Basketry accessories: footwear, bags and fans in ancient Egypt

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ABSTRACT

Ancient Egyptians had —by the New Kingdom— developed many basket making and matting techniques. These techniques were not only used for making all types and sizes of baskets and mats, but were also adopted for making other accessories such as bags, fans and different types of footwear, that seem to have been heavily used. Materials and techniques of nine objects consisting of 2 sandals, 2 shoes, 2 bags, 2 fans and a model of a mat at the Agricultural Museum in Giza were carefully studied.

In some cases the object was made of one plant, but in other cases more than one plant were identified. The materials used for making the different objects were identified using light microscope. Four plant materials were identified in the studied objects; Hyphaene thebaica Mart., Phoenix dactylifera L., Cyperus papyrus L. and Desmosachya bipinnata (L.) Stapf., in addition to a gypsum layer in one of the sandals. Five different techniques were used in making the different objects; both bags were made using the twining technique. The soles of the sandals were made using either a plaiting or sewing technique. Cordage was used in the manufacture in some of the objects. The fans were made using the binding and sewing technique.

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1. Introduction

Plant materials have found many uses in ancient Egypt, and they are often linked to basketry objects that were either used in every day life and/or placed in the tombs of the deceased. The techniques, materials, sizes and uses of the basketry objects varied according to user/owner and purpose of use. The term basketry does not only refer to baskets, plates and mats, even though they were the most common items found in tombs. Basketry objects also include either cheap or luxurious accessories such as sandals, shoes, bags and fans. It may be difficult to imagine that highly sophisticated luxurious, yet fragile objects were intended for everyday use, but evidence of wear and tear is clear in many cases.

In the last two decades a growing interest of basketry materials or objects made of plant materials has been noticed. A lot of research has been published in the field of footwear, but it is obvious that there is still a lot of work to be done. In Veldmeijer’s research (Veldmeijer, 2006–2010), which is part of the Ancient Egyptian Footwear project, a lot of collected data has been discussed and analyzed. The technology and terminology in this research follows Veldmeijer’s research in footwear and Ryan and Hansen, 1987.

Not a lot of research has studied in depth either the deterioration of basketry objects that were found in dry burial conditions or the applicable conservation and treatment methods of basketry objects. Therefore the aim of this study is to examine and determine the plant species used in the manufacturing technique adopted in chosen objects exhibited at the Agricultural Museum in Giza, Egypt, as a preliminary step towards finding a method for treating such fragile material.

Nine objects, which consisted of two sandals nos. 2317 and 2601, two shoes nos. 2595 and 2596, two fans nos. 648 and 4367, one model of a mat no. 1954 and two bags nos. 396 and 1475 were chosen for this study.

The only problem with most of the objects found at the Agricultural museum is that the registers do not have sufficient information on the history of the excavation sites, from which the objects came from. That is due to the fact that some of the objects were bought from bazaars or were given as presents from excavations in the years between 1933 and 1935. We cannot blame the museum registers for lack of information, because as mentioned by Ryan and Hansen (1987: 2) “different times or eras had certain archaeological philosophies”. That of course makes it very difficult to estimate whether the objects were found in funerary, domestic or garbage context. It is also difficult to confirm that the objects dated in the registers as “New
Kingdom” were actually found in the New Kingdom deposits of Deir El Medineh or were found in deposits that date back to later periods, but this is beyond the scope of this research.

2. Materials and methods

All nine objects are in a very fragile state, and even though their archaeological and historic details are unknown and may remain so for a long time, the materials and techniques needed for making them are of major importance as part of their documentation prior to their treatment and conservation in the near future.

For plant identification samples were either taken from detached parts from the chosen objects or from crumbling materials lying around the object. Thin sections (30–50 μm) of each specimen, which had been prepared at the Botany Department labs in Ain Shams University, were examined by light microscopy for details of


Some difficulty arose while preparing the fragile specimens for examination, because most of their cells were disintegrated (Fig. 1). For comparative study and verification of identification the use of modern material was necessary. Four monocotyledonous plant species native to Egypt were identified; *Hyphaene thebaica* Mart. (Doum palm), *Phoenix dactylifera* L. (Date palm), *Cyperus papyrus* L. (Papyrus) and *Desmostachya bipinnata* (L.) Stapf. (Halfa grass). In some cases all the elements in the object were made of the same plant species, in other cases 2 or 3 plant species were used in one object.

**Table 1**

<table>
<thead>
<tr>
<th>Object number</th>
<th>Locality</th>
<th>Period</th>
<th>Material</th>
<th>Length (cm)</th>
<th>Width (cm)</th>
<th>Acquisition date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2317</td>
<td>Deir el Medineh</td>
<td>New Kingdom</td>
<td><em>Cyperus papyrus</em> (bundle) &amp; <em>Hyphaene thebaica</em> (wrapping strip)</td>
<td>32.7</td>
<td>9.2–12</td>
<td>1933</td>
<td>Excavations of IFAO</td>
</tr>
<tr>
<td>2601</td>
<td>Deir el Medineh</td>
<td>New Kingdom</td>
<td><em>Hyphaene thebaica</em> (leaflet for plaiting strips and petioles in the bundles forming the edges)</td>
<td>29.5</td>
<td>9.0–12</td>
<td>1933</td>
<td>Bought at Cairo</td>
</tr>
<tr>
<td>2595</td>
<td>Deir el Medineh</td>
<td>New Kingdom</td>
<td><em>Cyperus papyrus</em> (plaiting strips and insole) &amp; <em>Phoenix dactylifera</em> (straps and reinforcement stitches)</td>
<td>30.8</td>
<td>8.6–10.4</td>
<td>1933</td>
<td>Excavations of IFAO</td>
</tr>
<tr>
<td>2596</td>
<td>Uncertain</td>
<td>New Kingdom?</td>
<td><em>Cyperus papyrus</em> (plaiting strips and insole) &amp; <em>Hyphaene thebaica</em> (straps and sewn edges)</td>
<td>29.2</td>
<td>8.5–11.2</td>
<td>1933</td>
<td>Bought at Cairo</td>
</tr>
<tr>
<td>648</td>
<td>Deir el Medineh</td>
<td>New Kingdom</td>
<td><em>Hyphaene thebaica</em></td>
<td>26</td>
<td>18</td>
<td>1935</td>
<td>No data available</td>
</tr>
<tr>
<td>4367</td>
<td>Deir el Medineh</td>
<td>New Kingdom</td>
<td><em>Hyphaene thebaica</em></td>
<td>24</td>
<td>20</td>
<td>1933</td>
<td>Excavations of IFAO</td>
</tr>
<tr>
<td>1954</td>
<td>Deir el Medineh</td>
<td>New Kingdom</td>
<td><em>Hyphaene thebaica</em></td>
<td>24</td>
<td>14</td>
<td>1935</td>
<td>Found in 1886, registered by the Antiquity service no. (22/4/27/43), and then given to the museum</td>
</tr>
<tr>
<td>396</td>
<td>Gebelein</td>
<td>—</td>
<td><em>Desmostachya bipinnata</em> (rope)</td>
<td>42</td>
<td>23</td>
<td>1933</td>
<td>No data available</td>
</tr>
<tr>
<td>1475</td>
<td>Deir el Medineh</td>
<td>New Kingdom</td>
<td><em>Phoenix dactylifera</em> (bundle) &amp; <em>Hyphaene thebaica</em> (strips) <em>Desmostachya bipinnata</em> (rope)</td>
<td>42</td>
<td>23</td>
<td>1933</td>
<td></td>
</tr>
</tbody>
</table>

3. Results

Specimens taken from the crumbling parts of the chosen objects were examined using morphological and anatomical features to identify plant species (Table 1). The techniques that had been applied in the nine objects varied, and in some cases more than one technique was applied. The “sewing technique”, which is defined according to Veldmeijer (2006/2007 and 2009a) as a horizontal bundle of material fastened by another bundle by wrapping with a strip of material” was used in sandal no. 2317. The “plaiting technique”, where three or more bands interface, was seen in the second sandal; no. 2601 and two shoes; nos. 2595 and 2596. The “binding technique”, where “passive elements are bound together with rope or thread”, was found in one the fans. The “twining technique”, where “an active system which consists of two strands twisted alternately behind and in front of the passive strands” had been used in the small bag. The twining technique with flexible materials and a three system technique had been used in the larger bag. Last but not least, the rope or cord making technique was applied in most of the objects.

3.1. Anatomical description of identified plants

- *H. thebaica* Mart. (Doum palm)

In T.S of the lamina (Fig. 1a), the upper and lower epidermis are lined internally by 2–3 layers of parenchymatous hypodermis, the mesophyll is not differentiated into palisade and spongy tissues. The vascular bundles are connected to the upper and lower hypodermis by patches of sclerechyma forming girders.

In the T.S of the petiole (Fig. 1b), the ground tissue is formed of numerous scattered vascular bundles with enlarged sclerenchyma cap at phloem pole, surrounded by thin walled parenchyma. The vascular bundles and fibrous patches are quite close to each other in the peripheral region; note the presence of peltate hairs (Fig. 1c). Found in examined specimens: 2317–2601–2596–648–4367–1954–1475 (strips).

- *P. dactylifera* L. (Date palm)

In T.S of the lamina (Fig. 1d), the epidermis of the upper and lower surfaces forms a slightly undulating layer. The mesophyll is not differentiated into palisade and spongy layers. The hypodermis is composed of one layer of polygonal thick-walled lignified cells, interrupted at intervals by masses of lignified cells. Patches of thick-
walled lignified fibers and reduced vascular bundles are embedded between large oval-shaped collateral vascular bundles; each is enclosed with a cap-like sheath of thick-walled fibers. Found in examined specimens: 2595- 1475 (bundle).

- C. papyrus L. (Papyrus)

In T.S of the culm (Fig. 1e), the epidermis is formed of the ordinary thick-walled epidermal cell. Below are found patches of chlorenchyma tissue alternating with rounded patches of fibers. The ground tissue is differentiated into a narrow peripheral zone; formed of several layers of radially elongated chlorenchyma cells and small reduced vascular bundles and a large inner one made up of highly lacunate aerenchyma with 3-armed cells and collateral vascular bundle surrounded by a sheath of 2-3 thick-walled lignified cells. Found in examined specimens: 2317- 2595- 2596.

- D. bipinnata (L.) Stapf. (Halfa grass)

T.S of the lower region of the leaf (Fig. 1f) is lined by an undulating epidermis composed of roundish cells and elongated silica cells. The margin is occupied by a triangular sub-epidermal patch of thick-walled lignified fibers. There is no differentiation between palisade and spongy tissue. Vascular bundles do not occupy the entire space between the upper and lower epidermis. Found in examined specimens: 396 (the entire bag) - 1475 (rope).

3.2. Footwear

In Pharaonic Egypt footwear made of plant materials was more frequently used than leather. It is thought that sandals may not have been appropriate footwear in death, but by the New Kingdom they were widely worn in life (Driel-Murray, 2000). The two chosen sandals nos. 2317 and 2601 and one shoe no. 2595 (one of a pair) all date back, according to the museum registers, to the New Kingdom and were found in Deir El Medineh. It is easy to distinguish that three of the 4 footwear (Fig. 2) were right feet and one was left. The technique and design or model differed in each case. The 2 sandals and 2 shoes were made of plant fiber, but only sandal no. 2317 had an additional layer of gesso.

3.3. Sandals

The shape of sandal no. 2317 (Fig. 2a) from Deir El Medineh (New Kingdom) is longitudinally almost symmetrical and straight with a slightly constricted waist and towards the front the edge diverges outwards and terminates in a rounded toe. The straps are missing and it was therefore important to determine whether it was a right or left foot by looking at both surfaces and comparing the worn parts, which are always found at the ventral. The sewn edge near the big toe, the area of the ball of the foot (Fig. 3a and b) and the edge of the heel that had been covered with a gesso layer were worn out (Fig. 3e), which confirm that it was a right foot sandal. The sandal was made using the sewing technique in both sole and the edges of the sandal. The passive bundles were made of papyrus rind and the wrapping strand was made of doum palm leaflet. The edges which can be seen all around the sole were used to secure the ends of the horizontal sewn bundles which form the sole of the sandal. The gesso layer, which seemed uncommon, covered a coarsely woven material made of cord that had been added on both dorsal and ventral surfaces of the sole in the heel area (Fig. 3d–f). It was identified using XRD and FTIR as gypsum (Figs. 4 and 5; Table 2). It is not certain whether the gypsum layer was added in the past while the sandal was still in use, or if it was added for restoration purposes during or after excavations, but due to lack of information on the history of excavation in the museum registers it is difficult to interpret the reason for the presence of gypsum in this sandal. The wear on the outer right side of the heel may be an indication that the sandal had been used after the addition of the gypsum layer, but so far that assumption has not been confirmed.
Sandal 2601 (Fig. 2b), which is a “fiber sewn-edge plaited sandal”, is a left foot sandal made using the plaiting technique (\1/1\1 pattern) and to secure the edges three rows were sewn all around. The plaiting straps were made of doum palm leaflets (Fig. 6b) and the passive bundles surrounding the edge of the sandal were made of thinly cut doum petioles. The shape of the sandal is longitudinally almost symmetrical and straight; towards the front the edge diverges outwards and terminates in a pointed toe. Reinforcement stitches of the sewn edges can be seen in the ventral surface, which is more worn out than the dorsal. Severe wear of the heel is evident, causing a hole in the area where the foot heel must have been in continuous contact with the sandal fiber. The edges of the worn through part on the ventral surface of the heel are covered with accumulated dirt (Fig. 6a and d), whereas on the dorsal surface the wear of the doum leaflet is clearly noticed (Fig. 6c). The straps are missing, and a new braided rope was added during conservation years ago (but the exact date of restoration is not mentioned in the registers).

3.4. Shoes

2595 and 2596 are “full upper open shoes” (Fig. 2c and d). In these two right footed sandals the relatively low upper runs along the entire sandal’s edge. Their shape is longitudinally almost symmetrical and straight, but towards the front the edge diverges outwards and terminates in a rounded toe, from which the width at both sides does not increase towards the front in shoe 2595 and slightly increases in shoe 2596. There is no constricted waist in both shoes. The sole in both shoes consisted of two layers, where the ventral surface was made using the plaiting technique made of papyrus strands and the dorsal surface consisted of horizontal papyrus strands forming an insole that was secured at the edges only. The upright upper was made of vertically placed strips. Reinforcement stitches evident only in the ventral of both shoes were used along the perimeter of the treadsole and lengthwise down the centre to secure braided cord made of the light beige inner fibers of papyrus. The
braided cord and reinforcement stitches may have been used for the reinforcement of the treadsole or for better resistance against wear.

The front strap in both shoes is the original strap ("T" binding technique), that consists of simple s-spun cord, that was inserted slightly off centre in the front. The back straps are attached to the sole, but outside the upper. To attach the front strap to the back strap the end of the front strap was looped and wrapped around the back strap almost half way along its length. In both sandals the three ends of the straps (one from the front strap and two from the back strap) were inserted in the sole, passing through all the layers of the sole in the case of the front strap (Fig. 7c), whereas the back strap was knotted in the ventral surface only (Fig. 8a).

It is interesting to note the differences in the two shoes. There is a big similarity in the main idea, design and materials of both shoes, but the plaiting of shoe 2595 is finer than 2596, although the maker used the difference in color of the outer and inner surface of papyrus culm artistically to give the chequered design in the ventral. Shoe 2595 had only one row of braided papyrus fibers cord fastened longitudinally in the centre of the treadsole (Fig. 7a), whereas as the other shoe had three rows of braided papyrus fibers cord (Fig. 8a). The reinforcement stitches in shoe 2595 were wide lazy stitches sewn randomly, but in shoe 2596 the reinforcement stitches were neatly sewn along the braided cord surrounding the edge.

The low upper in shoe 2595 shows clear evidence of its use and severe wear, because the vertical strips are disorganized and broken especially in the heel and toe area, giving an impression that it may have been a bit small on its owner’s foot (Fig. 7b and c).

3.5. Fans

Egyptian fans were of different sizes and materials. They had in many cases a semicircular shape, and were mainly made with feathers and with long handles. Their function was double: blowing air and scaring away insects.

From Egypt, the oldest known representation can be seen in the head of a ceremonial hammer at the Ashmolean Museum of Oxford. It belonged to “Narmer”, around 3000 B.C., which shows a group of royal servants, two of them are slaves carrying fans.

Information about fans made of plant materials is rarely mentioned in references, and Wendrich (2000: 261) mentions that “continuous plaiting was widely used in the Graeco—Roman period for making decorative small containers, fans and mats”.

Phillips (2000: 332) uses the fan found in the tomb of Tut Ankh Amon to point out the use of ostrich feathers for making fans, and Gale et al. (2000: 337) mention that the handle of a fan from the same tomb was made of silver birch wood. In Carters hand notes the fans from the Tut Ankh Amon tomb are described in detail and the materials that were used were documented. Only the handles of some of the fans were made of plant materials such as wood or bark, but materials used in basketry objects were not mentioned.

The two fans at the Agricultural Museum at Giza were of different shape and design. They are extremely fragile and need special handling.

Fan 648 resembles the bat-shaped Matraha, which is small in size, very fragile and light in weight (Fig. 9). The round shaped part consists of three passive elements, where the first and third layers are laid in the same direction parallel to each other and the second layer is perpendicular to them and sandwiched between them. All three layers are bound together by a twining technique using two active threads (unidentified due to difficulty of obtaining a sample). To secure the edges a strip of plant material was sewn around a fine core and attached all around the fan perimeter holding all three layers together. The handle was made of doum palm petiole.

Fan 4367 has a semicircular shape, which could not be mistaken for a very simple fan made of one doum palm leaflet, which is naturally fan shaped and its midrib was used as a handle (Fig. 10). To support the fan a neatly braided frame was sewn to the edge of the leaflet which formed the semicircular shape of the fan.
3.6. Rectangular shaped model of a mat

The manufacturing technique in this model of a mat is a merge between the techniques that were applied in the previous two fans. The rectangular shaped part consists of three passive elements, where the first and third layers of *H. thebaica* are laid in the same direction horizontally and the second layer is perpendicular to them and sandwiched between them. All three layers are bound together by a twining technique using two active threads (unidentified due to scarcity of sample). To secure the edges a strip of plant material was sewn around a fine core and attached all around the outer rectangular perimeter. An additional plaited frame around a core was sewn to three of the four sides of the upper face of the object. The strips used for sewing the edges and the plaited frame were colored in red and yellow, forming a colorful frame (Fig. 11).

3.7. Bags

According to Wendrich (2000) there were three types of bags: twined, knotless netting and knotted papyrus carrier nets. The best known bags are the open twined “seed-bag”, which was made of grass cord, with widely spaced rows of twining, which could be either fine or coarse. Bag 396 belongs to the category small open twined bags made of 2 ply halfa grass cord, z-spun, S-plied “zS2” (Fig. 12). It is noticeable that the sides of the bag were formed by plaiting the edges of both faces of the bag. The handle, which was made of the same cord, was tied to the sides of the bag by a big knot. The bag contained a wheat seed and fragments of a sycamore leaf.

The second bag 1475, which represents an example of twining technique with flexible materials, is made of three plant materials (Fig. 13). Date palm leaflets, which formed the passive bundles, were laid horizontally and passive doum palm leaflets were laid perpendicularly to the previous bundles below and above the date palm leaflets, covering them from both sides, (Fig. 13a). In the base of the bag two rows of twined doum palm leaflets were used to bind the three passive layers (Fig. 13c). The twining was always parallel to the horizontal passive bundle. The base was made up of two rows of twining and the sides were made up of one row of twining all around the bag. The cord forming the handle and running vertically around the bag sides, base and rim was made of halfa grass (2 ply cord, z-spun, S-plied “zS2”).

4. Discussion

The four identified plant species; *H. thebaica* Mart., *P. dactylifera* L., *C. papyrus* L. and *D. bipinnata* (L.) Stapf., were native to Egypt during the Pharaonic eras, among which three are still used today in the manufacture of baskets, bags and ropes. According to Greiss (1957), the fourth plant species, namely *C. papyrus* is no longer found in the wild state. Even though it has reappeared in the last few decades again in different parts of Egypt, it does not undertake its role again in manufacturing either basketry objects or rope.

The plant identification of Egyptian basketry artifacts and cordage depended in the past mainly on the observation of the general appearance of the material (Ryan and Hansen, 1987: 4). That is the case in most of the published research dealing with basketry or fiber artifacts from ancient Egypt. Lucas (1948: 130) mentioned the plants used in basketry objects by referring to what had been recorded in older literature written by archaeologists. In the revised edition (Lucas and Harris, 1962: 128–133) the anatomical studies by Greiss published in 1949, 1955 and 1957 were incorporated. The study of Greiss (1957) followed by Ryan and Hansen (1987) are a valuable survey of the internal anatomy of plant species used in ancient Egyptian basketry and cordage artifacts.

Wendrich (2000: 254–255) confirms that “few excavators have made an effort to identify the materials used”, but “did not refrain from publishing ill-found specifications”. In Veldmeijer’s published research on the footwear project (2006–2009) materials were mentioned or discussed according to previously published literature without dealing with the anatomical description or
Fig. 7. Shoe 2595; a) Ventral of shoe showing a chequered treadsole and braided papyrus rope. b) Detail of worn out and broken vertical strips in the toe area (dorsal). c) Detail of attachment area of front strap in the sole (arrow) and worn out side strips. d) Detail of plaited ‘over one, under one’ of two colors by using the outer papyrus rind and inner surface of papyrus culm in the treadsole. e) Detail of s-spun fiber from strap. f) Detail of braided papyrus cord and reinforcement stitches in the ventral of shoe (arrow).

Fig. 8. Shoe 2596; a) Ventral surface showing a chequered treadsole and 3 rows of braided papyrus rope neatly attached lengthways along the centre of the sole and the two knots used to attach the straps (arrows). b) Detail of strips sewn around the edges of the upper side of the shoe. c) Detail of s-spun fiber forming the T-technique strap.
identification of artifacts. An anatomical study on the materials used in the coiled basketry at the Agricultural Museum has been recently done by El Hadidi and Hamdy (2010), Hamdy and El Hadidi (in press).

Footwear, fans and bags made of basketry materials in Ancient Egypt were made of different materials, techniques and designs. The studies done by Veldmeijer (2006–2010) cover a very wide range of footwear made of different materials including those made of plant materials. The techniques mentioned in previous research were easily justified in the two sandals and two shoes from the collection of the Agricultural Museum. There was only one obvious feature that has not been mentioned in any previous research dealing with footwear made of monocotyledonous plants; namely the plastered heel in sandal 2317. The reason for adding this layer is not really clear, and it is a point that needs further research. It is difficult to ascertain whether the gypsum layer dates back to when the sandal had been in use, or if it is old restoration. In the collection at the Agricultural Museum some of the sandals have certainly been restored in the past using either cardboard, animal glue or molten wax. The registers of the museum do not include any information of previous restoration materials and that makes it very difficult to verify the authenticity of any added layers to the objects. The presence of stucco in footwear was recorded in the case of one pair of marquetry sandal from the collection of

Fig. 9. Fan 648; a) The bat-shaped fan, b) Detail of a detached part (left upper side) showing the three layers that were bound together to form the main part of the fan, c) Detail of the sewn edge (right lower near the handle) that runs around the outer perimeter of the fan.

Fig. 10. Fan 4367; a) The doum leaf fan, b) Detail of the neatly braided sewn edge forming a frame that runs around the outer perimeter of the fan.
Tutankhamun’s footwear. Sandal no. 397 in that collection was described by Howard Carter in his hand notes as follows: “Of wood; covered with a marquetry veneer of bark, green leather, and gold foil; upon a stucco ground. The soles of white stucco.” It is clear from Carter’s hand notes that the stucco was used as a ground layer for the decorative layers, but that is not the case in sandal no. 2317, because there are no traces of gold or any other materials in any part of the sandal. In another case a pair of sandals and an isolated left sandal were found in the tomb of Yuya and Tjuiu, but their soles consisted of a gesso layer, which served to adhere the gold to the sandal (Veldmeijer, 2009c: 559–560). These three cases may prove that the gypsum layer in sandal no. 2317 is original.

In regard to the plaited sandal and two shoes, two of which date back to the New Kingdom and one is uncertain, it is noticeable that the workmanship is much finer than the sandals from Qasr Ibrim that were studied by Veldmeijer (2008/2009a,b: 128). The strips are almost of the same width on the contrary to what was found in Qasr Ibrim, where the variation of width is verified partially due to the tapering shape of the split palm leaflet strips. That was not the case of sandal 2601, in which the plaits were made of doum palm leaflet that could be cut in the same width. The other two shoes were made of plaited papyrus strips, which are usually of a stable width, and therefore do not show the problem of changing strip width. Veldmeijer (2008/2009b: 132) is surprised that “plaited sandals were never worn before the Christian period”, and in his work on
further research is needed to try and find a link between materials used, techniques applied and finesse of accessories such as footwear, fans and bags. It may not be always possible to identify the owner of these objects, but whenever that information is available it would certainly give more weight to the study of ancient Egyptian basketry objects.

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References


Fig. 13. Bag 1475: a) Side of bag showing one row of twining, which was used to bind the three passive layers, b) Handle of bag made of halfa grass cord. c) Base of bag with two rows of twining. Parts of the doum palm strips are missing, and the bundles of date palm can be clearly seen.