

PLINY ON POTTERY, BUILDING & AMBER

BOOK XXXV CHAP. 46.--WORKS IN POTTERY.

Statues of this nature are still in existence at various places. At Rome, in fact, and in our municipal towns, we still see many such pediments of temples; wonderful too, for their workmanship, and, from their artistic merit and long duration, more deserving of our respect than gold, and certainly far less baneful. At the present day even, in the midst of such wealth as we possess, we make our first libation at the sacrifice, not from murrhine vases or vessels of crystal, but from ladles made of earthenware.

Bounteous beyond expression is the earth, if we only consider in detail her various gifts. To omit all mention of the cereals, wine, fruits, herbs, shrubs, medicaments, and metals, bounties which she has lavished upon us, and which have already passed under our notice, her productions in the shape of pottery alone, would more than suffice, in their variety, to satisfy our domestic wants; what with gutter-tiles of earthenware, vats for receiving wine, pipes for conveying water, conduits for supplying baths, baked tiles for roofs, bricks for foundations, the productions, too, of the potter's wheel; results, all of them, of an art, which induced King Numa to establish, as a seventh company, that of the makers of earthenware.

Even more than this, many persons have chosen to be buried in coffins made of earthenware; M. Varro, for instance, who was interred, in true Pythagorean style, in the midst of leaves of myrtle, olive, and black poplar; indeed, the greater part of mankind make use of earthen vases for this purpose. For the service of the table, the Samian pottery is even yet held in high esteem; that, too, of Arretium in Italy, still maintains its high character; while for their cups, and for those only, the manufactories of Surrentum, Asta, Pollentia, Saguntum in Spain, and Pergamus in Asia, are greatly esteemed.

The city of Tralles, too, in Asia, and that of Mutina in Italy, have their respective manufactures of earthenware, and even by this branch of art are localities rendered famous; their productions, by the aid of the potter's wheel, becoming known to all countries, and conveyed by sea and by land to every quarter of the earth. At Erythræ, there are still shown, in a temple there, two amphoræ, that were consecrated in consequence of the singular thinness of the material: they originated in a contest between a master and his pupil, which of the two could make earthenware of the greatest thinness.

The vessels of Cos are the most highly celebrated for their beauty, but those of Adria are considered the most substantial.

In relation to these productions of art, there are some instances of severity mentioned: Q. Coponius, we find, was condemned for bribery, because he made present of an amphora of wine to a person who had the right of voting. To make luxury, too, conduce in some degree to enhance our estimation of earthenware, "tripatinum," as we learn from Fenestella, was the name given to the most exquisite course of dishes that was served up at the Roman banquets. It consisted of one dish of murænae, one of lupi, and a third of a mixture of fish. It is clear that the public manners were then already on the decline; though we still have a right to hold them preferable to those of the philosophers even of Greece, seeing that the representatives of Aristotle, it is said, sold, at the auction of his goods, as many as seventy dishes of earthenware. It has been already stated by us, when on the subject of birds, that a single dish cost the tragic actor Æsopus one hundred thousand sesterces; much to the reader's indignation, no doubt; but, by Hercules! Vitellius, when emperor, ordered a dish to be made, which was to cost a million of sesterces, and for the preparation of which a furnace had to be erected out in the fields! luxury having thus arrived at such a pitch of excess as to make earthenware even sell at higher prices than murrhine vessels. It was in reference to this circumstance, that Mucianus, in his second consulship, when pronouncing one of his perorations, reproached the memory of Vitellius with his dishes as broad as the Pomptine Marsh; not less deserving to be execrated than the poisoned dish of Asprenas, which, according to the accusation brought against him by Cassius Severus, caused the death of one hundred and thirty guests.

These works of artistic merit have conferred celebrity on some cities even, Rhegium for example, and Cumæ. The priests of the Mother of the gods, known as the Galli, deprive themselves of their virility with a piece of Samian pottery, the only means, if we believe M. Cælius, of avoiding dangerous results. He it was, too, who recommended, when inveighing against certain abominable practices, that the person guilty of them should have his tongue cut out, in a similar manner; a reproach which would appear to have been levelled by anticipation against this same Vitellius.

What is there that human industry will not devise? Even broken pottery has been utilized; it being found that, beaten to powder, and tempered with lime, it becomes more solid and durable than other substances of a similar nature; forming the cement known as the "Signine" composition, so extensively employed for even making the pavements of houses.

BOOK XXXV CHAP. 48. FORMACEAN WALLS.

And then, besides, have we not in Africa and in Spain walls of earth, known as "formaceoan" walls? from the fact that they are moulded, rather than built, by enclosing earth within a frame of boards, constructed on either side. These walls will last for centuries, are proof against rain, wind, and fire, and are superior in solidity to any cement. Even at this day, Spain still beholds watch-towers that were erected by Hannibal, and turrets of earth placed on the very summits of her mountains. It is from the same source, too, that we derive the substantial materials so well adapted for forming the earth-works of our camps and embankments against the impetuous violence of rivers. What person, too, is unacquainted with the fact, that partitions are made of hurdles coated with clay, and that walls are constructed of unbaked bricks?

BOOK XXXV CHAP. 49. WALLS OF BRICK. MAKING BRICKS.

Earth for making bricks should never be extracted from a sandy or gravelly soil, and still less from one that is stony; but from a stratum that is white and cretaceous, or else impregnated with red earth. If a sandy soil must be employed for the purpose, it should at least be male sand, and no other. The spring is the best season for making bricks, as at midsummer they are very apt to crack. For building, bricks two years old are the only ones that are approved of; and the wrought material of them should be well macerated before they are made.

There are three different kinds of bricks; the Lydian, which is in use with us, a foot-and-a-half in length by a foot in breadth; the tetradoron; and the pentadoron; the word "doron" being used by the ancient Greeks to signify the palm --hence, too, their word "doron" meaning a gift, because it is the hand that gives.--These last two kinds, therefore, are named respectively from their being four and five palms in length, the breadth being the same. The smaller kind is used in Greece for private buildings, the larger for the construction of public edifices. At Pitane, in Asia, and in the cities of Maxilua and Calentum in Farther Spain, there are bricks made, which float in water, when dry; the material being a sort of pumice-earth, extremely good for the purpose when it can be made to unite. The Greeks have always preferred walls of brick, except in those cases where they could find silicious stone for the purposes of building: for walls of this nature will last for ever, if they are only built on the perpendicular. Hence it is, that the Greeks have built their public edifices and the palaces of their kings of brick; the wall at Athens, for example, which faces Mount Hymettus; the Temples of Jupiter and Hercules at Patræ, although the columns and architraves in the interior are of stone; the palace of King Attalus at Tralles;

the palace of Cræsus at Sardes, now converted into an asylum for aged persons; and that of King Mausolus at Halicarnassus; edifices, all of them, still in existence.

Muræna and Varro, in their ædileship, had a fine fresco painting, on the plaster of a wall at Lacedæmon, cut away from the bricks, and transported in wooden frames to Rome, for the purpose of adorning the Comitium. Admirable as the work was of itself, it was still more admired after being thus transferred. In Italy also there are walls of brick, at Arretium and Mevania. At Rome, there are no buildings of this description, because a wall only a foot-and-a-half in thickness would not support more than a single story; and by public ordinance it has been enacted that no partition should exceed that thickness; nor, indeed, does the peculiar construction of our party-walls admit of it.

BOOK XXVI CHAP. 53. QUICK-LIME.

Cato the Censor disapproves of lime prepared from stones of various colours: that made of white stone is the best. Lime prepared from hard stone is the best for building purposes, and that from porous stone for coats of plaster. For both these purposes, lime made from silex is equally rejected. Stone that has been extracted from quarries furnishes a better lime than that collected from the beds of rivers; but the best of all is the lime that is obtained from the molar-stone, that being of a more unctuous nature than the others. It is something truly marvellous, that quick-lime, after the stone has been subjected to fire, should ignite on the application of water!

BOOK XXVI CHAP. 54. SAND. COMBINATIONS OF SAND WITH LIME.

There are three kinds of sand: fossil sand, to which one-fourth part of lime should be added; river sand; and sea sand; to both of which last, one third of lime should be added. If, too, one third of the mortar is composed of bruised earthenware, it will be all the better. Fossil sand is found in the districts that lie between the Apennines and the Padus, but not in the parts beyond sea.

BOOK XXVI CHAP. 55. DEFECTS IN BUILDING. PLASTERS FOR WALLS.

The great cause of the fall of so many buildings in our City, is, that through a fraudulent abstraction of the lime, the rough work is laid without anything to hold it together. The older, too, the mortar is, the better it is in quality. In the ancient laws for the regulation of building, no contractor was to use mortar less than three months old; hence it is, that no cracks have disfigured the plaster coatings of their walls. These stuccos will never present a sufficiently bright surface, unless there have been three layers of sanded mortar, and

two of marbled mortar upon that. In damp localities and places subject to exhalations from the sea, it is the best plan to substitute ground earthenware mortar for sanded mortar. In Greece, it is the practice, first to pound the lime and sand used for plastering, with wooden pestles in a large trough. The test by which it is known that marbled mortar has been properly blended, is its not adhering to the trowel; whereas, if it is only wanted for white-washing, the lime, after being well slaked with water, should stick like glue. For this last purpose, however, the lime should only be slaked in lumps.

At Elis, there is a Temple of Minerva, which was pargetted, they say, by Panæus, the brother of Phidias, with a mortar that was blended with milk and saffron: hence it is, that, even at the present day, when rubbed with spittle on the finger, it yields the smell and flavour of saffron.

BOOK XXVI CHAP. 56. COLUMNS. THE SEVERAL KINDS OF COLUMNS.

The more closely columns are placed together, the thicker they appear to be. There are four different kinds of pillars. Those of which the diameter at the foot is one-sixth part of the height, are called Doric. When the diameter is one-ninth, they are Ionic; and when it is one-seventh, Tuscan. The proportions in the Corinthian are the same as those of the Ionic; but they differ in the circumstance that the Corinthian capitals are of the same height as the diameter at the foot, a thing that gives them a more slender appearance; whereas, in the Ionic column, the height of the capital is only one-third of the diameter at the foot. In ancient times the rule was, that the columns should be one-third of the breadth of the temple in height.

It was in the Temple of Diana, at Ephesus, as originally built, that spirals were first placed beneath, and capitals added: and it was determined that the diameter of the shafts should be one-eighth of their height, and that the spirals should be one-half of the diameter in height, the upper extremity of the shaft being one-seventh less in diameter than the foot. In addition to these columns, there are what are called "Attic" columns, quadrangular, and with equal sides.

BOOK XXVI CHAP. 59. GYPSUM

Gypsum has a close affinity with limestone, and there are numerous varieties of it. One kind is prepared from a calcined stone, as in Syria, and at Thurii, for example. In Cyprus and at Perrhæbia, gypsum is dug out of the earth, and at Tymphæ it is found just below the level of the soil. The stone that is calcined for this purpose, ought to be very similar to alabastrites, or else of a grain like that of marble. In Syria, they select the hardest stones

for the purpose, and calcine them with cow-dung, to accelerate the process. Experience has proved, however, that the best plaster of all is that prepared from specular-stone, or any other stone that is similarly laminated. Gypsum, when moistened, must be used immediately, as it hardens with the greatest rapidity; it admits, however, of being triturated over again, and so reduced to powder. It is very useful for pargetting, and has a pleasing effect when used for ornamental figures and wreaths in buildings.

There is one remarkable fact connected with this substance; Caius Proculeius, an intimate friend of the Emperor Augustus, suffering from violent pains in the stomach, swallowed gypsum, and so put an end to his existence.

BOOK XXVI CHAP. 60. PAVEMENTS. THE ASAROTOS ŒCOS.

Pavements are an invention of the Greeks, who also practised the art of painting them, till they were superseded by mosaics. In this last branch of art, the highest excellence has been attained by Sosus, who laid, at Pergamus, the mosaic pavement known as the "Asarotos œcos;" from the fact that he there represented, in small squares of different colours, the remnants of a banquet lying upon the pavement, and other things which are usually swept away with the broom, they having all the appearance of being left there by accident. There is a dove also, greatly admired, in the act of drinking, and throwing the shadow of its head upon the water; while other birds are to be seen sunning and pluming themselves, on the margin of a drinking-bowl.

BOOK XXVI CHAP. 61. THE FIRST PAVEMENTS IN USE AT ROME.

The first pavements, in my opinion, were those now known to us as barbaric and subtegular pavements, a kind of work that was beaten down with the rammer: at least if we may form a judgment from the name that has been given to them. The first diamonded pavement at Rome was laid in the Temple of Jupiter Capitolinus, after the commencement of the Third Punic War. That pavements had come into common use before the Cimbric War, and that a taste for them was very prevalent, is evident from the line of Lucilius--"With checquered emblems like a pavement marked."

BOOK XXVI CHAP. 62. TERRACE-ROOF PAVEMENTS.

The Greeks have also invented terrace-roof pavements, and have covered their houses with them; a thing that may easily be done in the hotter climates, but a great mistake in countries where the rain is apt to become congealed. In making these pavements, the proper plan is to begin with two layers of boards, running different ways, and nailed at the

extremities, to prevent them from warping. Upon this planking a rough-work must be laid, one-fourth of which consists of pounded pottery: and upon this, another bed of rough-work, two-fifths composed of lime, a foot in thickness, and well beaten down with the rammer. The nucleus is then laid down, a bed six fingers in depth; and upon that, large square stones, not less than a couple of fingers in thickness; an inclination being carefully observed, of an inch and a half to every ten feet. This done, the surface is well rubbed down with a polishing stone. The general opinion is, that oak should never be used for the planking, it being so very liable to warp; and it is considered a good plan to cover the boards with a layer of fern or chaff, that they may be the better able to resist the action of the lime. It is necessary, too, before putting down the planking, to underset it with a bed of round pebbles. Wheat-ear tessellated pavements are laid down in a similar manner.

BOOK XXVI CHAP. 63. GRÆCANIC PAVEMENTS.

We must not omit here one other kind of pavement, that known as the "Græcanic." The ground is well rammed down, and a bed of rough work, or else broken pottery, is then laid upon it. Upon the top of this, a layer of charcoal is placed, well trodden down with a mixture of sand, lime, and ashes; care being taken, by line and rule, to give it a uniform thickness of half a foot. The surface then presents the ordinary appearance of the ground; but if it is well rubbed with the polishing-stone, it will have all the appearance of a black pavement.

BOOK XXVI CHAP. 66. GLASS, AND THE MODE OF MAKING IT.

In process of time, as human industry is ingenious in discovering, it was not content with the combination of nitre, but magnet-stone began to be added as well; from the impression that it attracts liquefied glass as well as iron. In a similar manner, too, brilliant stones of various descriptions came to be added in the melting, and, at last, shells and fossil sand. Some authors tell us, that the glass of India is made of broken crystal, and that, in consequence, there is none that can be compared to it.

In fusing it, light and dry wood is used for fuel, Cyprian copper and nitre being added to the melting, nitre of Ophir more particularly. It is melted, like copper, in contiguous furnaces, and a swarthy mass of an unctuous appearance is the result. Of such a penetrating nature is the molten glass, that it will cut to the very bone any part of the body which it may come near, and that, too, before it is even felt. This mass is again subjected to fusion in the furnace, for the purpose of colouring it; after which, the glass is either blown into various forms, turned in a lathe, or engraved like silver. Sidon was formerly

famous for its glass-houses, for it was this place that first invented mirrors.

Such was the ancient method of making glass: but, at the present day, there is found a very white sand for the purpose, at the mouth of the river Volturnus, in Italy. It spreads over an extent of six miles, upon the sea-shore that lies between Cumæ and Liternum, and is prepared for use by pounding it with a pestle and mortar; which done, it is mixed with three parts of nitre, either by weight or measure, and, when fused, is transferred to another furnace. Here it forms a mass of what is called "hammonitrum;" which is again submitted to fusion, and becomes a mass of pure, white, glass. Indeed, at the present day, throughout the Gallic and Spanish provinces even, we find sand subjected to a similar process. In the reign of Tiberius, it is said, a combination was devised which produced a flexible glass; but the manufactory of the artist was totally destroyed, we are told, in order to prevent the value of copper, silver, and gold, from becoming depreciated. This story, however, was, for a long time, more widely spread than well authenticated. But be it as it may, it is of little consequence; for, in the time of the Emperor Nero, there was a process discovered, by which two small glass cups were made, of the kind called "petroti," the price of which was no less than six thousand sesterces!

BOOK XXXVII CHAP. 11. AMBER: THE MANY FALSEHOODS THAT HAVE BEEN TOLD ABOUT IT.

Next in rank among the objects of luxury, we have amber; an article which, for the present, however, is in request among women only. All these three last-mentioned substances hold the same rank, no doubt, as precious stones; the two former for certain fair reasons; crystal, because it is adapted for taking cool drinks, and murrhine vessels, for taking drinks that are either hot or cold. But as for amber, luxury has not been able, as yet, to devise any justification for the use of it. This is a subject which affords us an excellent opportunity of exposing some of the frivolities and falsehoods of the Greeks; and I beg that my readers will only have patience with me while I do so, it being really worth while, for our own practical improvement, to become acquainted with the marvellous stories which they have promulgated respecting amber.

After Phaëthon had been struck by lightning, his sisters, they tell us, became changed into poplars, which every year shed their tears upon the banks of the Eridanus, a river known to us as the "Padus." To these tears was given the name of "electrum," from the circumstance that the Sun was usually called "elector." Such is the story, at all events, that is told by many of the poets, the first of whom were, in my opinion, Æschylus, Philoxenus, Euripides, Satyrus, and Nicander; and the falsity of which is abundantly proved upon the

testimony of Italy itself. Those among the Greeks who have devoted more attention to the subject, have spoken of certain islands in the Adriatic Sea, known as the "Electrides," and to which the Padus, they say, carries down electrum. It is the fact, however, that there never were any islands there so called, nor, indeed, any islands so situate as to allow of the Padus carrying down anything in its course to their shores. As to Æschylus placing the Eridanus in Iberia, or, in other words, in Spain, and giving it the name of Rhodanus; and as to Euripides and Apollonius representing the Rhodanus and the Padus as discharging themselves by one common mouth on the shores of the Adriatic; we can forgive them all the more readily for knowing nothing about amber when they betray such monstrous ignorance of geography.

Other writers, again, who are more guarded in their assertions, have told us, though with an equal degree of untruthfulness, that, at the extremity of the Adriatic Gulf, upon certain inaccessible rocks there, there are certain trees which shed their gum at the rising of the Dog-Star. Theophrastus has stated that amber is extracted from the earth in Liguria; Chares, that Phaëthon died in the territory of Hammon, in Æthiopia, where there is a temple of his and an oracle, and where amber is produced; Philemon, that it is a fossil substance, and that it is found in two different localities in Scythia, in one of which it is of a white and waxen colour, and is known as "electrum;" while in the other it is red, and is called "sualiternicum." Demostratus calls amber "lyncurion," and he says that it originates in the urine of the wild beast known as the "lynx;" that voided by the male producing a red and fiery substance, and that by the female an amber of a white and less pronounced colour: he also informs us that by some persons it is called "langurium," and that in Italy, there are certain wild beasts known as "languri." Zenothemis, however, calls these wild beasts "langæ," and gives the banks of the river Padus as their locality. Sudines says, that it is a tree in reality, that produces amber, and that, in Etruria, this tree is known by the name of "lynx;" an opinion which is also adopted by Metrodorus. Sotacus expresses a belief that amber exudes from certain stones in **Britannia**, to which he gives the name of "electrides." Pytheas says that the Gutones, a people of Germany, inhabit the shores of an æstuary of the Ocean called Mentonomon, their territory extending a distance of six thousand stadia; that, at one day's sail from this territory, is the Isle of Abalus, upon the shores of which, amber is thrown up by the waves in spring, it being an excretion of the sea in a concrete form; as, also, that the inhabitants use this amber by way of fuel, and sell it to their neighbours, the Teutones. Timæus, too, is of the same belief, but he has given to the island the name of Basilia.

Philemon says that electrum does not yield a flame. Nicias, again, will have it, that it is a

liquid produced by the rays of the sun; and that these rays, at the moment of the sun's setting, striking with the greatest force upon the surface of the soil, leave upon it an unctuous sweat, which is carried off by the tides of the Ocean, and thrown up upon the shores of Germany. He states, also, that in Egypt it is similarly produced, and is there called "sacal;" that it is found in India, too, where it is held as a preferable substitute for frankincense; and that in Syria the women make the whirls of their spindles of this substance, and give it the name of "harpax," from the circumstance that it attracts leaves towards it, chaff, and the light fringe of tissues. According to Theochrestus, amber is thrown up by the tides of the Ocean, at the foot of the Pyrenæan range; an opinion adopted also by Xenocrates. Asarubas, who has written the most recently upon these subjects, and is still living, informs us, that near the shores of the Atlantic is Lake Cephisis, known to the Mauri by the name of "Electrum;" and that when this lake is dried up by the sun, the slime of it produces amber, which floats upon the surface. Mnaseas speaks of a locality in Africa called Sicyon, and of a river Crathis there, which discharges itself from a lake into the Ocean, the banks of which are frequented by birds which he calls "meleagrides" and "penelopes:" it is here that, according to him, electrum is produced, in manner above mentioned. Theomenes says that near the Greater Syrtis are the Gardens of the Hesperides, and Lake Electrum: on the banks, he says, are poplars, from the summits of which amber falls into the water below, where it is gathered by the maidens of the Hesperides.

Ctesias asserts that there is in India a river called Hypobarus, a word which signifies "bearer of all good things;" that this river flows from the north into the Eastern Ocean, where it discharges itself near a mountain covered with trees which produce electrum; and that these trees are called "siptachoræ," the meaning of which is "intense sweetness." Mithridates says, that off the shores of Germany there is an island called "Serita," covered with a kind of cedar, from which amber falls upon the rocks. According to Xenocrates, this substance is called, in Italy, not only "succinum," but "thieum" as well, the Scythian name of it, for there also it is to be found, being "sacrium:" others, he says, are of opinion that it is a product of Numidia. But the one that has surpassed them all is Sophocles, the tragic poet; a thing that indeed surprises me, when I only consider the surpassing gravity of his lofty style, the high repute that he enjoyed in life, his elevated position by birth at Athens, his various exploits, and his high military command. According to him, amber is produced in the countries beyond India, from the tears that are shed for Meleager, by the birds called "meleagrides!" Who can be otherwise than surprised that he should have believed such a thing as this, or have hoped to persuade others to believe it? What child, too, could

possibly be found in such a state of ignorance as to believe that birds weep once a year, that their tears are so prolific as this, or that they go all the way from Greece, where Meleager died, to India to weep? "But then," it will be said, "do not the poets tell many other stories that are quite as fabulous?" Such is the fact, no doubt, but for a person seriously to advance such an absurdity with reference to a thing so common as amber, which is imported every day and so easily proves the mendacity of this assertion, is neither more nor less than to evince a supreme contempt for the opinions of mankind, and to assert with impunity an intolerable falsehood.

There can be no doubt that amber is a product of the islands of the Northern Ocean, and that it is the substance by the Germans called "glæsum;" for which reason the Romans, when Germanicus Cæsar commanded the fleet in those parts, gave to one of these islands the name of Glæsaria, which by the barbarians was known as Austeravia. Amber is produced from a marrow discharged by trees belonging to the pine genus, like gum from the cherry, and resin from the ordinary pine. It is a liquid at first, which issues forth in considerable quantities, and is gradually hardened by heat or cold, or else by the action of the sea, when the rise of the tide carries off the fragments from the shores of these islands. At all events, it is thrown up upon the coasts, in so light and voluble a form that in the shallows it has all the appearance of hanging suspended in the water. Our forefathers, too, were of opinion that it is the juice of a tree, and for this reason gave it the name of "succinum:" and one great proof that it is the produce of a tree of the pine genus, is the fact that it emits a pine-like smell when rubbed, and that it burns, when ignited, with the odour and appearance of torch-pine wood.

Amber is imported by the Germans into Pannonia, more particularly; from whence the Veneti, by the Greeks called Eneti, first brought it into general notice, a people in the vicinity of Pannonia, and dwelling on the shores of the Adriatic Sea. From this it is evident how the story which connects it with the Padus first originated; and at the present day we see the female peasantry in the countries that lie beyond that river wearing necklaces of amber, principally as an ornament, no doubt, but on account of its remedial virtues as well; for amber, it is generally believed, is good for affections of the tonsillary glands and fauces, the various kinds of water in the vicinity of the Alps being apt to produce disease in the human throat.

From Carnuntum in Pannonia, to the coasts of Germany from which the amber is brought, is a distance of about six hundred miles, a fact which has been only very recently ascertained; and there is still living a member of the equestrian order, who was sent thither by Julianus, the manager of the gladiatorial exhibitions for the Emperor Nero, to procure a

supply of this article. Traversing the coasts of that country and visiting the various markets there, he brought back amber, in such vast quantities, as to admit of the nets, which are used for protecting the podium against the wild beasts, being studded with amber.

The arms too, the litters, and all the other apparatus, were, on one day, decorated with nothing but amber, a different kind of display being made each day that these spectacles were exhibited. The largest piece of amber that this personage brought to Rome was thirteen pounds in weight.

That amber is found in India too, is a fact well ascertained. Archelaüs, who reigned over Cappadocia, says that it is brought from that country in the rough state, and with the fine bark still adhering to it, it being the custom there to polish it by boiling it in the grease of a sucking-pig. One great proof that amber must have been originally in a liquid state, is the fact that, owing to its transparency, certain objects are to be seen within, ants for example, gnats, and lizards. These, no doubt, must have first adhered to it while liquid, and then, upon its hardening, have remained enclosed within.

BOOK XXXVII CHAP. 12. SEVERAL KINDS OF AMBER: THE REMEDIES DERIVED FROM IT.

There are several kinds of amber. The white is the one that has the finest odour; but neither this nor the wax-coloured amber is held in very high esteem. The red amber is more highly valued; and still more so, when it is transparent, without presenting too brilliant and igneous an appearance. For amber, to be of high quality, should present a brightness like that of fire, but not flakes resembling those of flame. The most highly esteemed amber is that known as the "Falernian," from its resemblance to the colour of Falernian wine; it is perfectly transparent, and has a softened, transparent, brightness. Other kinds, again, are valued for their mellowed tints, like the colour of boiled honey in appearance. It ought to be known, however, that any colour can be imparted to amber that may be desired, it being sometimes stained with kid-suet and root of alkanet; indeed, at the present day, amber is dyed purple even. When a vivifying heat has been imparted to it by rubbing it between the fingers, amber will attract chaff, dried leaves, and thin bark, just in the same way that the magnet attracts iron. Pieces of amber, steeped in oil, burn with a more brilliant and more lasting flame than pith of flax.

So highly valued is this as an object of luxury, that a very diminutive human effigy, made of amber, has been known to sell at a higher price than living men even, in stout and vigorous health. This single ground for censure, however, is far from being sufficient; in Corinthian objects of vertu, it is the copper that recommends them, combined with silver

and gold; and in embossed works it is the skill and genius of the artist that is so highly esteemed. We have already said what it is that recommends vessels of murrhine and of crystal; pearls, too, are of use for wearing upon the head, and gems upon the fingers. In the case of all other luxuries, in fact, it is either a spirit of ostentation or some utility that has been discovered in them that pleads so strongly in their behalf; but in that of amber we have solely the consciousness that we are enjoying a luxury, and nothing more. Domitius Nero, among the other portentous extravagances of his life, bestowed this name upon the ringlets of his wife Poppæa, and, in certain verses of his, he has even gone so far as to call them "succini." As fine names, too, are never wanting for bodily defects, a third tint has been introduced of late for hair among our ladies, under the name of "amber-colour."

Amber, however, is not without its utility in a medicinal point of view; though it is not for this reason that the women are so pleased with it. It is beneficial for infants also, attached to the body in the form of an amulet; and, according to Callistratus, it is good for any age, as a preventive of delirium and as a cure for strangury, either taken in drink or attached as an amulet to the body. This last author, too, has invented a new variety of amber; giving the name of "chryselectrum" to an amber of a golden colour, and which presents the most beautiful tints in the morning. This last kind attracts flame, too, with the greatest rapidity, and, the moment it approaches the fire, it ignites. Worn upon the neck, he says, it is a cure for fevers and other diseases, and, triturated with honey and oil of roses, it is good for maladies of the ears. Beaten up with Attic honey, it is good for dimness of sight; and the powder of it, either taken by itself or with gum mastich in water, is remedial for diseases of the stomach. Amber, too, is greatly in request for the imitation of the transparent precious stones, amethystos in particular: for, as already stated, it admits of being dyed of every colour.