

The Lamps in Ancient Egypt, with Unpublished Lamps in Mallawy Museum in Egypt

♦ **Dr.Marzouk Al-sayed Aman**

Abstract

Light was very important in ancient Egypt as it was in the entire world. It has served the principal utilitarian function of illuminating dark spaces. It has a divine function because of its apotropaic power. Light was a symbol of purity and goodness, hence ancient Egyptians used torches, and then manufactured lamps to illuminate tombs, temples and houses. Lamps differed from one another in size, form, and the material from which they were made. Vegetable oils such as olive, sesame, and castor-oil, as well as animal fat, were used as fuel for lamps.

The lamps, which date back to the ancient Egyptian dynasties age, were not of a great number and they are not really known. That is because either they were not discovered or even not classified as lamps. But by coming of the Greco-Roman period, these lamps existed as an idea inspired from ancient Egypt, even many of its designs were the same as what was used in ancient Egypt, and most of these lamps are peculiar to Egypt in form and design. In this paper, the researcher will try to publish the unpublished collection of lamps that are exhibited in Mallawy Museum at El-Menia governorate, Egypt from number 536 to number 556.

Introduction

♦ Lecturer of Egyptology, Egyptology Department, Faculty of Arts, Assiut University.

Light has served the principal utilitarian function of illuminating dark spaces through the ages¹. With Egyptians, as with other peoples, light had a divine function² on account of its apotropaic power. Light became a symbol of purity and goodness because it dispelled darkness and, therefore, avoided typhonic forces³. Lamps were an image of magical protection, an idea that may be based on the comfort of a night-light to frightened children.⁴ Introducing lamps was a certain rite in tombs after burial.⁵ At Deir El Medineh the lighted lamps were sometimes left in the burial chamber when the tomb was sealed⁶. The lamps were used for illuminating houses, and a few have been found in habitations at town sites such as Deir El Medineh⁷ and Amarna⁸.

So ancient Egyptians have yielded many lamps for that purpose, and if pottery lamps of the native dynastic periods are not well known by their absence (or, more probably, unidentified), this fact is balanced by the enormous number of pottery lamps of the Ptolemaic and Roman epochs in Egypt. These lamps existed as an idea inspired from ancient Egypt, and most of these lamps which dating to Greco-Roman period were found in Egypt are peculiar to Egypt in form and design.⁹ Vegetable oils such as olive and sesame, as well as animal fat were used as fuel for lamps.¹⁰ In the Greco-

¹ E.C.Lapp, 'Clay Lamps Shed New Light on Daily Life in Antiquity', *Near Eastern Archaeology*, 67,3(2004),174.

² M.Lurker, *The Gods and Symbols of Ancient Egypt* (London, 1980),76; G. Pinch, *Magic in Ancient Egypt*, (London,1994),80.

³ M.Lurker, *The Gods and Symbols of Ancient Egypt* (London, 1980),76.

⁴ G.Pinich, *Magic in Ancient Egypt*, (London,1994),80.

⁵ B.Brüyère, 'Rapport sur les Fouilles de Deir El Mèdineh (1934-1935)', pt.2, in *FIFAO*, XV, (LeCaire,1937),136.

⁶ H.G. Fischer, 'Lampe', in *L. Ä*, III,915.

⁷ B.Brüyère, 'Rapport sur les Fouilles de Deir El Mèdineh (1934-1935)', pt.3, in *FIFAO*, XVI, (LeCaire,1939),271, fig.143,331, fig.203.



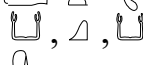

⁸ Fischer, in *L. Ä*, III,915.

⁹ F.W.Robins, 'Graeco-Roman Lamps from Egypt' : *JEA* 25,1(1939),84.

¹⁰ Fischer, in *L. Ä*, III,915.

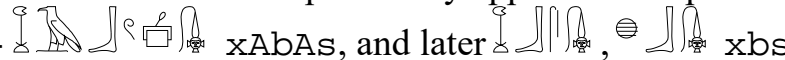
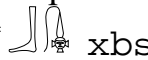
roman period the castor-oil was used for lamps in the temples, houses and tombs.¹¹

The terms for lamp in ancient Egypt are:

The term:  tkA pyr.
 Middle Kingdom.
 Greco-Roman period.
 determinative¹².

It was written in Coptic: ^s.tik , ^b.qik¹³.


This is a general term, it was used in ancient Egypt to refer to torches, flames, tapers, and light¹⁴, but the determinative of this word rarely specifies which of them is meant¹⁵.

There are two terms specifically applied to lamps in new Egyptian,
 1-  xAbAs, and later  xbs lamp¹⁶.

It was written in Coptic: ^s.HhBs , ^b.KhBs¹⁷.

2-  stAt lamp¹⁸.

The lamps types in ancient Egypt:

The determinative of tkA in pyr.606a¹⁹ , and other similar words²⁰, like the similar sign  , which was found in the inscriptions of the mastaba tomb chapel of Ne-ka- ankh at Saqqara ,

¹¹ B.Brüyère, 'Rapport sur les Fouilles de Deir El Mèdineh (1934-1935)', pt.2, 136.

¹² Wb.V,331(5-12).

¹³ W.Vycichl, *Dictionnaire Étymologique de la Copte* (Leuven 1983), 212.

¹⁴ Wb.V,331(5-12); R.O.Faulkner, *A Concise Dictionary of Middle Egyptian* (Oxford 1976), 301.

¹⁵ Fischer , in *L Ä, III*, 913.


¹⁶ Wb.III,230(3).

¹⁷ Vycichl, *Dictionnaire Étymologique de la Copte*, 290.

¹⁸ Wb.IV,333,(13-15).

¹⁹ Pyr.606a.

²⁰ H.F., Petrie, and M.A., Murray , *Seven Memphite Tomb Chapels*, (London, 1952) pl. III (2).

fifth dynasty, ²¹ show the type of lamp that was most frequently used through out ancient Egypt. A serpentine floating wick²² in a dish of oil or fat, ²³such as an OK small copper lamp in the form of a simple bowl or a dish was found at Saqqara with its wick, which, like some tapers, dating to the end of the sixth dynasty, the wick resembles the hieroglyphic sign  H(fig.1).²⁴ A similar copper lamp of the same period has three metal strips that were apparently intended to hold a wick in place(fig.2).²⁵ Also, a pottery lamp in the form of a simple dish was found at Saqqara, dating to the OK (fig.3).²⁶

There are many types of lamps dating to the MK .one of these types made of red pottery. It has the form of a compound dish, with a cup was fixed in the middle of this dish to hold the wick and to contain oil or fat which was used for illumination.²⁷

There is a very massive limestone lamp of the MK was found in Lahun. The lamp is on a stand in the form of a hollow cup. It made of stone, topped with a disk of pottery with a central hole for the wick; the disk was placed within a central well surrounded by a broad channeled rim.²⁸ The outer channel was intended to receive

²¹ Petrie, and Murray , *Seven Memphite Tomb Chapels*, pl. III (2).

²² Wick: A twist or braid of any material that brings the oil by capillary action from the oil reservoir to the nozzle. Wicks in antiquity were made of flax, hemp, oakum, and cotton. C. R. Fitch and N. W. Goldman, *Cosa: The Lamps*, in *Memoirs of the American Academy in Rome*, Vol. 39,(Michigan, 1994),255.

²³ Fischer, in *L. Ä*, III,913.

²⁴A.Radwan, *Die Kupfer-und Bronzegefäße Ägyptens von den Anfängen bis zum Beginn der Spätzeit*,(München,1983),58-60,Taf.28(147a-b);C.M.Firth and B.Gunn, *Teti Pyramid Cemeteries ,I*,(LeCaire,1926),34,Fig.37.

²⁵ G.Jèquier, *Tombeaux de Particuliers Contemporains de Pepi II*, (LeCaire,1929),82,Fig.92.

²⁶ Radwan, *Die Kupfer-und Bronzegefäße Ägyptens von den Anfängen bis zum Beginn der Spätzeit*, 60-61,71,Taf.28(152);Firth and Gunn, *Teti Pyramid Cemeteries ,I*,31-32,Fig.32(6).

²⁷ A. Kamal, 'Rapport sur les Fouilles Exécutes dans la Zone Comprise entre Deïrout au Nord et Deir-El-Ganadlah, au Sud ' in *ASAE*, 11, 1911, 14-15,fig.3.

²⁸ Rim: The outer band of the top surface of Lamps. This was usually set off from the discus. It might be flat or convex, wide or narrow. Fitch and Goldman, *Cosa: The Lamps*, 254.

water so as to keep the stone moist and prevent the oil from soaking into it ²⁹, the height of this lamp is 17 inches, diameter of base 9.2 inches, diameter of top 8 inches, it is now at University College, London (fig.4).³⁰

Middle kingdom tombs at El- Lisht and El-Lahun yielded more interesting limestone and pottery lamps, some of which resemble lamps of the Greco-Roman period, the broad rim is concave and covers most of the central reservoir leaving only a narrow aperture for the wick. In some cases, a smaller hole is provided for the wick at the outer edge of the vessel ((fig.5).³¹ It was noticed that some holes of these lamps were made after manufacturing by breaking some parts in these lamps. This type resembles the lamps nos.545, 548, 551, 554, 555, and 556, in Mallawy museum, which dating to Greco-Roman period, but handles were added to some of Greco-Roman lamps. On other side, most of lamps, which dating to Greco-Roman period which are in the Mallawy museum such as nos.536,537,538,539,540,541,542,543,544,547,552,and556 resemble in design with that which dating to MK, all of them had two holes, one of them is the filling-hole, it is always in the oil reservoir³², and the second is the wick hole. But, some of magical, decorative and religious motifs, such as frogs, roses, palm branches, crosses, and Greek letters were added to the Greco-Roman lamps.

There are many types of lamps dating to the NK .one of these types made of red pottery. It has the form of a dish, with an inner ring enclosing a central cup, (fig.6).³³ This type resembles the lamp

²⁹ G.Bruton, *Lahun, I, The Treasure*, (London, 1920), 13.

³⁰ Bruton, *Lahun, I, The Treasure*, 13, Fig.20.

³¹ W.C.Hayes, *The Scepter of Egypt, I*, (New York, 1953), 261, Fig.167.

³² Oil reservoir : The central body of the lamp into which oil was poured. Fitch and Goldman, *Cosa: The Lamps*, 254.

³³ R.Anthes, *Mit Rahineh 1955*, (Philadelphia ,1959), 30, Fig.18d.

no.550 in Mallawy museum, which dating to Islamic period, but a handle was added to Islamic lamp.

A compound 'dish -lamp' of rather similar form was produced in red pottery down to the NK. This lamp was found in 1935 in Deir El Medineh. In this lamp the area which surrounded the central cup is divided into three parts (fig.7).³⁴ Maybe, this area has the same purpose of the broad channeled rim which was found in some of the MK lamps.

The funerary equipments of Tut-ankh-amen include two types of lamps, the first one is a lamp of chalice form upon a desk carved out of translucent calcite, its chalice-like cup was designed to hold the oil and a floating wick. It is flanked with ornaments symbolizing 'Unity' and 'Eternal life', on each side is the name of Tut-ankh-amen (fig.8).³⁵

The second one is an exquisite triple-lamp of floral form, carved out of a single block of translucent calcite. Its design has three oil cups with stems and lotus leaves springing from a circular base. Carter says that: ' in all probability the lamp symbolizes the Theban triad'(fig.9).³⁶

In addition, it was found at Deir El Medineh, unusual form of lamp dating to the NK, it is a terra-cotta lamp in the shape of a duck (fig.10).³⁷

Many types of lamps were found in Tuna el-Gebel, from the Greco-roman period. They are now preserved in Mallawy museum, in El-Menia, Egypt. The researcher will study and classify these

³⁴ B.Brüyère, '*Rapport sur les Fouilles de Deir El Mèdineh (1934-1935)*',pt.3,271,fig.143; Hayes explained a similar form dating to MK found at the tomb of Senebtisy at El- Lisht as a multiple serving dish of pottery. W.C.Hayes,*The Scepter of Egypt,I*, Fig.168.

³⁵H.Carter, *The Tomb of Tut-ankh-amen,II*,(New York,1963),Pls.XLV-XLVI,30,228.

³⁶ Carter, *The Tomb of Tut-ankh-amen,II*,Pl. XLVII,31,226.

³⁷Brüyère, '*Rapport sur les Fouilles de Deir El Mèdineh (1934-1935)*',pt.3, 330-331,fig.203.

lamps according to their numbers in this museum from number 536 to number 556: Most of these lamps representing different types. Some are different from one another in size, form, and in the pottery color from which they are made.

1- No.536, white pottery lamp, circular body (Mold made lamp³⁸: double-convex body), short splayed nozzle³⁹ with curved tip⁴⁰, the nozzle is slightly concave on both sides. The nozzle always contains the wick hole⁴¹. The lamp has a frog sculpture on its top. The frog itself is usually taken to be a symbol of resurrection.⁴² Length 10.9 cm. width 8.8cm. This lamp has two holes, one of them for the oil, the second for the wick. It was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.11 d).

2- No.537, 'frog' type lamp⁴³, white pottery, oval body, 'flask'-shaped body, very little projection to spout⁴⁴, short nozzle, with a frog sculpture on top, length 8.2 cm. ,width 7.2cm. The lamp has two holes, one of them is the filling-hole and the second is the wick hole (Fig.12 c).

3- No.538, 'frog' type lamp⁴⁵, white pottery, oval body, 'pear'-shaped body, no projection to nozzle⁴⁶, with a frog sculpture on

³⁸ Moldmade lamps: Lamps usually made in a two-piece mold (matrix). Fitch and Goldman, *Cosa: The Lamps*,254.

³⁹Nozzle: The projection of a lamp to hold the wick, which extends down into the oil reservoir. Fitch and Goldman, *Cosa: The Lamps*,254.

⁴⁰ Compare: D.M.Bailey, 'Lamps from the Sacred Animal Necropolis, North Saqqara, and the Monastery of Apa Antinos' : *JEA* 87(2001),124,pl.XVI(7);Revise:F. W.

Robins, 'Graeco-Roman Lamps from Egypt': *JEA* 25, No. 1(1939),50.

Cosa: The Wick hole: The hole in the nozzle to accommodate the wick. Fitch and Goldman, ⁴¹ Lamps, 255.

⁴²F. W. Robins, *JEA* 25, 49.

⁴³ 'It was found two kinds of frog type lamp in ancient Egypt, the first has a frog sculpture upon its top, the second hasn't frog sculpture, but the later kind of lamp likes frog shape' Compare: Bailey, *JEA* 87,128-129,pl.XVIII(19,23-24).

⁴⁴ Compare: Robins, *JEA* 25, No. 1,51.

⁴⁵Compare: Bailey, *JEA* 87,128-129,pl.XVIII(19,23-24).

⁴⁶ Compare: Robins, *JEA* 25, No. 1,51.

top, the base ⁴⁷ decorated with floral motifs, length 7.3 cm. width 5.6 cm. The lamp has two holes, one of them is the filling-hole and the second is the wick hole. It was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.12 d)

4- No.539, 'frog' type lamp⁴⁸, white, grayish pottery, oval body, 'pear'-shaped body, very little projection to spout⁴⁹, with a frog sculpture on top, the base has a rang of decorative floral motifs, length 8cm., width 6.2cm. The lamp has three holes, one of them is the filling-hole, the second is the wick hole and the third maybe is the air hole⁵⁰. It was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.12 a)

5- No.540, 'frog' type lamp⁵¹, grey pottery, oval body, 'flask'-shaped body, no projection to nozzle⁵², with a frog shape on the top, the base has a rang of decorative floral motifs, length 7.7cm., width 5.8cm. The lamp has two holes, one of them is the filling-hole and the second is the wick hole. It was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.12 b)

6- No. 541, 'frog' type lamp⁵³, red pottery, oval body, 'pear'-shaped body, very little projection to spout⁵⁴, with a frog shape on top, length 7.3cm. width 6cm. The lamp has two holes, one of them is the filling-hole and the second is the wick hole. (Fig.14 a).

⁴⁷Base : The bottom of the lamp, flat or raised on a ring. Fitch and Goldman, *Cosa: The Lamps*, 252.

⁴⁸Compare: Bailey, *JEA* 87,128-129,pl.XVIII(19,23-24).

⁴⁹ Compare: Robins, *JEA* 25, No. 1, 51.

⁵⁰ Air hole : A tiny hole near the juncture between the discus and the nozzle. Whether it was designed to admit air, however, has never been determined. Fitch and Goldman, *Cosa: The Lamps*,252.

⁵¹Compare: Bailey, *JEA* 87,128-129,pl.XVIII(19,23-24).

⁵² Compare: Robins, *JEA* 25, No. 1,51.

⁵³Compare: Bailey, *JEA* 87,128-129,pl.XVIII(19,23-24).

⁵⁴ Compare: Robins, *JEA* 25, No. 1,51.

7- No.542, 'frog' type lamp⁵⁵, white pottery, oval body 'flask'-shaped body, no projection to nozzle⁵⁶, with a frog shape on top, the base has a rang of decorative floral motifs ,length 7.1cm. , width 6cm. The lamp has two holes, one of them is the filling-hole and the second is the wick hole. It was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.13 a)

8- No.543, 'frog' type lamp⁵⁷, white pottery, oval body, 'pear'-shaped body, very little projection to spout⁵⁸, with a frog sculpture on top, the base decorated with floral motifs ,length 8cm. , width 6.9cm. The lamp has two holes, one of them is the filling-hole and the second is the wick hole. It was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.13 c)

9- No.544, white pottery lamp, oval body, 'pear'-shaped body, no projection to nozzle⁵⁹, length 8.3cm. , width 6cm. it decorated with floral and geometrical motifs, among them two palm branches. Lamps with same decoration are sometimes called relief lamps⁶⁰. The lamp has two holes, one of them is the filling-hole and the second is the wick hole. It was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.13 d)

10- No.545, white pottery lamp, oval body, it has a raised ridge was used as an ear⁶¹ or a handle, length 7.3cm. , width 5.9cm. height 4.7 cm. The lamp has two holes, one of them is the filling-hole and the second is the wick hole. The filling hole is small and surrounded by pronounced rim I t was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.11 a)

⁵⁵Compare: Bailey , *JEA* 87,128-129,pl.XVIII(19,23-24).

⁵⁶ Compare: Robins, *JEA* 25, No. 1,51.

⁵⁷Compare: Bailey , *JEA* 87,128-129,pl.XVIII(19,23-24).

⁵⁸ Compare: Robins, *JEA* 25, No. 1,51.

⁵⁹ Compare: Robins, *JEA* 25, No. 1,51.

⁶⁰ Fitch and Goldman, *Cosa: The Lamps*, 254.

⁶¹ Ear: A small decorative element like a tiny handle added on one or both sides of the oil reservoir. Ears vary in shape and decoration. Fitch and Goldman, *Cosa: The Lamps*, 253.

11- No.546, red pottery lamp, it is in the form of a fish, short nozzle, length 10.9cm. , width 7.6cm. The lamp has two holes, one of them is the filling-hole and the second is the wick hole. The fish that the lamp took its shape has been identified as Nile perch ' bolti ', a species that carried its eggs in its mouth and spit out its offspring when they hatched. It was therefore a common symbol for birth and regeneration, especially the sort of self-generation.⁶² Hence, maybe this lamp was used as a magical power to ensure rebirth of the deceased. The lamp was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.11 c)

12- No. 547, red pottery lamp, oval body, no projection to nozzle⁶³, it has a raised ridge was used as an ear or a handle, length 7.8cm. , width 5.5cm., around the small filling hole are three ridges. The area around the wick hole is smoky; it means that the lamp was used before for illumination. It was found in Tuna el-Gebel, dating to the Coptic period, (fig.14 d)

13- No. 548, red pottery lamp, oval body, 'pear'-shaped body, no projection to nozzle⁶⁴, length 5.5 cm. , width 4.7cm. The lamp has two holes, one of them is the filling-hole; it is a small and surrounded by a decorated discus, and the second hole is the wick hole. It was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.15 c)

14- No.549, 'frog' type lamp⁶⁵ white pottery ,oval body, length 7.3cm. ,width 5.2cm. , it decorated with floral motifs and two roses upon its upper surface. This lamp had two palm branches on its top, which are extending to encircle the filling-hole area. The palm branch which is depicted on the 'frog' type lamps is a symbol of the

⁶²M.Stokstad and others, *Art History*, I,(NewYork,1995),121.

⁶³ Compare: Robins, *JEA* 25, No. 1,51.

⁶⁴ Compare: Robins, *JEA* 25, No. 1,51.

⁶⁵Compare: Bailey , *JEA* 87,128-129,pl.XVIII(19,23-24).

beginning of human life,⁶⁶ or rebirth, as in the case of the frog which had a palm branch engraved upon its back. The lamp has two holes, one of them is the filling-hole and the second is the wick hole. The area around the wick hole is smoky; it means that the lamp had been used during the deceased's life. It was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.12 e)

15- No.550, burned pottery lamp, circular body in the form of a dish, a cup was fixed in the middle of this dish to hold the wick and to contain oil or fat which was used for illumination. The area around the central well is smoky; it means that the lamp had been used during the deceased's life. The lamp has a horizontal handle, height 4 cm. diameter 9cm. Many of its parts are missed or broken. It was found in Tuna el-Gebel, dated to the Islamic period, (fig.14 b), and it resembles some of old Egyptian lamps.

16- No.551, red pottery lamp, circular body, with a horizontal handle in its top, height 5.5 cm. diameter 7.1cm. The lamp has two holes, one of them is the filling-hole and the second is the wick hole. The lamp's body was decorated with crosses. This lamp has Greek letters such as E, Γ, I, C=Σ and N. Those letters maybe refer to the initials of the dead person, to whom the lamp was dedicated. Also there are crosses carved upon its upper surface. The area around the wick hole is smoky; it means that the lamp had been used during the deceased's life. It was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.11 b)

17-No.552,'frog' type lamp⁶⁷, red pottery, nearly circular body,'flask'-shaped body, very little projection to spout⁶⁸,with a frog sculpture on the top,diameter5.2.The lamp has two holes, one of them is the filling-hole and the second is the wick hole.(Fig.15 d).

⁶⁶ G.Wilkinson ,*The Manners and Customs of the Ancient Egyptians* ,v,3rd.ed.(London, 1847)247.

⁶⁷Compare: Bailey , *JEA* 87,128-129,pl.XVIII(19,23-24).

⁶⁸ Compare: Robins, *JEA* 25, No. 1,51.

18- No.553, red pottery lamp, oval body, it has a horizontal handle and short nozzle,, length 7.1 cm., width 6 cm. The lamp has two holes, one of them is the filling-hole and the second is the wick hole. The filling hole is small and surrounded by an undecorated discus with outer circular edge. The filling hole was formed during preparation of the lamp and not by breaking the discus. It was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.14 c).

19- No.554, a buff- red pottery lamp, oval body, it has a horizontal handle, length 9.5cm. , width 6.4cm, some of its parts are missing .The lamp has two holes, one of them is the filling-hole and the second is the wick hole. The filling hole is small and surrounded by an undecorated small, slightly sunken discus; it was formed during preparation of the lamp and not by breaking the discus. It was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.15 b)

20- No.555, red pottery lamp, in the shape of a jug (the mold made 'Jug' lamp)⁶⁹, it has a horizontal handle, length 8.4cm. , width 6.4cm. some of its parts are missed. The lamp has two holes, one of them is the filling-hole and the second is the wick hole. The area around the wick hole is smoky; it means that the lamp had been used during the deceased's life. The filling hole is large and surrounded by raised ridge turns to out. It was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.15 a).

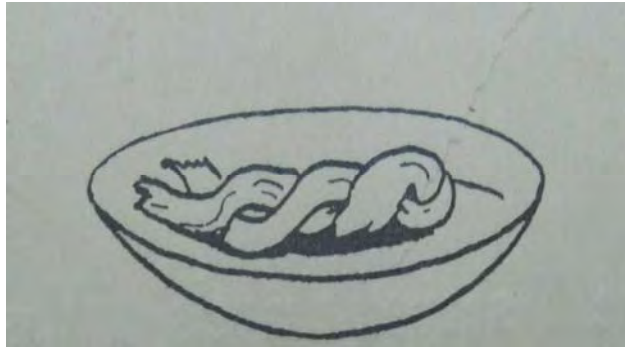
21- No.556, red pottery lamp, oval body, length 8.8cm. , width 5.5cm. The lamp has a horizontal handle⁷⁰ and two holes, one of them is the filling-hole and the second is the wick hole. The filling hole is small and surrounded by an undecorated small, slightly

⁶⁹ Revise: Baily , 'Reviews ' : *JEA* 71(1985),59.

⁷⁰ Compare this type with that of the New kingdom period. Revise: A.Radwan, *Die Kupfer-und Bronzegefäße Ägyptens von den Anfängen bis zum Beginn der Spätzeit*,169,Taf.83(478).
Handle: The vertical or horizontal attachment, usually placed opposite the nozzle, by which a lamp can be grasped. Fitch and Goldman, *Cosa: The Lamps*, 253.

sunken discus⁷¹. The filling hole was formed during preparation of the lamp and not by breaking the discus. It was found in Tuna el-Gebel, dating to the Greco-roman period, (fig.13 b)

The figures.



(Fig.1) An OK small copper lamp in the form of a simple bowl or a dish was found at Saqqara with its wick.

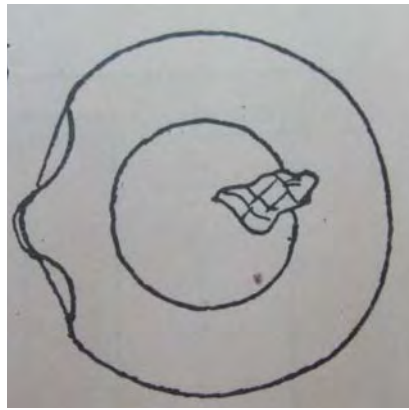
A.Radwan, Die Kupfer-und Bronzegefäße Ägyptens von den Anfängen bis zum Beginn der Spätzeit,(München,1983),58-60,Taf.28(147a);C.M.Firth and B.Gunn, Teti Pyramid Cemeteries ,I,(LeCaire,1926),34,Fig.37.



(Fig.2) A similar copper lamp of the same period has three metal strips that were apparently intended to hold a wick in place.

Radwan, Die Kupfer-und Bronzegefäße Ägyptens von den Anfängen bis zum Beginn der Spätzeit, 60-61,71,Taf.28(152)G.Jèquier, Tombeaux de Particuliers Contemporains de Pepi II, (LeCaire,1929),82,Fig.92.

⁷¹ Discus: The area, usually round, covering the oil reservoir partially or completely. It may be large or small, flat, concave, or recessed, plain or decorated. The concave surface on wide discus lamps was usually embellished with the discus relief. Fitch and Goldman, *Cosa: The Lamps*, 39,253.



(Fig.3) A pottery lamp in the form of a simple dish was found at Saqqara, dating to the OK.

Firth and Gunn, Teti Pyramid Cemeteries ,I, 31-32, Fig.32(6).



(Fig.4) A more massive limestone hollow cup made of stone to contain a pottery lamp, with its outer channel, from El- Lahun, dating to MK.

G.Bruton, Lahun, I, The Treasure, (London,1920),13, Fig.20.



(Fig.5) Many interesting limestone and pottery lamps were found at El- Lisht and El-Lahun dating to the MK, some of which resemble lamps of the Greco-Roman period.

W.C.Hayes, *The Scepter of Egypt*, I, (New York, 1953), 261, Fig. 167.



(Fig.6) A red pottery lamp. It has the form of a dish, with an inner ring enclosing a central cup, dating to the NK.

R.Anthes, *Mit Rahineh 1955*, (Philadelphia, 1959), 30, Fig. 18d.



(Fig.7) A compound 'dish-lamp' was produced in red pottery down to the NK. This lamp was found in 1935 in Deir El Medineh. In this lamp the area which surrounded the central well is divided to three parts.

B.Bruyère, 'Rapport sur les Fouilles de Dier El Mmèdineh (1934-1935)', pt.3, in *FIFAO, XVI*, (LeCaire, 1939), 271, fig. 143.



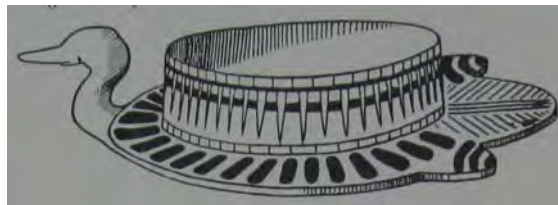
(Fig.8) A lamp of chalice form upon a disk carved out of translucent calcite, its chalice-like cup was designed to hold the oil and a floating wick. It is flanked with ornaments symbolizing 'Unity' and 'Eternal life', on each side is the name of Tut-ankh-amen.

H.Carter, The Tomb of Tut-ankh-amen,II,(New York,1963),Pl.XLV.



(Fig.9) A triple-lamp of floral form, carved out of a single block of translucent calcite. In design it includes three oil cups with stems and lotus leaves springing from a circular base.

Carter, The Tomb of Tut-ankh-amen, II, 31, 226, Pl. XLVII.



(Fig.10) unusual form of a lamp dating to the NK, it is a terra-cotta lamp in the shape of a duck.

Bruyère, 'Rapport sur les Fouilles de Deir El Mèdineh (1934-1935)', 330-331,fig.203.



(Fig.11)

a- Left above no.545, white pottery lamp, oval body, with a raised ridge was used as an ear or a handle.

b- Right above no.551, red pottery lamp, circular body, with a horizontal handle in its top.

c- Left below no.546, red pottery lamp, it is in the form of a fish.

d- Right below no.536 white pottery lamp, circular body (Mold made lamp: double-convex body), short Splayed nozzle .It was found at Tuna el-Gebel, dating to the Greco-roman period.

published for the first time. (The author).



(Fig.12)

a- Left above no.539, 'frog' type lamp, white - grayish pottery lamp, oval body, 'pear'-shaped body.

b- Right above no.540, 'frog' type lamp, grey pottery lamp, oval body, 'flask'-shaped body, no projection to nozzle.

c- Left middle no.537, 'frog' type lamp, white pottery, oval body, 'flask'-shaped body. It was found at Tuna el-Gebel, dated to the Greco-roman period.

d- Right middle no.538, 'frog' type lamp, white pottery lamp, oval body, 'pear'-shaped body. It was found at Tuna el-Gebel, dating to the Greco-roman period.

e- Below no.549, white pottery lamp, 'frog' type lamp, oval body.

published for the first time. (The author).



(Fig.13)

a- Left above no.542, 'frog' type lamp, white pottery, oval body 'flask'-shaped body, no projection to nozzle.

b- Right above no.556 red pottery lamp, oval body .The lamp has a horizontal handle.

c- Left below no.543,'frog' type lamp, white pottery, oval body, 'pear'-shaped body.

d- Right below no.544, white pottery lamp, oval body, 'pear'-shaped body, no projection to nozzle.

published for the first time. (The author).



(Fig.14)

a- Left above no.541, 'frog' type lamp, red pottery, oval body, 'pear'-shaped body.

b- Right above no.550, burned pottery lamp, circular body in the form of a dish, a well or a cup was fixed in the middle of this dish to hold the wick and to contain oil or fat which was used for illumination. it has a horizontal handle. It was found in Tuna el-Gebel, dating to the Islamic period, and it resembles some of old Egyptian lamps.

c- Left below no.553, red pottery lamp, oval body, it has a horizontal handle and short nozzle.

d- Right below no.547, red pottery lamp, oval body, no projection to nozzle, it has a raised ridge was used as an ear or a handle.

published for the first time. (The author).



(Fig.15)

a- Left above no.555, red pottery lamp, in the shape of a jug (the mold made 'Jug' lamp), it has a horizontal handle.

b- Right above no.554, a buff- red pottery lamp, oval body, it has a horizontal handle.

c- Left below no.548, red pottery lamp, oval body, 'pear'-shaped body, no projection to nozzle.

d- Right below no.552, 'frog' type lamp, red pottery, oval body, and 'flask'-shaped body, very little projection to spout.

published for the first time. (The author).