always considerably heated before the water entered them. Each of these chambers was, within the walls, forty-nine feet six inches long, by twenty-seven feet six inches wide, and about thirty high, the number of superficial feet in the whole floor of twenty-eight rooms being 38,115. If we allow thirty feet for the mean height, the whole quantity of water in these lower rooms will amount to 1,143,450 cubic feet. And the like quantity must be allowed for the upper rooms, making the whole quantity heated by fire 2,286,900 cubic feet sufficient, allowing eight* cubic feet of *hot* water t :

* This is Cameron's estimate, from whom this whole account is taken. Whether eight cubic feet was sufficient for a man, would of course depend mainly upon the temperature to which the water was heated; and therefore these numbers cannot be relied on to any degree of accuracy. His own estimate is evidently

each man, for the accommodation of 285,862 persons. We have no intimation from the ancients when they first fell upon this expedient for heating such large bodies of water; whether it was an invention of the Romans or brought from the East. We may reasonably suppose, that, as it was not necessary before the public warm baths were built in Rome, it was not more ancient than the time of Augustus, in whose reign, we are told by Dion Cassius*, that Mæcenas first instituted a swimming-bath of warm water, or a calida piscina.—(See *Cameron on Baths.*)

The hypocaustum (O O) was a furnace underground, the bottom of which formed an inclined plane; its internal side sloping gradually to the mouth of the furnace, where the fuel was put in. The reason which Vitruvius gives for this method of construction is, that the heat might be more equally conveyed to the vessels above. There were communications from the back of these furnaces to the several rooms of the baths, by means of flues fixed in the walls (P), which were more or less numerous as the purposes to which the rooms were appropriated required. These flues all proceeded from the back, or roof of the furnace, which was supported by pillars of brick (M) two feet high. The construction will be explained by comparing the following description of a Roman hypocaustum discovered in England with the section of the castellum of Antoninus. It resembles that which remains at Pompeii. “At Wroxter in Shropshire was discovered a small square room, set with four ranks of small brick pillars †, eight inches

numerically incorrect. “The water,” he continues, “would gradually cool as it flowed in from the upper chambers,”—not if the fire in the hypocaustum were kept up.

* l. iv. p. 553.

† A model of similar rooms discovered in England may be

square, laid in a strong sort of very fine red clay ; each pillar resting upon a foot-square tile or quarry of brick : upon the head of every pillar was fixed a large tile (L) of two feet square, hard almost as flint, as most of the Roman bricks are : these pillars supported a double floor (K) of very strong mortar mixed with coarse gravel and bruised or broken bricks : the first of these floors was laid upon the large tiles, and when dry, the second floor was laid upon it ; but first there was a range or rank of tunnel bricks fixed with iron cramps to the wall within, the lower ends of which were level with the under sides of the broad tiles, the upper ends with the surface of the upper floor ; and every tunnel had alike two opposite mortice holes, one in each side, cut through for a passage to disperse the heat across them all."

In the antique baths at Rome, where the church of St. Cecilia in Trastevere now stands, the flues are still to be seen : they are of copper, and appear to have been gilt.

The thermæ were constructed with this splendour, and at so vast an expense, principally for the use of the poorer classes, although all ranks frequented them for the sake of the various conveniences which they contained. But few Roman citizens in easy circumstances were without the luxury of a private bath. These of course varied in their construction, as much as the tastes or prodigality of the owner ; but the following description may be taken as a sample of their general arrangement. Passing through the atrium you entered an open court of moderate dimensions, surrounded by a portico, towards one end of which stood a baptisterium, or basin for cold
seen in the entrance chamber of the society of Antiquaries in London.

bathing. The sides of the portico were usually painted with trees loaded with fruits; those of the basin with fish of different species, upon a blue ground, which seen through the water appeared to be swimming in their native element. The court was paved in mosaic. Hence the bathers entered the apodyterium, where their garments were given to the attendant slaves called *Capsarii*. Next to the apodyterium was a lofty and spacious apartment, the *frigidarium*, containing a second cold bath, intended to be used when the weather made it unpleasant to bathe in that exposed to the open air. The lower end of this room was left vacant; the upper end, in which the bath was placed, was semicircular, and in the centre of the semicircular part was placed the basin. This portion of the wall was decorated with pilasters and niches, in which were placed statues, (to be seen represented on the painted walls of the baths of Titus,) and two raised steps, called *scholæ**, or places of waiting, ran around it for the use of spectators, or persons waiting for their turn. This part was lighted from above, that no shadow might be cast upon the bath itself. Before bathing they used various exercises to heat and render supple the body, as lifting heavy rings, kneeling on the pavement, and bending backwards till their heads were brought in contact with their feet, and similar tricks, which women practised as well as men. The *tepidarium* came next in succession; it was nearly square and also was encircled by two steps, or platforms, which however were not intended only for bystanders, but served for the bathers to dry themselves, or to repose when they left the adjoining

* Hence the term school, because the philosophers frequented those places where they were sure of an audience.—*Petronius Sat.*, cap. 17.

apartment, the caldarium, or hot bath. This was of a circular form, surrounded by three steps, with niches in the wall containing seats. The walls and floor were pierced with flues from the hypocaustum, as seen in the section of the *Concamerata Sudatio*, at Pompeii. On one side of the sudatorium stood either a brazier, or a sort of stove heated from below, called *laconicum*, which gave its name to that part of the room. In the centre of the conical ceiling was a clypeus of bronze, resembling a round shield*, and forming a valve, which was raised or lowered by means of a chain, and increased or diminished at will the degree of heat. In wealthy families, the females usually had baths separate from those of the men, but adjoining them, that they might be heated by the same fire.

The hypocaustum has been described in public baths; in private baths it was similar, but on a smaller scale. It is worth while to remark, that Vitruvius gives directions how to make wooden floors to the caldaria, so peculiarly liable to accidents by fire. They are to be rendered secure by a lining of tiles, laid upon iron bars and plastered over. The method of heating the water was similar to that at Pompeii, where three boilers are employed, as represented in the painting found in the baths of Titus. Another method highly approved of as precluding all chance of the water being smoked, was to twist thin copper pipes into a spiral form, like the worm of a distillery, and expose them to the fire. The water entered at the top and ran out at the lower end, and became thoroughly heated in its passage.

There is a letter of Seneca, contrasting his own

* Vitruv., lib. vi. cap. 10.



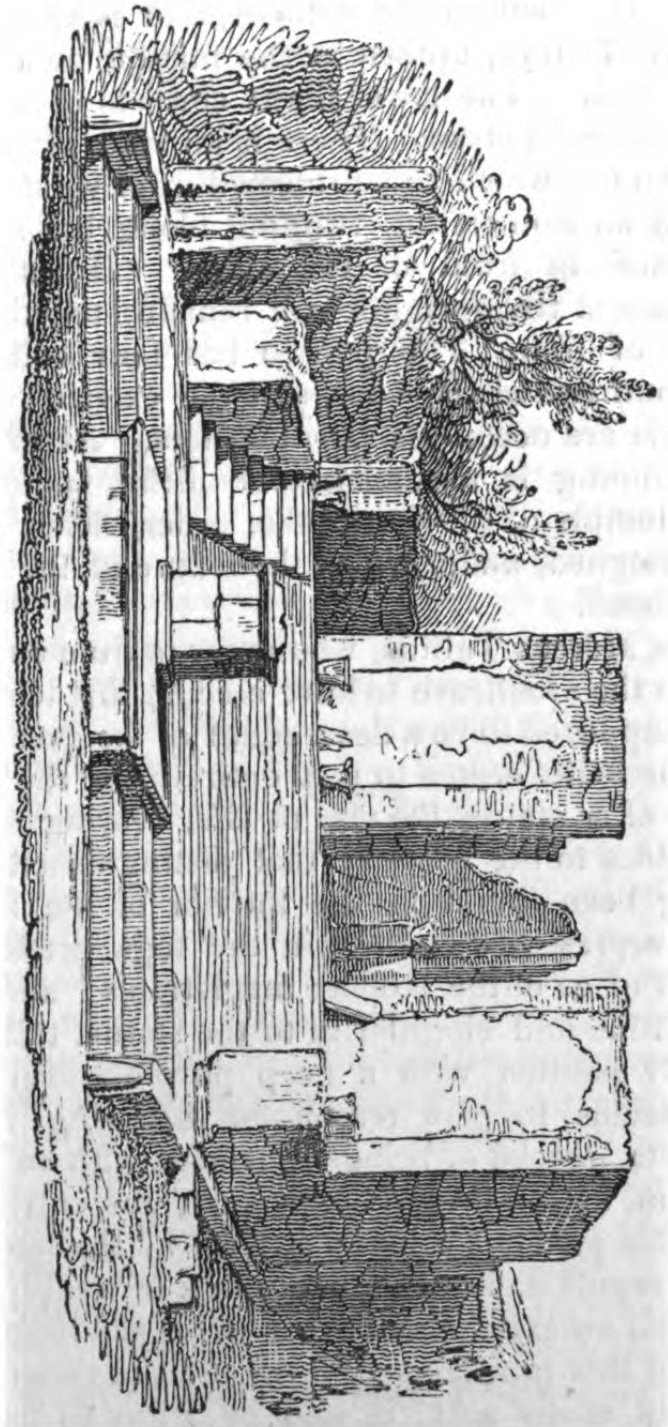
times with the period of the republic's manly vigour, which illustrates the subject on which we are now employed so much that we shall extract a considerable part of it.

“ I write you from the very villa of Scipio Africanus, having first invoked his spirit, and that receptacle in which, as I believe, that great man was buried. I see a villa built of squared stone, the wall of which encloses a wood, and has towers in the style of a fortification ; below the buildings and walls is a reservoir large enough for the use of an army. The bath is small and dark, after the old fashion, for our forefathers thought nothing hot that was not obscure. Great was my pleasure as I compared the manners of Scipio with our own. In this nook did that dread of Carthage, to whom our city is indebted that it was taken but once, bathe his limbs, wearied with rustic labour ; for he tilled his own ground, according to ancient custom : he lived under this mean roof, he stood upon this paltry pavement. But who would now submit to bathe in this fashion ? That person is now held to be poor and sordid whose walls shine not with a profusion of the most precious materials, the marbles of Egypt, inlaid with those of Numidia ; unless the walls are laboriously stuccoed in imitation of painting ; unless the chambers are covered with glass ; unless the Thasian stone, formerly a rare sight even in temples, surrounds those capacious basins, into which we cast our bodies, weakened by immoderate sweats, and the water is conveyed through silver pipes. As yet I speak only of plebeian baths : what shall I say when I come to those of our freedmen ? What a profusion of statues ! What a number of columns do I see supporting nothing, but placed as an ornament merely on account of the expense ! What quantities of water murmuring

down steps! We are come to that pitch of luxury that we disdain to tread on anything but precious stones. In this bath of Scipio are small holes, rather than windows, cut through the wall so as to admit the light without weakening it as a fortification; but now we reckon a bath fit only for moths and vermin if its windows are not so disposed as to receive the rays of the sun during its whole course; unless we are washed and sunburnt at the same time; unless from the bathing vessel we have a prospect of the sea and land: so that what brought crowds together to admire it when first built, is now rejected as antiquated, so inventive is luxury in finding new things to obliterate her own works. Formerly the baths were few in number and not much ornamented, for why should a thing of such little value be ornamented, a thing invented for use and not for the purposes of delicacy? The water in those days was not poured down in drops like a shower, neither did it run always fresh as from a hot spring; nor was the clearness of it considered as a matter of consequence. Yet, O good Gods, how pleasant was it to enter these baths, though dark and covered with common plaster, which you knew that Cato, in his *Ædile*-ship, or Fabius Maximus, or one of the Cornelii, had tempered with his own hand! For the most noble *Ædiles* performed this duty of entering those places which the people frequented, to require cleanliness, and see that they were kept at a useful and wholesome temperature; not as has lately been invented, at a heat like a furnace, so that a slave convicted of some crime, might, as a punishment, be *bathed* alive. It now seems to make no difference whether a bath be warm or burning."

Between the Forum and the baths is a small Corinthian temple, dedicated to Fortune by a private

View of the Temple of Fortune



person, one M. Tullius. It has been cased with marble both within and without, and is accessible by a flight of steps, broken in the middle by a podium or low wall. The lower flight consists of three, the upper of eight steps. There is an altar placed upon the podium, which was protected from wanton intrusion by an iron railing running along the side-margins and in front of the steps. Holes for the reception of the uprights still remain, together with pieces of iron. The portico has four columns in front and two at the sides, and the external walls of the cella are decorated with pilasters. At the end of the building is a semicircular niche, containing a small temple of the Corinthian order, richly finished and designed, under which the statue of the goddess was placed.

This Marcus Tullius, who appears from an inscription on the architrave to have erected this temple, has been supposed to be a descendant of the great Cicero. But the belief seems to rest entirely on the circumstance of a statue, the size of life, bearing some resemblance to the busts of that distinguished orator, having been found in the interior of the building. He is represented clothed in the toga prætexta, the robe of office of the Roman magistrates; and, which adds value and singularity to the statue, this robe is entirely painted with a deep purple violet colour. This seems to give reason for believing that the prætexta, instead of being a garment with only a purple hem, as it is usually explained, was entirely dyed with this precious colour; at least in the later times of the republic, in which the influx of wealth had introduced an extravagant scale of expenditure. The price of this purple was enormous; the violet, though the less costly sort, is said by Pliny to have been worth 100 denarii (about £3. 4s. 7d.) the pound; the

red is valued by the same authority at 1000 denarii. It was obtained from the murex, a shell-fish found in various parts of the Mediterranean. The species which produced the violet dye was found in considerable quantity near Tarentum; the red was chiefly brought from the neighbourhood of Tyre, whence the common name of Tyrian purple. Cochineal has now entirely superseded these dyes, but we may still perhaps trace the estimation anciently set upon them in the colours appropriated to the Romish hierarchy, in which the prelates are dressed in violet, and the cardinals in scarlet.

A female statue, the size of life, was also found within the cella, clothed in a tunic falling to her feet, and above it a toga. The border of the former is gilt; the latter is edged with a red purple bandeau, an inch and a quarter wide; the right arm is pressed upon the bosom, with the hand elevated to the chin, while the left hand holds up the toga. The face of this figure has been sawn off. Some have supposed this a piece of economy of the Pompeians, who, wishing to pay a compliment to some distinguished person, had thought that the cheapest way of doing it was to substitute her face for that originally belonging to the statue.

It is manifest that the ancients have made excavations on this spot, and carried away the columns of the temple, and the marble with which it was covered,

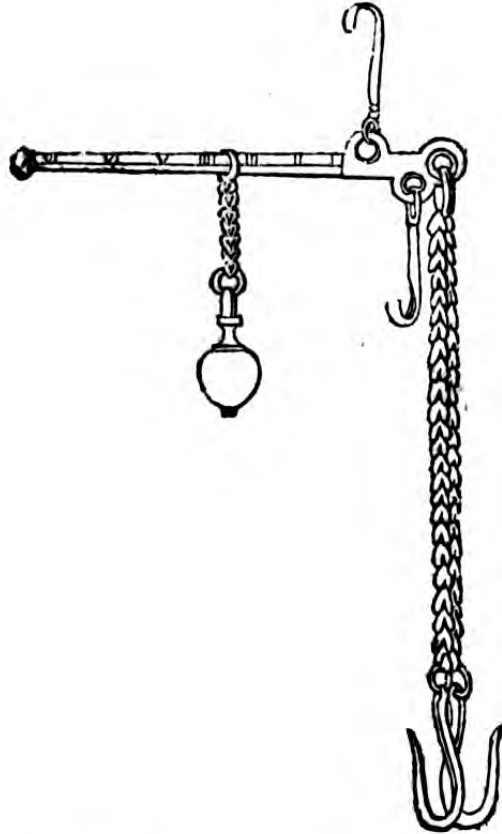


Flat drinking-cup.

both within and without. Some of the capitals however remain to show the order of its architecture, and enough is preserved to assure us that it was rich in ornament and highly finished.

The street running from the Temple of Fortune to the Forum, and called the Street of Fortune, has furnished an unusually rich harvest of various utensils. A long list of these is given by Sir W. Gell, according to which there were found no less than two hundred and fifty small bottles of inferior glass, with numerous other articles of the same material, which it would be tedious to particularise.

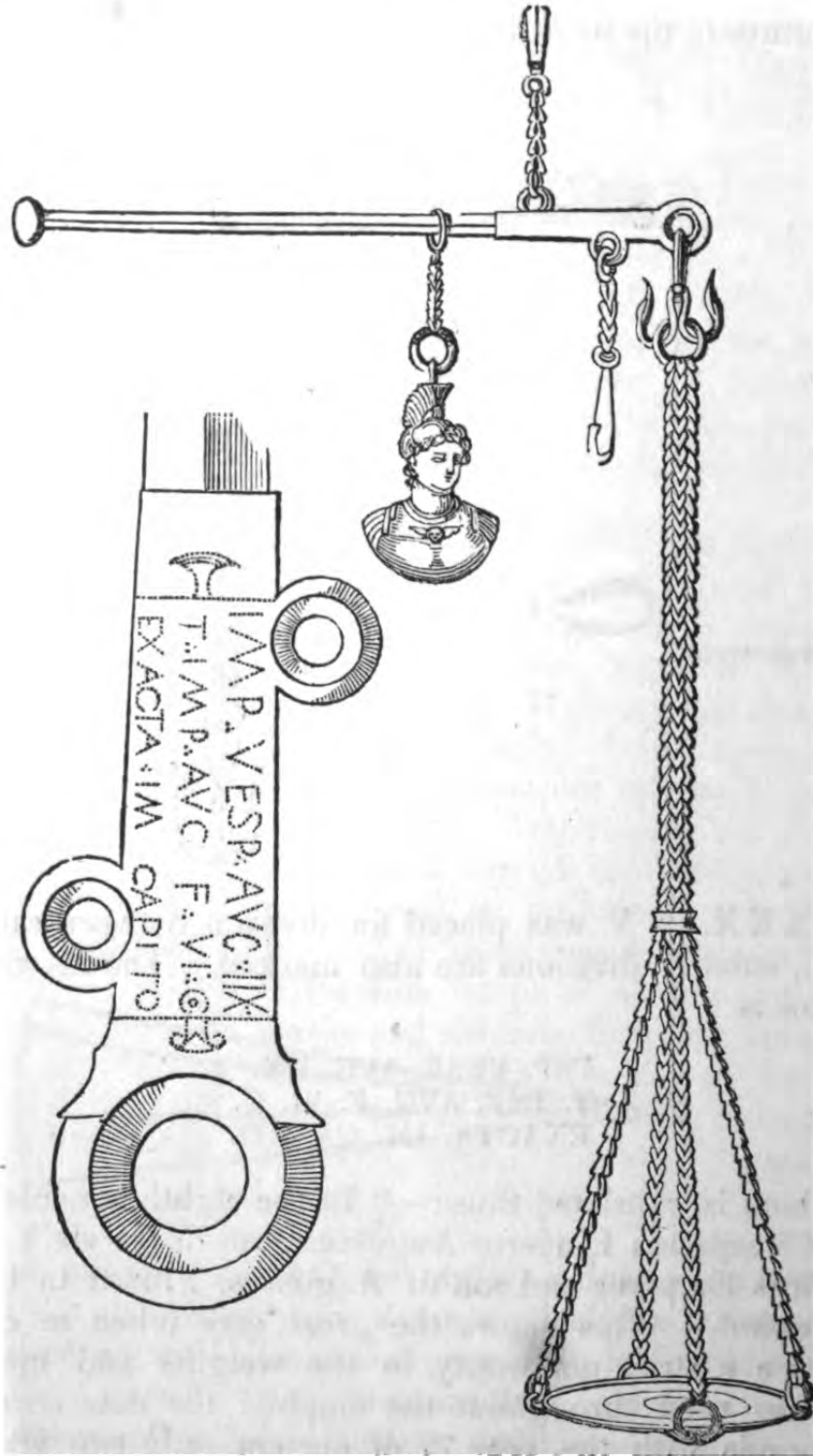
A marble statue of a laughing faun, two bronze figures of Mercury, the one three inches and the other four inches high, and a statue of a female nine inches high, were also found, together with many bronze lamps and stands. We may add vases, basins with handles, pateræ, bells, elastic springs, hinges, buckles for harness, a lock, an inkstand, and a strigil; gold ear-rings, and a silver spoon; an oval cauldron, a saucepan, and a mould for pastry, and a weight of alabaster used in spinning, with its ivory axis remaining. The catalogue finishes with a leaden weight, forty-nine lamps of common clay ornamented with masks and animals, forty-five lamps for two wicks, three boxes with a slit to keep money in, in one of which were found thirteen coins of Titus, Vespasian, and Domitian. Among the most curious things discovered, were seven glazed plates found packed in straw. There were also seventeen unvarnished vases of terra-cotta, and seven clay dishes, and a large pestle and mortar. The scales and steelyard which we have given are said to have been found at the same time. On the beam of the steelyard are Roman numerals from X. to



XXXX.; a **V** was placed for division between each **X.**, smaller divisions are also marked. The inscription is

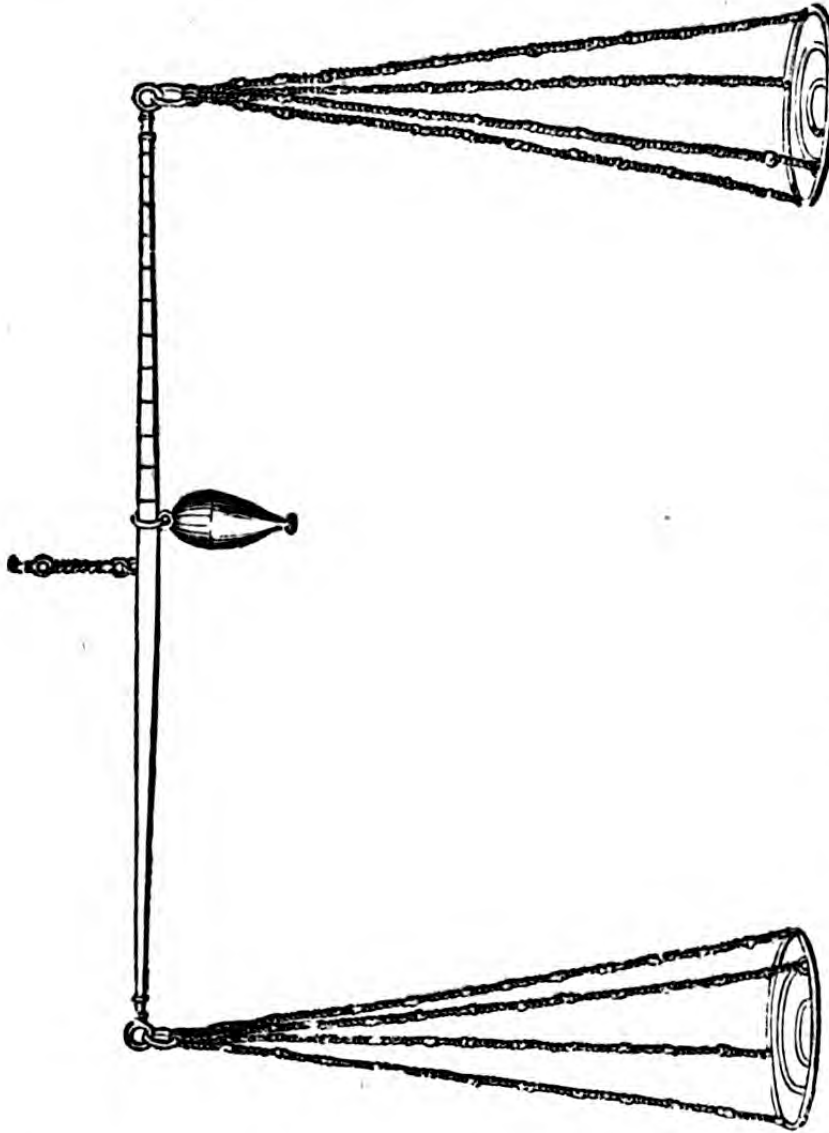
IMP. VESP. AVG. IIX.
T. IMP. AVG. F. VI. C.
EXACTA. IM. CAPITO.

which is translated thus:—"In the eighth consulate of Vespasian Emperor Augustus, and in the sixth of Titus Emperor and son of Augustus, Proved in the Capitol." This shows the great care taken to enforce a strict uniformity in the weights and measures used throughout the empire: the date corresponds with the year 77 of our era, only two years previous to the great eruption. The steelyard found



Steelyard, called *Trutinæ Campanæ*, with part of the beam and inscription on a larger scale.

was also furnished with chains and hooks, and with numbers up to XXX. Another pair of scales had



Scales, called Libræ or Balances.

two cups, with a weight on the side opposite to the material weighed, to mark more accurately the fractional weight; this weight was called by the Ancients *κάνων*, *ligula*, and *examen*.

Gell tells us that the skeleton of a Pompeian was found here, "who apparently, for the sake of sixty

coins, a small plate and a saucepan of silver, had remained in his house till the street was already half filled with volcanic matter." He was found as if in the act of escaping from his window. Two others were found in the same street.



Bronze Lamp and Stand.



Figure with a mask, from a painting in Pompeii.

CHAPTER VIII.

THEATRES.

NEXT in importance to the excavation which has laid open the Forum, is that of the quarter of the Theatres. It is approached either by the street of the silversmiths, already described, on the eastern side, or by the street leading out of the south-eastern corner of the Forum; both routes are now completely excavated. The space here cleared comprises two theatres of unequal size; a square called by some the provision market, but more usually the soldiers' quarters; a temple dedicated to Isis; another called the Greek temple, or the temple of Hercules, with other buildings of minor importance. It will be well to preface the description of these edifices by a general account of the form and distribution of a Greek or Roman theatre, the nature of the pieces to be re-

presented, and the method of representing them. In all these points, the ancient and modern drama differ so widely, that without some previous knowledge of them, we could hardly hope to be intelligible to the reader. It is a curious and interesting subject; it is also a very complicated and extensive one. Our account of it, therefore, must necessarily be very short and imperfect; it will be enough to indicate the leading features which run through the Greek, and its descendant the Roman drama, without pretending to characterise the varying practice of successive ages, or to point out accurately the different usages of the one country or the other. We shall presume that the reader is already acquainted with the leading peculiarities of the Greek stage; that it did not admit more than three interlocutors at once; that it deals much more in set speeches, and runs less into natural broken dialogue, than the English; that, as a general rule, there was no change of scene during the piece; and that a body called the Chorus, bearing no analogy to anything in the modern drama, was introduced, a sort of medium between actors and spectators, who took little share in the action of the piece, but rather reflected upon what was going on, than promoted the catastrophe, and did not come upon the stage, but occupied the orchestra, (a term which will be fully explained hereafter,) at times taking part in the dialogue, at times varying it by choral songs and dancing.

Both in Greece and Rome, dramatic entertainments, instead of being, as they now are, matter of private speculation, formed a part of the public expenditure, or were exhibited gratuitously by some wealthy and liberal, or ambitious person. At Athens, in particular, they were strictly religious ceremonies, and formed the most important part of some of the chief festivals annually celebrated. The theatres

therefore were necessarily of immense size, for they were meant to contain the male population of great cities. Instead also of being open nightly, and forming the recreation of the people when the labour of the day was over, they were only open at certain times, and then by day, and the whole day, as the amusement of the holiday. The performances therefore took place by daylight, and usually in an uncovered theatre: always, we believe, in Greece, for awnings were a late invention of Roman luxury. These two circumstances, combined with its religious origin, appear to have exercised a powerful influence over the drama. In explaining that influence, we shall speak only of tragedy, because the growth of comedy is comparatively little known; and because, tragedy having first assumed a regular form, comedy naturally adapted itself to that form, so far as the method of representation and peculiarities of ornament were concerned. In tragedy, then, the *dramatis personæ* were invariably taken from the mythic ages, from a class whom time and fable had invested with preternatural grandeur; men either the immediate offspring or the descendants of gods, and accustomed to see and converse with gods upon earth; capable alike of greatly daring, or of greatly enduring, and exalted above the common run of humanity in the qualities of both mind and body. Every thing therefore was to be great, but calm: the violent passions, the stormy scenes, which in the hands of our own dramatists produce such powerful effects, would not have found favour with an Athenian audience. The dialogue therefore was regular and sustained, the speeches long and rhetorical, and good recitation was of more importance than good acting. But the nature of the theatres contributed also to produce this effect. In their huge area, the expression of the face, the modulation of the voice,

together with all that we term by-play, would have been lost to far the larger part of the audience. With these excellencies, the greatest part of an actor's merit, they were unacquainted, and therefore could not try to preserve them; their object was to see and hear, not minutely, but to see and hear: and to increase the splendour of the spectacle, and enable the voice to penetrate the most distant parts of the building, they had recourse to contrivances which to us appear singular enough.

In the rude songs or farces, from which the drama arose, the clown, (such, rather than actor, is the proper term,) smeared his face with wine-lees, or assumed some other coarse disguise, to enjoy a more unlimited and fearless range of buffoonery. This practice of hiding the face appears never to have been laid aside. Æschylus, the father of Grecian tragedy, invented the mask, whether because custom rendered it imperative that the performer's face should be hidden, or that he did not appreciate the advantages to be derived from the breach of this rule. We have not the means, nor would it be to the purpose, to describe the earliest form of the mask, or to trace its progress. Ultimately, it was formed of brass, or some sonorous material, or the mouth at least lined with metal, so as to collect and reverberate the voice with something like the power of a speaking-trumpet. The Greeks called it *προσώπειον*, the Latins *persona*, a *personando*, from *resounding*, "because the head and mouth being entirely covered by it, and only one passage left for the voice, this cannot be dissipated, but being collected into a body, is thus rendered clearer and more sonorous*." They were made to contain the whole head, covered with hair of colour suitable to the characters they were meant to represent, and seem to have been coloured, for

* Aul. Gell. v. 7.



Masks, Dwarf, and Monkey, from a painting.

minute directions are given as to the complexion, and smooth or wrinkled character of the face. No doubt can exist as to the minute attention paid to this subject by the Greeks, for Julius Pollux enumerates no less than twenty-six classes of tragic masks, distinguished each by what apparently is its technical name. He divides them into the ranks of men, young men, slaves, and women, and names six of the first, eight of the second, three of the third, and nine of the last. As a sample of the arrangement, we give the first class, which consists of "The shaven man, the white, the grey, the black, the brown, the deeper brown *:" the other classes are similarly subdivided, and to each is attached a short description of the character of face which it should portray. "The shaven man is the oldest of all, his hair quite white and collected upon the foretop (*ὄγκος*). The foretop is the upright projection above the face, in shape like the letter Λ . His beard is close shaven, and his cheeks pendulous. The black man is named from the darkness of his complexion, his hair and beard are curling, his face rough, and his foretop large†." Such is the exact detail continued through the four classes, and these seem merely to have been the regular stock of the theatre or mask-maker: for he after-

* τὰ μὲν τραγικά. ξυρίας ἀνὴρ. λευκός, σπαρτοπολιος, μέλας ἀνὴρ, ἀνὴρ ξανθός, ἀνὴρ ξανθότερος. iv.

† Pollux Onomasticon. iv. 19.

wards enumerates extraordinary personages, as Actæon with his horns, or many-eyed Argus, or Tyro with bruised cheeks, as introduced by Sophocles, or Gorgon or Death, or a Fury, and a host more of mythological personages, or Thamyris, with one eye blue and the other black. This last is the most extraordinary. It appears from the marble masks still extant, that the white of the eye was imitated, leaving only the aperture of the iris to see through; but the irides themselves of Thamyris's eyes must have been imitated: an extraordinary instance of minute attention to propriety, when two thirds of the spectators probably could not tell whether he had any irides at all. The same may be observed of Tyro's black and blue face.

There are two very striking tragic masks in the Townley gallery. The male is remarkable for the great elevation of the hair (*ὄγκος*) to give increased



stature and dignity to the actor ; its features are stern and exaggerated. Those of the female are regular and beautiful, and bear a wild, intense, inspired expression of terror, such as Cassandra may have worn while darkly presaging her own fate, and the evils about to



fall on the house of Atreus. The comic masks are still more numerous than the tragic, and there are others devoted to the satyric drama.* This was something of a medium between tragedy and comedy ; in spirit and cheerfulness it resembled the latter, but its external form was derived from the former, and its subject was mythological. Its distinctive mark was a chorus of satyrs, who accompanied such heroic adventures as were of a more cheerful hue, with lively songs, gestures, and movements. The immediate cause of this species of drama was derived from the festivals of Bacchus, in which satyr masks were a common disguise. In these representations, therefore, the severe beauty of the tragic mask, softened in

* The original is in the Townley Gallery ; but it is very difficult to convey the expression of a mask by an engraving.

its features and expression, was combined with, and opposed to the grotesque character usually given to Fauns and Sileni; and the ancient sculptors seem to have been fond of thus contrasting them. There are some instances of this in the Townley gallery, from which a drawing is given below. We also give



Tragic and Grotesque Masks.

a masked figure of Silenus from the same collection. The only existing satyric drama is the *Cyclops* of Euripides.

The tragedians rarely travelled out of the mythic age: indeed there are only three known instances of subjects being taken from a more recent period, the capture of Miletus, by Phrynichus, and the *Phœnissæ*, by Phrynichus, and the *Persæ*, by Æschylus, both



Masked figure of Silenus.

written in commemoration of the overthrow of Xerxes. Hence the same persons, Achilles, Hercules, Orestes, Theseus, were continually re-appearing on the stage. We know that a peculiar costume was assigned to

them, as Priam was always shaven, Ulysses dressed in a cloak, that being the Ithacan habit; Achilles and Neoptolemus were introduced with diadems. It is not improbable, therefore, that they had a traditional cast of features assigned them, and if Mr. Flaxman's assertion be correct, that the Grecian artists had for each of their principal deities an ideal model to which they always conformed, we may be sure that when introduced on the stage the orthodox countenance was strictly followed. The nature of their characters, therefore, created a further inducement to retain and improve the mask, rather than to cast it aside, as a rude and mean appendage of the art in its infancy. Devoted as the Greeks were to beauty, an ugly or plebeian Prometheus, or Agamemnon, or Achilles, would have been intolerable; but an ugly Apollo would inevitably have been hooted off the stage. Many imitations of masks carved in marble still exist, which display great beauty and excellence of workmanship. We know much less of the minutiae of the Roman than of the Greek theatre; it appears from a passage in Cicero, that the celebrated



Comic Scene from a Painting at Pompeii.

Roscius sometimes played without his mask, and that this was preferred by his audience.

It is evident that the heads of the actors must have appeared disproportionately large. To remedy this, and to raise their stature to the heroic standard, a thick-soled boot was invented, called *ἔμβας*, and *κόθορνος*, from which the words buskin and cothurnus have become almost convertible with tragedy in the Augustan age of Latin, and that which has been called the Augustan age of English litera-



Tragic Scene from a Painting at Pompeii.

ture. Both the cothurnus and the *ὄγκος* above-mentioned are represented in the annexed outline of a painting found in Pompeii. Distinguished from these was the comic shoe, *ἔμβάτης*, in Latin *soccus*. The proportion of the figure, thus increased in height, was preserved by lengthening the arms with gloves, and by stuffing and padding the body; so as to convey the idea of superhuman size and strength. How all this was consistent with any

thing like natural speech or action, it is not easy to imagine. Distance certainly at once rendered the increase of bulk more necessary, and softened the awkwardness of such made-up figures; still, in spite of the acknowledged purity of Grecian taste, and of the exquisite art and splendour lavished on their adornment, they must surely have seemed constrained and unnatural to any eye and ear not habituated to such spectacles. It is evident, that while this method of representation continued, tragedy could never lose its uniform and measured character. If the author had thought it consistent with the dignity of the occasion, and of his subject, to introduce those tumultuous scenes, that abrupt and impassioned dialogue, which in the hands of our elder dramatists produce such astonishing effect, they would have been lost in the delivery.

Not less minute directions* are given respecting costume than respecting masks. Tiresias had a peculiar dress, like a net. Atreus and Agamemnon, and such characters, had a peculiar upper garment. Bacchus, a saffron robe, with a broad embroidered band around his breast. Telephus and Philoctetes, who were represented in great distress, were clothed in rags. And the fondness of Euripides for introducing such subjects, and raising compassion for bodily suffering, is a constant subject for the ridicule of Aristophanes, who regarded it as an effeminate and unworthy deviation from the loftier style of his predecessors, Æschylus and Sophocles. In the Acharnians, when Dicæopolis is to plead his cause before the Chorus, he has recourse to Euripides for the means of moving their pity:—

Good Euripides,
Give me the rags from some old tragedy.

* Pollux, iv. 13.

- Eurip.* Whose rags wilt have? those in which Æneus here,
That wretched old man, used to play his part?
- Dicæop.* Not those of Æneus, but one poorer still.
- Eurip.* Blind Phœnix, then?
- Dicæop.* No, still you miss the mark:
Think of some other, much worse off than Phœnix.
- Eurip.* Whose rags, in the devil's name, does this man want?
Perhaps you mean the beggar Philoctetes?
- Dicæop.* There's yet another doubly beggarly.
- Eurip.* Wilt have the looped and windowed raggedness
Of lame Bellerophon?
- Dicæop.* No: yet my friend
Was lame, exacting, with large gifts of tongue.
- Eurip.* I know the man—the Mysian, Telephus.

Accordingly he turns to his servant, and bids him reach down Telephus's rags; they lie up there between those of Thyestes and Ino. All the persons here named were characters in lost tragedies of Euripides. The Telephus, for some reason or other, was a standing joke among the comic poets. Dicæopolis continues his suit for all the apparatus of beggary,—a staff, a bucket with a hole burnt in it, a cup with a broken lip, a few leaves to garnish his bucket. Euripides complains that the man is robbing him of a whole tragedy, but complies with his wishes, until driven off by an insulting request which touches the honour of his parentage*.

Pollux is equally exact in his directions for comedy. The dress of the old man was of some grave colour; purple belonged to young men; countrymen were distinguished by a scrip, a staff, a goatskin tunic; parasites wore black, or some dark colour; slaves, different ranks of women, had each their costume: but these rules probably belong to the last style, the

* Acharnians, 415—430.

New Comedy, as it is called, which came into fashion during the fourth century B. C. From Greece it was introduced at Rome; it formed the regular comedy of the Roman stage, and, lost in the original language, still survives in the works of Plautus and Terence. The Old Comedy of Athens overleaped all rule. As the furniture of the tragic muse was calculated to elevate the mind of the spectator, and prepare it for scenes of action and suffering above the lot of ordinary humanity, so the furniture of the comic muse was intended to reverse this effect. The Old Comedy was in fact a parody upon tragedy in great measure; at least the comedians most readily seized the opportunity of a fling either at the persons or the pieces of their graver brethren, and still more of each other. As in the one every thing was exalted, so in the other every thing was degraded and made ridiculous, not even excepting the gods, who meet with very scurvy treatment from Aristophanes*. The masks partook of the general character of the exhibition and were made with grinning mouths, flat noses, distorted as best suited the fancy of the artificer, or the author's purpose. Until near the end of the Peloponnesian war, living persons were brought on the stage in character, with portrait-masks, of course not over-flattering likenesses. In the New Comedy this license and the general extravagance of the old style was abridged, yet still a trace of it survived in the masks. Youthful characters were represented with regular and youthful features; but aged persons and slaves still retained a most grotesque character of face. The annexed masks belong to some of Terence's characters: they are given by Mad. Dacier, on the authority of a very ancient manuscript in the Royal Library at Paris, and serve to illustrate the varieties

* See more especially the Birds and Frogs.

of countenance considered applicable to different characters.



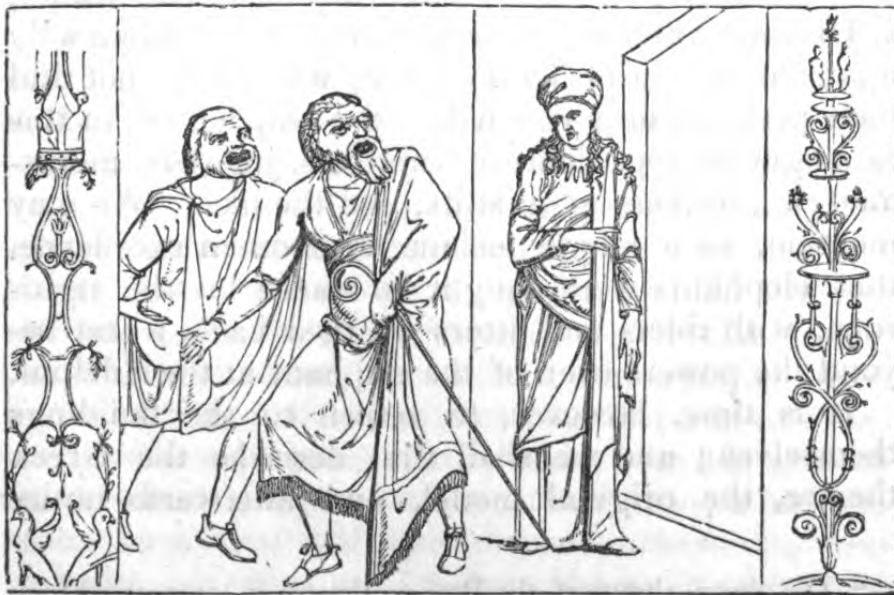
We have been more particular in this account of the Grecian drama than may appear to belong to the subject, because the Roman regular theatre was formed upon it, and because our knowledge of the latter is much less accurate and extensive. The regular drama was not of indigenious growth, and never took firm root in Italy. It was unknown until about two centuries and a half before Christ, when Grecian literature began to be cultivated, and never rose to be more than a feeble transcript of the original. The Romans were first led to theatrical amusements as a means of appeasing the anger of the gods, having been before only acquainted with gymnastic exercises and circus races. During a desolating pestilence, which seemed proof against all remedies, they sent for *histriones* from Etruria, A.M.C. 391: these, however, seem to have been merely dancers, or tumblers, rather, such as are represented on the Etruscan monuments. The oldest spoken plays, the *Fabulæ Atellanæ*, were borrowed from the Osci, of whom we often have had to speak, and appear to have been rude improvisatory attempts at rustic satire. It was more than 500 years after the æra usually assigned to the foundation of Rome, that Livius Andronicus first attempted to imitate the Grecian tragedy. He was followed by Ennius

and Nævius, and, later, by a number of writers in the Augustan age, and under the Emperors; but, with the exception of some fragments, and the tragedies ascribed to Seneca, all their works are lost. This is the less to be lamented, because it does not appear that a single Roman tragedy was ever composed upon a Roman subject.

In the comic department they displayed more originality. The *Fabulæ Atellanæ* were so popular, that youths of noble family engaged in the representation of them; and, in consequence, the professional actors employed in them were exempted from the ignominy which attached to other theatrical artists. Similar to these, probably, but more polished, were the *Mimi*. These were composed in verse, in the Latin language, and sometimes were delivered extempore. *Laberius* and *Syrus* are the two most celebrated writers of them. The former was compelled by a request, equivalent to a command, from *Julius Cæsar*, to appear on the stage, although his compliance was attended with the loss of civil rights; and the prologue which he spoke on this occasion is still extant, and expresses nobly and feelingly his sense of the injury. Time has left us no specimens of either of these species of composition; and the scanty notices which remain concerning them do not enable us to form a clear idea of their nature.

The regular comedy of the Romans, which is preserved to us in *Plautus* and *Terence*, was for the most part *palliata*, that is, it appeared in a Grecian dress, and represented Grecian manners. But they had also a *comœdia togata*, so called from the Roman dress which was worn in it. *Afranius* was the principal writer in this walk. We have no remains whatever of his writings, nor can we determine whether the *togatæ* were original comedies of new invention, or merely Grecian comedies adapted to Roman man-

ners. The latter case is the more probable: yet it is not easy to conceive how Attic comedies could well be adapted to local circumstances of so different a nature. The way of living of the Romans was in general serious and grave, during the republic: the diversity of ranks was politically marked in a very decided manner, and the wealth of private individuals was frequently not inferior to that of princes; women lived much more in society, and acted a much more independent part with them than among the Greeks; and from this independence they fully shared in the general refinement of manners, and the corruption by which that refinement was accompanied. In these points, Athenian were the Antipodes of Roman habits; and with such essential differences between them, an original Roman comedy would have been a most valuable production, and would have given us that insight into the private feelings and private life of this remarkable people, which is of all knowledge the most curious and important. That this, however, was not accomplished in the *comædia togata*, the



Comic Scene from a Painting at Pompeii.

indifferent manner in which it is mentioned by the ancients will hardly allow us to doubt. Quintilian himself informs us that the Latin literature "was lamest in comedy*."

But this lameness was purely metaphorical. So far as the activity of the outward man can make up for the sluggishness of the inner, the Roman stage might bear comparison with any other. To the lamenters over the degeneracy of modern taste, it might be some comfort, perhaps, to look at the awful list of hard words which Bulinger has collected in his erudite treatise "De Theatro," and if they have courage and perseverance to wade through the eighteen chapters devoted to explaining them, he will find reason to believe that an Easter spectacle is at least as rational and elevated an amusement as a Roman interlude. There would be little use in troubling the reader with the explanation of *petauristæ*, *petaminarii*, *crotocho-reutæ*, and such cacophonous polysyllables; it is enough that there is not a species of extravagance or buffoonery exhibited in pantomimes, or elsewhere, during the last fifteen years,—not Madame Saqui, *Il Diavolo Antonio*, or the man who walked like a fly upon the ceiling of Drury Lane, who might not find their performances rivalled, if not anticipated, in this catalogue of rope-dancers, tumblers, jugglers, merry-andrews, walkers upon stilts, and the like. We may mention, as a single instance of Roman excellence, that elephants were taught to dance on the tight-rope, with riders and litters on their back, a feat beyond the powers even of the elephant at the Adelpi.

It is time, however, to return to the buildings themselves; and we shall first describe the Greek theatre, the original model, and afterwards notice

* The above sketch of the Roman theatre is compressed from Schlegel's Lectures on Dramatic Literature, sect. viii.

those points in which the Roman theatre differed from it. Thespis performed on a waggon: this was soon succeeded by a moveable wooden structure, which was put up and removed when required. It is said that the first stone theatre was erected in consequence of the wooden building having given way under an unusual crowd. However this may be, it was erected by Themistocles, not long after the defeat of Xerxes, in the seventy-fifth Olympiad.



Comic Scene from a Painting at Pompeii.

Minute directions, strongly illustrative of the importance of the subject, are given for choosing a proper situation. "When the Forum is finished, a healthy situation must be sought for, wherein the theatre may be erected to exhibit sports on the festival days of the immortal gods. For the spectators are detained in their seats by the entertainment of the games, and remaining quiet for a long time, their pores are opened, and imbibe the draughts of air, which, if they come from marshy or otherwise unhealthy places, will pour injurious humours into the body. Neither must it front the south; for when the sun fills the concavity, the inclosed air, unable to

escape or circulate, is heated, and then extracts and dries up the juices of the body. It is also to be carefully observed, that the place be not dull (*surdus*), but one in which the voice may expand as clearly as possible*."

It is probable that the natural sweep of some dell, hollowed out in a hill-side, furnished the original design of a theatre; and the Greeks always availed themselves, if possible, of a hill-side, or some locality which lightened the labour of the building. At Nyssa the theatre occupies an angle in a ravine partially filled up; and it is said that the only instances now known of Grecian theatres built in a plain, are those of Mantinea and Megalopolis, and a small one in Asia Minor†. The Roman theatres, on the other hand, were usually elevated upon arches, wherever a suitable situation could be found, without regard to economical considerations. When the nature of the ground allowed, the Greeks hewed seats out of the living rock, and perhaps lined them with marble; when it was of softer materials, they excavated to a depth suitable to their purpose, and formed rows of stone



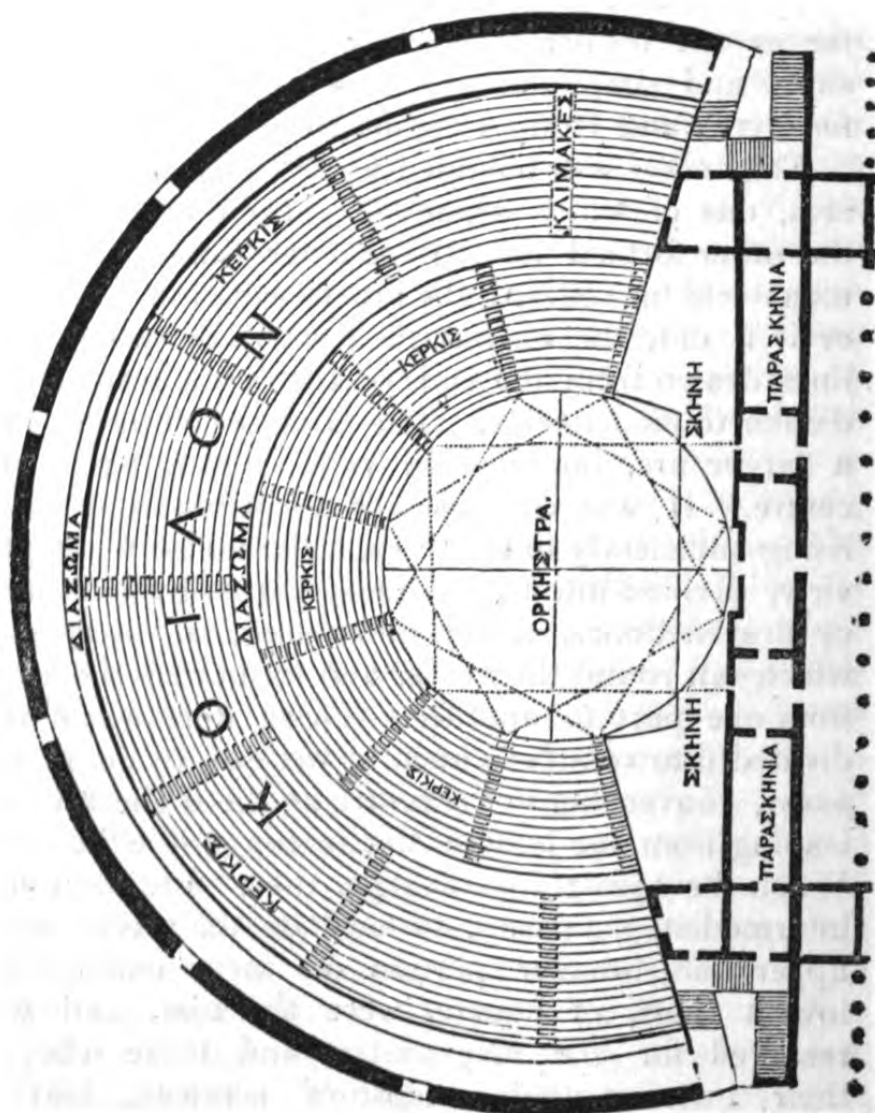
Comic Scene from a Painting at Pompeii.

* Vitruv. v. 3.

† Stuart's 'Athens,' vol. iv.; On the Greek Theatre, p. 36.

benches round the hollow. The building itself we may divide into two parts—the *κοῖλον*,—in Latin, *cavea*, the part for the audience; and that devoted to the business of the play, which is again subdivided into the *ὄρχήστρα*, and *σκηνὴ*, the orchestra and stage. So far as the former is concerned, the description is short and simple, and may serve equally well both for Greek and Roman architecture.

The *κοῖλον* was bounded by two concentric circular arcs, one of which separated it from the orchestra, the other formed its extreme outer limit. The Romans seldom suffered the arc to exceed a semicircle, or if it did, the excess was formed by two straight lines drawn from the ends of the semicircle perpendicular to its diameter. The Greeks commonly used a larger arc, bounded by radii converging to the centre. It was composed of a succession of seats, rising sufficiently to afford each tier an uninterrupted view, divided into two or more flights by *διαζώματα*, or *præcinctiones*, a sort of landing, or broad step, which ran round the whole, and facilitated the access from one part to another. These were again subdivided into *κέρκιδες*, *cunei*, or wedges, by stairs, *κλίμακες*, converging to the centre of the orchestra, and leading from the bottom to the top of the building. When the theatres were large, there were commonly intermediate staircases, to facilitate the ascent to the upper and broader portion of these *cunei*. The lowest seats, of course, were the best, and were reserved for the magistrates, and those who, by their own or their ancestors' services, had acquired a right (*προεδρία*) to have places reserved for them. The Roman arrangement was different in this particular, as we shall hereafter notice. The whole was surrounded and surmounted by a portico, to confine sound and give shelter from a passing storm; the upper line of wall being continued, at the



same level, to meet the back of the stage, that the voice might spread evenly over the whole building, without opportunity to escape from one part sooner than from another. Still further to increase the resonance of the voice, brazen vases (*ἡχεῖα*), resembling bells, were placed in different parts of the theatre. It is well known that when two instruments in harmony are placed within the sphere of each other's influence, if one be struck the other will vibrate the corresponding chord, and the vibration of the second will of course increase and strengthen the sound of the first. "Acting on this principle, which particularly suited the recitative in which dramatic compositions were delivered, the ancients had echeia of earth and metal, modulated to the intervals of the different notes of the voice, placed in small cells under the seats, in one, two, or three rows, according to the extent of the theatre. Hence it resulted that the voice, passing from the scene as the centre, expanded itself all round, and striking the cavity of those vases, produced a clearer and more distinct sound by means of the consonance of these different modulated tones, and extended the powers of the speaker to the utmost limits of the cavea. The vases were in the shape of a bell, placed in an inverted position, the side towards the audience resting on a pedestal not less than half a foot high, in all other respects quite free from contact; and in order to allow the vibration of the sound, a small aperture was left in the front of the seat, about two feet long and half a foot high. It is remarkable that no writer has been able to adduce an existing example in confirmation of the principles, for the echeia and their cells, laid down by Vitruvius*." The Roman architecture lays down minute and abstruse rules

* Stuart's 'Athens,' vol. iv.; On the Greek Theatre, p. 39.

for their arrangement, depending entirely on mathematical and musical principles, unintelligible without considerable acquaintance with both sciences, and subject to be misunderstood even by the most learned. The wonder that none of them have been found, is partly explained by Vitruvius himself from whom we learn that they were far from being universally used. "It may be said that many theatres are built yearly at Rome, in none of which are these contrivances used. But all public theatres have many boarded surfaces, which resound by nature. We may observe this from singers, who, when they wish to raise a loud note, turn to the doors of the scene, and thus receive a help to their voice. But when the theatres are built of solid materials, as stone or marble, which are not sonorous, then these methods are to be employed. If it is asked in what theatre they are made use of, we have none at Rome; but in different parts of Italy, and in the Greek provinces, there are several. We have also the authority of L. Mummius, who destroyed the theatre of Corinth, and brought the brazen vases to Rome, and dedicated them in the temple of Luna. And many skilful architects, who build theatres in small towns, use earthenware vases, to save éxpense, which, when properly arranged, have an excellent effect*." It is said that a very complete example of these echeian chambers has been discovered at the theatre of Scythopolis, in Syria, by W. Bankes, Esq.

The rest of the building is not quite so easily disposed of. The orchestra or dancing station, from *ὀρχέομαι*, to dance, we have already said was bounded towards the audience by a circular arc. Suppose the circle completed, and a square inscribed in it, the side of the square farthest from the audience

fixes the position of the front of the stage. A tangent to the circle, drawn parallel to this side, determines the depth of the stage. The position of the staircases is determined by the angles of two other squares inscribed in the circle. Again, draw a diameter through the centre of the orchestra, parallel to this side of the square, and from each end of it, with radius equal to the diameter of the orchestra, describe a portion of a circle, cutting the side of the square produced. Thus, by this delineation of the orchestra about three centres, greater breadth was given both to it and the stage, which is a shallow platform, elevated ten or twelve feet, behind which rose the *σκηνη*, or scene, a lofty wall, which terminated the spectators' view, usually adorned with architectural designs, but susceptible of variation, to suit the plot of the drama to be performed. Opposite to the centre of the stage stood the *thymele*. The real meaning of this term is very doubtful. Bulinger appears to designate by it all that part of the orchestra which the chorus actually occupied. Others say that it was an altar, on which sacrifices were offered to Dionysius. Pollux describes it ambiguously, as "an altar or raised platform for speaking*." It appears, according to the best opinion we can form among conflicting authorities, to have been an elevated platform in front of the stage, approached by steps, and very probably containing an altar, on which the *coryphæus*, the spokesman, or leader of the chorus took his stand, when it was not singing, in an intermediate situation between the stage and his comrades, so as, without mixing in the action, to be ready to take his share in the dialogue. The rest of the chorus took their station, and performed their evolutions, in the orchestra, where lines were

* Lib. iv. 19.

drawn on the floor, to mark their station. They seem not to have ranged over the whole area, in which case they would often have been concealed from a great part of the spectators, by the basement wall of the *κῶλον*. The space to which their motions did not extend, is called *κονίστρα*, the arena, or place of sand; but we know not its precise limit, nor whether the rest of the orchestra was elevated above it. The whole area was kept scrupulously clear of spectators, the Greeks considering that the presence of a single person would impede the equable diffusion of sound. The chorus did not enter over the stage, but by passages which led from behind the scene, under part of the auditory. In tragedy it usually contained fifteen persons, and entered and took its station either in three rows of five each, or in five rows of three: in comedy it consisted of twenty-four members, and was arranged in ranks of four, or six. Usually it remained in the orchestra during the whole piece; but sometimes it withdrew. It was preceded and regulated by a flute-player. Sometimes it divided itself into two parts, called *ἡμιχόρια*, semi-chorusses, which ranged themselves on opposite sides of the orchestra; and took part in the dialogue, each by its own coryphæus.

We now come to the *σκηνὴ*, the most complicated and obscure division of the theatre. The stage, we have said, was elevated ten or twelve feet above the orchestra; the wall, which supported it, was called *ὑποσκήνιον*, and was relieved by statues, pillars, and other architectural ornaments. Some consider all that was under the stage, or the whole stage itself, comprised in this term*; but it seems almost hopeless to ascertain satisfactorily the exact meaning of this, or several other technical words.

* See Bulinger and Stuart's Athens, vol. iv.

Very probably the terms remained the same while the construction varied; and another reason for the confusion which exists may be found in the practice of translating Greek words into Latin words, which were already applied to the Roman theatre, but to parts not exactly identical with those of the Greek. The stage itself was, as we have said, a broad shallow platform, called by the Greeks *λογείον*, or *προσκήνιον*, by the Romans *pulpitum*. Behind it rose the scene. The word *προσκήνιον* again is of doubtful signification. Schlegel describes it as a recess in the central part of the scene. Bulinger says that "in Greece, the scene was higher than the proscene, and the proscene than the *pulpitum* (the *thymele*, that is), which stood in the orchestra." By Vitruvius, it seems to be used for the whole space in front of the scene, as its etymology would indicate, and we incline to think this most extended signification of the word correct. In this case the *proscenium* may be divided into three parts, the *λογείον*, the narrow portion opposite the centre of the scene where the actors stood and spoke, and two broader portions, at either end, which extended from the scene to the seats of the spectators. In front of the stage was a recess in the floor meant to contain a curtain, which was drawn up previous to the performance, to conceal the scene. A flight of steps, called *κλιμακτῆρες*, led up from the *thymele* to the stage, not for the use of the chorus, who never quitted their proper station in the orchestra, but for the characters of the play, who, when they were supposed to come from a distance, often entered by the orchestra. There was also a flight of steps concealed under the seats of the spectators, called Charon's staircase (*Χαρωνίοι κλίμακες*), by which ghosts entered, and proceeded up the *thymele* to the stage.

The scene, as we have said, was a wall, which rose to the level of the portico surrounding the *κοίλον*. Its width was double the diameter of the orchestra. "There are three kinds of scenes, each different and dissimilar to the other. The tragic is composed of pillars, pediments, statues, and other princely ornaments. The comic has the appearance of private houses, with windows, &c. The satyric is ornamented with trees, caves, mountains, and other rustic objects, to resemble a landscape*." "There are three doors in the scene†, the centre one representing a palace, a cavern, or whatever is the proper entrance for the chief character of the piece. The second character enters through the right-hand door; that on the left, which belongs to the least important person, is a ruined temple, or a solitary view. In tragedy the right-hand door belongs to guests; the left is a prison." In front of the central door stood an altar, dedicated to Apollo Agyieus, presiding over ways. There were also entrances at the side, and, as we have said, in the orchestra. This appropriation of particular entrances to particular people was facilitated by the small number of characters usually introduced in tragedy. The actors rarely crossed each other on the stage, but remained where they first came on. By this arrangement the business of the piece was always carried on in the open air, usually in the vestibule of a palace, or before a temple; but often, as in the *Prometheus*, or *Philoctetes*, among the grandest objects of nature. This practice, not without its inconsistencies and incon-

* Vitruv. v. 8.

† There were also five doors in the scenes of some theatres, the ruins of which exist in Greece. The scene of one of these is not less than two hundred and fifty feet in length, five times longer than the scene of the theatre of San Carlo at Naples, the largest modern theatre in Europe.

veniences, was rendered necessary by the habits of the Greeks, who, like most southern nations, lived much in the open air, and admitted strangers very sparingly into their houses. They had contrivances, however, by which the interior could be represented if necessary. These doors led into a room behind the scene (*παρασκηνιον*) in which those incidents were supposed to take place, which the genius of the drama did not allow to be exhibited to view, as the murder of Clytemnestra in the *Choephoroi*, or of Agamemnon, when his dying exclamations are heard from within. The recesses, if we may so call them, at each end of the stage, were occupied partly by a frame consisting of three scenes, revolving on a pivot, thence called *περιάκτος*, suitably ornamented, behind which there were lateral transverse entrances, through which messengers or travellers, or sometimes sea and river gods, were introduced on the stage. Behind the scene spacious porticos, sometimes enclosing gardens, were erected, for the audience to retire to if sudden rain should interrupt the shows, and also as a convenient place for the chorus to rehearse their part.

Such was the construction of the Greek stage; inferior to the modern stage in the illusions produced by perspective, and by the exquisite skill which has raised scene-painting from a term of reproach to an important branch of art; inferior in splendour of decoration, so far as the gorgeous processions, and the crowds of mutes and dancers with which we love to crowd the boards, deserve the name of decorations; above all, inferior, according to our notions, in the style of acting to which their observances confined them. Yet, never was there more enthusiasm displayed in favour of theatrical amusements than at Athens. The wealthy *choragi*, at whose expense the decorations were provided, the chorus trained and

rehearsed, and the whole piece brought out, vied with each other in magnificence as eagerly as did the authors in poetic excellence; and the same tripod which recorded that Phrynichus gained the prize, bore testimony also that his success was partly owing to the liberality and taste of Themistocles. In truth, the spectacle, though somewhat stiff and formal, and partaking, as Schlegel has observed, somewhat of the nature of a bas-relief, was of a grand and elevating character; and where the nature of the piece was favourable to such display, left nothing to be wished for on the score of simple magnificence. The opening of the *Œdipus Tyrannus*, where a multitude of citizens knelt in supplication before the altar in the palace vestibule; or the scene in *Prometheus*, where the Titan, chained among the rocks of Caucasus, is visited by the fifty air-borne daughters of Ocean, or the conclusion, where, unterrified by the threats of Hermes, or the anger of Zeus, they crowd round him, resolute not to abandon their friend, while the earth quakes, the lightnings flash thick around them, and conflicting winds mingle air and sea, might probably compare, for mere effect, with the most successful productions of modern machinists. Nor were the Greeks unskilled in the use of stage machinery. There was the *ἐγκύκλημα*, or *ἐξώστρα*, intended to remedy the inconvenience of conducting all the action of the piece in the open air, by representing the interior of edifices, and transactions passing in them. It appears to have been a revolving portion of the scene, level, and seemingly a solid part of it, or presenting a recess capable of containing at least one actor, as one side or the other was presented to the audience. Thus in the *Acharnians*, just before the passage above quoted, *Dicæopolis*, on presenting himself before the house of Euripides, is informed that the poet cannot be seen. "Euri-

pides," he exclaims, "Euripides!" "I have no time," is the answer. "At least turn round to me." "It is impossible." "Only this favour." "Well, I will turn round, but I have not time to descend;" and the encyclema, turning round, shows him seated upon the first floor*. Different from this was the *ἔισκίκλημα*, or rolling platform for sea-gods. Many other contrivances are named without being described, as *φρυκτώριον*, the beacon tower, raised probably above the scene, required in the Agamemnon; *κεραυνοσκοπέιον*, a lofty machine to produce lightning; *βροντέιον*, a vessel filled with stones, and rolled along sheets of brass, to imitate thunder; *γέρανος*, and *ἄιωραι*, the crane and ropes by which actors were borne into the air; *θεολογέιον*, the sky platform, on which the celestial deities appeared aloft; *μηχάνη*, the machine by which they descended; with others to facilitate their appearance from above, or the ascent of the infernal gods and spirits from below.

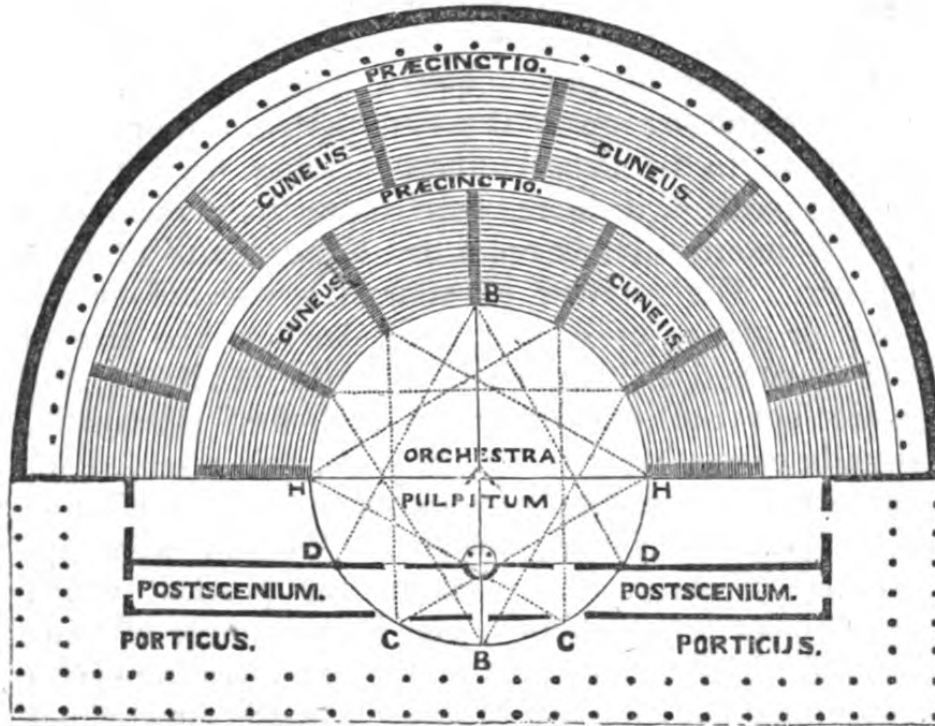
With so excitable and impetuous an audience as the Athenians the task of an actor was by no means easy. Their theatre, as we have said, was open to the whole people, however poor, for originally the performances were gratuitous; and when a price was charged for admission it was furnished from the public funds to any person who applied for it. In the time of Plato it would hold about thirty thousand persons; and this immense audience expressed their satisfaction, or still more their displeasure, with an energy, compared to which the first night of a new piece is decorum. Not content with hooting and pelting with figs and apples, the legitimate expression of theatrical opinion in all ages, they sometimes compelled an unlucky actor to take off his mask,

* Acharn. 406.

drove him from the stage, and summoned another to supply his place. That Æschines had been an actor, and a bad one, is one of the things objected to him by Demosthenes in the celebrated oration for the crown. "You played a third-rate part; and I hooted you. You were driven from the stage; and I hissed." Again: "You hired yourself out to actors, to play third-rate parts, collecting figs, grapes, and olives, like a fruit-seller, from other men's orchards, receiving more wounds thus than in the conflicts which you, Athenians, have waged concerning your lives; for between you and your audience there was truceless, irreconcilable war. Therefore, having taken many wounds at their hands, you may justly mock those as cowards who are untried in such dangers*." The profits of the stage were enormous, though the profession was not in high repute. Polus, a celebrated Greek actor, is said to have sometimes made a talent (about 225*l.*) in two days. At Rome, also, the profession was lucrative. Roscius and Æsopus, the most celebrated of Roman actors, are known to have amassed vast wealth.

In the Roman theatre, the construction of the orchestra and stage was different. The former was still bounded towards the cavea by a semicircle. Complete the circle, draw the diameters BB, HH, perpendicular to each other, and inscribe four equilateral triangles, whose vertices shall fall severally upon the ends of the diameters; the twelve angles of the triangles will divide the circumference into twelve equal portions. The side of the triangle opposite to the angle at B will be parallel to the diameter HH, and determines the place of the scene, as HH determines the front of the stage, or pulpitum. By this construction the stage is brought nearer to the au-

* Demosth. de Corona, p. 200; Schæfer.



Plan of the Roman Theatre.

dience, and made considerably deeper than in the Greek theatre, its depth being determined at a quarter of the diameter of the orchestra, which itself was usually a third, or somewhat more, of the diameter of the whole building. The length of the stage was twice the diameter of the orchestra. The increased depth of the stage was rendered necessary by the greater number of persons assembled on it; the chorus and musicians being placed here by the Romans. A further consequence of the construction is, that the circumference of the cavea could not exceed one hundred and eighty degrees. Sometimes, however, the capacity of the theatre was increased by throwing the stage further back, and continuing the seats in right lines perpendicular to the diameter of the orchestra. This is the case in the great theatre at Pompeii. Within the orchestra were circular ranges of seats for the senate and other dis-

tinguished persons, leaving a level platform in the centre. The seven angles which fall within the circumference of the orchestra mark the places at which staircases up to the first præinctio, or landing, were to be placed; those leading from thence to the second, if there were more than one, were placed intermediately opposite to the centre of each cuneus. The number of staircases, whether seven, five, or three, of course depended on the size of the theatre. In the great theatres of Rome, the space between the orchestra and first præinctio, usually consisting of fourteen seats, was reserved for the equestrian order, tribunes, &c.: all above these were the seats of the plebeians. Women were appointed by Augustus to sit in the portico, which encompassed the whole. The lowest range of seats was raised above the area of the orchestra one-sixth of its diameter: the height of each seat is directed not to exceed one foot four inches, nor to be less than one foot three. The breadth is not to exceed two feet four inches, nor to be less than one foot ten. The stage, to consult the convenience of those who sit in the orchestra, is only elevated five feet, less than half the height given to the Grecian stage. The five angles of the triangles not yet disposed of determine the disposition of the scene. Opposite the centre one are the regal doors; on each side are those by which the secondary characters entered. Behind the scene, as in the Greek theatre, there were apartments for the actors to retire into, and the whole was usually surrounded with porticoes and gardens. The square at Pompeii, called the soldiers' quarters, appears to have been an appendage to the great theatre. These buildings, being under cover, served better for the purposes of rehearsal than the open stage. A very beautiful mosaic has been found in a house in Pom-

peii, representing the Choragus*, or master of the chorus, instructing his actors in their parts. He is represented as sitting on a chair in the Choragium, or place devoted to these rehearsals, surrounded by performers: at his feet, on a stool, are the various masks which were used; another is behind him, on a pedestal; these he seems about to distribute. One of the actors, assisted by another, is putting his arms through the sleeves of a thick shaggy tunic; while the Choragus appears to be addressing him who has lifted his mask, that he may show by the expression of his countenance his attention to what is being said. In the middle of the picture is a female, crowned with a wreath, playing on the double flute, or perhaps tuning the instrument. Two of the figures are merely covered round the loins with goat-skins. Behind the figures are represented the Ionic columns of the portico, with its entablature; above this is a kind of gallery, decorated with figures and vases; and garlands are also hung, in festoons, between the columns. This mosaic is composed of very fine pieces of glass †, and is esteemed one of the most beautiful that has yet been discovered.

The earliest theatres at Rome, as at Athens, were mere temporary buildings of wood, removed when the immediate occasion for them was over. Stage-plays, as we have said, were first introduced A.M. 391. For two hundred years the Romans continued satisfied with standing-room; for, in the year 599, the

* The Romans termed Choragus the person whom the Greeks named Chorodidasalus, the maître du ballet. The Choragus, in the proper sense of the word, was the person at whose expense the chorus and decorations were provided.

† Until lately it was supposed that the small and fine mosaics found at Pompeii were made of stone, but it has since been ascertained that they are made of glass, in a similar manner, and with similar materials, to the modern Roman mosaics now so celebrated.



Mosaic, representing the Choragus instructing the Actors.

Censors Valerius Messala, and Caius Cassius, wishing to build a permanent theatre, were prevented by the senate, at the instance of Scipio Nasica; and at the same time an order was made that no person should provide seats at public spectacles within a mile of the city, "that the manly habit of standing, combined with mental relaxation, might be the peculiar mark of the Roman people;" or, according to Tacitus, "lest, if the people sat, whole days might be spent in idleness*." Mummius, the destroyer of Corinth, transported the furniture of the Corinthian theatre to Rome, and, at his triumph, represented plays in the Grecian manner, for the first time, about the year 610. The first permanent theatre was built by Pompey, and finished in 699. Up to that time, the ædiles, or other persons who exhibited theatrical amusements, constructed edifices on purpose, at an enormous expense, and with such splendour as would have seemed meant to hand down the name and magnificence of the founder to the latest posterity, instead of serving merely for a passing pageant. But money lightly earned is generally prodigally spent; and extreme magnificence in works of ornament is seldom consistent with the happiness of those at whose expense in reality they are constructed. The immense wealth which supplied these costly entertainments was the fruit of unjust conquest, or the spoils of subject provinces, and was thus prodigally lavished merely to obtain favour in the people's eyes, and procure other and more lucrative appointments. Celebrated above all others are the theatres of Scæurus and Curio, which are minutely described by Pliny, and will show how far the prodigality and splendour of ancient Rome surpassed all that modern extravagance has ventured, or modern means supplied.

* Val. Max. lib. ii. 4; Tacit. Ann. xiv. 20.

“Howbeit, as sumptuous in this kind as either C. Caligula or Nero was, yet shall they not enjoy even the glorie of this fame; for I will shew that all this pride and excesse of theirs in building their palaces (priuces though they were and mighty monarchs) came behind the privat workes of M. Scaurus, whose example in his Ædileship was of so ill consequence, as I wot not whether ever there were anything that overthrew so much all good manners and orderlie civilitie; in such sort, as hard it is to say whether Sylla did more damage to the state in having a sonne-in-law* so rich and mightie, than by the proscription of so many thousand Romane citizens. And in truth, this Scaurus, when he was Ædile, caused a wonderfull peece of worke to be made, and exceeding all that ever had been knowne wrought by man’s hand, not only those that have been erected for a month or such a thing, but even those that have been destined for a perpetuitie; and a theatre it was: the scene had three stories, one above another, wherein were three hundred and threescore columnes of marble (a strange and admirable sight in that citie, which in times past could not endure six small pillars of marble, hewed out of the quarry in Mount Hymettus, in the house of a most honourable personage †, without a great reproach and rebuke given unto him for it); the base and the nethermost part of the scene was all of marble, the middle of glasse (an excessive superfluitie, never heard of before or after); as for the uppermost, the boards, planks, and floores were gilded; the columnes beneath were fortie foot high, wanting twaine; and between these columnes (as I have shewed before) there stood of statues and images in brasse to the number of three thousand. The theatre itself was able to receive

* Sylla married the mother of Scaurus.

† L. Crassus.

fourscore thousand persons, to sit well and at ease*. Whereas the compass of Pompeii's Amphitheatre (notwithstanding the cite of Rome, so much enlarged and more peopled in his time) was devised for to containe no greater number than fortie thousand seats at large. As touching the other furniture of this theatre of Scaurus, in rich hangings, which were cloth of gold; pictures, plaiers' aparell, and other stufte meet for to adorne the stage, there was such abundance thereof, that there being carried backe to his house of pleasure at Tusculum the surplusage thereof, over and above the daintiest part, whereof he had daily use at Rome, his servants and slaves there, upon indignation of this wast and monstrous superfluties of their maister, set the said countrey house on fire, and burnt as much as came to a hundred million of sesterces †. Certes, when I consider and behold the monstrous humours of these prodigall spirits, my mind is drawne away still from the progresse of mine intended journie, and forced I am to digresse out of my way, and to annex unto this vanitie of Scaurus as great follie of another, not in masonrie or marble, but in carpentrie and timber: and C. Curio it was, hee who in the civile warres between Cæsar and Pompey, lost his life in the quarrell of Cæsar. This gentleman, desirous to shew pleasure unto the people of Rome at the funeral of his father deceased, as the manner then was, and seeing that he could not outgoe Scaurus in rich and sumptuous furniture (for where should he have had such a father-in-law againe as Sylla? Where could he have found the like mother to Dame Metella?

* We may more than suspect error here. It is calculated that, to contain this number, the theatre must have been 700 feet in diameter—eighty feet more than the greatest diameter of the Coliseum.

† Upwards of 80,000/.

who had her share in all forfeitures and confiscations of the goods of outlawed citizens? And where was it possible for him to meet with such another father as M. Scaurus, the principall person of the whole citie so long together, who parted stakes with Marius in pilling and polling of the provinces, and was the very receptacle and gulfe which received and swallowed all their spoils and pillage?). And Scaurus himselfe verily, if he might have had all the goods in the world, could not have done as he did before, nor make the like theatre againe, by reason that his house at Tusculum was burnt, where the costly and rich furniture, the goodliest rare ornaments which he had gotten together from all parts of the world, were consumed to ashes; by which fire yet this good he got, and prerogative above all other,—that no man ever after him was able to match that sumptuositie of his theatre.

“This gentleman (I say) Curio, all things considered, was put to his shifts and devised to surpass Scaurus in wit, since he could not come neare him in wealth. And what might his invention bee? Certes it is worth the knowledge, if there were no more but this, that we may have joy of our owne concerts and fashions, and call ourselves worthily as our manne is Majores*, that is to say, superior every way to all others. To come then to C. Curio, and his cunning devise, he caused two theatres to be framed of timber. and those exceeding big, howbeit so as they might bee turned about as a man would have them approach neare one to the other, or be removed farther asunder as one would desire, and all by the means of one hinge a piece. Now he ordered the matter thus; that to behold the severall stage plaies, and shewes

* The Romans delighted much in this word *Maiores*, as may appear by their *More Majorum*, &c. Holland.

in the forenoone before dinner, they should be set backe to backe, to the end that the stages should not trouble one another: and when the people had taken their pleasure that way, hee turned the theatres about in a trice against the afternoone, that they affronted one another: insomuch, as by the meeting of the hornes or corners of them both together in compasse, he made a fair round amphitheatre of it; and there in the middest betweene, he exhibited indeed unto them all jointly, a sight and spectacle of sword-fencers fighting at sharpe, whom he had hired for that purpose: but in truth, a man may say more truly, that he carried the whole people of Rome round about at his pleasure, bound sure ynough for stirring or remooving. Now let us come to the point, and consider a little better of this thing. What should a man wonder at most therein, the deviser or the devise it selfe? The workeman of this fabricke, or the maister that set him on worke? Whether of the twaine is more admireable, either the venterous head of him that devised it, or the bold heart of him that undertooke it? to command such a thing to be done, or to obey and yield to goe in hand with it? But when we have said all that we can, the follie of the blind and bold people of Rome went beyond all who trusted such a ticklish frame, and durst sit there in a seat so moveable. Loe where a man might have seen the bodie of that people, which is commander and ruler of the whole earth, the conquerour of the world, the disposer of kingdoms and realms at their pleasure, the divider of countries and nations at their will, the giver of lawes to forraine states, the vicegerent of the immortall gods under heaven, and representing their image unto all mankind: hanging in the air within a frame, rejoicing and readie to clap hands at their owne daunger. What a cheape market of men's lives was here toward! What was

the loss at Cannæ to this hazard, that they should complaine so much as they doe of Cannæ? How neare unto a mischeife were they, which might have happened hereby in the turning of a hand? Certes, when there is newes come of a cittie swallowed up by a wide chinke and opening of the earth, all men generally in a publicke commiseration doe greeve thereat, and there is not one but his heart doth yearne; and yet, behold the universal state and people of Rome, as if they were put into a couple of barkes, supported betweene heaven and earth, and sitting at the devotion onely of two hinges. And what spectacle doe they behold, a number of fencers trying it out with unrebated swords? nay, ywis, but even themselves rather entered into a most desperat fight, and at the point to breake their necks every mother's son, if the scaffold failed never so little, and the frame went out of joint: and by this hanging of the tribes in the air is favour carried at the election for tribunes. What a mightie man with them might hee bee (thinke you) preaching unto them from the Rostra? What would not he dare to propose, having audience in that public place before them, who could persuade them thus as he did, to sit upon such turning and ticklish theatres. And in truth, if we will consider this pageant upright, we must needs confesse and may be bold to say, that Curio had all the people of Rome to performe a brave skirmish and combat indeed to honour and solemnize the funerals of his father before his tombe. And yet here is not all: for he was at his chaunge and varietie of magnificent shewes: and when he perceived once that the hookes of his frame were stretched ynough and began to be out of order, hee kept them still close together round in forme of a perfect amphitheatre, and the very last day of his funerall solemnities, upon two stages just in the midst, he represented

wrestlers and other champions to performe their devoire, and then all on a suddaine, causing the said stages to be disjoined and haled one from another a contrary way, he brought forth the same day the fencers and sword players who had woon the prise, and with that shew made an end of all. See what Curio was able to doe! and yet was he neither king nor Kesar: he was not so much as a generall or commaunder of an armie; nay hee was not named for any great rich man: as whose principall state depended upon this, that when the great men of the citie, Cæsar and Pompey, were skuffling together by the eares, hee knew well how to fish in a troubled water*."

The first permanent theatre was constructed by Pompey, after he returned from Asia, at the close of the Mithridatic war. Plutarch says, that, stopping at Mitylene, on his way home, he attended some dramatic representations there, and was so much struck with the building, that he determined to erect one on the same plan, but with greater splendour, at Rome. It was not completed until his second consulship, in the year 699; and even in that luxurious age, either the ancient jealousy of permanent theatres still remained, or he was afraid of raising envy, and prejudicing his popularity, by giving his own name to so magnificent and proud a structure; for he built a temple of Venus Victrix, the Conqueress, at the highest part of the cavea, and dedicated the whole to her, stating in the edict by which he summoned the citizens to the dedication, that he had built a temple to Venus, "under which," he said, "I have placed tiers of seats, to behold spectacles." It would contain 40,000 spectators. Subjoined to this building, and as it were a part of the establishment, were his own house, a portico, basilica, and curia. It was in

* Plin. Hist. Nat. xxxiii. 24.

the latter that Cæsar was slain, after which it was shut up. It was splendidly ornamented with statues by eminent artists ; among them were the images of fourteen nations, those, perhaps, whom he claimed to have conquered. Near it, in later times, stood a remarkable colossal statue of Jupiter, erected by the Emperor Claudius. Being injured by fire in the reign of Tiberius, it was repaired by Caligula, and was again burnt, and restored by Claudius. It was burnt a third time in the reign of Titus. Nero gilded the scene, the theatre, and every thing employed in the performance, to make an exhibition of his magnificence to a royal visitor, Teridates, king of Armenia ; the very awning was purple, studded with golden stars, representing the heavens, and in the centre was an embroidered representation of himself, as the sun guiding his chariot.

The next permanent theatre was built by Augustus, and named by him after his favourite, Marcellus, who died before it was completed. It stood on the declivity of the Capitol, near the Tarpeian rock, on the spot where Julius Cæsar had proposed to build one of surpassing magnitude. It is called by Ovid the marble theatre, either from being built of that material, or because four columns, of remarkable size, taken from the atrium of Scæurus's house, stood in it. Vitruvius is generally reported to have been the architect of this building, which would contain 30,000 persons. A third theatre was built by Cornelius Balbus, at the instance of Augustus. These three all stood in the neighbourhood of the Circus Flaminius ; traces of them still remain, which will be found in the map of ancient Rome. We do not read of any more separate theatres being built ; but they were sometimes placed as appendages to the magnificent Thermæ, which about this time it became the fashion to construct.

To roof these vast areas was probably beyond the architectural skill of the Romans, nor, if thus covered, could they well have been properly and sufficiently lighted. Smaller theatres, however, were sometimes roofed, as was the lesser one at Pompeii; and the celebrated Herodes Atticus built two roofed theatres, one at Athens, the other at Corinth; this, however, was at a much later period. Originally, the Romans defended themselves from the sun by broad-brimmed hats, called *causiæ*, or *pilei Thessalici*; and from the rain by mantles or hoods. It was the Campanians, who carried to the highest pitch every refinement of luxury, who first devised the means of covering their theatres with awnings, by means of cords stretched across the *cavea*, and attached to masts which passed through perforated blocks of stone, deeply bedded in the solid wall. But we shall treat this subject more fully in the chapter which relates to amphitheatres.

We now proceed to describe the quarter of the theatres, which is inferior only to that of the forum in the variety and beauty of its buildings. As the latter was especially dedicated to business, so was the former to pleasure; and we here find ample provision made for the gratification of the citizens, not only by dramatic entertainments, but by spacious porticoes, and large areas, which probably were planted and adorned with flowers. It was in such places as these, under the shade of colonnades, or in the open air, as the weather might invite, in each other's company, that the Italians loved to take the mild exercise which suited the climate; or when they engaged in more violent exercise, it was in athletic games, or similar pursuits: to take a walk, in the English acceptation of the term, was a thing that no one ever thought of doing for pleasure. The theatres themselves, of course, are small and plain,

compared with those magnificent edifices at Rome, which we have described ; yet they bear the remains of considerable magnificence, and the larger at least would be considered of great size in any modern capital. The approach to them must have combined convenience and beauty in no common degree. Just at the point where the two routes from the forum unite, there stands a propyleum, or vestibule, of eight Ionic columns *in Antis*, raised upon two steps, one foot nine inches in diameter, and thirteen feet four inches high. In the mouldings of the entablature an artifice has been employed by the architect, to produce an effect as if black lines had been painted. This is done by cutting deep narrow lines under the projecting mouldings, allowing of no reflection, and consequently producing a sharp and black shadow. In front of one of the columns is a fountain, that never-absent article of Pompeian comfort, supplied with water through a mask sculptured in stone. A marble basin or patera is also attached to one of the columns of the portico, facing you as you enter, which was fed by pipes carried up through the centre of the column. In this vestibule some articles of gold and silver were found, together with an emerald ring. This leads into an extensive colonnade of the Doric order ; between the pillars of which were iron bars, to confine the crowd within them. It is not completely cleared out, and the dimensions, therefore, not accurately known , but in form it is triangular, and the greater side appears to have been about 450 feet in length, and the other two about 250 or 300 feet. Within this ample area are the remains of a sacred edifice, called, from its style of architecture, the Greek temple, otherwise the temple of Hercules. This, from its size, arrangement, and style of art, is one of the most important buildings in Pompeii. The Count de Clarac* dates

* See Pompeii, par le Comte de Clarac.

its erection about eight hundred years before the Christian æra; and if this remote antiquity can be maintained, it is one of the most ancient specimens existing of Grecian art, and must have been erected by some of the earliest Grecian colonists. It is in a very dilapidated state; the few indications that can be relied on seem to prove that it had an entire peristyle of columns, three feet ten inches and a half in diameter, diminishing at the top to three feet, and about four and a half diameters, or seventeen feet six inches high, comprising seven columns on the north-west, and south-east fronts, and eleven on each of the sides. The intercolumniations are one diameter and two-ninths. This is one of the few instances of an ancient building having an uneven number of columns in front, and consequently an odd one in the centre; another instance occurs in the basilica of Pæstum. The capitals belong to the Grecian Doric; the abacus, or flat stone at the top, is four feet eleven inches square, and the whole capital peculiar, inasmuch as the stone out of which it is worked includes no part of the shaft. Its great depth (one foot ten inches and a quarter) and bold projection indicate a very ancient character*; and the masonry has been covered with fine stucco. The cell appears to have been divided into several compartments, paved with mosaic, and there seem to have been two entrances from the portico, one on each side of the centre column. The whole building stands upon a podium or basement, raised five steps above the level of the ground. In front there is a further flight of five steps; these are entire, but much worn. The total length of the building, including the podium, but not the flight of steps, is about 120, its breadth about 70 feet. Before the steps is an enclosure, supposed to have been a

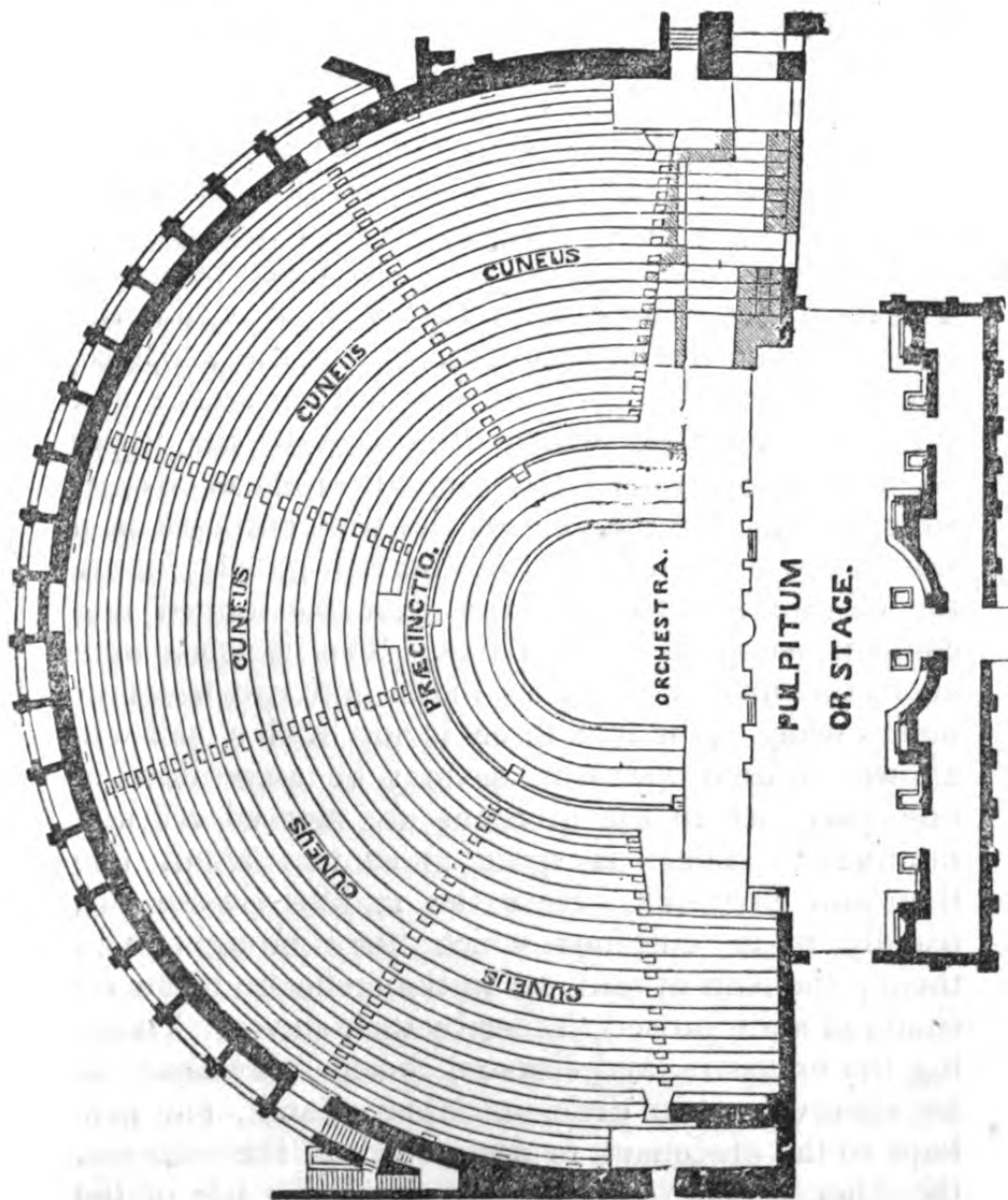
* Gell, p. 241.

pen to contain victims, and by its side two altars. A little further off stands a small monopteral building, of the Doric order, covering a puteal, or well, from which the water required in the temple was drawn. Otherwise it has been called a bidental, or locus fulminatus, a spot where a thunderbolt has fallen. Such spots were held in especial awe by the ancient Romans, and set apart as sacred to Pluto and infernal deities. The method of its construction will suit either supposition. Eight columns of tufa, one foot four inches in diameter, supported a circular epistyle and roof. Under this is a structure resembling a circular perforated altar, such as was commonly placed for security round the mouth of wells. Exactly the same covering was placed over a bidental, and in either case it was alike called puteal.

It has been supposed that the temple was erected on the site of a still older pottery, from the fragments of vases and tiles which have been discovered under the base. This spot is elevated considerably above the level of the plain, which it overlooks, and appears to have been the highest part of the isolated eminence on which Pompeii was built. Near the southwest corner of the building is an exedra, or seat, placed to afford the worshippers and others the full enjoyment of the magnificent and extensive view. The seat is semicircular, like those in the Street of Tombs. Anciently, the sea seems to have washed the foot of the hill, where now the road runs from Naples to Nocera, on the brow of which it is built; and beyond a noble prospect presented itself to the eye, embracing Castellamare, Vico, Sorrento, the promontory of Minerva, and the island of Capri, with almost the entire expanse of the dark blue bay of Naples. The city wall appears to have bounded the area upon this, the south side, so that the

portico, which would have interrupted the view, was only continued along two sides. Parallel to the eastern portico there runs a long wall, terminated at one end by the altars already mentioned, and at the other by a pedestal, inscribed

M. CLAUDIO. M.F. MARCELLO. PATRONO.



Plan of the large Theatre at Pompeii.

In the eastern portico are four entrances to different parts of the theatre. The two first, as you enter, lead into a large circular corridor surrounding the whole cavea : the third opens on an area behind the scene, from which there is a communication with the orchestra and privileged seats : the fourth led down a long flight of steps, at the bottom of which you turn, on the right, into the soldiers' quarter, on the left, into the area already mentioned. The corridor is arched over : it has two other entrances, one by a large passage from the east side, another from a smaller passage on the north. Six inner doors, called vomitoria, opened on an equal number of staircases, which ran down to the first *præcinctio*. The theatre is formed upon the slope of a hill, the corridor being the highest part, so that the audience, upon entering, descended at once to their seats ; and the vast staircases, which conducted to the upper seats of the theatres and amphitheatres at Rome, were saved. By the side of the first entrance is a staircase which led up to the women's gallery, above the corridor : here the seats were partitioned into compartments, like our boxes. The benches were about one foot three inches high, and two feet four inches wide. One foot three inches and a half was allowed to each spectator, as may be ascertained in one part, where the divisions are marked off and numbered. There is space to contain about five thousand persons*. Here the middle classes sat, usually upon cushions which they brought with them ; the men of rank sat in the orchestra below on chairs of state carried thither by their slaves. Flanking the orchestra, and elevated considerably above it, are observable two divisions, appropriated, one perhaps to the proconsul, or *duumvirs* and their officers, the other to the vestal virgins, or to the use of the

* Donaldson's Pompeii.

person who gave the entertainments. This is the more likely, because in the smaller theatre, where these boxes, if we may call them so, are also found, they have a communication with the stage.

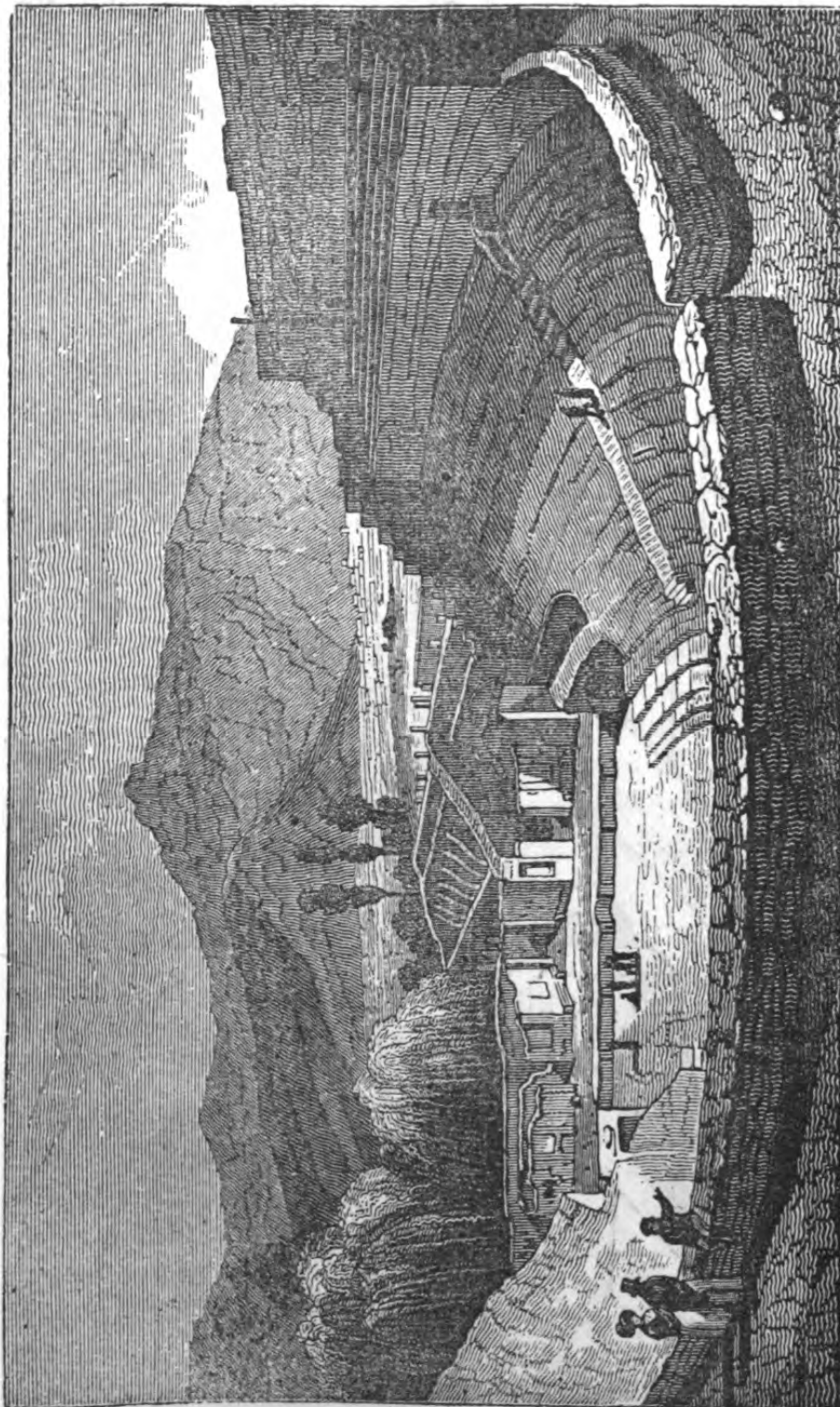
This theatre appears to have been entirely covered with marble; the benches of the cavea were of marble, the orchestra was of marble, the scene with all its ornaments was also of marble; and yet of this profusion of marble only a few fragments remain. It appears, from an inscription found in it, to have been erected, or much improved, by one Holconius Rufus. Upon the first step of the orchestra was another inscription, composed of bronze letters let into the marble. The metal has been carried away, but the cavities in the marble still remain. They were placed so as partly to encompass a statue, and run thus:—**M. HOLCONIO. M. F. RVFO. II. V. I. D. QVINQVIENS. ITER. QVINQ. TRIB. MIL. A. P. FLAMEN AVG. PATR. COLON. D. D.**—signifying, that the colony dedicated this to its patron, M. Holconius Rufus, son of Marcus: then follow his titles. In the middle of this inscription is a vacant space, where probably stood the statue of Holconius, as the cramps, by which something was fastened, still remain. Or possibly it may have been an altar, as it was the custom among the ancients to sacrifice to Bacchus in the theatre. The annexed view represents the building which we have been describing, as seen from one of the entrances leading to the orchestra, having on the right hand the scene. In the wall which supported the front of the stage are seven recesses, similar to those discovered in the theatre at Herculaneum. These have been supposed to be occupied by the musicians*.

* This represents a musician playing on the double flute. It is kept close to his mouth, and the breath hindered from escaping by a band, called *φορβείον* by the Greeks, *capistrum* by the Latins



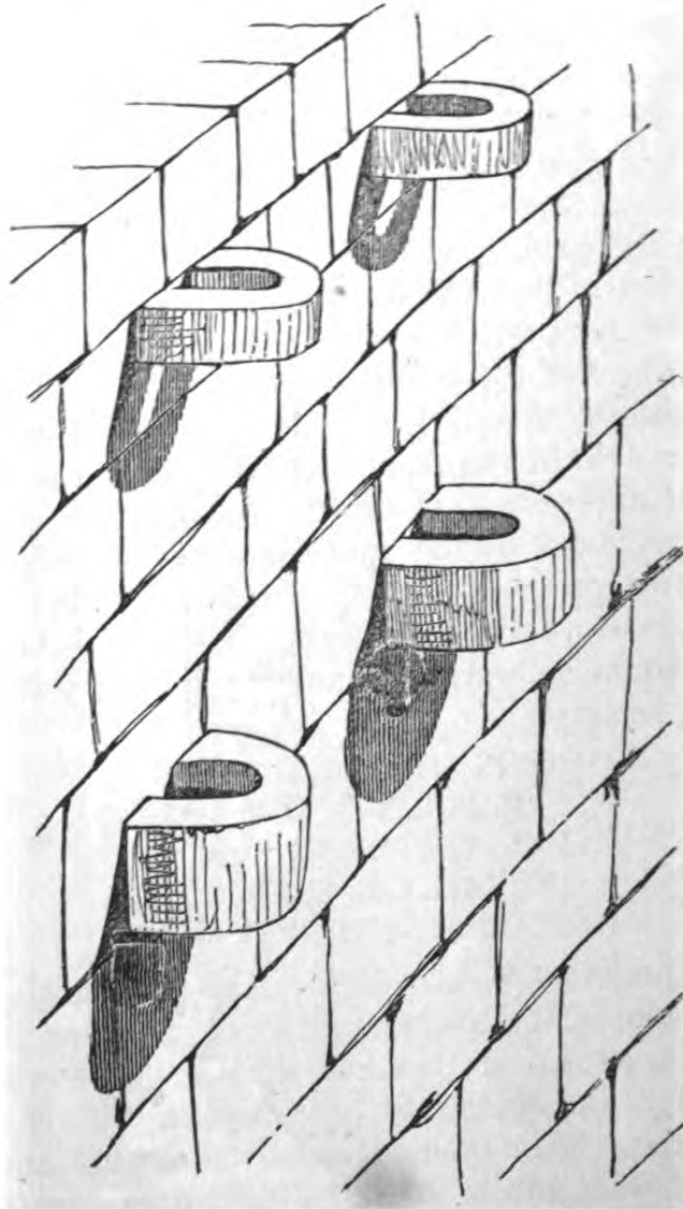
Flute-player, from a painting at Pompeii.

In front is the entrance to the orchestra : above may be seen the six rows of steps which encircled it ; then the *cavea*, despoiled of its marble, but still showing the lines of benches, and stairs dividing them into *cunei*, and the *vomitioria*, or doors of entrance. Still



View of the large Theatre.

higher is the women's gallery, and above that the external wall, which never was entirely buried, and might have pointed out to any curious observer the exact situation of Pompeii. In our general view, the reader will observe one of the masts which sup-



Stone Rings, to receive the Masts of the Velarium, from the Great Theatre at Pompeii.

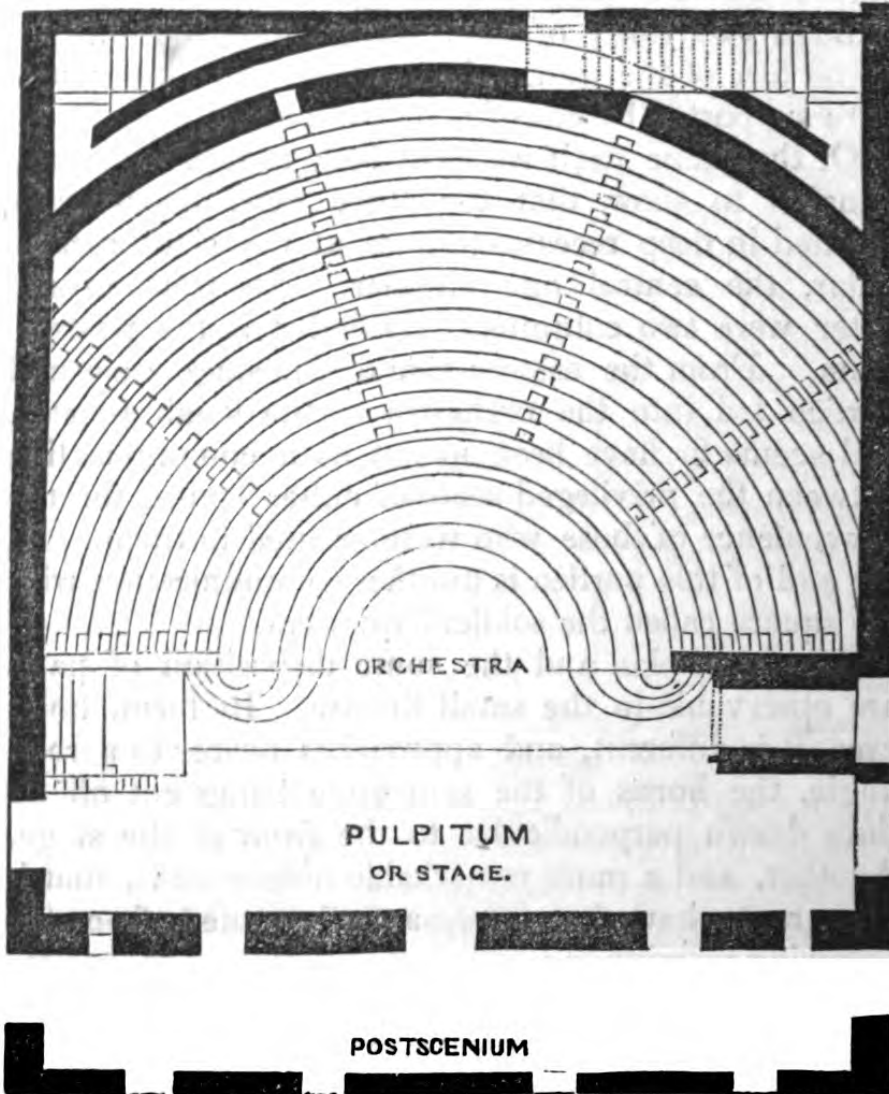
ported the velarium, or awning, restored: it passed through two rings of stone projecting from the internal face of the wall. At the Coliseum these masts were supported by consoles on the outside.

Of the scene itself we have little to say. Enough remains to show that the three chief doors were situated in deep recesses; those at the sides rectangular, the central one circular. In front of the latter were two columns. Behind it is the postsce-nium. From the eastern side of the stage a covered portico led into the orchestra of the small theatre, and seems to have been meant as a communication between the privileged seats of either house, for the convenience of those who were entitled to them. At the end of this portico is another communication with the square called the soldiers' quarters.

The same plan and the same disposition of parts are observable in the small theatre. In form, however, it is different, and approaches nearer to a rectangle, the horns of the semicircle being cut off by lines drawn perpendicular to the front of the stage. Another, and a more remarkable difference is, that it appears to have been permanently roofed, from the following inscription:—

C. QVINCTIVS . C. F. VALG.
M. PORCIVS . M. F.
DVO. VIR . DEC. DECR .
THEATRVM . TECTVM
FAC . LOCAR . EIDEMQ . PROB .

“ Caius Quinctius Valgus, son of Caius, and Marcus Porcius, son of Marcus, Duumvirs by a decree of the Decurions, let out the covered theatre to be erected by contract, and the same approved it.” It is supposed to have been erected shortly after the end of the Social war, and is inferior to the other theatre in decoration and construction. It is built of the tufa of Nocera, but the stairs which separate the cunei



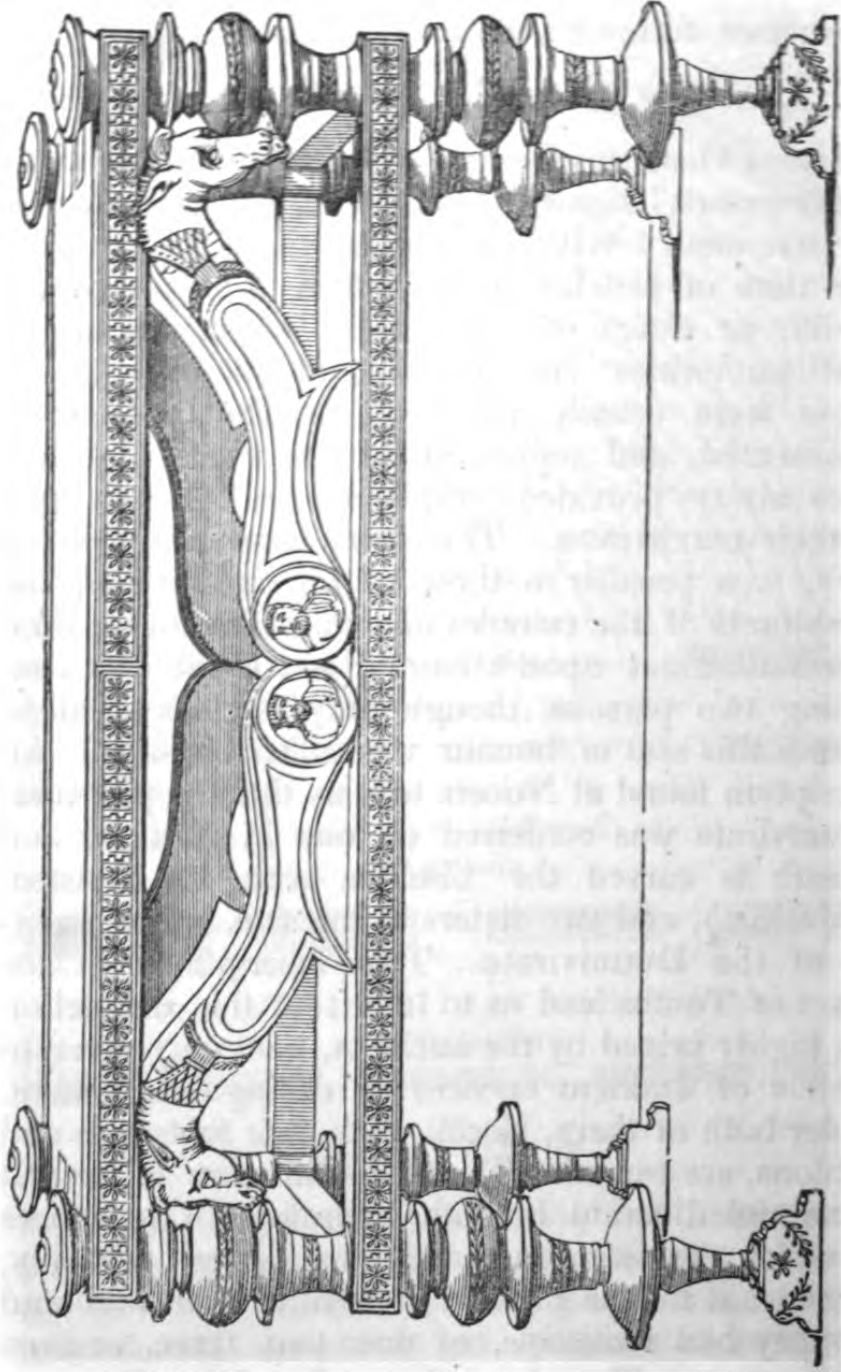
Plan of the small Theatre.

are of a very hard Vesuvian lava, well fitted to withstand the constant action of ascending and descending feet. The front wall of the proscenium, the scene, and the pavement of the orchestra, were entirely marble. The latter is of various colours: African breccia, giallo antico, and a purple marble. A band of marble, striped grey and white, runs across it from end to end of the seats, in which are inlaid letters of

bronze, eight inches and a half long, and level with the surface, forming the following inscription :—

M. OCVLATIVS . M.F. VERUS . IIVIR . PRO . LVDIS.

“ Marcus Oculatius Verus, son of Marcus, Duumvir for the games,” signifying, probably, that he laid down the pavement. Within the orchestra itself there were four tiers of benches, upon which were placed the bisellii, or chairs of state, upon which the municipal authorities and persons of distinction sat. These were usually made of bronze handsomely ornamented, and supported by four legs. The Romans always provided conspicuous and distinct seats for their magistrates. The curule chair, composed of ivory, was peculiar to those of the metropolis; the inhabitants of the colonies and municipalities placed their authorities upon a large chair, capable of containing two persons, though only one occupied it, whence this seat of honour was called bisellius. An inscription found at Nocera tells us that the perpetual Duumvirate was conferred on one M. Virtius; and beneath is carved the bisellius with its footstool (scabellum), and two lictors at the side, as the insignia of the Duumvirate. Two inscriptions in the Street of Tombs lead us to infer that this distinction was highly prized by the ancients, and only given to persons of eminent services or distinguished merit. Under both of them, bisellii, with their footstools and cushions, are carved. These bisellii were of several forms and different heights, according to the places for which they were intended: the highest, probably, were meant for the highest authorities: but high and low they had footstools, of one, two, three, or even more steps. Two have been found at Pompeii, of one of which we have given an engraving. In form and ornament they are much alike, but they are very unequal in height. Both are made of bronze,

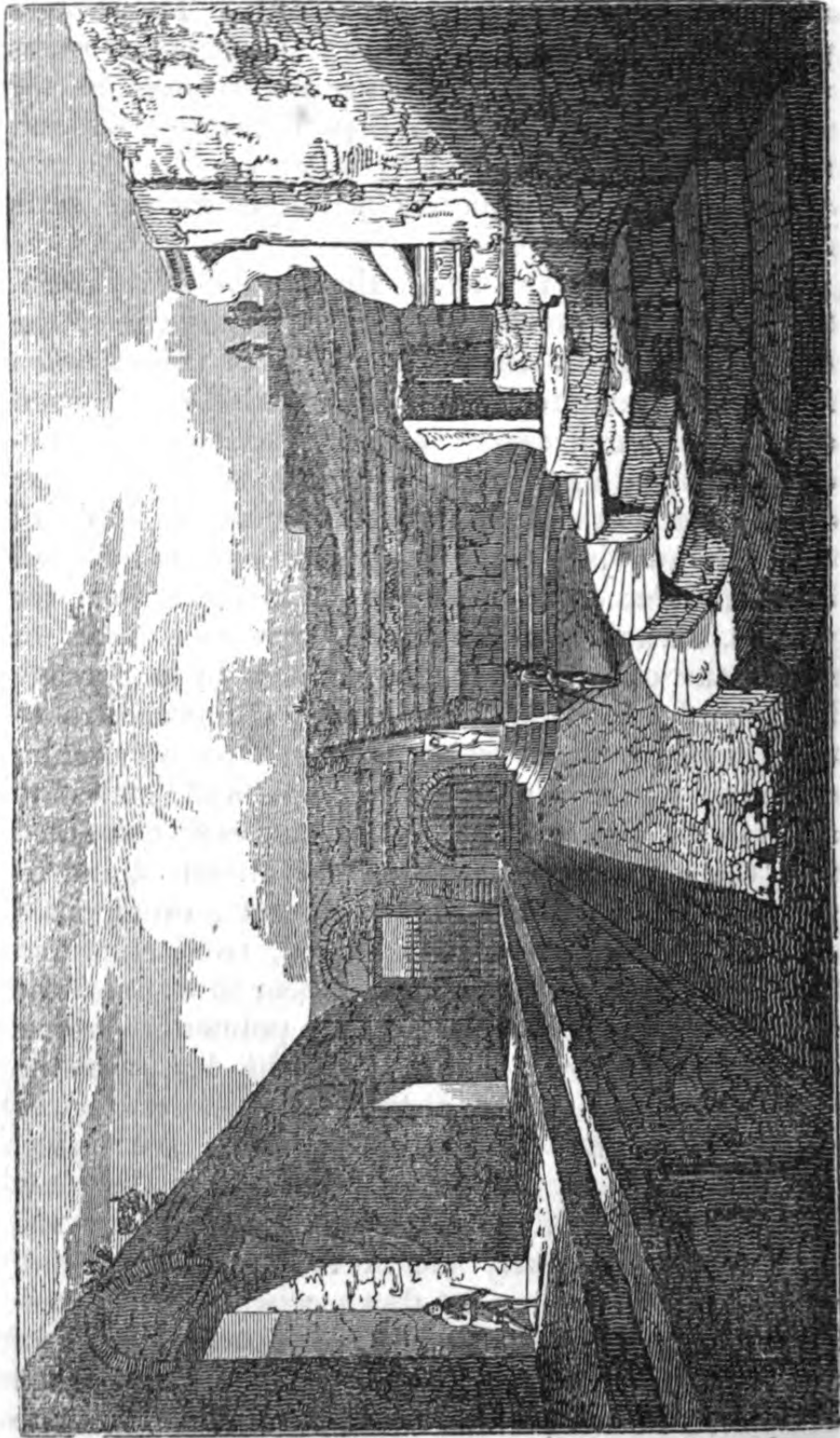


Bisellius, or Chair of State found at Pompeii.

inlaid with silver. In execution and elegance, they are equal, if not superior, to any thing of the kind in modern art, and in the workmanship an extraordi

nary finish and accuracy is visible. These were placed, as we have said, on the four ranges of steps within the orchestra, which are not so deep as the steps of the cavea, nor have they places hollowed out for the feet, to defend the backs of the inferior row of spectators, the different arrangement of seats making this unnecessary.

In the view of this small theatre which is given, the reader will plainly see the different parts of the building. Behind the four benches of the orchestra rises a high parapet, which separated the privileged and unprivileged seats. Behind this ran the *præ-inctio* or landing, accessible from below by the four curved steps at each end of the orchestra. Two of the stairs are visible, and a complete *cuneus* included between them. Above the cavea is the gallery for women. The cavea contained seventeen rows of seats: the only direct access to it is by a passage behind, also communicating with the orchestra of the large theatre, which opens into a circular corridor, where are the vomitoria and stairs to ascend to the gallery. It has been computed that there is accommodation for fifteen hundred persons. The ends of the parapet are ornamented with winged griffins' legs: behind, two sculptured figures, stoutly proportioned, appear to support the side-wall of the cavea, upon which ponderous bronze candelabra formerly stood. To the left are the stage, scene, and *postscenium*. The centre door, or *valvæ regiæ*, and one of the side ones, are visible, and the wall of the *postscenium* closes the view behind. The cavity running along the front of the stage was most likely meant to hold the curtain, which was raised, not let down, when it was necessary to conceal the scene. The marble facings of this part of the building seem to have been carried away after the eruption of Vesuvius. In front, there

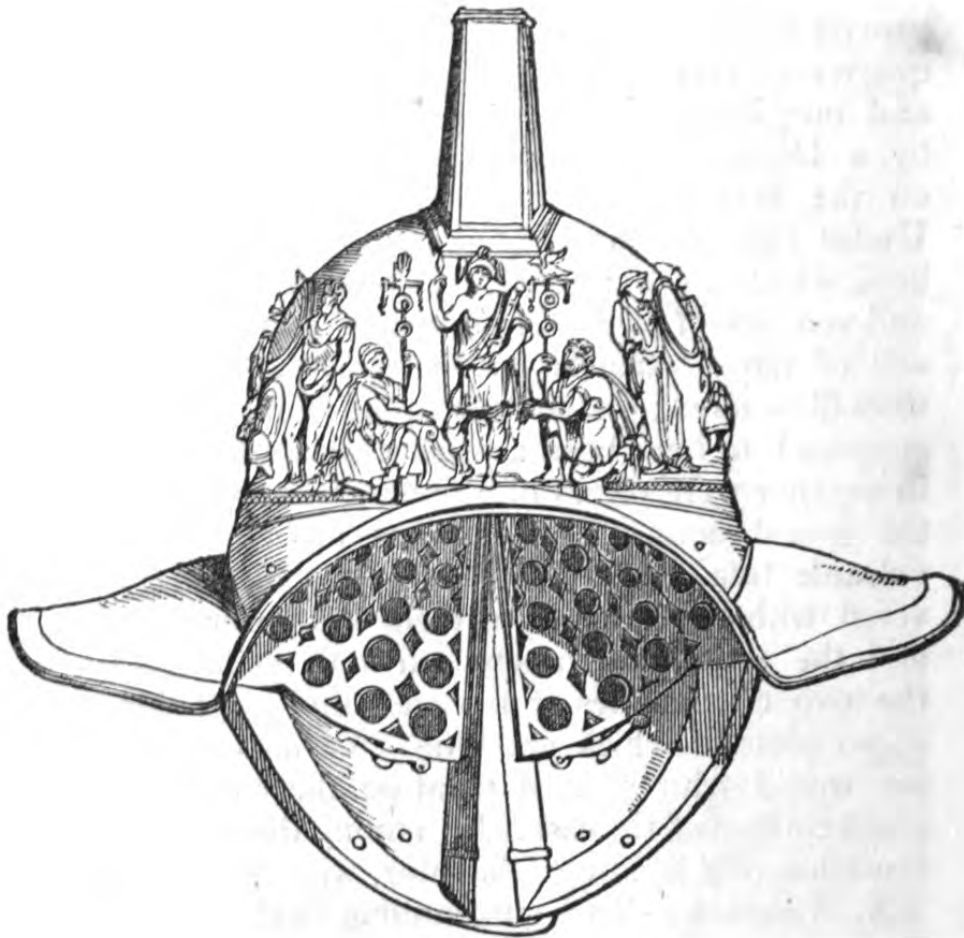


View of the small Theatre.

appear two entrances, one to the scene, the other to the orchestra: between them is a flight of steps which led up to the chamber or box above-mentioned, as set apart probably for the person who celebrated the games.

Adjoining the small theatre stands a large rectangular enclosure, called Forum Nundinarium, or provision market, by some,—by others, the soldiers' quarters. It is one hundred and eighty-three feet long and one hundred and forty-eight wide, surrounded by a Doric colonnade, having twenty-two columns on the longer sides, and seventeen on the shorter. Under this colonnade are a number of small chambers, which it is supposed were occupied by butchers, and vendors of vegetables, meats, and liquors. In one of these, utensils for the manufactory of soap were discovered; in another an oil-mill; in another, supposed to have been a prison, stocks were found; in another were pieces of armour, whence it is called the guard-room. The columns are constructed of volcanic tufa, fluted two-thirds of their height, covered with stucco, and painted, the lower part red, and the upper alternately red and yellow, except the two centre ones of the east and west side, the upper parts of which are blue. Various inscriptions are traced with a hard point on the surface of the ninth column of the east side; among them, the representation of a fighting Gladiator, with these letters—XX. Valerius. The surrounding walls were also covered with stucco, painted red below, with yellow above, and the lower chambers had red lines and ornaments rudely executed on a yellow ground. On the north-eastern side there was a direct communication with both theatres, and its porticoes must have been of great utility to the spectators, affording additional shelter from the rains, when the porticos of the great theatre might have been crowded. The

upper story of this building has been restored at one of the angles, upon the authority of various indications in the construction, from which it appears that there was a wooden gallery all round the upper story, used as the means of communication from one



Bronze Helmet found at Pompeii.

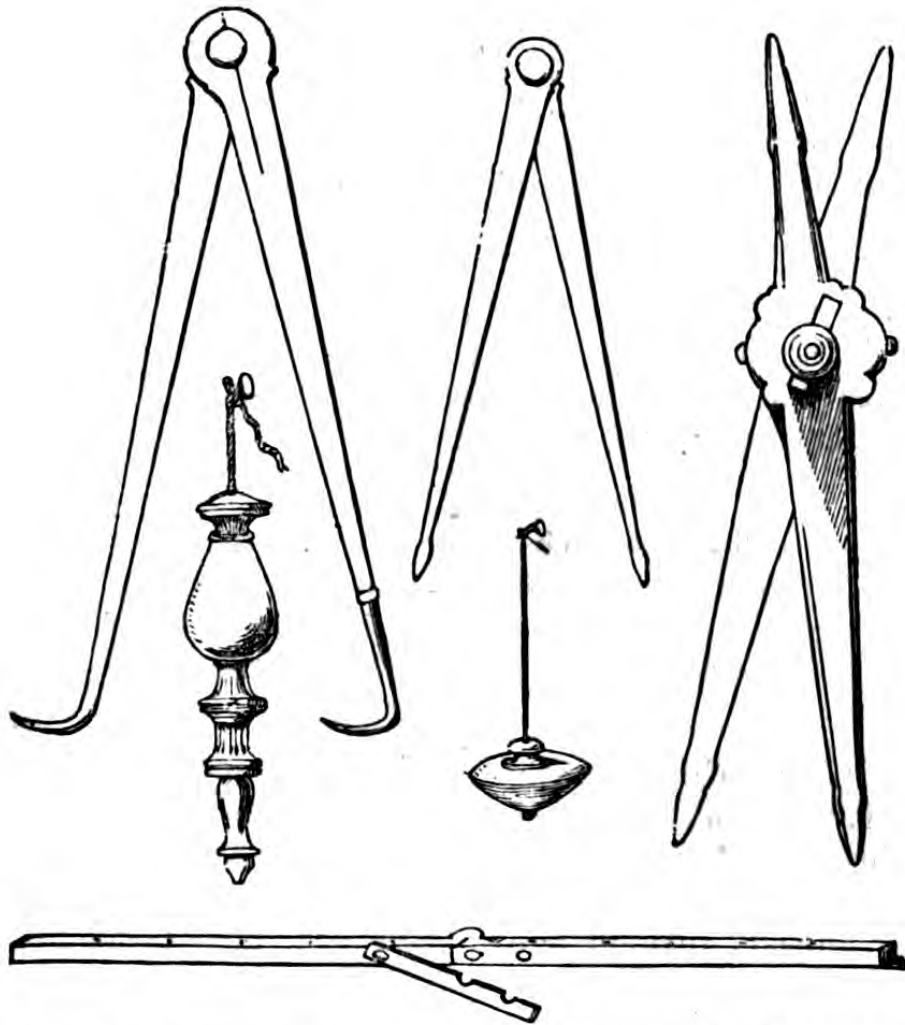
room to another Here was found a bronze helmet, highly enriched with bas-reliefs relating to the principal events of the capture of Troy. Another helmet found in Pompeii represents the triumphs of Rome in the midst of her vanquished enemies and captives ;



Specimen of the Greaves supposed to have been worn by the Gladiators.

this one has a vizor, like those of the lower ages, with square and round holes to see through. From their size and weight, these pieces of armour have been supposed by some not to have been really worn, but only intended as ornaments for trophies; but Sir W. Hamilton, who was present at their excavation, states distinctly, that he saw part of the linings adhering to them, now fallen out, and has no doubt but that they were meant for use, and of their having been worn. Greaves, or coverings for the shins, made of bronze and highly ornamented, were discovered here; on these were sculptured masks alluding to the dramatic representations. The most remarkable is one with a triple face representing the tragic, comic, and satiric features.

From hence we will return to the little theatre, and complete the circuit of this island, as the Romans would have called it, of building, which, with the exception of two private houses, is entirely devoted to public purposes. These stand together behind the small theatre, their gardens separated from it by the broad passage above-mentioned. The easternmost of them is one of the most interesting yet discovered in Pompeii, not for the beauty or curiosity of the building itself, but for its contents, which prove it to have been the abode of a sculptor. Here were found statues, some half finished, others just begun, with blocks of marble, and all the tools required by the artist. Among these were thirty-two mallets, many compasses, curved and straight; a great quantity of chisels, three or four levers, jacks for raising blocks, saws, &c. &c. On the north, a small temple, called of *Æsculapius*, adjoins this house. The entrance leads into an open court, in which stands an altar, large out of all proportion to the size of the building, peculiar in its character, and bearing a striking resemblance to the monument in



Proportional compasses, calipers, compasses, rule and weights for drawing perpendicular lines and levelling, found in Pompeii.

the Vatican commonly called the tomb of the Scipios ; the most remarkable points being the triglyphs with which the frieze is ornamented, which are of rare occurrence in constructions of this size and character, and the volutes at the corners, which are not known to occur elsewhere. This court is traversed in its whole width by a flight of nine steps, on the top of which stands the temple itself, com-

prising a small square cell, with a tetrastyle pseudo-dipteral portico. Here were found three terra-cotta statues of Æsculapius, Hygeia, and Priapus. Upon its northern side are four apartments, one communicating with the court, which probably were connected with this temple, or the adjoining one of Isis.

Returning westward, along the northern side of this island of building, we come to the temple of Isis, separated by a narrow passage leading to the great theatre, from the temple of Æsculapius. Above the entrance is this inscription—

N. POPIDIVS. N. F. CELSINVS.
 ÆDEM . ISIDIS . TERRÆ . MOTV . CONLAPSAM
 A . FVNDAMENTIS . P. SVA. RESTITVIT .
 HVNC . DECVRIONES . OB . LIBERALITATEM .
 CVM . ESSET. ANNORVM. SEXS . ORDINI . SVO
 GRATIS . ADLEGERUNT .

“ Numerinus Popidius Celsinus, son of Numerinus, restored from the foundation, at his own expense, the shrine of Isis, overthrown by an earthquake. The Decurions, on account of his liberality, elected him when sixty years of age to be one of their order free of expense.” The earthquake alluded to was probably that in the year 63, sixteen years before the eruption of Vesuvius.

This is one of the most perfect examples now existing of the parts and disposition of an ancient temple. A rude Corinthian portico encompasses the court ; the columns about one foot nine inches in diameter, the shafts painted. To the two nearest the entrance, two lustral marble basins, now in the Museum of Naples, were found attached, and a wooden box, reduced to charcoal, probably a begging-box to receive the contributions of worshippers. The *ædes*,

for the reader will observe that this little building is not in the inscription called a temple, stands insulated in the centre of the court on an elevated podium, and is accessible by a flight of steps occupying only part of its front. On each side of the portico are altars. In front of the cell is a Corinthian tetrastyle portico, comprising six columns. It is flanked by two wings, with niches for the reception of statues: behind that on the left are steps, and a side entrance to the cell. The whole exterior is faced with stucco decorations, capricious in style, and disfigured by a strange mixture of the very commonest species of ornament. Within the temple, at the further end, a strip is parted off, probably for some juggling purposes connected with the worship of the temple.

In the south-east corner of the enclosure is a small building, ornamented with pilasters, with an arched opening in the centre, and over the arch a representation of figures in the act of adoration; a vase is placed between them. This building covered the sacred well, to which there is a descent by steps, and served probably for purification of the worshippers, and other uses of the temple. The whole is grotesquely decorated with elegant though capricious stuccos, and whimsically painted. The ground-colour between the pilasters is yellow, that of the frieze red; and the flat space between the arch and the pediment is green, while within the arch it is yellow. The cornice was surmounted by terra-cotta antefixes, which, from a single fragment remaining, representing a mask, appear to have been executed with great taste and skill. On the court-wall, fronting the temple, stood a painted figure of Sigaleon, or Harpocrates, called by the Egyptians Orus the son of Isis, represented pressing his fore-finger to

his lip, to impress silence, and intimate that the mysteries of the worship were never to be revealed. Beneath the niche is a shelf, perhaps to receive offerings, under which a board was found, supposed to have been meant to facilitate kneeling. In another part of the court, a beautiful figure of Isis was found standing on its pedestal; the drapery painted purple, and in part gilt. She held in her hand the sistrum, an instrument peculiar to her service, made of bronze, in the form of a racket, with three loose bars across it, to serve the purpose of cymbals, or other noisy instruments; in her left, the key of the sluices of the Nile.

In the south side of the court, immediately opposite the entrance from the street, there are two chambers and a kitchen, with stoves, on which the bones of fish and other animals were found. A skeleton lay in the outermost room, supposed to be that of one of the priests, who, having deferred probably to make his escape until it was too late to do so by the door, was attempting to break through the walls with an axe. He had already forced his way through two, but before he could pass a third, was stifled by the vapour. The axe was lying near his remains. Behind the temple is a large chamber, forty-two feet by twenty-five, in which another skeleton was found, who seems, like his companion, to have been at dinner, for chicken-bones, egg-shells, and earthen vases were near him. In the sacred precinct lay many other skeletons, supposed those of priests, who, reposing a vain hope in the power of their deity, were unwilling to quit her protection, and remained until the accumulation of volcanic matter prevented them from seeking safety in flight. Pictures were to be seen of the priests of Isis, represented with the head closely shaven, robed in white linen,

typical of the introduction of linen among the Egyptians by Isis. They were bound by their vows to celibacy ; never ate onions ; abstained from salt to their meat, and were forbidden the flesh of sheep or hogs. Fish, we learn from Plutarch, was their chief diet. They were employed day and night in unremitting devotion round the statue of their deity. In front of this small edifice was an altar, on which sacrifices had been offered up : the top was burnt, and the bones of victims remained. The white stuccoed wall of the adjoining edifice, containing the sacred well, was discoloured with the smoke from the fire. Other altars or pedestals remain within the enclosure. On the two flanking the steps which ascend to the temple, the basalt Isiac tables, with hieroglyphics, now to be seen in the Museum at Naples, were found. In several parts of the edifice were termini, or small square columns, surmounted with the heads of various divinities. Statues also were discovered, among which was an image of Venus, with the arms and neck gilt. Paintings of architectural subjects were also discovered, detached from the walls ; two pictures of the ceremonials then in use among the priests of Isis, as well as a representation of Anubis, with the head of a dog, many priests, with palms and ears of corn, and one holding a lamp in his hand ; there was also the representation of a hippopotamus and an ibis ; the lotus ; various birds ; and, on a pilaster, dolphins. All the instruments of sacrifice, made of bronze, were obtained during the excavations.

The modern aqueduct, executed by Dominico Fontana, which conveys the water of the Sarnus to the town of Torre del Annunciata, runs through the court of this temple ; and the town having been here first discovered, it diverges, and is arched over, in

consequence of the ancient edifices above ground, which would otherwise have been destroyed.

Between the temple of Isis and the propylæum, or entrance-portico to the Greek temple, with which we began the description of this quarter, is a square building, the purpose of which is not very well defined. By some it is called a curia, by others a school for the public lectures of rhetoricians, grammarians, and others who taught the various branches of polite education. This building seems to be designated by the word tribunal, in the inscription referred to in page 261 :—

M. M. HOLCONI. RVFVS FI. CELER
CRYPTAM . TRIBVNAL . THEATRUM. S. P.
AD . DECVS . COLONIÆ.

It consists of a court, surrounded on three sides by a portico of the Doric order, with two rooms at one end, supposed to be the crypt, and an elevated pulpitum, for a speaker, at the side. The whole building is seventy-nine feet long, by fifty-seven wide; the columns, like almost all found at Pompeii, are very high in proportion to their diameter (1 : 4), being in fact eight and a half diameters, while those of the Parthenon are not quite five and a half. The intercolumniation is seven feet six inches, and the architrave was of course supported by beams. In the centre of the pillar is an elevation, placed to relieve the abacus of the superincumbent weight, which might perhaps have broken it. There are two entrances: one from the street; the other, which has been much used and worn, from the portico surrounding the Greek temple. Between this building and the circular back wall of the great theatre, there is an open area, where stands a large square mass of building, supposed by some to have been the foundation for a cistern. Its real purpose is doubtful.

From hence we pass out into the portico surrounding the Greek temple, and conclude the survey of this interesting part of the city at the propylæum, where we began it.

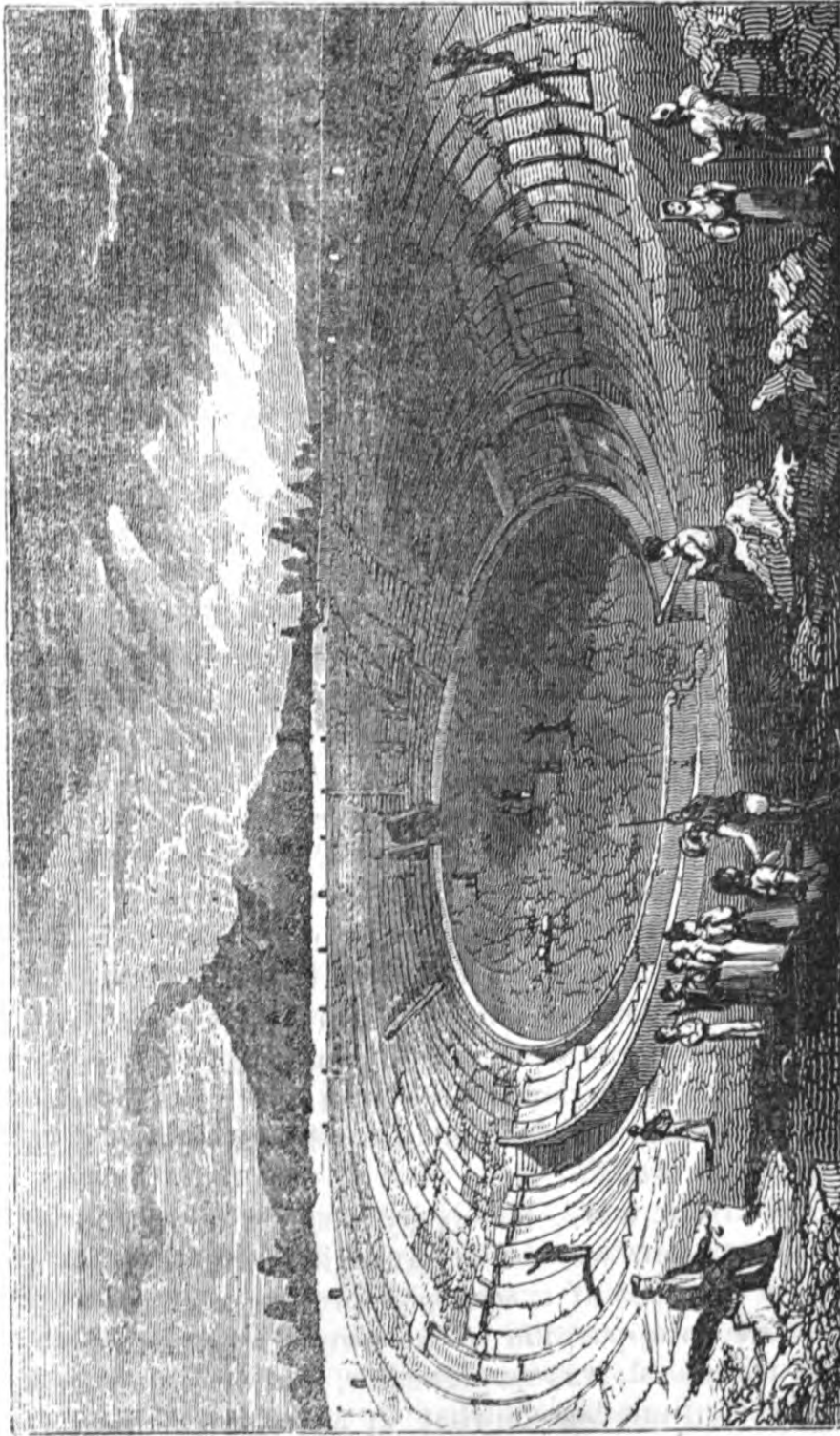


Comic Mask on a Tile found in Pompeii.

CHAPTER I

AMPHITHEATRES.

SOME hundred yards from the theatres, in the south-eastern angle of the walls of the town, stands the Amphitheatre. The splendour of spectacle was carried to an extreme at Rome which has never been equalled. At an early period, A. U. 490, the practice of compelling human beings to fight for the amusement of spectators was introduced; and twelve years later the capture of several elephants in the first Punic war proved the means of introducing the chase, or rather the slaughter of wild beasts, into the Roman circus. The taste for these spectacles increased of course with its indulgence, and their magnificence with the wealth of the city and the increasing facility and inducement to practise bribery, which was offered by the increased extent of provinces subject to Rome. It was not however until the last period of the republic, or rather until the domination of the Emperors had collected into one channel the tributary wealth which previously was divided among a numerous aristocracy, that buildings were erected solely for the accommodation of gladiatorial shows; buildings apparently beyond the compass of a subject's wealth, in which perhaps the magnificence of ancient Rome is most amply displayed. Numerous examples, scattered throughout her empire in a more or less advanced stage of decay, still attest the luxury and solidity of their construction: while at Rome the Coliseum asserts the pre-eminent splendour of the metropolis; a monument surpassed in magnitude by the pyramids alone, and as



View of the Amphitheatre at Pompeii.

superior to them in skill and varied contrivance of design, as to other buildings in its gigantic magnitude. Six hundred years had tried its stability, when its stately mass, unbroken by the efforts of barbarians, suggested the well-known expression recorded by Bede : " *Quamdiu stabit Colisæus, stabit et Roma ; quando cadet Colysæus, cadet Roma ; quando cadet Roma, cadet et mundus.*"—So long as the Coliseum stands, Rome shall stand : when the Coliseum falls, Rome will fall ; when Rome falls, the world will fall. Religious veneration united probably with the impressive recollection of that stupendous building to prompt this prediction ; which now seems not unlikely to be verified, but in a sense different to that which the author contemplated. The Coliseum, which Bede chose as the type of the stability of Roman greatness, more weakened by the peaceful plunders of a rapacious hierarchy, than by the attacks of barbarian invaders, or the wasting of time, is said already to show signs of approaching downfall ; and as of old the temporal empire of Rome, so the more oppressive spiritual empire which succeeded it has shrunk before the hardy tribes of the north. Rome and the Coliseum are alike a wreck of what they have been, and may together crumble, and together come to their end. The world meanwhile retains its former youth and vigour : still that prediction has been more than usually fortunate, of which after the lapse of eleven centuries no part is proved false, and half is strengthened rather than impaired in credit.

The Greek word, which by a slight alteration of its termination, we render Amphitheatre, signifies a theatre, or place of spectacles, forming a continuous enclosure, in opposition to the simple theatre, which, as we have said, was semicircular, but with the seats usually continued somewhat in advance of the diameter of the semicircle. The first amphitheatre

seems to have been that of Curio, already described, consisting of two moveable theatres which could be placed face to face, or back to back, according to the species of amusement for which they were required. From the construction of its parts, therefore, we may presume that one of its diameters was longer than the other, and derive from hence the elliptical or oval form usually given to these buildings, in preference to the circular form, which appears best calculated for the convenience of the whole body of spectators. Usually, gladiatorial shows were given in the Forum, and the chase, and combats of wild beasts exhibited in the Circus, where once, when Pompey was celebrating games, some enraged elephants broke through the barrier which separated them from the spectators. This circumstance, together with the unsuitableness of the Circus, which was divided into two compartments by the spina, a low wall surmounted by pillars, obelisks, and other ornamental erections, and besides, from its disproportionate length, was ill adapted to afford a general view to all the spectators, determined Julius Cæsar, in his dictatorship, to construct a wooden theatre in the Campus Martius, built especially for hunting (*θεατρὸν κυνηγαιτικὸν*), "which was called amphitheatre [apparently the first use of the word], because it was encompassed by circular seats without a scene*." The first permanent amphitheatre was built partly of stone and partly of wood, by Statilius Taurus, at the instigation of Augustus, who was passionately fond of these sports, especially of the hunting of rare beasts. This was burnt during the reign of Nero, and, though restored, fell short of the wishes of Vespasian, who commenced the vast structure, completed by his son Titus, and afterwards called the Coliseum, otherwise the Flavian amphitheatre. The expense of this

building it is said would have sufficed to erect a capital city, and, if we may credit Dion, 9000 wild beasts were destroyed in its dedication. Eutropius restricts the number to 5000. When the hunting was over the arena was filled with water, and a sea-fight ensued.

The construction of these buildings so much resembles the construction of theatres, that it will not be necessary to describe them at any great length. Without, they usually presented to the view an oval wall, composed of two or more stories of arcades, supported by piers of different orders of architecture adorned with pilasters, or attached pillars. Within, an equal number of stories of galleries gave access to the spectatory at different elevations, and the inclined plane of the seats was also supported upon piers and vaults, so that the ground-plan presented a number of circular rows of piers, arranged in radii converging to the centre of the arena. A suitable number of doors opened upon the ground floor, and passages from thence, intersecting the circular passages between the piers, gave an easy access to every part of the building. Sometimes a gallery encompassed the whole, and served as a common access to all the stairs which led to the upper stories. This was the case in the amphitheatre at Nismes. Sometimes each staircase had its distinct communication from without: this was the case at Verona. The arrangement of the seats was the same as in theatres; they were divided horizontally by *præinctiones*, and vertically into *cunei* by staircases. The scene and apparatus of the stage was of course wanting, and its place occupied by an oval area, called arena, from the sand with which it was sprinkled, to absorb the blood shed, and give a firmer footing than that afforded by a stone pavement. It was sunk twelve or fifteen feet below the lowest range of seats, to secure the spectators from injury, and was besides fenced

with round wooden rollers, turning in their sockets, placed horizontally against the wall, such as the reader may have observed placed on low gates to prevent dogs from climbing over, and with strong nets. In the time of Nero these nets were knotted with amber* ; and the Emperor Carinus caused these to be made of golden cord or wire †. Sometimes, for more complete security, ditches, called *euripi*, surrounded the arena. This was first done by Cæsar, as a protection to the people against the elephants which he exhibited, that animal being supposed to be particularly afraid of water ‡. The arena was sometimes spread with pounded stone. Caligula, in a fit of extravagance, used borax ; and Nero, to surpass him, caused the brilliant red of cinnabar to be mixed with borax.

In the centre of the arena was an altar dedicated sometimes to Diana or Pluto : more commonly to Jupiter Latiaris, the protector of Latium, in honour of whom human sacrifices were offered. Passages are to be found in ancient writers, from which it is inferred that the games of the amphitheatre were usually open by sacrificing a *bestiarius*, one of those gladiators whose profession was to combat wild beasts, in honour of this blood-thirsty deity §. Beneath the arena dens are supposed to have been constructed to contain wild beasts. At the Coliseum numerous under-ground buildings are said by Fulvius to have existed, which he supposed to be sewers constructed to drain and cleanse the building ||. Others with more probability have supposed them to be the dens of wild beasts. Immense accommodation was requisite to contain the thousands of animals which were slaughtered upon solemn oc-

* Pliny, lib. xxxv. † Calpurnius. ‡ Pliny, lib. viii.

§ Lipsius De Amphitheatro cap. iv.

|| De Mirabilibus Urbis, lib. i.

casions : but no great provision need have been made to carry off the rain-water which fell upon the five or six acres comprised within the walls of the building. Others again have supposed them formed to introduce the vast bodies of water by which the arena was suddenly transformed into a lake, when imitations of naval battles were exhibited. In 1813 the arena was excavated, and numerous substructures discovered, a view of which is given in the second volume of *Menageries*. It has since been filled up, the ground having become a swamp for want of drainage. Doors pierced in the wall which supported the podium communicated with these, or with other places of confinement beneath the part allotted to the audience, which being thrown open, vast numbers of animals could be introduced at once. Vopiscus tells us that a thousand ostriches, a thousand stags, and a thousand boars were thrown into the arena at once by the Emperor Probus. Sometimes, to astonish, and attract by novelty, the arena was converted into a wood. "Probus," says the same author, "exhibited a splendid hunting match, after the following manner. Large trees torn up by the roots were firmly connected by beams, and fixed upright ; then earth was spread over the roots : so that the whole circus was planted to resemble a wood, and offered us the gratification of a green scene*."

The same order of precedence was observed as at the theatre ; senators, knights, and commons having each their appropriate place. To the former was set apart the podium, a broad precinct or platform which ran immediately round the arena. Hither they brought the curule seats or bisellii, described in speaking of the theatres of Pompeii : and here was the suggestus, a covered seat appropriated to the

* In Probo.

Emperor. It is supposed that in this part of the building there were also seats of honour for the exhibitor of the games and the vestal virgins. If the podium was insufficient for the accommodation of the senators, some of the adjoining seats were taken for their use. Next to the senators sat the knights, who seem here, as in the theatre, to have had fourteen rows set apart for them; and with them sat the civil and military tribunes. Behind were the popularia, or seats of the plebeians. Different tribes had particular *cunei* allotted to them. There were also some further internal arrangements, for Augustus separated married from unmarried men, and assigned a separate *cuneus* to youths, near whom their tutors were stationed. Women were stationed in a gallery, and attendants and servants in the highest gallery. The general direction of the amphitheatre was under the care of an officer named *villicus amphitheatri*. Officers called *locarii* attended to the distribution of the people, and removed any person from a seat which he was not entitled to hold.

We may notice, as a refinement of luxury, that concealed conduits were carried throughout these buildings, from which scented liquids were scattered over the audience. Sometimes the statues which ornamented them were applied to this purpose, and seemed to sweat perfumes through minute holes, with which the pipes that traversed them were pierced. It is this to which Lucan alludes in the following lines :

— As when mighty Rome's spectators meet
 In the full theatre's capacious seat,
 At once, by secret pipes and channels fed,
 Rich tinctures gush from every antique head,
 At once ten thousand saffron currents flow,
 And rain their odours on the crowd below.

ROWE'S *Lucan*, book ix.

Saffron was the material usually employed for these refreshing showers. The dried herb was infused in wine, more especially in sweet wine: balsams and the more costly unguents were sometimes employed for the same purpose.

Another contrivance too remarkable to be omitted in a general account of amphitheatres, is the awning by which spectators were protected from the overpowering heat of an Italian sun. This was called *Velum*, or *Velarium*; and it has afforded matter for a good deal of controversy, how a temporary covering could be extended over the vast areas of these buildings. Something of the kind was absolutely necessary: for the spectacle often lasted for many hours, and when anything extraordinary was expected the people went in crowds before daylight to obtain places, and some even at midnight. The Campanians, as we have before said, invented the means of stretching awnings over their theatres. Quintus Catulus introduced them at Rome, when he celebrated games at the dedication of the Capitol, A. U. 684. Lentulus Spinther, a contemporary of Cicero, first erected fine linen awnings (*carbasina vela*). Julius Cæsar covered over the whole Forum Romanum, and the Via Sacra, from his own house to the Capitol, which was esteemed even more wonderful than his gladiatorial exhibition*. Dio mentions a report that these awnings were of silk: but he speaks doubtfully; and it is scarcely probable that even Cæsar's extravagance would have carried him so far. Silk at that time was not manufactured at Rome; and we learn from Vopiscus, that even in the time of Aurelian, the raw material was worth its weight in gold. The veil of Nero, studded with golden stars, has been already mentioned. Lucretius, speaking of the effect of coloured bodies upon trans-

* Pliny, *Hist. Nat.* xix. 6.

mitted light, has a fine passage illustrative of the magnificence displayed in this branch of theatrical decoration.

This the crowd surveys
 Oft in the theatre, whose awnings broad,
 Bedecked with crimson, yellow, or the tint
 Of steel cerulean, from their fluted heights
 Wave tremulous; and o'er the scene beneath,
 Each marble statue, and the rising rows
 Of rank and beauty, fling their tint superb.
 While as the walls with ampler shade repel
 The garish noon-beam, every object round
 Laughs with a deeper dye, and wears profuse
 A lovelier lustre, ravished from the day*.

Wool however was the most common material, and the velaria made in Apulia were most esteemed, on account of the whiteness of the wool.

Those who are not acquainted by experience with the difficulty of giving stability to tents of large dimensions, and the greater difficulty of erecting awnings, when, on account of the purpose for which they are intended, no support can be applied in the centre, may not fully estimate the difficulty of erecting and managing these velaria. Strength was necessary both for the cloth itself, and for the cords which strained and supported it, or the whole would have gone to shivers under the first gust of wind; and strength could not be obtained without great weight. Many of our readers probably are not aware, that however short and light a string may be, no amount of tension applied horizontally will stretch it into a line

* Lucretius, iv. 73, Good's translation. In the seventh line "rank and beauty" is an interpolation of the translator's, taken from the practice of the modern theatre. In the Roman theatre they were as widely separated as are the boxes and one-shilling gallery in our own.

perfectly and mathematically straight. Practically the deviation is imperceptible, where the power applied is very large in proportion to the weight and length of the string: still it exists; and to take a common example, the reader probably never saw a clothes-line stretched out, though neither the weight nor length of the string are considerable, without the middle being visibly lower than the ends. When the line is at once long and heavy, an enormous power is required to suspend it even in a curve between two points; and the amount of tension, and difficulty of finding materials able to withstand it, are the only obstacles to constructing chain bridges which should be thousands, instead of hundreds of feet in length. In these erections, the piers are raised to a considerable height, that a sufficient depth may be allowed for the curve of the chains without depressing the roadway. Ten times—a hundred times the power which was applied to strain them into that shape would not suffice to bring them even so near to a horizontal line, but that the most inaccurate and unobservant eye should at once detect the inequality in their level; and the chains themselves would probably give way before such a force as this could be applied to them. The least diameter of the Coliseum is nearly equal in length to the Menai bridge; and if the labour of stretching cords over the one seems small in comparison with that of raising the ponderous chains of the other, we may take into consideration the weight of cloth which those cords supported, and the increase of difficulties arising from the action of the wind on so extensive a surface. In boisterous weather, as we learn from Martial and other authors, these difficulties were so great, that the velum could not be spread. When this was the case, the Romans used broad hats, or a sort of parasol, which was called

umbella, from *umbra*, shade*. These were not confined to the Amphitheatre, but were used at the Circus, and other public places, and served to indicate to which faction of the Circus the wearer belonged; for the chariot-drivers, like jockies, wore various colours, with this difference, that the jockies adopt this practice merely to indicate to whom the horse which they ride belongs, while the colours of the Circus, originally worn only for the sake of distinction, were ultimately adopted as party badges: and not only the populace, but the nobility of Rome and Constantinople adopted their favourite hue with a brutal zeal. White, red, blue, and green † were the colours in use; and the heat with which the honour of the several factions, or the claims of rival charioteers were advocated, often led to bloody and desperate riots. We may add, in conclusion, that Suetonius mentions as one of Caligula's tyrannical extravagances, that sometimes at a show of gladiators, when the sun's heat was most intense, he would cause the awning to be drawn back, and at the same time forbid any person to leave the place.

The difficulty of the undertaking has given rise to considerable discussion as to the means by which the Romans contrived to extend the velum at such a height over so great a surface, and to manage it at pleasure. Sailors were employed in the service, for the Emperor Commodus, who piqued himself on his gladiatorial skill, and used to fight in the arena,

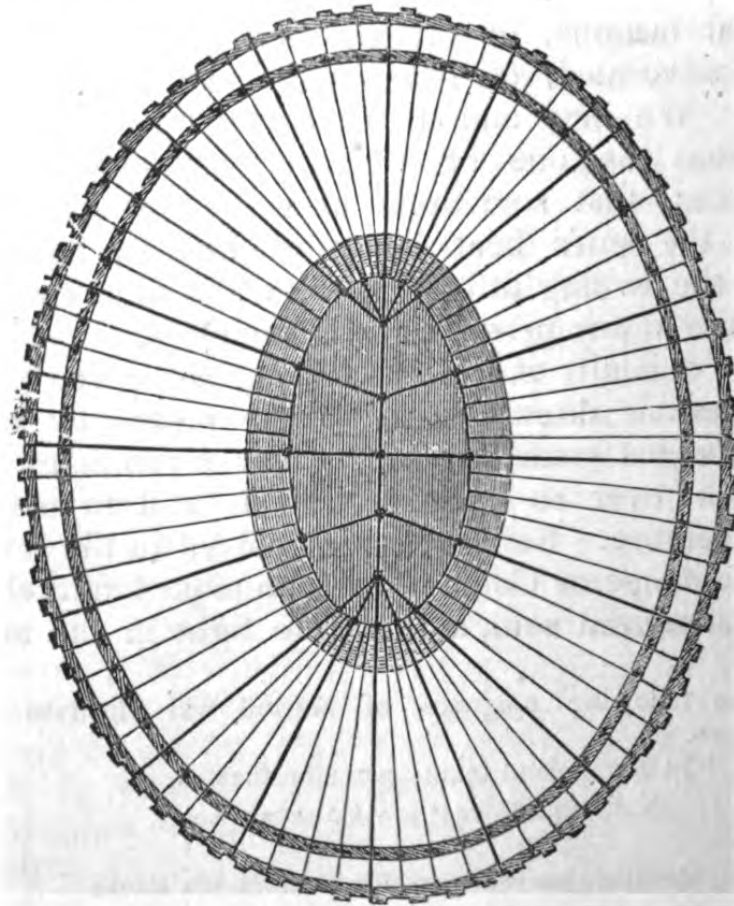
* The following epigrams of Martial will illustrate these points:—

In Pompeiano tectus spectabo theatro,
Nam populo ventus vela negare solet.

Accipe quæ nimios vincant umbracula soles:
Sit licet et ventus, te tua vela tegent.

† Albat, russati, veneti, prasini.

believing himself mocked by the servile crowd of spectators, when once they hailed him with divine honours, gave order for their slaughter by the sailors who were managing the veils*. Concerning the method of working them, no information has been handed down. It is evident, however, that they were supported by masts which rose above the summit of the walls. A view of one of these, with the method of fastening it, has been given in the chapter on theatres. Near the top of the outer wall of the Coliseum there are 240 consoles, or projecting blocks of stone, in which holes are cut to receive the ends of spars, which ran up through holes cut in the cor-



Plan of the Velarium, according to Fontana.

* Lampridius.

nice to some height above the greatest elevation of the building. A sufficient number of firm points of support at equal intervals was thus procured; and this difficulty being overcome, the next was to stretch as tight as possible the larger ropes, upon which the whole depended for its stability.

Fontana has given a drawing of the velarium according to his own idea, but has neglected to explain in words the manner of its execution. In the absence of all certain authority, we shall endeavour as clearly as possible to describe a plan, by which, according to our notions, the velarium might have been supported and managed without any very great difficulty.

The amphitheatre being oval, the velarium would of course be of the same form. We conjecture that a large oval ring of strong rope, about the size of the arena, was first formed, and divided into a certain number of equal parts by metal rings, corresponding in number and situation with the masts by which the awning was to be supported. To these rings long stout ropes would be attached, and rove through pulleys in the heads of the masts, the ends being brought down to the ground, and attached to windlasses. At a given signal this whole framework would begin to ascend by the slow action of the windlasses, and by a little dexterity, the whole could be drawn equally tight, and the strain thrown equally on all the masts. The awning itself we imagine to have consisted of a number of pieces, either permanently attached to the framework of ropes, and drawn and undrawn by an apparatus of smaller ropes and pulleys, or sent aloft at pleasure by similar means. The phraseology of the passage in Suetonius above quoted, which states that Caligula forbade the audience to quit the amphitheatre, "*reductis* interdum flagrantissimo sole velis," seems to favour the former supposition.

The games to which these buildings were especially devoted were twofold;—those in which wild beasts were introduced, to combat either with each other or with men; and those in which men fought with men. Of the former, some account has been given in the second volume of *Menageries*; and therefore we shall here limit ourselves to a short account of the rise and progress of the latter branch of gladiatorial exhibitions: for under the general term of gladiators are comprised all who fought in the arena, though those who pitted their skill against the strength and ferocity of savage animals were peculiarly distinguished by the name of *bestiarii*. In general these unhappy persons were slaves, or condemned criminals, who by adopting this profession purchased an uncertain prolongation of existence: but freemen sometimes gained a desperate subsistence by thus hazarding their lives; and in the decline of Rome, knights, senators, and even the emperors sometimes appeared in the arena, at the instigation of a vulgar and degrading thirst for popular applause.

The origin of these bloody entertainments may be found in the earliest records of profane history, and the earliest stages of society. Among half-civilized or savage nations, both ancient and modern, we find it customary after a battle to sacrifice prisoners of war in honour of those chiefs who have been slain. Thus Achilles offers up twelve young Trojans to the ghost of Patroclus*, and similar examples may be easily found among our northern ancestors and the indigenous American tribes of the present day. In course of time it became usual to sacrifice slaves at the funeral of all persons of condition; and either for the amusement of the spectators, or because it appeared barbarous to massacre defenceless men, arms were placed in their hands, and they were incited to save their own lives by the

* Il. xxiii. 175.

death of those who were opposed to them. In later times, the furnishing these unhappy men became matter of speculation, and they were carefully trained to the profession of arms to increase the reputation and popularity of the contractor who provided them. This person was called *lanista* by the Romans. At first these sports were performed about the funeral pile of the deceased, or near his sepulchre, in consonance with the idea of sacrifice in which they originated: but as they became more splendid, and ceased to be peculiarly appropriated to such occasions, they were removed, originally to the Forum, and afterwards to the Circus and amphitheatres.

Gladiators were first exhibited at Rome, A. U. 488, by M. and D. Brutus, on occasion of the death of their father. This show consisted only of three pairs. A. U. 537, the three sons of M. Æmilius Lepidus the augur, entertained the people in the Forum with eleven pair, and the show lasted three days. A. U. 552, the three sons of M. Valerius Lævinus exhibited twenty-five pairs: and thus these shows increased in number and frequency, and the taste for them strengthened with its gratification, until not only the heir of any rich or eminent person lately deceased, but all the principal magistrates, and the candidates for magistracies, presented the people with shows of this nature to gain their favour and support.

This taste was not without its inconveniences and dangers. Men of rank and political importance kept *families*, as they were called, of gladiators,—desperadoes ready to execute any command of their master; and towards the fall of the republic, when party rage scrupled not to have recourse to open violence, questions of the highest import were debated in the streets of the city by the most despised of its slaves. In the conspiracy of Catiline so much danger was apprehended from them, that particular

measures were taken to prevent their joining the disaffected party: an event the more to be feared, because of the desperate war in which they had engaged the republic a few years before, under the command of the celebrated Spartacus. At a much later period, at the triumph of Probus, A. D. 281, about fourscore gladiators exhibited a similar courage. Disdaining to shed their blood for the amusement of a cruel people, they killed their keepers, broke out from the place of their confinement, and filled the streets of Rome with blood and confusion. After an obstinate resistance they were cut to pieces by the regular troops.

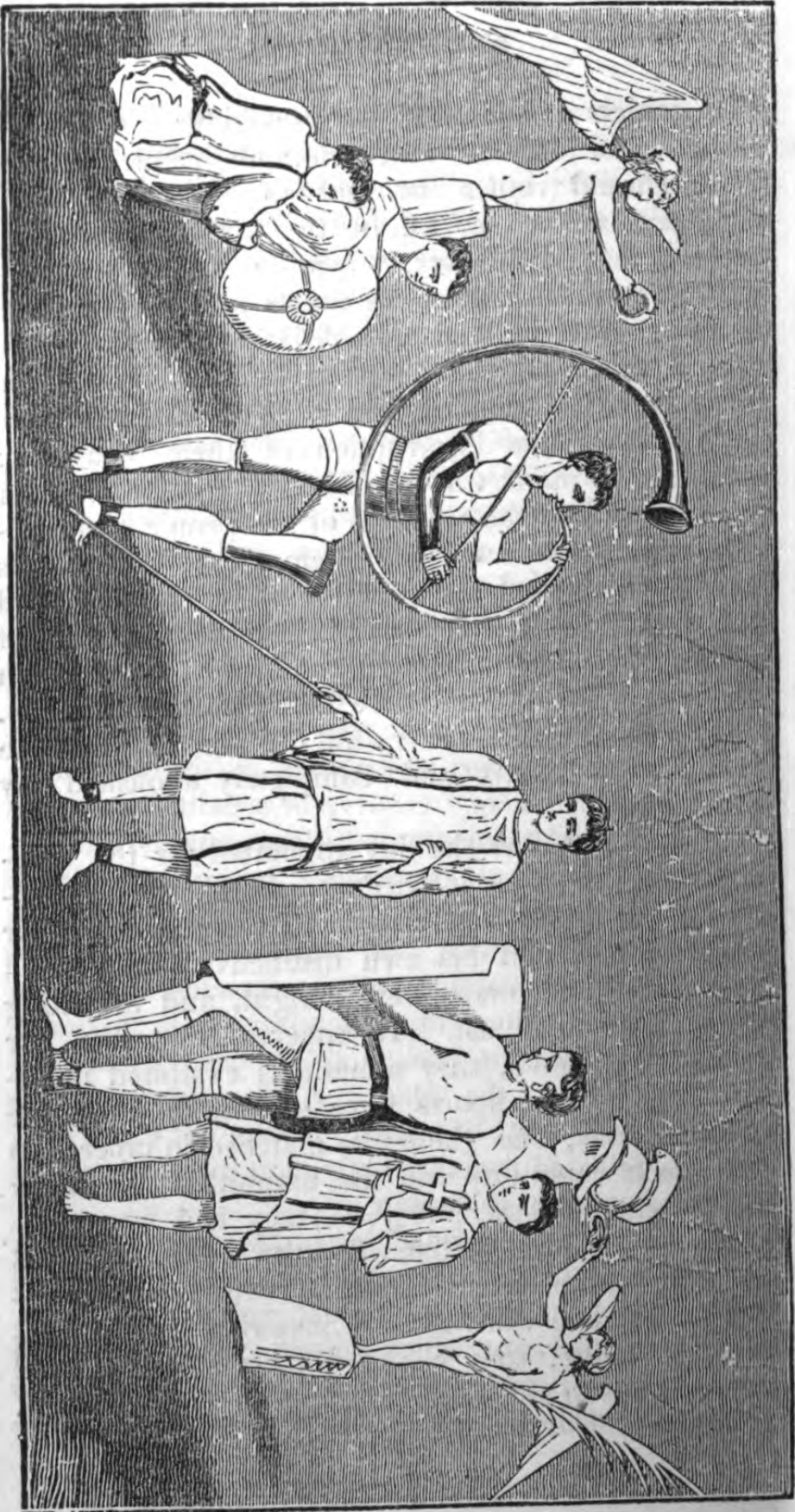
The oath which they took upon entering the service is preserved by Petronius, and is couched in these terms: "We swear after the dictation of Eumolpus to suffer death by fire, bonds, stripes, and the sword; and whatever else Eumolpus may command, as true gladiators, we bind ourselves body and mind to our master's service."

From slaves and freedmen the inhuman sport at length spread to persons of rank and fortune, inso-much that Augustus was obliged to issue an edict, that none of senatorial rank should become gladiators; and soon after he laid a similar restraint on the knights. Succeeding emperors, according to their characters, encouraged or endeavoured to suppress this degrading taste. Nero is related to have brought upwards of four hundred senators and six hundred knights upon the arena; and in some of his exhibitions, even women of quality contended publicly. The excellent Marcus Aurelius not only retrenched the enormous expenses of these amusements, but ordered that gladiators should contend only with blunt weapons. But they were not abolished until some time after the introduction of Christianity. Constantine published the first

edict which condemned the shedding of human blood; and ordered that criminals condemned to death should rather be sent to the mines, than reserved for the service of the amphitheatre. In the reign of Honorius, when he was celebrating with magnificent games the retreat of the Goths and the deliverance of Rome, an Asiatic monk, by name Telemachus, had the boldness to descend into the arena to part the combatants. "The Romans were provoked by this interruption of their pleasures; and the rash monk was overwhelmed under a shower of stones. But the madness of the people soon subsided; they respected the memory of Telemachus who had deserved the honours of martyrdom, and they submitted without a murmur to the laws of Honorius, which abolished for ever the human sacrifices of the amphitheatre*." This occurred A. D. 404. It was not however until the year 500 that the practice was finally and completely abolished by Theodoric.

Some time before the day appointed for the spectacle, he who gave it (*editor*) published bills containing the name and ensigns of the gladiators, for each of them had his own distinctive badge, and stating also how many were to fight, and how long the show would last. It appears, that like our itinerant showmen, they sometimes exhibited paintings of what the sports were to contain. On the appointed day, the gladiators marched in procession with much ceremony into the amphitheatre. They then separated into pairs, as they had been previously matched. At first, however, they contended only with staves called *rudes*, or with blunted weapons; but when warmed and inspirited by the presence of battle, they changed their weapons, and advanced at the sound of trumpets to the real strife.

* Gibbon, chap. xxx.



Gladiators.

The conquered looked to the people or to the Emperor for life ; his antagonist had no power to grant or to refuse it ; but if the spectators were dissatisfied and gave the signal of death, he was obliged to become the executioner of their will. This signal was the turning down the thumbs, as is well known. If any showed signs of fear, their death was certain ; if on the other hand they waited the fatal stroke with intrepidity, the people generally relented. But fear and want of spirit were of very rare occurrence, in-somuch that Cicero more than once proposes the principle of honour which actuated gladiators, as an admirable model of constancy and courage, by which he intended to animate himself and others to suffer every thing in defence of the commonwealth.

The bodies of the slain were dragged with a hook through a gate called *Libitinensis*, the Gate of Death, to the *spoliarium* : the victor was rewarded with a sum of money contributed by the spectators, or bestowed from the treasury, or a palm-branch, or a garland of palm ornamented with coloured ribbons ; ensigns of frequent occurrence in ancient monuments. Those who survived three years were released from this service, and sometimes one who had given great satisfaction was enfranchised on the spot. This was done by presenting the staff, *rudis*, which was used in preluding to the combat : on receiving which, the gladiator, if a freeman, recovered his liberty ; if a slave, he was not made free, but was released from the obligation of venturing his life any further in the arena.

Gladiators were divided, according to the fashion of their armour and offensive weapons, into classes, known by the names of Thrax, Samnis, Myrmillo, and many others, of which a mere catalogue would be tedious, and it would be the work of a treatise to ascertain and describe their distinctive marks. The

reader who has any curiosity upon the subject may consult the *Saturnalia* of Lipsius, in which a vast body of minute information is collected. It falls however strictly within our province to describe a tomb at Pompeii, ornamented with bas-reliefs in good preservation, which represent the two branches of amusements practised in the amphitheatre—hunting, and gladiatorial fights, and throw a light upon many parts of our subject.

It is situated in the Street of Tombs, as it is called, without the gate leading to Herculaneum, and consists of a square chamber, serving as a basement, surmounted by three steps, upon which, and on the uppermost part of the basement are placed the sculptures, of which we proceed to speak. The whole is terminated by a square cippus, or funeral pillar, which bore the following inscription:—

RICIO . A . F . MEN
 SCAVRO
 II VIR . I . D
 - - - ECVRIONES . LOCVM . MONVM .
 - ∞ ∞ IN . FVNERE ET . STATVAM EQVESĀ .
 - - - ORO . PONENDAM . CENSVERVNT .
 SCAVRVS . PATER . FILIO .

To* Aricius Scaurus son of Aulus, of the tribe *Menenia*, Duumvir of Justice, by command of the decurions. The decurions decreed the site of the monument, two thousand sesterces for funeral expenses, and an equestrian statue in the Forum. Scaurus the father to his son.

We give drawings of the most interesting of these sculptures from Mazois, to whose researches we are

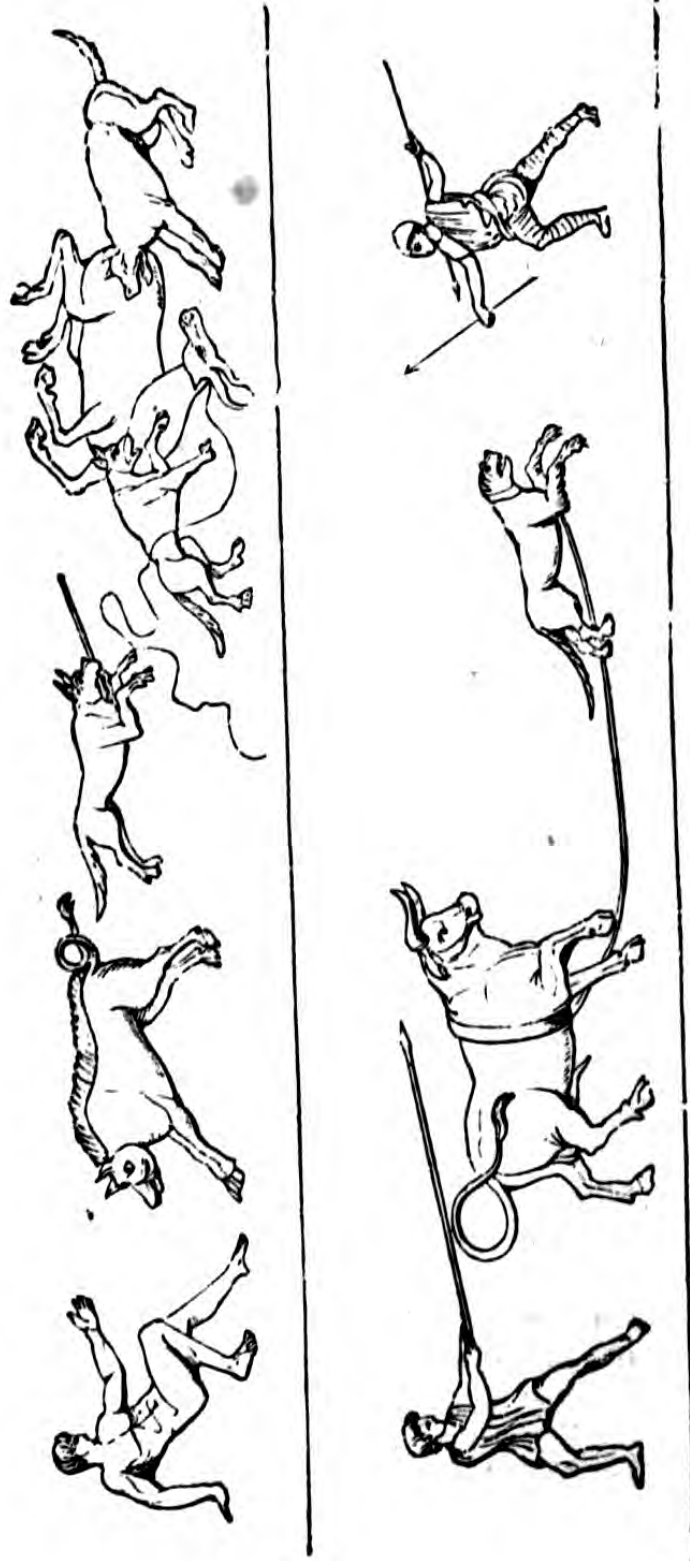
* The marble is broken, so that the first name (*prænomen*) and the first letters of the name are lost. The latter has been differently read Aricius, Castricius, Patricius: which is right is of little importance. The beginnings of all the longer lines are wanting, and the symmetry of the inscription would lead us to

also indebted for the following account of them. The earlier ones relate to the chase (*venatio*), and are taken from the steps which support the cippus. The first



represents a man, naked and unarmed between a lion and a panther : the second, a wild boar apparently running at a man, also naked and defenceless, and in a half recumbent posture. Mazois conjectures that these figures were of that class of combatants who, trusting in their activity alone, entered the arena merely to provoke the wild beasts after they were let loose ; and he adds that this dangerous exercise is still practised in the bull-fights at Rome. Defenceless as these figures are, they show no signs of alarm, and in particular he who is opposed to the boar seems collecting himself for a spring to baffle his enemy. In the continuation of the same relief is a wolf at full speed, gnawing a javelin deeply fixed in his chest, and further on a stag, with a rope attached to his horns, pulled down by two dogs, or wolves. The next group is the most curious of this series, for it seems to represent the process by which the *bestiarii* were trained in their profession. It exhibits a youth, his legs and thighs protected by a sort of armour, a javelin in each hand, attacking a panther. The freedom of the beast's movements is hampered by a cord attached at one end to a collar round its neck, and at the other to a broad girth which passes round the body of a bull. By this arrangement the novice is in part

suppose that the cypher which stands for a thousand should be prefixed once oftener in the fifth line ; which will make three thousand sesterces, about £24.



Bestiarii.

protected, while at the same time far more activity and wariness is required than if the animal were attached to a fixed point. Behind the bull is another figure with a lance, who seems to goad the bull forwards, and thus offer more scope for movement to the panther.

Another bas-relief represents a man fighting a bear; a sword in one hand, and a veil in the other,



the very equipment of the matador in the Spanish bull-fights to the present day. This circumstance, of little importance in itself, deserves remark, because it serves to fix the period of the construction of the tomb. We learn from Pliny* that the veil was not employed in the arena against wild beasts before the reign of Claudius. Claudius became Emperor A. D. 41. In the year 59 all theatrical exhibitions were interdicted for ten years. Four years afterwards occurred the earthquake, to which we have had occasion to make frequent reference; and as the building bears evident marks of injury from this cause, and repair, we must conclude that it was erected at some time between the dates already given, probably during the ten or twelve years antecedent to the year 59.

The sculptures on the basement are divided into two lines of figures, forming a sort of double frieze.

* viii. 16.

Here, as in the upper series, they are made of stucco; indeed there is no marble about the tomb, except the slab, on which the inscription was engraved. The figures appear to have been moulded separately, and attached to the plaster ground by brass or iron pins, more frequently the latter. These in many instances have been destroyed by rust, and have suffered the figures to drop. It is worthy of observation that the sculpture has been in part restored, and that under the present figures others have been found, of better workmanship, and, in some instances, differently armed.

In various portions of the frieze are written, the name of the person to whom the gladiators belonged, one Ampliatus, the names of the combatants, and the number of their victories. Ampliatus probably was the *lanista* of the city; for an inscription found on the outer wall of the basilica states that the family of N. Festus Ampliatus will contend a second time on the 17th May. These names are written in black, the letters narrow and ill shaped.

The upper frieze contains eight pairs of gladiators. The first pair, on the left, represents an equestrian combat. The first figure is called Bebrix, a barbarous name which denotes a foreign origin. The numerals added to his name denote the number of contests in which he has been victorious; they are much effaced, but have been read XII*. His adversary is called Nobilior, and reckons XI victories. Both are armed alike with a light lance, a round buckler (*parma*) elegantly ornamented, and helmets, with vizors which cover the whole face, and more resemble the helmets of the middle ages than

* The letters IVI occur over most of the figures. In conjunction with the numerals, Mazois seems to interpret them, 'conquered so many times;' but he does not tell of what word he supposes them to be the abbreviation: nor are we prepared to suggest any.



the Roman helmet as it is usually represented. The right arms of both, and the thigh of Nobilior, are protected by a sort of armour resembling successive bands of iron. These two gladiators are clothed in the *inducula*, a short and light cloak which formed part of the dress of the Roman knights; the legs are naked. Bebrix has shoes resembling those now in use, but Nobilior wears the *semiplovia*, a kind of hunting-shoe bound with thongs round the leg*. The horse is covered with the *sagma*, a square saddle-cloth in use among the Roman cavalry: the crupper is painted red. The action of the figures is good. Bebrix appears to have aimed at Nobilior a blow with his lance, who having received it on the buckler, attacks in his turn Bebrix, who now places himself on the defensive.

The group next in succession represents two gladiators whose names are defaced. The first wears a helmet having a vizor, much ornamented, with

* Similar to the moccasins of the Indians, or the Scotch brogue. A similar article of home manufacture, made of raw hide, is still in use among the peasants of southern Italy.—See *Pinelli's Costumes*.

the long buckler (*scutum*). It is presumed that he should have for offensive weapon a sword, but the sculptor has neglected to represent it. Like all the other gladiators he wears the *subligaculum*, a short apron of red or white stuff fixed above the hips by a girdle of bronze or embroidered leather.



On the right leg is a kind of buskin, commonly made of coloured leather, on the left an ocrea or greave, not reaching to the knee. The left leg is thus armed, because that side of the body was the most exposed by the ancients, whose guard on account of the buckler was the reverse of the modern guard; the rest of the body is entirely naked. The other figure is armed with a helmet ornamented with wings, a smaller buckler, thigh-pieces formed of plates of iron, and on each leg the high greave, called by the Greeks *κνημῖς*. These figures appear to represent one of the light-armed class, called *Veles*, and a Samnite (*Samnis*), so called because they were armed after the old Samnite fashion. The former, who has been sixteen times a conqueror in various games, has at last en-

countered a more fortunate, or a more skilful adversary. He is wounded in the breast, and has let fall his buckler, avowing himself conquered; at the same time he implores the pity of the people by raising his finger towards them—for it was thus that the gladiators begged their life. Behind him the Samnite awaits the answering sign from the spectators, that he may spare his antagonist, or strike the death-blow, as they decree. The third couple represents (*Thrax*) a Thracian, so called from the fashion of his armour, especially the round Thracian shield (*parma*), and one called Myrmillo, a name of doubtful origin. It appears, however, that the Myrmillones were for the most part Gauls, and armed somewhat in the Gallic style, and that the Thrax and the Myrmillo were usually opposed to each other. The Thrax wears a helmet, with greaves and thigh-pieces like those of the Samnite: and we may here observe that the right arm of every figure is protected by a banded armour which we have already described. The upper part of the body is naked. The dress of the Myrmillo is nearly the same, except that he has not the thigh-pieces. A conqueror XV times, he is now worsted; and his adversary gains the XXXVth victory, and the letter Θ over his head, the initial of *Θάνατος*, indicates that he was put to death. The M which precedes it is interpreted to be the initial of Myrmillo.

The next group consists of four figures. Two are *secutores*, followers, the other two *retiarii*, net-men, armed only with a trident and net, with which they endeavoured to entangle their adversary, and then despatch him. These classes, like the Thrax and Myrmillo, were usual antagonists, and had their name from the secutor following the retiarius, who eluded the pursuit until he found an opportunity to throw his net to advantage. Nepimus, one of the latter, five times victorious, has fought against one of the



A · M · P · L · I · A · I · P · F · C · V · M · M · C

JVNERE · C

S · M · XXV · M · Θ

HYPP · I · T · I · S · F · I · V · A

CE · A · T · V · S · I · V · I · N · I

NEP · I · M · V · S · M · A · V

IVXXXIV

former, whose name is lost, but who had triumphed six times in different combats. He has been less fortunate in this battle. Nepimus has struck him in the leg, the thigh, and the left arm; his blood runs, and in vain he implores mercy from the spectators. As the trident with which Nepimus is armed is not a weapon calculated to inflict speedy and certain death, the secutor Hyppolitus performs this last office to his comrade. The condemned wretch bends the knee, presents his throat to the sword, and throws himself forward to meet the blow, while Nepimus his conqueror pushes him and seems to insult the last moments of his victim. In the distance is the retiarius who must fight Hyppolitus in his turn. The secutores have a very plain helmet, that their adversary may have little or no opportunity of pulling it off with the net or trident; the right arm is clothed in armour, the left bore a *clypeus* or large round shield; a sandal tied with narrow bands forms the covering for their feet. They wear no body armour, no covering but a cloth round the waist, for by their lightness and activity alone could they hope to avoid death and gain the victory. The retiarii have the head bare, except a fillet bound round the hair; they have no shield, but the left side is covered with a demi-cuirass, and the left arm protected in the usual manner, except that the shoulder-piece is very high. They wear the caliga, or low boot common to the Roman soldiery, and bear the trident; but the net with which they endeavoured to envelope their adversaries is nowhere visible. This bas-relief is terminated by the combat between a light-armed gladiator and a Samnite. This last beseeches the spectators to save him, but it appears from the action of the principal figure that this is not granted. The conqueror looks towards the steps of the amphitheatre, he has seen the fatal signal, and in reply prepares himself to strike.



Between the pilasters of the door the frieze is continued. Two combats are represented; in the first a Samnite has been conquered by a Myrmillo. This last wishes to become his comrade's executioner without waiting the answer from the people, to whom the vanquished has appealed; but the *lanista* checks



his arm, from which it would seem that the Samnite obtained pardon. The following pair exhibits a similar combat, in which the Myrmillo falls stabbed to death. The wounds, the blood and the inside of the bucklers are painted of a very bright red colour.



The swords, with the exception of that of Hyppolithus, are omitted; it is possible that it was intended to make them of metal.

The bas-reliefs constituting the lower frieze are devoted to the chace, and to combats between men and



animals. In the upper part are hares pursued by a dog, beyond is a wounded stag pursued by dogs, to whom he is about to become the prey: below, a wild boar is

seized by an enormous dog, who has already caused

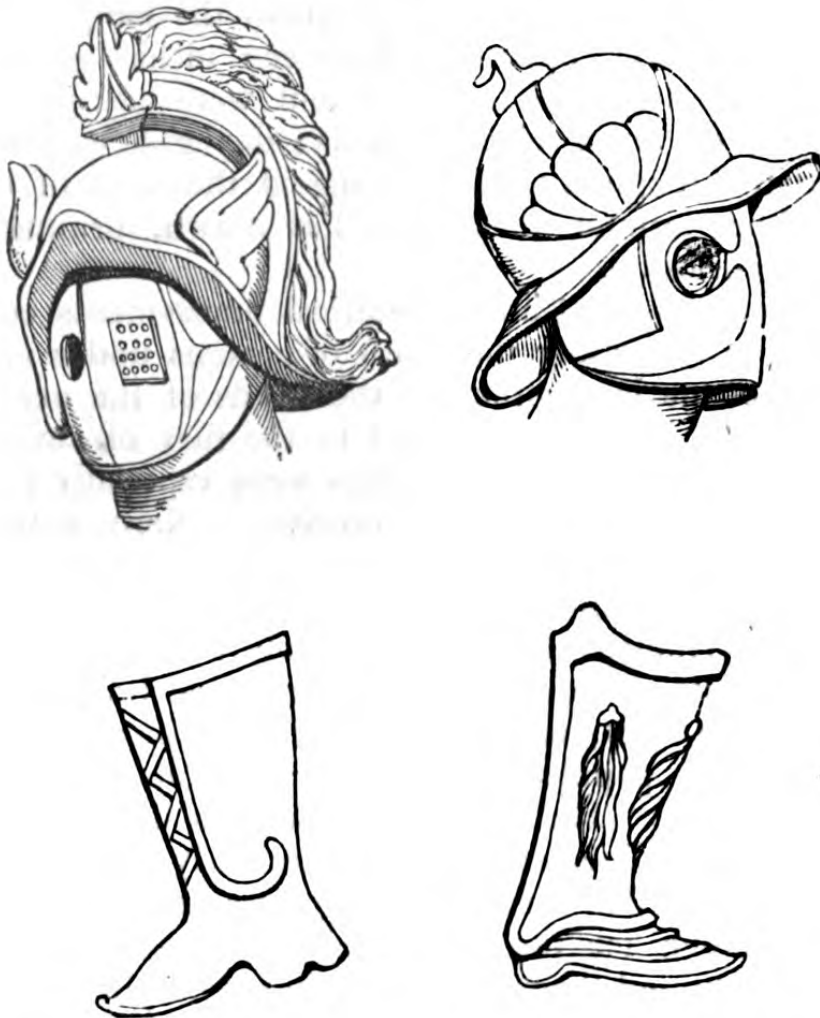


his blood to flow. In the middle of the composition a *bestiarius* has transfixed a bear with a stroke of his lance. This person wears a kind of short hunting-boot, and is clothed as well as his comrade in a light tunic without sleeves, bound round the hips, and called *indusia, subucula*. It was the dress of the common people, as we learn from the sculptures on Trajan's column. The companion of this man has transfixed a bull, which flies, carrying with him the heavy lance with which he is wounded. He turns



his head towards his assailant, and seems to wish to

return to the attack ; the man by his gestures appears astonished, beholding himself disarmed and at the mercy of the animal, whom he thought mortally stricken. Pliny (lib. viii. cap. 45) speaks of the ferocity shown by bulls in these combats, and of having seen them, when stretched for dead on the arena, lift themselves up and renew the combat. The following cuts represent the helmets of two of the figures at large, and the greaves, or boots.



- In the interior of this tomb is a vaulted sepulchral chamber, the arch of which and the upper part of the

monument is supported by a massive pier, pierced by four small arches, niches rather, except that they traverse its whole thickness, three of which were closed with glass, and the fourth with a thick veil fastened with nails. This kind of tabernacle, contrived thus in the centre of the pier, did not contain anything when discovered, but it is probable that it was meant for a lamp, from the care taken to shut up the sides with glass, leaving one aperture for the admission of air. The arches seem to have been closed that the wind might not extinguish the lamp when the door was opened. Fourteen niches pierced round the inside of the apartment were destined to receive as many cinerary urns; daylight was admitted through a small opening at the back of the building, around which a wall is drawn, forming a small enclosure.

Another sort of amphitheatrical amusements consisted in witnessing the death of persons under sentence of the law, either by the hands of the executioner, or by being exposed to the fury of savage animals. The early Christians were especially subjected to this species of cruelty. Nero availed himself of the prejudice against them to turn aside popular indignation after the great conflagration of Rome, which is commonly ascribed to his own wanton love of mischief; and we learn from Tertullian, that, after great public misfortunes, the cry of the populace was, 'To the lions with the Christians*.' The Coliseum now owes its preservation to the Christian blood so profusely shed within its walls. After serving during ages as a quarry of hewn stone for the use of all whose station and power entitled them to a share in public plunder, it was at last secured from further injury by Pope Benedict XIV., who consecrated the building about

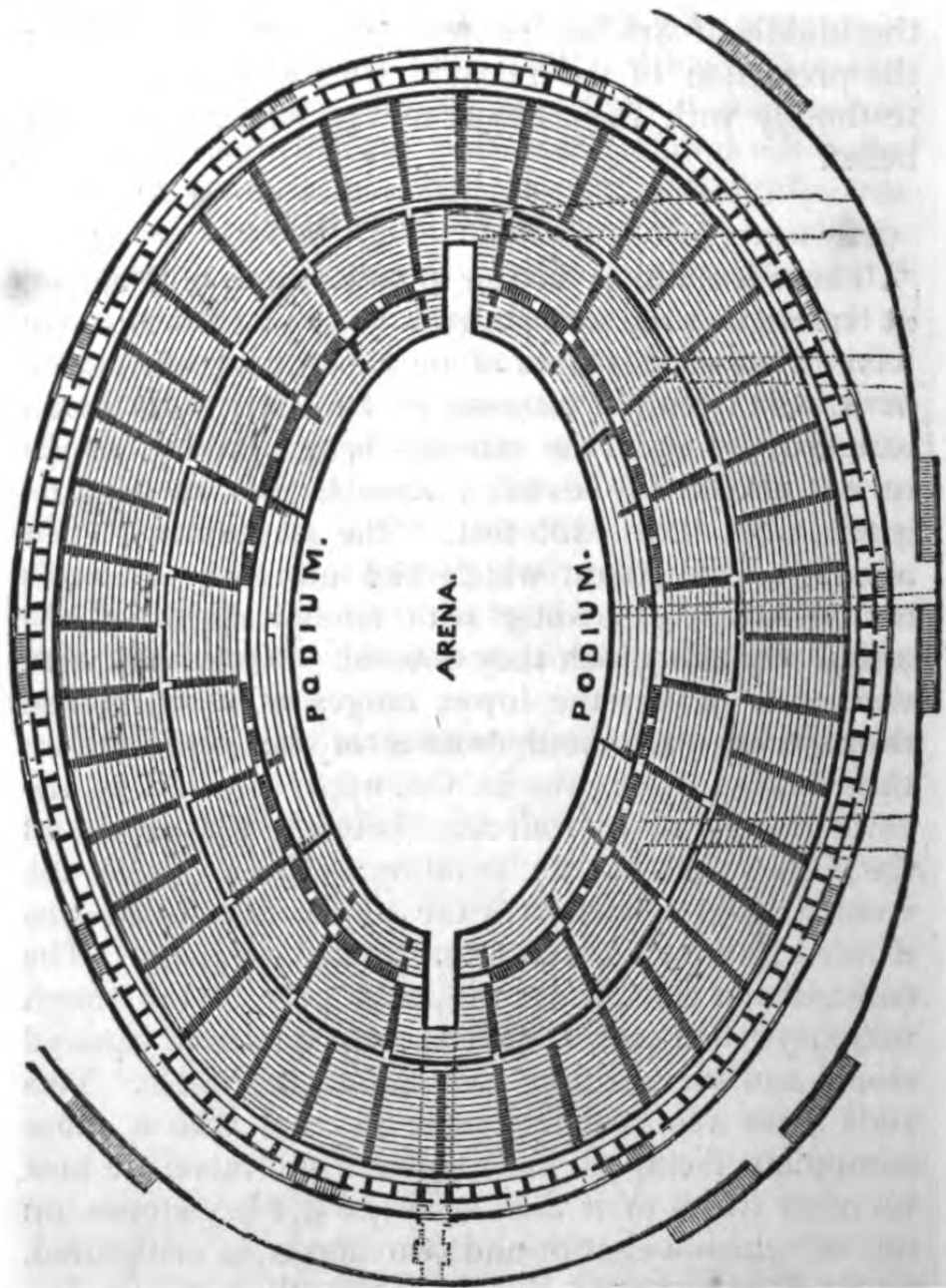
* Tertullian, Apol. 40.

the middle of the last century, and placed it under the protection of the martyrs, who had there borne testimony with their blood to the sincerity of their belief.

AMPHITHEATRE OF POMPEII.

There is nothing in the amphitheatre of Pompeii at variance with the general description which we have given of this class of buildings, and our notice of it will therefore necessarily be short. Its form, as usual, is oval: the extreme length, from outside to outside of the exterior arcade, is 430 feet, its greatest breadth is 335 feet. The spectators gained admission by tickets, which had numbers or marks on them, corresponding with similar signs on the arches through which they entered. Those who were entitled to occupy the lower ranges of seats, passed through the perforated arcades of the lower order: those whose place was in the upper portion of the cavea, ascended by staircases between the seats and the outer wall of the building. From hence the women again ascended to the upper tier, which was divided into boxes, and appropriated to them. The construction consists for the most part of the rough masonry called *opus incertum*, with quoins of squared stone, and some trifling restorations of rubble. This rude mass was probably once covered with a more sumptuous facing of hewn stone: but there are now no other traces of it than a few of the key-stones, on one of which a chariot and two horses is sculptured, on another a head; besides which there are a few stars on the wedge-stones.

At each end of the ellipse were entrances into the arena for the combatants; through which the dead bodies were dragged out into the spoliarium. These were also the principal approaches to the lower ranges of seats, occupied by the senators, magis-



Plan of the Amphitheatre at Pompeii.

trates, and knights, by means of corridors to the right and left which ran round the arena. The ends of these passages were secured by metal gratings against the intrusion of wild beasts. In the northern one are nine places for pedestals to form a line of

separation, dividing the entrance into two parts of unequal breadth. The seats are elevated above the arena upon a high podium or parapet, upon which, when the building was first opened, there remained several inscriptions, containing the names of duumvirs who had presided upon different occasions. There were also paintings in fresco, one representing a tigress fighting with a wild boar; another, a stag chased by a lioness; another, a battle between a bull and bear. Other subjects comprised candelabra, a distribution of palms among the gladiators, winged genii, minstrels and musicians: but all disappeared soon after their exposure to the atmosphere. The amphitheatre comprises twenty-four rows of seats, and about 20,000 feet of sitting-room: it would consequently afford accommodation for something more than ten thousand people, exclusive of those who were obliged to take up with standing-room.



Bronze Helmet, supposed to have been worn by a gladiator.

Having now described all the public buildings of Pompeii, it will not be out of place to say a few words on their architectural character. The city, as might be expected from its antiquity, and from its change of masters, having been a Greek colony long before its subjugation by the Romans, presents us with examples both of Greek and Roman architecture, domestic as well as public. The Romans borrowed their knowledge of building from the Greeks, but they borrowed it as imitators, not as copyists: they aimed at variety, by altering the details and proportions of the several orders, and what they gained in novelty they lost in beauty. Hence the Doric and Ionic of the one are immediately distinguishable from the Doric and Ionic of the other: the difference between the Corinthian orders is less perceptible, consisting chiefly in the foliage of the capital. In Greece the Doric gradually changed its character, being most robust in the most ancient examples. But the standard examples of it, built in the age of Pericles, are still robust in character, with twenty flutings, or longitudinal channels cut in the pillars. The Romans made the column more slender, and at the same time increased the number of flutings. The original was placed upon the temple floor, without even a plinth—the copy was raised upon a pedestal; the capital of the former was grave and simple—that of the latter was more elaborate, and enriched with varied mouldings. At Pompeii the most characteristic parts of the buildings, the entablatures and capitals, are almost all destroyed; still enough remains for us in most instances to ascertain the style of what remains, and consequently to ascribe to them something like a comparative date. Thus the columns which surround the Forum fulfil the above-named conditions of the Grecian Doric; they have no base, contain twenty flutings, and have a simple capital.

Similar in style are those of the triangular forum in the quarter of the theatres; and the schools or tribunal, and the square called the soldiers' quarters are also evidently of Greek design and construction, though repaired by their last possessors. It is to be observed, however, that the Doric of Pompeii, though it preserves the Greek taste in the detail of its mouldings, is exceedingly slender, and in this respect varies materially from the most esteemed models of the order.

Another characteristic of Greek architecture, which points out its originality in a striking manner, is that the profiles of all its mouldings are drawn by hand, and cannot be mechanically described, whereas the Roman mouldings are all formed on some geometrical construction. Hence the latter are always similar, while the former admit of indefinite variety, according to circumstances which might influence the architect, though they escape our notice. The reader may see an instance of this in a capital from the Parthenon, now in the court-yard of the British Museum. Upon cursory examination the projecting moulding of the capital under the abacus would be taken for the frustum of a cone, whereas it is really a very delicate curve. What the object of the architect was in tracing this line, which viewed from below must have appeared a straight line, it may not be easy to determine, but without doubt in taking this trouble he was influenced by some delicate perception of beauty. It is from this peculiarity in the mouldings that we conclude the small portico, propylæum, or entrance to the triangular forum, was designed by a Greek architect. It is of the Ionic order; the mouldings and the volutes or spiral horns are more elegant than in the Roman style. In addition to this the deep sinking under some of the mouldings, which the strictness of Roman rules did not allow, stamp it as a Greek work, where variety and thought were permitted.

The capital of the Ionic order found in this city differs in one respect from all the examples, both Greek and Roman, with which we are acquainted. We allude to the ornamented echinus moulding which runs under the volutes, which usually is carved to represent eggs within a shell, thus,



But in the Pompeian examples the egg is very small, and the shell or husk is of a different form, more like the section of a horse-chestnut, showing a small portion of the nut where the rind is partially split, from which indeed the idea may possibly have been taken.



The Basilica is similar in the details of its architecture to the celebrated Temple of Vesta at Tivoli, supposed to have been erected by a Greek architect, and displays marks of Grecian taste.

The oldest building in Pompeii is the Temple of Hercules, perhaps erected by the first Greek colonists, or at least raised on the site of a more ancient temple. It is Doric, and of course Grecian; and the style observable in its scanty remains leads the learned to refer it to the most remote antiquity. The most remarkable feature is the swelling of the flat part of the echinus moulding which, when the order became perfected in the Parthenon and Temple of Theseus at Athens, was made flat or insensibly curved, as may be seen in the capital above referred to. The basements also of some of the temples may be considered as more ancient than the columns reared

upon them, and it is very possible that both the basement of the Temple of Jupiter and that of the Temple of Venus may be of Greek construction. The Romans either repaired or rebuilt many of the public buildings of the city; the ruins of brick at the end of the Forum, opposite the Temple of Jupiter, were built by them; the baths, with their vaulted ceiling, they also constructed. The Temple of Fortune was erected by a Roman individual, as the inscription sets forth; and the Pantheon, Temple of Mercury, with the building placed between them, as well as the crypto-portico of Eumachia, which is partly built of brick, bear evident marks of a Roman origin. The Temple of Venus may be considered as Roman, its original Greek design having been changed by a coat of plaster, as we have already observed. The theatres and amphitheatre are evidently Roman. That the former were so is ascertained from inscriptions, while the latter was, as we well know, of their own invention. The triumphal arches are of course Roman, such buildings having been unknown to the Greeks. In private dwellings, as well as in public edifices, the same mixed character is evident, and adds to their interest. But this branch of the subject belongs to the next volume, in which we shall endeavour to point out the differences of design and detail in the Greek and Roman houses.



