

# Coiled Baskets from Deir El Medinah

N.M.N. El Hadidi , Faculty of Archaeology , Cairo University  
R. Hamdy, Faculty of Science , Cairo University

Baskets were used for everyday life and as funerary tools and materials in Ancient Egypt. Baskets found in excavations ranged from very simple baskets to finely decorated baskets. Maybe not all the baskets that reached us are intact or complete, but the samples or fragments that were found give an idea of both the materials and techniques used in basket making.

Baskets found in excavations across Egypt varied a lot, and because basket making is still common in modern Egypt, it is not difficult to understand the ancient technology. Coiling was one of many common techniques used for making different sizes and shapes of baskets and other related objects. Materials used for making coiled baskets varied according to type of basket and provenance, depending on the availability of materials in the area. The “Deir El Medinah” collection of decorated and undecorated coiled baskets belonging to the Museum of Agriculture in Giza-Egypt, is just one of several interesting basketry collections owned by the museum.

Most of these baskets were either found in Deir El Medinah, Thebes or were bought from Luxor and Cairo, or were a gift from the Egyptian museum in Cairo.

Coiled baskets were very common in Ancient Egypt, and they varied in size, shape, materials, decoration, quality and uses. The chosen baskets had one common factor; they were all coiled with the “stitch through the previous winder” technique”.

Study samples were taken from baskets that were in a fragmentary state. In cases where the basket or its decorations were intact sampling was not possible. For plant identification samples were studied under the microscope. Colouring layer was studied using SEM / EDX, which gave a clue of the thickness of the layer, and the elements of which it consisted. The use of XRD for colour identification was not possible, due to the scarcity of the sample.

## Coiled “stitch through the previous winder” oval shaped basket

**Description:**  
**Reg. No.:** 1909  
**Bought :** in Cairo on 28.4.1932  
**New Kingdom or later**  
**Dimensions** (in cm): basket: height: 5; base: ca. 19x8;  
lid: height: ca. 4; length of uppermost part of lid:15

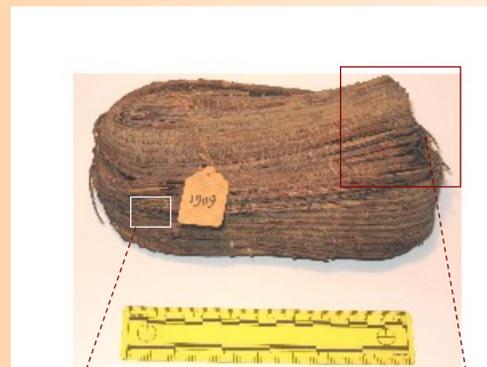
**Plant Materials used:**  
*Juncus acutus* culms



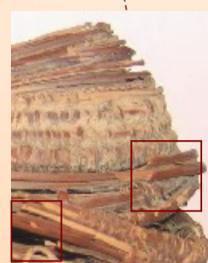
Inside of basket showing the elongated snail start in partially good state. The base of the basket is separated in some areas from the sides and the brim is badly deteriorated



Elliptic coned lid resting partially on one side of the basket with the aid of old restoration string



Deteriorated winder strands of basket side



Deteriorated rim of both lid and basket



T.S in the culm of *Juncus acutus*

## Coiled “stitch through the previous winder” basket covered with leather

**Description:**  
**Reg. No.:** 1908  
**Bought:** from Antiquary at Luxor on 27.3.1933  
Probably New Kingdom or later  
**Dimensions** (in cm): base 15x9.5; height 9.5; lid 12x6.5

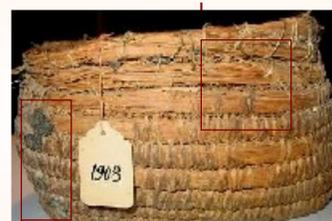
**Plant Materials used:**  
**Coil bundle:** *Desmostachya bipinnata* leaves  
**Winder:** *Phoenix dactylifera* leaflets  
**Inner side of basket:** *Linum usitatissimum* L.fiber



Degradation of winder material, showing clearly the “stitch through the previous winder” coiling technique



Piece of knotted goat skin found inside the basket



Side view of basket showing degradation and remains of goat skin



Coarse grain of goat skin remains adhering to the basket outer side



The basket contained fragments of leather, coiling materials and adhering linen textiles..



Coiled lid with the remains of goat skin patch adhering to the outer side only.



T.S in the leaflet of *Phoenix dactylifera*



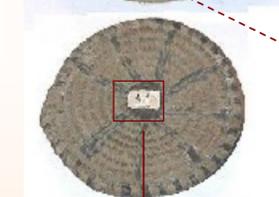
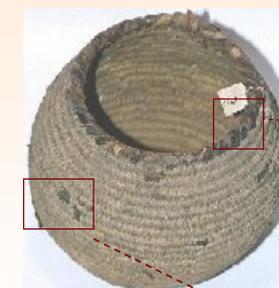
Part of the cell of *Linum usitatissimum* L.fiber

The decay of the winder material in this oval shaped basket with flat lid shows the coiling technique that was applied on all the chosen baskets “Coiled stitch through the previous winder” technique.

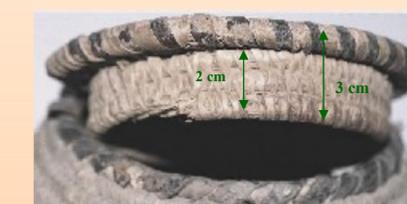
## Coiled “stitch through the previous winder” basket decorated with leather and brown coloured decorative plaits (stitches over two bundles diagonally)

**Description:**  
**Reg. No.:** 1910  
**Bought:** from Tano (antique dealer) on 15.2. 1933, who had bought it from the Egyptian Museum (reg.no. 6917)  
**Provenance:** uncertain possibly Thebes  
**Dimensions** (in cm): basket height 16; base: 10.5; max. diameter of basket: 18  
lid: 13 (outer diameter); 11 (inner diameter)

**Plant Materials used:**  
Coil bundle: *Desmostachya bipinnata* leaves in addition to *Juncus acutus* culms  
Winder: *Phoenix dactylifera* leaflets.



Leather patch covering the simple knot. The patch was fastened with stitches of the first adjacent coil. The diagonal stitches over 2 bundles was coloured brown to imitate leather.



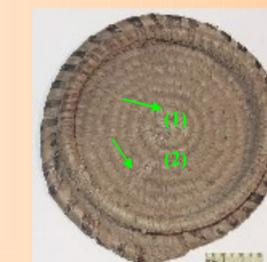
Supporting ridge added to the flat lid. The outer rim of both the lid and the basket was decorated with leather



T.S in the leaf of *Desmostachya bipinnata*



Leather thongs used for covering the rim and stitched within winder in parts of the basket.



A simple knot in the bundle used as the base for the first coil and stitches in the centre of the flat lid (1). Uncoloured diagonal stitches over 2 bundles form decorative plaits (2) starting from the centre outwards (inner side of lid)

**Coiled "stitch through the previous winder" coloured basket lid**

**Description:**  
**Reg. No.:** 4944  
**Bought:** from Tano (antique dealer) on 15.2. 1933  
**New Kingdom-1300 B.C.**  
**Dimensions (in cm):** diameter: 17; height: 3.5

**Plant Materials used:**  
*Juncus acutus* culms.



Rim of lid from both outer and inner sides, that were decorated by the use of coloured winders

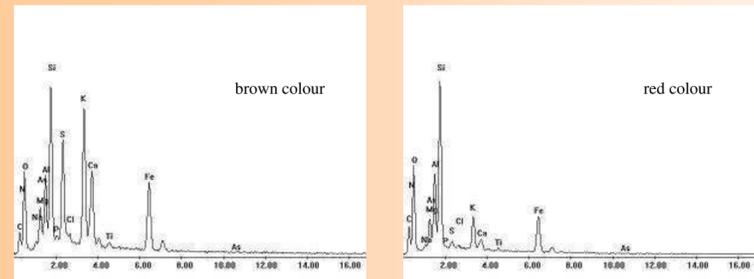


Side view of partially deteriorated rim (2 coils)



Open centre with the wrapping strand covering ca. 4 rows of coiling

For the identification of the brown and red colours samples were studied using SEM/EDX. The colours in this basket covered only the outer side of the winder.



EDX spectra of brown and red colour layers, showing the elements of which these two layers consist of. Presence of iron is an indication of the use of iron minerals. Minute amounts of Arson may be due to the use of a mixture of coloured materials.



The colouring layer was only present on the outer side of the winder material. It's thickness was around 8-9 µm and could be easily seen with the naked eye.

**Coiled "stitch through the previous winder" basket decorated with different materials and colours**

**Description:**  
**Reg. No.:** 716  
**Bought in Luxor** 1934  
**Provenance:** Thebes - New Kingdom  
**Dimensions (in cm):** height: 35; diameter of base: 27.5; diameter of basket: 29

**Plant Materials used:**  
 Coil bundle: *Phoenix dactylifera* midrib and leaflets  
 Winder: *Phoenix dactylifera* leaflets  
 Detached handle: Date-palm fibers



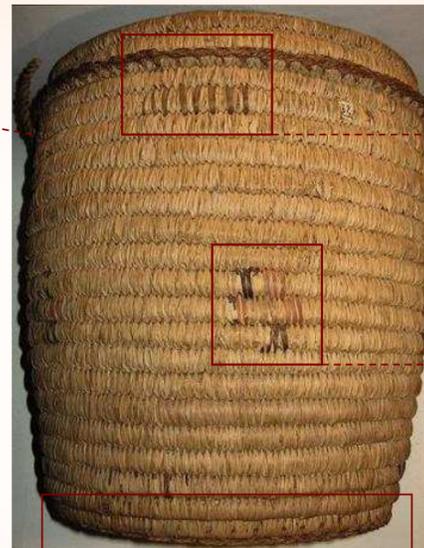
End of coil after the last winding stitch, and the stumps are visible



The handle was made of rope that was sawn into the coils



The detached handle, inside the basket



Rim decorated with sewn plaited fibres just like the base and some scattered coloured stitches



Coloured stitches were either made from plant remains or leather



Base of basket with rosette centre and fibre plaits sewn around the outer edge of the base



The colouring layer in this basket was very thin and covered the winder material on both sides, with a thickness of ca. 3.5-5 µm.

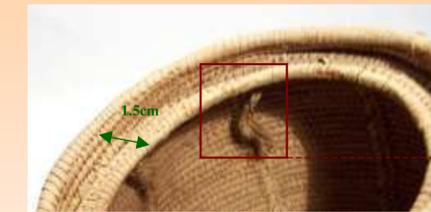


T.S in a part of the midrib of *Phoenix dactylifera*

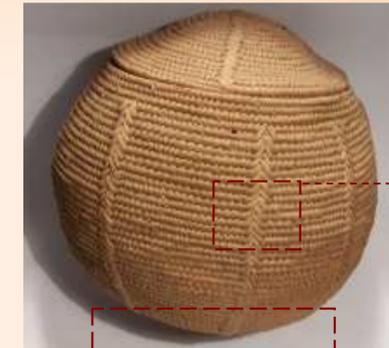
**Coiled "stitch through the previous winder" basket with decorative plaits (stitches over two bundles diagonally)**

**Description:**  
**Reg. No.:** 1487  
**Bought on** 30.9.1939 - gift from Egyptian Museum  
**Provenance:** Deir El Medinah -Thebes - New Kingdom  
**Dimensions (in cm):** basket height 18.5; base 17 (diameter); lid: 18 (diameter); height: 4

**Plant Materials used:**  
 Coil bundle: *Imperata cylindrica* leaves  
 Winder: *Phoenix dactylifera* leaflets in inside the basket: linen fibers



Rope hanging from the inner side of the basket below the supporting ridge formed by 3 extra coils and a rim



Diagonal stitches over 2 bundles forming decorative plaits



Round base of basket with snail centre. At the edges of the base the beginning of stitches over 2 bundles are clearly seen. Only the first stitch is vertical over 2 bundles, the remaining stitches are diagonal forming decorative plaits that strengthen the basket.

**Description:**  
**Reg. No.:** 1486  
**Bought on** 30.9.1939 - gift from Egyptian Museum  
**Provenance:** Deir El Medinah -Thebes - New Kingdom  
**Dimensions (in cm):** basket: height 36; base length 50 ; lid: length: 41; inner width: 25.5; height: 7.3

**Plant Materials used:**  
 Coil bundle: *Juncus acutus* culms in addition to a reed plant?  
 Winder: *Hyphaene thebaica* leaflets.



Elliptic coned lid with decorative stitches over 2 bundles



Added rim consisting of 2 bundles of coarse coiling



Oval shaped base with elongated snail centre



T.S in the leaflet of *Hyphaene thebaica* Mart.