# Images of Leather-workers as Sandal-maker from the Old Kingdom to the New Kingdom Abdallah Mohammed Daib

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#### Abstract

This paper discusses leather-workers making sandals from the Old Kingdom to the New Kingdom, as a hand-made craft disrespected in ancient Egyptian society, although the workshop produced a perfect made sandals used by all the pharaohs and high officials. The worker in leather and sandal-maker was identical where leather-workers Tbw referring also to "sandal-maker," and Sandal-makers term used for leather worker in general. The workshop of leather worker making sandals was rarely depicted in ancient Egyptian tombs in comparison with other crafts, although tombs' scenes recorded that sandals were made inside the leather workshop, so no sandal made of plant fiber or papyrus has been shown. The paper also describes the hardship of working conditions of this craft which led to portray the craft as a humble and misery profession by Egyptian society. Some letters records the assignment of animal skins to sandal-maker from the regular daily sacrifice inside the temple. it also reflected a link between good quality of leather and sandal maker. Various Egyptian literature texts connected the hardship and misery life of sandal-maker with the leather worker.

**Keywords**: Sandal, sandal-maker, leather, tools, papyrus, workshop, footwear.

#### **Previous studies**

Previous studies indicate that most of the studies concentrate on footwear or sandals rather than the sandal-maker, maybe due to the abundance and varieties of sandals in ancient Egypt, and the rare data available concerning the sandal-maker. However most of previous studies do not take into account the man behind this production and the working conditions without further detailed. Several publications have appeared in recent years documenting sandals without more information about the maker. The most interesting approached to the issue of sandals conducting on Tutankhamun's footwear (Veldmeijer, 2011) and the second work is to the same author (Veldmeijer, 2014) dealing with footwear. Some studies dealing also with sandals in the context of ancient Egyptian handicrafts as a whole, such as (Nicholson and Shaw, 2000), (Lucas and Harris, 2012) and the study of (Scheel, 1989) about metalworking and tools.

The purpose of this paper is to highlight the role of the leather-workers as a real sandal-makers represented in the tombs' scenes inside their workshop from the Old Kingdom to the New Kingdom, and the ancient Egyptian term of sandal-maker which referring mainly to leather-worker it also described the leather-worker's tools and working conditions.

## **Introduction:**

Much research on sandal has been done, but the current research on sandal maker is focused on leather workers as the main workforce behind this craft, supported by the evidence on tombs' scenes and literature. Leather sandals are known from as early as the Predynastic period and were often made of animal hide (unprocessed skin) cut in such a way that base straps were made all from the same piece, and leather sandals might even be further decorated by dyeing the natural material (Peck, 2013: p. 66; Andreu, 1997: p. 71; Gabriel, 2007: p. 40). The first evidence in

ancient Egypt for "leather of hide" dhr occurs in Neolithic graves of the Badarian period (Stocks, 2001: P. 282), and at the Predynastic cemetery of Mostagedda, the sandals were made from goat skin. (Nicholson, & Shaw, 2000: pp. 312-313; Forbes, 1966: p.24; Faulkner,

1964: p. 315). Certainly, footwear was not worn by much of the ancient Egyptian population (Foster, 2010: p. 66).

An illustration in the 5<sup>th</sup> dynasty tomb of Ti at Saqqara depicts sandals being offered for sale. Sandal-maker's workshop is shown in the 12<sup>th</sup> dynasty tomb of Amenemhet at Beni Hasan in Middle Egypt. One of this nomarch's titles, "Overseer of Horns, Hooves, Feathers, and minerals," probably indicates a responsibility to collect leather taxes for the government (Stocks, 2001: P. 283) At *El-Lahun*, old sandals made from leather, once they had worn out were apparently recycled; in some of the houses they were placed in the sockets to raise the surface of the doors (David, 2003: p. 335). In most cultures, the most common leather artifact is footwear, although in pharaonic Egypt fiber was more frequently used for this purpose (Nicholson & Shaw, 2000: p. 2013; Brier & Hobbs, 2008: fig. 140). However leatherworking is depicted in private tombs dated from the 5<sup>th</sup> to the 26<sup>th</sup> dynasty at Giza, Saggara, Deshasheh, Beni Hassan, and Thebes. (Stocks, 2001: P. 283; Nicholosn, & Shaw, 2000: p. 299). The tomb paintings show the whole process; how the skins soaked, then taken out and dried. The skin is then pulled forward and backwards over a blade of wood or metal set in a stake. When dries cut into pieces for making sandals (Forbes, 1966: p.24). Generally, Sandals seem to have been made in the leather workshop. Although fiber sandals are sometimes shown in the storage facilities seen in these scenes, the production of fiber footwear is never shown, therefore, it might have been a household activity (Veldmeijer, 2014: pp. 18-19).

# The terminology of sandal

Various terms were known in ancient Egyptian language, referring to sandals and ended with determinatives represented pair of sandals. The following table demonstrates these terms.

Table 1: Ancient Egyptian terms of sandal

Egyptian term	Transliterate	Meaning	Sources
	inw	Sandal	
	wxAti	Pair of sandal or shose	Budge, 1920: pp. 60, 105 ff; Helck and Otto, 1984:pp. 379 ff)
	kbw		
	Tbw		
	tbty	Pair of sandal	Budge, 1920: pp.793, 826 ff; Erman & Grapow, 1971: 361; Helck and
	tiw		Otto, 1984:p. 379 ff
	tiwy		

## **Leather- workers as sandal-maker**

The ancient Egyptian expresses different ways of sandal-maker like Tbw, or "Sandal-maker", or "worker in leather" (Gardiner, 2007: 601; Budge, 1920: pp. 327, 827,854), and Tbw, "Sandal maker" (Faulkner, 1964: p. 304), and imy-r Tbw "overseer of Sandal-maker" (Ward, 1982: 417/53).

"Overseer of Sandal-maker" (Jones, 2000; 963/268; Fischer, 1997: p. 50; Helck & Otto, 1984: p.

379 ff). As for local lo

may have been the center of a leather industry, *Heka-nefer* bore the title may be may have been the center of a leather industry, *Heka-nefer* bore the title maker. Thus ny-swt, "king's sandal maker" (Trigger, 1996: p. 806; Budge, 1920: 853). In Thebes, a district of the town of *Deir el-Medina* was assigned to the leather cutters (Wilkinson, 1857: p. 114). Texts only mention the title "sandal-maker" without further qualification, regardless of whether the person is producing sandals of plant fiber or leather. It has been suggested that the term 'sandal-maker' might be a term used for leatherworkers in general (Veldmeijer, 2011: p.201).

Two texts from the Middle Kingdom administration of the pyramid temple of Senwosret II at *El-Lahun*. Both connecting leather with sandal-maker. The first address the name of the Scribe of the Temple, Horemsaef; "Year 4, IV shemu, day 14 (?). Have a cow-hide fetched, being of good quality! Now it is to be (fit) for this purpose! Now, I have sent the sandal-maker Hetepi for it, so you are to give (it) to him!" The second text is written into the temple day-book: "Copy of (letter sent) from Hetep-Senwosert, where the sandal-maker Sankkhptah's son Werenptah brought: 'a cow-hide or else a sheepskin fetched! You are to give it to the sandal-Maker Werenptah, and put it in writing!' a cow-hide was given to this sandal-maker."(Eyre, 2013: P. 99). A request in a letter delivered to one of temple scribe said: "Let there be brought a hide of an ox or a hide of a goat. You (are) give it only to the sandal-maker Ptahwerren." (Uljas, 2007: P.319).

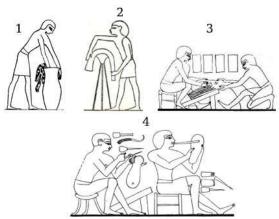
Leather-workers, using hides mainly from cattle, gazelles, and goats (Janssen, 1999: p. 189). The manufacture of sandals from this material is one of the operations represented in the tombs of *Beni Hassan* (Kenrick, 1850: p.248). Major temples in ancient Egypt had ready access to cow skin in the form of ritual slaughter, and it is therefore not surprising to find them supplying the leather for the sandals (Veldmeijer, 2011: p. 201). Letters and daybooks from the Middle Kingdom temple at *El-Lahun* record the assignment of animal skins to sandal-makers from the regular daily sacrifice inside the temple (Lloyd, 2010: p. 300). The leather-workers in the tomb-paintings were seen in their workshop as professionals with a skilled process (David, 1996: p. 245).

There is a link between good quality of leather and sandal manufacture, reflecting by a letter of the late New Kingdom from a scribe called *Hormin*, writes to a fellow scribe *Maanakhtef*, wishing that he "attain a long life and a great old age, being a great sandal-maker forever, and possessing good leather and large bright hides." (Veldmeijer, 2011: p. 201). Scenes from the Old Kingdom tombs show various stages in the leather working process, such as depilation, cleaning, and softening of the skin or to immerse it in a tanning substance. Other scenes show skin being stretched over a trestle table, cutting the skins, and making sandals and leather rope (fig.1) (David, 2003: 335; Gosse, 1847: fig.332; Osburn, 1846: pp. 192-193). Such sandals were produced in quantity for both genders (Brier, B. & Hobbs H. 2008: p. 141).

Sandal making, represented in various tombs' scenes and evidenced by surviving examples of footwear from, for example, the tomb of Tutankhamun, the town of *El-Lahun* and in the Tomb of *Rekhmire* at Thebes (Dynasty 18) (David, 2003: p. 335). Titles, such as 'Overseer of the Sandal

Makers' in general, suggest a continuous supervision of the work daily, but it is not mentioned what type of sandals were made and what they were made for (Veldmeijer, 2014: p. 19). Middle Kingdom expedition inscriptions record sandal-makers as part of the crew, as well as "donkeys laden with sandals" certainly from leather, as part of their provisions to replace the men's worn footwear (David & David, 2003: p. 116). The title "overseer of sandal-makers" imy-r Tbw suggests a degree of formal organization, perhaps along the lines attested for other types of craftsmen like goldsmiths and Carpenters. Administrators like the "overseer of sandal-makers of the temple of Amun" or "overseer of sandal-makers in the temple", would presumably have been in charge of the day-to-day management of the workshops (Veldmeijer, 2011: p. 200). Sandal-making can also be seen in tomb-paintings, where Beni Hasan gives nearly contemporary evidence of a Sandal-maker's workshop. Especially in the tomb of Amenemhet (no.2), Governor of the Oryx Nome (David, 1996: p. 245).

Fig. 1 Phases of making leather sandal



(1)Soaking skins (2) pulled over a blade of metal (3) cut skins into pieces (4) making sandals (Details from the tomb of Aba (1), tomb of Rekhmire 1, 2-4)

The majority of individuals dedicating the stelae with anthropomorphic images of Amun-Re are connected in some way to the temple or estate of Amun one of them was the Sandal-maker of Amun, Amenemhat (Karen, 2006:p. 141), like the tomb (No 70) usurped by *Amenmosi*, Overseer of Sandal-maker (?) of the state of Amun, from 21<sup>st</sup> Dynasty at *Shiekh Abd el-Qurna* (Porter, & Moss, 1972: pp.139, 788, 807). *Paabunakhte* and his colleague *Ashaket* (?) who are listed as "sandal-makers of the mortuary temple of Ramesses III" in the tomb-robbery papyri (Veldmeijer, 2011: p. 200).

A rare painted wooden statuette from *Beni Hasan* now in the National Museum of Scotland, depicting a leather-maker while making a sandal. This statuette dates back to the Middle Kingdom (Tooly, 1989: p. 62). Although the misery life of sandal-makers, one of them seems to have a comfortable life that he owned a farm deserved a tax payment (Gardiner, A. H (1941: p.52).

#### Sandal's makers' stelae

Ancient Egyptian sources recorded more than once, sandal-makers' stelae dedicated to various gods, without any reliefs represented their work. A round-topped stela of *Yipu* Head of sandal-makers of the Lord of the Two Lands during the Middle Kingdom (Lacau, 1926: p. 149-50, pl. XLVII), and a stela of *Renefsonb*, Overseer of Sandal-makers, from 12<sup>th</sup> Dynasty, Florence,

Museo Archeologico (No. 7598) (Porter & Moss, 1972: p. 804), another stela of *pay'a*, sandal maker, and two songstresses before *Osiris-mes*, in Cairo Museum (Porter & Moss, 1971: p. 53). From Hanover, Kestner Museum [No. 1935. 200.106] *Sa-Imen* son of *Tetisene*b, a Theban woman from 17<sup>th</sup> Dynasty, bear the title "Royal Sandal-maker and Doorkeeper" (Rice, 2004: p. 203; Porter & Moss, 1972: p. 788), a Round-topped stela belongs to *Nebamun*, Royal sandal-maker, accompanied by mother and small son, in adoration before seated Osiris (18<sup>th</sup> Dynasty) (Aldred, 1951: p. 63, pl. 69), and a stela dedicated to Amun-Re and Ptah by *Amenemhat* the Sandal Maker of Amun (Porter, & Moss, 1964: p. 812).

A rectangular stela with the triangular summit and offering basin of Sandal-maker *Tutu* and his family, in adoration before seated Osiris. Now in London, British Museum [No.549] (Egyptian Galleries, 1909:549, Pl. XXII; Edwards, 1939: p. 42, Pl. XXXVI), and a round-topped stela, belongs to *Huy*, the sandal-maker with his family before seated Osiris (19<sup>th</sup> Dynasty), in British Museum [No. 631] (James, T.G.H (1970: p. 66, Pls. 1 [2], IA [2]; Egyptian Galleries, 1909: 175 [631].

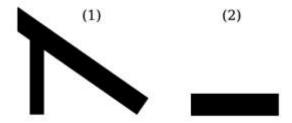
Fig. 2 sandal-maker tools

1) Awl 2) Half-moon knife 3) Metal blade 4) Burnisher 5) Comb 6) Needle



Based in the painted scenes in the tomb of Rekhmire and other tombs Fig. 3 Tablets for making sandals

1) Sloping work table 2) wooden frame



Based in the tomb of Rekhmire and other tombs Fig. 4 Chairs of Sandal-maker

1) Block chair 2) Three-leg chair 3) Four-leg chair (1) (3)

Based in the tomb of Rekhmire and other tombs

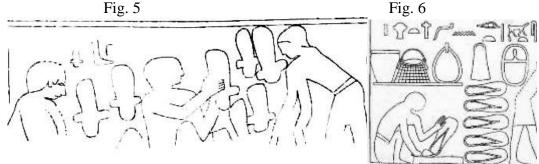
## **Leather-worker's tools**

Metal tools suitable for leather-working do occur in early Dynastic graves (Nicholson, & Shaw: 2000: 308) these tools are depicted in the wall paintings and reliefs of private tombs from the Old Kingdom to the Late Period, (Scheel, 1989: p. 54). The illustrated tools included the half-moon knife, awl, piercers, and a comb type tool used for stripping the flesh off a hide like that illustrated in the tomb of *Rekhmire* (fig.2). At *El-Lahun* the excavators discovered Sandal-maker's tools; a bone awl, and copper piercers (David, 2003: p. 335; Lucas & Harris, 2012: p. 35). Also, a metal comb for "graining" the leather (Gosse, 1847: p. 334). Generally, the well-known tools used by leather-workers or sandal-makers consisted of, beside knives with broad and narrow edges, an awl, a marlinspike and a horn for enlarging holes, a comb to prick the holes for the seam, and a green stone for smoothing out the work (Davies, 1943: p. 50).

These instruments were exactly similar to tools still used today. Three thousand years and upwards have made little or no alteration (Osburn, 1846: p. 200; Lucas, and Harris, J.R (2012: p.35). The leather-cutting knife consists of a blade and a wooden handle. The copper or bronze blade was inserted into a round handle. Knives with a T-shaped and broader blade are also known during the New Kingdom (Scheel, 1989: p. 54). Finally, a trestle table where the skin

being stretched over it was called msqt, or msqt, or msqt n Tbw, "tablet of the sandal-maker" (Budge, 1920: p. 325; David, 2003: p. 335; Gosse, 1847: 332) (fig.3). The workshop of the sandal-maker contains also three of small chair used by the sandal-maker, and displayed more than once in the tomb's paintings of Rekhmire and other tombs (fig.4).

Fig. 5-6 workshop of sandal-maker – tombs of Anta [5] and Shedu [6]



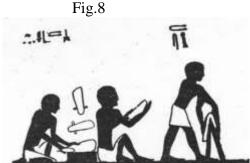
After: Petrie, 1898: Pl. XIII After: Petrie, 1898: Pl. XXI

## **Leather-worker's workshop**

Leather, throughout Egypt's history, was manufactured mainly from the skins of calfs, gazelles, goats, and sheep (Stocks, 2001: P. 282). The workshops necessary to produce large numbers of sandals would presumably have been associated with major institutions like temples and palaces. The detailed depictions of the workshops of the great temple of Amun at *Karnak* and in the tomb of *Rekhmira* at Thebes (No. 100) show a degree of organization of craftsmen, including Sandalmakers (Veldmeijer, 2011: p. 200). Evidence from earlier periods suggests that temples of more moderate wealth and status employed the services of sandal-makers who were not part of the temple staff themselves (Veldmeijer, 2011:200). The artist has distinctly pointed out the nature of the substance they employed, by figuring an entire skin, and the soles of a pair of shoes, or sandals, suspended in the shop (Birch, 1878: p. 233).

Figs. 7-8 workshop of sandal-maker – tombs of Aba [9] and Baqt III

Fig. 7



After: Bouriant, 1894, Pl.3: fig.3

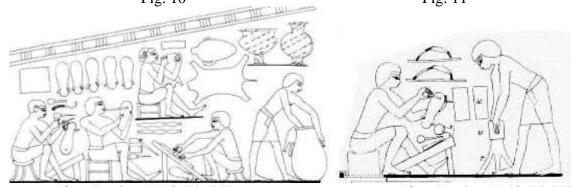
After: Newberry, 1893: PL. IV

Fig. 9 sandal-makers in the tomb of Amenemhet



After: Newberry, 1893: pl. XI

Figs. 10-11 leather and sandal maker during their work-tomb of Rekhmir Fig. 10 Fig. 11



After: Davies, 1943: Pl. LII

After: Davies, 1943: Pl. LIII

The following are scenes of sandal-maker on leather workshop dated back from the Old Kingdom to New Kingdom. In the tombs of *Anta* and *Shedu* at the 5<sup>th</sup> Dynasty cemetery of *Deshasha*. The scenes at Deshasha reveal that the Sandals are made of one or more layers of skin (usually cow-hide) (Nicholson, & Shaw. 2000:313-314). In the tomb of *Anta* (5<sup>th</sup> dynasty), two sandal-makers, and a man preparing a piece of skin. (fig. 5), while in the tomb of Shedu (5<sup>th</sup> dynasty), one scene displayed the preparation of leather, and sandal-making. Above a short text;

THst "leather" and irt nDt Hr "making gifts" (fig. 6). (Petrie, 1898: pp.8, 10, Pls. XIII, XXI; Dasen, 2013: p. 119: Faulkner, 1997: P.144). In the tomb of *Aba* at *Assassif* (5<sup>th</sup> dynasty), leather craftsmen working on sandals, one of them is stretching skin

around a frame, before him a man holding a pair of sandals. A short text above said:

tHs Tbw "leather sandal" (fig. 7) (Bouriant, M.U. 1894: 635, pl. 3, fig.3; Budge, 1920: p. 859). Similarly, in the tomb of *Baqt III* (No.15) at Bani Hasan (11<sup>th</sup> dynasty), two men working on sandals, above them a word of Tbw, "sandal-makers" before them a man stretch a piece of skin around a frame, and a word THs "skin or hide" (fig. 8) (Newberry, 1893: Pl. IV; David, 1996: p. 245; Klebs, 1922: Abb. 87). The tomb of *Ib* at *El-Saff* (11<sup>th</sup> dynasty), a representation of a male offering bearer and some of their offerings, including a jar and two pairs of sandals (Fischer, 1996: p. 8).

Since the manufacture of sandals and leather straps would seem to have been very important to the tomb owners, these activities are depicted in the wall paintings and reliefs of private tombs from the Old Kingdom to the Late Period (Scheel, B. 1989: p. 54, fig. 59). At Beni Hasan the sandal-maker was seen in the workshop like the tomb of Amenemhet (No. 2) from the 12<sup>th</sup> dynasty, where three men was seen working in leather sandals. The finished sandals represented in the background. (fig. 9) (Newberry, 1893: pl. XI). Another scene from the same tomb, displaying the process of a finishing sandal (Carter, Blackden, Brown, & Bucckman, 1900: p. 9, Pl. XXVII). Rekhmire was represented in his tomb (TT 100) at luxor (18th dynasty). accompanied by forty attendants, "inspecting all the handicrafts [made in the temple the house of and teaching each man his duties concerning handicraft the occupation."(Newberry, 1900: p. 35; Virey, 1889: pl. XIII-XV).

The Scenes in the tomb of *Rekhmire* (TT 100), sumrize the steps of making sandals where the hide (unprocessed skin) being taken from a pot or a large jar, where it had been softened or tanned. The skin was further prepared as men beat it with a stone and then stretched it over a wooden frame to make it supple. Next, the Sandal-maker put the prepared leather on his sloping worktable and cut it into soles or straps, using a knife. Then, using a piercer he made holes in the skin through which the thongs would be drawn. The workman pulled these through with his teeth and fastened them with knots, thus producing the simplest form of sandal (fig. 10) (Davies, De G. 1943: Pl. LII, David, R. 2003: p.335). Another leather-worker were seen indulging in an operation of making sandals, and the finished sandals are displayed in the background (fig.11). (Davies, De G. 1943: p. 50, Pls. LII-LIII). A painted scene showing two leather-worker while cutting up a skin on a sloping board, while four piece of skin were displayed above and the process of tanning the skin was underway by another man standing behind them. At the far right, there were two kinds of sandals, one which is displayed both in side view and in plan, and a fancy sort in which the latchet is given the form of a fish. (fig.12) (Davies, De G. 1943: pp.49-50, Pl. LIV).

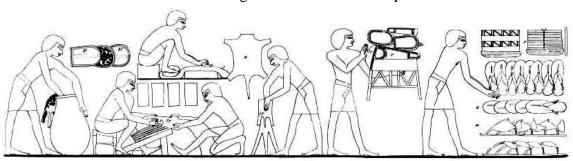


Fig. 12 A leather workshop

After: Davies, 1943: Pl. LIV

Sometimes huge numbers of sandals were among the offering lists, where the papyrus Harris recorded about 15,110 papyrus sandal (pair) and 3,720 leather sandal (pair) as an offering for the

new feasts founded by Ramses III to Amun-Ra. (Breasted, 1906:241/137). Many of these sandals found in the tombs are of most skillful workmanship and are decorated with painting or gilding, this indicate a tangible proof of the perfect competency of the Egyptian workmen. (Osburn, 1846: p. 200). There are several references to Sandal-makers in texts from or relating to the village of *Deir el-Medinah*, and these indicate a classification of such individuals as specialized craftsmen (Veldmeijer, 2011: p. 202).

## **Working conditions**

There are no contemporary accounts by sandal-makers themselves, and the few descriptions that survive are literary in nature, so the most of social status and living conditions of sandal-makers remain unknown. The sandal-maker mixes his odor stinks; his hands are red with dye, like one who is smeared with his own blood and looks behind him for the vulture, as a wounded man whose flesh is exposed (Veldmeijer, 2011: p. 202). One writer entreats his son to adopt the profession of letters, which he points out leads to rich fees, ease, comfort, and dignity, and he begs him to "love letters as thy mother." He then compares the toil and unpleasantness of the life of many craftsmen among them the sandal-maker and urges him to devote himself to his books (Egyptian Collections, 1909:p. 69).

A misery image always associates with sandal-maker as in the teaching of *Khaty*, the sandal-maker "is utterly wretched carrying his pots of grease and oil forever. His shop is filled with skins of animal deaths, and what he bites is leather" (Simpson, 2003:435/18; Wilkinson, 2016: p. 267; Foster, 2009: p. 18-19), and the sandal maker or leather-worker struggling in dirty and uncomfortable working conditions (Wilkinson, 2016: p. 263). Sandal-makers among other handcrafts were indulging in occupation for a prolonged length of time. This situation exposes the individual to the detrimental effects of repeated actions in specific environments and raises their susceptibility to the acquirement of occupation-related diseases. Occupations have the potential to impact on health in a direct or indirect manner, in terms of injuries or the development of more insidious weakness (Hebron, 2013: p. 159).

## Conclusion

Leather sandals are known from as early as the Predynastic period and were often made of animal hide (unprocessed skin). The worker in leather and sandal-maker was identical where Sandal-maker term used for leather worker in general. Many persons bearing a title of sandalmaker working at the same time in leather as "overseer of tanning", some of them belongs to Toshka east whish have been the center of leather industry, and in the town of Deir el-medina which also assigned to the leather cutter. Letters dates back to the Middle Kingdom at El-Lahun record the assignment of animal skins to sandal-maker from the regular daily sacrifice inside the temple. Letters also reflected a link between good quality of leather and sandal maker. Therefore, the production of fiber sandals is never shown. The great number of papyrus sandals compared with its counterpart made from leather recorded in Papyrus Harris, indicate the abundance of fiber sandals, although they never represented in tombs' scenes. Several tomb scenes displaying various stages of treating leather which finally led to making sandals by using leather metal and stone tools, which led to the conclusion that sandals have been made in the leather workshop. Scenes sumrize the whole process of making sandals as following: (1) takin the skin from a pot after tanning or softening. (2) The skin is then pulled forward and backwards over a blade of wood or metal set in a stake. (3) Cutting the skin into straps or sole. (4) the process of making sandal by leather-worker (sandal-maker) (Fig. 1). It also revealed that straps of skin ready for

making sandals are displayed and the final product of sandals is shown in the background (figs. 13, 14-15). The reliefs of sandal-maker were recorded on the tomb's walls fewer than other ancient Egyptian crafts. Moreover, Various Egyptian literature texts and teaching connected the misery life of sandal-maker with the leather worker.

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