OBSERVATIONS
UPON THE
ANTIQUITIES
Of the Town of
HERCULANEUM,
Discovered at the Foot of
MOUNT VESUVIUS.

With some Reflections on the PAINTING and SCULPTURE of the Ancients.

And a short Description of the ANTIQUITIES in the Neighbourhood of NAPLES.

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Enriched with Forty-two PLATES, designed and engraved by the Author.

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MDCCLIII.

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ADVERTISEMENT.

THIS collection of obſervations was at firſt made with a view ſolely to my own private inſtruction, aud I ſhould never have ventured to commit them to the publick, had not I been induced to hazard that ſtep by perſons of conſideration, as well as an earneſt deſire to preſent them to Monſieur de Vaudieres, *whom I had the honour to accompany in his journey to* Italy. *This is the leaſt acknowledgment I owe to this illuſtrious protector of the liberal arts, for the ſingular ſhare of his favour which I enjoyed, and the advantages I have reaped from a journey ſo neceſſary to*

render me perfect in the study of architecture.

The principal design in this little work is to refresh the memory of those who have visited Italy, *and seen the most remarkable antiquities in the neighbourhood of* Naples; *as well as to communicate a slight idea of them to others, who have not made that tour, and of consequence cannot judge for themselves. I shall only observe, that, among the different designs exhibited in this volume, there are some plans of the principal edifices in the city of* Herculaneum, *the dimensions of which it was not possible for me to take; for the inspectors of the works, and those who conducted the digging, had so severe orders on that subject, that they would never indulge me with an opportunity.*

I have divided this collection into three parts, which form as many little separate treatises, in the first of which I describe every interesting particular which I observed in Herculaneum, *including publick and private edifices, tombs, utensils, and other curiosities found in that subterranean city, where the least trifles become matters of consequence to the lovers of antiquity.*

The second section is composed of a dissertation upon the paintings and sculpture found in Herculaneum; *and as this part was not so much my province, I would not rely upon my own knowledge, but had recourse to Monsieur* Cochin, *who had the honour to be chosen by his majesty, as a proper person to accompany Monsieur* de Vaudieres

dieres *in the ſame journey, and who employed every leiſure moment that was at his diſpoſal, in making obſervations, touching an art in which he excels.----This diſſertation, therefore, is entirely the work of that celebrated deſigner, who hath been pleaſed to communicate to me every thing that he had collected upon the ſubject.*

The third ſection contains a deſcription of the antiquities in the neighbourhood of Naples; *namely,* Baiæ, Pùzzoli *and* Capua. *I know very well that ſeveral authors have given deſcriptions of what is moſt remarkable in theſe different places. But as I likewiſe made obſervations upon the ſame antiquities, which I accurately delineated upon the ſpot, I thought it was a duty I owed to my profeſſion*

to insert them after those of Herculaneum, *with which, indeed they seem naturally connected.*

Should the publick relish this little performance, I may hereafter communicate my reflections upon the monuments of antiquity in Rome, *and other parts of* Italy.

E R R A T A.

Page 200. Line 19. for *us*, read *his*.
P. 206. for *Marca*, r. *Maria*.

OBSERVATIONS

UPON THE

ANTIQUITIES

Of the CITY of

HERCULANEUM.

SECTION I.

Of the EDIFICES, TOMBS, and CURIOSITIES found at HERCULANEUM.

DISSERTATION upon the Eruptions of Mount VESUVIUS.

BEFORE we enter into a detail of the edifices and other curiosities which have been discovered in the subterranean town of Herculaneum, it will not be improper to give a superficial sketch of Mount Vesuvius, which was the cause of that city's destruction. The prodigious effects of this vulcano are the more difficult to describe, as the mountain from which it rises, is subject to great alterations, occasioned by

the earthquakes which produce the eruptions. The following remarks I made upon these phænomena in the year 1749. They have been confirmed by a repeated survey, which I took in 1750, as well as by the observations of Monsieur Souflot, the king's architect, who favoured me with the dimensions as he himself had taken them that same year.

Plate I. The first plate represents Mount Vesuvius*, as it appeared in 1750; the circumference of the summit being eight hundred and fifty toises, and the diameter two hundred and eighty two.

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* Those who are curious to see this vulcano represented more at large, may have recourse to the plate which Monsieur Chedel hath engraved, after a design made upon the spot in 1750. by Monsieur Cochin, jun.

We

We arrived at the ſpot A. from whence we could perceive the mouths B. C. D. E. before we deſcended by the path which leads to the bottom. The road to the ſummit was very difficult, the laſt two miles being partly through cinders, and partly over ſtones, which had been very unequally diffuſed by the late eruption. Theſe ſtones were of different natures, both in conſiſtence and colour, ſome of them being very hard, and heavy, and others light, and extremely porous, compoſed of ſulphur and minerals. In 1749, at the bottom of this vulcano were ſeveral mouths, E. G. which threw up the matter in ſuch abundance, as to raiſe the earth to the level, C. D. E. which in 1750 formed the new interior ſurface of this mountain. The ſummit A. from the line C. D. E. is

not more than from thirty to thirty two toiſes in heighth, which is not quite one half of what it was in the preceding year. We deſcended over cruſts of ſulphur, which covered a boiling matter, like metal in a ſtate of fuſion. We found a ſpace of about eighteen or twenty feet, in which theſe cruſts being broke, diſcovered a kind of a lake, formed of different inflammable ſubſtances, the ſcum of which being thrown out upon the ſides, was cooled and accumulated into new heaps, the form of which, I can compare to nothing ſo aptly, as to the effect produced in a river by ſheets of ice: they were about eight or nine feet thick, and bore up by a liquid ſubſtance; ſeveral flakes were piled one over another, and all the bottom gaping in different parts, being full of chinks

through

through which the fire was perceivable.

The mountain B. was ſituated at about one third of the diſtance from this bottom, and partly covered with its vaults the great mouth, from whence, every five minutes, iſſued a ſheet of fire, mixed with ſtones, liquid ſulphur, and laver, which being cooled in falling down, increaſed the mountain, which, in the year 1750, might be from twelve to fifteen toiſes in heighth, and the ſheet of fire roſe about eighteen or twenty toiſes above the ſummit.

This mountain was ſurrounded by a quantity of other ſmall openings, B. C. D. and E. called chimneys, which never threw out flames, except when the ſheet, in its different periods, finding difficulty in iſſuing

through the great opening, and ſtriking violently againſt the ſides of the vaults, was determined downwards into the interior part of that gulf, where it ſeemed to receive new force, which enabled it to eſcape through theſe ſmall openings. Theſe effects were obſerved diſtinctly, and at different times, as well as a pretty violent wind, which iſſued from the little mouths, and ſeemed likewiſe to have a vent at the great opening. Theſe occaſional alterations are plainly proved, by the ſmall elevation of the ſheet of flame in 1749, when I went thither for the firſt time; for, about a month before that period, the abbé Nollet had ſeen it iſſue with as great violence, as we afterwards obſerved in the month of November, 1750. But thoſe who want to be perfectly informed of the different effects of this vulcano, its variations,

and

and phænomena, will find their curiosity satisfied in the relation with which that great philosopher proposes to oblige the publick.

For some years, the increase and fury of this vulcano gave reason to apprehend a new eruption; frequent earthquakes were felt in the neighbourhood of Naples, and all the dreadful symptoms which used to precede these evacuations, were augmented. Accordingly, the terrible effects were soon produced, for in the month of October, 1751. the mountain opening, vomited up a prodigious quantity of laver, which had been amassed in its bowels. Luckily, this torrent of burning matter directed its course towards the river Sarno, where it stopt; so that the country was saved from the overflowing of its streams, which would

certainly

certainly have, otherwiſe, done infinite damage.

About ſix and twenty eruptions have been reckoned ſince that in the firſt year of the reign of Titus, in which the city of Herculaneum was engulphed; and the layer and cinders of all theſe eruptions, being ſucceſſively ſpread on the ſame place, have formed over that city a ſolid cruſt, about fifty or ſixty feet thick.

Some authors pretend, that this vulcano hath diſcharged water mixed with ſhells, and ſeveral Latin inſcriptions ſeem to confirm the ſtrange phænomenon. Among others, that which is upon the road to Naples at Portici; beginning with theſe words, "Poſteri, Poſteri, veſtra Res agitur." (Vide Miſſon Tom. 2. p. 59.) and that near the Torre del Greco, which begins

begins with " Viam a Neapoli ad " Rhegiam, &c." (Vid. id. Tom. 3. p. 354.)

I do not think it is my buſineſs to expatiate further upon the hiſtory of mount Veſuvius; as the detail may be found in ſeveral authors, who have treated of it, as philoſophers and naturaliſts. Beſides, ſuch accounts being foreign to my deſign, I ſhould be afraid of having been already too diffuſe on this ſubject, were I not perſuaded that thoſe who read this little performance, will be glad to find the origin of the antiquities, which I preſent to their view.

DISCO-

DISCOVERY

OF THE

CITY of HERCULANEUM.

IT is a long time ſince the ſpot, where Herculaneum was ſituated, hath been diſcovered by means of a well, dug by a peaſant of that neighbourhood, who found ſeveral pieces of marble under-ground. In 1706, the workmen employed in building a country-houſe at Portici, for the Prince d'Elbuf, in digging for a foundation, arrived at a vault, under which they found different ſtatues of braſs and marble, which were ſent to prince Eugene; and ſince that time, no meaſures have been taken to forward the diſcovery, until the preſent king of Naples and Sicily

Sicily ordered new refearches to be fet on foot. In effect, at the depth of fixty feet from the furface, they found an ancient city, over which are built the fmall contiguous towns of Portici and Refini, fituated between mount Vefuvius and the fea. For a long time, the world was dubious about the real name of this fubterraneous city; but thefe doubts are now difpelled by the various infcriptions, and the principal buildings which have been difcovered, particularly the infcription, engraved upon that fine equeftrian ftatue of Nonius Balbus, of which we fhall have occafion to fpeak in the fequel. On the pedeftal we read thefe words,

M. NONIO. M. BALBI. F.
P. P. : . . . . . .
. . . HERCULANENSES.

and another found in the quarter of the theatre beginning thus,

L. Annius L E Mammianus
Rufus. XI. vir &c.

OF

OF THE

THEATRE

OF

HERCULANEUM.

THE plan of the theatre which I here exhibit, is not absolutely exact, the places being dug, and the discoveries made at different times; so that we are obliged to guess at its form by the pedestals, walls, columns, stairs, &c. which we include in the plan of this edifice, according to the places in which they were discovered. In 1750 they were at work upon the orchestra E; but it is impossible to examine the whole theatre at once, because there is a necessity of leaving here and there, piles of earth H, to support the considerable mass, with which the town Plate II.

is

is entirely overwhelmed. The trenches, which the workmen cut at random, in this ſubterranean city, are no more than from four to ſix feet in heighth, and three or four in width; and when they meet with any ſtatue, they dig it out very often in pieces; for almoſt all of them are mutilated, being either broke by the weight of the earth above them, or melted by the heat of the laver with which they were ſurrounded. In the apartments of the king of the two Sicilies, there are ſeveral pieces of excellent workmanſhip, which have met with this misfortune.

The plan which I here repreſent, is, that which I received in the country, for I would not too much depend upon my own original ſketch. But I ſcrupulouſly examined all that was diſcovered of it, going through all the paths

paths that were then formed at random, in the extent of the Theatre. Indeed, at that time no more than the three pillars F, were discovered in the Proscenium. I ascended several small stair-cases C, by which all the steps D communicated, one with another, and I perceived in the steps above, several pedestals B, which seemed nearer one another, than is represented in the plan which was taken. It is more likely, that these pedestals supported pillars that formed a gallery, such as the ancients were used to make in their theatres. In other respects, they were well proportioned, and covered with very fair marble. The four stair-cases C, have already been discovered, and the piles of earth are left standing upon the great steps, eighteen of which rise successively to the circular

landing-place, that ſeparates them from three other higher ſteps. The form of this landing-place, and the ſteps which it environs, is a circumference deſcribed round three different centers, according to this deſign, copied from that which was given to me upon the ſpot. The width of the Orcheſtra is taken from the third ſtep, reckoned from below to that on the oppoſite ſide, and the Theatre ſeemed terminated by a façade of architecture; at leaſt, ſo I judged from the baſes of the columns F, which I ſaw upon the Proſcenium, of very fine marble. As for the wooden-work found in the parts G, it was all reduced to charcoal.

This theatre was not only adorned with the fineſt marble, decorated with ſtatues, and enriched with columns,

lumns, but great part of its outſide A, was painted in freſco. As it had been dug piece-meal, it was gradually ſtript of its ornaments, and now nothing remains but bricks and ſtones, which were formerly covered with marble or plaiſter, upon which the painting was performed. But the conduct preſcribed to the workmen in digging, obliges them to replace the earth in thoſe parts which they have viſited, that they may have room to penetrate another way; by which means, ſuch conſiderable changes are made in the appearance of things, that thoſe, who may hereafter examine the place, will not perhaps find it in the ſame ſituation as it occurred to me. This conſideration induced me to mention the moſt eſſential things, which I myſelf obſerved, as this plan ſeems to

me neither exact nor faithful, and makes me conjecture, that the author has erred considerably in his delineation of the Theatre.

THE

THE THEATRE OF HERCULANEUM

Compared with that of MARCELLUS at ROME.

IN order to ſupport my opinion upon ſome certain foundation, I will compare the theatre of Herculaneum with that of Marcellus, of which there are ſtill ſome curious remains at Rome: Not only the form of the firſt is diſagreeable, but it is encumbered with parts, which in my opinion, cannot belong to it. Such are the columns placed in the angles of the wall A F, which muſt

have hindered the ſpectators upon the high ſteps, from ſeeing what paſſed upon the ſtage. If the deſign, therefore, gives a juſt idea of this Theatre, it is very remarkable, that the ancients ſhould in this place, have abandoned the form of a ſemicircle, which hath been always deemed the beſt and moſt commodious for thoſe ſorts of buildings, and to which they ſeemed to be always conſtantly attached. It is alſo a melancholy circumſtance, that a monument ſo well preſerved as this of Herculaneum cannot be ſo cleared from the earth which ſurrounds it, as to permit people to aſcertain the form of it, by exact dimenſions; but the difficulties are altogether inſurmountable. I have been therefore obliged to ſupply theſe defects by my own conjectures, aſſiſted by thoſe of other people,

ple, and the comparisons which my knowledge enables me to make of this edifice, with some others of the same kind. According to the report of certain curious people, who from time to time have carefully observed the progress of the digging, and every new discovery as it was made, the remains of brazen statues melted by the heat, were found upon the tops of the Vomitories or principal entries; a circumstance that seems to denote the extraordinary magnificence of this Theatre. Every thing which I myself observed upon a most diligent examination, conspired to give me the idea of an edifice, elegant in construction, and very rich in ornaments. In a word, the general dimensions which I have been able to take, altho' it was not possible to measure every particular with

the rule and compaſs, have induced me to compare it rather to the Theatre of Marcellus, than to the plan which I received as the true model.

T

OF

OF THE THEATRE OF MARCELLUS.

THIS Theatre, which was built in the reign of Auguſtus, is externally adorned with two orders of architecture; namely the Dorick, ſurmounted by the Ionick. The Orcheſtra A, is incloſed in a ſemicircle, on the outſide of which, and upon the ſame circumference, are raiſed the walls and galleries F, neceſſary for the communication of the ſtair-caſes G, the partition walls of which correſpond with the ſame centre. The Proſcenium B, ocupies the ſpace between the Walking-places D, which Plate III.

which communicate with the porticos of the ſcene C, in the middle of which uſually ſtood the Pulpitum, and at E, is a Veſtibule, opening towards the ſtair-caſes which lead to the other different parts of the edifice. It is probable, that could we make an intire diſcovery of the Theatre of Herculaneum, it would be found to have a ſtrong affinity with this of Marcellus, as the ancients always employed the ſemicircle in the form of theſe edifices, as is plainly proved not only by the Theatre of Marcellus, but likewiſe by that of Pola in Iſtria.

OF

OF THE THEATRE AT VICENZA;

Built by PALLADIO.

THE fourth plate exhibits the design of the Olympic theatre built at Vicenza, by Palladio.--- That celebrated architect, who by his uncommon merit, which I still revere, acquired immortal fame in a vast number of fine edifices with which he adorned his native country, is nevertheless chargeable with the same defect which is attributed to the theatre of Herculaneum, and in which he hath deviated from the examples I have quoted. The inconvenience Plate IV.

venience resulting from his plan is, that in the whole space comprehended in the triangle formed by the wall that separates the steps from the Proscenium, and the line C. D. the spectator could not observe what passed upon the scene, particularly the actors who entered by the porticos C. C. Indeed these porticos served only for the least important actions of the performance; but nevertheless it must be owned that one half of those triangles was so much pure loss to the spectators, because from the point A. which is the centre of the scene, the line A. E. B. describes a space from which the Theatre could not be seen.

Mean while, it must be observed, that Palladio might have avoided this inconvenience, by raising the wall of separation

ſeparation no higher than the ſteps; ſo that the ſpectators who ſate on that part, which I have mentioned, would have ſeen all that paſſed on the Proſcenium. However, I do not here pretend to criticiſe that great man, who, doubtleſs, had good reaſons for acting in this manner, and perhaps, purpoſely ſacrificed this little ſpace to the decoration of his Theatre. But it is ſurprizing that, in his plan, he ſhould prefer the ellipſis to the ſemicircle, contrary to the authority and example of the ancients, whom he expreſly propoſed to imitate in this modern theatre; for they conſtantly made uſe of this laſt figure. Certain it is, that the circular plan would have furniſhed a greater number of places, from which the ſpectators could have ſeen the perſpective F, the decorations of which are

permanent

permanent and invariable. In a word, if the third and fourth plates, which ſhew the difference between the two forms, be duly conſidered, I believe nobody will heſitate in giving the preference to that of the ſemicircle, from which as I have already obſerved, the ancients never deviated, except in the Theatre of Herculaneum, that is, ſuppoſing the author of the plan hath taken its juſt dimenſions.

OF

OF A PUBLIC EDIFICE,

Supposed to be the

FORUM of the CITY,

And of two TEMPLES contiguous to it.

IN the course of digging, they found, at some distance from the Theatre, a street from five to six toises in breadth, furnished on each side with the piazzas P, for the convenience of foot-passengers. These piazzas led to two temples I M, and I N, separated by a street, at the extremity of which was the pedestal O, and these temples were in the neighbourhood of a great edifice, about the name of which, antiquarians are not yet agreed. Plate V.

Some

Some people pretend to call it a Chalcidica.* Others consider the plan as that of a forum. If we may believe Vitruvius, those Chalcidicæ were always adjoining to the Basilica

* Authors are divided in their opinion, concerning the word *Chalcidica*. Philander believes that this word, which comes from the Greek, signifies the place where they decided causes relating to the coin, or rather the mint where the money was coined, alledging, in behalf of this conjecture, the etymology of the word, which is composed of Χαλκος, *Brass*; and δικη, *Justice*. Others think, that instead of *Chalcidica* we ought to read *Chalcidicon*, which signifies a *Hall of Brass*. Leo Baptista Alberti pretends that we should read *Causidica*; that is, an *Auditory* or court of justice where causes are pleaded. Festus gives us to understand that *Chalcidica* was a sort of edifice first built in the town of Chalcis. Arnobius calls *Chalcidica* the hall where the pagan gods were supposed to hold their festivals. Barbaro and Balbus think that it is the proper name of a particular edifice, which, according to Dion, was built by Julius Cæsar in honour of his father. —Palladio following the opinion of Barbaro, formed such an edifice upon the model of a tribunal described by Vitruvius in the temple of Augustus, adjoining to the Basilicon or palace of Fano.

Basilica or palaces: which was not the case here,---on the contrary, this edifice was shut up with walls and surrounded with private houses, H, except at the porticos B, which were common to three buildings. Be that as it will, the plan is an oblong space, within which are the porticos C, closed on one side by columns in the wall F, and separated by niches, and on the other side by detached pillars, forming a peristyle, round the great court A, which was four steps lower than the landing-place of the porticos.---Near the entry of these porticos, were found two kinds of great pedestals, G G, supported against the detached pillars.

At the extremity of this edifice, they had made a kind of sanctuary, D, ascended by three steps. It in-

closed a continued pedestal, which occupied its whole width, and upon which were placed three marble statues, that in the middle representing the emperor Vespasian. The two others that are seated in curule chairs, are not known, because their heads could not be found. On one side were two circular niches, before which were found two pedestals. They sustained the statues of Nero and Germanicus in brass. The other three were nine feet in heighth, and may be seen in the cabinet of the king at Portici, together with many others, several of which are of marble. They are finely proportioned, and the draperies of the greatest part of them, wrought with great taste and delicacy. The back part of the two niches, which we have mentioned, was adorned with painting in fresco,

fresco, and from these were taken the central pictures of Theseus and Hercules, of which we shall speak in the sequel. Upon the walls that formed the bottom of the portico, in the upper intercolumnation F, statues of marble and brass were placed alternately. But nothing, except the wreck of the last, could be found, because they had been melted by the heat of the laver. The portico of the entry B, was divided into five equal parts, those of the extremity leading to the interior porticos, and each vault of this entry was decorated with an equestrian statue; but two only of marble could be found, one of which was that of M. Nonnius Balbus, represented in plates XVI. and XVII. and counted one of the finest pieces of antiquity. The pillars of the porticos were not crusted

with marble, though the pavement at that place was intirely ſo.

I did not perceive any thing ſingular or remarkable in theſe temples, the plan of which was formed upon an oblong ſquare. In the largeſt the ſanctuary was placed at the extremity, in the other, it was in the middle, and incloſed by a wall with only one opening, oppoſite to which was placed the divinity. This little temple had but one entry, and on each ſide of the door, were two corners N N, for holding the utenſils neceſſary for the ſacrifices. The largeſt, on the contrary, had two doors, between which was a pedeſtal that ſuſtained a car of braſs, of which nothing but the fragments could be found. They were both vaulted, and the inſide adorned with columns, between which

were

were found ſome paintings, and inſcriptions on braſs.

Theſe temples were ſurrounded by houſes more or leſs enriched with painting: ſome of them were paved with marble of different colours, and in ſome was found moſaic work, which is the more imperfect, as the ancients were ignorant of the compoſition of this ſort of work, in which they employed no more than four or five kinds of natural ſtones. Beſides, it was without taſte or correctneſs, and conſequently very much inferior to that of the moderns, which is improved to the laſt degree of perfection. Scarce any thing is to be ſeen of the private houſes, the greateſt part of which have been buried again by the earth which was thrown into

them, to make room for digging in other places. I could examine but a very ſmall number of them, and the few columns which I ſaw, were overthrown, and very much defaced. But they were all of brick, covered with ſtucco, in the ſame manner that ſtill prevails throughout all Italy.

The plan of theſe buildings was communicated to me, together with that of the Theatre, of which I have already ſpoken, but the dimenſions ſeemed to me to be ſo uncertain, that I will no longer inſiſt upon the ſubject.--This is not the caſe with the tombs deſigned in Plate XVIII. The principal dimenſions I took with great exactneſs; and indeed, I have omitted nothing of what I ſaw, being reſolved to communicate this monument

monument to the publick, thereby conveying a just idea of an antiquity, which perhaps no longer exists.

OF THE

TOMBS

FOUND AT

HERCULANEUM.

AFTER having made the discoveries which I have already mentioned, the workmen with a great deal of difficulty arrived at a very thick wall, decorated in different places by the pedestals B. Then the progress of their work conducted them by the path A to the wall C, which formed a right angle with the wall B. Tired with their fruitless endeavours, by which they could not find an entry either in the one, or in the other; they made an opening, which led them into the vault D. After having cleared it of all the rubbish, they

they discovered the little banks E, decorated with niches, in each of which was a vase, H, containing ashes; and above every niche, the name of the person was slovenly painted in red colour; the vault was twelve feet by nine, not decorated with painting, nor faced with marble, the joining of the bricks being apparent, and the banks raised three feet from the ground. In all probability, this vault had been particularly built, for the sepulture of one family. Between the niches was found the little staircase E, which ascended to the great edifice adjoining to the tomb: but the workmen had not cleared away the earth with which that great building was covered. In the XVIIIth plate is represented the path A, dug thro' the thickness of the earth and laver

G,

G, that ſtill covered part of the little ſtair-caſe.

The grandeur of the architecture that appears in the exterior parts of this great edifice, and the beauty of its profile, as far as can be judged from the pedeſtals that were diſcovered, declare it to be an edifice of ſome importance, and I do not at all doubt that by this time, they have found the interior parts ſuitable to its external beauties. Some parts in the different edifices appear to have ſuffered, the walls inclining to one ſide, either from the weight of the matter, the crazineſs of the building, or the earthquakes which are frequent in this neighbourhood; though in other edifices we are ſurprized to find every thing entire and unſhaken. Sometimes the moſt delicate movea-

bles

bles are found not at all disordered: the vases H, which are here exhibited, are a proof of what I advance; for even the little tiles which covered them were found in their places.

At some distance we were shewn a well, the diameter of which was extremely narrow, so as just to admit an ordinary bucket.---It contained water, which from the surface might be from forty to forty-five feet deep. It is the more surprizing that this well is not filled up, as in all the other parts that have been dug, they have not found a single fathom of space, in which the laver has not been introduced, either in the instant of the city's misfortune, or by the compression of the matter which hath been since accumulated, and

which

which now forms a solid crust sixty feet thick. At the time I speak of, that is, in the year 1750, one could easily examine those places which I have mentioned; but I will not answer for their being in the same situation at present; for as I have already observed, they clear one place, and fill up another: so that every six months it puts on a new appearance.

In the course of this subterranean excursion, we descended into several houses, some of ordinary construction, and others more considerable. When the workmen find the entry, they make small paths within the house, leaving in the middle, here and there, piles of earth to support the weight above. Several of these houses we found paved in compart-

ments, as represented in the design A, at the top of plate XIX. The filets, together with the great and little bands were of marble of different colours. Some of them were formed in triangles, black and white, the summits of which united in the same point. The middle of the compartment was of bricks very nicely joined. Some of these bricks being measured, we found three feet long, six inches thick, and broad in proportion. The same kind are to be seen in the temple, which hath been discovered at Puzzoli; and those of the admirable Piscina, of which we shall treat in the sequel, being of the same magnitude, prove that these dimensions were usually observed by the ancients in brick-making. In the same same plate, at the figure B, is the design of a compartment, painted

Plate XIX.

ed in fresco, with which the walls of the Theatre, and most of the private houses of Herculaneum were decorated in the inside; the ground being black, and the bands yellow.

I have represented, in the bottom of Plate XV, a piece of plaister, on which is a compartment painted with three colours; the lozenges being red, the bands grey, and the circles of a darker grey, raised with a stronger tint, in order to deepen the shades. Divers other walls were likewise painted grey, with garlands carried by birds. Every thing of this sort worth notice had been stript off the walls, and deposited in the cabinet of the king of the Two Sicilies, where there is a considerable collection of all curiosities which deserve the attention of connoisseurs.

OF

OF THE UTENSILS AND OTHER CURIOSITIES FOUND IN THE CITY of HERCULANEUM.

IN the collection of obſervations which I preſent to the publick, I have not limited myſelf to my remarks upon architecture, which is more immediately my profeſſion, becauſe I thought it my duty at the ſame time to communicate all the diſcoveries which I could collect at Herculaneum. The Abbé le Blanc, who accompanied us in this journey, and

and who is much better qualified than me to satisfy the curiosity of the learned upon the antiquities of this city, will doubtless, oblige the publick with his profound meditations upon every thing that can interest the world of letters. In the mean time, I will mention those curiosities which may have an affinity with the arts, and just name the rest, that nothing remarkable may be omitted.

The temples which have been discovered adjoining to the Forum, as well as several private houses, have enriched the cabinet of the king of the Two Sicilies at Portici, with divers moveables, effects, and utensils, destined for domestick purposes, an infinite number of these being equally curious both for their rarity and use. On the following plates are represented

presented some vases and lamps, of which a great number were found. Plate XX. exhibits the design of an earthen lamp, A B, representing a subject very different from those which are on the copper lamps taken from the same place; the indecent figures of which give reason to believe, that the city was under the protection of Venus or Priapus, and that a particular sort of worship was paid to one or other of these divinities. The basso relievo upon this lamp A, represents a dog seizing a hare, the ornament of the periphery is a vine. The profil B, is adorned with channellings toward the socket of the lamp, and with other little designs, pretty much in the same taste.

They found at Herculaneum corn very well preserved, and a loaf which

 is

is considered as one of the greatest curiosities of that unfortunate city; for, although blackened, it hath not lost its shape, nor the impression of the letters upon its top. It is represented at C, on the bottom of plate XX. But what is still more surprizing, we saw fishing-nets, which were found in the same place, extremely well preserved; and were shown a case of surgeon's instruments, every one of which had a brass handle, adorned with very curious workmanship.

Plate XXI. Plate XXI. represents two small Lachrymatories, A, B, the first being of glass; a great number of this form have been found, as well as several bottles and vessels of the same matter. The second, B, is of earth, and differs in shape from the first:

a

a great many of this sort are found in the catacombs at Rome. The figure C is a vase of brass, a vast number of which are at Portici: one among the rest has a double bottom, and is supposed to be a fire-stove; for it is furnished with three branches, which seem to be funnels, or little chimneys for the conveyance of the smoke. In the king's cabinet, there is another vase of brass, the neck of which is adorned with little ornaments, very well executed. The XXIId plate represents a cistern of marble, A, raised upon a foot, in form of a balustrade, with spiral channelings: the ornaments and mouldings are of a good taste and fine workmanship; as well as those of another trough, or little vase, in form of an oblong square, supported upon two feet. The figure B exhibits a kind

Plate XXII.

of tripod uſed by the ancients in ſacrificing to their houſhold gods. It is bruiſed and half melted, and almoſt all the veſſels of braſs, and other fuſible metal, which they have found in this ſubterranean city, are pretty much in the ſame condition. The tripod C, is in the king's apartments; and its ornaments are finiſhed with great delicacy. The ciſtern is ſupported by three wing'd ſphinxes, which are extremely well chizzelled.

Plate XXIII. Plate XXIII. repreſents two chandeliers, A, the ornaments of which are as well executed as thoſe of the other utenſils which I have already mentioned. They are four feet and a half in heighth; one of them being turned in a ſpiral line, and the other ſurrounded by a kind of reed.

Amongſt

Among the fragments of brass, are found a good many other vases in the same taste with that represented by the figure B.

If I had been allowed to copy after nature all the curiosities of Herculaneum, which are now in the cabinet of the king of the Two Sicilies, I could have furnished the lovers of antiquity with many designs of different things, which I could not retain so faithfully as to publish, notwithstanding the repeated visits I made to examine them. Nevertheless, I shall, upon the two following plates, exhibit some vases, the singular figure of which made a deep impression upon my memory.

Figure A, in plate XXIV. represents an earthen vase used in sacri- Plate XXIV.

fices; the vases B and C are of brass, and there is a great number of the same proportion. The figure D is the handle of a vase, in the same taste with that in the preceding plate.

Plate XXV. The vases marked by the letters A and B, in plate XXV. are likewise of brass. The first, which was probably used in libations, could not stand upright. The figures C and D represent the pictures of two small vases, the colour being red, and the transparent part well expressed. There is likewise a great number of other small pictures very well executed. The utensils A, F, G, seemed to have served for some domestick uses in private families.

Over and above this infinite quantity of vaſes of different forms, which I have mentioned, ſome of Hetruſcan earth were found, of a fine ſhape, like thoſe which are in the library of the Vatican at Rome. They have likewiſe diſcovered at Herculaneum, ſeveral feet of folding-chairs, executed in braſs, and made in the ſhape of an S. Finally, all the utenſils which I have ſeen, were either of earth or braſs; and it is very ſurprizing, that in the multitude of curioſities contained in the king's cabinet, there is nothing of iron but a gridiron, ſuch as we make uſe of at this day. It would miſlead me from my ſubject, to venture reflections upon this head, as well as upon many others that ſurprized me not a little; for in ſurveying all thoſe objects, I have limited myſelf intirely to the

task of representing them faithfully in the engravings which I have made, leaving to others those learned dissertations of which they are susceptible.

OBSERVATIONS
UPON THE
ANTIQUITIES
Of the City of
HERCULANEUM.

SECTION II.

Of the Paintings and Pieces of Sculpture found in HERCULANEUM.

THE paintings of different kinds found at Herculaneum, having excited the curiosity of antiquarians, especially of the lovers of that art, I have reason to believe they will be pleased with a detail of them, how

how superficial soever it may be; but as this subject is not so much in my province as that which I have already treated of, I would not publish my own ideas; and therefore, for what I am going to say, I have had recourse to some letters of a French artist, who was at Naples while I remained in that city; and that these extracts may be the more easily understood, I shall add some plates, which have already appeared, and fallen into my hands. Though they are engraved after designs made from the memory, they pretty exactly represent the composition of the subjects, and even the principal defects for which the originals are blamed. With regard to the design, I have likewise added others, which I myself drew from my remembrance; and I am persuaded, that notwithstanding

standing the defects in point of exactness that may be found in them, as they will engage the imagination much more strongly than could possibly be done by simple description.

The criticism may perhaps appear severe, but I was unwilling to weaken it, because it seemed entirely free from prejudice; and besides I see no reason for sparing such ancient painters. It is not therefore my opinion, which I here offer, but that of an accurate connoisseur who gives an account of the impressions which those pieces have made upon him.

HISTO-

HISTORICAL PICTURES.

THE most important pictures, which have been found in the subterranean city of Herculaneum, are upon some historical subjects, and the figures as large, or nearly as large, as the life.

Plate VI. The first picture represents Theseus victorious over the Minotaur. Theseus stands upright, and naked, except on the shoulder and left arm, which are covered with a piece of drapery. Young children of Athens are represented kissing his hands and feet. The Minotaur exhibited under the figure of a man with the head of a bull, appears overthrown at his feet. On a cloud is represented the

figure of a woman, who has a quiver at her back, and a great affinity with the usual description of Diana. The composition of this picture is very cold: the principal figures (especially that of Theseus) seem to be copied from statues. The two children who embrace his right and left arm, appear in attitudes which are very common in the basso relievo of the ancients. The others are not so much in this taste, particularly the Minotaur, who appears foreshortned. Theseus is tolerably drawn, though without art or understanding, yet there is a very good character in the head. Nor are the other figures designed with better taste.---We may nevertheless affirm, that the manner in these pictures is generally grand and the pencil easy. Otherwise this

performa-

performance is unfinished, and cannot be considered in any other light than that of a forward sketch.

PICTURE II.

Plate VII. The figures of this picture are as big as the life: it represents a woman sitting and leaning upon the right arm, and holding a staff in her other hand. She is crowned with flowers and leaves, intermixed with some ears of corn, and at her right side appears a basket of flowers, from which she is supposed to represent the goddess Flora. Behind her is a fawn, holding a flute composed of seven pipes, and a staff bent in form of a crosier. A man standing upright with his back towards the spectator is placed before her, and is supposed

ſuppoſed to be Hercules, on account of the lion's ſkin that covers his quiver. He is looking at a child, who in the lower part of the picture, is repreſented ſucking a hind, which careſſes him, and lifts up her hind leg that he he may ſuck with more eaſe. Between Hercules and this child is an eagle with his wings half diſplay'd. On the other ſide of Hercules, is a lion aſleep; and above in a cloud, the figure of a woman repreſenting a divinity. This picture ſeems to be nothing more than a Camaieu of red colour, the draperies of which are nearly of the ſame tint with the fleſh; yet this laſt has a variety of tones, and ſeems to approach the true colouring of nature. The picture is poorly deſigned, and ſhews very little knowledge in drawing and expreſſion. The heads are middling,

middling, the hand ill executed, and the feet altogether as incorrect. The child is lame, opens his thighs to an unnatural width, and his loins are a great deal too large. The woman has great eyes, which are neither fellows, nor opposite to each other: the whites of them are too much sunk and ill-rounded. The head of the fawn is well enough drawn, and has character in it: as for the animals, they are very ill expressed, especially the eagle and the lion. In a word, this picture seems to be painted by the very same hand that produced the other; for it has the same ease, the same boldness of touches, and is altogether as unfinished.

PICTURE III.

Represents the centaur Chiron teaching Achilles. The centaur sits upon his buttocks, embracing the young man. He is tuning the lyre, which Achilles touches at the same time, and which is hung round his neck. Behind these figures, in the back ground, is a plan of architecture, the mouldings of the cornishes of which are very ill executed, and painted with red, so as to resemble a piece of stuff. The manner of this picture is pretty much the same with those I have already mentioned, and altogether as poorly designed. The muscles of the stomach, and legs of the centaur, are neither just, nor well ex- Plate VIII.

 pressed.

preſſed. Beſides, the arms are ill drawn, with regard to the outlines, and the hind legs, which are bent under him are ill choſen, conſequently have an ill effect. The figure of Achilles has more ſymmetry, and the outlines are more flowing; becauſe, without doubt, copied from ſome good ſtatue; for the attitude gives us reaſon to ſuppoſe that was the caſe. However, the figure is not ill-painted; the ſemi-tints make a pretty ſoft gradation from the light to the ſhade; and though of a very grey tone, have a good deal of truth and nature.

PICTURE IV.

Plate IX. Is that which is ſaid at Naples to repreſent the Judgment of Appius Claudius. The Decemvir is ſeated, and

and touches his forehead with his finger. Behind him appears a woman, who embraces him with her right arm; and seems to hold him with her left hand. In the middle of the picture forwards is a man seated with his back to the spectators, and holding a paper in his left hand. At his right, you see an old woman with her finger on her mouth; and behind her, at some distance, a young man, whose countenance gives indication of grief, though the expression is but faint. By his side, is another figure of a woman; and lastly, on the back ground, appears another placed like a statue, which seems to be Diana; yet the figure is coloured, and the drapery is green. All the female heads are dressed in a cap that does not cover the roots of the hair, and have two buckles,

 which

which hang down along the cheeks. The Decemvir has ſhort hair, and buckles too, though not ſo long as the others. This picture ſeems to be painted in another manner, tho' not ſo good as that of the preceding. The compoſition is heavy and cold, and the colouring much worſe; the back is not covered with any drapery, but appears of the colour of blackiſh brick, even amidſt the lights. It is, beſides, altogether wretchedly drawn, the hips being as broad as the ſhoulders. In a word, there is no dignity in the figures; and though ſome of the heads may be a little more boldly touched, they are abſolutely void of true character and expreſſion.

PICTURE V.

Plate X. There are ſome other pictures, the figures of which are nearly as big as

the life. Such is that representing three half length figures of women upon the fore-ground, and in the back-ground a man ſtanding in the water up to his cheſt, and holding a bent or crooked ſtaff in his left hand. This is ſuppoſed to be the Judgment of Paris.

Another piece exhibits, as it is believed, Chiron inſtructing Achilles: here Chiron is not a centaur but an old man; and Achilles, or the figure taken for him, is a youth about fifteen years of age, holding two flutes.

There is a third, which is ſaid to repreſent Hercules in his infancy, ſtrangling two ſerpents. On the floor or ground, appears a child, execrably deſigned, with a ſerpent in

each hand. A man apparelled ſits on the right hand ſide of the picture, a woman behind him, and on his left hand, an old man holding a child in his arms.

In a picture, the figures of which are about a foot and an half high, we ſee Hercules in his childhood wreſtling with one hand againſt a ſatyr. But, both wreſtlers are of ſuch ſmall proportion, in compariſon with the other figures, as to be wholly ridiculous.

There is beſides, a number of other pictures which I do not recollect, though the figures are pretty much of the ſame ſize; but thoſe I have mentioned are the moſt important, and what the moſt ſolid judgment may be founded upon.

Their

Their colouring in general, has neither art, beauty nor variety: the great lights are well enough coloured; but the ſemi-tints being nearly the ſame from head to foot, are of a yellowiſh grey or olive colour, without grace or variety. The red predominates in the ſhades, the tone of which is of a duſkiſh hue. Nor is there any ſtrength in the ſhadows of the drapery, an inconvenience that uſually attends painting in freſco and diſtemper. Another fault which is viſible in a great number of freſco's, even by the beſt Italian maſters, is, that the colour of the ſhades is not broken down, but continues nearly the ſame with that of the lights, there being no other difference than that the colour of the ſhades, has a little leſs white in it.----I do not think the weakneſs of the colouring

in those pictures, can be attributed to the effect of time; at least they seem perfectly fresh and well preserved in that respect. The manner of painting is generally by hatchings, and sometimes melted: almost all the pieces are unfinished, and painted pretty much like our decorations of the theatre. The manner is grand enough and the touches easy, but on the whole denote more boldness than skill.

After having described those pictures which are the most considerable for the largeness of the figures, and the subjects which they represent; I will now take notice of those which are of an inferior kind and proportion; and without insisting on their manner, content myself with communicating

municating an idea of such as appeared to me the most distinguished in point of composition and execution.

PIC-

PICTURES

CONTAINING

FIGURES of a middling size.

THERE are several pictures composed of figures of half the natural size, or less; the greatest part of which are indifferent: though the heads are generally the best parts of them, and discover something of a greater character, which savours of what we call the antique. The touches in these are bolder, and sustained by a more vivid colouring than that which we find in the rest. The subject of the most and best of these pieces, is a woman seized by a satyr.

There

There is besides, a picture of Ariadne forsaken. The figures, which are about a foot high, are well coloured, correctly drawn, and have a good effect.

Among other pieces found at Herculaneum, were two pictures, curious on account of the subject they represent; namely, Ægyptian sacrifices, the figures being about a foot in proportion. On the foreground of one of these is an altar, at the side of which appear two birds which can be no other than Ibes: an old man is employed in placing on the altar something which cannot be distinguished. At a distance are two groupes of figures, ranged in parallel lines; and in the middle of these two groupes is the figure of a man arrayed in white, with a sword in

Plate XII. Fig. A.

in his hand, at least so it is judged from its appearance. In the back-ground appear three figures, with their hands resting on their respective breasts, and concealed under a large white robe that descends to their feet, and the prospect terminates behind, in an arcade drawn symmetrically: there being on each side a sphinx and a palm tree.

Plate XI. Fig. A. The other picture represents nearly the same subject; only instead of one there are two men by the altar, bending downwards; though I could not distinguish their action: for the pictures are no more than very rude sketches: in this last, we see neither the man with the sword, nor the three figures or kind of Acolyths in the back ground: but, in their room we distinguish the figure of a black-

a-moor,

a-moor, dancing with gesticulations. These two pieces are miserably executed; the perspective is false when viewed from above and without diminution, nearly in the same taste with that which we call military perspective.

PIC-

PICTURES OF ANIMALS.

THEY have likewise discovered at Herculaneum, a great number of pictures of animals, birds, fishes, fruits, &c. of the natural size. These pieces are the best of any yet found, being executed with taste and ease; yet they are for the most part unfinished, and have not always the necessary rounding and exactness. I will mention some that seem to be pretty true in colour and effect, though they want strength in both.

Plate XIV. Fig. C. One of these represents an earthen bottle, on the neck of which is a glass

glaſs reverſed, of the ſame form with our goblets, but ſhorter.

In another appears a glaſs with two handles half filled with white wine, and a glaſs bottle holding ſome water, which cannot be better expreſſed. Plate XXV.

In a third we find a book, compoſed of two rolls, and another utenſil, which appears to be a Portefeuille, reſembling thoſe which are now in uſe. Theſe are three very good pieces.

Some pictures repreſent game; and among others is a wild duck extremely natural, together with fruits, and a loaf of the ſame ſhape with that which was actually found, &c.

There are alſo ſmall pieces repreſenting animals, and among the reſt, elephants;

elephants; but that which is the most distinguished for the delicacy of execution, is a tyger about five or six inches long.

Plate XIII. There is another picture which has nothing worth notice, but the singularity of the subject; representing a bird like a perroquet, yoked to a little car, upon the forepart of which sits a grashopper, holding the reins in the capacity of driver: this, however, is none of the best executed.

PIC-

PICTURES

Composed of very small

FIGURES.

THE best of these pieces are such as consist of figures from four to seven or eight inches high; and there is a great number of that sort. They are composed in the taste of basso relievo, and without any shortening, for the most part consisting of one figure only; sometimes a woman in the air, sometimes a child, or a centaur bearing a woman on his back, &c. Plate XII. Fig. D.

These figures are painted on a flat ground, of some single colour, such as red; but touched with great spi-

rit and taste, and sometimes extremely well coloured. Some of them are very curious, because they exhibit figures cloathed in the fashion of those times, working at some trade, as a miller, shoe-maker, &c. with the utensils of their different professions, exactly represented. There are also many rope-dancers among them.

In general, the children painted in those pieces, are just enough in point of drawing, but deficient in those natural graces which Pietro Testo hath displayed in his pictures, and Francis Flamand in his models.

Plate XIII. Fig. C

In several of those pictures, are grotesque Mascarons, representing old men, or different masks, especially those that were used in the theatre.

In

In ſome others we find galleys, which at firſt ſeem to have two banks of oars, the firſt not parallel with the ſecond; but, when conſidered with attention, the truth is eaſily diſtinguiſhed.

Some of thoſe pictures repreſent chimera's and imaginary figures of men and women, terminating in a bird's tail: a great number of theſe little figures being painted with pure red, while the ground is covered with another ſimple colour.

PAINTINGS OF ARCHITECTURE.

THERE is a very considerable number of these pictures of architecture or ruins; but they scarce deserve notice: for, they are altogether out of the proportion of the Grecian architecture. Generally speaking, the pillars are double or triple the length of the natural dimensions: the profil of the mouldings of the cornishes, chapiters and bases, is of a wretched Gothic taste; and most of the Arabic mixture in the architecture, is as ridiculous as any of the Chinese designs. Nevertheless, we must except two or three pieces

pieces which are agreeably coloured, though not true, and in which the landſkip is touched with eaſe: we may allow the ſame advantage to ſome other pieces of ornament twined with vine leaves or ivy. In general, what they have taken from nature, is good: but, we cannot ſay ſo much for their works of imagination. There is gradation and diſtance in theſe pictures, and the architecture is repreſented in a kind of perſpective, which plainly proves, however, that the authors of theſe compoſitions did not underſtand the rules of that art. The receding figures do not tend towards the points, where they ought to unite. Some objects are ſeen above, and ſome below; ſo that ſeveral diſtant horizons are required to arrange them.

In a word, we perceive ſome notion of the diminution of objects, but without any knowledge of the invariable rules, to which it ought to be ſubject; or a right underſtanding of the effects of light.

On the fifteenth plate is exhibited a picture of architecture, which I deſigned, to ſhew how much inferior it is to the taſte which prevails in all the buildings of this city. The compoſition is wretched, the order extravagantly lengthened, ſupported by pedeſtals that look like arbour-work, between which is an hollowed table, adorned with a garland, the chapiter of the pillars is of the Ionick order, compoſed with double aſtragals. The great intercolumniation is decorated with a garland, on which

which a bird perches: but what ſavours more of the Arabic compoſition, each of the little intercolumniations is alſo accompanied with a garland. The corniſh of this order is architraved, and the ornaments are good. On one ſide, the columns are detached, and on the other, ſeem to be ſupported upon a kind of arbour work: the perſpective of the fore-ground, has a point of view different from that of the back-ground, which is very much of the ſame compoſition, namely, birds perching upon garlands between the pillars, which are of a very bad proportion. In ſhort, this picture is raiſed from a pavement of different colours; and it muſt be owned, that with regard to the diſtance of the objects, the effect is tolerable.

The cabinet of Portici, as we have already ſaid, contains a good many pictures of this kind, in which the ſame defects, and others ſtill more conſiderable, may be obſerved: but I thought the deſcription of one ſufficient to convey an idea of that ſort of painting.

PAINT-

PAINTING
IN
BROOCH or CAMAYEUX.

I Thought it would not be amiſs to take notice of ſome Camayeux upon white marble, about eighteen inches in proportion, which have been covered with glaſs, in order to preſerve them. Theſe pieces exactly reſemble the drawings with red Crayon, and like them are hatched in ſeveral places. One of them ſeems to repreſent Hercules and the centaur Neſſus. Another exhibits three comic figures, one of which ſeems to wear a peruke or hair flowing down to his breaſt; the headdreſs reſembling that of the Marquis in the time of Moliere. Theſe two

deſigns

designs on marble are of a good antique taste, with regard to the dress and flowing of the drapery; but they are very incorrect, and besides, the colours are harsh, and a great deal too strongly marked. There is a third Camayeu which seems much better than the rest, but unhappily it is almost quite effaced; the figures however which are observable, though very imperfect, seem to be well formed and of correct composition.

MARBLE

MARBLE STATUES

FOUND IN

HERCULANEUM.

THE ſculpture found in this ſubterranean city, is much ſuperior to the painting. Plate XVI, and XVII.

The principal and fineſt piece hitherto diſcovered, is the equeſtrian ſtatue of white marble, repreſenting Nonnius Balbus. This is a young man, armed with a cuiraſs, which ſcarce deſcends to his loins: Under this cuiraſs, is a ſort of ſhirt without ſleeves, that covers his ſhoulders; then paſſing under the cuiraſs, comes down

down as far as one third of his thighs. A cloak which he wears upon the ſhoulder and left arm, does not conceal the hand with which he holds the horſe's bridle, which is very ſhort. His thighs and legs are naked, except ſo much as is covered with the buſkins, that ſcarce reach above the inſtep, over which they are tied with ſtrings.

This figure is extremely beautiful, on account of the ſimplicity with which it hath been deſigned; it is not ſo ſtriking or fair at firſt ſight, as it will appear after an attentive examination. The head is admirable, the figure ſurprizingly correct, the contour juſt and delicate, and the compoſition equally grand and ſimple. Although the horſe be likewiſe

very

very beautiful, and his head full of fire and ſpirit, it is nevertheleſs inferior to the figure of the man, and the work performed in a peculiar manner; indeed that manner is beautiful and grand: yet the canons of the forelegs, together with the hoof and joint of the foot, ſeem to be too long in proportion. Another equeſtrian ſtatue of marble was alſo diſcovered, but I could not ſee it, as they were at work in repairing it.

Herculaneum hath furniſhed eleven or twelve figures of white marble, as big, or rather bigger than the life. Theſe pieces, though not of the firſt order, are not without their beauties: their draperies are executed with great taſte and delicacy, and in a manner that ſavours leſs of wet linnen,

linnen, than that of ſeveral other antique Roman pieces of ſculpture; but almoſt all the heads are very indifferent.

BRONZES.

BRONZES.

IN the ſame place that contains theſe treaſures, are ſeven or eight figures in braſs, one of which is much bigger than the life, and ſuppoſed to repreſent Jupiter. The head and body have been flattened by the weight of the laver, and though that misfortune hath injured theſe parts, the beauties of them are ſtill obſervable: the legs are better preſerved, and extremely beautiful, of a grand character, and in a gout like that of the antique fawn which holds Bacchus in his infancy.

One of thoſe figures repreſents a conſul; another ſeems to have had eyes of a different metal, for the holes

holes in which they were incrusted are still perceivable; a circumstance which has a disagreeable effect, and never could produce a good one, though frequently practised among the ancients.

They have also found several fragments of an equestrian statue of brass, which has either been crushed to pieces, or melted: the head of the horse, and the legs of the man, which are the most perfect of the parts that remain, make us regret the loss of it, by giving us reason to believe, that it is a very good piece. There are likewise some heads of marble, and of brass, which have some degree of merit.

In the apartments of the king of the Two Sicilies, we see some little antique

antique ſtatues, of about one foot and a half in proportion, which are pretty; in particular, a ſmall Venus, like that which we diſtinguiſh under the name of the Venus of Medicis; and another very good figure of the ſame divinity, cloathed from the middle to the feet; together with a figure ſuppoſed to repreſent Bacchus, in a grand manner, and learnedly deſigned.

BAS RELIEFS IN MARBLE.

Plate XIV. THEY have likewise found some bas reliefs in white marble, the best of which represents an old man making libations upon an altar. In the middle is a woman seated and veiled, and another behind her, standing upright.

There is another small bas relief, the figures of which are about ten inches in heighth: It is not so beautiful as the former, with regard to the work, but much more curious; for the subject is a comic scene, and the actors appear in their masks. I could

not

not comprehend the back-ground, which probably represents the decoration of the theatre. There likewise we see a third basso relievo, with figures of about two feet in proportion: there is nothing in it worthy of notice.

These are all the pieces I have been able to preserve in my memory, but it is possible I may not only have forgot things of more importance than those I have described; but I may have also erred in some circumstances, though I do not believe my mistakes are very considerable; for I have mentioned nothing but what presented itself distinctly to my remembrance, and all that I have said was written immediately after I had examined, and admired an infinite number of curiosities at three diffe-

rent visits. The king of the Two Sicilies, who takes pleasure in indulging the publick with a detail of that important discovery, will not suffer any Frenchman to make drawings; though they are freely allowed to see and examine. I thought, however, I might communicate to the publick the impression they made upon me, in order to augment the desire which all the virtuosi of Europe feel, to be more particularly acquainted with them; and to be masters of a description, in which the artists are employed by his Sicilian majesty; and which will doubtless, answer their expectations.

REFLEC-

REFLECTIONS

UPON THE

STATE of PAINTING

AT

HERCULANEUM.

ONE would imagine, that ſuch a numerous collection of antique paintings would aſcertain the degree of perfection to which the ancients carried the different parts of that art; nevertheleſs, I do not believe, that they convey a diſtinct idea of the excellence of ancient painting. And indeed it is probable that theſe pieces were not painted by the beſt maſters of thoſe days. For how can we ſuppoſe, that in ſuch an age,

abounding with excellent sculptors, any consideration could be had to painters so weak in point of design. It seems probable therefore, that these are the works of painters belonging to this ancient city, which in itself was but very inconsiderable. They are painted upon the walls of a theatre, and other publick places, and doubtless, were at that time regarded only as simple embellishments, for which they were unwilling to be at such an expence as would attend the choice of abler artists.

But that as it will, the Theseus and other pictures as big as the life, are too feeble in point of colour and design. There is very little genius in the composition; and all the parts of the art are expressed in an equal degree of poverty and weakness. The

colouring has no variety of tones, and shews no knowledge of the clair obscur; that is, the change which the colours undergo from the distance of the objects; the reflection of the contiguous bodies, and the privation of light. In a word, these works display none of the graces of the art of composing the lights and shades; so as that being assembled and aggrouped, they become more grand, and produce a more sensible effect. Every figure has its own light and shade, and I have not observed one overshadowing another; nor is there one that does not look like the first elements of a composition. The shades are either not at all reflected, or they are reflected equally from head to foot. The colours are too glaring, without being broken down, as they ought to be, by a pri-

vation of light: and they do not partake of the reflection of the adjacent objects. In fine, we observe nothing which can prove, that the ancients had carried the knowledge of light to that degree which it hath attained in these latter ages. As to the composition of the figures, it is cold, and seems to be rather treated in the taste of sculpture than with that heat of imagination of which painting is susceptible. Yet as some of the figures are a little fore-shortened, we may suppose that art was carried farther by the able painters of those days. But nothing has been discovered which determines, whether the ancients knew the fine effect which the richness and variety of stuffs have in painting. We can, however, perceive that the manner of painting drapery in small

folds,

folds, as practised in statuary, was not general among them, and that they had another manner more large and full. Indeed of this circumstance we were already fully assured by several pieces of antique sculpture; the draperies of which were of coarser stuffs, and folded in larger masses.

Notwithstanding the mediocrity of the large pieces, they plainly shew a grand manner of designing, and an easy pencil; which plainly proves, that the painters learned the elements of the art in a good school, and under masters who worked with ease, and if there was very little variety in the tones of the colouring, it was probably the fault of young beginners; for the best manner of painting figures for history, is that, in

which

which the degrees of light and shadow are delicately marked; so as that the variety of the tones may not be so perceptible as to interrupt the greatness of the masses. The raw beginners not perceiving the knowledge concealed by this artifice, attempted to imitate with two or three tones, this almost imperceptible variety, which the able artist knows how to effect in the transitions from light to shade. The same thing happens, in designing from nature, and very often the pupils fall into the same mistake. A good drawer treats his object in such a manner, as that at first view it presents nothing but great parts and a grand contour, yet an intelligent eye soon discovers the most minute variety. In my opinion, therefore, the authors of those pictures may be justly accused of

great

great ignorance in point of design; for it must be owned, that although the forms are, in general, good, there is neither justness nor ingenuity in the detail.

The pieces taken from nature, such as vases, fruit, game, &c. are painted with a good deal of truth; but these performances copied after immoveable bodies, are easily executed. Yet even in these pictures, we do not find that degree of illusion, to which imitation has been carried in our days; and all of them have considerable faults in point of perspective.

The pieces composed of very small figures are certainly the best of those that have been found at Herculaneum.

um. They are not only touched with a great deal of ſpirit, but the manner is excellent; they are altogether in the taſte of the antique bas reliefs, and the colouring is exceeding good. At Rome, and other places, there were ſeveral ſmall pictures, but not ſufficient to eſtabliſh a certain judgment of the painting of the ancients; for, in order to conſtitute good performances of this kind, the deſign muſt be ſpirited and the touches light. Few tones are ſufficient for the colouring, becauſe there is hardly room for a variety in the ſemi-tints; eſpecially, in ſuch unfiniſhed pieces.

If the pictures of architecture were more ſupportable, we might derive from them ſome knowledge of the

manner in which the antients practised lineal, or aerial perspective; but they are so rude in all respects, that the painters seem to have had no acquaintance with beautiful architecture, and their productions look like the effects of profound ignorance and extravagant delirium. However, as the king of the Two Sicilies still continues his researches, we ought not to despair of finding some pieces of painting worthy of being compared with the fine statues which have been already discovered. Besides, how small soever the value of these paintings may be, they serve plainly to demonstrate the certainty of one kind of painting, which might have been carried in those days to a degree of excellence that deserved all those elogiums lavished by authors

upon

upon ancient pictures, of which we are deprived by the tyranny of time. If I may be allowed to hazard some conjectures on this subject, I am of opinion, that the idea of those pieces may be found in some of the excellent pictures of Guido, which, tho' their composition is cold, symmetrical, and destitute of those grand effects of light, so striking in other masters, and even in many of his own pieces, are yet extremely beautiful in the perfection of design, the exactness of truth, and delicacy of colouring. The antique paintings give room to doubt, whether the ancients were equal to several Italian, Flemish and French masters, in the fire of genius, and force of imagination, either in composition, or the effect of light; and if we may judge of them by their architecture, they

seem

seem to have been afraid of giving way to the suggestions of fancy; but like the moderns, especially those of Italy, generally chose to imitate one another. We ought not for that reason to tax them with want of genius: on the contrary, all the inventions which are really good, and consequently used in the modern architecture, have been derived from the remains of the antique. But the desire of striking out something new does not seem to have been their prevailing passion; as they probably bestowed all their attention in perfecting what was already received with approbation. The beautiful in each kind being once found, they rarely ventured to search for it in another path. The antique temples are almost all composed in the same idea, which is likewise the case with a great many

things both in architecture and painting. Perhaps, then, there was a general taste in painting, followed by almost all the masters of those times; and it is probable, that this prevailing taste was that of basso relievo, as sculpture was then very much in fashion. There is even reason to believe, that if composition, or the heat of the imagination, had predominated among them, and the magic of colouring, and the clair obscur, been found out, their seducing charms would have hinder'd them from being neglected and lost, because this part of the art, although very difficult to bring to perfection, admits of a mediocrity, which furnishes more easy resources for seducing those who are not perfectly well acquainted with painting. And indeed, if we may judge by what happens in our own times,

times, in all probability, when the arts ſhall have loſt that degree of perfection, to which they are now arrived, there will remain a ſort of harmony, which though no other than a falſe, and ill-underſtood imitation, will ſerve to prove, that this ſo ſtriking part of painting muſt have been known, and carried to a greater length by thoſe who firſt practiſed it. Some traces of this degeneracy we perceive in the paintings of Herculaneum, which are modern, in compariſon of thoſe ſo much extolled by the ancients. However, it is probable, that thoſe painters had ſtill in their eye a great many fine pieces, which now no longer ſubſiſt; from which they would have drawn theſe leſſons, if all the parts of the art had been aſſembled in a degree capable to inſpire a taſte for them.

SECTION III.

OF THE ANTIQUITIES IN THE Neighbourhood of NAPLES, below PAUSYLIPO, upon the Gulf of POUZZUOLI, and at BAIÆ.

IN giving my remarks upon the antiquities lately diſcovered in the town of Herculaneum; I think the publick would not be ſorry, ſhould I join ſome of thoſe that ſtill exiſt in the neighbourhood of Naples. Theſe laſt have been mentioned by ſeveral authors; and therefore I ſhall not much expatiate upon them, but on-

ly premiſe, that no perſon has deſcribed them ſo exactly as myſelf, and I hope it will be agreeable to find them added to this little performance, with which they have an intimate connection. Therefore, ſo far as I have obſerved them, they ſhall be repreſented in the following plates.

OF THE GROTTO OF PAUSYLIPO.

THIS grotto, or subterranean passage, through which the high road is carried from Naples to Puzzoli, is so ancient, that the epocha of its origin is altogether obscure, and has produced disputes among authors that are well known. For my own part, I am contented with believing that the ancient inhabitants of Naples, for their own conveniency, having opened quarries in this mountain, which is formed of sand and Plate XXIV.

ſoft ſtone proper for building, and uſed for that purpoſe to this day, instead of conducting their trenches at random, carried them on in a ſtraight line through the mountain; induced perhaps by the deſire of doing ſomething extraordinary while they were employed on this occaſion. For the mountain being entirely formed of ſandy ſtone, it muſt have been a matter of indifference to them on which ſide the excavations were conducted. Very ſimple motives have produced a thouſand things, which are every day the ſubjects of aſtoniſhment and diſpute. Be that as it will, this ſubterranean paſſage is in length about an Italian mile, and about twenty feet broad. As for the height, it varies conſiderably; for the two openings made to admit a volume of light to enlighten the paſſage, are at

leaſt

least sixty feet high; they descend sloping insensibly to a dormer window in the middle, pierced from the summit of the mountain down to the interior parts of the grotto; conveying thither still more light, though it contends with that which arrives weakened from the entry, and if I may be allowed the expression, confounds the passengers. This grotto had been for a great while, very much neglected. Time, the destroyer of all things, had made considerable havock in it: the earth and stone tumbling down, had blocked up the passage; so that it served no other purpose than that of a den for banditti, who chose it for their retreat, and from thence very much infested the neighbourhood, when Philip II. ordered it to be repaired, as appears

by an inscription decorated with a piece of architecture at the entry, "Philippo II. Catol. regnante hoc "invia Ibicibus paria, &c. Vid. La "nouveau Guide de Pouzzole." From that time it hath continued, as it is at present, in very good condition. A chapel cut out in the middle of it, where a lamp continually burns, serves as a place of devotion for those who pass through it. I will, however, take upon me to affirm, that the advantage of this opening, which saves the trouble of ascending the mountain, is dearly bought by the dreadful dust, which at all times stifles the passengers, and when the weather is dark, obscures the middle of it to such a degree, that they are obliged to cry aloud, for fear of stumbling against

one

one another. On the top of this mountain is an old tomb, said to be that of Virgil, but it is without inscription, and too ruinous to be described.

OF THE

GROTTO DEL CANE.

Plate XXVII.

THE territory in the neighbourhood of Naples, abounding, as it does, with fire, and bituminous or sulphureous exhalations; it is not surprising to find places which are not to be approached without danger. Such is the grotto called Del Cane, because the experiment, I am going to mention, is always tried upon a dog. This grotto being five feet in heighth, four in width, and from seven to eight in depth, is kept shut by a wise precaution, in order to avoid the danger which might result to any fatigued traveller, who should unfortunately repose himself in that place. The keeper of a hot bath in the neighbourhood, keeps the

the key of this perfidious cavern, to which he conducts travellers, and shews them that a dog stretched in the bottom of this grotto, even at the distance of a foot from the earth, inhales such mortal vapours, that in a few minutes he falls into convulsions, of which he would die, if he was not taken out immediately into the fresh air, or thrown into the lake of Agnano, which is about twenty paces from the cave. The same man likewise shews, that a lighted torch presented to this vapour, is immediately extinguished, without the least trace of smoke remaining; and this experiment is tried with success upon several other animals aquatic, as well as terrestrial.

OF

SOLFATARA.

Plate XXVIII

THE Solfatara seems to be another exhausted vulcano, forming a large oval plain, about fifteen hundred feet in length, and a mile in breadth, environ'd with several little hills, the pores of which every instant exhale vapours of a sulphurous odour. The earth itself of these mountains, and especially that of the plain, is yellowish, and seems to be very much loaded with this mineral. In 1750, there were at the bottom of this plain several mouths, from which issued a very subtile flame. These they covered with pieces of earthen pots and tiles; to which borax was found sticking. They have likewise built

built huts, in which caldrons are fixed for purifying sulphur, vitriol and allum; the fire that issues from the earth serving to make the caldrons boil, and to refine the minerals.

Plate XXIX.

The bituminous vapours that continually exhale from this ground and the neighbourhood, corrupt the waters as well as the air; yet, notwithstanding this inconvenience, there is upon the mountain a convent of Capuchins, the church of which is dedicated to St. Januarius, the patron of Naples. True, it is, they stay here only during the winter; for, besides the suffocating smoke, it is impossible to live there in the summer, on account of the extreme heat. There is nothing remarkable in this house but a bust of St. Januarius

which

which is in great veneration in that country; and a cistern of very singular contrivance for preserving the rain water from corruption. The vase B, which contains the water, does not touch the earth, in which is founded the cage C, surrounding the vase B, which is detached from every part of it, except the pillar A, upon which it rests. This reservoir may be from fifteen to eighteen feet in diameter, built of brick lined with stucco, and secured with some bands of iron.

OF

POUZZOLI.

THIS city has been described by so many authors, that after all that has been said, I shall not tarry long upon the subject. It is very ancient, and still remarkable for the ruins of several grand edifices, which formerly composed one of the superb cities of the Roman power. This place and the neighbourhood is full of temples, theatres, and circus's, which denote its ancient magnificence. Almost at the entrance of the new Pouzzoli, appear the remains of an amphitheatre, called by the inhabitants Coliseum, like that of Rome. I perceived some of the galleries penetrating as far as the Arena, Plates XXX. and XXXI.

Arena, which is now converted into a garden; but it was so ruinous, that I could not form any probable conjecture touching the different orders of the architecture. From what remains of it, I only concluded, that it was altogether built of hewn stone. The cathedral of this city is said to be built upon the foundations of a temple of Jupiter, which formerly perished in an earthquake. Near the amphitheatre are still to be seen the remains of a reservoir, resembling the Piscena at Baiæ, but scarce to be distinguished, the place is so ruinous. The pedestal, which is in the middle of the market-place of Pouzzoli, represented by the figures A and B, though beautiful, hath suffered by time. It is of white marble, adorned with fourteen figures jutting out, and an inscription; having been found

in

in digging the foundation of a private house. The side of the inscription is adorned with two figures and a child: the opposite with six, and the others with three figures each; all very much mutilated; but nevertheless beautiful in those parts that remain.

In my last journey in 1749, I had observed in this city, three pillars, of about five feet in diameter, the shafts of which were half buried. Since that time the place having been dug, they have discovered their bases B, which are of marble, and the profil is very beautiful. The king of the Two Sicilies having ordered the work to be continued, they found a temple, supposed by the idol, and some other circumstances, to have been dedicated to Serapis. Accordingly, Plate XXXII.

when I returned in 1750, I made a design of the profils, as represented in this plate. They had already found in these ruins, vases and statues of excellent workmanship. The portals of this edifice were of a very good contour, and one may judge from their centre A, that this curve was not of the invention of modern architecture. I have met in my travels with several of this kind, which induced me to believe, that the ancients sometimes deviated from the full centre. This temple was very magnificent, every part of it being covered with marble, even to the very jakes, C D E, together with their seats and sewers. It is to be hoped, that in continuing to dig in these places, they will find a great many other curious particulars. People usually embark at Pouzzoli for

Baiæ;

Baiæ; and in this paſſage, which is no more than the breadth of the gulf, they ſail along the arches of a mole, vulgarly called at Baiæ, Caligula's bridge. I ſhall not follow the opinion of thoſe authors, who believe it was really a bridge acroſs the gulf, from one place to the other; a conjecture altogether void of truth or probability, for the diſtance between theſe two cities, is too conſiderable to admit of any ſuch expedient: I believe then, and I am not ſingular in my opinion, that this mole was made with a view to render the port of Pouzzoli, more ſafe for the veſſels that rode in it, and to reſiſt the force of the ſea, which ſpends that fury on its pillars, that otherwiſe would do miſchief by beating upon the beach of the town. It was certainly a great and uſeful enterprize;

the arches and pillars were composed of stone and brick; and are of a noble magnitude; while their duration, and the good condition in which they still appear, are plain proofs of the solid manner with which the ancients carried on their buildings.

OF AGRIPPA'S RESERVOIR, Commonly call'd the WONDERFUL FISH-POND.

ON our arrival at Baiæ we proceed to Cape Miſenum, among an infinite number of fine ruins, which demonſtrate the ancient Deliciæ of theſe places. Amongſt others is to be ſeen a great reſervoir, very well preſerved, the plan of which is an oblong ſquare formed of thirteen arches by five, with the canal A, in the middle. We find the remains of a ſtair B, ſerving for a deſcent into it. The path leading to the reſervoir, is on a level with the uppermoſt ſtep; ſo that it is ſunk the whole depth of the ſquare. The Plates XXXIII. and XXXIV.

length of the arches is from eleven to twelve feet, and their height in proportion; those that are on the two sides, which constitute the breadth are the highest; those that make the length scarce reaching to their centre. In a word, the vault is supported upon forty-eight pied-droits, composed of four pilasters each, as represented in the figure A, plate XXXIV. This reservoir is lined with a sort of mastic, the composition of which is the subject of dispute among the most of those who have examined it; some pretending that it is a kind of mastic, mixed with whites of eggs, while others suppose that it is simply a crust which the waters have made upon the wall. For my own part, I have always supposed, that it was a mastic composed of marble powder, and the sand of the

country, with some mixture, which, like a great many other secrets of the ancients, is now no longer known. Be that as it may, this mastic, which is but two lines thick, and composed, as we plainly perceive, of different layers, is so extremely hard, that an iron tool can scarce make an impression upon it. The mason-work is so good, that the pavement is still very well preserved, the stones well joined, and the walls very little damaged. The pillars B, in plate XXXIV. together with the walls, are of brick-work bound; therein differing from those in another reservoir, called the Hundred chambers of Nero, the pillars of which C, in plate XXXIV. are likewise of bricks, though differently laid. As to the Piscina, the middle is laid in lozenges, which Vitruvius calls Opus reticu-

reticulatum, and the angles with large bricks bound; this manner of building having been very much uſed by the ancients, as we perceive by the ruins which are ſtill extant at Rome, and in the neighbourhood of that city.

OF

OF THE TOMBS IN THE ELYSIAN FIELDS.

COMING out of the Piſcina, we aſcend to the top of Cape Miſenum, at the foot of which we ſee the Mare Mortuum, ſo called, becauſe it was croſſed by thoſe who carried the aſhes of the ancients to the tombs, which are on the ſide of this mountain, formed in vaults, the greateſt part of which are decorated with little circular niches, both in the plan and elevation. Thoſe in the middle are diſtinguiſhed with ornaments, or by being larger than the reſt. Some are adorned with pedi- Plate XXXV.

ments on their door-cases, and supported as drawn in this plate. These tombs were formerly richly ornamented, and I found some trifling remains of painting in them; but could see none of the vases that contained the ashes of the dead. Though there is a great number of these tombs communicating one with the other, I thought it would be sufficient to delineate a couple, which are built of brick laid in the manner we have already mentioned, and according to the representation at the bottom of this plate. They are for the most part half buried in the place, and their entrances almost shut up.

OF AGRIPPINA's TOMB.

UPON the road that leads from the tombs I have mentioned, to Baiæ, we find a vault of a semicircular arch detached, which our conductors assure us is the tomb of Agrippina, that unfortunate mother of Nero. This vault, which is buried in the earth up to the beginning of the arch, may be about five feet in breadth, and six in heighth. It is is internally covered with stucco, of which they have formed compartments of sculpture, in an excellent taste and exquisite workmanship. The bas reliefs, which are in the middle of the arch, are equally beautiful, though very much damaged, and blackened

Plate XXXVI.

blackened by the ſmoke of the torches, which people are obliged to uſe in going down into theſe ſubterranean places. At leaſt, that is the notion I conceived from the little of what remains. Theſe bas reliefs are all incloſed in borders, the ornaments of which are beautifully finiſhed, in the true antique taſte. Although the ſide poſts of this vault are almoſt intirely buried, and the place otherwiſe greatly damaged, we, nevertheleſs, ſee ſome remains of painting, though they are in very bad condition, and ſo much effaced, that no judgment can be formed of them. All that I could diſcover, is, that they agree with the decoration of the vault in variety of ornaments; among which I found ſome of thoſe chimerical animals, compoſed of a lion's body, with the head and wings of

an

an eagle. The ancients often represented this monster called a griffin, in their ornaments, as may be seen in the frize of the temple of Faustina, in the Campo Vaccino at Rome. This vault is said to lead into several adjacent chambers, which, however, contain nothing remarkable, and are for the most part filled up with ruins.

OF

OF THE

TEMPLE of VENUS,

Vulgarly called the

TEMPLE of NEPTUNE.

Plate XXXVI.

AFTER having quitted Agrippina's tomb, and passed below the fort of Baie, we were landed at the foot of a temple, the dedication of which is still a subject of dispute; and as it is a thing really very obscure, I shall adhere to the opinion of the country; although in this respect, the vulgar especially is often apt to lead us astray. This temple, however, which some believe to have been dedicated to Venus, and others to Neptune, is externally formed upon an octogonal plan, four sides of which are flanked with

with grouped pilasters, placed upon high pedestals, which are almost intirely sunk in the marshy ground where the edifice is built. As to the chapiters, they are so totally ruined by time, that not the least vestige of them remains. The gate is of a semicircular arch, but the cross-work A, above, is formed of the same curve, which I mentioned above in the article of the temple of Serapis, lately discovered at Pozzuoli. Internally, this temple is circular, tho' I have designed it as an octagon. The arches are totally ruined, so that I could not judge of their decorations. But by the appearance of the naked bricks, one is disposed to believe, that this edifice, as well as a great many others, was crusted with marble. I had almost forgot to observe, that the pilasters jut out from

the

the wall, about two thirds of their breadth. There is nothing preſerved in the inſide worthy of notice, and it is ſo difficult of acceſs, that one is obliged to be carried thither acroſs the moraſs; ſo that I can aſſure the reader, there is nothing to be ſeen that will make amends for that trouble. But this is not the caſe with what I am going to mention in the following chapter.

OF

OF THE

TEMPLE of MERCURY.

THE temple of Mercury, as well as the preceding, is partly ſunk in the marſhes, and you muſt be carried thither before you ſee the inſide, which, however, yields much more ſatisfaction than the laſt. It is a kind of rotundo, with an opening in the arch, which ſerves to enlighten the whole temple, in the ſame manner as that of the Pantheon at Rome. The ſurface of the walls is covered with ſmall pieces of marble, placed here and there, without any order; a circumſtance from which I ſuppoſed it was no more than a preparation for receiving ſome plaiſter, Plate XXXVIII.

of which, however, there are no remains. Adjoining to the temple are other vaults, which contain nothing remarkable. I entered by the door A, which is the usual entrance; though it is not in a line with the door B. This is likewise the case with the others, C and D. I could not conceive the meaning of this irregularity, unless they were so disposed, for communicating with some other edifices contiguous to the temple; and indeed this alone seems to have been the cause of such singular construction. The coridor E, is still decorated with some paintings in fresco, very well preserved; though they are not remarkable for their beauty. I observed that this temple, as well as all that remains of the ancient edifices in these places, is built of bricks, of the size I have

 already

already mentioned; although stone is very common in the country: so that the ancients seem to have preferred the first to the last.

OF THE

BATHS of NERO,

AND THE

TEMPLE of DIANA.

Plate XXXIX.

ON the ſame ſide, and almoſt in the bottom of the gulf of Pozzuoli, we go down by a gradual deſcent, through a path hollowed in the rock, which is a diminutive of the famous grotto of Pauſilipo, to theſe baths. At the end of this ſubterranean place, where no kind of carriage but horſes only can paſs, we find the ſtair A, at which ſeveral roads leading to different places of the mountain, reunite. Here we find ſeveral chambers or ſubterranean grottos, B, cut in the rock, that conduct us to the corridor C, of the ſame kind of workmanſhip, by which we go down by

by a gradual descent, to the baths of hot water which are said to have been made in this subterranean cavity for the use of Nero. The water is so hot, that the men who go to fetch it, not only find it insupportable to the touch, but when they return, they are quite covered over with sweat, by the heat of the vapours which exhale. I had a mind to enter them, but I found the heat insupportable. We have many examples of such water, heated, without doubt, by mines of kindled bitumen, through which they pass, but few so hot as this. The inhabitants of the country make use of them for several distempers, as well as of the stoves or hot baths, built near the grotto Del Cane, as I have mentioned in their proper place. In these grottos, B, are a kind of beds

or banks, D, made of ſtucco, for the ſick perſon to lie upon in that poſition which his malady demands. All about this place, is found abundance of ruins, which give reaſon to believe, that the baths were inclosed in ſome conſiderable palace; but in ſuch bad condition that it is impoſſible to ſay any thing poſitive upon the ſubject.

The little part of the vault F, is what remains of a temple formerly dedicated to Diana, in which I could find neither painting, nor bas reliefs; and there is ſo little remarkable in the remains of this edifice, that I ſhall content myſelf with the bare mention of it.

CHAMBERS of VENUS.

THE chambers of Venus, as well as those temples I have mentioned, are very ruinous pieces of antiquity, and of very difficult access, on account of the heaps of rubbish all round them. In entring this place, we find the first chamber, A, the plan of which is square, and the arch decorated with compartments, in each of which, there are bas reliefs, and though well executed, they do not approach to the beauty of those which contribute to the decoration of the chamber B, built in a plan half circular and half square. Under the arcade D, we find a petrified tree, and in the mid- Plate XL.

dle of the vault an opening, G, which in all probability, furnished it with light. Among the fine bas reliefs which ornament it, there is a gladiator, exactly in the attitude of that figure which is in the Villa Borghese, from whence, as well as other circumstances, we may conclude there were plagiaries among the ancients as well as among the moderns. I have in this plate given some idea of the bas reliefs E, which are all included in a border, being gilded, and of exquisite workmanship; and in point of design, resembling those of Agrippina's tomb, which I have already mentioned. The greatest part of these bas reliefs, are composed of subjects relative to the divinity of the place, and are at least as obscene as those represented on the lamps found at Herculaneum. From this last

piece

piece of antiquity, the conductors usually carry the curious to a very deep vault, pierced under the mountain, where formerly stood the ancient city of Cumæ. At the end of this subterranean cavern, are several chambers and baths, communicating one with another, but I found nothing in them worth describing. All that I can say, therefore, is, that this is vulgarly believed to be the cave, where the famous Sibyl of Cumæ delivered her oracles, and I refer the reader to Misson, for the historical discussion of this subject.

OF

OF THE CATACOMBS of NAPLES.

Plate XLI. I Was unwilling to conclude this performance without giving the curious some notion of that kind of caverns, called in Italy Catacombs; which I have accordingly represented in this plate. It appears, that this sort of subterranean and publick tombs, was very much in use among the ancients; for, besides these at Rome and Naples, which I have examined; Mr. Bernard, who has made the tour of Sicily, saw some as considerable as these, at Syracuse and Malta; and assures me, they are in the manner of their distribution exactly the same. We may likewise judge of the whole by those of Naples,

ples, which I am going to describe. Those called the catacombs of St. Januarius, from which I took this design, are like all others, pierced at random in a mountain, where we find considerable banks of stone, still more soft than that of St. Leu, which must have been very easily cut. In all the fronts of these subterranean caverns, are houses of different sizes, made without order or arrangement, as may be seen by that represented in the design. There are different corners, which by their distinction and decoration, seem as well as the tomb D, where we find some remains of painting to have belonged to some particular families. They and the avenues E, are full of niches of different size, for the sepulchre of the large as well as the little bodies belonging to these distinguished families.

lies. The entrance A, of these subterraneous caverns, is cut pretty straight; but when we penetrate farther, we find a number of windings cut, as I suppose, altogether at random; so that the whole looks like a subterranean city, with streets, squares, alleys, and corners, and the extent of it is so considerable, that some passages are supposed to go as far as Pouzzoli. Here too, as well as at Rome, they have had the precaution to shut up several avenues, that none of the number of people, whom curiosity induces to visit those places, may be in danger of losing themselves. In those places where the excavation is large, they have left here and there the pillar C, to support the vault. Here, likewise, there are usually two stories. I thought my design, by speaking to the eyes, would

would assist the imagination, in forming a distinct idea of this sort of sepultures. To this, therefore, I confine myself, without engaging in those disputes which they have occasioned among a great many authors, to whose works, such as are desirous of being farther informed, may have recourse.

OF

OF THE AMPHITHEATRE

Of the Ancient CITY of CAPUA.

Plate XLII.

IN the number of the antiquities of Naples, methinks I may mention those of the ancient city of Capua. This place, which is but ten leagues distant from the other, and about two miles from modern Capua, we find upon the road to Rome, and by the great number of ruins, it seems to have been very considerable. Besides, ancient authors have so extolled its Deliciæ, that we cannot possibly entertain any other idea of it. Yet I found nothing in it worth mentioning, but an amphitheatre,

theatre, and that too greatly damaged, the plan of which, by the form of its curve, resembles the Coliseum at Rome. I think it will be proper to observe, that it was composed, at most, of three orders, the first of which, by the profil of its entablature, seems to be of the Dorick. Yet the frize is not adorned with any triglyph, and the cornish is without brackets. The cornish of this order may be about one fourth more than the frize. The coping is very small, and crowned with a wave, C, very heavy, which is employed with the same defect in the chapiter and impost. I observed, in this amphitheatre, five galleries, D, three of which serve for communication to all the stairs that open on the steps. The middle, A, which was the arena, is now a corn-field; each pillar

B,

B, was decorated with an inſerted column, the baſes of which are new ſunk in the earth. The walls and external decoration of this edifice, were built of excellent ſtone, and all the brick-work very ſolid, as being compoſed of bricks that are very large and thick. I reckoned in the whole circumference of this theatre ſixty four arcades, threeſcore of which were each thirteen feet wide, as well as the galleries D, which are arched. The other four arcades are ſtill larger, and ſerve for the principal entries. The keys of theſe arcades are of the firſt order, ornamented with coloſſal heads, one of which repreſents Diana, and the other exhibit other deities; ſome of them are ſtill to be ſeen in New Capua, where they have alſo preſerved ſeveral altars and inſcriptions. Among the

the faults that are visible in the profils of this theatre, the smallness of the Coping, put me in mind that the ancients have the same defect in several of their edifices, as may be observed in the entablature of the Pantheon and the temple of Mars, now the Custom-house at Rome. The largeness of the Coping, as described in several modern authors, seems to me the more reasonable; because this profil crowning the other mouldings, ought to dispute with them in proportion, and yet yield by its simplicity to the ornaments with which it is charged in elegant buildings. This is all I had to say of the Amphitheatre of Capua; an antiquity which I thought I might join to those of Naples, especially as there is such an intimate connexion between them. What I have said of these last, which

have been a long time known, may ſeem to engage me to ſpeak alſo of thoſe at Rome, which would have furniſhed me with matter at leaſt as ample and abundant; but as my intention at firſt was ſolely to comply with the deſire of ſome patrons of the arts, for whom I have the moſt profound regard, and who requeſted me to publiſh the remarks I had made upon thoſe things which have been lately diſcovered in the territory of Naples, I was willing to confine myſelf entirely to the ſatisfaction of their deſire; being, beſides, uncertain of the reception theſe my firſt eſſays would meet with from the public, I thought I could not uſe too much circumſpection in running the career of authors. However I will premiſe, that having all the neceſſary materials for the ſequel,

if

if this firſt volume ſhall be favourably received, I ſhall be encouraged to gratify the public with regard to the reſt.

LETTER

FROM A

GENTLEMAN at NAPLES,

Giving a SHORT ACCOUNT of

HERCULANEUM.

SIR,

HErculaneum was a city of vast antiquity, dedicated to Hercules, who was held in great esteem all over the then known world. Temples and altars were every where erected to him; witness the famous temple of Cadiz, extra Herculis columnas in Gadibus. The Carthaginians offered him human sacrifices; and the Romans made vows to, and consulted

consulted him in their greatest enterprises. This city stood where now stands the royal village of Portici, washed by the sea, four miles from Naples, and two from the top of Vesuvius. It seems, as likewise Pompea, to have been buried in the first great eruption of that mountain, in which Pliny the elder was suffocated.

The city is about seventy feet below the present surface of the ground. The matter with which it is covered is not every where the same. In some places it is a sort of lime, and hard cement; in others, a sort of burnt dry earth, like ashes; and elsewhere, what the Neapolitans call lava, that is, a substance like melted glass, composed of sulphur and stone, which Vesuvius throws out in

its eruptions. This lava, whilst it preſerved its heat, ran like a river into the ſea; but as ſoon as it cooled, it ſubſided, and became a ſolid ſubſtance, like a dark blue marble; of which I have ſeen tables. It is therefore no wonder that this river ſhould have penetrated into every cavity it met with in its courſe; ſo we find that part of the city over which it ran, full of it.

Nothing is more difficult than to explain this ſurprizing effect. The learned are much divided in their opinions concerning it. The moſt general opinion is, that the mountain firſt threw out ſuch a quantity of cinders as covered the city; and then the ſea penetrating into the bottom of the volcano, was afterwards vomited out, and in its courſe, puſh-

ed the cinders, earth, &c. into the houſes. Many authors aſſert, that Veſuvius in its eruptions throws out more water than fire. In the eruption December 10, 1631, it is ſaid that the harbour of Naples for a moment was quite emptied, and that all ſorts of ſhell-fiſh were mixed with the lava that came from the mountain. Pliny the younger, giving Tacitus an account of the death of his uncle, ſays the ſea ſeemed to go back. The water entering the volcano, probably gave riſe to this obſervation. Perhaps too the eruption was attended by an earthquake, which may have aſſiſted to ſwallow up the city. But I ſhall ſay no more on a ſubject ſo far above my ken.

Herculaneum lay thus buried from the year 79 to the year 1739. The

prince of Elbeuf indeed, in the 1711, building a little house near to Portici, and digging for a well found some pieces of wrought marble; and afterwards discovered a temple, of a round figure, built to Bacchus, adorned with pillars of yellow marble, and some fine statues, viz. one of Hercules, and another thought to be Cleopatra, which he sent to Vienna as a present to prince Eugene. But the discovery went no further; nor did they suspect that this was part of Herculaneum.

It was in the beginning of the 1739, that digging for another well, they found some more marble; and being ordered by the king to dig towards the grotto formerly discovered by Elbeuf, they found two consular statues of marble, one of which

was

was Augustus; afterwards some brick pillars, painted with different colours; and continuing the search, they fell on the theatre, which consisted of eighteen seats for the spectators. It was incrusted with marble, and beautified with pillars, statues, and paintings.

I shall not waste time in describing the many fine statues already found: I cannot however omit mentioning an equestrian one of marble, with the following inscription on the pedestal.

M. NONIO M. F.
BALBO
PR. PRO. COS.
HERCULANENSES.

The connoisseurs say, that this statue is preferable to the so much celebrated

lebrated one at the capitol of M. Aurelius Antoninus, of Corinthian brass. It is indeed more ancient, and perhaps the work of a more eminent master; but,

Non nostrum inter vos tantas componere lites.

This statue of Balbus, and another of his father, which is now broke, were placed before the door of the theatre that fronted to the street.

Satisfied that they had at last discovered Herculaneum, they continued to work on; and near the theatre they found another temple, dedicated to Hercules. It has been disputed, if the ancients used to build temples so near their theatres. The one here is a proof of the affirmative;

firmative; and indeed altars have been erected within theatres themselves. Sacrifices preceded their games and plays, which were connected with, and made up part of their religious ceremonies. Here were got idols of several deities, particularly one of Hercules of brass, and all the instruments proper for sacrifice.

The walls of this temple were painted in different compartments, representing combats of wild beasts, real and imaginary animals, heads of Medusa, landskips, views of houses, and architecture of various kinds. But what surprise every one, and are of infinite value in themselves, are the historical paintings.---One represents a naked Theseus, with a club in his hand,

hand, a ring on his finger, and a sort of scarf hanging at his shoulder. Between his legs lies the Minotaur naked, his body of a human figure, but his head horned like a bull. The head is entirely seen; but the body goes back in a straight line, and is finely fore-shortened. The hero is surrounded with three boys; two of them kiss his hands, and the third gently embraces his left arm. A virgin modestly touches the club; which perhaps is Ariadne, or Phædra. In the air is seen another figure, which denotes Victory; and you can also observe the volutes of the pillars that adorn the labyrinth. In a second we see a woman sitting crowned with flowers. At her left side is a basket of fruits, and at her right a young Faunus playing on a pipe. Opposite to the woman is a naked man with

a

a black beard, with a bow, quiver, and club; behind him is another woman, who seems to speak to the first; and below, a child sucking a deer. The subject of this picture is probably the birth of Telephus, the son of Hercules and Augea; the sitting woman representing Augea, the naked man Hercules, and the child Telephus, who was said to be miraculously nursed by a deer.---A third represents Chiron, under the figure of the centaur, teaching young Achilles music. A fourth is Mercury giving Bacchus to the nurse.----But it would be tedious to describe all the pictures.

I do not pretend that all the paintings here found are equally good. Some of them are very bad. But surely the ones I have mentioned, and

and ſeveral others, cannot be over-valued, whether you conſider the judicious compoſition, the accurate contour, or fine colouring. They will be ſufficient to demonſtrate, that the ancients excelled the moderns in painting, as much as in ſculpture and the other fine arts. And if ſuch is the value of theſe pictures, what muſt have been the works of Apelles, and the other maſters of Greece, ſo renowned in ſtory? Though buried near 1700 years, the colouring is as freſh as if painted a few years ago. But perhaps this is partly owing to the external air being ſo effectually excluded. The king has cauſed cut them off the walls, and put them in frames.

The moderns generally imagine, that the ancients uſed only four colours, viz. white, black, yellow and red.

red. But here they will see both blue and green. The mistake has arisen from too strictly interpreting a passage of Pliny (lib. 35. c. 7.) He says indeed, that the painters in his time used these four colours; but he does not say, that they used these, and only these. It has been said too, that the ancients did not understand perspective. But the above paintings are clear evidence of the contrary. Vitruvius and Pliny use the word mensura for what we call perspective. For what else can mean that passage of Pliny, when, mentioning Apelles, he says, Non cedebat Amphioni de dispositione, Asclepiodoro de mensuris; hoc est, quantum quid aequo distare deberet?

Proceeding with the work, they entered a street with houses on both sides.

sides. Some of them were incrusted with marble, and richly ornamented, the floors being generally paved with mosaic. Within the houses they found dead bodies, medals, furniture, and things of all kinds. I was told that the bodies mouldered away when exposed to the air. I saw the whole utensils of a kitchen, pots, pans, glass bottles, shapes for making pies, &c. In an oven they found a loaf still entire, and in earthen pots corn quite fresh.

It is impossible for me to give you a catalogue of this vast treasure, which is daily increasing, and will serve to clear up many difficulties concerning the history, customs, arts, and religious rites of the ancients. The king, proud of his collection, has built a palace at Portici, where every

every thing found in Herculaneum is preſerved. A bold attempt, you will ſay, to build a city where one formerly met with ſuch a cataſtrophe. But the philoſophers of this country think, that the eruptions of Veſuvius will never again be ſo conſiderable, as it is ſo wore out with daily belching up quantities of matter. I was really aſtoniſhed to ſee what vollies of ſtones and ſulphur it threw up, attended with a noiſe like that of many cannon.

I cannot help regretting the method they have taken to clean out this city. Had they laid it open from the top, we would have had the pleaſure of ſeeing it as it formerly ſtood; we would have ſeen the diſpoſition of the ſtreets, temples,

&c. we would have seen the interior of the houses, and a thousand curiosities we are now deprived of. But as the city lies so far below ground, it would have been an immense expence to have wrought in this manner. They have therefore satisfied themselves with cleaning it out like a mine, by leaving a number of pillars to support the roof, which is in danger of falling; and in many places they have filled up the houses they had once cleaned out, with the rubbish they took from the adjacent ones. After wandering some hours with torches, I cannot say I was able to form a distinct notion of the situation of the houses, streets, or any thing; such was the confusion that reigned every where.

AN

AN EXTRACT FROM

XIPHILINUS's epitome of DION, which makes particular mention of an earthquake that happened under the reign of Titus, attended with a violent eruption of mount VESUVIUS, by which the cities of HERCULANEUM and POMPEJA were overwhelmed.

IN the autumnal season, some strange and frightful things happened in Campania, for all of a sudden there broke out a great fire from Vesuvius. This mountain, which is near the sea-shore of Naples, contains an unexhaustible quantity of combustible

matter. At the time when the fire broke out, from the middle of it, the top was all of an equal height. On the outside it did not burn, and there it continues entire still, the summit retaining its ancient height; but where the fire issues forth it gradually becomes hollow, as it subsides, so as to resemble an amphitheatre, if we may liken small things to great. Its summit produces plenty of trees and vines. This circle enlarges daily by the fire which smoaks in the day-time and burns clear in the night, as if they were offering up every kind of sacrifice within the mountain, and it does so continually, more or less. When any thing falls into it, it throws up ashes, and stones too, if the wind blows hard. It likewise echoes and makes a lowing noise, as if it came

came through rifts and ſecret air-vents, and was not pent up.

Such then is Veſuvius, and ſuch its yearly appearances; and although in compariſon with what has paſt, they may ſeem extraordinary to theſe people who are conſtant ſpectators, yet they will be looked on as trifling, compared with the preſent which we ſhall now deſcribe.

There appeared many great men exceeding the common ſize of mankind, and ſuch as giants are deſcribed to be. They were ſeen in the mountains and neighbouring countries, and wandering up and down in the towns adjacent, and likewiſe in the air. After this there happened a great drought from the extraordinary heat and violent earthquake,

ſo that the whole plains were dried up, and the tops of the hills ſubſided. The noiſe under ground was like thunder, and on the ſurface of the earth it was like the lowing of cattle. The ſea raged, the heavens reſounded, and an unuſual noiſe was heard, as if mountains claſhed together. Then, for the firſt time, ſtones of an extraordinary ſize were thrown out at the top, attended with fire and ſmoak, ſo that the air was darkened thereby, and the ſun was hidden, as in the time of an eclipſe. Night ſprung from day, and light from darkneſs, and people imagined that the giants had rebelled, as images of them were ſeen in the ſmoke, and the ſounding of trumpets was heard. Others thought that Chaos was come again, and that the general conflagration was at hand.

Theſe

These things made people run out of their houses into the streets, and those who were in the streets go within doors. Those who were on shipboard went ashore, and these on land went aboard, every one thinking that any situation was better than their present one. And along with all this, there were such quantities of ashes as possessed all space, earth, sea, and air; and wherever it happened, it did hurt both to men, the cattle, and the grounds, and the fishes, and all the birds were destroyed. The two cities of Herculaneum and Pompeja were entirely overwhelmed, while the people were sitting in the theatre. Such quantities of ashes were thrown out as to reach Africa, Syria, Egypt, and Rome; and filled the air in this last place so as to darken the sun, and struck

the people with a panic for many days: Not being able to conjecture what all this meant, they imagined that nature was turned upside down; that the sun was lost in the earth; and that the earth was gone up to Heaven. Although these ashes did little damage at that time to the Roman people, yet afterwards they brought on a direful pestilence*.

* See Xiphilinus's epitome of Dion in Tito.

PLINY's

PLINY's LETTER TO TACITUS*.

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 action 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

* See Pliny's letters, lib. vi. lett. 16.

has himself composed many and lasting works, yet I am persuaded, the mentioning of him in your immortal writings, will greatly contribute to eternize his name. Happy I esteem those to be, whom Providence 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

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 you 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, which extended itself

ſelf at the top into 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 either 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 Baſ-

ſus,

ſus, 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 intreated him therefore to come to her aſſiſtance. He accordingly changed his firſt deſign, and what he began with a philoſophical, he purſued with an heroical turn of mind. He ordered the gallies 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

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 a-ground 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 encrease, 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, encouraged and exhorted 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 chearfulness, or at least (what is equally heroic) with all the appearance of it. In the mean while the eruption from mount Vesuvius flamed out in several places with much violence, which

the

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 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

unconcerned

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 round 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 drank 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 fore-runner of them, diſperſed the reſt of the company, and obliged him to ariſe. 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 vapor, having always

ways had weak lungs, and 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 connection with your history, so your enquiry 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 chuse out

of this narrative such circumstances as shall be most suitable to your purpose: for there is a great difference betweeen what is proper for a letter, and an history; between writing to a friend, and writing to the public. Farewel.

To Cornelius Tacitus*.

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 shock'd soul recoils, my tongue shall tell.

* Pliny's Letters, book vi. lett. 20.

My

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 ſurprized us as they are extremly frequent in Campania; but they were ſo particularly violent that night, that they not only ſhook every thing about us, but ſeemed indeed to threaten total deſtruction. 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

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 crouds 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 lightening, but much larger. Upon this our Spaniſh friend, whom I mentioned above, addreſſing himſelf to my mother and me with greater 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 us. Hereupon our friend left us, and withdrew from the danger with the utmoſt precipitation. Soon afterwards the cloud

ſeemed

ſeemed to deſcend, and cover the whole ocean; as indeed it entirely hid the iſland of Caprea, 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 ſhould 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 ſmoak, which

came

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 croud that followed us. We had ſcarce ſtepped out of the path, when a 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, 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 up their hands to the gods;

but

but the greater part imagining that the laſt and eternal night was come, which was to deſtroy both the gods and the world together. Among theſe there are ſome who augmented the real terrors by imaginary ones, and made the frighted multitude falſely believe that Miſenum was actually in flames. At length a glimmering light appeared, which we imagined to be rather the fore-runner 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 ex-

preſſion 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 or ſmoak; 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 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

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 of 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 appear ſcarce to deſerve even the trouble of a letter. Farewel.

DE-

DESCRIPTION
OF A
TORRENT of FIRE;
That issued from
MOUNT VESUVIUS,
In the Year 1751.

By Father D. J. Marca de la Torre, Correspondent of the Academy of Sciences.

WE cannot too much commend those who take care to observe the surprising events in nature, and to transmit all the circumstances of them to posterity. But, I have never approved of the practice of those who join their own reflections on the subject, being persuaded

perſuaded that it is not at all the buſineſs of an obſerver to attempt to explain the effects of which he has been eye-witneſs; his duty is to deſcribe faithfully what he hath ſeen, without adopting any ſyſtem or particular opinion; otherwiſe he may impoſe upon the learned as well as the ignorant. In order to avoid this fault, I will exactly recount, as in a journal, all that I have obſerved touching the laſt torrent of fluid matter, which iſſued from one ſide of mount Veſuvius.

Having gone to paſs the holidays with the marquis de Genzano, at Poggio-marino, ſome miles from Veſuvius, I thought of viſiting that celebrated mountain, and communicated my deſign to the marquis, who not only approved of my reſolution, but

but also provided me with all the means for putting it in execution, and ordered several of his domestics to accompany me in the excursion. Accordingly, I set out on the 19th of October, resolved to satisfy my curiosity to the full. Having ascended about half way to the summit, I reposed myself in the very place, from whence, eight days after, issued the torrent of fire known by the name of Lava, without perceiving the least symptom of such an eruption. Continuing our route, we arrived at the summit of the mountain, where we found a pit about a mile in circumference, and an hundred and twenty feet deep. There seemed to be nothing remarkable in this pit, but the smoke which was thrown up from some openings. A little lower I perceived such another

ther pit, and towards the north, an hill ſixty feet high quite hollow within, from whence iſſued a continual ſmoke. This is the ſmoke which is every day ſeen to riſe from the top of mount Veſuvius, when it is viewed at a diſtance. In the ſpot from whence the ſmoke aroſe, I from time to time heard a violent hiſſing like that produced from melted metal when it paſſes through a moiſt place.

At length, on Saturday October 23, about half an hour after five in the evening, ſome ſhocks of an earthquake were felt at Naples and Maſſa de Somma, which is an hill in the neighbourhood of Veſuvius. The preceding day, about half an hour after ten, the people of Ottajano, had heard a dreadful noiſe from the ſide of Veſuvius; which noiſe was

renewed on Monday the 25th, about nine in the evening, and heard in ſeveral places; then was ſeen to iſſue from the middle of Veſuvius, half a mile below its ſummit, at a place that fronts the eaſt, called Atrio del Cavallo, a fluid matter like melted glaſs or metal, which deſcending the mountain, towards the Tour du Greo, ran through a valley, and directed its courſe towards Le Maure, a piece of ground covered with wood, which belongs to the prince d'Ottajano. This matter rolled with ſuch force, that on the 26th at noon, it had run four miles, the computed diſtance between the place from whence it iſſued, and the valley of Fluſcio. That morning the weather was ſerene, and a pretty cold north-eaſt wind blew, whereas on the preceding days, the wind

was

was southerly with rain. The torrent being arrived at a place where the valley is 102 palms * in width, it ran sixty palms of ground in five minutes, and was two palms and a quarter high in front, and a little lower the height was augmented by half a palm; then the torrent ran 115 palms of ground in nine minutes. As this matter is of a thick consistence, it does not run like water, which is extremely low in its anterior part, but all of a piece, having always a considerable height in front, as I have observed above. The surface of these sorts of matter, is entirely covered with pumice-stone, of the colour of iron dross, which

* The Neapolitan palm contains about ten inches of France, so that substracting the sixth part of a number of feet, they become palms: For example, sixty palms make fifty feet.

fall to the bottom as the Lava advances, and are insensibly kept underneath. They are of different sizes, and often followed by other larger stones, some of which are not yet calcined, while others are wholly so, together with flints and a great quantity of earth or sand calcined. Sometimes likewise they are mixed with branches of trees, pieces of oak, &c. which are carried along by the Lava. I do not believe that these foreign bodies are produced by the despumation of the matter, as is the scum of iron with which the Lava is covered; I rather think they are pieces of rocks and other bodies, which the torrent hurries away, and which being light, swim upon the surface. When the Lava meets with any obstacle in its way, such as a rock or any other fixed body, it turns aside

aſide and takes another courſe: wherefore, meeting with trees, it makes a compaſs round, ſtops for a moment, riſes and at length runs away on one ſide. Theſe trees ſubſiſt for ſome time, without ſeeming to have received any apparent damage; but, being ſoon reduced to charcoal in that part of the trunk which the matter had ſurrounded, they fall and float upon the ſurface, until being thoroughly dried, they kindle and are conſumed. Care is generally taken to cut the trees in all places through which it is ſuppoſed the torrent will paſs, in order to ſave them from its fury; but as the trunks remain ſtanding, it ſets them on fire in its paſſage; ſo that a flame is ſeen to iſſue from among the pumice-ſtones, though it is not violent, and

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the ſame phenomenon is obſerved in ſeveral parts of the ſurface.

The Lava, in running, makes a continual noiſe; its courſe is not ſo rapid, but that one may go before it at the diſtance of one or two fathoms: ſo that he has an opportunity of making ſeveral obſervations, and it extends or contracts itſelf according to the width or narrowneſs of the road.

But, to return to the obſervations which I made in the valley of Fluſcio, thro' which the Lava paſſed in a road 150 palms in length, its front, which was but 2 $\frac{1}{2}$ palms in height, encreaſed to 3 $\frac{3}{4}$ a little after; it roſe to the height of four, on account of the great quantity of matter which was continually flowing from Veſu-

vius,

vius, and in twelve minutes ran 115 palms of ground. Its height augmented ſucceſſively to 7 ½ palms, and having met with a ſpace extending 182 feet in width, it ran 117 palms in 16 minutes. The valley of Fluſcio, in this place, ſtretches to the left, into a road that leads to the country-houſe of M. Anthony Buonincontro, oppoſite to le Maure, and from thence to a Fiſh-pond of the territory of Boſco Regale; and on the right, to a valley eighty palms deep, and upwards of fifty wide, called the valley of M. Anthony Buonincontro, becauſe it is in the neighbourhood of his houſe and le Maure. The Lava being come to the end of the valley of Fluſcio, did not take the road to Buonincontro, or the Fiſh-pond, on account of an emi-

nence that was in its way, but about half an hour after eight in the evening, precipitated itself into the valley on the right, having run half a mile of ground, since noon. It did not fall in form of water, but like a soft paste, being detached in different pieces; nor did it make a great noise in its fall, although it was more loud than in its course through the valley of Fluscio.

Having filled the whole valley, at the distance of several paces, it continued its course. As this valley ends at the road which the Lava quitted, and stretches out anew, under the country-house of Buonincontro, forming with it a road that leads to the fish-pond, the Lava, about nine in the evening, had arrived at the place where the two

roads

roads meet. Instead of taking that which goes to the fish-pond, it turned to the left, towards a small village, and directed its course through these lands, namely the territory of St. Maria Salonè, and that of the baron de Massa, having run from nine in the evening till midnight, the third part of a mile. It afterwards passed through the grounds of the baron de Massa, extending itself more and more till towards midnight; then it began to contract itself and run slower, having made but 400 paces, from the village where it turned aside, to the road of Poggio-Marino, where it stopt.

On the 27th, the wind being still northerly, the Lava slackened in its course; so that towards half an hour after six in the evening, it was op-

posite

posite to the Inn du Chêne, commonly called la Cercola a Babzani, upon the ground which leads to the Fish-pond, which is between the village where it had turned aside, and Santa Maria Salome.

Two causes contributed to moderate its impetuosity; first, it met with a plain where it had liberty to sink and extend itself; then the stones that floated upon the surface, falling continually from its anterior part, and rising several palms above its level, greatly retarded its course; then it cooled by degrees, lost its fluidity, acquired a more solid consistence, and consequently made less way. The ground which it occupied in this place, was in width, 900 common paces, or 1900 Neapolitan palms. Its height taken in front, was in some

places

places, nine palms, in ſome ten, and in others twelve, according as the ground was more or leſs elevated. It was not only in the front, and at this place, that it cooled, but alſo upon the ſides, and in the valley where it had precipitated itſelf the evening before. It likewiſe cooled from the front to the width of 180 palms, which was the extent of the ground that it occupied before it fell into the valley of Buon-incontro. It formed in that whole ſpace, comprehending that of the valley, a hill of pumice and other ſtones, as high as the poplars that grew on the ſpot.

As the Lava ſtill received new matter from Veſuvius, it filled the whole valley of Fluſcio to the place where it ſtopt, continuing to drive before it, the hill of pumice-ſtones, which

which was seen from time to time, to tumble among the flames, advancing towards the sheepfold of Buon-incontro, the house and road that leads to the Fish-pond. A great part of this melted matter had opened a passage through the stones in the valley of Buon-incontro, where it continued to run with great velocity, forming a continued rivulet to the bottom of the Lava, which had stopt upon the lands of the baron de Masla, about seven a clock the preceding night. Having, about four in the afternoon, measured the velocity of the current, in the middle of the Lava, at that part through which it discharged itself into the valley of Buon-incontro, I found it ran 28 palms in one minute, on a front of 16 palms. The same current measured near the Inn du Chene,

where

where the descent is much less, made 10 palms in a minute. The front of the Lava, on the baron de Massa's grounds, which was 900 feet wide, diminished about three in the afternoon; but being pushed by the torrent that continued to descend from Vesuvius, it lenthened out 94 paces, and made 50 paces on the baron's ground, from three o'clock in the afternoon till nine in the evening. This current in the middle, extending to right and left, began to push the matter which had stopt near the Inn du Chêne; so that in the space of three hours, it approached the road leading to the Fish-pond, having run twenty common paces in that interval.

On the 28th, the wind being southerly, the Lava advanced on the side

ſide towards the church of Santa Maria Salomé, which is below the inn, without damaging the grounds belonging to it, and enlarged itſelf 100 paces. The middle part, which, the day before, was 94 paces in width, lengthened out this day, and occupied 150 paces of ground. The part that was above the inn, ſtopt, but that which was below, took the road to the Fiſh-pond: its courſe was afterwards interrupted, and, about four in the afternoon, the torrent continued its route through the valley of Buon-incontro, running in the valley at the rate of 21 palms of ground, and near the inn, 10 palms and an half, in the ſpace of a minute. Then its front advancing ſeveral paces in the valley, it penetrated into the ſheepfold, which is oppoſite to the houſe, and took the

road leading to the fish-pond, and lodging that belongs to it; it also made its way into two valleys which are on the side of the sheepfold, advanced several paces, and then stopped.

The rain which fell upon the 29th, having hindered me from continuing my route, I contented myself with observing through a telescope, the Lava which descended from the steepest part of the mountain, at some distance from its source. I saw issuing from it, a great quantity of stones, which rolled amidst the torrent, with incredible impetuosity, and as they were of a black colour, I perfectly distinguished their motion in the midst of the flames.

On

On the 30th, the wind ſhifting to the north-eaſt, the weather was extremely cold and fair; the Lava leaving on the right the baron de Maſſa's houſe, which is on the road from Boſco-Reale to Poggio-Marino, gained ground anew, after having ſtopt for the ſpace of twelve hours.

On the 31ſt, the wind continuing north-eaſterly, the Lava ſlackened conſiderably in the valley of Buon-incontro, running no more than eight palms in a minute; it had taken the road to the fiſh-pond, and penetrated into an houſe next to the Inn. Having left the houſe of the baron de Maſſa on the right, it continued its courſe as far as the road that goes from Boſco-Reale to Poggio-Marino, after having over-turned a ſmall houſe in its way; it made

a compaſs round two others, entered one of them by the door, advanced ſome paces farther, and then ſtopt.

The wind falling on the firſt day of November, the current which had thrown itſelf into the valley of Buon-incontro, cooled externally and ſtopt, although there was ſtill fire underneath. It likewiſe ſtopt on the road of Boſco-Reale, having run ſo far from the valley of Fluſcio, being 120 paces: I went to examine its ſurface, ſaw ſmoke iſſue from ſeveral parts of it, and the whole covered with white flints extremely acrid. I found ſeveral of them covered with ſal ammoniacum, the ſmell of which I had evidently perceived during the whole time of my obſervations, though it was mix-

ed with that of the trees, which the Lava had burned in its course. We likewise observed, in the night, a flame like that of sulphur, issue from the surface of the Lava, but it was of short duration.

I did not examine the degree of heat in this matter, because I was persuaded that it is the same with that of melted metal, being no other than a composition of the earthy, metalline and mineral parts that form mount Vesuvius, which fermenting gradually by the assistance of sulphur, have melted and refined. When this matter ferments to such a degree, that it can no longer remain under the stony crust that forms the interior plan of the mountain, it makes an effort, forces a passage through the sides, and takes its course by the

the descent of the mountain. After it is entirely cooled it forms a stone of a black colour, like that which is taken from the old Lava, in order to pave the streets of Naples.

I shall not pretend to describe the figure, quality, or size, of the different kinds of matter with which the surface of the Lava was covered; because that is morally impossible. Any one may easily conceive that this matter is composed of all the mineral and metalline parts that form Vesuvius, and are of a disposition to melt; and that the mountain containing besides a great quantity of sulphur, the surface must be covered with different kinds of bodies, some of which resemble iron-scum, others an extremely hard crust; and a third sort are of different size and figure. For the

ſame reaſon I have omitted ſpeaking of the lateral falls or ſtreams that the principal current formed in the different parts of the country which it deluged, together with the height to which the pumice-ſtones and flints were thrown from the front and ſides. Let is ſuffice to obſerve, that the Lava having occupied, the ſecond day, a great extent of ground, that the inflammable matter having diminiſhed in heighth, and loſt part of its fluidity, without ceaſing, however, to carry along with it abundance of calcined ſtones and other bodies, it was ſome time before it could continue its courſe; and, during this interval, divers heaps of pumice-ſtones and flints, raiſed to a conſiderable height, were formed in ſeveral parts of the front and ſides. At length, however, freſh matter arriving, had force

enough

enough to drive from the front and ſide, although with an unequal motion, the bodies which oppoſed its paſſage.

When the Lava advanced in front, or to one ſide, we ſaw the heaps of ſtones fall, and the fire underneath appear; ſure ſigns that it began to put itſelf again in motion. In precipitating itſelf from theſe heaps of pumice-ſtone, it made a noiſe like that which is heard when pieces of copper or glaſs are jingled together. Theſe pumice-ſtones, though full of pores, had a conſiderable weight, proportioned to their magnitude.

What attracted my chief attention were two kindled torrents, formed by the matter of the firſt Lava. One of theſe took its courſe on the other ſide of that which I have mentioned, to-

towards the wood of Ottajano, on the first day of November, in the evening; and the other, a few days after, about the sixth, on this side, in respect to those who were at Naples, above the Bosco-Trecase, which is on the same line with the Fish-pond and Bosco-Reale. We have seen above, that the Lava of Bosco-Reale deposited in its course, stones, calcined earth, and other bodies that floated on its surface; and the same thing happened when it quitted the spot called Atrio del Cavallo. For seven days it threw up such a vast quantity of matter, or pumice-stones like the dross of iron, that the whole ground was filled with them; so that the matter still flowing from Vesuvius, was obliged to turn aside in the evening of the first day of November towards Ottajano, and on the sixth towards

Bosco-Trecase. It appears, therefore, that these two torrents were no other than considerable branches of the first which took its course towards the Fish-pond and Bosco-Reale. I could not learn whether or not the matter which began to run on the first day of November, issued from the opening that was made on the twenty-fifth at night. I shall, therefore, content myself with relating the observations communicated to me by those whom I sent to visit the place from whence issued the torrent that took its course towards Bosco-Trecase. They found its source some fathoms lower than the first opening; but they perceived that the Lava issued from that place. It was impossible for them to discover its first source, because it was covered with an hard, continued vault, several fathoms in length, which resound-

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ed when ſtruck with a ſtaff. The matter ran above like a river, iſſued through an opening which it had made, and took its courſe towards Boſco-Trecaſe, tending towards the Fiſh-pond, as well as the firſt Lava. The mountain in this place was pierced by ſeveral holes. It follows from this obſervation, compared with the firſt, that the matter not being able to iſſue all at once, through the opening which it had made on the twenty-fifth of October, effected another below, that it might have free room to diſcharge itſelf.

On the 2d day of November the wind ſhifted to the ſouth, with rain, and this weather continued 'till the 16th: but, the north wind returning, Veſuvius and the other mountains in the neighbourhood of Naples, were

were in the morning wholly covered with ſnow.

After having gone about two miles in Boſco-Trecaſe, I found the Lava about half a mile from its origin, or the vault of which I have ſpoke above. It was partly cooled, but ran like that which I ſaw upon the eſtate of the Baron de Maſſa. It was then upon the grounds of Cæſar Vitelli. Having advanced ſome paces, I perceived on one ſide, among the pumice-ſtones and other bodies that were already cooled, two openings, one of three palms and the other of four; from each of which iſſued a ſtream of melted matter, covered with an hard, tranſparent cruſt, which I attributed to the rain which then fell. About half an hour after five o' clock in the evening, having meaſured the velocity of the firſt branch that was near-

est me, I found it ran eight palms in a minute. As these two branches joined at the distance of some palms from their origin, and formed a stream of liquid matter four and twenty palms broad; that ran in the middle of the cooled Lava, and slackened in its course towards the grounds of Cæsar Vitelli, I thought proper to measure the velocity of this matter, as I could not measure that of the other branch, on accouut of its distance; and I found that it made 15 palms of ground in a minute.

This torrent continued its course on the following days towards Bosco Trecase, from whence it was but a mile distant on the ninth day of November.

That which ran towards Ottajano is not yet quite extinguished, and con-

continues to burn the trees of the forest. This circumstance proves that the mountain has not yet vomited up all the matter which hath been amassed in its bowels for several years. The torrent which took its course towards Bosco-Trecase did not stop till the 20th day of November. During the whole course of my observations, Vesuvius threw up nothing but some clouds of smoke of different degrees of thickness, as is commonly the case every year.

On the 15th day of November I sent the people who had attended me to the summit of Vesuvius, to see if its interior plan had undergone any alteration; and they reported, that they could not find the summit which they had seen on the 19th of October, but, in lieu of it, a profound

gulph or pit, throwing out ſmoke incessantly; at one ſide of which was a deep canal ſeveral palms in breadth, which croſſed the ſurface, ſtretching towards the place where Veſuvius was open. Deſcending from the ſummit of the mountain into the internal ſurface, they found the ſame kind of matter as Lava, but open in ſeveral places, and filled with ſulphur of different colours, as we have already obſerved on the 19th of October, which was the day of the eruption. They found it warm in ſeveral places; but, approaching the great gulph and canal to ſee if they could diſcover fire, they were prevented from accompliſhing their aim by the great clouds of ſmoke.

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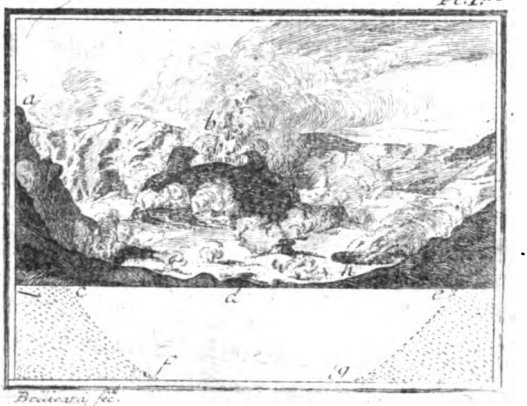

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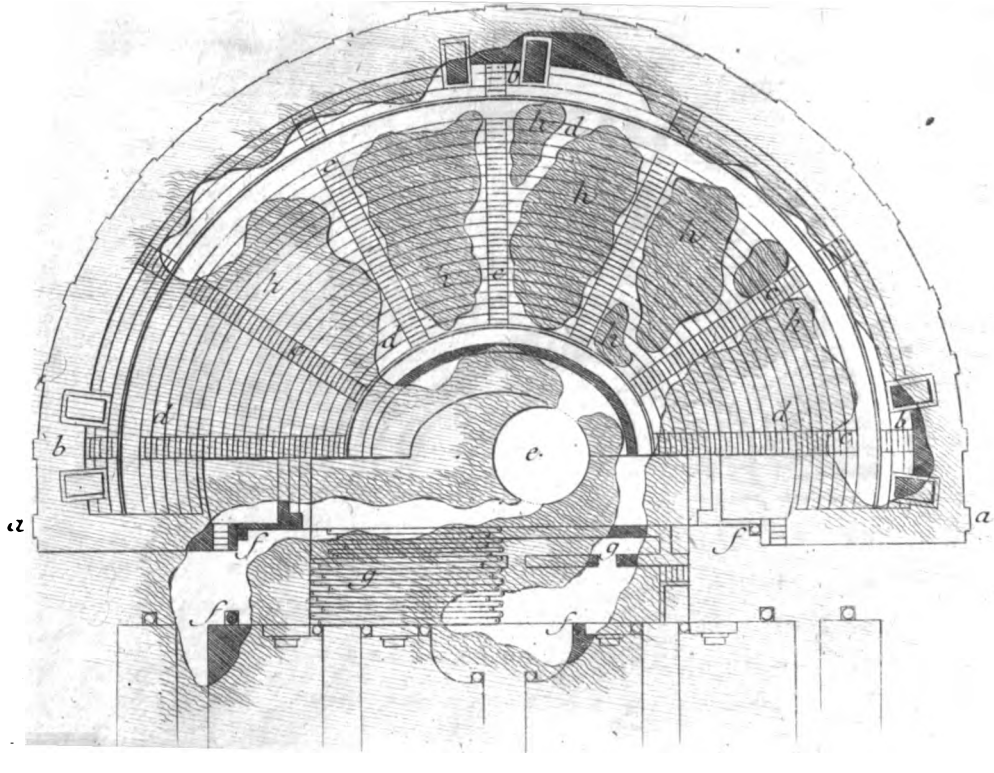

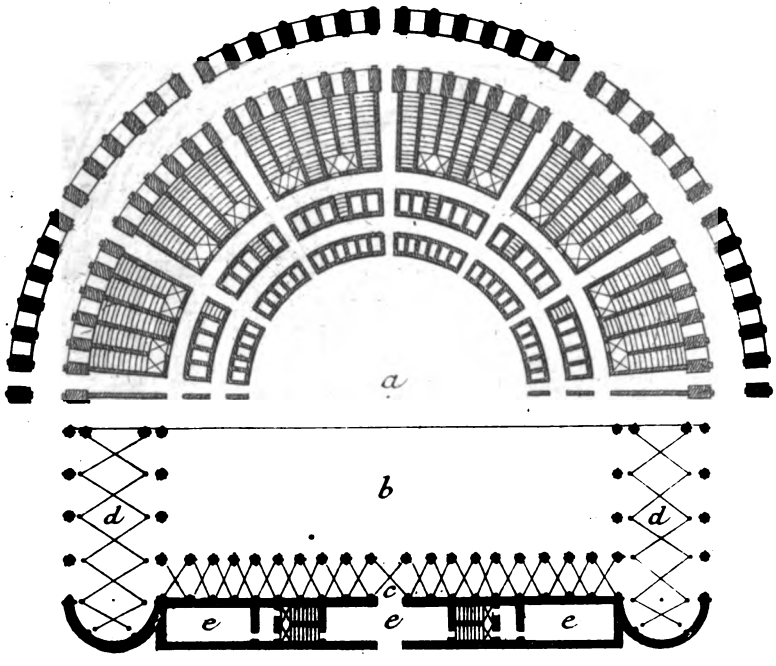

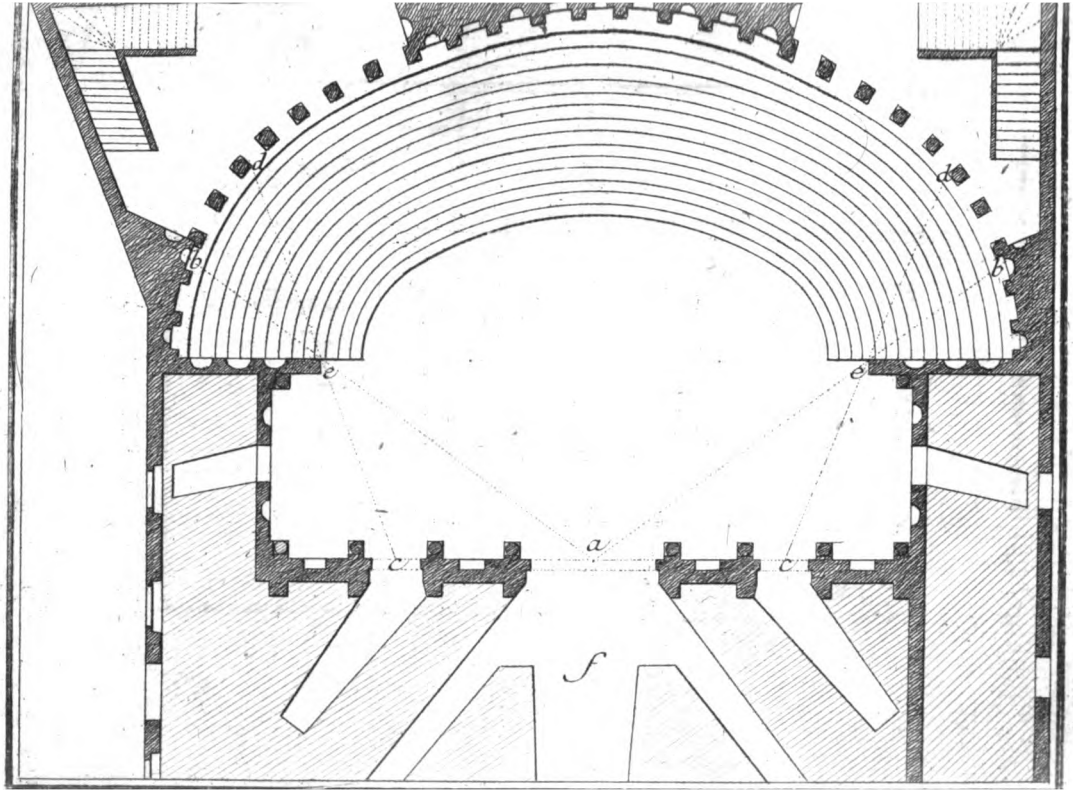

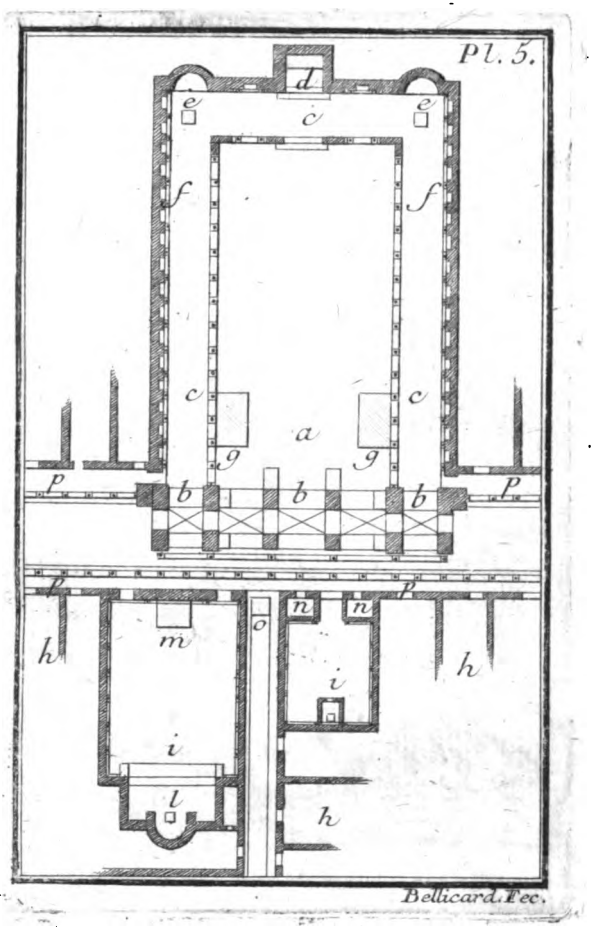

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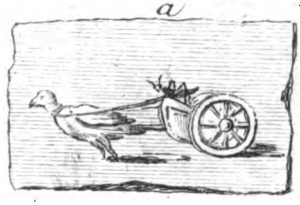

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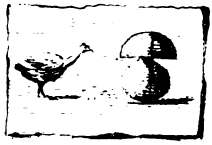

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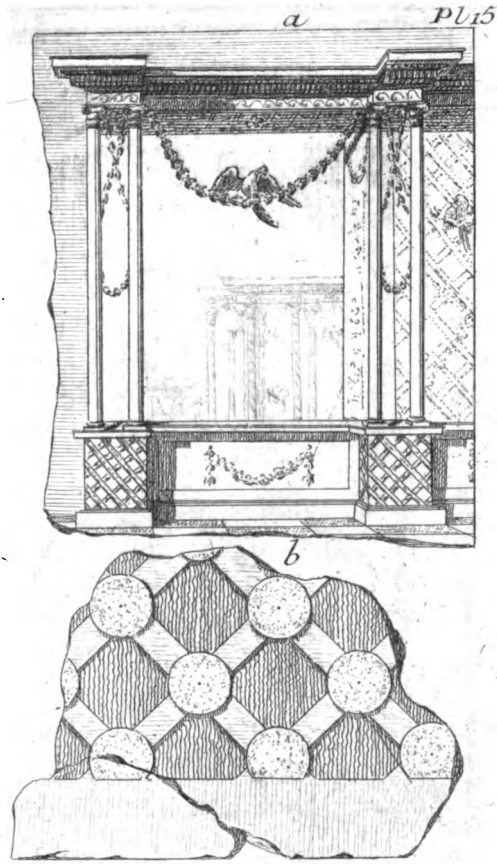

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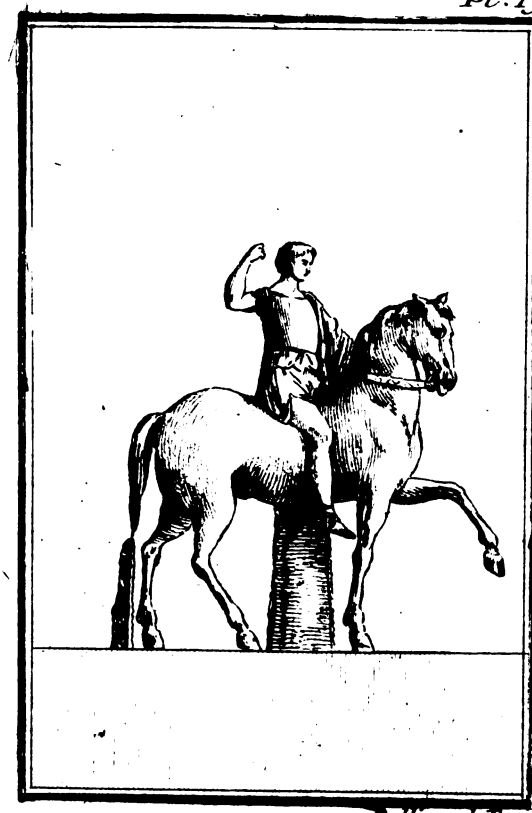

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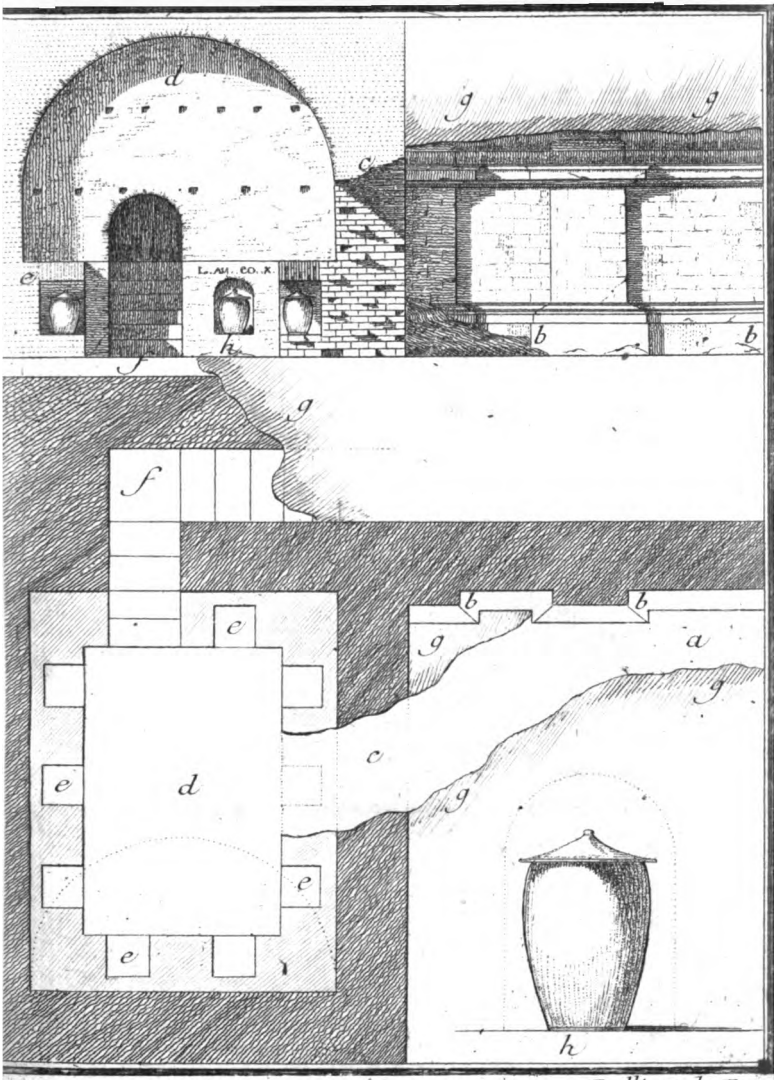

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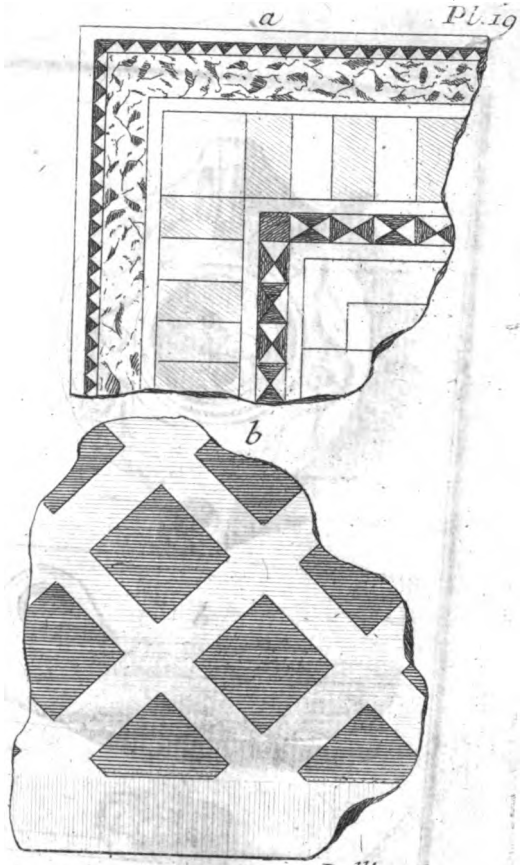

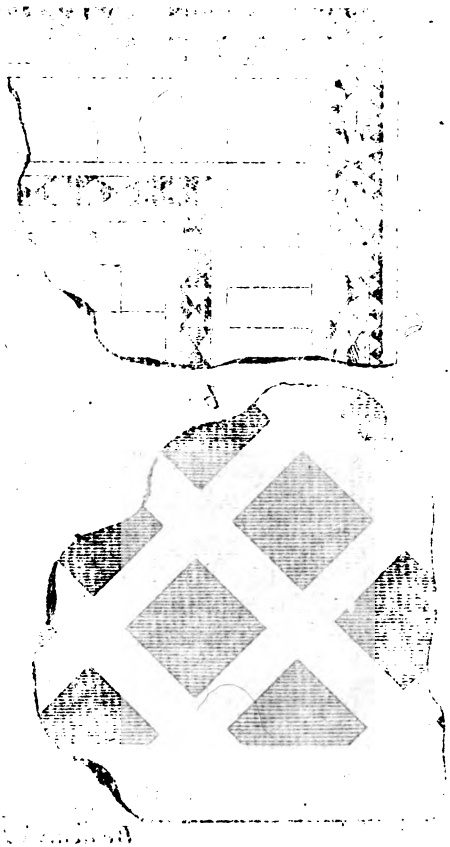

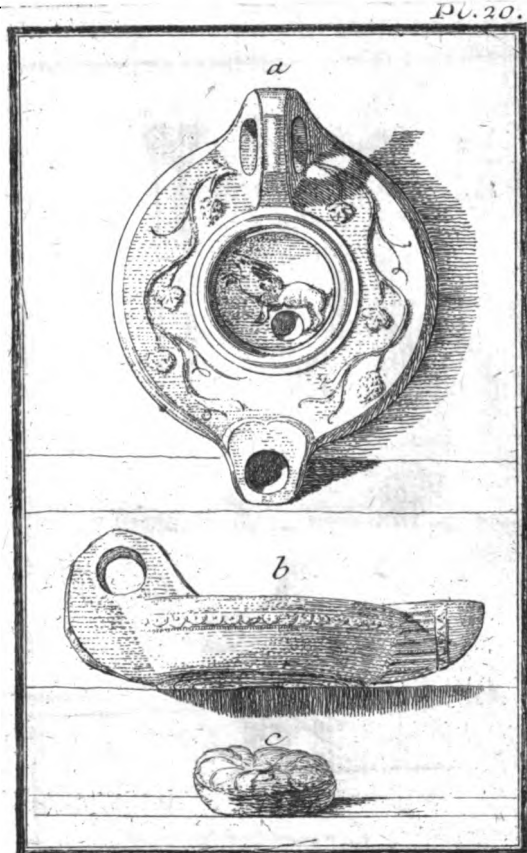

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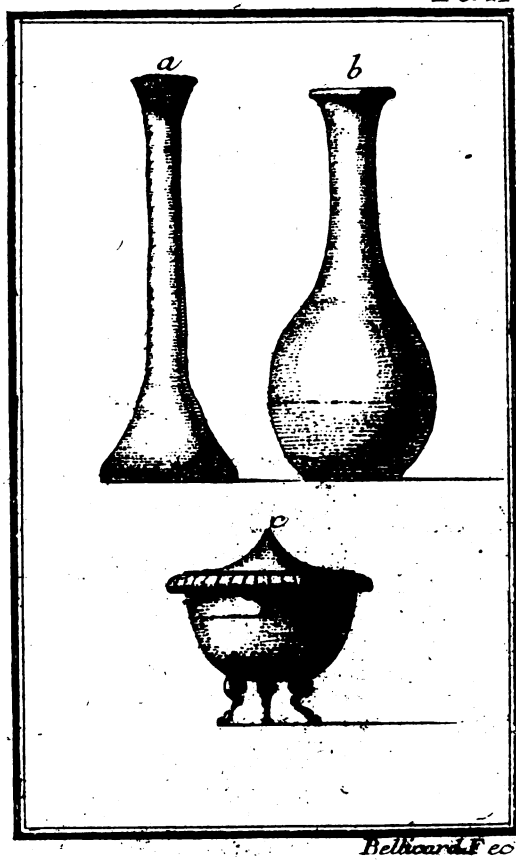

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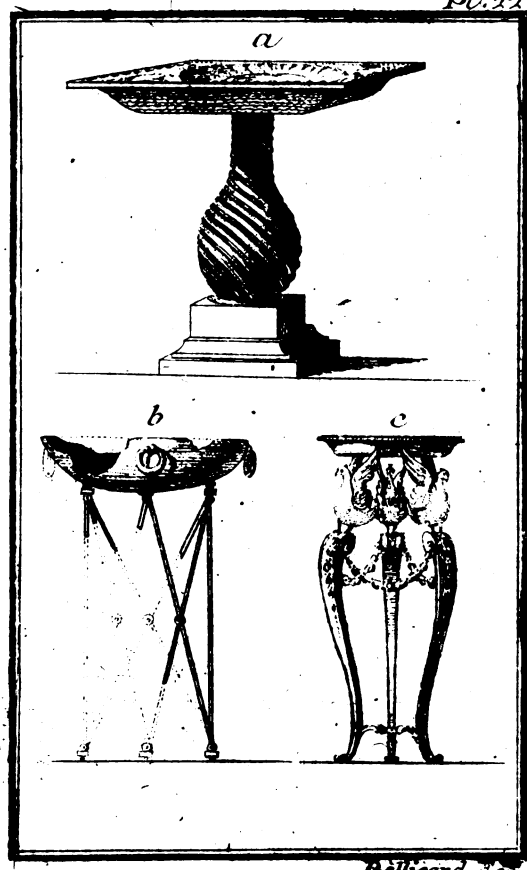

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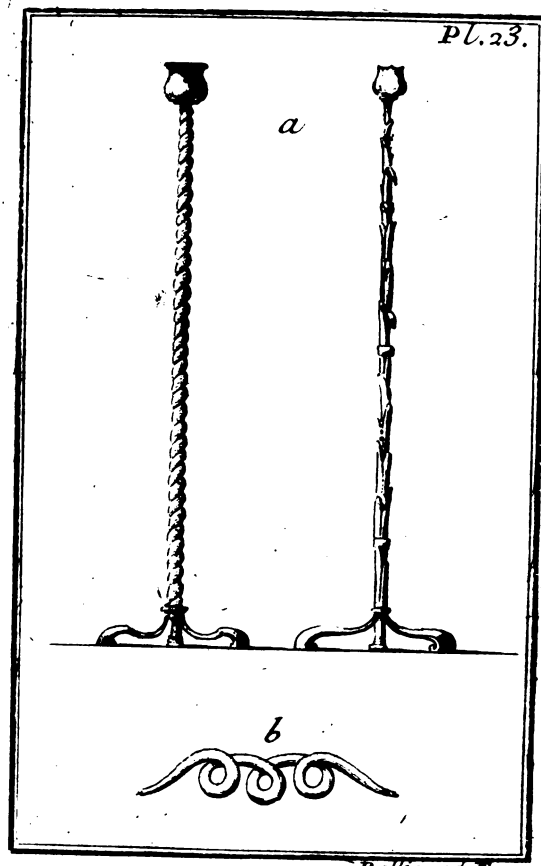

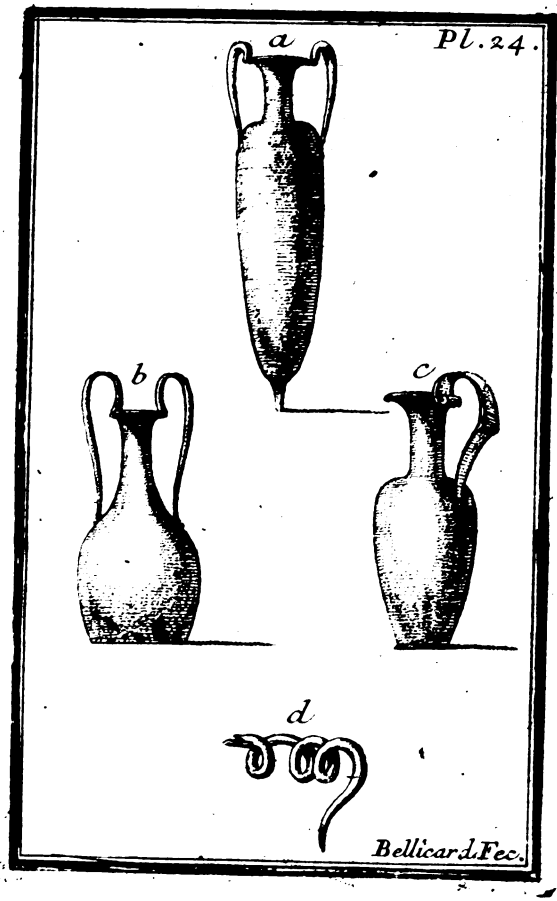

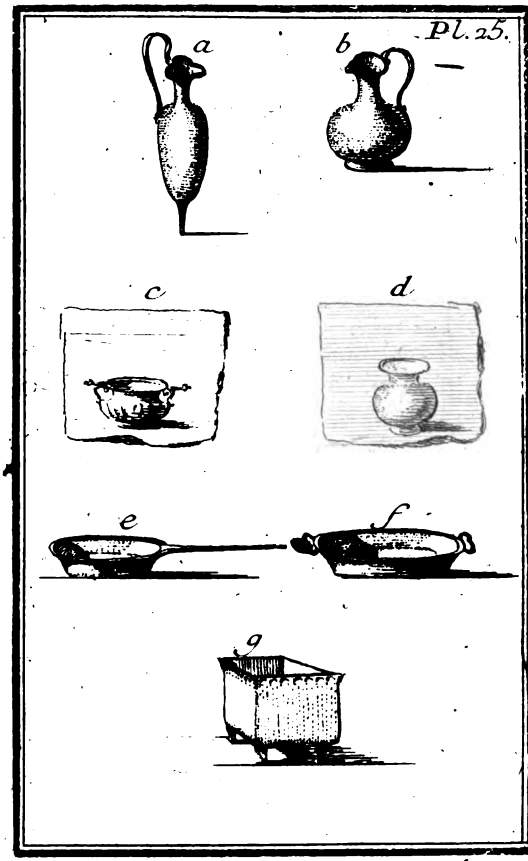

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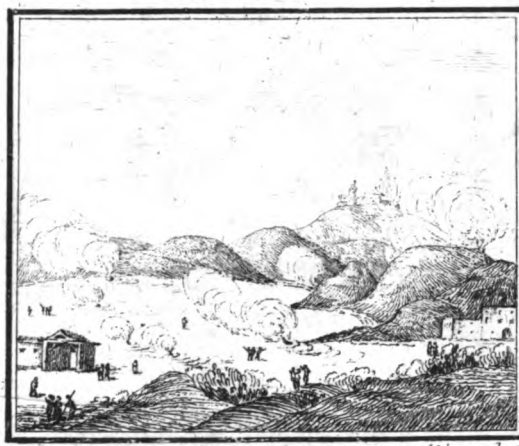

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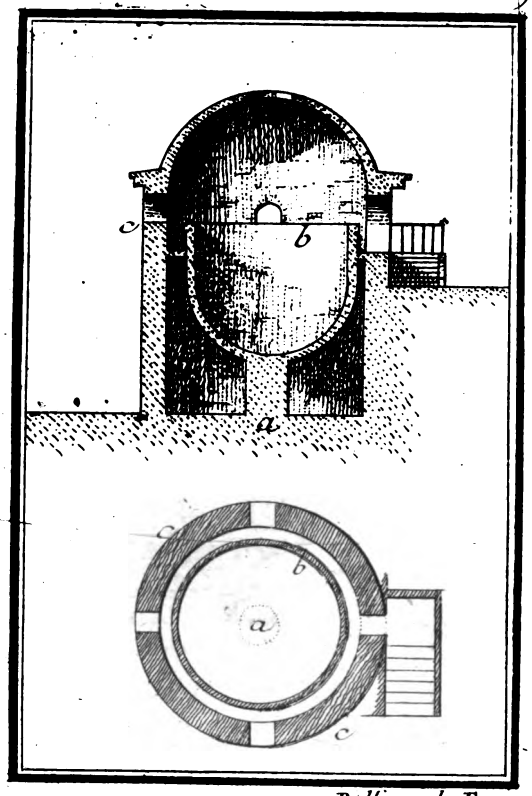

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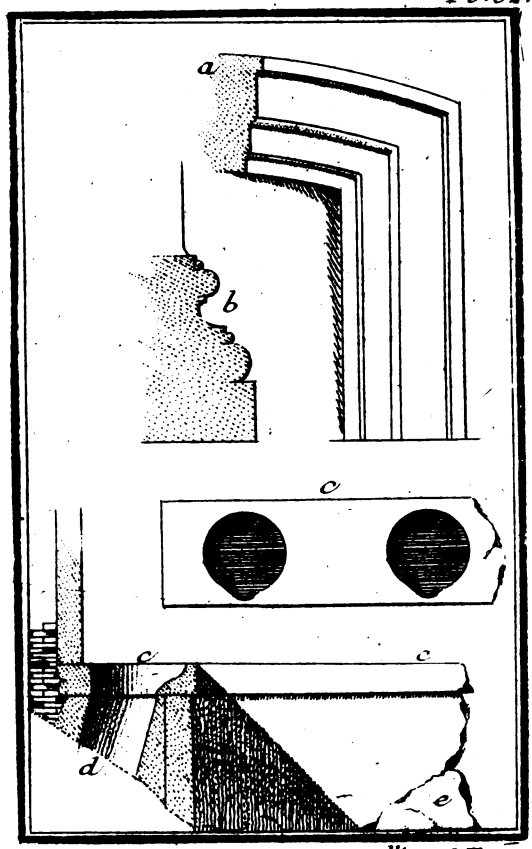

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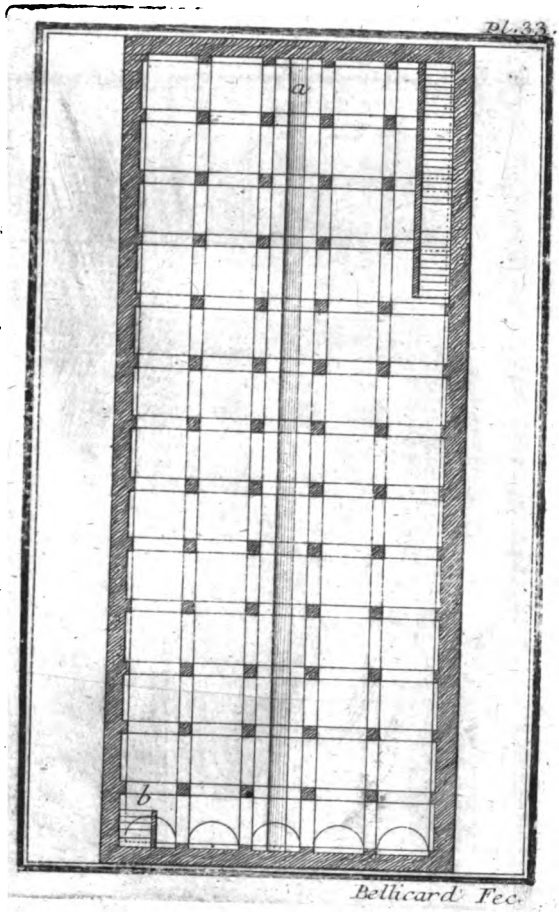

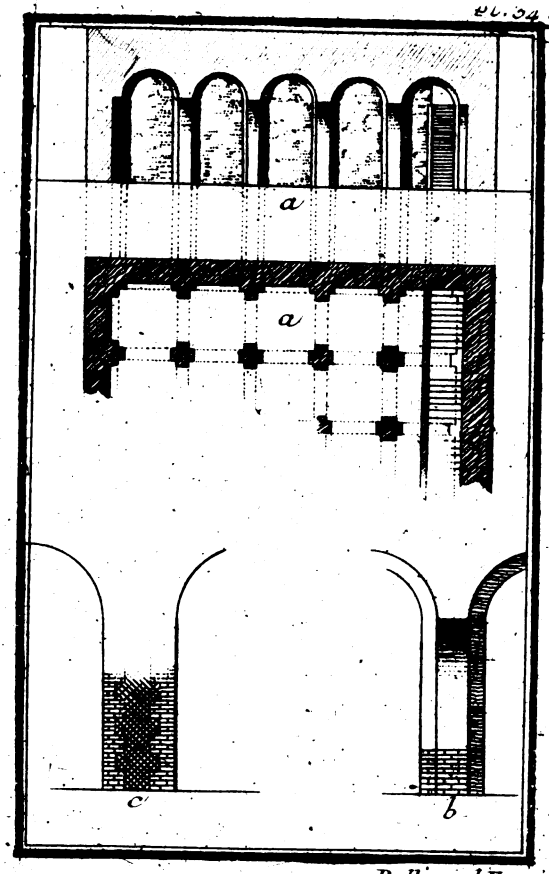

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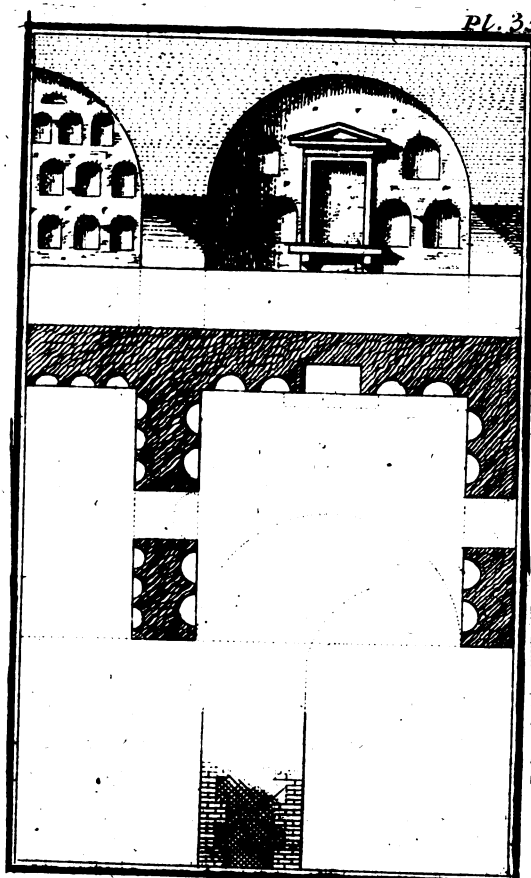

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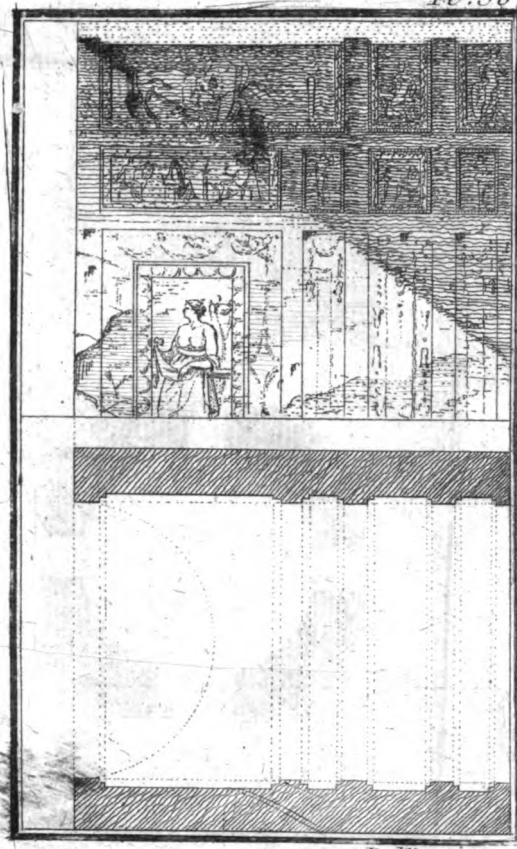

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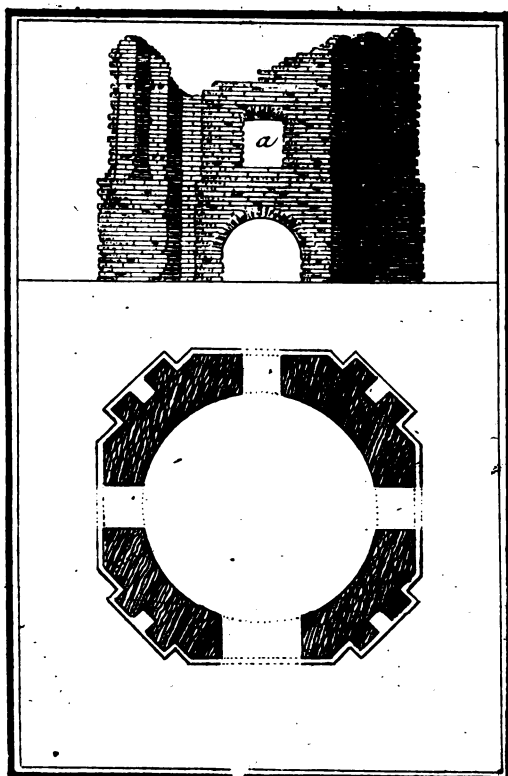

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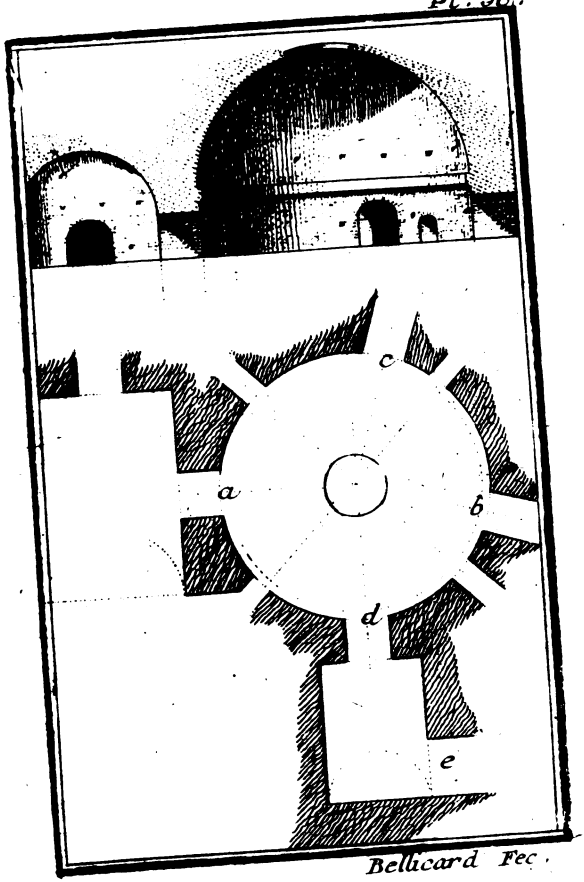

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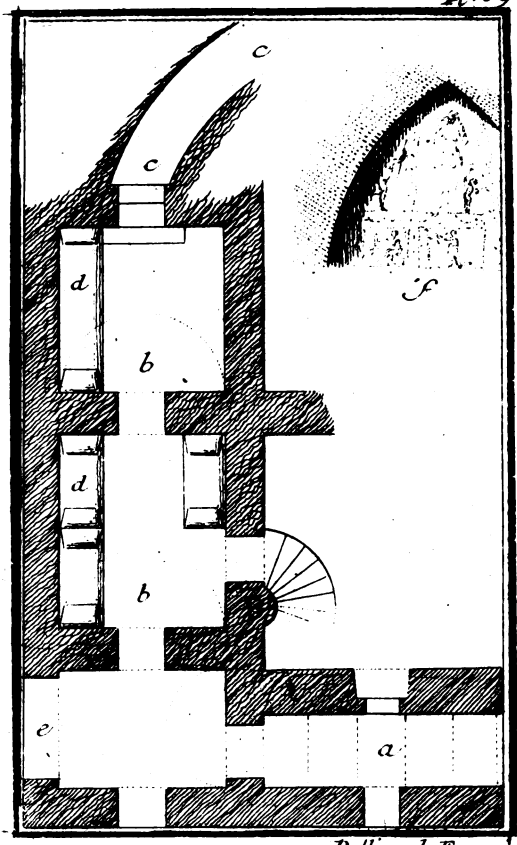

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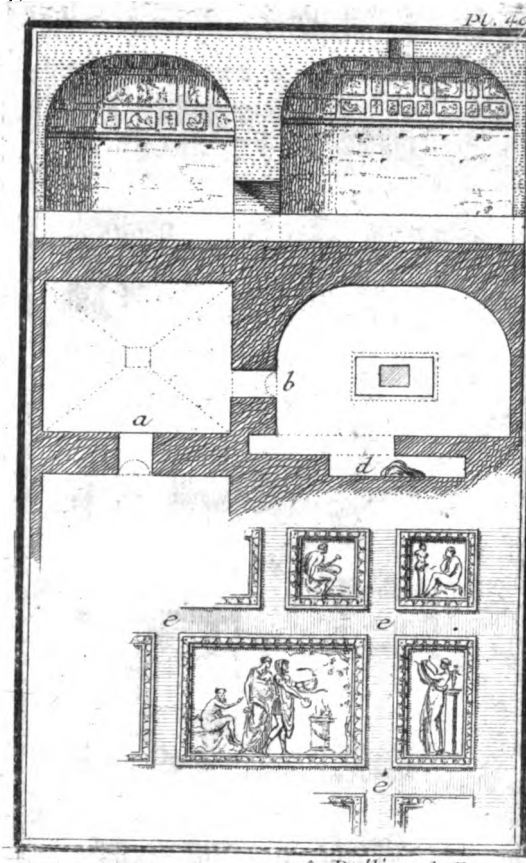

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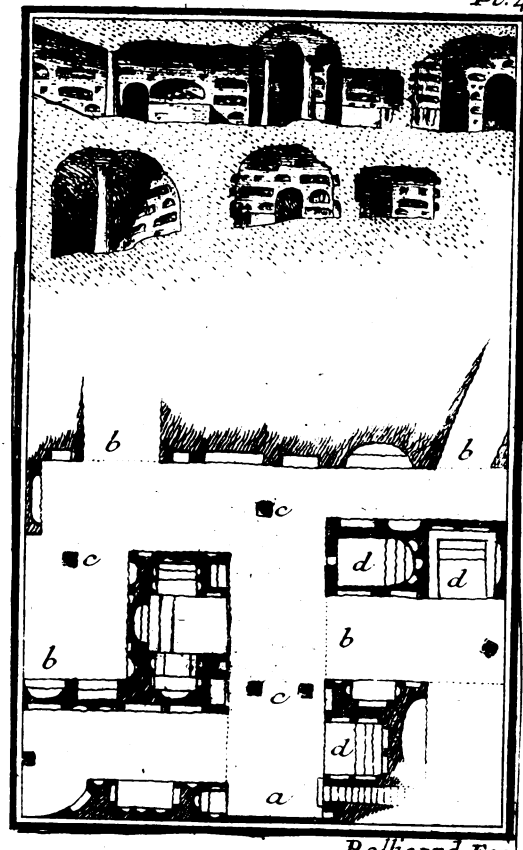

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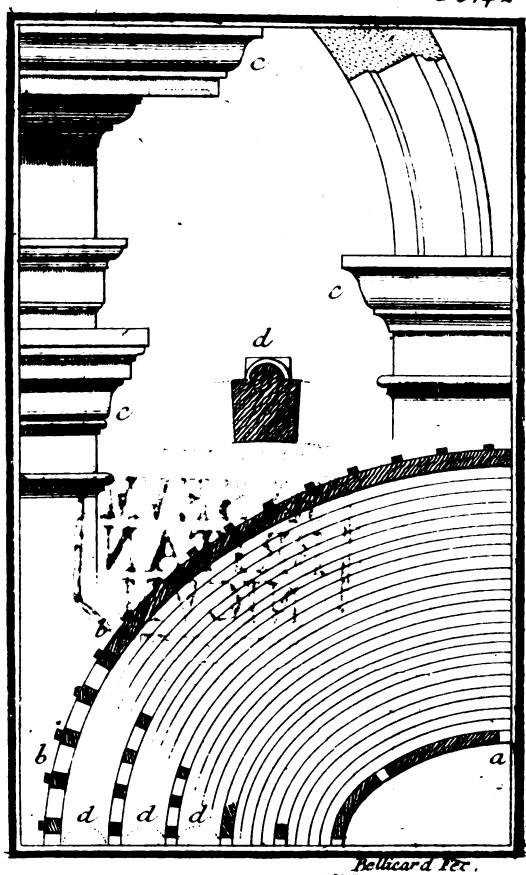

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