Greek and Roman Pottery Lamps

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PLATES
Introduction

This booklet illustrates various types of pottery lamps made mainly in the Mediterranean world from the Minoan period until early Christian times.

Such lamps can be very attractive small objects and well repay attention. They are of interest to the social and art historian because of the representations of daily life, religion and mythology, and of lost masterpieces of sculpture appearing on some Roman lamps. Lamps are useful, too, to the archaeologist in that they are ephemeral and are easily recognisable: even small fragments can be placed within their types. These types can, on the whole, be dated comparatively closely, and so, in lamps, the excavator has a valuable dating tool. The distribution of lamps foreign to the area in which they are found is some indication of the pattern of trade in the ancient world, while the various uses to which lamps were put illustrate aspects of social and religious life.

Owing to space limitations, only a few of the thousands of lamps in the Museum's collections can be described or illustrated here, and only a limited number are displayed in the public galleries for the same reason. Most of the Antiquities Departments possess pottery lamps, and these can normally be made available to interested members of the public if notice is given.

I would like to thank Mr D. E. L. Haynes and Mr R. A. Higgins for reading the text and making many useful observations; also Mr Lukas A. Benachi, Professor P. E. Corbett, Miss Judith Perlzweig, and Mr A. F. Shore, who, over many years, have furnished me with much invaluable information, and Miss Kathleen Kenyon for details of Palestinian lamps. Special thanks are due to Dr D. E. Strong, who read the text and proofs, and whose advice and encouragement I have sought on many matters, always with helpful results.
The Pottery Lamp

The physical requirements of pottery lamps are simple: a container for the fuel, the fuel itself, a wick to enable the fuel to burn and to feed the fuel to the flame, and a continuous air supply. These are basic; all other aspects of lamps are refinements and improvements.

A wick floating in a bowl of oil will burn where it surfaces, but the flame cannot be controlled, and will produce smoke as well as light. A minor improvement is to channel the wick by pinching-in the rim of the bowl, as in the 'cocked-hat' lamps (pls. 1, c, d), but this still leaves a considerable length of the wick clear of the oil. The introduction of the bridged nozzle was a definite advance, as only the end of the wick appears at the wick-hole, and the flame produced can be tamped down until it is virtually smokeless. The nozzle on early lamps was, generally speaking, very short, barely projecting from the wide, open bowl. As lamps developed, and the oil container became more enclosed and deeper, aesthetically a longer nozzle would fit more happily on the lamp.

Moulded lamps, when introduced, followed closely the shape and nozzle length of the contemporary wheel-made lamps, but during Roman times the nozzle shortened once more until in the 3rd and later centuries A.D. the wick-hole in some lamps was in effect pierced through the shoulder, the nozzle almost merging with the body. A long nozzle would not appear to be a great utilitarian improvement; variations are, in the main, due to a local fashion and taste: at all periods, where one area preferred a long nozzle, a short nozzle was favoured elsewhere.

The gradual closing-in of the body or oil container was, on the other hand, very practical. The fuel was less likely to spill or dry up, it hindered rats and mice drinking the oil, and insects, attracted by the light, would not so easily fall in and drown. Inserting and adjusting the wick was rather less easy, however, but the slight extra trouble in this respect was obviously outweighed by the many advantages.

Handles, although not a necessary feature, appear on Minoan lamps, and on the earliest Athenian lamps of the 7th century B.C. Their use is largely a matter of local or temporal taste, some areas and periods favouring them more than others.

Bases merely allowed the lamp to stand steadily: turned bases are not usually found on the wide 'cocked-hat' lamps, nor upon some of the shallow open Greek examples, but most wheel-made lamps have a well-defined base. Moulded lamps, also, are normally provided with an adequate base or base ring.

Pottery lamps are a cheap and practical means of illumination, easy to produce, handle and use, but are rather messy in operation. Oil oozes from the wick-hole in greater quantities than the flame
can burn, and runs down the outside of the lamp. This oozing probably explains the number of lamp-holders found in Britain; as oil had to be imported, wastage was to be avoided. Oil collected in the holders after some hours of burning could be poured back into the lamp. A lamp produces a fairly reasonable light - about the same as that from a candle (but requires less attention; the wick does not have to be snuffed, but very gradually burns away, needing to be pulled forward occasionally with a needle or tweezers). When tamped down, the flame produces little or no smoke, but a larger and brighter flame can be obtained by pulling out the wick slightly, although an oily black smoke results.

Brighter smokeless lights were made possible only by an increase in the number of lamps used together or by increasing the number of nozzles on a lamp. Two-wick lamps are very common, and many lamps with up to a dozen nozzles have been found. Exceptional lamps, often found in sanctuaries, can have several hundred wicks. Two wicks will, of course, burn twice as much oil as a single-nozzled lamp, and giant lamps with several nozzles (pl. 5a) have a large container to ensure that replenishing with oil was not required too often. The length of time a lamp will burn also depends on the size of the wick. An experiment showed that one fluid ounce of olive oil burned for over three hours, using a linen wick of small calibre, while a fatter wick burned for half that time; there was not much difference in the size of the flame in these two cases, but a really substantial wick, such as would be required by the lamp shown on pl. 8a would produce a large but perhaps smoky flame.

Wicks and Fuel

Wicks were made from any available fibrous material which would, by capillary action, suck the fuel from the container and deliver it to the wick-hole. Substances used for wicks in Roman lamps included linen, papyrus, mullein, oakum, fibres of the castor plant, and perhaps asbestos.

The fuel used in ancient lamps, like the material of the wicks, depended largely on availability - olive oil was probably the principal fuel employed in most Mediterranean countries, and was exported to areas where the olive did not grow. Britain, for instance, would have to obtain all olive oil used from abroad. Other oils which were probably used in lamps include sesame oil (mainly in the East), nut oil, fish oil, castor oil and other plant oils. Crude, surface-occurring mineral oil was perhaps used, when obtainable, in Mesopotamia. Except for the latter, it must be remembered that when burning oil in lamps one is actually burning food, so only societies producing a food surplus could afford to use lamps extensively, and areas which had to import edible oils would be inclined to use them for cooking rather than fuel. This probably accounts for the comparatively few lamps found in Britain.

Uses of Lamps

Although we can be sure that daylight governed life to a far greater extent than at the present time, in antiquity lamps were used by every stratum of society, the poorer people using the common wheel-made and mould-made lamps, and the richer their elaborate metal examples. Houses were lit poorly or brightly according to the owner's circumstances. The many mining enterprises necessary for supplying the basic material requirements of the ancient world needed illumination, and lamp niches are a common feature in shafts and galleries, and lamps are often found in old workings.

The immense number of ancient lamps which survive in museums and other collections - and which are constantly coming to light in excavations - can only be a small fraction of those once in use. That lamps were used in great quantities is illustrated by the 1600 lamps and fragments found in the large military camp at Vindonissa, near Basle, occupied for less than a century, from the time of Tiberius until about A.D.101.

Religious festivals and games were occasions on which the burning of lamps was customary. Caligula and Domitian lighted their gladiatorial shows and theatres with lamps, and thousands of lamps were lit during the celebrations of the Secular Games organised by the Emperor Philip I in A.D. 248. In the Greek theatre lamps were used to show that the action was set during the night. Their slapstick use in Comedy is indicated by a critical remark: 'It is vulgar to come on stage with a lamp and burn somebody'.

Street lighting, as a municipal responsibility, does not appear to have been introduced until the middle of the 5th century A.D., when Antioch was lit with tarred torches, but most Roman towns must have been brightly lit at night, in the commercial streets at least. Shops were lighted during the hours of darkness, when open, to show off their wares and to attract custom; lamps were placed on counters and over doors. At Pompeii several hundreds of such lamps were found in comparatively short lengths of street: the High Street to Stabiae had about 500 lamps in a stretch of 700 metres, and in Second Street, 132 shops had for illumination purposes some 396 lamps. Shrines at street corners were also illuminated at night, and many temples were brightly lit. Lamps were often lighted at graves and tombs, but as these were outside
the town boundaries this would not help as far as street lighting was concerned, but would at least inform belated travellers of the proximity of a town.

Lamps were from early times an important item of temple furniture. From the famous Golden Lamp made by Callimachus and kept on the Athenian Acropolis to the ordinary clay example presented as a votive offering at many temples and shrines, the lamp is a common feature in the worship of the gods. In many places all over the ancient world, among them Sicily, Cyprus, Naukratis, and Athens, a variety of lamps with many nozzles, known collectively as ‘sanctuary lamps’, has been found. These were used from at least the 6th century B.C. down through Hellenistic times and during the Roman period. The Museum’s collections include only fragmentary examples of the 6th and 5th centuries B.C., but dozens of lamps of this sort, and date, were found in a temple of Demeter at Akragas in Sicily. A Hellenistic example with hundreds of nozzles arranged in several tiers on a conical structure was recently found at the shrine of an unnamed nymph at Kafizin in Cyprus.

Lamps were given in great numbers as votive offerings at some temples. When space became restricted in the sanctuary, the earlier offerings were cleared out to make room for subsequent votives. As the offerings thus removed were still sacred they could not be thrown away, and so it often happened that pits were dug within the temple grounds, and they were buried. Sir Charles Newton found several such caches of lamps in the Temenos of Demeter at Cnidus during the British Museum excavations at that site in 1839.

The third main use for lamps in the ancient world — and probably the main source of modern collections — was their function as tomb furniture. This practice dates back to the 3rd millennium in the Levant, and was widespread during classical times in the Mediterranean area, although more prevalent in some places than others. Lamps placed in tombs were probably, like the pottery and glass, jewellery and other objects buried with them, merely the property of the dead person, but may have had some symbolic or religious purpose. Many seem to be unused; there is no sign of blackening around the wick-hole; these were probably purchased specially for funerary use, though they differ in no way from the domestic variety. Occasionally a lamp found in a tomb was not placed there as funerary furniture, but was left behind by a tomb robber, and can be considerably later in date than other objects left in the tomb.

Thus, in antiquity, lamps had, in the main, three purposes: domestic or commercial illumination, funerary function, and votive use. Exactly the same type of lamp could be employed for any of these reasons, and there would seem to be very little connection between the use to which a Roman lamp was put, and the decorative scene appearing on it.

Three methods of lamp manufacture were used — hand-modelling, throwing on the wheel, and moulding. Hand-modelled lamps were probably made at all periods; they are certainly as early as the end of the 7th century B.C., when examples were made in some quantity in Athens, but they were never very common, and wheel-made and moulded lamps were easier to produce. The hand-modelled example illustrated (pl. 4d) was found in a Hellenistic tomb near the acropolis of Sparta, and was dated by the excavator to the 2nd century B.C.

Wheel-made lamps were made throughout the period covered by this booklet, although from Hellenistic times onwards the moulded lamp was more popular with makers and users. The ‘cocked-hat’ type of lamp was formed by merely folding or pinching-in the edges of a shallow bowl or plate as soon as it had been thrown. A lamp with a bridged nozzle was thrown as a bowl, more or less open according to its type. When the clay had dried ‘leather hard’ it was placed upside down on the wheel, and the base turned with a metal or wooden tool. After this the nozzle, which had been previously fashioned by hand and allowed to dry somewhat, was luted on and the wick-hole cut through it and the shoulder. The handle, if any, was modelled and added in the same way. On many lamps of the 4th and 3rd centuries B.C. a lug was applied to the shoulder and pierced vertically. This lug would seem to be simply a means whereby the lamp could be hung up when not in use, by threading a piece of string through the hole. The lamp would then hang in such a position that any oil left in it would not spill. The lug is not usually found on lamps with handles. The pierced lug was rather a short-lived feature, but unpierced lugs, of no functional use, continued to be applied to or moulded with lamps for two or three hundred years. This decorative lug was occasionally modelled in the form of a dolphin.

Although hollow-moulding was used for terracottas in Greece at least as early as the mid-6th century, this process does not seem to have been used for lamps until the early 3rd century B.C. A patris or model from which a mould could be taken was fashioned by hand from clay, or perhaps carved from wood. If clay it was fired as hard as possible. Moulds were taken from this by pressing on clay until a substantial layer covered one half (top or bottom) of the patris. The clay was then allowed to dry somewhat (it must not be allowed to dry out too much or it will shrink and split on the patris), and the other half made in the same way. When sufficiently dry, the halves of the mould were removed from the patris.

Plaster moulds were used rather than clay examples in Roman times in most areas, and these were made in the same fashion, but there was no necessity to remove the mould from the patris.
before it was thoroughly dry, as there is little or no shrinkage in plaster. Clay moulds need to be fired, but plaster does not. As many moulds as were thought necessary would be taken from the patric. Lamp makers must have held a considerable stock of moulds: a lamp cannot be removed from a mould with ease or without damage until some little time has elapsed, putting the mould out of use for that period.

Plaster moulds must have worn out comparatively quickly, gradually disintegrating through repeated use; clay moulds lasted much longer and details did not blur as easily. Not many moulds have survived, although thousands must have been in use over a period of many hundred years. This perhaps indicates that most moulds were made of a perishable substance such as plaster (several plaster moulds have been found in Egypt), but the main, though not conclusive evidence for this is on the lamps produced from such moulds: air bubbles often form on the surface of a plaster mould when it is being made. When clay is pressed into such moulds the air bubbles are reproduced in reverse as raised globules. A high proportion of moulded Roman lamps have these globules.

When the clay mould has been fired or the plaster mould dried it is ready for use. Of the two possible methods of production one is more tedious and difficult than the other. In both methods wet clay is pressed into each half of the mould in a thin layer, and any excess trimmed away. In the more probable production method (evidence for which is provided by the occurrence of moulds bearing guide lines scratched on the edge, or by positioning bosses and hollows - pl. 16a, b, c), the top and bottom halves of a lamp were joined by pressing the two parts of the mould together in register, with the moist clay pieces inside. When the pieces had dried sufficiently, the mould would be removed, and the requisite holes pierced: filling-hole, wick-hole, air-hole, handle-piercing. The joints would be made good with wet clay where necessary, and excess clay on the outside trimmed away. The other possible, but less likely, method was to allow the two halves to dry separately in the two pieces of the mould until they could be removed. The necessary holes would then be pierced in the upper half, and when dry enough the pieces luted together. The final stage in the actual fashioning of the lamp was the attachment of the handle, if this feature had not been formed in the mould with the lamp. The lamp was allowed to dry out thoroughly, treated with a glaze preparation, and then fired.

to district. This means that the fabric of lamps from one particular area has a different appearance from that of similarly shaped products made elsewhere. The texture and colour, the presence or absence of grits and mica specks, the appearance of any glazed decoration all help to assign a lamp to its place of origin. Unfortunately, with many fabrics, there is a great deal more work to be done on this subject - the identification of the place of manufacture - before it will be possible to say with any certainty that a particular piece comes from a particular site. The problem is further complicated by the differences in colour and texture brought about by variations in firing conditions and temperatures, and in clay constituents, even from one small area.

Glazes differed in place and time as much as the clay body. The main purpose of a glaze is to render the lamp less permeable to the fuel it contains, and its decorative function is only secondary. This did not, of course, prevent a lamp maker applying his glaze in such a manner as to give a pleasing appearance to his products. Most ancient glazes are not true glazes since they are not vitreous, but a slip or thin wash of clay which owes its colour to the presence of iron oxides and to the conditions of firing (as does the colour of the clay body itself). If a suspension in water is made of clay which has a good proportion of iron oxide - in many cases the potting clay itself has sufficient oxide - and to this slurry is added a peptizing agent, such as potash, to keep the minute particles of clay from coagulating, the resulting solution, when applied to a lamp, will produce a glaze when fired, the colour depending on the firing technique.

Thus, to produce a red glaze, the treated lamp is fired in a clear, oxidising atmosphere. A black glaze is brought about by a smoky, reducing atmosphere within the kiln, caused by the introduction of damp fuel and by stopping air entering the firing chamber. This treatment also turns the unglazed parts black or grey. To produce a lamp with a pink or buff body decorated with black glaze a three-stage firing is necessary: first the lamp is fired in an oxidising (smokeless) atmosphere, the main function of which is to bake the object; if taken from the kiln at this point a buff or pink body with a sintered red or brown glaze is the result. Most Roman lamps went through this stage only. After this, damp fuel is introduced to the kiln and all entry for air blocked up. The damp atmosphere, and the incomplete combustion of the fuel producing carbon monoxide, result in a change of colour: the body turns grey and the sintered glaze black. The third stage consists of the reintroduction of dry fuel and air to the firing chamber. The oxidising flame so generated reverses the effect of the reducing atmosphere of the preceding stage as far as the clay body and the unglazed parts of the lamp are concerned; they return to the buff or pink colour produced by the first stage. But the glaze is not affected by this third stage - it remains the black colour obtained in the second firing stage. The three stages follow one upon the
other in one continuous firing, and the kiln is not cooled or unloaded between stages.

The three main methods of applying the glaze slip were by painting, dipping, and pouring, or a combination of these. The bands of glaze which decorate many Greek lamps were painted on as the lamp turned on the wheel; the interiors were often glazed by pouring in slip, swilling it round and pouring the surplus out. Roman lamps were usually glazed by dipping the whole lamp quickly into the glaze medium, or by pouring the slip over the lamp. Finger marks, showing where the lamp was held during this process, are often found.

Many pottery objects, lamps amongst them, of Roman date were coated with true vitreous glazes, although they are vastly outnumbered by wares decorated with the sintered metallic slip described above. Lead glaze wares, usually of a green colour, were produced at many sites mainly in the first three centuries A.D. - Tarsus and other places in Asia Minor, South Russia, Egypt and Italy, at St. Remy-en-Rollat in France, Cologne in Germany (pl. C), and also Holt in Denbighshire, and Colchester. This kind of glaze required two separate firings; the unglazed lamp was fired and when cool the lead glaze mixture was applied to the biscuit body. A subsequent firing in a muffle kiln fused the glaze dressing into a vitreous coating.

The usual type of kiln used in antiquity was the vertical variety. This had, normally, a circular fuel chamber with a combined flue and stoke-hole at one side. Above this was the firing-floor, pierced in many places to allow the hot air and gases to enter the firing chamber. This chamber was domed, with a vent at the top: it was built from clay for each firing and broken down to retrieve the finished products. Before the dome was completed the lamps were stacked tightly on the firing floor within the kiln, resting one upon the other. Occasionally horizontal through-draught kilns were used. The firing temperatures probably varied from place to place and with each firing, but in the main would seem to have been a little under 1000°C. The fuel used was in most cases wood, and the firing probably took at least 24 hours and perhaps twice as long, with a slow build up of temperature and a gradual cooling. Sometimes accidents happened and the heat got out of hand and excessive, resulting in warped lamps, often fused together, the fabric very hard and discoloured. The examples shown on pl. 16d, e are from kilns at Ephesus, and are probably those described by Wood (the discoverer and excavator of the site of the Temple of the Ephesian Artemis) as being found dumped inside a tower of the city wall: 'We came across a great quantity of pottery, consisting chiefly of lamps, some of which were joined together, having been spoilt in the baking'.

Short Bibliography

GENERAL

MUSEUM CATALOGUES, ETC.

EXCAVATION REPORTS

A wealth of relevant material is also buried in a great number of defunct and current periodical publications and journals dealing with classical and near-eastern studies. Useful references to these are supplied in the annual Archäologische Bibliographie published with the Jahrbuch des Deutschen Archäologischen Instituts, and in Fasti Archaeologici.
Notes on the Illustrations

Unless otherwise indicated all lamps are in the Department of Greek and Roman Antiquities.

Plate 1
(a) Lamp 130. Middle Minoan lamp from Palaikastro, Crete. Circa 1700-1450 B.C.
(b) Lamp 97 4-1 1283. Mycenaean lamp from a tomb at Enkomi in Cyprus. 1400-1200 B.C.
(c) Lamp 1960 3-2 1. Cypriote cocked-hat lamp from a tomb at Amathus. Circa 6th century B.C.
(d) Lamp 1924 11-14 1. Punic cocked-hat lamp, said to be from Malaga in Spain. 5th-4th century B.C. (Western Asiatic Department).

Plate 2
Lamp 137. Lamp with three nozzles, held by a terracotta figure of a woman. Made in Rhodes and found at Camirus. About 600 B.C.

Plate 3
(a) Lamp 196. Found in the Archaic Temple of Artemis at Ephesus, and made in Western Asia Minor. End of the 7th century B.C.
(b) Lamp 65 7-20 24 (9). Toy lamp. Probably made at Athens. 5th century B.C.
(c) Lamp 174. Made at Athens between the last quarter of the 6th century and circa 480 B.C.
(d) Lamp 1482. Made at Athens. Found at Gela in Sicily. Second or third quarter of the 5th century B.C.
(e) Lamp 1962 9-20 1. Sicilian lamp, said to be from Sardinia. 5th-4th century B.C.
(f) Lamp 1959 7-12 1. Made at Corinth. Last quarter of the 5th century B.C.

Plate 4
(a) Lamp 230. Sicilian lamp, found at Gela. 4th century B.C.
(b) Lamp 64 10-7 1779. Made in Rhodes, found at Camirus. Second half of 3rd century B.C.
(c) Lamp 302. Found at Kition in Cyprus. Second half of 3rd century B.C.
(d) Lamp 1923 2-12 343. Hand-modelled lamp from a Hellenistic tomb at Sparta. 2nd century B.C.
(e) Lamp 366. Found in the Temenos of Demeter at Cnidus, and perhaps made locally. Second half of the 2nd into first quarter of the 1st century B.C.

Plate 5
(a) Lamp 388. Same site and same date as pl. 4e above.

(b) Lamp 333. Found at Ephesus, and probably made there between the last quarter of the 2nd century B.C. and the first quarter of the 1st century A.D.
(c) Lamp 330. As pl. 5b above.

Plate 6
(a) Lamp 63 7-28 233. Found at Akragas. Late 1st century B.C. into 1st century A.D.
(b) Lamp 1936 11-18 1. 'Pitcher lamp'. Made and found in Lower Egypt, probably at Alexandria. Circa 2nd century B.C.
(c) Lamp 267. 'Herodian' type. Said to be from Siloam; made in Palestine, circa 50 B.C.-A.D. 50
(d) Lamp WT 459. Made in Italy. Early 1st century A.D.
(e) Lamp 525. Altar and dolphins. Made in Italy towards the end of the 1st century B.C.
(f) Lamp 410. Late Republican. Made in Italy. 1st century B.C.

Plate 7
(a) Lamp 1962 8-29 1. Scallop shell. Made in Italy. Early 1st century A.D.
(b) Lamp 617. Eros. Made in Italy. Said to be from Naples. Middle years of the 1st century A.D.
(c) Lamp WT 490. Satyr and nymph. Made in Italy. Early 1st century A.D.
(d) Lamp 1925 11-20 33. Man and Horse. Made in Egypt in the first half of the 1st century A.D.
(e) Lamp 1949 10-11 52. Victory. Made in Germany. Found at Cologne. 1st century A.D.
(g) Lamp 652. Victory. Made in Italy. First half of the 1st century A.D.
(h) Lamp 768. Made in Italy. First half of the 1st century A.D.
(i) Lamp 661. The shepherd Tityrus, and sheep. Made in Italy. First half of the 1st century A.D.
(k) Lamp 709. Bird on bough. Found at Curium. Made in Cyprus. 1st century A.D.

Plate 8
(a) Lamp WT 466. Made in Italy. Late 1st century B.C. into early 1st century A.D.
(b) Lamp 846. From the Temenos of Demeter at Cnidus, and made locally. 1st century A.D.
(c) Lamp 940. Found in London. Probably made in Britain. 1st century A.D. (Prehistoric and Romano-British Department).
(d) Lamp 1955 7-16 1. Large four-nozzle lamp. Made in western Asia Minor, acquired in Smyrna. Signed ΔΙΟΝΥΣΙΟΥ. 1st century A.D.
Plate 9
(a) Lamp 1945 11-29 1. Bull’s head. Made in Italy. First half of 1st century A.D.
(b) Lamp 56 9-2 32. Grotesque face. Perhaps made at Athens, and found at Mytilene. 2nd century B.C.
(c) Lamp WT 421. ‘Bird Head’ lamp. Made in Italy. Second half of 1st century A.D.
(d) Lamp 390. Ship form. Made at Cnidus. Found in the sea off Pozzuoli in Italy. 1st century A.D., perhaps the second half.

Plate 10
(a) Lamp 1007. Drinking cup. Made in Italy. Signed CIVNDRAC. First half of 2nd century A.D.
(b) Lamp 1048. Zeus and his eagle. Made in Italy in the middle years of the 1st century A.D.
(c) Lamp 68 6-20 198. Made at Ephesus, where it was found. Last years of the 1st century A.D.
(d) Lamp 907. Factory lamp. Made in Italy. Signed FONTEIVS. Last quarter of the 1st century A.D.
(e) Lamp 889. Factory lamp. Made in Italy. Signed IEGIDI. About 100 A.D.
(f) Lamp 896. Factory lamp, short form. Made in Italy. Signed CDESSI. About 100 A.D.
(g) Lamp 1949 10-11 49. Factory lamp. Made in Germany, found at Cologne. Second half of 2nd century A.D.
(h) Lamp 935. Factory lamp. Made in Britain, found in London. 2nd century A.D. (Prehistoric and Romano-British Department).

Plate 11
(a) Lamp 1246. Made at Cnidus, where it was found. Signed ROMANESIS. Second half of 1st century A.D.
(b) Lamp 1293. Gladiators. From the Temenos of Demeter at Cnidus, and made locally. Signed ROMANESIS. First half of 2nd century A.D.
(c) Lamp 1239. Horse. From Cnidus, where it was made. 2nd century A.D.
(d) Lamp 1962 8-29 2. Crater. Made in Italy about the turn of the 2nd and 3rd centuries A.D. Signed AMACHI.
(e) Lamp 626. Circus scene. Made in Italy. Signed SAECVL. Probably first half of 3rd century A.D.
(f) Lamp 57 12-18 178. Found at Carthage; made locally. Probably 3rd century A.D.

Plate 12
(a) Lamp 1925 11-20 29. Europa and the Bull. Made in Egypt, probably Alexandria. 3rd century A.D.
(b) Lamp 1925 11-20 41. Eros in goat chariot. Made in Egypt. 3rd century A.D.
(d) Lamp 1311. Wreath. Made at Tarsus, where it was found. 2nd century A.D.
(e) Lamp 1289. Athena and Poseidon – the central figures of the West Pediment of the Parthenon. Found at Salamis; probably made in Cyprus. 3rd century A.D.
(g) Lamp 477. Made in Italy. Last years of the 1st century A.D., into the 2nd century. Signed MNOVISTI.
(h) Lamp 504. Made in Egypt and found at Naukratis. 1st century B.C.

Plate 13
(a) Lamp 1920 5-12 1. Athena. Made at Corinth. From Athens. Signed AXYROI. 2nd century A.D.
(b) Lamp 1204. Zeus. From Athens. Signed IPRIMOY. Early 3rd century A.D.
(c) Lamp 1212. Eros. Made in Cyprus, found at Salamis. 3rd century A.D.
(d) Lamp 68 6-20 180. Goddess with double axe. Found at Ephesus. Made at Athens. Early 4th century A.D.
(e) Lamp 1226. Apollo. Made in Egypt, found at Behnosa. 3rd century A.D.
(f) Lamp 1356. Made at Athens. Found at Ephesus. Signed XIONI. First half of the 5th century A.D.

Plate 14
(a) Lamp 1913 10-14 4. ‘Candlestick lamp’. Made in Palestine. Nonsense inscription. 5th century A.D. (Department of Medieval and Later Antiquities).
(b) Lamp 1334. Horse. Made in Cyprus. Circa 5th century A.D. Signed EYXYTHOE.
(c) Lamp 1962 9-20 2. Made in Italy in the 3rd or 4th century A.D.
(d) Lamp EC 819. ‘Frog Lamp’. Made in Egypt. 3rd or 4th century A.D. (Department of Medieval and Later Antiquities).
(f) Lamp EC 858 Early Christian. Made in Italy. Circa 6th or 7th century A.D. (Department of Medieval and Later Antiquities).

Plate 15
(a) Lamp 1326. Pan and woman. Made in western Asia Minor. Found at Calymnos. 5th-6th century A.D.
(b) Lamp 56 8-26 206. Cross. Made in western Asia Minor. Found at Calymnos. 5th-6th century A.D.
(c) Lamp 67 11-22 232. Man and woman. Made in western Asia Minor. Found at Ephesus. 5th-6th century A.D.
(d) Lamp 70 1-5 19. Made in western Asia Minor. Found in a Lydian tumulus at Sardis. 6th-7th century A.D.
(e) Lamp 22829. Made in Upper Egypt. 7th to 8th century A.D. (Egyptian Department).

Plate 16
(a) Lamp 1402. Upper mould for lamp similar to pl. 5c. Found at Ephesus.
(b) Lamp 1401. Lower mould for lamp. Made in Athens. Late 1st century A.D., into the 2nd century.
(c) Lamp 1400. Upper mould for lamp. Made in Egypt. Found at Naukratis. 3rd to 4th century A.D.
(d) Lamp 1498. Mass of lamps fused together. Ephesian fabric, probably found at Ephesus. Second half of the 1st century, into the 2nd century A.D.
(e) Lamp 1497. As (d) above.

Colour Plates

Plate A
Lamp 249. Athenian lamp, found at Tocra in Cyrenaica. End of the 5th century B.C.

Plate B
Lamp 398. Two-nozzled lamp supported by a figure of Bes. Made in Egypt. 1st century A.D. (Egyptian Department).

Plate C
Lamp 1925 10-16 1. In the form of a gladiator's helmet. Made in Italy. Signed FORTIS. About A.D. 100.
Lamp 442. Green-glazed lamp in helmet form. Made at Cologne, where it was found. About A.D. 200.

Plate D
Lamp EC 716. 'African lamp'. Bust of a woman. 5th century A.D. (Department of Medieval and Later Antiquities).