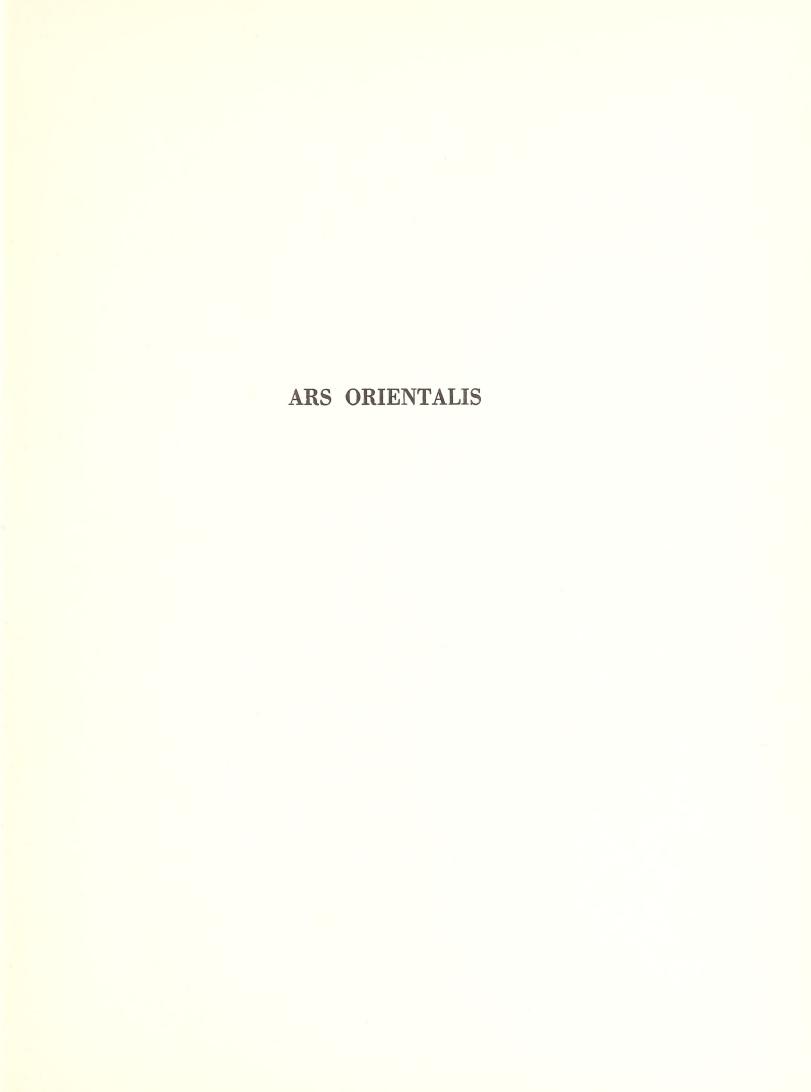
# ARS ARS ORIGINALIS

**VOLUME VIII** 

1970



# ARS ORIENTALIS

THE ARTS OF ISLAM AND THE EAST





VOL. 8

FREER GALLERY OF ART, SMITHSONIAN INSTITUTION

DEPARTMENT OF THE HISTORY OF ART,

UNIVERSITY OF MICHIGAN

Printed by Brüder Hartmann Berlin (West), Germany

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## MEDIEVAL CERAMIC OIL LAMPS FROM FUSȚĀŢ BY WLADYSLAW B. KUBIAK \*

Among the great mass of ceramic objects excavated at Fustat by the Archaeological Expedition of the American Research Center in Egypt, oil lamps were very common finds. They occurred throughout all excavation areas and in practically all working levels. So far, not less than several thousands of these objects were uncovered during this excavation. This large number constitutes only a small proportion of all lamps yielded by the Fustat mounds. Ali Bahgat alone excavated many thousands of them.1 This was certainly the case in other digs, both authorized and unauthorized, conducted in the area during more than one hundred years. Therefore it is not suprising that today many collections of Islamic art include representative examples of these objects.

In spite of the popularity of Fustāt pottery lamps, not much was known about their chronology until quite recently. Even now, especially in museums, some confusion reigns as far as dating is concerned. Typological grounds are seldom sufficient for the correct dating of an object, and archaeological evidence was almost non-existent. One had to look for this evidence at other sites, for example Corinth or Antioch which yielded some analogous mate-

\* The author is Assistant Director, Fusṭāṭ Expedition. This study was made possible through funds made available to the American Research Center in Egypt from the Smithsonian Instution.

<sup>1</sup> In the Egyptian Antiquities Department storehouse at Fustat there are still at least several thousands of them.

rial. Fustāt mounds were believed to be without value for archaeological chronology.2 Only recent archaeological research proved that, in spite of the activity of generations of sibākh-sifters and all kinds of private diggers and scavengers, the site still retains portions of undisturbed fills with preserved stratification.3 This, of course, does not automatically solve every chronological problem, but nevertheless it provides more solid ground for dating than traditional formal analysis of objects. It should be noted however that the site of Fustāt, as certainly every other archaeological site, has its specific characteristics which in turn have bearing on the scientific material obtained.

The major part of the city (at least the quarters under excavation) was founded on rock bedding, which was so convenient for foundations that almost every subsequent construction, even the latest, was also built on top of this surface. The natural result was that there was virtually no vertical growth of archaeological strata within the habitations. Theoretically a house from Umayyad times, if it could survive, would be at the same level as a house built in the middle of the Fāṭimid period. There was generally only one occupation

<sup>2</sup> Cf. for instance the opinion stated in A. Bahgat et A. Gabriel, *Fouilles d'al-Fustât*, Paris, 1921, p. 4.

<sup>3</sup> Cf. G. T. Scanlon, "Fusṭāṭ Expedition: Preliminary Report," 1965 – Part I, Journal of the American Research Center in Egypt, vol. 5 (1966), pp. 101 ff. layer, the last one; and what was under the floor could as well date from the time of 'Amr ibn al-'Āṣ as from the period of the early Fāṭimid Caliphs or be a mixture of all, which was usually the case.

Fortunately there are exceptions to this rule: the fill of the streets. The streets were unpaved, so they could naturally grow in thickness; and they alone, as a rule, show clear stratification. This does not directly help our study because oil lamps are not expected to be usually found in a street fill; but it certainly aids chronology of the site. The main source of our datable lamps are cesspools and sewage canals; but being a part of habitations, these quite naturally yield material mostly from the last stage of occupation which is, with few exceptions, the reign of Mustansir or, more precisely, the period of plague and famine around 1070. There were however cases when certain cesspools were abandoned in earlier times, mainly as a result of new constructions in which they did not fit. In such cases they hold material necessarily predating the construction. But this did not occur frequently. One of the reasons was that making a new cesspool must have been fairly expensive (they were hewn many meters deep into the bedrock); therefore, whenever it was possible old ones were adapted to a new construction.

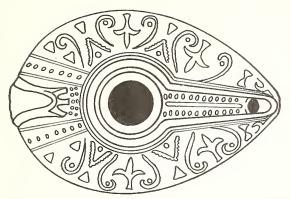
The practical result of this situation for the present study is that we have a fair amount of objects from fills dated roughly in the third quarter of the 11th century; but both earlier and later types lack a sufficient amount of direct dating material, and their chronology has to be established by inference from other facts.

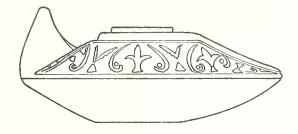
The present study is an attempt to work out a systematic chronology of the

more common types of ceramic oil lamps, mostly glazed, excavated at Fustat in a clear archaeological context. It is exclusively based on the specimens discovered during the four seasons of excavation by the Expedition of the American Research Center in Egypt. The field work is not yet finished, and the future will doubtless bring us new material and new evidence. Therefore the conclusions are open to final adjustments, and the typology perhaps will be supplemented. It is hoped however that for the time being this study will fill a gap in our knowledge of Islamic Egyptian lamps and provide an archaeologist with useful information.

The available material has been divided into twelve distinct categories which we chose to designate by the letters of the alphabet. They comprise types which commonly occur from about A.D. 800 to 1500. Other less common types will be briefly discussed without an attempt to classify them. Complete typology, in addition to being unfeasible at the present stage of archaeological research, would have to encompass all known specimens, including rare, imported ones and those of uncertain origin and date. This is beyond the scope of this article.

<sup>4</sup> For the Reports see G.T. Scanlon, "Preliminary Report: Excavations at Fusṭāṭ 1964" in JARCE, vol. 4 (1965), pp. 7–30; "Fusṭāṭ Expedition: Preliminary Report" 1965–Part I, JARCE, vol. 5 (1966), pp. 82–112; Part II, JARCE, vol. 6 (1967), pp. 65–86; The next Report by W. B. Kubiak and G. T. Scanlon is in preparation. The writer is indebted to Dr. G. T. Scanlon, Director of the Expedition, for yielding at his disposal all records of the excavation, including those of the season 1968, when the writer could participate only in the first month of the field work.





TEXT FIG. 1 a and b.

### Type A (text figs. 1 a-b and 2 a-b; fig. 1).

The earliest type of ceramic oil lamp from Fusțaț differs in no important way from the common early Christian form. Lamps were made in a mold (bottom and upper parts separately) in the shape of a pointed oval. The upper part was usually decorated with molded designs in relief of floral, zoomorphic or geometric motifs. Regardless of the decoration, the majority of the excavated lamps belong to two main variants. Both of them have a rounded upper part which meets the bottom part of the lamp at a sharp angle. This type of lamp has a rather large central filling hole surrounded by a shallow circular canal which connects with a wide, straight, shallow trough running from the filling hole to the wick hole at the pointed nozzle end. The main difference between these two variants lies in the shape of the handle and foot. The first variant has a conical handle and a low circular or, at least, rounded ring foot. The second has a handle roughly triangular in section and slightly bent forward at the top (tongue-shaped). The base of this sub-type is usually flat and of the

same pointed-oval shape as the lamp itself. Sometimes it is surrounded by a protruding low rim, similar to the ring foot of the first variant.<sup>5</sup>

Certain lamps of this family, especially (or as it seems almost exclusively) of the second variant, were glazed. The lead glaze was usually dark green but in a few cases was yellow. The same type of glaze was employed on technically similar molded relief wares of the late eight and ninth century.<sup>6</sup>

The molded decoration on both the glazed and unglazed groups of lamps is generally of a similar kind. It may even seem that the same workshop, using the

<sup>5</sup> F. E. Day, "Early Islamic and Christian Lamps," *Berytus*, vol. 8 (1942), pp. 65 ff., who discussed the analogous material from Syria and Palestine, regards lamps of both categories to be of different structural types. The author calls them "lamps with conical handles" and "lamps with tongue-shaped handles" or "tongue handle type" respectively. F. O. Waage (*Antioch on the Orontes* III, Princeton, 1941, pp. 67–68 and p. 77, fig. 81) regards them as one type 56.

<sup>6</sup> See A. Lane, "Glazed Relief Ware of the Ninth Century A.D.," Ars Islamica, vol. 6 (1939), pp. 56 ff. He discussed lamps on p. 57.

same molds, could produce lamps which were either glazed or unglazed.

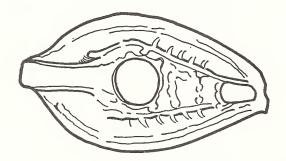
Decoration normally covers the upper part of a lamp. The style and decorative motifs on the majority of unglazed lamps follow local tradition, Byzantineo-Coptic patterns (as the lamp in fig. 1). Some other unglazed specimens and the majority of glazed ones do not, however, conform to early Christian tradition but rather show influence of what we would call the 'Abbasid or Samarra style of decoration (see text fig. 1).8 Besides the standard lamps there were certain specimens showing more individual characteristics. They may be regarded as more developed forms of the common type. A few of them deserve mention:

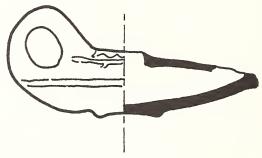
- 1. A fragmentary lamp, with the top completely flat, of the same pointed-oval shape as the flat bottom. The trough be-
- <sup>7</sup> For other examples see e.g. G. T. Scanlon, op. cit., JARCE, vol. 5 (1966), fig. 6c on p. 92; C. Wulff. Altchristliche und mittelalterliche, byzantinische und italienische Bildwerke I, Berlin, 1909, t. 66, p. 261, especially nrs. 1334, 1335, 1337; and also Lane, op. cit., fig. 6B.

8 See also the lamp in A. Bahgat et F. Massoul, La céramique musulmane de l'Egypte, Cairo, 1930,

pl. LVI, fig. 2.

- tween the filling hole and the wick hole, which is a common feature of pointed-oval lamps, was not present except for decorative value (a few straight lines in the usual place of the trough).
- 2. Another fragmentary lamp, yellow tin glazed, with a trough only as a decorative mark and a completely rounded bottom without a foot. A rear part of both lamps was broken, therefore the shape of the handle is unknown; presumably it was of the triangular type.
- 3. A lamp with only a decorative trough perhaps regarded as an intermediary form which developed into a wheelmade type with a handle. It is of elliptical shape with a small, round foot and large loop-handle which goes from the filling hole to the back of the lamp (text fig. 2a and b).
- 4. A lamp found in the context of the ninth and early tenth century which is a rare example of a zoomorphic type. It is roughly oval and has general characteristics of the *Type A* lamps, but the shape was largely modified to imitate the head of a crocodile. It has two wick holes, representing nostrils of a crocodile, and a small loop-handle. It might be regarded as a transitional form.





Text Fig. 2 a and b.

Lamps of Type A were made of either red or grey clay. The latter one seems more common. Our research does not show preference for either kind of clay in application to particular sub-types or modes of decoration. Similarly, also glazed lamps are either red or grey ware. Both clays are usually of good quality: hard, heavy and fine grain. They seem to be local, especially the red clay, which is similar to the clay used in some common pottery wares from earlier strata of Fustāt. Approximately the same kind of clay was used to make certain lamps of Type B and G. Grey clay is usually unlike any other common grey ware of this time and distinctly differs from that of later types of lamps.

Most of the Fustat lamps of Type A, either glazed or unglazed, with the exception of those, fairly numerous, found in disturbed upper strata of excavation, came from deposits roughly dated to the ninth and tenth centuries. Several specimens, rather unexpectedly, came from deposits dated as late as the second half of the 11th century. These were, for instance, the fragment of an unglazed lamp with a ring foot and decorated with a cross (i. e. of the 1st variant) which came from the pit  $VI^1$ -23-E, and the lamp of the 2nd variant from the pit U in the Quadrant XXI-8.10 Fills of both pits were dated by the glass weights of al-Mustansir. Another lamp, green glazed, was found in an undisturbed layer of sebākh which filled the empty place left by a dismantled wall. From other evidence, it was proved that the wall was dismantled after this part of the city was definitely abandoned, and this could not have happened before the "great calamity," i.e. around the year A.D. 1070. Other pottery of the late Fāṭimid date found in the same location corroborates the late 11th-century date of the fill.

No lamp as yet has come from any location which could be undisputedly dated to the seventh and eighth centuries. The absence of datable early finds does not, evidently, prove that lamps of this type were not used at Fusṭāṭ before the 9th century. The type was certainly used during pre-Islamic times and must have been common at Fusṭāṭ as well as in other Near Eastern countries during the first centuries of Islam. On the other hand the occurence of lamps of this type in late fills would be indicative that they were used throughout the first half of the Fāṭimid rule in Egypt. 13

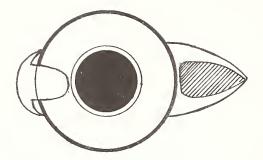
<sup>11</sup> One lamp of the first subtype was found in the pit together with a coin of the Emperor Heraclius, but other objects did not permit dating the fill prior to the 9th century.

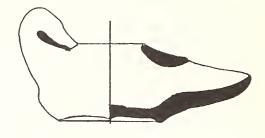
12 For instance the specimens from Antioch are regarded as "the VI c. lamps par excellence," cf. Antioch-on-the Orontes III, p. 67. According to Day, op. cit., pp. 70–73, where further references are also given, conical handle type should be assigned to the Umayyad period, and the tongue handle type, originally Umayyad, continuing in the 'Abbasid period. Two Egyptian lamps of the latter type with Kufic inscription, published by J.D. Weil, "Note sur deux lampes Egyptiennes en terre quite," in Syria, vol. 28 (1951), pp. 265–268, were also assigned to the 'Abbāsid period (ca. A.D. 860) on epigraphical grounds.

13 One lamp of this type, with an Arabic inscription, a surface find from 'Athlīt, according to C. N. Johns, "Excavations of Pilgrim's Castle" ('Athlīt), Quarterly of the Department of Antiquities in Palestine, vol. 1 (1932), p. 129 and pl. LIII,

<sup>&</sup>lt;sup>9</sup> For the location see G. T. Scanlon, op. cit., JARCE, vol. 5 (1966), plan.

This deposit will be discussed in the Fusṭāṭ Report 1966 (in preparation).





Text Fig. 3 a and b.

Our material does not allow more precise dating nor does it provide grounds for more exact typology. Both described variants seem to have been used simultaneously, at least, through the ninth and tenth centuries; and the glazed lamps intermingled with the others. It is, however, doubtful if the glazed category came into use before 'Abbāsid times.

Another problem which cannot be satisfactorily solved now is the provenance of Fustat specimens. Since no wasters were recorded, there is no direct evidence of the local manufacture. Use of clays, which also occurred in other wares commonly found at Fustat, and modes of decoration would however indicate the local production.

Type B (text fig. 3 a-b; figs. 2-4).

Contrary to lamps of *Type A*, which are unquestionably the earliest in Medieval Egypt under Islam, there is a certain con-

figs. 2, 9 "can hardly be dated earlier than the Mamluk conquest, judging from the letter forms" (that is sometime after 1291). In my opinion, the inscription does not conclusively prove this date, nevertheless it points to the survival of this form, at least in Palestine, much beyond the date assumed from our material. So far, no lamp of this type was found at Fustat which could be given the date later than the 11th century.

fusion as to which type of lamps developed next. There are two, perhaps four, types which can be considered as the chronological successors of *Type A*. Archaeology as yet does not satisfactorily answer the question, and purely typological considerations are difficult because of the complete change of production techniques. Molding was replaced by throwing, and therefore normal transitional types do not exist to indicate the supposed course of typological evolution.

Superficially lamps of Type D without a projecting nozzle seem closer in shape to the early oval-pointed Type A lamps than the Type B lamps. But from the technical point of view, production of the Type B lamps was much simpler than the others; and this, besides some other typological and archaeological indications which we will discuss later, was the decisive, although not conclusive, criteria for establishing the chronological sequence of types.

Lamps of this wheel-made type are usually small: the bodies average about 6 cm., though some occur as large as 8 cm. and as small as 5 cm. The oil container (the body) is usually bowl-shaped, not very deep, with slightly rounded sides. Its top part meets the sides at an angle and rises a little toward the filling hole. Some vari-

ants of this type are all rounded and, with the exception of a flat foot, are almost spheroidal. In the center of the top there is a round filling hole proportionally large and without a neck. The rather unpronounced foot is round and flat; sometimes there is no foot at all, only a flat round bottom. At one point the side of the container is pierced through to give the wick an outlet to a protruding, slightly pointed, and rather short nozzle. On the opposite end of the container there is a small handle which has the shape of a long conical stub lapped over toward the filling hole. It can be assumed that this particular shape of handle originated from handles of Type A. Slightly bent handles, both conical and triangular, could inspire introduction of a new shape. A simple stub handle, roughly conical with a crudely cut top, observed on one specimen could be regarded as an intermediary form. Another unglazed example has a small tongue handle, exactly as the Type A, variant 2.

Another feature, which recalls earlier lamps made in a mold, is a circular canal around the filling holes observed on many lamps of the present type. Generally the evolution of Islamic lamps from Fustat goes from neckless and stub handle types to those with a loop handle and a prominent neck. Within the group discussed, the development can be traced on a number of specimens. The lamp in *figure 3*, with the top almost of *Type C*, has a small loop handle with a nib on top which is characteristic of *Type F* and the successive ones. The lamp in *figure 4* developed a high flaring neck and a sphero-eliptical body.

Most lamps of *Type B* are glazed although unglazed ones are not rare. Glaze is always applied both inside and outside.

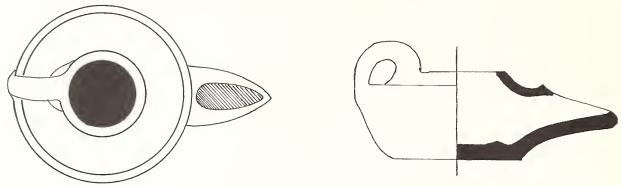
Most common was an early type of a green, olive-brown or yellow-brown lead glaze. In addition, tin glazes, white, white with green splashes, brown, pale yellow and light green were used.

Some of these lamps are carefully made and well potted, but many are quite crude. All of them are rather heavy with thick walls disproportionate to the small size of objects. The clay used was either red, similar (though not identical) to *Type A*, or grey. Occasionally a buff or yellowish, sandy clay also occurs. This is similar to the clay of the majority of later lamps.

Most of the undisturbed fills which yielded lamps of this type could be dated roughly to the middle Fāțimid period. Terminus ante quem of several deposits provided glass weights of al-Mustansir, although some associated artifacts, especially pottery, glass and bone objects, could be dated to the early Fatimid or even pre-Fatimid times. It seems therefore that the safe date for the Type B lamps would be the 10th and 11th centuries. The same, or slightly later date, would probably also apply to similar lamps found at Qal'a of the Banū Ḥammād.<sup>14</sup> It is likely, however, that the type developed much earlier. Lamps of this type with a single stub handle were found in a trial pit at the Ribat of Susa in the layer which corresponds with the construction of the first Ribāt, i.e., probably before the year 796.15 At Fustat, however, no evidence has been discovered so far to support such an early date. On the contrary, the

<sup>&</sup>lt;sup>14</sup> Cf. L. Golvin, Récherches archéologiques à la Qal'a des Banu Hammad, Paris, 1965, p. 203, figs. 76, 1.

des Antiquitès et Arts de Tunesie, Notes et Documents, vol. 14, Tunis, 1956, pl. XI c, pp. 9 and 20.



Text Fig. 4a and b.

types of glazes commonly applied to those lamps in all probability did not develop before Tūlūnid times.

### Type C (text fig. 4a-b; figs. 5 and 6).

Lamps of this group are usually much larger than the preceding type. The body varies from 6 to 8 cm. in diameter. It has usually a straight-sided body which is rounded near the flat, footless bottom. The top was turned separately on the wheel. It slopes from the filling hole to the edge of the oil container, then slightly rises to form a distinct edge at the joint. Sometimes there is a short neck or a collar around the filling hole. A flat loop handle is attached with one end to the rim of the filling hole (or the neck) and with the other to the side of the body. Opposite the handle there is a nozzle, proportionately short, of the same sort as on the Type B lamps, which connects with the container through a wick hole. Occasionally there are lamps with two nozzles (see fig. 6).

All recorded specimens are glazed. Both lead and tin glazes are equally common. The range of colors is practically the same as on lamps of *Type B*. The only difference is that a few examples are deco-

rated with a turquoise tin glaze, the kind which occurs often on later Fāṭimid pottery.

The majority of objects in this category which were studied are very well potted, with relatively thin walls, carefully shaped and glazed all around. The clay is usually of the same kind throughout the series: pinkish, pinkish-brown or pinkish-grey, medium-hard and coarse-grained, almost sandy. This clay is unlike that of the other lamps, a fact which would point to one, highly-specialized center of production. A few examples, usually much cruder, are of yellow-buff, rather soft, sandy clay, typical for local products.

Development of this type from the preceding one is attested to by a number of transitional specimens in both groups. Chronologically *Types B* and *C* seem roughly contemporary, although *Type C* probably lasted longer. The approximate date is the 10th and 11th centuries.

### Type D (text fig. 5a-b; fig. 7).

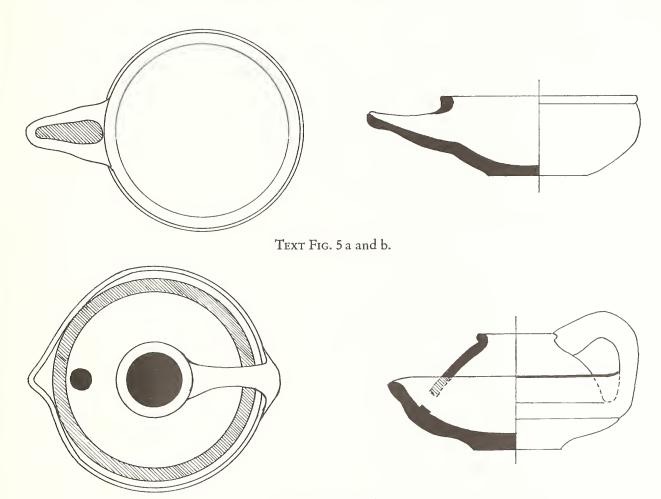
This particularly common type has a very simple form. The lamp is composed of a round, shallow, saucer-like body with vertical sides rounded at the bottom and a

small, round flat foot. The side of the body is pierced by a wick-hole, at which point there is attached a short nozzle of the same type as in the *Types B* and *C*. There is no handle. Lamps of this type are lead glazed, usually yellow-brown, sometimes with spots of green pigment. The clay is buffgrey or pinkish-buff, rather soft and coarse grain. The lamps can be roughly dated to the 10th and 11th centuries.

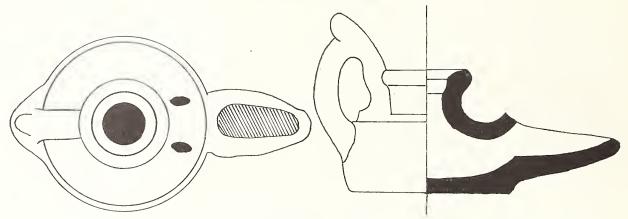
Type E (text fig. 6 a-b; fig. 8).

These very characteristic lamps are typologically related to Type C; but the

distinction between the body and the top here is much more pronounced, and there is no protruding nozzle. The lamps are composed of two parts turned separately on a wheel. One part is a rounded saucershaped base with a small round, slightly protruding flat foot; it forms the bottom part of the lamp. The other part is a semiglobular top. This top has a slightly smaller diameter than the "saucer" so as to fit deep into it. As a result, the "saucer's" sides protrude considerably above the joint of the two parts. A filling hole in the center of the top is surrounded by a prominent col-



Text Fig. 6 a and b.



Text Fig. 7 a and b.

lar. The handle is attached with one end to the filling hole collar and with the other to the side of the base. A wick-hole is in the side of the semi-globular top, opposite the handle. The rim of the "saucer" at this point is slightly bent down to form a small nozzle. All known specimens are glazed, sometimes with the exception of the bottom. The glaze is usually transparent green or green-turquoise. One specimen, made of red clay, with yellow tin glaze over the cream slip, was also found. Another one was covered with dark brown-manganese glaze. The body is ordinarily of a buff, soft and coarse grain clay, practically the same color and texture as the other common kinds of Fustat glazed pottery. Its use for local manufacturing of wares is attested to by many pottery wasters, although no waster-lamps of Type E have been found.

There are not many lamps of this type recorded at Fustāt. Their date roughly corresponds to those of Types B, C and D. Lamps of this type are fairly common in the Valley of Orontes and in Corinth where earlier unglazed variants are also recorded. Numerous lamps of this type, but with brown glaze, were found at Corinth to-

gether with coins from the time of John Tzemisces. 16 This date, however, seems too early for Fusṭāṭ. Also the date of the Antioch specimens, assumed to the 9th-10th centuries, 17 should be put forward to the 10th-11th centuries at Fusṭāṭ. As, however, no earlier prototypes are found in Egypt, it is possible that our specimens originated by imitating foreign models, hence the later date.

### Type F (text fig. 7a-b; fig. 9).

This is another very distinct group of lamps closely related to Type E. They are generally larger and much cruder than the others. The body is cylindrical with a flat footless bottom, and the sides rise above the slightly concave top cover. It forms a prominent rim much more pronounced than that of Type C. The top of the container of many specimens has a simple openwork decoration of a row of longish triangular holes. Sometimes there are only

<sup>&</sup>lt;sup>16</sup> Cf. Corith, vol. 4, part II, Terracotta Lamps by O. Broneer, Cambridge, Mass. 1930, p. 124.

<sup>&</sup>lt;sup>17</sup> Cf. Waage, op. cit., p. 68, type 58 a (ills. on pl. p. 77), fig. 81.

Kubiak Plate 1



Fig. 1.—Lamp. Type A.



Fig. 2.—Lamp. Type B.



Fig. 3.—Lamp. Type B.



Fig. 4.—Lamp. Type B.



Fig. 5.—Lamp. Type C.

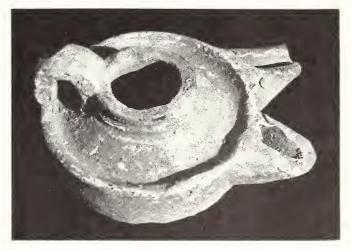


Fig. 6.—Lamp. Type C.

Kubiak Plate 2



Fig. 7.—Lamp. Type D.



Fig. 8.—Lamp. Type E.



Fig. 9.—Lamp. Type F.



Fig. 10.—Lamp. Type G.



Fig. 11.—Lamp. Type H.



Fig. 12.—Lamp. Type I.

Kubiak Plate 3



Fig. 13—Foot of lamp. Type I.



Fig. 14.—Waister of lamp. Type I.



Fig. 15.—Lamp. Type J.



Fig. 16.—Waister of lamp. Type J.



Fig. 17.—Lamp. Type K.



Fig. 18.—Lamp. Type L.

Plate 4 Кивіак

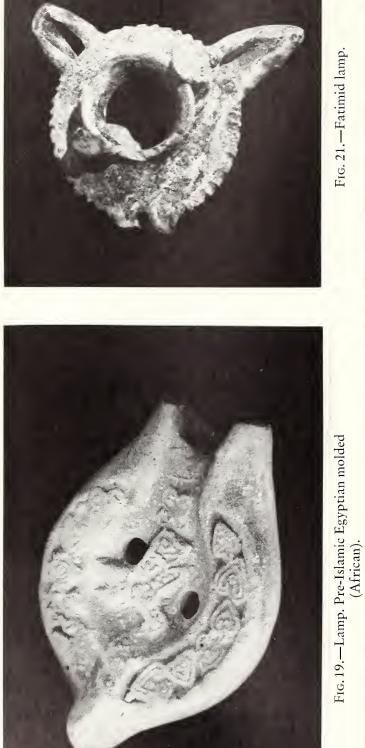




Fig. 21.—Fatimid lamp.



Fig. 20.—Fatimid lamp.

Fig. 22.—Lamp with a stand.

a few of them between the neck and the nozzle; sometimes they are all around the cover. A high funnel-neck with a flaring rim leads to a small central filling hole. A handle is attached with one end to the top and the neck and with the other to the rim of the container. Usually it is large and high and at the top has a pointed nib. The nozzle is of the same kind as on earlier types (B, C and D), but it is proportionately longer and heavier. It is slightly pointed at the end, and the wick channel is oval when viewed from above. Sometimes, from the rim of the body on both sides of a nozzle two small nibs protrude. Almost all fully developed examples are glazed with a turquoise tin glaze. A few have a bluishgreen glaze; and only the earlier, transitional examples, with a shorter neck and a body with a less prominent rim and rounded bottom edge, such as the Type C, are differently glazed (brown, yellow, milkybrown).

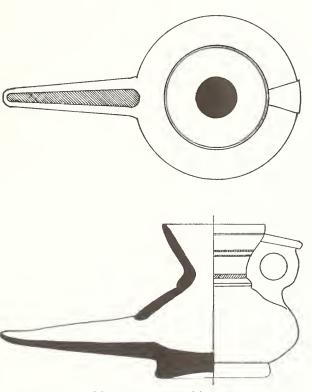
The buff-grey clay is soft and coarse grained of the same general sort (except a slightly different color) as that of lamps of *Type E* and some others.

Some lamps of this type came from undisturbed fills together with other finds of the middle Fāṭimid period. Many more were found in the later dump mixed up with elements of different times, but predominantly of the late Fāṭimid, Ayyūbid and Mamlūk periods. A large number of these objects in the dump would indicate that they were common in the period when Fusṭāṭ already had become a kharāb (rubbish mound). It is however doubtful if the short nozzle types of lamps survived for long in the post-Fāṭimid period. Therefore, the proposed date would be the second half of the 11th and the 12th centuries. The dis-

covery of similar lamps at the Qal'a of Banū Ḥammād,<sup>18</sup> would indicate the approximate date.

Type G (text fig. 8 a-b; fig. 10).

With the introduction of this type the large family of long nozzle lamps, which dominated production in post-Fāṭimid



Text Fig. 8 a and b.

times, began. The shape differs considerably from lamp forms known before, although some elements were already developed on earlier types.

The body is spheroidal, slightly flattened and squat on a well-pronounced, slightly concave foot. It has a large, tall neck

<sup>&</sup>lt;sup>18</sup> See Golvin, op. cit., p. 203, figs. 76, 2.

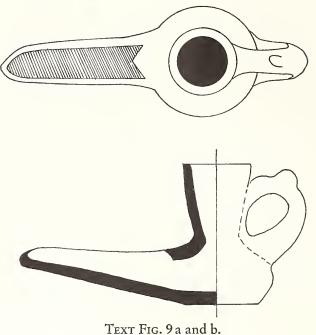
with flaring sides and a slim, long straight nozzle. But some, presumably early, specimens with a large body have a disproportionately thin and rather short nozzle. The small ring handle is attached to the upper part of the body and the neck. On its top there is a small flat triangular slab to support a fingertip; on later types this is transformed to the shape of a nib protruding from the handle itself.

Early examples are usually well potted with thin carefully turned walls; later ones are more crude with wider nozzles, a more globular body and a narrower neck. Some specimens are close to certain variants of a later group, *Type I*, which certainly developed from this type. The only difference lies in the shape of the handle, which here is always small and approximately ringshaped.

All known examples are glazed inside and outside. Usually the foot is left unglazed. The normally used glaze is transparent green or greenish-blue of siliceous type. On better examples of a presumably earlier, squat variety sometimes a simple sgraffito under-glaze decoration is applied. The technique and glaze of this variant is the same as of the so-called late Fāṭimid under-glaze sgraffito pottery of the Fusṭāṭ type.

The body is of the same standard clay as that of *Types E* and *F*, which is soft and sandy. It is, however, normally of a better whitish-buff quality of clay.

Many specimens found in undisturbed fills were associated with objects of the middle Fāṭimid period. They were also found together with lamps of Type F. The safe date of this type is the 11th and earlier part of the 12th century, although some late variants continued much later.



TEXT TIG. 7 a and b.

Type H (text fig. 9a-b; fig. 11).

The next group of lamps, roughly contemporary to the two preceding ones, belongs to the same large family of the longnozzle lamps. The shape, however, is quite distinctly different. Its main characteristics are a very small spheroidal body with a flat footless bottom and a long, straight and rather wide nozzle rounded at the end, usually with the short, pointed triangular tongue above the wick-hole, at the point where the nozzle meets the body. The nozzle is disproportionately large for the small size of the body. The neck is wide and tall with straight flaring sides. A prominent, rounded handle, with a nib on its top, is attached with one end to the neck and the other to the body. The handle and nozzle are so well balanced in size that in spite of a relatively small body the lamp looks pleasant and well-proportioned.

There is a variant of this type with a

larger body of characteristic conical shape. The filling hole inside the prominent neck is usually small. Otherwise the main characteristics are the same with the exception of the glaze which is always of a pale yellow tin type and of poor quality. Regular specimens most commonly are tin glazed, dark green, bright yellow-green, yellow with light green pigment, or whitish-green; rarely the glaze is transparent brown without an admixture of tin. Many specimens are unglazed.

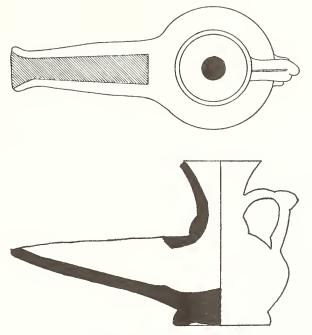
The clay is always dark or medium red, soft and somewhat gritty. It is different from the clays of other lamps, but not unusual in other red wares from Fusṭāṭ. This, as well as the rather distinct glaze, would however point to a very individualized center of production, perhaps outside Cairo.

Lamps of this type were often found within the middle Fāṭimid context, sometimes together with specimens of *Types F* and *G*. They most probably continued throughout the 12th century. Late dating is confirmed by frequent finds of the same lamps at Kōm el-Dikka in Alexandria in the early Ayyūbid Layer, dated by the underlaying, well-dated, late Fāṭimid necropolis and the ceramics. The date is approximately the second half of the 11th and the 12th centuries.

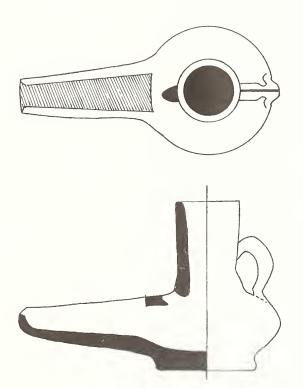
Type I (text figs. 10a-b and 11a-b; figs. 12-14).

This very numerous group of late lamps, although largely differentiated by certain details of shape and decoration, is

<sup>19</sup> Cf. W. B. Kubiak, "Les fouilles polonaises à Kôm al Dick en 1963 et 1964," *Bulletin de la Société Archéologique d'Alexandrie*, no. 42 (1967), p. 64.



TEXT Fig. 10 a and b.



TEXT Fig. 11a and b.

sufficiently homogeneous to regard it as one type. It clearly is derived from more developed varieties of Type G. The main difference is a single or double loop-handle with or without a nib on the top, a larger nozzle rectangular in shape when viewed from above, and a glazed, flat or slightly concave foot with an incised ring inside (see fig. 13). The neck is tall with a flaring rim or with straight flaring sides, but also sometimes cylindrical or with a wide collar on the top. The handle is attached with the one end in the middle of the neck and with the other in the middle of the globular body. A great majority of the lamps, perhaps 90 per cent, conform to this description. Half of them are glazed with turquoise tin glaze and the other half with green transparent glaze of various shades, mostly deep dark-green. Better examples are very well proportioned and, having a nice shiny color, present a pleasant image.

Besides the standard lamps, described above, there exist many varieties, different in shape and decoration: for example, lamps with two or three nozzles,<sup>20</sup> or with one nozzle with two or three wick channels. Only the variant with three nozzles presents more individuality because of their radial arrangement. Otherwise the shape of the body, neck, foot and nozzle is unchanged.

A common type of decoration is a primitive relief kind. It consists of simple decorative elements such as rosettes, button-like circles, pearls and mere knobs and rods applied to the body of a lamp, sometimes stamped in extra clay and covered

with a regular glaze. An equally frequent occurrence is an extra decoration applied to the handle.<sup>21</sup> Another is a painted decoration, usually of simple geometric motives; it is painted under transparent glaze in the usual Mamlūk technique and with the use of the same colors: namely blue, black and white. Other, usually cruder examples are painted in blue and manganese. Very infrequent is the application of the otherwise very common Mamlūk potters' decorative technique of sgraffito under the lead glaze. A number of lamps, apparently very early examples of the type, were covered with a good quality white or slightly bluish tin glaze with smudges of blue and manganese pigment. This kind of glaze sometimes used along with the lustre decoration is usually associated with the late Fățimid pottery.

Clay used for production was almost exclusively of the same calcareous, coarse grain, whitish, greyish or buff kind as that used frequently by the potters of Fusṭāṭ. Wasters of lamps found during the excavation (fig. 14) leave but little doubt that they were locally manufactured.

Lamps of *Type I* occur in the dump of the late period. A thick layer of this dump has been, as we know, thoroughly disturbed; nevertheless innumerable objects of the Mamlūk period, which make up as much as about nine tenths of all finds from this layer, give a prevalent Mamlūk date. In addition to that, the types of decoration, in most cases distinctly Mamlūk in style and technique, help to attribute the majority of the lamps of *Type I* to that late period of Egyptian history. On the other hand, certain modes of decoration on some examples

<sup>&</sup>lt;sup>20</sup> Good example of a three-nozzle lamp is illustrated in A. Bahgat and F. Massoul, *op. cit.*, pl. LVII, fig. 5.

<sup>21</sup> Ibid., pl. LVI, fig. 1.

are attributed to an earlier date. All facts considered, the proposed date would be from the second half of the 12th through the 14th or even 15th centuries.

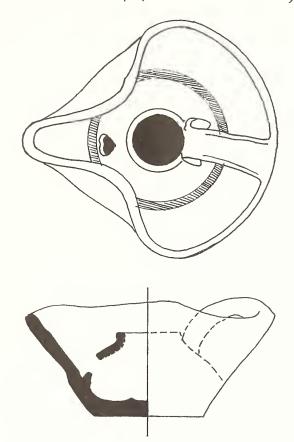
Type J (text fig. 12a-b; figs. 15-16).

There is a close relationship between these lamps and those of *Type E*. Some authors classify them even within the same category.<sup>22</sup> In our opinion, however, there is a sufficient dissimilarity in techniques and clay to justify the separate classification.

Generally the type is a considerable simplification of Type E, and the specimens are usually much cruder, although the main characteristics remain much the same. These include a saucer-body, separately turned on the wheel, which here is considerably deeper with straight flaring sides and a semi-globular top. About half of the flaring sides are pinched in to form a kind of high nozzle. This is quite prominent in comparison with a small depression in a lip characteristic of the *Type E* group. The bottom is usually flat, but some specimens have a well-pronounced foot, a characteristic of the Type I group. A small semiglobular top, separately turned on the wheel, is attached deep to the "saucer" to form an oil container. It has a short, straight neck; and in one side, opposite the nozzle, there is a wick-hole. The handle is attached with one end to the neck and top, with the other to the rim of the "saucer."

The majority of our specimens are covered with monochromatic lead glaze tinted brown. A few are covered with dark green glaze. Both kinds of glaze are of the same

<sup>22</sup> Cf. Waage, op. cit., p. 68 and fig. 81, type 58 b, c.

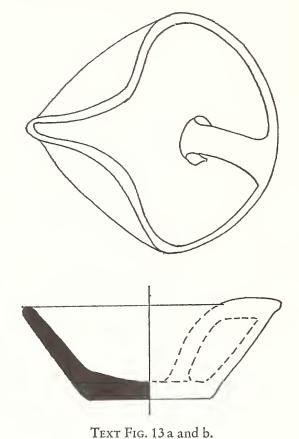


Text Fig. 12 a and b.

type as on the common Mamlūk sgraffito pottery. Wasters (fig. 16) attest to local production. The clay is always of the same sort: brownish-red, rather soft, medium grain. It is the same kind as that used in the Type H lamps.

All specimens were found in the layer of the late medieval rubbish, in the same context as the lamps of Type I. The approximate date is the 13th (?), 14th and 15th centuries, which roughly corresponds to the assumed date given the specimens from the Valley of Orontes.<sup>23</sup>

<sup>23</sup> Loc. cit. A similar lamp was found in Athlit together with coins of the late 12th and 13th cen-



### Type K (text fig. 13a-b; fig. 17).

Lamps of this type present a still further simplification of the preceding form. In external appearance they are alike; the only difference is that the internal semiglobular top entirely disappears. As a consequence of this change the handle with its lower end is attached to the bottom of the "bowl."

The glaze and colors are the same as of the former group, and the clay is also the same.

turies. Cf. C. N. Johns, "Medieval slipware from Pilgrims' Castle Atlit, Quarterly of the Department of Antiquities in Palestine, vol. 3 (1934), p. 137 and pl. LVII c.

The date is probably much the same, although progressive simplification would point to a slightly later development of the form. More precise chronology is not possible in view of insufficient evidence.

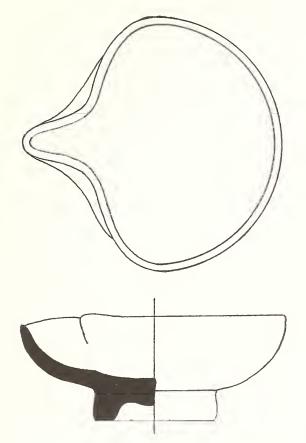
### Type L (text fig. 14a-b; fig. 18).

The shape of this type of lamp follows the external form of J and K, but they are plain inside without any top or handle. They developed, however, a well-pronounced, rather heavy, low ring foot. This type is thickly potted, rather crude and glazed in green.

The clay is brown-red or greyish, medium soft and coarse grained. The date is probably late and post Mamlūk.<sup>24</sup>

Besides the lamps classified, there are some others of various shapes which do not correspond to the characteristics of the common types. There are individual examples which do not appear in series, rare types, or fragmentary specimens not sufficiently preserved to allow their proper classification. Some others are similar to foreign types and more than likely were imported from outside Egypt. These small, relatively strong objects could have been easily transported, so there probably existed a substantial commerce in lamps throughout the Middle Ages. Egyptian lamps found in other Mediterranean countries bear witness to this commerce, which doubtlessly must have had two directions. In spite of that only very few specimens found at Fusțāț can be safely attributed to a foreign source. Since the technical ideas and concepts of forms travelled freely

<sup>&</sup>lt;sup>24</sup> F. O. Waage for the Antioch specimens gives the date post-medieval, op. cit., p. 68.



TEXT FIG. 14 a and b.

throughout the medieval world, exclusively typological studies do not always give conclusive proof for the origin of particular objects.<sup>25</sup>

Within our unclassified finds certain groups can be distinguished:

First, is the group of molded lamps which do not fit into the common type of

<sup>25</sup> It might be generally stated that lamps of the medieval Mediterranean countries show much similarity. On the other hand lamps from the Eastern Islamic hinterland, as for example Persia, produced much different forms. For lamps from Iran and Central Asia cf. J. Lacam, *Etude et classement des lampes a huile musulmanes* (Collections des Musées français), Cahiers de Byrsa, vol. 3 (1953), pp. 197–203 and plates, *passim*.

pointed-oval lamps. A few of them, unglazed, could be attributed to pre-Islamic types, as for example lamps referred to by Waage as "African" but which are clearly derived from pre-Muslim types manufactured in Egypt or are the genuine imported specimens. Lamps from this group were recorded once or twice at Fustāṭ (fig. 19). Some other fragmentary examples are glazed and Islamic in style, probably Fāṭimid. They usually are of angular shape, sometimes with the handle side of the body rounded and decorated in deep molded relief. 27

Another group would be hand-made lamps. They are usually luxury objects, sometimes of zoomorphical shapes decorated with luster. Very few objects of this group have been recorded. They could be attributed more than likely to the Fāṭimid period.<sup>28</sup> It seems likely that certain shapes of the molded and hand-made pottery lamps followed the metal models.

The next group would constitute "open lamps," that is the lamps with an oil container without a top cover (as Types D, K and L). They are relatively numerous but differ largely in shape, size, and decoration.<sup>29</sup> Listing of particular lamps would serve no purpose here, especially since they cannot be associated with any particular period.

A number of specimens and fragments, although with characteristics of the large family of lamps with protruding nozzle and a top cover, cannot be attributed to any of our types (figs. 20 and 21).

<sup>29</sup> *Ibid.*, pl. LVII, fig. 2.

It is his type 54, op. cit., p. 67 and fig. 80.
 An example is illustrated in A. Bahgat and F. Massoul, op. cit., pl. LVII, fig. 4.

<sup>&</sup>lt;sup>28</sup> *Ibid.*, pl. LVI, fig. 5 and pl. LVII, fig. 7.

Lastly there is a fairly numerous group of lamps attached to a stand.<sup>30</sup> Some of them, which belong to the best known group, have on top of the tall stem a small lamp (a *Type L* shape; *fig. 22*). As a base they probably had a flat plate with low sides. The date of recorded specimens would be roughly the 12th and 13th centuries, but perhaps later as well.

<sup>30</sup> *Ibid.*, pl. LVII, fig. 6, which represents a rather early specimen.

The other kind which can be called "ring lamps" were in the shape of a circular pipe-like channel attached to the hollow stem. The "pipe" holds oil. It opened into a nozzle of a normal Type G shape. Presumably several lamps were attached, one above the other, to one tall, vertical stem. The shape of the base is unknown. The form of the nozzle and the type of glaze (white tin with blue and manganese splashes) give the 12th century as the approximate date of these lamps.

