II.

ON TERRA-COTTA LAMPS. BY ROBERT COLTMAN CLEPHAN, F.S.A. SCOT.

The modelling of these useful though fragile vessels in terra-cotta, that is baked clay, and their enrichment, may be regarded as a fine art; though the domestic lamp is something more than an ornament, for it is a household necessary, and was often a symbol; it was used daily by the living, and was buried with the dead. This branch of ceramics merits more attention from the archaeologist than it has received at his hands.

Nothing is known as to the country in which the oil-lamp first appears, but Polydore Vergil is probably right in ascribing the invention to the ancient Egyptians.

Antique lamps of this kind were modelled by hand; or the lumps of clay or earth of which they were made, first having been washed free of all granular substances and worked plastic with added moisture, were pressed into moulds, and afterwards sun-dried or baked in an oven or kiln; in the latter process the high temperature cements the mass together, thus rendering the vessel closer in texture and more capable of retaining oil; or, better still for the purpose, many lamps are covered with a silicious slip or with enamel. Probably the receiver was created by moulding the clay around a kernel of wood, which was burnt away in the kiln, leaving the orifice clear. These indispensable utensils, made most frequently of a red or a yellowish-grey paste, are remarkable for their lightness.

While the bulk of the specimens preserved are somewhat roughly made, with a view to cheapness, and, like the coarser kinds of pottery generally, were obviously intended to supply the needs of the poorer classes, there has been a multitude of examples found of fine design and workmanship, of rare beauty and finish. Many lamps, first roughly fashioned by hand, were finished off on the potter's wheel, which enabled the modeller to do his work with more precision and in
more accurate proportions. Pliny attributes the invention of this very
primitive machine to Coroebus the Athenian, but monuments of the
time of the Hyksos or Shepherd Kings, say a couple of centuries
before and after B.C. 2000, give representations of it, and the date of
its invention probably goes back to a period of antiquity more remote
still. The ram-headed god Khnumu, the god of Elephantine, the father
of the gods, is represented at Philæ as fashioning a man on the potter's
wheel. The Egyptian type of the machine is a low circular table turned
with the foot. An illustration occurs on a black figured cup in the
British Museum; the potter is seated on a stool turning a wheel with
his foot. The prophet Jeremiah refers to "the potter working at his
wheel," which consisted of two wheels of wood or stone, one over the
other, the upper being the smaller. Examples of moulds have been
found in considerable numbers; and, like those for terra-cotta statuettes,
they were made in parts, and before being used were smeared out
with some fatty substance to prevent adhesion. The original model
was first prepared in clay or wax, and a mould taken by squeezing on
clay, which was then baked. In many cases it is only the top of the
lamp that is moulded. A mould in the British Museum—one for impress-
ing the ornamentation—shows how simply, rapidly, and cheaply lamps
were prepared for the kiln.

Lamps of all grades and periods may be seen in the British Museum,
and they record, perhaps better than anything else, the progress and
decadence of the ceramic or plastic art. It is regrettable, however, that
a better record of the specimens in the Museum has not been kept, and
that they are not arranged and classified more with a view to the
approximate dates of origin, and mentioning the places where found.
This remark applies to many other collections also.

By far the greater number of antique lamps are made of terra-cotta,
but many bronze specimens have been unearthed, and the general form
is very similar in both cases. Lamps were not used for domestic pur-
poses only, but largely in temples and public buildings; and many, more
especially those of bronze, hung suspended by chains.
Great numbers of terra-cotta lamps have been found in Egypt, Magna Græcia, Sicily, Attica, the Isles of the Ægean, Cyprus, Asia Minor, Carthage, Italy, and the provinces of the Roman empire generally. The earliest examples that can be identified, possibly those following on the "lampas" or torch of Homer, one of the winged steeds of Aurora, are open, the receivers annular in form, with a projecting rim and a spout or lip in one part of the circumference for laying in the end of the wick. Specimens of this kind have been found both in terra-cotta and black glazed ware; but this shape alone is far from being decisive as to age, for the uncovered-in form has been unearthed in Britain and other provinces of the Roman empire; and it continued in use among the peasantry, especially in Cyprus, for many ages, indeed up to comparatively recent times. An example, 4½ inches long, is illustrated in fig. 1. A lamp in the Black Gate Museum of this form, which belonged to Mr Robert Blair, F.S.A., one of the hon. secretaries of the Society of
Antiquaries of Newcastle-upon-Tyne, was in use in India not many years ago. Some of these lamps date back perhaps as far as B.C. 600, possibly even earlier. This shape, which combines the necessary steadiness for carrying about and the flatness for setting down, forms the basis for all later designs; but with an open receiver the oil was apt to spill when the lamps were handled, and a covered-in body was soon seen to be desirable.

The form of the bulk of the lamps preserved is either annular or shoe-shaped; the body or receiver of the first-named kind, which is the earlier, is covered in with a concave top, in or near the centre of which is a small hole for filling in the oil, and there is a nozzle for the wick, while in the case of the latter description the top of the receiver is usually more or less convex, and the filling-hole often much larger, or is itself placed in a small concavity, the wick-hole being in the toe-end of the shoe. These, in their order, may be roughly described as the Western and Eastern types.

Some lamps assume fanciful forms, but there is really less variety of shape than might be expected over a period of a thousand years. Plugs or stoppers for the filling-holes were sometimes used, and specimens have been found, though rarely. Lamps are both plain and enriched with a subject in relief, or are decorated with floral or geometrical designs. The subject is more frequently restricted to one figure, especially in the case of the earlier specimens, this being in accordance with the then canon of art against any redundancy of ornamentation. The decorative work intended to relieve and embellish the subject, framing it, as it were, is characterised by extreme simplicity, and may even be described as formal and monotonous. It is used sparingly in the best periods, while the worst are characterised by a superabundance of enrichment, which ought to be strictly subordinate to the subject. Like other terra-cottas, lamps were often coloured, but this has mostly disappeared with the lapse of time. The reliefs and inscriptions upon pottery have proved invaluable in the making of history, and often at times when other records are scanty, for not only do they portray the manners, customs,
and costumes of bygone ages, but they illustrate the mythologies and legends of those times, and the changes therein, besides outlining the rise of Christianity, with its later modifications and developments during the earlier stages.

The usual size of a lamp with a single wick-hole or nozzle ranges from about 2½ to 4 inches in length by about 1 inch in depth, the walls of the receiver being about ¼ of an inch thick. The greater number are provided with a single wick-hole, and such a lamp must have given but a very feeble light; but many of these utensils have two nozzles or wick-holes in the receiver itself; some, indeed, with up to a dozen, or even twenty; but these are rare, and such examples are much larger, running up to 8 inches and even a foot in length.

Lamps are both with handles and without; a common form of this appendage is a ring for the forefinger, surmounted by a palmette, on which the thumb is placed to prevent the vessel from swaying or slipping. Crescent-formed and semi-oval handles are also common, while some are triangular. When lamps are without handles, the nozzles are usually elongated; and they are sometimes provided with a small spur or lug, rising diagonally from the rim of the receiver, occasionally one on each side. Some see in this appendage an embryo handle, whilst others regard it as a symbolic sign; but, as a matter of fact, these lugs are handles, and effective ones too, as may be proved by placing a thumb upon the lug, with one of the fingers grasping the bottom of the lamp, which can then be carried about with ease and steadiness—more so, perhaps, than when held by the ordinary projecting handles. These lugs are usually pierced, and the hole is probably for holding the pin or straw, the acus or festuca, with which the wick was trimmed. Fig. 2 affords an example of a lamp with a lug. This specimen is of dark red ware and is quite plain. Wicks were made of tow, ordinary rush or papyrus.

Stands of clay—lamp-holders, as they were called—were provided in the rooms where the lamps were wanted when not being carried about, mainly the kitchen and study, as shown in the excavations at Pompeii,
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once a Greek colony, destroyed 79 A.D., and they were often fastened to the wall by a nail, or hung suspended from brackets, or were placed in candelabra. In Pompeii, niches for lamps are shown in the walls of these rooms, with chimneys for carrying away the smoke. In cases where lamps were made specially for hanging, the ornamentation is sometimes placed on the under side, and these were used in the salles à manger. Some examples have been found with sockets for fitting on to candelabra, or for carrying about in processions, with sticks or staves inserted. The stands are often most graceful in form, and so also are the vessels sometimes looked upon as holders of a stock of oil; but these flattish, highly-finished vases, with upright spouts, varieties of the ashi (wineskins) or gutti, were used for wine, water, or any other liquid. An undoubted specimen of a boat-shaped oil-holder, 11 inches long, of a light red paste, in the museum at the Black Gate, Newcastle-upon-Tyne, has been kindly photographed for me by Mr Parker Brewis one of the curators, and is reproduced on fig. 3. There are also fillers
or replenishers, with long funnel-shaped necks; a Ptolemaic specimen from Hawara, Egypt, in my own collection, is illustrated on fig. 4. The body is formed elliptically, and on it is stamped indistinctly the head of an Apis bull. On the under side of the receiver are two raised annulets of clay. Its entire length is over 8 inches. An example of this kind of utensil, fashioned as a hound on his haunches, may be seen in the Babylonian-Assyrian room in the British Museum, and there is one in the form of a bird. Another in the shape of a grotesque human head, Romano-Egyptian, from Naucratis, is in my possession.

Numerous oil-replenishers of the sixth century of our era or thereabouts have been found at Alexandria. These terra-cotta oil flasks or bottles were carried about by pilgrims, filled with oil for replenishing lamps hanging in the various shrines they visited. Many of these ampullæ bear on their faces figures of St Menas in relief. This saint was an Egyptian martyr who suffered death during the reign of the Emperor Diocletian. The figure of this martyr is usually flanked
by camels, more or less conventionally rendered, in remembrance of some legend connected with the history of the saint. Three examples of oil-flasks of this kind lie on the table. Others in the National Collection are described and illustrated in the Society's Proceedings, vol. xii. p. 98.

Lamp-stands may be divided into two classes: one, for laying down; the other, a candelabrum on which to set a lamp, or to which a lamp was affixed, or from which lamps hung from its branches, for a greater diffusion of light. A Romano-British example of the first-named in my collection, though of bronze, fairly expresses the class. It was found at Berkhamstead; the shallow body of oval form, the nozzle circular;

Fig. 4. Oil-pourer of the Ptolemaic Period.

a large crescent-shaped ornament projects over the annular handle. The length is nearly 8 inches, and the breadth at the widest part 3 inches.

On the archaic Etruscan sarcophagus in the British Museum (Cat. No. B. 630) is a lamp-stand, the legs of which are fashioned as lion's claws. A candelabrum in the same collection is formed as a long cylinder with a swelling base; the upper part of the column is modelled as a woman, who grasps with uplifted arms a lamp with three nozzles. This example came from Cameiros in Rhodes, a town destroyed B.C. 408.

Many of the Etruscan stands are very beautiful. A terra-cotta example in my possession, from South Italy, of about B.C. 600, is illustrated in fig. 5. A column enriched with mouldings springs from a square pedestal supported on four lion's feet; at the top
is a hollow disc in which the lamp is placed. The stand is decorated in a rich red colour on a yellowish ground, the column being enriched by bands of clinging honeysuckle, and the mouldings with circlets of pendants. The same floral design covers the pedestal, which is further enriched by a bordering of annulets.

Fig. 5. Etruscan Lamp-stand.

Great numbers of lamps have been found in the excavation of the sites of ancient cities, more especially those devastated by war or overwhelmed by volcanic eruptions; and we owe the recovery of many fine specimens to the fact of their having been preserved in sepulchres, where the history of an ancient people must always be sought. Many examples have been found at Carthage, most of which are of bright red ware.
The question of the approximate date of the earliest lamps that have been found is one full of doubt and perplexity, and it has not been found possible to trace even the century when they began to supersede the Homeric torch in Greece. No specimens, which can be identified as lamps, have been found in that country before the period arbitrarily classed as historic; and it is doubtful if any examples can be attributed with safety to the archaic period of Greek art, so that any early specimens with a covered-in receiver found in Greece can hardly date much before B.C. 500-400. Turning to a much earlier period, and to Palestine, the passages in which lamps are mentioned in translations of the Old Testament, such as occur in Judges vii. 16 and in 1 Samuel iii. 3, afford no decisive information as to the antiquity of that mode of artificial lighting among the Jews, for the Hebrew words have been translated arbitrarily; still the passage "ere the lamp of God went out in the temple of the Lord" would seem to imply rather a lamp than a torch; and the candlestick with seven branches placed in the sanctuary by Moses and those which Solomon prepared for the temple were probably oil-lamps of some kind, placed in candelabra. A Jewish candelabrum with seven branches is sculptured on the Arch of Titus.

That these utensils in some form or other were in common use in Egypt and Greece, B.C. 465, is clear from the writings of Herodotus, who visited the land of the Pharaohs in that year, in the reign of Artaxerxes (Longimanus), of the XXVIIth (a Persian) dynasty, during whose government the Egyptians, under Inarus and Amyrtæus, attempted to regain their independence, aided by the Athenians, and they were for a time partially successful; but it was in the reign of Darius Nothus, B.C. 425-405, when a revolt fully succeeded, and a second Amyrtæus became king of Egypt. Herodotus mentions the feast of lamps at Saïs, a festival likewise celebrated at Rome in honour of Minerva (Pallas Athené); and it is probable that the practice of burning candles in Christian churches had its origin in pagan religious celebrations. He refers also to a lamp which was
burning before the cow-shaped sarcophagus of Mycerenus (Menkara) at the same place; and then writes, quite as a matter of course, of evening being the time for lamps,—"and about the time for lighting lamps," "perc λυχνων ἀφάς." It is clear, then, that this mode of lighting was known to the ancient Egyptians of the new empire, and it is recorded that lamps were employed in illuminations by Cleopatra; but it is certainly very strange that specimens have not been found wholesale in tombs in Egypt, where so much of the pottery of daily life was stored for the use of the defunct in the fields of Aalu; but perhaps it was imagined that there is no darkness there. In these tombs, from a very early period, consisting as they do of a series of subterranean chambers and passages all richly frescoed, the artists must have had a good artificial light to have been able to do their delicate work; and had torches been used they would have left indelible traces of their presence on the ceilings, which were often low, but nothing of the kind is to be seen in any freshly-opened tomb, unpolluted by the modern savant or tourist. How, then, were these sepulchres lighted when in course of construction and decoration? The prehistoric strata of ancient Greek cities that have been excavated, such as Tiryns and Mycenae, have not yielded any vessels that can be identified as lamps, while numberless examples of the conventional forms have been unearthed above these deposits. The sites of temples and shrines would have yielded many more examples of pottery but for the practice of the breaking up and clearing away of votive offerings periodically by the attendants; thus, older specimens have only been preserved in these buildings in cases where they had become covered with earth or rubbish. Numerous lamps have been recovered in Christian sepulchres.

These utensils and candelabra are referred to in the writings of Pherekrates, a comic Athenian poet, who lived in the time of Pericles (b.c. 470–29), and who is quoted by Athenæus. The myths themselves supply some evidence bearing on the antiquity, or rather perhaps on the popular use, of lamps in Greece, for in the early one of Demêter (Ceres)
the goddess is always represented carrying a torch, her definite attribute, when seeking for her daughter Persephoné (Proserpine), while in illustrations of later myths the lamp appears. There is no evidence that the early Britons ever got beyond the torch for illuminating purposes, though in Britain, as elsewhere, it may be that some of the clay vessels found had been used for the purposes of oil-lamps; but if so they are without spouts or nozzles, for no marks of the action of fire, such as so freely appear on the blackened and burnt nozzles of terra-cotta specimens, are discernible on any spouted vessels in any way suitable for the purpose. The earliest form of lamp was probably a vessel more or less annular, with a floating wick, and thus without nozzle or lip; and the use of such a utensil may possibly go back to very ancient times. Herodotus states in book ii. that at the festival of the lighting of lamps already referred to, held at Sais and all over Egypt, flat vessels filled with salt and oil, on which a wick floated, were used for the purpose of illumination, and that they burned all night, and in the open air. We may probably infer from this that it is only the comparatively later lamps which have nozzles, and that the earlier ones were formed as Herodotus describes; and here we have perhaps the reason why no lamps with nozzles, that is, vessels that have been identified as having been used for lighting purposes, have been found in the earlier deposits or in tombs. Many lamps were kept burning at shrines, and the legends regarding certain sepulchral lamps, referred to by Pliny and others, which burned for a long time without any renewal of oil, may have some slight foundation in fact, and the addition of some sort of salt, as mentioned by Herodotus, possibly had the virtue of rendering the mixture slow-burning; but if so, it must have been at the expense of the illuminating power.

The Roman settlements of this country have yielded fewer lamps than might be expected, but in Gaul great numbers have been unearthed and lamp-kilns have been discovered. A lamp found in a sepulchre at Colchester, of the common Roman shape, is ornamented with a herald’s staff, caduceus, placed between two cornucopiae; and another, dug up in
London, exhibits a winged figure of Mercury standing on an orb, holding a crow in the right hand and a palm branch in the left. A pear-shaped terra-cotta specimen was unearthed near Liverpool Street, Bishopsgate, London, with an annular holed boss for fixing on to a candelabrum, or to a staff for processional purposes. One found in 1873 near Hexham, on the site of Corstopitum, a Roman town of some importance, covering about twenty acres, where some excavations are now being made, has a long perpendicular shank for socketing into wood or stone. The specimen is about 2 inches long, the shank 1\textfrac{1}{2} inches. Finds of bronze lamps in Britain are comparatively rare.

A Gallo-Roman example found at Cologne, a colony first called by the Romans Colonia Agrippinensis, and afterwards Colonia Claudia Agrippina, is enriched with the figure of a hare eating a bunch of grapes; and another, in my possession, found in excavating the thermae at Augusta Trevirorum, the modern Trêves, exhibits Jupiter with the eagle of the Olympian divinity.

The greater number of the Romano-British lamps in the British Museum are annular and without handles. The colours of the pastes vary a good deal, but a dark salmon shade of red predominates, while others run from a light grey to a dark brown. There is a specimen fashioned as a gladiator's helmet; another has a nozzle at either end. The subjects of enrichment comprise a peacock, a lion attacking a horse, gladiators fighting, a stag, a galley, Cupid and a hare, and a bacchante. There are several open lamps very roughly made, and a covered-in specimen had been distorted in the kiln; all of these latter are evidently of native make, but the finer examples mentioned had been probably imported from Rome.

Many superstitions were connected with lamps, and notably the one for their employment in choosing the name for a child, when a certain number of these vessels were selected, and one lighted for each name in the list; the last to burn out decided the matter. Lamps were often

\footnote{More probably the figure represents a cock, as emblematic of vigilance.}
given as birthday presents, and some have been found with the inscription

ANNV NOV FAVSTV FELIX

and a specimen of this kind may be seen in the British Museum.

There is some confusion as to the classification of pottery, including lamps, owing to the designation “Etruscan” having been applied to the fictile Greek vases (Hydrias) found in considerable numbers in Etruria; and the name was extended to pottery found in Greece of the same period. The more correct term for such ware should rather be Greek. No pottery is, strictly speaking, entitled to the designation “Etruscan” excepting that found in Etruria of the seventh and sixth centuries B.C.

The Etruscan ware is black throughout the paste. Native Etrurian art is not to be specially distinguished from that of some of the more southern provinces of Italy, though such States were probably at an early period more or less subjected to Etruscan domination. The first foreign influence brought to bear upon Etruscan art forms was Egyptian, and then the Greek, and of this the sepulchres afford abundant proof. The ornamentation on real Etruscan terra-cottas closely resembles that present on some of the pottery found by Dr Schliemann at Mycenae, so that it was greatly on a par with that of contemporary Greece up to the end of the sixth century B.C., but there the parallel ceases. Two lamps
from Tusculum, of Etrurian black clay, are in the Black Gate Museum, Newcastle-upon-Tyne. One of these, 2½ inches in length, is given on fig. 6, from a photograph taken by Mr Parker Brewis. They are formed rectangularly, with long upright backs, which are holed for hanging on a nail. Athenæus writes of the skill of the Etruscans in making lamps.

There is an interesting collection of terra-cotta lamps in the Black Gate Museum, concerning which little or no record of the places where they were found has been kept; the importance of this was not realised by the earlier explorers. Some of the lamps were probably unearthed along the Roman Wall extending from the Tyne to the Solway, though that double line of fortification has yielded comparatively few examples.

Though Greek pottery forms, the methods of working and enrichment, had been freely imparted to and assimilated by the entire Roman world, Greek art remained unique in its beauty, symmetry, and delicacy of outline, even long after the Roman conquest (B.C. 140); but the halcyon period was from, say, B.C. 440 to about 280. The terra-cotta lamps of Greece of the best period are remarkable for their small size, their lightness, the noble simplicity of their form, and the fineness of the paste employed in their construction, as well as for the refinement and correctness of the figures and enrichment generally, though many examples are without subject or mouldings of any sort. The paste is usually much lighter in colour than that employed by Roman potters, but specimens of a black or bluish-black ware have been found. Greek lamps assume an even greater variety of form than those of Rome, but the earlier covered-in type has a plump annular body with a nozzle. Some of the designs are most elaborate, such as a boy reclining on a couch, the wick-hole being at its foot. In the British Museum is the rude model of a bull in terra-cotta from Salamis, and between the horns is an open lamp, while along the back of the animal are places for three more. Another lamp in the same collection is fashioned in the form of Artemis (Diana) standing on a pedestal. The figure, which forms the receiver, is clad in a short chiton, the oil-filling hole being placed at the
back of the neck, and there is a nozzle at each side. The lamp is supported by the raised hand. Behind the left leg is a dog, and on that side a cippus, on which is a figure of Hecatē. This example was found in the temple of Demēter at Knidos. Handles, when present, are mostly annular, crescent-shaped, semi-oval, or flat and triangular. The subjects of enrichment are varied in character, but mythological and legendary themes are more rarely represented than is the case with Roman lamps; but what there is of this kind shows the progressive influence of the mythology of Egypt on the Greek pantheon. Ornamentation is artistically disposed around the crater, assuming scroll, wreath, and floral forms, and antefixal designs, that is, helices or architectural ornaments, the helix being often impressed on the handle or nozzle. Antefixes are thought to have been used to mask the ends of the tile ridges on a roof, though some more light is required as to their application. They were also used by women when spinning, the wool being rubbed upon them before being placed on the distaff.

Fig. 7 represents a typical example from Athens, of small size (2 inches long). Plump annular body, elongated nozzle, without handle. Early form, simple and elegant.

Fig. 8.—Greek or Græco-Roman lamp of dark red paste; annular body,
elongated nozzle, enriched with mouldings. Triangular handle, stamped with a helix. Length over 7 inches.

Fig. 9.—Christian lamp found in a tomb at Jerusalem by Professor Palmer, probably the work of a Greek artist. It is enriched with the legend of "the dove and the olive branch" in relief.

These lamps are in my possession.

The use of wax as an illuminant was not unknown to the Romans, but that they generally used oil is told by the proverb "tempus et oleum perditi."

The terra-cotta lamps of Rome and Italy generally have naturally many points of contact with those of Greece, for they were largely designed by Greek artists, many of whom had been taken in battle by the Romans, and given their freedom so that they might continue their avocations in their new country, instead of being kept or sold as slaves like the other prisoners of war; still the mere lamp-maker occupied no distinguished position in the republic of art. Furthermore, the intimate connection of Italian pottery with that of Greece probably goes back to B.C. 660-655; for when the Corinthians revolted against the Bacchiadæ and drove them from the city, Damaratos, one of their family, fled, and, it is said, found an asylum at Tarquinii,
in Etruria, taking with him the two celebrated potters, Euclerus and Eugrammos, who founded a school of pottery there. Damaratos is stated by Pliny to have been the father of the elder Tarquin. The Bacchiadse were popularly supposed to have been the descendants of Heracles. Rome was indebted to the Etruscans for her early lessons in art before her intercourse with Greece. Roman lamps are spread broadcast over the empire; for Rome, after the second Punic War,

Fig. 9. Christian Lamp from Jerusalem.

became the chief seat of the lamp-making industry, and they were exported thence to the provinces, carrying their story with them; hence another reason besides that of Greek influence why the country of origin of so many of the specimens found outside Italy is so often in doubt. With the fall of the metropolis of the world the manufacture of these lamps would appear to have ceased in Italy. When potters’ names are stamped on Roman examples they are usually of Greek nationality, and must be looked for at the bottoms. Many Roman lamps are made of a rather dark red paste, being of earth from the
Vatican hill, but red clay of various shades is present all over Italy; others are what is known as false Samian ware, made of a reddish paste dipped in a solution of sulphate of iron, but this ware is vastly inferior in fineness of texture, regularity of colour and tone to the real Samian, which is a fine sealing-wax red. Lamps of this kind have been found both in Britain and Gaul. The term Samian ware is misleading, for this class of pottery has nothing to do with the island of Samos. A grey paste was also used, though more rarely. The greater number of lamps found in Italy are of the shapes already described, those with annular bodies, and concave tops containing the subject; the nozzles, formed in semi-ovals, often enriched by mouldings; but the lamp admits of many imaginative shapes, and we find examples of forms such as bulls' heads; animals, down to the snail; triremes, and sandalled human feet. Most of the specimens of this kind date from the commencement of the Empire to the middle of the fourth-century. The ornamentation on Roman lamps is full of interest, the subjects covering a wide range, and many of them are grotesque. The Romans, who were not an artistic race, borrowed their pantheon, like their art, from Greece, merely changing the names of the deities. Among the figures of the gods, Venus and Cupid, Bacchus, Mars, Hercules, Diana and Minerva are the most popular; Jupiter, with the eagle of the Olympian divinity, is often represented; Juno but rarely. Genre subjects are often depicted. Much Graeco-Roman work is sadly marred in our eyes by a gross spirit of licentiousness and indelicacy; but however it may offend our sense of decency, it is never devoid of artistic merit.

Taking, as far as possible, a chronological series of mythological subjects exhibited, brings out very clearly the changes wrought in the earlier Roman pantheon by the gradual addition of strange deities adopted from foreign systems after the close of the Republic, such as Mithras the Persian Sun-god, Isis, Serapis (Osiris-Apis, supposed to contain the souls of Osiris and Ptah), Heru-pa-khrat or Harpocrates (Horus, the child), and even combinations like Helio-Serapis. This almost hopeless multiplicity of deities greatly contributed to a condition
of moral unrest, and prepared the world for the advent of Christianity. The emblems of this faith do not appear on lamps very early, but when once commenced they become very common. There is a singular absence of historic subjects, owing perhaps, more than anything else, to the intense and progressive frivolity of the Roman citizens under the Empire. Probably the lamps of the best period are those with a single figure in the centre, surrounded by a plain bead or moulding; later, the *limbus* becomes more elaborate, consisting often of fruit and floral ornamentation distributed around the subject, which also tends to amplify considerably; or around the crater, when a subject is absent.

There is a fine collection of Græco-Roman lamps in the British Museum.
Museum, though chiefly of the commoner sorts, and among the subjects are—five fishermen fishing in a harbour; a goatherd; Victory, with shield; pieces of armour; a savage clad in skins, brandishing a tree branch; and there are the usual mythological and legendary themes. The handle of one example is formed as a bust of Serapis, with the modius, a measure of corn or fruit, on his head. The lamp (lucerna polylychnis) has seven nozzles, and is reproduced from a drawing on fig. 10. A fine specimen in this collection exhibits as subject a race of four quadrigae within the circus, with spectators, architectural and other details. The example is circular in form, with an annular handle; the nozzle enriched with mouldings. This lamp, also reproduced from a

1 The modius or corn-measure is the attribute of the Chthonian or Telluric deities.
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drawing, is illustrated in fig. 11. There are specimens formed rectangu-
larly, with wick-holes in the bodies, one of them for twelve lights; an-
other, annular in form, with a single nozzle in front, has a miniature 
lamp fixed on either side of the rim.

The following examples are in my collection:

Fig. 12.—Of light red paste, over 5 inches long. Annular body, no 
handle, nozzle flanked by mouldings. Enriched with the figure of a 
horse, a standard, a club, and a manger.

Fig. 13.—Of a dull grey paste. Subject, the figure of a crab.

Fig. 14.—Cupid, with the attributes of Mars; a conceit to show the 
power of love over force.

Fig. 15.—Of a brown paste, about 4½ inches long; nozzle projecting 
very slightly. Margin around concave top enriched with a band of 
egg and tongue moulding.

Some of the lamps found near Naples are very artistic. They are 
made of a light grey or yellow paste.

The Nile valley has yielded but few terra-cotta lamps, that is vessels 
known as such, of a date prior to the Roman occupation of the country, 
and most of the examples preserved belong to the Christian period, 
many as late as the sixth century, and even up to the Saracen invasion. 
Several glazed specimens of a yellowish-brown ware, inscribed with the 
cartouches of the Ptolemies, have been found at Alexandria. Glazed 
lamps are rare anywhere. The influence exercised by Egypt on Chris-
tian art as well as on religion was immense. Great numbers of lamps 
with Coptic Christian emblems have been found in the country, and 
many of these symbols had descended from Pagan times; the Ankh 
(cruz ansata), the ancient Egyptian sign for life, was often used in 
ornament to express the Cross of Christ. The Copts are Monophysite.
Some Egyptian lamps are made of a coarse brown or a yellowish clay, 
others of red paste, and a few specimens in black ware have been 
discovered. Many of those of a dark red paste are probably of Roman 
make. The town Coptos (Kabt) was noted for its pottery from very
TERRA-COTTA LAMPS.

early times, and the clay in its vicinity, a sort of silicious earth or frit, is well adapted for making it. The shapes and sizes of native ancient Egyptian lamps vary exceedingly, and the quality both of manufacture and enrichment is greatly inferior to that of Greece or Italy; indeed, the potter's art in Egypt was always far behind these countries in excellence,¹ probably mainly for the reason that the Egyptians from very early times found that vessels cut in alabaster answered their purposes much better than did ware; which latter, being cheaper, was mostly made for the use of the poorer classes. I am not aware, however, of any alabaster lamps having been discovered—none, at least, that can be certified as such—though some of the vessels found may have been

¹ The remark applies to dynastic times only. The quality and design of predynastic pottery were better than any produced in later times in Egypt.
used as lamps with floating wicks, like those mentioned by Herodotus, which we have not been able to identify.

A favourite early shape for Egyptian lamps is that of a conventionalised frog or toad. The frog is emblematic of the Resurrection and fertility; while the toad, according to Chaeremon, symbolises the Resurrection. An example of this form, made of a yellowish-grey paste, from Coptos, is given on fig. 16; and another from the same place, fig. 17, affords an instance where the frog is given fully formed and in its natural size, behind which is a curved line of annulets. This specimen is of red clay whitened over, and the sacred Christian monogram is stamped on the bottom. A lamp of the Christian period, in the fine museum of Egyptian antiquities at Alnwick Castle, is enriched in front with the figures of two lions, and between them a Maltese cross. The tongues of the lions are protruding, their tails curved over their backs. Around the edge is a wreath of ten pendants and pellets, while below is a festooned band of drop-shaped ornaments, besides a pendant, cross, etc. An inscription in Greek characters shows that the lamp had belonged to Timotheos, Archbishop of the Thebaid (Alexandria). It is of red paste and 4\(\frac{1}{4}\) inches long. Representations
of the gods as applied to lamps are comparatively rare in Egypt, and this is not surprising, as so few specimens dating before the Christian era have been found. Still, the older religion, despite all edicts, continued to linger on in Upper Egypt, and notably at Philæ, up to the fifth century A.D. Fig. 18 furnishes an example of this kind from Thebes. It is of a light red paste, dipped in a white slip, shoe-shaped and grotesque, the receiver fashioned in the recumbent form of the god Bes, a figure with wrinkled face, large ears, hanging stomach, hands on the hips, and knees wide apart, concerning whose attributes there is some ambiguity. At the period of the lamp, this deity was regarded as the "old god who renewed his youth"; but during the middle empire he was the god of war and pleasure, and specially associated with childbirth and the protection of children. The handle of this specimen is annular, and the
lamp is very characteristic of the style of art of the new empire. Fig. 19 is a double lamp in black ware from Alexandria. The handle is annular, and each twin lamp has a long nozzle. It is enriched with a geometrical design. I have not seen another of the kind. These examples are in my own collection. The Greek A is stamped on the bottoms of many specimens found in Egypt, a circumstance perhaps suggestive of there having been a considerable lamp-making industry at Alexandria.

Among the specimens from Egypt in the British Museum, all belonging to the late Greek or Roman and Christian periods, are the following:—Lamps formed as busts of Osiris and Serapis; an elephant’s and a Nubian’s head; an example from the Fayûm, of fine red paste, has a heart-shaped handle, a lug on each side of the receiver, and stands on a pedestal fashioned as a full figure of Bes, about 5 inches in height. Another example from the same province represents the figure of Minerva standing in her bath, a specimen probably of Roman origin. Some lamps from Coptos have the covers of the receivers modelled as frogs, like figs. 16 and 17. There are two specimens with ten lights each, one of them shaped rectangularly, the other formed as a triangle, another annular with six lights. On one example the name of St Mark the evangelist is moulded in relief. The sizes of the lamps in the collection vary greatly, one being no more than an inch long, and another with two nozzles measures only about 2 inches from end to end, while others are, if I remember rightly, as much as 10 inches in length.

The great majority of lamps found in Palestine, Syria, and Asia Minor are shoe-shaped, with usually a much larger filling-hole than that present in annular examples; but many, more especially those from Judæa, have receivers almost semicircular in form, with very long nozzles. The paste used in Palestine is mostly of a light red or a yellowish-brown colour, but not to the exclusion of shades both lighter and darker.

The Jews, who were a pastoral and nomadic people, did not excel
in pottery; and their decorative work, which is distributed over the usually somewhat convex tops of the receivers, exhibits great poverty of design, consisting often of merely a few parallel lines or concentric circles. The subjects are symbolic, almost to the exclusion of the human figure, probably partly owing to the Mosaic law against graven images; and enrichment first begins after the commencement of the Christian era, when symbolism in contradistinction to individuality soon became the motive force of early Christian art representation. As the multiplication of the mythological subjects delineated on Roman lamps demonstrates the decay of what we call Paganism, for want of a better word, so do the early emblems of Christianity register the hunted beginnings and progress of the newer faith; for the earlier symbolic forms are merely suggestive,—the cross, for instance, being only indicated by its extremities, though it must be remarked that the simple cross was but rarely used as a monumental Christian symbol before the fifth or sixth century. These emblems gradually expand during and after the reign of Constantine into the full symbols of Christianity, such as a fish, one of the earliest; the ship; the Agnus Dei; the palm bough; the dove and the olive branch; the monogram of our Saviour, or Chi-Rho, the first two letters of the Greek word for Christ;¹ and eventually the full cross. The hooked cross, the fylfot or swastika, is found on a few early specimens, but this emblem is a form of the cross going far behind the Crucifixion, and its very ambiguity perhaps recommended it to the infant Church, subjected as it was to so much persecution. This form of cross has been found at the supposed site of Troy (Hissarlik), Tiryns, and Mycense, besides being a Buddhist symbol, much in evidence in the recent expedition to Thibet. It is an ancient emblem in Greek art, and would appear to be the symbol of some very ancient divinity. It is often present on

¹ The sacred monogram occurs in a Roman villa at Frampton, in Dorsetshire, and elsewhere in Britain. A silver vessel found at Corstopitum, Corbridge, but now lost, also bears the monogram. This emblem assumes various forms at different periods.
Cyprian pottery. Many lamps have words or phrases of a religious character stamped in Greek characters along their margins. An example of this kind, found at Tiberias, is copied on fig. 20. It is shoe-shaped, of a coarse friable light grey earth, bearing the epigraph in relief, in debased Greek, reading in translation—"The Light of Christ shines for all." Fig. 21 is a Christian lamp also found at Tiberias. It is shoe-shaped, of a light yellowish paste, and enriched with a Greek cross. The receiver contains a small finger-bone. Fig. 22 is a lamp found at Gezer, of unusual form, the funnel-shaped filling-hole standing up half an inch beyond the receiver, which is built up in concentric sections. These examples are in my collection. All lamps found in sepulchres are, as far as I have seen, almost white, or with traces of a covering of pipeclay, or a slip of fine white clay; and it seems probable that, like the white lekythi, they were made specially for funeral purposes. Greek sepulchres always contain some objects made purposely for them, and passages in wills have been found mentioning the personal possessions which the deceased would wish to have buried with them. Some of the vessels found in tombs had been made so thin as to do no more than bear their own weight. In ancient Egypt the making of mortuary articles was an important branch of trade, and some of the papyri found in sepulchres proved on unwinding to be mere jargon, and even sometimes blank,—rolled and prepared thus to save trouble and expense, in the expectation that the fraud would never be discovered.

Cyprus is noted for its ceramics, and the island is rich in suitable clays for producing it—a black and a red earth or frit. Great numbers of terra-cotta lamps have been found among the ruins of its ancient cities, such as Salamis and Idalion, more especially by General di Cesnola in 1866, and later by Major A. P. di Cesnola, and their forms vary greatly. The very early open lamps unearthed in this island have been already mentioned. Fig. 23, a Cyprian lamp, in my collection, is a Greek type of a rare form. It is of a dark red paste, annular
receiver, large oil-hole, long semicircular handle fashioned to appear pivoted on either side in the centres of the sides of the body, like the handle of a pail, and reaching out horizontally half an inch beyond it. Among the lamps found on the island are the following:—A specimen formed as a human foot, with an Eros reclining on the instep; another, the grinning head of a Nubian woman, with an earring of gold. One showing Silenus lying on an amphora, his hand pointing to his mouth. Some of the early lamps exhibit marked traces of Phœnician influence; but this people were remarkable rather as agents for distribution than for independent designing.

Babylonian and Assyrian lamps are most frequently of a light grey or a yellowish paste, but they are occasionally met with in red ware; and examples have been found, though rarely, covered with a thin film of blue glaze. Their length is usually from 1\(\frac{1}{2}\) to 5 or 6 inches, and the forms are both annular and shoe-shaped, with handles and without. Those from Nimrud, on the Tigris, assume the shape of the head of a meerschaum pipe, deep bowl and long nozzle. Examples fashioned as animals and birds are not uncommon.
MONDAY, 14th January 1907.

DAVID CHRISTISON, M.D., LL.D., Vice-President, in the Chair.

A Ballot having been taken, the following were duly elected Fellows:

WILLIAM BROWN, Bookseller and Publisher, 22 Cluny Drive.
WILLIAM CAMPBELL, K.C., Dean of the Faculty of Advocates, 12 Randolph Crescent.
ALEXANDER D. CUMMING, Headmaster, Callander Public School.
REV. JOHN GEORGE GIBSON, The Rectory, Ebchester, Durham.
WILLIAM CAMPBELL JOHNSTON, W.S., 19 Walker Street.
ROBERT SCOTT MONCRIEFF, W.S., 14 Eton Terrace.
JOSEPH MORRIS, Fern Bank, Clermiston Road, Corstorphine.

The following Donations to the Museum and Library were laid on the table, and thanks voted to the Donors:

(1) By JOHN BRUCE, Esq., of Sumburgh, F.S.A. Scot.
Collection of Objects found in the course of the Excavation of the Broch at Jarlshof, Sumburgh, Shetland. [See the previous paper by Mr John Bruce.]

(2) By the Hon. JOHN ABERCROMBY, F.S.A. Scot.
Large Cinerary Urn, 13 inches in height and about 11\(\frac{1}{2}\) inches in diameter at the mouth, found in 1904 at Earlsloch, Hill of Mountblairy, Alvah, Banffshire.

(3) By D. M. GRAHAM, Esq., of Pitreuchie.
Small Necklace of Jet Beads and Ornamented Plates (incomplete), and Fragments of a Food-vessel Urn, found in a Cist, with a larger Necklace and an Unburnt Burial, at Pitreuchie, Forfar. The accompanying illustration (fig. 1) shows the two necklaces, the smaller of which has
been presented to the Museum, along with the fragments of the urn. The larger necklace, which has been given to the Forfar Museum, is similar to those from Balcalk, Tealing, Forfarshire, and from Mountstuart, Bute, and others more or less complete in the National Museum. The smaller necklace, which wants one of the terminal, triangular-shaped plates, is the only one known of this small size, and there is no other instance on record in Scotland of the occurrence of two necklaces in one cist.

(4) By Spencer G. Perceval, Esq., Clifton, Bristol.

Small Turreted Brooch of Bronze, Leaf-shaped Pendant of White Metal, Bronze Belt-tag and Leadén Weight, found in excavating near the Cathedral, Bristol.
DONATIONS TO THE MUSEUM AND LIBRARY.

(5) By G. S. Duncan, F.S.A. Scot., Blairgowrie.

The Trial of Joseph Gerrard, Delegate from the London Corresponding Society to the British Convention, before the High Court of Justiciary at Edinburgh, for Sedition. 8vo. Edinburgh, 1794.

Trial of Sir Archibald Gordon Kinloch of Gilmerton, Bart., for the Murder of Sir Francis Kinloch, Bart. 1795.

Martyrologia Evangelica; or, Historical Lives of Eminent and Pious Persons, etc. Folio. London, 1800.

Poems. Written by Dr Thomas Parnell, and published by Mr Pope. Glasgow, R. & A. Foulis, 1773.


(6) By Alan Reid, F.S.A. Scot., the Author.


(7) By H. F. Morland Simpson, F.S.A. Scot., the Editor.


The following Communications were read:—