CHAPTER II

THE SWAMP PLANTS

In ancient Egypt and particularly in the meandering arms of the river in the Delta, the banks of the Nile were lined by swamps such as are now only to be found in the reaches of the White Nile. In ancient Egypt the marshes, characterized by the luxuriant growth of tall papyrus sedges, were extremely important in the economy of the land. In them the cattle found pasturage; and their transit through the water, risking the attacks of lurking crocodiles, to new fields is frequently shown in the scenes of Egyptian tombs. In the swamp lands too, the peasants fished and netted birds or harvested papyrus. Much of the economic value of the marshes arose from the presence of this plant which had manifold uses. The building of papyrus boats, the making of papyrus ropes and matting, the splitting of papyrus stems, possibly in preparation for papermaking are illustrated on tomb

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2 Ptahhotep I, Pl. XXI = Atlas I, Pls. XVI (Saqqara; Dyn V). Neferhotep I, Pl.XLIV (Khokhah 49, Ai) Passages in Schweinfurth op.cit., pp. 169-70, 134, describing the modern herding of cattle on the floating marshes of the White Nile, could apply equally well to the scenes in Egyptian tombs.
3 Cf. Klebs, AR, pp.70 ff.; Klebs, MR, pp.96, 100 f.; Klebs, NR, 78-87.
5 Atlas I, P1.XXX, commentary. Pliny, completing his description of the plant says that, "... it has a head on the top, which has no seed in it, and indeed is of no use whatever, except as a flower employed to crown the statues of the gods. The natives use the roots by way of wood, not only for firing, but for various other domestic purposes as well. From the papyrus itself they construct boats also, and of the center coat they make sails and mats, as well as cloths, besides coverlets and ropes; they chew it also, both raw and boiled, though they swallow the juice only. (The Natural History), [Trans., by J. Bostock, H.T. Riley, Bohn's Classical Library], XIII, 23 [Vol.III, 18] cf. XIII, 21, 23-24 for discussion of papyrus paper.)
7 Klebs AR, p.98.f. JEA III (1916), Pl.XIV (Woser, Dira Abu’n Naga 260; probably Tuthmosis III.
8 Puyemre I, 66, Pls.XV, XIX (Khokhah 39, early Tuthmosis III).
walls. The tender edible portions of the plant appear among food offerings. If the swamps were the setting for much of the labor of the ancient fellahin, they were equally important as places of sport and leisure for the aristocrats of Egypt. Like Ti, they sometimes glided quietly through the green maze of papyrus stems taking pleasure in “seeing all the good things that are in the papyrus swamps,” but it was more common for them to achieve great success spearing fish or capturing wild fowl with a boomerang. In the New Kingdom the owners of tombs themselves harpoon the hippopotamus, but they had formerly, in the Old Kingdom, been content to watch the exploits of their retinue. In addition to visits made to the marshes for hunting or “sight-seeing,” there is evidence suggesting that the trips could at times possess religious or ritual significance. In the tomb of Meresankh III at Giza, she and her mother, Hetepheres II, daughter of Khufu, pull out papyrus, “for Hathor” according to the accompanying superscription. A Fifth Dynasty tomb at Saqqara records a journey downstream for the purpose of pulling papyrus for Hathor; Sethe has pointed out that this, in conjunction with the Meresankh III relief, indicates the existence of a definite ceremony in which a papyrus stem was plucked as a gift worthy of the goddess. Ti, when he pulls down two papyrus umbels, may also be

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9 Atlas III, Pl.XXXIX, B (Ahethetep, Saqqara; now in Louvre; Dyn.? peasant carrying papyrus and eating a piece); ibid., pp. 210-211, Pl.XCVII (Ti, Saqqara; Dyn.V; bag containing edible papyrus stems piled on top of cages with small animals).

10 Steindorff, Grab des Ti (Leipzig, 1913), Pl.CXIII. Schäfer-Andrae, Kunst des Alten Orients (2d ed, Berlin, 1925), p.250, 1 (Hetepet; Berlin, no. 15402; Dyn.IV; smelling water lily while gliding among nymphaeas toward a mass of papyrus). LD II, Pl.LX (Reshepses, Saqqara Leps.16; Dyn.V; standing opposite papyrus). Wiedemann-Pörtner, Ägyptische grabreliefs aus der Grossherzoglichen Sammlung, Karlsruhe (Strassburg, 1906), Pl.V.(paddled by five men). Von Bissing-Bruckmann, Pl.XV.(=Klebs, AR, p.27, Fig.15; München, Glyptothek no.40836; man and wife in a boat which is both towed and paddled).

11 ÄZ, LXIV (1929), 6 (quotation from tomb of Meresankh II at Giza).

12 Klebs, AR, pp.35-37; MR, pp.55-57.

13 Amenemhet, Pls.I, 1A (Querna, 82; Tuthmosis III). Atlas I, Pls.LXXVII (Amenemhet, Querna 53; Tuthmosis III), CCLXXI (Cf. Puyemre I, 51, Fig.1 Amenemheb, Querna 85; Tuthmosis III-Amenhotep II). Puyemre I, Pl.IX (Khokhah 39, early Thutmosis III).

14 Steindorff, Grab des Ti, Pl.CXIII = Atlas I, Pl.CIV. Ibid., Pl.CIV A shows a fragment, now in Berlin, of a similar scene probably from a Saqqara tomb. Mereruka I, Pl.LD II, Pl.LXXVII (Giza, Leps. 27). Macramallah, Le Mastaba d’Idout (Cairo, 1935).Pls.VI, VII (Sesheshet or Idut smells a water lily while in front of her a man harpoons a hippopotamus; Dyn VI). Encyclopédie photographie de l'art I, Pl.XXIV (Ahethetep Dyn.VI).
engaging in this ritual. Gifts of papyrus stems were not limited to divinities. In the processions of offering bearers long papyrus stems were never omitted.

In the Old Kingdom marsh scenes devoted to the activities of the tomb owners, the setting is provided by a background of massive, serried papyrus stems rising far above the water. Their umbels provide a habitat for thronging birds, insects, and marauding carnivores. In the Old Kingdom the figure of the tomb owner was occasionally silhouetted against this papyrus mass, but more commonly it forms a centerpiece toward which the boats of the nobles were propelled and against which the narrow registers showing the activities of the peasants were arbitrarily juxtaposed. In compositions where only the practical marsh pursuits were shown the background was often reduced to a small group of curtain-like papyrus stalks, shielding the birdnetters from their unsuspicious quarry or shading the men engaged in preparing fowls or fish for storage. Papyrus could even be entirely omitted and the swamp indicated only by water weeds or water lilies.

Throughout the Middle Kingdom and New Kingdom such individual clumps of

\[15\] ÄZ, LXIV (1929), 6. Sethe claims that the goddess would naturally be thought of as taking the offering and holding it. This, then, would be the origin of the papyrus scepter which Egyptian goddesses held occasionally before the end of the Eighteenth dynasty and frequently thereafter. BMFA Boston, XXV (1927), 69-71, Figs.8,10. Steindorff, Grab des Ti, Pl. ? = Atlas III, 85-86; Pl.XLIII. Cf.LD II, Erg.bd. Pl.XL (Saqqara; Dyn.V). Deir el Gebrawi II, Pl. XVII (Rahenem-Asa; no.72). Cf. also BMFA XXXIII (1935), 76, Fig. 13 showing Yassen standing in a boat pulling a papyrus stalk with left hand and brandishing another (with split stem) in his right, probably fowling, for Senmut holds up bunch of ducks.

\[16\] Ptahhetep II, Pls.V, X, XV, XXII, XXIII, XXIV (Akhetetep). Mereuka I, Macramallah, op. cit., Pls.VI, VII (Sss.t.s t. surnamed 'Idw.t usurped this tomb from 'Ihy; Dyn.VI).

\[17\] Cf. the scenes from Ti's tomb cited above. LD II, Pls. XII (Nebemakhet, son of Mencheres and Meryseankh III; Giza Leps. 86; hunting with throwstick); XLIII, a (Giza Leps. 95; hunting with throwstick). Smaller, subsidiary figures were more frequently shown against a papyrus background; Cf. scenes showing peasants harpooning hippopotami.

\[18\] In such masses a few curving stems were allowed to break the monotony of the vertical papyri. Atlas I, Pl.CCCCLXXVII (Dyn.IV; Berlin no.14103; fish spearing). Atlas III, Pls.XLI (Kaemnefret, Saqqara, now in Boston; Dyn.V.);[8a, LVIII (Neuserre Sun Temple, now in Berlin; peaceful scene without the intervention of human figures);] Ptahhetep II, Pl.XIII = Atlas III, Pl.XLII (Akhihotep, son of Ptahhotep I; surrounding a door; owner, seated, watches activities in the swamp). Deir el Gebrawi I, Pl.V.(Aba,T.8.). Petrie, Dendera, (London, 1898), Pl.V. (Adu I).

papyrus remained as the ordinary short-hand notation for indicating a swamp setting in small registers. Although a fairly large median block of papyrus, usually forming a centerpiece for the parallel scenes of fishing and fowling on either side, was retained as one of the commonest motives, the feeling for the massive, overshadowing character of the papyrus swamps, which produced the tremendous background of sedges used in Ti's tomb, appears to be characteristic chiefly of the Old Kingdom. In later times there was a continuous tendency to diminish the size and rigidity of the swamp landscape, until in many New Kingdom scenes it has become nothing more than a graceful clump of papyrus.

Scenes later than the Old Kingdom, in which papyrus towers high above human figures, are exceptional. One example shows Baqt III, son of Remushen, fowling. Since the scene involving the master and tall papyrus was forced into a register also portraying the activities of peasants in the marshes, there resulted an anomalous product in which the noble and his family appear on a smaller scale than ordinary folk. In the New Kingdom, papyrus drawn in a subsidiary register in the tomb of Huya at Akhetaten is almost twice as large as the peasants who carry bundles of it away, but a precursor occurred in the tomb of Amenemhet, II, Pls.IV, XXVII, 1 (Ukhhotp, T.2), Beni Hasan I, Pl.XII (Amenemhet, T.2; Sesostris I; man "in" curtain). Beni Hasan II, Pl.VII (Baqt III; T.15; Dyn. XI). Antefoker, PL. V. (Qurna 60; Sesostris I). An extremely unusual marsh occurs in the tomb of Khety, where at least twenty large blocks of papyrus in superimposed registers cover a large part of a wall (Beni Hasan II, PLXI/T.17/). Bersheh II, PLXVI (Ahanekht, Son of Tehutihotp; T.5). Atlas I, Pls.XXIV (Amenemheb, Qurna 85; Tuthmosis III-Amenhotep II), CXLVI (Puimre, Khokhah 39; Tuthmosis III = Puyemre I, PLXV), CLXXXIV (Userhet, Qurna 56; Tuthmosis III; two clumps), CCXXX (Hepu, Qurna 66; later Tuthmosis IV? Dyn.XVIII), CCXLIX (Haremheb, Qurna 78; two clumps); CCCLXIV (Senem`ioh Qurna 127; Tuthmosis III?), CCCLXIII (Ipy, Deir el Medineh 217; Rameses II). A variation introduced in the New Kingdom was a fairly large curtain of papyrus with a pool of water filling most of it (Nakht, PL.XXVI/Qurna 52; Tuthmosis IV-Amenhotep II/).

Meir I, Pl.II (Ukhotp's son, Senbi, T.B I; Amenemhet I). Beni Hasan I. Pls.XXXIV (Khnhemhotp II, T.3; Sesostris II) Beni Hasan II. Pl.XXIX (Baqt I, T.29; Dyn XI/!). Atlas I, Pls.II, a (Menena, Qurna 69; Tuthmosis IV?); XXXVIII, CLXXXIII (Userhet, Qurna 56; Amenhotep II); LXX (Haremhab, Qurna 78; Tuthmosis III-Amenhotep III; three clumps), LXXVII (Amenemhet, Qurna 53; Tuthmosis III), CVII (Baki, Dir `Abu`Naga 18; first half of Dyn. XVIII), (Tuthmosis III or before), CLIII (Menkheper, Qurna 79; first half of Dyn XVIII, CCXIV (Suemmut, Qurna 92; Amenhotep II; preliminary sketch); CCCLXXIII (Senem`ioh, Qurna 127; Tuthmosis III), CCCLIV (Mentiywey, Qurna 172; three clumps; Thutmose III-Amenhotep II?). Anc. Egy. Paint. II, PLXV (BM Tuthmosis IV or Amenhotep II). The scene of Nakht is unusual in showing a continuous backdrop of papyrus, which does not, however, reach as high as the huntsman's shoulders (Atlas I, PL.CLXXIV=Nakht, Pls. XXII, XXIII, A; XXIV: Qurna 52; Tuthmosis IV).

Beni Hasan II, Pl.IV (T.15; Dyn. XI).

20 Meir II, Pls.IV, XXVII, 1 (Ukhhotp, T.2), Beni Hasan I, Pl.XII (Amenemhet, T.2; Sesostris I; man "in" curtain). Beni Hasan II, Pl.VII (Baqt III; T.15; Dyn. XI). Antefoker, PL. V. (Qurna 60; Sesostris I). An extremely unusual marsh occurs in the tomb of Khety, where at least twenty large blocks of papyrus in superimposed registers cover a large part of a wall (Beni Hasan II, PLXI/T.17/). Bersheh II, PLXVI (Ahanekht, Son of Tehutihotp; T.5). Atlas I, Pls.XXIV (Amenemheb, Qurna 85; Tuthmosis III-Amenhotep II), CXLVI (Puimre, Khokhah 39; Tuthmosis III = Puyemre I, PLXV), CLXXXIV (Userhet, Qurna 56; Tuthmosis III; two clumps), CCXXX (Hepu, Qurna 66; later Tuthmosis IV? Dyn.XVIII), CCXLIX (Haremheb, Qurna 78; two clumps); CCCLXIV (Senem`ioh Qurna 127; Tuthmosis III?), CCCLXIII (Ipy, Deir el Medineh 217; Rameses II). A variation introduced in the New Kingdom was a fairly large curtain of papyrus with a pool of water filling most of it (Nakht, PL.XXVI/Qurna 52; Tuthmosis IV-Amenhotep II/).

21 Meir I, Pl.II (Ukhotp's son, Senbi, T.B I; Amenemhet I). Beni Hasan I. Pls.XXXIV (Khnhemhotp II, T.3; Sesostris II) Beni Hasan II. Pl.XXIX (Baqt I, T.29; Dyn XI/!). Atlas I, Pls.II, a (Menena, Qurna 69; Tuthmosis IV?); XXXVIII, CLXXXIII (Userhet, Qurna 56; Amenhotep II); LXX (Haremhab, Qurna 78; Tuthmosis III-Amenhotep III; three clumps), LXXVII (Amenemhet, Qurna 53; Tuthmosis III), CVII (Baki, Dir `Abu`Naga 18; first half of Dyn. XVIII), (Tuthmosis III or before), CLIII (Menkheper, Qurna 79; first half of Dyn XVIII, CCXIV (Suemmut, Qurna 92; Amenhotep II; preliminary sketch); CCCLXXIII (Senem`ioh, Qurna 127; Tuthmosis III), CCCLIV (Mentiywey, Qurna 172; three clumps; Thutmose III-Amenhotep II?). Anc. Egy. Paint. II, PLXV (BM Tuthmosis IV or Amenhotep II). The scene of Nakht is unusual in showing a continuous backdrop of papyrus, which does not, however, reach as high as the huntsman's shoulders (Atlas I, PL.CLXXIV=Nakht, Pls. XXII, XXIII, A; XXIV: Qurna 52; Tuthmosis IV).

22 Beni Hasan II, Pl.IV (T.15; Dyn. XI).
son of Dhutmosi.  

Slightly later is the painting in T. T. 49 (Khokha) where a peasant cuts papyrus three times his height. This tomb possesses many characters derived directly from Amarna, and the highly exaggerated swamp scene is probably to be numbered among them. It was in the Amarna Period, too, which gave rise to the unique paintings in the Green Room of the North Palace at Akhetaten, where, instead of undergoing a reduction, the papyrus motive has been magnified to cover the greater part of the walls and is represented for its own sake, without the intrusion of human figures. The frequency with which papyrus appears in Egyptian representative art need not be stressed further. Its occurrences, however, are by no means limited to pictorial contexts. It not only provided the Egyptian script with a number of signs, but as the emblematic plant of the Delta, Lower Egypt, it was a widely used symbol.

**BOTANICAL DESCRIPTION AND TYPOLOGY OF PAPYRUS**

Many features of *Cyperus papyrus* L. are already clear from Egyptian representations. The plant, which is a member of the *monocotyledonous* family *Cyperacea*, under warm temperature conditions grows in fairly shallow water. The long creeping rootstock throws up stems rising to an average height of three meters and with a diameter of ten centimeters; the plant becomes much larger when growing in the tropics (Fig. II.1A). Its stalks possess a characteristic triangular section (Fig. II.1B). The leaves have been suppressed except for those, numbering nine or more, which sheath the basal part of the stems and others at the base of the inflorescence. This structure is, in papyrus, a compound umbel sheathed at the base by twenty to thirty narrow green, pointed leaves (Fig. II.2).

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23 *Amarna* III, Pl.VIII (T.I).  *Amenemhet*, Pl.II. (Qurna 82; Tuthmosis III).

24 *Neferhotep*, I, Pl. XLIV (49; Ai). Cf. painting of such a knife in *JEAI* III (1916), Pl.XV (Woser; Dira Abu’n Naga 260; probably Tuthmosis III). Ipy, when out fowling, glides towards papyrus that extends through two registers, and is accordingly taller than his figure (*Two Ramesside Tombs*, Pl. XXX / Qurna 217; Rameses II/).


From the axils of the latter spring the pedicels, or rays, each of which is surrounded by a tubular whitish sheath, circa 3 cm. long at its base. As many as ten pedicels may spring from each leaf axil, so that one umbel may contain two or three hundred primary rays, which at maturity are approximately 30 cm. long. The upper sections of these pedicels are tripartite, and from the axils thus formed spring the small, 1 cm. long, rays of the secondary umbels (Fig. II.3). These secondary rays bear the 2-3 mm. long spikelets (Fig. II.4).

From the axils of the bracts (or glumes) of which the spikelets are composed, project the
individual papyrus flowers (Fig. II.5), each of which consists of three stamens and a pistil. In view of the complex structure of the papyrus umbel, and the minute size of many of its constituents, it will not be surprising to find that the Egyptians showed it in a much stylized form.

The earliest representations occur on the macehead of King Scorpion (Fig. II.6) and the Narmer Palette, both found in the Main Deposit at Hierakonpolis. The stems end in fan-shaped heads which are smooth in the center but surrounded by a broad semicircular border incised with radial lines. On a wooden tablet of Aha the papyrus heads are wedge-shaped with the narrow point turned upward. A clay seal impression of Djer shows that by that time the bell-shaped profile which was to be the canonical Egyptian stylization of the papyrus umbel, was in use. Despite the absence of details entailed by the medium, the seals of Den

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27 Most of the details of this description, including the measurements, are taken from Möbius in JdI, XLVIII (1933), 17-19, Fig.10,A-C. Cf. also the description, varying somewhat in the measurements, in Keimer, Aegyptus, VII (1926), 171, n.2, who follows P. Ascherson and P. Gräbner, Synopsis der Mitteleuropäischen Flora (1904) II, 2, p.286. The detailed discussion and drawings in Woenig, Die Planzen im Alten Aegypten (Leipzig, 1886), pp.75-81, Figs.62-66 have apparently been overlooked by many later students. An excellent photograph is to be found in Syria XVII, (1936), Pl.LIV, 2.

28 Hier.I, Pls.XXV, below; XXVI, C, 1-3; XXIX.

29 For detailed discussion of these forms cf. Keimer in Aegyptus, VII (1926), 169-79 and Ranke in Studia Orientalia, I (1925), 167-75.


and Peribsen show campaniform heads.\textsuperscript{32} The papyrus on a sealing of Azib is probably of the same form, but has an uncertain outline, possibly caused in part by the modern copyist.\textsuperscript{33} The same may hold true for two sealings with the name of Meretneith, which, as published, resemble the semicircular papyrus outline used at the beginning of the dynasty more than the normal bell-shaped profile.\textsuperscript{34} Although we cannot say with certainty that the semicircular papyrus type had been abandoned by the reign of Djer, it is more important to determine that the classical profile occurs at that time. The elimination of the preliminary experimental pattern of papyrus is another instance illustrating the emergence of classical Egyptian stylistic features. At the beginning of historical times there were still used a number of motives, such as a crouching falcon (instead of the erect bird of later Egypt) or a threatening baboon, that were soon to be eliminated from the repertoire. Lion figures with widely opened jaws were to be replaced by less voracious examples, but in the reign of Djer, both types were in use concurrently, and this may have also held true for the semicircular and bell-shaped papyrus forms.

The earliest detailed rendering of the classical type of papyrus umbel occurs on a fragmentary painting from the Third Dynasty mastaba of Hesy, a contemporary of Djoser (Fig. II.7).\textsuperscript{35} The inflorescence is shown in strict profile, sheathed at the base by triangular leaves and with a narrow zone, corresponding to the area of the secondary umbels, at the top edge. Radiating lines, covering in this case both the main area of the

\textsuperscript{32} Ibid., Pls.XVII, 135 (Single papyrus stem and umbel; considered as papyrus on p.31); XXII, 184 = H. Petrie, \textit{op.cit.}, Pl.XVII, 408. A papyrus may occur on Pl.XIV, 10 (ivory tablet) in Petrie, \textit{Royal Tombs}.

\textsuperscript{33} Petrie, \textit{Royal Tombs} 1, Pl.XXVI, 58.

\textsuperscript{34} Ibid., Pl.XXIII, 37,38.
umbel and the band at the top, represent the pedicels. The form exemplified by Hesy's papyrus, despite variations in excellence and amount of detail shown, remained the standard type in the Old Kingdom (Figs. II.8-10) and Middle Kingdom (Figs. II.11-13), and also in the majority of New Kingdom representations (Fig. II.14).

In the New Kingdom swamp scenes the umbels continued to be shown with a campaniform profile outline and vary only in details such as the character of the hatching of fringed zones, the presence or omission of radiating lines. However, alongside of the conventional umbels, the papyrus heads which form part of the complex bouquets popular in the New Kingdom illustrate the first major innovation since the Third Dynasty.

Beginning with the reign of Tuthmosis IV, some of these heads are shown in a semicircular three-quarters view, seen from the outside (Fig. II.15). By this means, more of the

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35 J.E. Quibell, *Excavations at Saqqara*, 1911-12; Tomb of Hesy, Pl.XV.5 (area SW of the village of Abusir; Quibell T. 2405; fragment found in the filling).
36 Petrie, *Medum* (London, 1892), Pl.XII, upper left, Atlas III, Pls.CIV, CIV, A (Ti and Berlin fragment). WVDGG, VII, p.38, Fig.16.
drooping nature of the umbel was suggested than ever before. It was not until the Amarna Period that there occurred the first penetration of the unusual three-quarters view, hitherto strictly limited to bouquets, into representations of growing plants. One papyrus head in a subsidiary register in the tomb of Huya, containing the papyrus harvesting scene already referred to, is shown almost in a full circular back view (Fig. II.16). Such aspects may well have been used in the now destroyed upper part of the marsh scene from the Green Room at Akhetaten and among the papyrus umbels in a bronze bowl that belonged to a lady Sit-Amun, found in her coffin at Qurna, is one in full view, forming a kind of rosette (Fig. II.17). Huya's umbel was probably the prototype for a circular example in the tomb of Neferhotep, son of Neby, painted in the reign of Ai (Fig. II.18).

In the Nineteenth Dynasty, the logical conclusion of the trend, a completely circular umbel in full view, with a rosette of sheathing leaves, was reached in a vignette from a Book of the Dead and in a relief of Seti I (Fig.II.19). The three-quarters view also continued in use,

(Nebamun and Ipuky, Khokhah 181; late Amenhotep, III-early Akhenaten), XXXI, 1 (Huy, Qurna 54; Tuthmosis IV-Amenhotep III?). Amarna II, Pl.XXIII (Panhesy, T.). Amarna III, Pl. XXII (Huya, T.l). BIFAO, XIX (1922), 63, Fig.52, (Roi; Wilkinson, M. and C.2 III, 418, Fig.611, 8. inaccurate sketch of Jequier). There does not seem to be any justification for connecting these daring new three quarters views with the primitive semicircular pattern of the beginning of the First Dynasty (Aegyptus, VII/1926/)

40 Amarna III, Pl.VIII (T.l).
41 Annales II (1901), 10, Fig.10, (Main coffin of the four apparently belonged to a Hatiay) = Jdl, (1898), Pl.II.
42 Nefer-Hotep I, Pl.XLI (Khokah 49).
43 E.P. Wallis Budge, Book of the Dead, Papyrus of Ani I (London, 1920), Pl. XXXVII. This umbel occurs in the vignette showing Hathor, as a cow, appearing from the cliffs of the West, amid a clump of papyrus.
as a bouquet from the tomb of Ramses III (Fig. VI.24). In addition to the change in outline, the papyri of the bouquets illustrate the experiments used by Eighteenth Dynasty artists in their attempts to express the multiplicity of pedicels and the filigree character of the inflorescence. The striations representing the primary rays in papyrus of Qenamun are prolonged through and above the broad red ochre rim which is covered by rows of deeper red spots (Fig. II.20). The painter of T. T. 90 (Nebamun) showed some very billowy papyrus in profile, with a broad fringe at the edges filled by short radiating lines which end in a mass of dots (Fig. II.21). In papyrus of Harembah's tomb the light colored borders of the umbels are fringed by short thick lines (Fig. II.22).

On a fragment from Tomb 226, which dates to the reign of Amenhotep III, the pedicels are emphasized and cross each other at the edges, forming an irregular fringe (Fig. II.23). This and similar examples from the tombs of Amenhotpe-Si-Se, and Nebamun and Ipuki

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44 Calverley, *Temple of Sethos I at Abydos* II (London, 1933), Pl.I
45 Or.Inst. Photo. 28253 (Biban el Moluk 11).
46 *Ken-Amun* II, Pl. LI, A.
47 *Two Officials*, PL.XXVIII (Qurna 90; Tuthmosis IV). Cf. also Vandier d' Abbadie, *Chapelle Khâ* (MIFAO LXXIII, 1939), PL.IV (much less spectacular than Nebamun's).
49 *Men. et al.*., Pl.XLV, A (Meryre/?, Qurna 226).
(Fig. II.24), lead directly to the most detailed of all Egyptian renderings of papyrus painted in the Green Room at Amarna (Fig. II.25). There the primary rays are clearly drawn and a few of them even fall naturally downwards. The complicated structure of the secondary umbels was represented by a dotted zone in some of the heads, but in many others the tripartite ends of the pedicels (from the axils of which the rays of the secondary umbel spring in the natural inflorescence) are depicted. Similar papyrus representations continued in use in the better work of the Nineteenth Dynasty (Figs. II.26-27). Types with radial lines ending in a zone of dots were also used in Ramesside times (Fig. II.28).

![Fig. II.26](image1.png) ![Fig. II.27](image2.png) ![Fig. II.28](image3.png)

In decorative art the papyrus inflorescence was applied either in the round to form part of various objects, and on a large scale as columns, or the bell-shaped profile served as a flat motive out of which a number of designs were formed.

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50 Two Officials, Pl.XIV (Qurna 75; Thuthmosis IV). Two Sculptors, Pl.XXVI, 1 (Khokhah, 181; late Amenhotep III-early Akhenaten). Cf. also Schiaparelli, Cha (Torino, 1921-7), Fig. on p.34; bouquet tied to a column of the baldachin of Osiris; hatched freize surmounted by dots (Fig. II.100).
51 Frankfort, Mural Painting of El- `Amarneh (London, 1929), PIs.III-VI.
52 Two Ramesside Tombs, Pls.V, VII (Userhet, son of Khensem/hab/?/, Qurna 51; Ramses I-Seti I), XXIII, XXIX, XXX, XXXII. A (Apy, Qurna 217; Ramses II). Cf. MDIAA VI (1936), Pl.V,b (Thebes 44 feathery head but unclear details).
53 M. Bard and E. Drioton, Tombes thébaines: Tombeau de Panehsy (Mem. Miss. Inst. Fr. Arch Or.,
DESIGNS

TWINNED PAPYRUS

The earliest example of the design showing two adjoining papyrus heads with stems flaring apart occurs on the Narmer Palette, on the side without the depression for grinding, where it is carved at the shoulder of a slaughtered enemy (Fig. II.29). The signs beside the other figures are all hieroglyphs and apparently render names, but the twinned papyrus never plays such a role in later times. On the Narmer Palette the two stems end in one primitive, semicircular umbel, and there is no sign of the binding that appears below the heads in following dynasties. With the next example, we already have the design fitted into the context normal during most of the New Kingdom. It occurs in the serekh pattern of the stela of Djet, found by Amelineau at the edge of Djet's grave at Abydos (Fig. II.30). Here the heads probably appear in a somewhat semicircular form and are bound together. At present we do not possess any materials filling the gap between Djet's stela and the large number of twinned papyrus designs beginning in the Fourth Dynasty and continuing throughout the Old Kingdom. They occur in the same design which formed the lower part of the serekh and which was also used as the pattern of the elaborate

LVII, 2), 11, Fig. 321, Fig.10, 23, Fig.11, 25, Fig.12, 29, Fig.14 (Dira Abu'n Naga 16).

54 The individual plant motives are followed from their beginnings to the peak of their development in the New Kingdom. This method obscures the picture of the repertoire of Egyptian plant decoration at any particular time.

55 Hier. I, Pl.XXIX.

56 Mon Piot, XII (1905), Unpublished photo, Boston Museum. Pl.I. MDIAA, I (1930), 57. Ant. Egy. Louvre I, 234. A fragment of a green glazed plaque from Djet's tomb is painted with black glaze in a design somewhat reminiscent of the general outline of the twinned papyrus, but too simplified to qualify as a certain example of the motive (RT II, 38; Pl. XXXVII, 49).

57 Note: Bound papyrus plants, fragment of open-work carving (Amelineau, Nouvelles Fouilles d'Abydos III (Paris, 1894-8), Pl.VI; W. S. Smith, A History of Egyptian Sculpture (London, 1946), p.11. This is the same as MAS IV, Pl.37 322 = Berlin 18025 bought in 1907 from Amelineau collection = Fouille 189718, Pl.VI, no.25. There are later cases of serekhs, so detailed as to even contain this group; two are carved in Sahure's mortuary temple, another painted in the tomb of Qenamun, 1a, WVDOG, XXVI, Pls. XVIII, LXIV. Ken-Amun II, Pl.XI A
type of false door (“great” or “palace facade” door; Prunkscheintür) carved\textsuperscript{58} or painted\textsuperscript{59} in the great mastabas.

The origin of the elaborately niched false doors has been a much discussed problem, but Frankfort has now shown that the need for an architecturally emphasized place for funerary ritual was satisfied by the elaboration of one of the compound brick recesses introduced from Mesopotamia in the First Dynasty, and the elimination of the others.\textsuperscript{60} He has also indicated the surprising coincidence between the general outlines of the twinned papyrus group and the patterns in a recessed building on an Uruk IV type cylinder seal,\textsuperscript{61} and has suggested, as a not improbable explanation, that in Mesopotamia this represented a window with ornamental grillwork, which was transformed into an indigenous floral design when the Egyptians adapted Mesopotamian architectural forms. This explanation remains attractive since it would explain how the plant design, which is apparently unrelated with either the recessed brickwork, or with the the mat motives of the false doors, could have found a place in the pattern.\textsuperscript{62} However, only one Mesopotamian seal shows traces that can be approximated to the twinned papyrus; moreover, the absence of a number of early Egyptian examples is a hindrance to the satisfactory solution of the origin of the motive.

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\textsuperscript{60} AJSL, LVIII (1941), 347-54.

\textsuperscript{61} \textit{Ibid.}, 345-6. CS, PL.III,d (found at Tell Billa).

\textsuperscript{62} It is noteworthy that, aside from Djer's stela, the early examples of recessing do not contain this motive. Unfortunately the elaborate painted designs in Hesy's mastaba have been destroyed at the height where the
Balcz's interpretation, adopted by Badawy, in which the tying together of the two papyri is considered symbolic of the unification of the two Delta kingdoms, as postulated in Sethe's hypothetical reconstruction of early Egyptian history, does not explain why the presumptive symbol should have been inserted into the upper portion of false door recesses. The unification symbol proper, *shema* (Fig. III.1) occurs in a well developed form at the time of Khaskekhemui (Fig. III.2), and the twinned papyrus motive shares none of its peculiarities (trachea and lung; possessing the phonetic value *shema*, meaning to unite; knotting of stems). If the twinned papyrus symbolizes the unification of two lands, one may as well assume that the triple-papyrus group occurring in the chair of Hetep-heres (Fig. II.31) at the beginning of the Fourth Dynasty must refer to the unification of three areas. Altogether, our present materials are not sufficient to provide an explanation for the origin of the twinned papyrus motive, but occurrence in Djet's stela enables it to claim precedence as the earliest of the classical Egyptian plant patterns.

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64 MDIAA, I (1930), 57-9. Cf. AJSL, LVIII (1941), 343.
65 *Hier* I, Pls.XXXVIII (Granite and alabaster vases).
II.36

The Old Kingdom examples already cited provide a review of the variant forms of the motive, which may occur with umbels and stems of varying proportions. Simplest are those pairs in which each of the umbels remains separate from the other (Figs. II.32-33). The tips of the heads, however demonstrate a strong tendency to curve backwards; often they merely touch one another (Figs. II.34-36), but sometimes the two umbels became fused together (Figs. II.37-39). In the plainer examples only the outline of the inflorescence was given; in other cases the zone corresponding to the secondary umbels, and the sheathing leaves were shown.

In addition to the false door slabs built into the mastabas, or painted on their walls, it was customary in the Old Kingdom to provide those able to bear the expense with sarcophagi carved on all sides with a series of elaborate false doors, a decoration which reflects the architectural forms of the archaic mastabas, which began in the First Dynasty and were niched on all sides. The sarcophagus of Fifi bears very detailed papyrus; not only are there hatched fringes and subsidiary leaves, but chevrons indicate the sheathing leaves at the base of the papyrus stem (Figs. II.38, 40).

In the latter part of the Old Kingdom there came into use wooden coffins less expensive than the carved stone sarcophagi, and differing in that the painted design

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Cf. Balcz, MDIAA, I (1930), 54-5 for list of examples; Pl.XVII (Giza, Cairo Mus., No.6039 = New No.51,950; limestone). Perrot-Chipiez, *op. cit.*, 183-4, Figs.123-4 (Khufu-Ankh; also shown in M.E. Grébaut, *Musee Egy.* I (Cairo, 1890-1915), Pl.XXI). *Ibid.* , II, 57, Fig.34 (Mycerinus; now missing). Boeser et al, *Beschreibung der ägyptischen Sammlung des Niederländischen Reichmuseums der Altertümer in Leiden: die Denkmäler des Alten Reiches* (The Hague, 1905), Pl.XXX (Men?-Nefer; probably Saqara; red granite; badly weathered; former coll. J. d'Anastasy). (*Hwfw-dd.f.*), *Ant.egy. Louvre* I, 233-4, Pl.XXI (Abu-Roasch). Cf. also the sarcophagus of Meresankh II, daughter of Khufu, which was not covered by a continuous series of false doors, but bears single ones on its sides (BMFA Boston, XXV (1927), Fig. at bottom p.97) and the false doors painted on the ends of Mereruka's coffin (*Mereruka II*, Pl. CCIX). Cf. also Jéquier, *Tombeaux de Particuliers Contemporains de Pepi II* (Cairo, 1929), p.15, Fig.11 for side of limestone sarcophagus of Ada decorated with three separate false doors.
represents, not a continuous series of niches, but a transcription of an entire decorated wall (Fig. II.41). Such types as occur in funerary chambers of later Old Kingdom continued in use during the First Intermediate Period and in the earlier part of the Middle Kingdom (Figs. II.42-44). The execution of the designs varies from hasty brush strokes to carefully drawn umbels. The papyrus heads may either be separate or touch each other but no details (sheathing leaves; fringe) were shown; even the binding cords could be omitted, as had already occurred in some Old Kingdom false doors.

The only unusual forms are one in which spirals substitute for the normal papyrus tufts (Fig. II.45), and others in which the umbels are painted with solid color (Fig. II.46).

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67 Selim Hassan, *Excavations at Giza*, 1929-30 (Cairo, 1936), Pls.LXI-LXV (Fifi, called Ptahsdjefa).
68 *Dendræ* 1898, Pl.III (Mena: Pepi II), LD II, Pl. XCIII d (Kagemni; Saqqara, Leps 10). Petrie, *Deshasheh* (London, 1898), Pls. XXVII, top left (Meri; Old Kingdom); XXIX, bottom (NenkheftKa; late Dyn.V. or Dyn.VI).
70 LD II, Pl.XLVII, a (Dagi, Qurna 103; end of Dyn.XI). WVDOG, VII? PL. 61, top (Hereschef-hotep I; coarse painting on outer coffin) *Art Égy.* II, Pl.CXXIII (Asasif; date?). Steindorff, *Grabfunde des mittleren Reich* I (Berlin, 1896,1901); *Mentuhotep*, Pls.1, (c. beginning of Dyn. XII); *Ibid., II*: Sebk-o, Pl.I. *Ant.Égy. Louvre* I, 107-8, Pl.IX (Sepi, Bersheh, Louvre). P.Lacau, *Sarcophages antérieurs au nouveau empire* I (Cat. Caire), Pls. XIII, 28036 (Kheper-ka-ra; Saqqara), XV, 28029 (Seneb-rehu-?; Qurna /T.10/?)? XVI, 28030 (Nebu-her-redi; Deir el Bahri /T.7/), XVII, 28069 (name missing Meir), XXIV, 28083 (spi; Bersheh (B.1), XXVII, 28088 (Nefri; Bersheh, (B.2) outer coffin ), XXIX, 28094 (Djeuty-nakhr; Bersheh, (B.6). *Annales XXX* (1930), Pl.II accompanying Gauthier, “Sarcophage” (possibly from Meir; Dyn. XII)
71 LD II, Pl.CXLVIII, d (Asasif, Leps. 25). Cf. Steindorff, *op. cit.* :I *Mentuhotep* Pl.IV (outer coffin at head) for rendering of Peshkef implement, the descendant of the prehistoric fishtailed lance, showing accidental resemblance to the twinned papyrus (Jéquier, *Frises d' Objets* (Cairo, 1921), p.3242 n. 5).
False doors, carved or painted on a large scale on tomb walls are not as common during the Middle Kingdom as in the preceding period, but several elaborate examples testify to the close adherence to the classical traditional forms (Fig. II.47), and greatly simplified types were carved or painted on Eleventh Dynasty sarcophagi in continuation of the infrequent Old Kingdom usage which placed single false-door units on some sarcophagi.

The tomb of Intefofer and his wife Senet has preserved two different architectural forms utilizing the twinned papyrus. On the south side of the west wall of the shrine is an example of the simple false door surmounted by a rectangular slab showing Senet seated in front of a table of offerings. The space above her is divided into squares or rectangles, filled by various matting designs and by two pairs of djed-pillars and two pairs of twinned papyrus (Fig. II.48). Reliefs from the chapels of princesses in Mentuhotep III Neb-hepetre's temple at Deir el Bahri provide earlier analogies for the use of the twinned papyrus

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72 Quibell, Excavations at Saqqara 1906-7 (Cairo, 1913), Pl.XX. Steindorff, op. cit., I: Pl.IV.
73 Meir III, Pl.XX (Ukhotp, son Ukhotep and Mersi; T.B.4; Amememhet II; walls of the statue recess, carved in stone and painted). Meir IV, Pls.XIX, XXIII, 3; XXV, 2 (Pepi-onkh, son of Sebkhotp and Rekennefer; T.D.2; Sesostris I; Pepi II recesses of S and N burial chambers; roughly worked). Cf. relief fragment (of wall?) from Chapel built by Sesostris II near pyramid at Lahun. (Petrie et al, Lahun II (London, 1890) 20, Pl.XXI, 24.
74 Naville, Eleventh Dynasty Temple at Deir el Bahri, I (London, 1907). Pls. XIX, XX outside II (Kauit); XXII, XXIII (Kemsit; reconstructions of painted sarcophagus with false doors).
75 Antefoker, Pl.XXX (Qurna 60; Sesostris I).
as subsidiary decorative motives in false doors with offering scenes. An extremely simplified and degenerate example of the motive occurs in the door of Amenemhet (Ameni),

![Fig. II.48](image1)

![Fig. II.49](image2)

where, aside from the offering slab and the slit of the door itself, only two pairs of papyrus remain out of the entire pattern.

![Fig. II.50](image3)

On the north side of the west wall in the shrine of TT 60 is carved a false door surmounted by a semicircular entablature, filled with a decoration of djed-pillars, twinned papyrus, and front view falcons' heads (Fig. II.49). Carefully carved but fragmentarily preserved Eleventh Dynasty examples were found in Mentuhotep III's temple (Fig. II.50) and in the grave of Khety. The same pattern, though simplified, appears on the sides of small free-standing naios represented on the sarcophagi of Kauit and Kemsit. As has often been pointed out, this semicircular entablature represents an openwork window placed above the entrance of a door, presumably originally in a hut of reed matting. It appears filled with djed-pillars,

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76 Naville, *op. cit.*, Pls.XI (Sadhe; entrance), XX (Kemsit; east side)
77 *Beni Hasan* I, Pl.XII (T.2; Sesostris I).
78 *Antefoker*, Pl.XXI, top.
79 Naville, *op. cit.*, II, Pls.XIV (chapel of `Ashayt; south side; reconstruction), XV (watercolor of the fragments); XIX (`Ashayt; north side); cf. Capart, *Documents Servir* I (Brussels, 1922), Pl. XXVI for photographs of some of the fragments).BMMA, XVIII (1923), Dec., Pt.II p.17, Fig.8 (Deir el Bahri 311; dyn. XI).
80 Naville, *op. cit.*, I, Pls.XX, outside I (carved), XXII (top 11 left (painted). *Five Theban Tombs*, p.37; Pl.XXX, 7 (Dagi, Qurna 103; end of Dyn.XII; painted on stone).
above doors in the subterranean passages of Djoser’s pyramid.\textsuperscript{81} In a Middle Kingdom model of a garden beside a columned portico, the door of the house facade is equipped with an entablature of open work in which the twinned papyrus group seems to be visible despite the unclear photograph.\textsuperscript{82} This fanlight shows that entablatures with this motive were not limited to funerary architecture alone; like certain New Kingdom decorative elements cited by Frankfort, it testifies that the same units could be used both for the decoration of the abode of the dead and for the dwellings of the living.\textsuperscript{83}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{Fig_II.51}
\caption{Fig. II.51}
\end{figure}

The absence of Old Kingdom false doors or steles crowned by this kind of entablature with twinned papyrus filling is probably accidental, for a representation from the tomb of Ipi proves that this ornamental form was fully developed by the Sixth Dynasty (Fig. II.51).\textsuperscript{84} Here the owner of the tomb is carried in his litter which is canopied by carved wooden screens. The relief is important, not only as an example of an Old Kingdom cornice with twinned papyrus, but also as additional proof that the use of recessed designs

\begin{itemize}
\item \textsuperscript{81} \textit{ÄZ}, LXXIII (1937), 68-9, \textit{Dec. Art}, pp.94-5.
\item \textsuperscript{82} OR Inst. Photo No.34848 (Met.Mus. photo). BMMA, XV (1920), Dec., Pt.II, p.25, Fig.17; cf.p.28 (Deir el Bahri tomb of Mehenkwt-Re; Mentuhotep III) = Metropolitan Museum Studies I (1928) 251, Fig.15. cf. \textit{ibid.} 234, Fig.1A for openwork above house door, without designs (Thut-nufer, Quurna 104, Thutmosis III).
\item \textsuperscript{83} H. Frankfort, \textit{Mural Painting of El-Amarneh} (London, 1929), pp.1-2.
\end{itemize}
and the accompanying papyrus motive was not limited to funerary architecture or funerary equipment (such as coffins or the small naoi represented on Eleventh Dynasty coffins). There is no reason why a litter should be adorned with designs of funerary significance, and, accordingly, we must assume that patterns ultimately derived from the recessed brick architecture of the earliest dynasties were more widely used in purely decorative contexts than has been realized. The carrying chairs of other Egyptian aristocrats offer examples. The sides of the seats of the litters of Mereruka and Djau, dating respectively to the beginning and end of the Sixth Dynasty, are niched.\(^{85}\) Even more explicit niching, some topped by twinned papyrus and \textit{djed}-pillar, is shown in the Twelfth Dynasty on the carrying chair of Djehutihotep and on the sides of his throne erected on the deck of a Nile boat.\(^{86}\)

In addition to the carrying chairs, an ivory box of unknown provenience, now in the British Museum, is carved with elaborate false doors complete with twinned papyrus (Fig. II.52).\(^{87}\) This casket appears almost like a miniature model of the carefully worked stone sarcophagi that were covered with a continuous series of false doors. According to Petrie the Louvre possesses an article of ivory furniture carved with a semicircular entablature filled with \textit{djeds} and twinned papyrus.\(^{88}\)

Examples of the use of twinned papyrus divorced from niche designs are extremely rare. A servant of Mereruka bears on his shoulders a canopied stand made in the shape of a shrine and with a panel of openwork in which two pairs of twinned papyrus alternate with three Isis knot-amulets; inside the stand are placed two spouted water jars (Fig. II.53).\(^{89}\)

\(^{84}\) \textit{Atlas}, I, Pl.CCCCV (Saqqara) = ÄZ, Vol.LXXIII (1937), Pl.VIII.c (Kairoguide 61; now in Cairo Mus.).
\(^{85}\) \textit{Atlas} III, Pls. VIII, IX (Kagemni) = Mereruka I Atlas III, Pl.X = Deir el Gebrawi II, Pl.VIII. (Djau)
\(^{86}\) Bersheh I, Pls.XXIX, XVIII (T.2; Amenemhet II-Sesostris II).
\(^{87}\) E. Denison Ross, \textit{Art of Egypt Through the Ages} (London, 1931), p.98, Fig.2.
\(^{88}\) Dec. Art, p.95.
\(^{89}\) Mereruka I, Pls. LXXXVI, LXXXVII.
The motive also occurs in one of several enigmatic sherds of Nile mud with polished haematite slip, but black interior. They were found at Koptos below a pavement, which is presumably of the Twelfth Dynasty, in an approximately four-foot deep stratum of earth containing blacktopped and white cross-lined predynastic pottery. Some of the unusual clay pieces are fragments of human or animal figures in the round, but the ones which concern here are said by Petrie to be parts of “a large oval ring-stand, decorated with relief figures around the outside. It is about ten inches high, and is worn on the upper edge by the rubbing of a vessel which stood on it” (Fig. II.54). This “stand” apparently showed two dogs and a rough, and now greatly abraded, twinned papyrus flanked on one side by a vertical band. The sherds do not give the complete context of the motive nor is it possible to ascertain the type of pottery stand to which they belonged. In view of their unparalleled nature and doubtful stratification of their Fundplatz we can only state that they may be Old Kingdom in date. This appearance of the motive on what is apparently a pottery stand and its use on the elaborately carved wooden stand of Mereruka can only be regarded as a meaningless coincidence.

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90 Petrie, *Koptos* (London, 1896), pp.5-6; Pl.V, 2. In *Dec. Art*, p.62 he is apparently referring to this piece when he mentions the occurrence of the twinned papyrus pattern “on the prehistoric pottery at Koptos.” However, in view of the fact that another sherd of a stand apparently bears hieroglyphs in relief (*Koptos*, Pl. V,3) and since the relief decoration applied to a small number of prehistoric vessels is completely different, such a date cannot be accepted. In *Koptos*, p. 6 Petrie had dated these fragments around the beginning of the Fourth dynasty, and stated that “one piece of this relief pottery was found associated with handmade jars and rough pots similar to those of the early IVth dynasty at Medum (*Medium* (London, 1892), XXXI, 15, 17).”

91 However stands decorated by crudely modeled figures, chiefly nude females, have been found at Beni Hasan and presumably may range from First Intermediate period into Twelfth dynasty (Garstang, *Burial Customs of the Ancient Egyptians* (London, 1907), Pl.XI, Figs.205, 210, 211.)
The semicircular entablature continued to be used in the New Kingdom. It was sometimes elaborated by the addition of New Kingdom motives such as sphinxes or crouching cats, but the classical Middle Kingdom type filled with *djeds* and twinned papyrus persisted and is found in the tombs of Puimre (Fig. II.55), Amenemhet, son of Dhutmosi (Fig. II.56), Qenamun (Fig. II.57), Amenemhet, called Surere (Fig. II.58), and Sennefer.

An entablature in the tomb of Huya has one space filled by two axially symmetrical spirals with flaring stems; it could be an abstraction of the twinned papyrus, but this cannot be proved. Although the elaborate false door type was extremely uncommon in comparison

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93 *Puyemre* II, Pls.XLIV, LXXXVIII (Khokah 39; early Tuthmosis III). *Amenemhet*, Pl.XXVIII (Qurna 82; Tuthmosis III). *Ken-Amun* I, Pl.XXV, A (Qurna 93; Amenhotep II). ÄZ, Vol.LXXXIII (1937), Pl.VIII, a (Khokhah 48; Amenhotep III). BMMA, XXIII (1928), Dec., Pt.II, p.47, Fig.5 (Qurna 96; Amenhotep II).
94 *Amarna* III, Pl.XIX (T.I).
with earlier times, it was not extinct. A version was sketched in red, blue and black on an ostraca from Senmut’s tomb, but the twinned papyrus motive was omitted. At approximately the same time three complicated examples were painted on the ceiling of the sarcophagus chamber of Puimre; they contain detailed papyrus groups (Fig. II.59).

A simplified form, of the Prunkscheintur, used as a pedestal for a figure of a sphinx, was carved on the red granite stela of Tuthmosis IV, placed between the forepaws of the Sphinx at Giza. Here, if Lepsius' drawing is accurate, the papyrus heads have lost their identity and have fused together, (Fig. II.60). This is not the only New Kingdom example which deviates from the normal forms of the twinned papyrus. Although normal groups without the recurved ends of the umbels, do appear on a false door towards which a statue of Qenamun is dragged, a much more unusual form can be found in the inner Osiris hall of Seti I’s temple at Abydos. The king presents an image of Maat to the falcon perched on an elaborate serekh pedestal. The twinned papyrus has acquired a very extraordinary shape (Fig. II.61), showing clear signs of conflating with the South-flower to be discussed below. The same forms, only without the pendant ribbons, appear in the serekh which forms the seat of the king in the same temple.

The use of this motive in the applied arts of the New Kingdom cannot be

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95 William C. Hayes, Ostraka and Namestones from the Tomb of Sen-Mut (No.71) at Thebes (New York, 1942), pl.14; Pl.VI, 24. Cf. also Five Theban Tombs, Pl.III (Menthirkhopshuf; Dira `Abu’n-Naga 20; Tuthmosis III /?/; matting designs are placed in a panel above the door proper; they are fragmentary and no papyri are preserved.

96 Puyemre II, Pls.LX, LXI. Cf. pp.31-32 where Davies points out that this was an adaptation of a coffin composition used on a large scale.

97 LD III, Pl.LXVIII.

98 Ken-Amun I, Pl.XL (Qurna 93; Amenhotep II). Several elaborate false doors are painted on the interior of the Nineteenth Dynasty coffin of Amenemapit, but the illustration is too small to show whether the
demonstrated, but is suggested by the appearance of a unique twinned papyrus group in the passage of TT 112, one of the two tombs of Menkheperra`sonb. The date of the design is uncertain since the tomb was usurped by a certain `Ashefytemwese' in Ramesside times. Nor is the referent of the pattern clear; since it occurs together with a table and beside two workmen, Davies considers it to be part of a scene showing the making of funerary equipment (Fig. II.62).

The papyri are drawn in detail with tripartite sheathing stems and radial lines representing the pedicels. The stems cross each other instead of being tied together and flaring apart as in normal groups.

The twinned papyrus design persisted into the final phases of ancient Egyptian culture. It appears on a coffin of the Late Period found in the vicinity of Neuserre's funerary temple at Abusir (Fig. II.63).

The papyrus heads have lost the recurved ends typical for the motive, and instead of the cording enclosing the stems there are a series of lines drawn between the stalks. In Ptolemaic times one of the designs in the tomb of Harsiesi, called Dionysius at Hu, shows a lower Egyptian shrine, (khem), standing in the shade of a tamarisk tree. Its facade is covered with a false door design, surmounted by two rows filled with djeds and twinned papyrus.

**TRIPLE PAPYRUS**

twinned papyrus motive was included (Encyclopédie photographique de l'art I, Pl.C, A /Louvre/).

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99 Men. et al., pp.19, 24-5; Pl.XXX, F. According to Davies this painting appears to be more Ramesside than Tuthmosid, and yet it shows no signs of alteration by the later occupant of the tomb.

100 WVDOG, VIII, p.125, Fig.203 (Late Period gr.17; no grave goods).

101 Wilkinson, Manners and Customs..(London, 1868) 2 III, 349, Fig.588 (from the sarcophagus chamber; the tomb is now destroyed; cf. Wilkinson, Modern Egypt and Thebes II (London, 1843), 116 f.).
Under this heading may be subsumed a number of compositions in which three papyrus stems are grouped together, but which are not all orthogenetically connected with one another. Most frequently met is the hieroglyph ha (Fig. II.64), symbolic of the Delta, which takes the form of a tall median stem flanked by two shorter ones springing from basal leaves.\textsuperscript{102} It is common in the First Dynasty and thereafter,\textsuperscript{103} and in addition to its use in the script, it was often combined with other symbols or hieroglyphs in compositions fulfilling both decorative and meaningful functions.

In the New Kingdom the hieroglyph was used in many decorative contexts, but before that time was very rare. In the Old Kingdom there appears only one example of a triple papyrus motive, which evidently possesses an origin independent of the hieroglyph. The arms of the gold-plated wooden chair of Hetepheres I (the daughter of Huni, wife of Snefru, and mother of Khufu, in whose reign she was buried)\textsuperscript{104} are filled by three papyrus stems (Fig. II.31). The two outer ones are curved in the same manner as the twinned papyrus stems. Six cords bind the three stalks together. The design is apparently a variant of the twinned papyrus motive, with a straight, median member added. The side of a Middle Kingdom faience hippopotamus was decorated with triple papyrus groups (Fig. IV.19).\textsuperscript{105}

The Eighteenth Dynasty brings with it
the application of the hieroglyphic triple papyrus group in a number of arrangements which are primarily decorative. In them however, the semantic value of the design was usually still present, as is shown clearly by its use as an ornament of the pommel of an axe of Ahmose (Fig. VII.9). The group was modified to fit a narrow, tall rectangular space when it was carved on a colossal scale as the decoration of a monolithic pillar erected by Tuthmosis III in the Amun temple at Karnak. It alternates with a recessed design and with a group of triple plants representative of Upper Egypt to form a dado painted or carved on palace walls or molded in polychrome tiles which may have formed part of the decoration of a throne dais (Fig. II.65). On scarabs the hieroglyph was used, of course, in ordinary writing, and was at times combined with other hieroglyphs in inscriptions apparently more decorative than meaningful. It is but a short step to the scarab bases filled by a single triple papyrus design (Fig. VII. 10). Such types seem to be typical for the Eighteenth Dynasty.

Another type of small object on which the design may occur is the ointment spoon. The handle of one in the British Museum is shaped into this form. An example with a cartouche-shaped bowl has a goose-necked handle which forks into three papyrus stems and umbels which provide a more solid attachment. A triple papyrus group is one of the

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106 É. Vernier, *Bijoux et Orfèvereries III* (Cat. Caire), Pl. XLII, 3, and cf. in the Middle Kingdom a jewel of Khnumit (J. de Morgan, *Fouilles à Dahchour* (Vienna, 1894-5), PL IV, 34, 35)
107 Hoyningen-Huene and Steindorff, *Egypt* (New York, 1943), Fig. on p.93.
108 MJ, VIII (1917), 218 (Memphis, Palace of Merenptah; walls of the throne room.; since there is no illustration it remains uncertain whether the triple papyrus or clump with bent stems was used here). William C. Hayes, *Glazed Tiles from a Palace of Ramesses II at Kantir* (New York, 1937), Pl.17 and nn. 64-65; Pls. III, IV, V, type i. *Ibid.*, p.17 refers to its use alone at the bottom of faience inscriptions of Seti I and Ramses II at Quantir. *Medinet Habu* III, 48, Fig.27, (First palace).
110 Newberry, *Scarabs* (Cat. Caire), Pl.XLI, 16. Newberry, *Scarab-shaped Seals* (early dyn.XVIII = Fig. VII.10).
112 E. Riefstahl, *Toilet Articles from Ancient Egypt* (Brooklyn, 1943), Pl.XIII, right.
elements of an elaborate ointment spoon in Berlin (Fig. VI.49)\textsuperscript{113} and forms the main part of the handle in other examples.\textsuperscript{114}

In addition to the examples of the adaptation of the hieroglyphic triple papyrus group for ornamental purposes, it should be noted that in representative contexts the long papyrus stems brought as offerings are frequently arranged in groups of three.\textsuperscript{115} When all the scraps of evidence available are taken together, it becomes clear that the triple grouping of papyrus was a commonplace motive in the repertory of Egyptian designers from the Old Kingdom on. In the New Kingdom we shall see that the triple papyrus design played an important role in the creative synthesis of new plant patterns that took place at that time.\textsuperscript{116}

**PAPYRUS CLUMPS**

The triple papyrus motives just discussed are usually referred to as papyrus clumps, but, since there exist decorative and representative designs which differ both in form and use, we propose to designate these latter designs, characterized by the appearance of more than three stems, as papyrus clumps.\textsuperscript{117} They may consist of symmetrical groups with additional members added to a central core equivalent to the triple papyrus. Papyrus buds may be interspersed with the umbels, or a triple group of stems may be flanked by two stalks, acutely bent and ending either in buds or inflorescences. It is this last type which formed a hieroglyph used as a determinative expressing papyrus or swampy areas, and

\textsuperscript{113} Fecheimer, *Die Kleinplastik der Agypter* (Berlin, 1922), p.143
\textsuperscript{114} Champollion, *Mon.* II, CLXVII, 7. *Art Égy.* II, Pl. CLV,4
\textsuperscript{117} In making this distinction we do not intend to suggest that there is any fundamental difference between the triple papyrus and the papyrus clump motives. They are all variants of the papyrus motive and one may appear in the place of another.
which often replaced the *ha* hieroglyph in the Middle Kingdom.\(^{118}\) The manner in which the various motives could be interchanged is illustrated by the symbolic groups in which the basket on which sits the serpent Buto is supported on papyrus,\(^{119}\) or in which groups of papyrus form the headdress of Nile gods or goddesses.\(^{120}\)

The earliest prototypes of this sign, found on the mace of King Scorpion,\(^{121}\) antedate the earliest known triple papyrus groups (Fig. II.66).\(^{121}\) The plants appear springing from two superimposed ground lines and are presumably intended as representations rather than as hieroglyphs. The number of stems in each group varies from two to four, and both the upright and bent stems end in the semicircular umbel of the earliest papyrus delineations.

After Scorpion's mace the motive disappears until the Fourth Dynasty when it is incised on a tall narrow alabaster jar from the Austrian concession in the West Cemetery at Giza (Fig. II.67).\(^{122}\) All the stems, including the two bent ones, end in bell-shaped umbels. The only other known pre-Eighteenth Dynasty papyrus clump decoration is to be found on a

\(^{118}\) A. Gardiner, *An Egyptian Grammar*, M 15 (Fig. II.64).

\(^{119}\) Jequier, *Monument funéraire de Pepi II* (Cairo, 1936) Vol II, Pl. XXIII, top middle.

\(^{120}\) No reference

\(^{121}\) *Hier.* I, Pl XXVI c, 1.3.

\(^{122}\) Junker, *Giza* I (Vienna, 1929-55) 110, Fig. 10, 3; p. 263; not assignable to a specific mastaba. The rim of the vessel is carved in the form of a round cartouche.
litter of Khnemhotep III (Fig. II.68). The panel which forms a solid wall between the animal-shaped feet of the chair is decorated by five clumps of papyrus with bent stems. According to Rosellini’s drawing the upright median stem of each group ends in a tripartite head, a shape which, if it is actually present in the original, constitutes a peculiar and unique rendering of papyrus.

In the New Kingdom papyrus clumps, either flanked by bent stems or consisting of a number of stalks forming a rounded group, are shown on the borders of pools in the private tomb (Fig. II.69). They serve to mark the swamp setting, or are placed behind the figure of the Hathor cow emerging from the mountains of the West, a motive which was introduced in the later part of the Eighteenth dynasty and was very popular thereafter, both in the tombs and as a vignette in the Book of the Dead. In such contexts the clumps serve as pictures of real plants. Exactly the same motives were painted on the palace pavements at

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123 Beni Hasan I, Pl.XXIX = Rosellini, Mon. Civ., Pl.XCIII, 2 T.3; main chamber, West wall; Sesostris I). Rosellini’s figure is the most detailed drawing available; since we cannot trust its accuracy implicitly, it is unfortunate that no modern facsimile exists.

124 Rossellini, Mon. Civ., Pl.LXIX (Sennufer, Qurna 96 A; garden of Amenhotep II; with and without bent stems = Fig. II.69) Ken-Anun I, Pl.XLII (Qurna 93; Amenhotep II). Anc. Egy. Paint. II, PLLXIX (No. no.; BM 37983; Tuthmosis IV or Amenhotep III: 12 clumps, only one with bent stems). Neferhotep I, Pl.XLII (Khokhah 49; Ai; clumps with flanking stems bent circularly), XLIV (as before and also straight-stemmed clumps). Rosellini, Mon. Civ., Pl. CXXXIX, 1 = MDIAA IV (1933), Pl.XXXV, b (Pesiur; Qurna 106, Seti I; Rameses II, two clumps at a pool, by which grows the tree with dryad goddess).

125 Much of the papyrus in the New Kingdom marsh scenes (cf. nn.20, 21) conforms to this pattern. Atlas I, Pls.LXXX, CCXLIX = Bouriant, Tombeau de Haremhab ("Mem. Miss. Inst. Fr. Arch Or.," V), Pl.VI (Qurna 78; Tuthmosis III; fowling, harpooning; netting birds). Amarna V, Pl.V (May; T.14; two papyrus clumps, one with bent stems, one without, on the quaiside of Akehetaten). Two Ramesside Tombs, P1s. XXX, XL,3 (Apy, Qurna 217; Rameses II; netting scene and cleaning fish; bent stems).

126 Two Sculptors, Dyn. XVIII papyrus, p.32, and n.2; = Winlock, Excavations at Deir el Bahri (New York, 1942). Hathor Shrine, Pl.xxxi, 2 = Borchardt, Works of Art (Cairo, 1908) Pl.xxxiii, papyrus clump interspersed with "lily" flowers. Neferhotep I, Pl.LX, B (Khokhah 49, Ai) Cf. Hathor cow against papyrus clump as decoration of interior of faience bowl (WVDOG XIV, 132, Fig.180 top left.)
Thebes and Amarna (Fig. VI.43); they serve as excellent examples of those borderline cases, frequent in Egyptian art, in which representative motives take on a decorative function without changing their shape or losing their pictorial meaning. Papyrus clumps around a pool were skillfully used to adorn the top of a glazed brick from Amarna; noteworthy is the satisfactory manner in which the problem of filling the corner spaces is solved. The motive of a pool with plants growing around it was reduced to a much more stylized form in the interiors of the glazed bowls which are characteristic of the New Kingdom. Although waterlilies are more usual, clumps of five or three papyrus stems also make their appearance. Papyrus clumps appear on painted pottery.

A number of designs are alike in that each consists of a single clump filling an allotted space, often as a unit in architectural design. Two triangular spaces in an entablature above the door leading to the shrine of Huya were filled by papyrus clumps now badly

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128 *City of Akhenaten II*, 67; Pl.XLI, 2; cf. JEA, XVII (1931), Pl.LXXII, 5 (Area T.34.3 /poor huts/; no.301600; dark blue glaze with design in lighter blue).

129 MDIAA, V (1934), 148, Fig.4 (= H. Wallis, *Egyptian Ceramic Art* 1898 (London, 1898), Fig.12, opposite Pl.VI,2); Pl.XXVI, C (New York). Cf. fragmentary tile, probably from Amarna, Burlington 1922, Pl.XL.

130 *City of Akehenaten I*, Pl.XLV, 1.4. Spiegelberg, *Ausgewählte Kunst-denkmäler der Aegyptische Sammlung* (Strassburg, 1909), Pl.XX, 75 (Thebes), Nagel, *Ceramique du nouvel empire à Deir el Médineh*
damaged.\textsuperscript{131} The lower part of the wine press of TT Tomb 90 (Nebamun) is divided into three sections; the two outer, larger ones are filled with bent-stem clumps, while the median one possesses a smaller, plain clump (Fig. II.70).\textsuperscript{132} The pattern is somewhat reminiscent of that applied to the sedan chair of Khnemhotep III. Akhenaten’s reign yields two different utilizations of clumps with bent stems. On each side of the Window of Appearance carved in Parennefer’s tomb is a panel filled with this design.\textsuperscript{133} In the North Palace the east wall of the hypostyle hall was decorated by a continuous dado of clumps of papyrus with acutely bent stems alternating with niches and south flower clumps, a frieze design which we have already observed carried out with a triple papyrus groups in the Nineteenth Dynasty.\textsuperscript{134} These two Amarna clump patterns, taken together with the clumps painted on the pavements, the glazed brick and painted pottery from the site, testify to the great popularity of this motive during the Amarna Period. Part of the decoration of a gold plated bedstead of Tutankhamun, of his throne, and of open panels decorating a stone lamp, is made up of clumps of papyrus,\textsuperscript{135} and the side chair of Ramses III (?) was filled by a clump with bent stems.\textsuperscript{136} Another example comes from the period immediately succeeding Tutankhamun. Two panels on one of the boats in the funeral cortege of Neferhotep, son of Neby, are filled by a clump with bent stems and by a triple papyrus group, and offer an additional instance of the essential equivalence of the two motives.\textsuperscript{137} Panels bordering the Window of Appearance of Ramses II are filled by two clumps with bent stems.\textsuperscript{138} The design also appears on small objects; a clump with circularly bent flanking stems was used on the mirror

\begin{itemize}
\item\textsuperscript{131} Amarna III, Pl.XIX (T.1).
\item\textsuperscript{132} Two Officials, Pl.XXX (Qurna 90; Tuthmosis IV-early Amenhotep III)
\item\textsuperscript{133} Amarna VI, Pl.IV (T.7).
\item\textsuperscript{134} Frankfort, \textit{op.cit.}, pp. 69-70; Pl.XII, A.
\item\textsuperscript{135} Tomb Tut.,III, Pl.XXXII.C; Ibid., II, Pls.LXIV, XLV.
\item\textsuperscript{136} \textit{Art. Égy.}, II., Pl.C L 1,2 (“Dyn. XX”).
\item\textsuperscript{137} Nefer-hotep, I. Pl. XXXIII (Khokhah 49; Ai).
\item\textsuperscript{138} Medinet Habu III, 4, Fig.22
\end{itemize}
case of Hent-taui, wife of Nesubenebded of the Nineteenth Dynasty (Fig. VI.50). The handle of an ointment spoon in the British Museum is occupied by this motive with corners filled by subsidiary birds or waterlily buds. Two clumps fill panels on a semicircular toilet box of the Nineteenth Dynasty.

**VERTICAL PARATACTIC PAPYRUS DESIGNS**

The source of designs consisting of series of unconnected vertical stems, often crowned by alternating buds and umbels or even flowers of other species, is undoubtedly the erect seriation of papyrus used in many of the marsh scenes. Most of the New Kingdom fens contain less formal plants, but in the temple garden at Deir el Bahri are shown absolutely regular and rigid vertical stems, varied only by three stalks falling in stiff parabolic curves. From such representations it is but a slight step to the monotonous friezes of papyrus, and sometimes other plants, which were carved on the lower parts of temple walls and were especially common in the Late Period. This remained the main application of the paratactic papyrus design, but it was also used in the applied arts, as on a piece of harness, on the sides of the glazed brick from Amarna, around a pool carved on the interiors of ointment spoon bowls, in an openwork pot stand, and on faience pots.

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139 Bénédite, *Miroirs* (Cat. Cairo), Pl.XXIII, 44101 (Deir el Bahri, coffin).
140 JEA, XIII (1927), Pl.III, 5975
141 Brunton and Engelbach, *Gurob* (London, 1927), Pl.XXIV.29 (T.606; "Ramesside").
142 Cf. LD II, Pl.XXXV (Giza, Leps. 90).
143 Naville, *Deir el Bahri* V, Pl.CXLII. Cf. also the strip of straight papyrus in the 9th hypostyle room of the Monthu Temple A. Varille, *Karnak* I (FIFAO XIX, Cairo, 1943)), 9, Fig.9 (Amenhotep III?).
145 *Medinet Habu* I, Pl.XXIII (Ramses III; alternating long and short stems).
146 *City of Akhenaten* II, Pl.XLI, 2.
148 *City of Akhenaten* I Pl.XLV, 4
or pottery, or as pendants from counterpoise of a necklace.
APPLICATIONS OF THE PAPYRUS FORM IN APPLIED ART

FILLETS

The enumeration of the designs derived from papyrus does not end the story of its utilization in Egyptian workshops. Its bell-shaped umbel was used, either as a flat profile form or in the round in the formation of a number of objects. The usual headdress of the Old and Middle Kingdom was a narrow fillet that consisted originally of a linen band tied in a bow at the back of the head. It was soon replaced for wealthier people by bands of metal with holes at the ends for ribbons, and in the Fifth Dynasty was being made entirely of precious materials. These circlets were usually decorated by floral motives, among which the papyrus is found. Some examples of the actual objects have been preserved. In the burial of a young woman, one of the subsidiary graves in the mastaba of Re’wer, son of It-s at Giza was found a gold fillet (Fig. II.71). To it were fastened three gold plaques, of

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153 For the plain, linen band cf. Petrie, *Medum* (London, 1892), PL IX. An example of a gold circlet occurs in the First dynasty (Reisner, *Early Dynastic Cemeteries at Naga-ed-Der I* (Leipzig, 1908-32), PL IX, d; gr.1532). For plain fillets with bow knot cf. WVDOG, XXVI, Pls. LIII, LIV (distribution of gold, mortuary temple of Sahure) and p.63, Fig.9 (*akhut-hotep*? with same subject, now in Louvre. An example on a table shows that the bowknot occurs both in front and back).
which two, at the side of the head, are cut into the shape of papyrus heads attached horizontally to an inlaid circular center, an arrangement traced by Winlock back to the bow knot of the original linen ties.\textsuperscript{155} In the space above the two umbels nestle two ibis (Fig. II.72). Another fillet from Giza, now in Leipzig, shows three papyri set at right angles to one another, with the upper quadrant filled by two ibis flanking an ankh (Fig. II.73).\textsuperscript{156} Such head bands are often represented in the Old Kingdom reliefs. A Hetepheres sits in front of an offering table wearing one decorated (in the relief) by two single papyrus inflorescences (Fig. II.74).\textsuperscript{157} Rahenem, named Henema, wife of Aba and her daughters wear fillets decorated by only a single papyrus (Fig. II.75).\textsuperscript{158}

The exact meaning of this design appears uncertain; it may refer to the same doubled group usually shown. On the other hand, the statuette of a female offering bearer from the grave of a Mentuhotep at Thebes wears a painted fillet in which only a single papyrus flower is suspended from the knot at the back of the head.\textsuperscript{159} The wife of Hetep-ni-Ptah of

\begin{itemize}
\item\textsuperscript{154} ILN, Feb.21, 1931, p.295, top.
\item\textsuperscript{155} Winlock, \textit{op.cit.}, p.27.
\item\textsuperscript{156} Schäfer-Andrae, \textit{Kunst des Alten Orients, /2d ed./} (Berlin, 1942), pp.270, 1:629 (Dyn.IV).
\item\textsuperscript{157} LD II, Pl.XC, left: (Giza, Leps. 54).
\item\textsuperscript{158} \textit{Deir el Gebrawi}, I, P1S. III, IV, XII, XVIII Cf. also \textit{Bersheh} I, Pl.XXVIII.
\item\textsuperscript{159} Steindorff, \textit{Grabfunde des Mittener Reiches} (Berlin, 1896f) I, \textit{Mentuhotep}, Pl.XI, 1.3.
\end{itemize}
the Fifth dynasty wears a fillet that is drawn with all three plaques in profile (Fig. II.76).\textsuperscript{160} A wife of Pepi II wears it when officiating in temple services.\textsuperscript{161} Watetkhethor, wife of Mereruka wears it frequently, and it appears among the objects finished by the workmen in her husband's shops (Fig. II.76).\textsuperscript{162} This last example is highly interesting for it shows the headdress complete with ribbons. It provides a new illustration of the accuracy of which the Egyptian artist was capable; he has placed a bird on top of two of the papyri; the design of this circlet's plaques was very similar to that of the actual examples preserved. Wife of Pepiankh the middle wears a fillet evidently decorated by three papyriform plaques.\textsuperscript{163} The fact that Meresankh III apparently wears the fillet only while in the marsh is interesting in view of the fact that the object was termed the "rowers" or "boatmen's fillet" in the Middle Kingdom.\textsuperscript{164} In the Old Kingdom sailors sometimes wore simple fillets, or on occasion more ornate ones with vegetal ornament, possibly actual flowers.\textsuperscript{165} The sailors demonstrate that this headdress was by no means a feminine perquisite.

\textbf{Fig. II.77} \hspace{1cm} \textbf{Fig. II.78} \hspace{1cm} \textbf{Fig. II.79} \hspace{1cm} \textbf{Fig. II.80}

The form with doubled papyrus head was affected by men as frequently as by women

\begin{itemize}
\item \textsuperscript{160} LD II, Pl.LXXI,a (Giza, Leps.25).
\item \textsuperscript{161} Jequier, \textit{Fouilles à Saqqara: Pyramide d' Oujebten}, (Cairo, 1928), p.15, Fig.8.
\item \textsuperscript{162} \textit{Mereruka} I, Pls.VIII,IX, XXIII,a; XXVI-XXVIII, and passim. Cf. also, \textit{Bersheh}, Pl.XXX (Tehutihotep; T.2).
\item \textsuperscript{163} \textit{Meir} III, Pl.VII.
\item \textsuperscript{164} BMFA Boston, XXV (1927), 71, Fig.10 (Giza, Reisner 7530 sub; daughter of Kaw-ab and Hetepheres II; granddaughter of Khufu). Winlock, \textit{op.cit.}, p.27 f.
\item \textsuperscript{165} \textit{Ibid.}, p.28 and n.17. \textit{Deir el Gebrawi} I, Pl.IV (Aba; T.8; Merena Pepy II). \textit{Mereruka} I, Pl.XIII. Plain white ribbons were sometimes painted on Middle Kingdom model boatmen (Reisner, \textit{Models of Ships and Boats},/Cat. Cairel/, 61-2, Figs.219-30; nos.4899-4900 /Meir/).
\end{itemize}
At present only one actual copper circlet, possibly Old Kingdom in date, has been found; in Grave 315 at Sedment. No details are unused on the simple bow-shaped plaque fastened to the front of this band (Fig. II.79). In the Middle Kingdom circlets with doubled papyrus were painted on a sarcophagus (Fig. II.80), and were occasional items in the inventories of objects painted on sarcophagi (Fig. II.81). Actual examples occur among the Dahshur finds (Fig. II.82). Reliefs from the tomb of Tehutihotp prove that its use had not been relegated to the realm of funerary equipment but that it was still being worn. A fillet with this decoration is worn by the king on a fragment of a relief from Mentuhotep III’s temple at Deir el Bahri. The double papyrus umbels were sometimes even applied to the necklaces worn by bulls, in addition to the mankhet pendant that usually

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166 Atlas I, Pl.CCCLXXVII (Berlin 14103. Dyn.IV, spearing fish). Merenra I, Pls.IX, XV, XVI (fowling). Capart, Rue de Tombeaux (Brussels, 1907) Pls. XCI-XCIII (Neferseshemtah or Uzahateti, good name Sheshi; leaping on staff; on Pl.XCIII his wife appears wearing an identical fillet). WVDOG VII, Pl.XVI (Neuserre enthroned), WVDOG, XXVI, Pls.XXXV (Sahure offering to Bast). XXXVIII.XXXVIII (wearing Atef crown). Deir el Gebrawi I, Pls.III (Aba and his son Zau harpooning fish). VI (seated watching marsh activities). Von Bissing, Gemnikai (Berlin, 1905), Pls.XV (standing), XX (leaning on staff). Meir IV, Pls. VII (spearing fish); XVII (fowling, both husband and wife have fillets with single papyrus (Pepiankh the middle, T.D. 2, Pepi II).

167 Petrie, Sedment I (London, 1924), p.2; Pl.XXII,2. Unfortunately the evidence for dating Gr.315 is not consistent. Petrie assigns the stone vessels and bricks blocking the chamber to the First Dynasty, "the skeleton was contracted in a manner that disappears after the Fifth Dynasty", but the mirror, is of a type not known before the 18th Dynasty.

168 Lacau, Sarcophages anteriers au Nouvel Empire I (Cat. Caire), Pl.XXXII, 28120. Cf. also Chassinat-Palangue, Necropoles d’Assiout (MIFAO, XXIV), Pls. XXVI, XXVII.

169 Lacau, op.cit., II, Pl.LIV, 491. Winlock, op.cit., p.28 points out that at this time the fillet "began to be classed as a king's crown which was shown among the amuletic articles in the coffins."

170 J.deMorgan, Dachour, (Vienna,1895), Pl.XXVIII.C.E (Aweb-Re-Hor), G (Nubhetepti-Khrad, probably daughter of Hor).

171 Bershel I, Pls.VIII, XXVIII-XXX (Tehutihotp; T.2; Amenemhet II-Sesostris III). Beni Hasan II, Pl.XXVII Baqt I; T. 29; Dyn. XII ?).

172 Naville-Hall, XIth Dynasty Temple at Deir el Bahri (London, 1907-10), III, 23, Pl.XII, 1.
adorns the prize cattle: a precedent for this had been set in the Old Kingdom.\(^{173}\) Although in the New Kingdom these fillets were royal prerogatives (the crowns of Neb-Kheper-Re Intef of the Seventeenth Dynasty (Fig. II.83), and of Tutankhamun (Fig. II.84) have been found.\(^{174}\) Nevertheless, they were still represented as placed in the chests of funerary equipment carried in the funerals of private individuals (Fig. II.85).\(^{175}\)

![Fig. II.83]

![Fig. II.84]

![Fig. II.85]

In addition to the fillet with double papyrus ornament, royal or divine ladies of the New Kingdom sometimes wore circlets shown with only one papyrus umbel in back. Such a headress is worn by Nefruré among others.\(^{176}\) She is nude except for jewelry and a complicated belt, tied in exactly the same manner. Nefrubit's, however, ends in a clasp formed of two papyrus umbels.\(^{177}\)

\(^{173}\) Bersheh, I, Pl.XVIII. Cf. Jéquier, *Frises d'Objets* (Cairo, 1921), p.65, Figs.171-175 for occurrence of mankhet pendants as counterpoises to heavy necklaces. *Ptahhetep* II, Pl.XXI.

\(^{174}\) Boeser, *Aegyptische Sammlung in Leide* (The Hague, 1905) III, p.8; Pls.XVIII, XXII (Fig. 17,0) *Tomb Tut.*,II, PLLXXV, A.C. (Fig 17,P). Representations: LD III, PLLI, a (Semneh Temple inner East wall), LII, a (outer West wall) LIV, a (West portal), LVIII (Temple Kamneh). *Art Égy.*, I, Pl.XXXIX; for present mutilated state cf. *Atlas III*, Pl. CCIII (Khaemhet, Qurna 57; Amenhotep III). Calverly, *Temple of King Sethos I at Abydos I* (London, 1933), Pls.III, VI, worn by Queen Bruyere. *Deir el Medineh 1923-24, FIFAO.,II 2/1925/),76, Fig.10 (Stela). Giulio Farina, *Pittura Egiziani* (Milano, 1929), Pl.CLXXIX =? Bruyere, *Deir el Medineh 1927, FIFAO V* (1928), goddess suckling baby. *Amenemhet*, Pl.XII (Qurna 82; Tuthmosis III). *Rekhmire*, Pl. XVIII (Qurna 100; Tutmosis III = Amenhotep II).

\(^{175}\) *Calverly, Temple Sethos I Abydos I* (London, 1933), Pl.V. (goddess). Champollion, *Mon. II, CXCIV, 1,3 = Rosellini, Mon hist. XIX, 123 = Naville, Deir el Bahri V* (London, 1907-10), Pl.CXL (here figure of princess is almost completely destroyed.)
FURNITURE

In Egypt the commonest decorative form into which free projecting ends were shaped, or which was used for handles, was the papyrus umbel. Even though the actual objects have rarely survived, the numerous representations testify to the frequent use of papyrus in this manner during all phases of Egyptian history. The projecting ends of the horizontal frames of Egyptian chairs, which rested on animal shaped legs, form the most ordinary examples of this application of the papyrus head. The earliest examples are chairs and beds painted on the walls of Hesy's mastaba (Figs. II.86-89). Four heads are shown on his chairs, but later it became customary to add this decoration only to the backs of the seats. This feature was almost universal in the Old Kingdom, (Fig. II.90) but became

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178 Quibell, Excavations at Saqqara, 1911-12; Tomb of Hesy (Cairo, 1913), Pls.XVIII, (Fig. II.86)=33, (Fig. II.87)=40; (Fig. II.88)=XIX, (Fig. II.89)=44, 47, XX, 51. It is possible that the papyrus head was already being used for furniture in the First Dynasty. A palanquin on Narmer's mace head has splayed projections and rests on animal feet (Hier I, Pl.XXVI, B). This really becomes a certainty when we note the papyrus-ended palanquin from Sahure's temple. (WVDOG XXVI, Pl.LXV.)
rarer during the Middle Kingdom and appears in the New Kingdom only as an exception, not as the rule. Beds, though less commonly shown, were also equipped with these papyrus projections (Figs. II, 89, 91). That of Hetepheres I provides an illustration in the round. A fragment of a chair from Sedment shows one of the small cross pieces ending in a papyrus umbel when joining the main leg; another chair frame apparently shows the same feature, though less clearly.

BOATS

Since they were made of papyrus, it was considered in the New Kingdom especially appropriate to shape the ends of the recurved prows and sterns of the light skiffs used for expeditions into the fens into the shape of a papyrus inflorescence. Such boats are shown in the reliefs and were included among the funerary models of the New Kingdom. Large boats of funerary cortege could not have been made of papyrus but their ends are carved into

179 Junker, *Giza I* (Vienna, 1929-55), 175, Fig.31; Pls. XXVI,b; XXVII (offering slab of Yunu-Jwenewy; Mastaba Is; Reisner 4150; Khufu=Fig. II.90); p.186, Fig.36; Pl.XXIX,a (Offering slab, Mastaba In; Reisner 42601 Khufu). Junker, *Giza II*, 146-7, Figs.15,16; Fig.18 opp. p.150; Pl.Y, a (Kanesesut; Reisner 4870; beginning of Dyn.V); p.180, Figs 25,26 (Seskhetotp; Leps 36; beginning of Dyn. V.); Junker, *Giza III*, 169, Fig.30 (Nesutnfefer; Reisner 4790; transition, Dyns. IV-V). Sheikh Said, Pl.IV (Serfka?; T.24). Naville-Hall *Xlfh Dyn. Temple at Deir el Bahri I* (London, 1907). Pl.XVIII, top middle (shrines of princesses).II, Pls.XII Sethe? XIII, XVII (A?). *Bersheheh I*, Pls.XIX, XXXII (Tehutihtotp; T.2; Amenemhet II-Sesostri III). *Meir II*, Pls.VI, XXVIII (Senbi's son, Ukhhotp; T.B.2). *Beni Hasan I*, Pls.XII, XVIII (Amenemhet/Ameniti; T.2). H.O. Lange and H. Schafer, *Grab-und Denksteine des MRs IV* (Cat. Caire), Pls. XCI, 576, 578-583; XCVII, 590-592 (Lep.; Waterlily); XCVI, 617. (*Puyemre* II, pl. LVIII (Khokhah 39). LD III, Pl.IX, a,b,Qurna, Leps. II Champollion *Mem.* III, Pl.CCLXXII “Ramses V” tomb). *Ken-Amun II*, Pl.IX. A. cf. also the reappearance of this feature in the Ptolomaic grave stela of the Phoenician Aha-hepe (AZ, XL [1902], Pl.I). Lacau, *Sarcophages antérieures au nouvel empire* (Oriental Institute, 1904-6), Pl. XXXV, 101 (Middle Kingdom coffin). ILN, Aug.24, 1929, p.345, top.

180 *Sedment II*, 25, Pls.LXI, 68 (Group 419-“Amenhotep III”), 58 (Group 336).

181 *Atlas I*, Pls.II (Menena, Qurna 69); XXXVIII, CLXXXIII (Userhet, Qurna 56; Amenhotep II); CVII (Baki, Drah abu’ L-Naga 118; first half of Dyn.XVIII); CCLIII (Menkeper, Qurna 79; first half of Dyn.XVIII).

Boats with this feature may have been known in earlier times but remained rare. That of Meresankh III has a stem in this shape.

OBJECTS

Objects with papyriform handles are frequent throughout all periods of Egyptian history. Exceedingly common is the sekhem scepter, of which the earliest representation with a definitely papyriform handle is Hesy’s. As a symbol of authority it was held by aristocratic Egyptian tomb owners, and was not omitted from the Middle Kingdom coffins. The actual object has rarely been found. An example of wood, approximately 38 cm. long, was discovered in the sarcophagus chamber of Re-wer II, dating to the end of the Fifth Dynasty or later (Fig. II.66). An eleventh dynasty example comes from Deir el Bahri, and Tutankhamun’s burial was equipped with an ornate wooden sekhem or kherep scepter plated with gold. Other scepters or symbols with papyriform handles are the nehbit, a peculiar stave ending in an umbel from which projects the basal part of a papyrus stem, and the wekh fetish of Kusae. The staves of large fans, of military
standards,\textsuperscript{195} of short-handled fans\textsuperscript{196} end in papyrus umbels. The handles of sistra almost always take the shape of a Hathor head, since they were sacred emblems of that goddess. However, Senbi’s son, Ukhotp, holds, while taking part in a ceremony in honor of that goddess, an object in the shape of three papyrus stems; the middle umbel is surmounted by a pylon flanked by falcons.\textsuperscript{197} Blackman has considered this as an elaborate version of the \textit{wekh} symbol, but it is unlike any of the numerous variants of that fetish. Since the sistrum held by the women in the same scene all show central pylons (as the framework which supported the metal bars and plaques, here omitted, by which the rattling of the instrument was produced) identical with that above the middle papyrus of Ukhotp’s object, there is little doubt but that it is a variant form of sistrum.\textsuperscript{198} Much later, in Amarna times, the queen and princesses hold sistra the handles of which are papyrus umbels.\textsuperscript{199} The haft into which the carved hands holding bowl of censers was sometimes papyriform,\textsuperscript{200} as are the hafts of a gold spoon with handle ending in a reversed duck’s head,\textsuperscript{201} and of a long handled wooden comb from Grave 1955 at Sedment.\textsuperscript{202} A crescent scimitar with papyrus handle was found in a tomb at Qurna.\textsuperscript{203}

Parts of many of the objects used in everyday life were papyriform. Mirrors with papyriform handles were known in the Old Kingdom, as is proved by tomb

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\textit{Thebes} (Oxford, 1912). Pl.LXV, 2 (Gr.37, no.16; associated with scarab of Amenhotep I). \textit{Tomb Tut.},III, Pls.XVII, A; XLIII, A.C; \textit{Tomb Tut.}II, Pls.LXII, LXIII. Bruyère, \textit{Deir el Medineh} 1928 (FIFAO VI [1929], Pl.VIII, right. Frequent in reliefs: \textit{Men. et al.}, Pl.XI (Qurna 86; Tuthmosis III; product of workshop). \textit{Amarna} I, Pl.XV (Merya; T.). \textit{Ken Amun} I, Pls. XVIII-XXI (Qurna 93, Amenhotep II New Year’s gifts).

\textsuperscript{195} R.O.Faulkner, "Egyptian Military Standards", JEA, XXVII (1941), 12-18; Pls.IV, 1,2,4,7,8, V,11; VI,20. \textit{Two Officials}, Pl.XXVI (Nebamun 90; Tuthmosis IV).

\textsuperscript{196} Gardiner, \textit{An Egyptian Grammar}, S 37. \textit{Amarna} I, Pl. XIX (Merya; T.; held by princess). \textit{Hay}, Pl.XX, XXII (Qurna 40; Tutankhamun held by Huy while in audience before the king). Prisse, \textit{Mon.}, Pl.XXX. (Poeri. Meneptah I).

\textsuperscript{197} \textit{Meir} I, pp.3-4, Fig.1; \textit{Meir} II, pp. 24-5; Pls. XV, XXXV, 1.

\textsuperscript{198} Blackman himself calls it a sistrum. JEA VII, (1921), 21.

\textsuperscript{199} \textit{Amarna} I, Pl.XXVI (Merya; T. ). MDIAA III (1932), Fig.17 a, opposite. p.36.

\textsuperscript{200} \textit{Puyemré} I, Pl.XXXVIII, \textit{Two Sculptors}, Pl.XXIV. Calverly, \textit{op. cit.}, Pl.VII.

\textsuperscript{201} \textit{Ken-Amun} I, 30, no.90. Pl.XVIII.

\textsuperscript{202} \textit{Sedment} II, 31, Pl.LXVI, 13 (Burial of prince, Menka of Henemmysut; probably Ramses II).
representations, but were much commoner in the Middle Kingdom when they were frequently shown in coffins, or in stele and tombs, often placed under the chairs of their owners. Many of the actual objects have been found. In the New Kingdom the types with simple papyrus head and with Hathor combined with the umbel continue. A type in which the handle is formed by a nude girl supporting on her head a papyrus umbel was introduced. The arms of balances, the supports holding the tongues of chariots off the ground, and the pedestals of lamps and occasionally of temple offering stands were cast into the papyrus form. This sedge umbel was a very appropriate shape for the basal and top portions of a pottery funnel. A jar in tomb of Menkheperaseneb is supported by a

203 Champoillion, Mon II, Pl.CLXXXVIII.5.
204 Benédite, Mirrors (Cat. Caire), p.xxxiii, Fig.N (Ipi; relief now in Cairo; Dyn.VI). Deir el Gebrawi I, Pl.XVII (two mirrors and a dwarf holding a third, all under the chair of the owner, Aba, T. 8 ). Von Bissing, Gemnikai I (Berlin, 1905) Pls.XXII, XXVII, 118 (Carried by servant of retinue accompanying Kagemnis litter) Jéquier, Tombeaux de Particulieres contemporaines de Pepi II (Cairo, 1929), p.46, Fig.50 (registers of objects, funerary chamber of Penon, four examples).
205 Lacau, op.cit., II, Pls.XXXVII, 133-134; in cases: 146, 147: XXXVIII 149,150,152. Steindorff, Grabfunde des MRs: I (Berlin, 1896), Mentuhotep, Pl.I
206 Lange and Schäfer, Grab- und Denksteine des MR (Berlin, 1902-25), Pl.LXXXVIII, 494-505. Beni Hasan I, Pl.XII (Amemnethet. T.2; carried by servant girls). Antefoker, Pl.XIII, XXXIII (Qurna 60; Sesostris I; carried by woman among funerary equipment and offered to Senet). Evers, Staat aus dem Stein (Munich, 1929), II, Pl.III, Fig.38 (relief fragment Cairo 20505, two ladies with mirrors under chairs; Dyn. XI). BMMA, XII (1917), Moy, Pl.II, Pl.13., Fig.19 (Dyn. XII stela).
207 Bénédite, op.cit., Pls.V, 44020; II, 44014 (date?); IX, 44035; XXI, XXII (Dahshur). E. Reifstahl, Toilet Articles from Ament Egypt (Brooklyn, 1943), Fig.17.
209 Bénédite, op.cit., Pls.X, 44038, 44045; XI, 44044, 44046. Riefstahl, op.cit., Fig.9, above.
210 LD III, Pl.XXXIX, a.c (Qurna). Two Officials, Pl. VIII (Amenhotepise; Qurna 75; Tuthmosis IV). Men. et al., Pl.X, XI (Qurna 86; Tuthmosis III).
211 Ken-Amun I, Pl.XXXII (Qurna 93; Amenhotep II).
212 WVDOG, XIV, pp.133-4., Fig.184 (Faience; found in the Sekhmet stage of the mortuary temple; one piece with name of Amenhotep III). Dendra 1898, Pl.XXVIII, 10-12 (faience). Schiaparelli, Cha,.... Bruyere, Fouilles de Deir el Medineh, 1924-25 (FIFAO), 15, Fig.9: Ibid., 1927 (Vol.V), 4, Fig.2; ibid., 1934-35 (Vol.X, 1 [1939], 209, Fig.98. Ibid., p.108, Fig.39 reproduces a painting from the tomb of Sennufer 99 shows such a lamp burning in a bedroom (Tuth. III).
213 Calverly, Temple of Sethos at Abydos, London, 1933), Pls.III, right, XXX
214 Schiaparelli, Cha (Torino, 1921-7), p.80, Fig.45.
The handle of a long necked flask from KV 46 (Biban el Moluk) ends in two papyrus heads carved in relief on the body of the vessel.

**PAPYRUS COLUMNS**

There remains one major utilization of the papyrus in Egyptian art, namely, as a column, which, together with the other plant pillars has been a widely discussed facet of Egyptian plant decoration. The most detailed treatment remains that of Ludwig Borchardt, who in 1897 and 1902 maintained that the Egyptians considered their columns as free endings, as representative of the plants themselves, playing their part in buildings intended to reproduce the earth, vegetation, and sky of the natural world. Borchardt's interpretation ran counter to that of Semper and Lepsius, generally accepted at that time and reasserted by Wilcken, which explained the columns as functional supports, presumably originally bundles of reeds or small posts, which were merely decorated with vegetal accessories. The passage of almost fifty years has multiplied the examples of plant columns known, but only the excavation at Saqqara of the extensive series of buildings surrounding the Step Pyramid of Djoser, first king of the Third Dynasty, has thrown new light on the origin of Egyptian plant columns. This complex is the first example of the use of stone on a large scale. Its archaic character is betrayed by the treatment of stone with techniques derived from brick work, wattle and daub. Accordingly the Djoser buildings probably illustrate the first emergence of columns on a monumental scale. Several types were in use. Those in the long entrance colonnade, connected on one side with the walls of the hall by cross walls, and carved with convex ridges are evidently translations into

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216 Men. et al Pl.IV.
217 Quibell, Tomb of Yuaa and Thuiu (Cat.Caire), Pl.XXVI, 51106.
219 Ulrich Wilcken, "Die Bedeutung der ägyptischen Pflanzensäulen," AZ, XXXIX (1901), 66-70; cf.67, n.1, for older literature.
stone of reed bundles; they are structural “Bündelsäulen” in Wikens’ sense.\textsuperscript{220} Engaged columns with concave fluting are crowned by curious pendant “leaves” at the capital. They decorate the facades of the chapels lining the west side of the “Heb-Sed” Court,\textsuperscript{221} and on a larger scale the facades the Houses of the North and South.\textsuperscript{222} Engaged fluted columns, evidently ending in a plain abacus, were used in a hallway of the small Temple T, which is connected by a small court and corridor with the large “Heb-Sed” court.\textsuperscript{223} In addition

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\textsuperscript{220} Lauer, \textit{Pyramide à Degrés} I (Cairo, 1936), 117-9; II, Pls. XXXVIII, XL-XLVIII. Cf. also Firth and Quibell, \textit{Excavations at Saqqara: Step Pyramid}, I (Cairo, 1935), p.14; Hoyningen-Huene and Steindorff, \textit{Egypt} (New York, 1943), Fig. on p. 27.
\textsuperscript{221} Lauer, \textit{op.cit.}, I, 136-7; II, Pls.LVII, LVIII, LX, LXII.
\textsuperscript{222} \textit{Ibid.}, II, Pls.LXXVIII-LXXXI. I, 159-163; II, Pls.LXXI, LXXIII, LXXV, 3; LXXVI.
\textsuperscript{223} \textit{Ibid.}, II, Pls.LV, LXVIII-LX. Hoyningen-Huene and Steindorff, \textit{op. cit.} Fig. on p.29.
to these columns, two further types were found. Large recesses topped by a semicircular cornice appear in the east sides of the Courts belonging to the South and North Houses. The cornice of the recess in the Court of the North is supported by three engaged columns, shaped as three-sided papyrus stems with capitals in the form of an open umbel. These are the earliest examples of Egyptian plant columns known (Fig. II.92). They were paralleled in the South Court by a column with round section (no traces of the two other pillars to be expected by analogy with the Court of the North were found) which is assumed to have been surmounted by a capital representing the plant emblematic of Upper Egypt. As Lauer has pointed out, the Saqqara papyrus columns prove that Borchardt was correct in claiming that the class of open, campaniform, papyrus columns were derived from a single papyrus stalk. A combination of several such single stems would produce the column in the form of a bundle of stems topped by buds which became popular in Egypt. There seems to be no proof that the Egyptian plant pillars were developed by a veneer of floral decoration added to a primarily structural form. We have seen that throughout Egyptian history the papyrus head served as a handle or as a free ending. A fragment of swamp relief from the mortuary temple of Neuserre illustrates the manner in which this function of the papyrus inflorescence even penetrated into a representative relief. On this slab an unopened papyrus head supports a nest of fledglings (Fig. II.93) just as the roofs of the same building were supported by papyrus "bud"

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224 Lauer, op. cit., I, 171-2; II, Pl.LXXVIII, LXXXI-LXXXIII; III, Pl.XXIII. Hoyningen-Huene and Steindorff, op. cit., Fig. on p.7.
225 Lauer, op. cit., I, 169 and Fig.188 (here the capital is restored in a form considerably later than that current even in the time of the Fourth Dynasty); II, Pl.LXXVII.
columns, consisting of six stems bound together below the unopened heads (Fig. II.94).\textsuperscript{226}

The austere monolithic style of the Fourth Dynasty, as exemplified in the Temple of Khephren appears to have meant a real gap in the development of the plant columns. No evidence has been found bridging the break between Djoser's columns and those of Neuserre. In the later Old Kingdom vegetal supports were widespread and in reliefs we can find examples of closed papyrus columns (Fig. II.95).\textsuperscript{227}

The open umbel type of Djoser does not find a successor until the Middle Kingdom, and even then the examples are not on a large scale; they are represented in the tomb of Antefoquer (Fig. II. 96),\textsuperscript{228} and certain wooden objects from the town of Kahun may be models of or small columns of this shape.\textsuperscript{229}

Bud columns continue to occur in the Middle Kingdom\textsuperscript{230} and New Kingdom (Fig. II.97).\textsuperscript{231}

It was not until the Empire that the open papyrus column became exceedingly

\textsuperscript{226} WVDOG, VII, 36, Fig.16; Pl.XIII.
\textsuperscript{227} LD II, Pls.LXI, a (Re-shepses; Saqqara, Leps.16; Dyn.V = Fig. II.95), CXI,e, right (Zawiyet el Meitin, Leps.14, Dyn.VI).
\textsuperscript{228} Antefoker, Pl.IX (Qurna 60; Sesostris I) a closed papyrus column is also shown here). The drawing of LD II, Pl. CXXVII (Beni Hasan, Leps.2 = Khnemhotep, T.3) appears to be inaccurate.
\textsuperscript{229} Petrie, \textit{Illahun} (London, 1891), Pl.VI, 2,3,5.
\textsuperscript{230} Lacau, \textit{op.cit.}, II, XXXVIII. 159. LD I, Pl.XLVII, lower right (near pyramid of Hawara; Amenemhet III).
\textsuperscript{231} Carnarvon and Carter, \textit{Five Years Exploration at Thebes} (Oxford, 1912), Pl.V.1 (Tetiky; Dira `Abu'n Naga 15; c. Ahmose I). LD III, Pl. LV, b (relief in Temple of Senneh). Naville, \textit{Bubastis} (London, 1891), Pls. VII, LIII (dated in text to Dyn.XII?). LD II, Pl.CXXVII (Temple of Amenhotep III, Soleb). \textit{Amarna I}, Pls. II, III (Meryra; T. ); \textit{Amarna II}, Pls.III, IV, XXVIII, XXIX. \textit{Amarna III}, Pls.I, VI, XIV. In these same Amarna tombs such columns are repeatedly shown in the reliefs of the great temple at Akhetaten. Fig.II.97 = \textit{Amarna VI}, Pl.XIV, left (Tutu).
popular. Besides serving on a large scale in temple architecture, this type, according to the documentation of the tombs was widely used as the support of the kiosks and baldachins under which the king (of by analogy the gods) was enthroned, or which was erected in the fields to shade the landowner as he surveyed his peasants’ work (Fig. II.98-99). These campaniform columns were sometimes adorned by the tying of two waterlily buds below their capitals or the attachment of floral bouquets and twinning convolvulus to their shafts. A few of the representations have capitals in which more detail is shown than in the usual forms. In Qenamun's tomb a capital is drawn with lobes and a number of sheathing leaves; that of TT 226 is similar. In a Book of the Dead belonging to Kha the column displays a loose feathery capital that appears more like an inflorescence from a floral bouquet than a structural unit (Fig. II.100). The closeness with which such representations correspond to their original cannot be ascertained, but in any case they testify to the presence of fairly ornate architectural renderings of a single papyrus stalk and inflorescence.

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232 Medinet Habu II, Pl.VIII (Temple of Ai and Haremhab).
233 As representatives of the large number known cf. Carnavon-Carter, op. cit., pl.V. 1. (Tetiky, Dira Abu’Naga 15; pub. Ahure I = Fig. II.98) Or.Inst. Field Neg.6428 (Amenemhet, Qurna 53; Tuthmosis III). Amenemhet, Pl.XXIV (Qurna 82; Tuthmosis III). Atlas I, Pl.CCCLV (Mentiwyey, Khokhah 172; Tuthmosis III-Amenhotep II?).Ken-Amun I, Pl.XLVII (Qurna 93; Amenhotep II). Men. et al. Pl.XLI = Fig. II.99 (T.226). Amarna I, Pl.VIII; Amarna II, Pls. XIII, XIV, XVIII. Amarna VI, Pls.IV, XVIII. Neferhotep I, Pls. XIV, XXI, XLI, XLVIII (Khokhah 49; Ai).
234 Petrie, Illahun (London, 1891), Pl.VI, 2,3,5.
235 Schiaparelli, Cha (Torino, 1921-7), Fig. on p.34.
THE NYMPHAEAS

Best known of all Egyptian plants are those usually called "lotuses", but known botanically as *Nymphaea Lotus* L. and *N. coerula* Sav. From the tubers grow long stems limp when out of water, which support the peltate leaves, those of *N. Lotus* L. having dentate edges. Only a single leaf or flower springs from each stem. The inflorescence consists of four sepals which surround a polypetalous corolla. From the tourus surrounding the large compound ovary spring numerous stamens. The stigma is broad and radiate in shape. The two species are easily distinguished since the buds, sepals, and petals of the nocturnal white *N. Lotus* L. are much more rounded than those of the diurnal blue, *N. coerula*; its sepals are dotted with purple spots in contrast to the plain calyx of *N. Lotus*

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236 They belong to the *Nymphaeaceae*. Although usually considered as a *dicotyledonous* family, the seedlings show only one cotyledon and this group may possibly be *monocotyledonous*.

237 Sometimes shading into pink according to Spanton in Ancient Egypt,IV (1917), 2.
L., nor does the white waterlily possess as marked a scent as the blue.\footnote{238} Egyptian artists carefully distinguished between the two varieties in representative contexts and in most decorative work; thus there is rarely any doubt as to which species is intended.

Despite the clearcut characteristics of the waterlilies in nature and in Egyptian art, much confusion has gathered around them. Some of these misconceptions are owing to the fact that Herodotus described *Nelumbo speciosum*\footnote{239} as the typical “lotus” of Egypt, whose tubers and seed were used for food. This plant belongs to the family *Nelumbonaceae* and is native to India. It had been introduced into the Nile by the time of Herodotus' visit, and was commonly represented after that time.\footnote{240} Despite the fact that it played no part in the long story of Egyptian art preceding the Graeco-Roman period, it has at times been mistakenly considered to be the “Egyptian lotus.”\footnote{241}

In addition to the confusion in regard to the natural prototype of the Egyptian waterlilies, there has been a great lack of precision in the application of the term "lotus" to Egyptian designs. Very often the campaniform papyrus, and even the Egyptian South-flower pattern have all been thrown together, usually under the nomen of “lotus.” Towards the close of the last century Goodyear insisted that all the swamp plants of the Egyptians are lotuses, and that the papyrus was not used.\footnote{242} Thus Petrie rules out the existence of papyrus ornament altogether. “The debated question of lotus and papyrus disappears at once when we look at the feathery head of minute flowers which the papyrus bears. That some flower,
such as a *Nelumbium*, was confused with the lotus seems, however, very likely. There is no doubt that in ornament different flowers were sometimes confused, and their details mixed; hence it is of no use for us to be too particular in trying to separate them.” Petrie proceeds to discuss, under the name of “lotus” a large number of designs, the majority of which are not derived from waterlilies at all, but are clearly of papyrus or “lily” types. It would not be difficult to collect a large number of citations in which papyrus designs have been misnamed “lotuses,” a term which is itself unfortunate since it is usually considered to connote the *Nelumbium* rather than the *Nymphaeas*. The undue prominence of the waterlilies is probably mainly the result of the work of Goodyear, an adherent of the Elliott Smith pan-Egyptian school, who laid great stress on the symbolic importance of the “lotus” in the Egyptian sun cult. Its religious significance appeared to him the cause of its ornamental application, and practically no ancient decorative form, whether vegetal or not, seems immune from interpretation as a “lotus” derivate. A number of Goodyear’s views were accepted by Riegl in his *Stilfragen* (1893) and have by that means become common currency in histories of ornamental art.

If the Egyptians distinguished between waterlily and papyrus types, and if that differentiation is overlooked, the resulting description of Egyptian plant designs will be extremely misleading. In actual fact, patterns whose prototypes cannot be definitely identified as either a waterlily or a papyrus are extremely rare. The campaniform outline of the sedge is usually quite distinct from the more triangular forms of the *Nymphaeas*. It is only when the basal leaves of the papyrus inflorescence are enlarged and multiplied so as to cover the major part of the area of the umbel, that some confusion between the two genera may arise. If, then, we keep separate those motives which the Egyptians carefully distinguished, we will discover, that instead of being “the largest and most complex growth

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243 *Dec. Art*, pp.61-62. The opposite extreme is illustrated by the anecdote, quoted by Spanton, of an architect who reputedly said, "Oh, we call them all papyrus," (Ancient Egypt, IV (1917),1).

of Egyptian ornament, the waterlilies occupied in comparison with the papyrus and south flower, a fairly modest place in the development of Egyptian vegetal designs. Although the *Nymphaeas* were exceedingly common ornaments on certain classes of objects, they did not play a role in the formation of many patterns.

![Fig. II.101](image)

A few words should be said in regard to the symbolic value of the Egyptian waterlilies. They are the source of three hieroglyphs, an open flower, *seshen* (ideogram or determinative for “lotus”), a bud, *nehbet* (determinative in “lotus” bud), and a leaf with stem, *khā* (ideogram for waterlily plants and the numeral, thousand), and together with an oblong pool, *shā*, the buds and flowers formed the ideogram for “lotus” pool (See Fig. II.101). Except for the numeral, the signs contributed by the *Nymphaeas* do not appear to have formed nearly as important members of the script, as for example those derived from the papyrus. There is no proof that the waterlily had any symbolic significance comparable to that possessed by the *djed*-column, the Isis knot, the Ankh, or any of the other numerous and potent Egyptian symbols. It was not until relatively late, in the New Kingdom, that there occur texts referring to the association of this flower with the deity Nefertem. Vignettes from the Book of the Dead represent the head of this god rising from a waterlily and this motive was reproduced in the round by a head of Tutankhamun, evidently identified

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246 A. Gardiner, *An Egyptian Grammar*, M 9, 10, 12; M 8; Cf. *Beni Hasan I*, Pl.XXVIII (Knemhotp, T.3).
247 Cf. a few s’ort excerpts in Spanton, *Ancient Egypt*, IV (1917), 1, 9; he gives a brief summary of the place that the “lotus” is presumed to have occupied in Egyptian religion. Cf. also Edouard Naville, “La Plante Magique de Noferatum,” *REA.*,I (1927), 31-44., *Miscellanea Gregoriana*, p.81.
with Nefertem, resting on a blue (?) waterlily. Small bronzes showing Nefertem with *Nymphaea* headdress or Harpocrates squatting on one of these flowers in the Late Period are common. Although the plants may thus have become involved in the lucubrations of late Egyptian cosmologists and theologians, this aspect had but little reaction on the place of the flowers in Egyptian life. The symbolic values of the waterlilies were not the cause of their popularity, but rather secondary, late concretions that developed around the *Nymphaeas*, probably as a result of their prominence on many occasions in Egypt, which was produced by the natural reaction of a flower-loving people to ornamental plants possessed of great virtues. They bore the largest and showiest flowers native to Egypt, and the blue species was, in addition, very fragrant. Not only were the *Nymphaeas* plentiful in the favorite swamp resorts of the Egyptians, but they were easily grown in any artificial pool. In their floriferousness (?) they formed a complete antithesis to the sparse, thorny vegetation of the barren sands and desert cliffs which were never far away. Thus, it was for their natural qualities that they were valued, and not for the unimportant, and late, religious significance, which has been so misleadingly emphasized.

Like the papyrus, waterlilies are ubiquitous in Egyptian tomb representations. The water in those Old Kingdom scenes characterized by huge masses of papyrus is usually filled only by aquatic animals and it is the smaller registers filled with busy peasants in which the surface of the water is covered by leaves, buds, and flowers, of *N. coerula* Sav.

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250 Metropolitan Museum Studies, V (1934-36), 152.


252 Cf. however fragments from the Sixth Dynasty tomb of Ankhmahor (Capart, *Rue de Tombeaux* (Brussels, 1907), Pl.XXVI).
and *N. Lotus L.* blooming at the same time.²⁵³ By the Middle Kingdom the waterlilies are also beginning to appear in the main marsh scenes of fowling and fish spearing,²⁵⁴ and they continue to be shown in some New Kingdom scenes.²⁵⁵ It is not often that we possess a modern transcription comparable to a scene drawn by the Egyptians, but Menna's swamp, where the water is studded with flowers while behind grows papyrus, is matched by a drawing of Schwienfurth's showing boating in the vegetal barrier of the White Nile; the water in the foreground is covered with waterlilies and boats are being poled through the tall papyrus sedges, just as the Egyptian nobleman's craft was punteled into the midst of the fens (Fig. II.102).²⁵⁶ While the master hunted, his wife and daughters might gather a fragrant bunch of flowers or sniff the aroma of a single specimen. A girl, presumably of the Middle Kingdom date, has had the flowers fastened to the ends of her plaits.²⁵⁷ The pleasure pools

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²⁵⁴ *Meir*, III, Pls.IV, VI (Ukhotp, son of Ukhhotp and Mersi Amenemhet II). *Meir* I, Pls. II, XVI (Senbi, son of Ukhhotp; T. B.1; *Amenemhet* I; here the Nympahaeas are drawn as fairly dense, stemmed clumps rather than as the isolated elements usual before and after; this appears to be a Middle Kingdom trait; cf. *Bersheh* II, Pl.XV; T. 5; Ahanekht, son of Tehutihotp).

²⁵⁵ *Atlas* I, Pls.I (Menna, Qurna 69, Tuthmosis IV ?), CCCXLIII (Senem’ioh, Qurna 127; Tuthmosis III). *Anc. Egy. Paint.* II, Pl.LXV (BM ?; Tuthmosis IV or Amenhotep II).

²⁵⁶ Schweinfurth, *Heart of Africa* I, (New York, 1874), Fig. opp. p.106.

²⁵⁷ Lange-Schäfer, *Grab und Denkstein des Mittlern Reichs* (Cat Caire), Pl.LXVIII,174 (Stela 20515).
in Egyptian gardens were always covered by waterlilies,258 and a few of them are sometimes placed among the swimming birds netted in pools.259 Among the duties of the marsh workers was not only the arduous task of pulling papyrus, but the more pleasant duty of plucking waterlilies,260 and bunches of the flowers are often to be seen in their boats.261 It was not the nobles alone who appreciated these flowers; boatmen, engaged in their customary battues, or plying their oars, wore them in wreaths on the head or suspended around the neck as did also other workmen.262

Waterlilies were brought indoors where a single example might be ceremonially presented to the master, as in some Old Kingdom reliefs.263 Every Egyptian tomb reveals scenes with figures holding one or more waterlilies, usually sniffing their perfume.264 Bunches of the flowers, sometimes with stems twisted around in circular knots, were borne by members of funerary processions, and were offered to the gods as well as to men. In delineations of piles of offerings Nymphaea flowers are laid on top of the less fragile gifts; two stems were sometimes knotted around dishes or covers.

Representations, very common in the Old Kingdom but not as frequent in the Middle Kingdom,265 show waterlilies arranged together with buds and leaves in variously shaped
open bowls, which usually rest on stands, or set individually into two (as shown in the representations) narrow necks and larger central opening of long, oval flasks. Other shapes occasionally held *Nymphaeas*. The Old and Middle Kingdom vases used to contain real flowers appear to be ancestral to the well known New Kingdom vessels adorned with erect ornaments attached to the rim or rising from the interior; these decorations were frequently floral but sometimes became extremely elaborate and ornate, especially in the later part of the Eighteenth Dynasty and afterward. Such triumphs of the metal worker's art were the ostentatious translations into precious materials of the living

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266 Some of the bowls are shown with wavy rims: (Caroline R. Williams, *Perneb* (New York, 1926), Pls.XI-XIII; MDIAA, III /1932/, 107, Fig.21 Weserneter, both straight-sided. *Ibid.*, 112, Fig. 25, h = Dyote-Pirie, *Ptahhetep and Ramesseum*, Pl.XXX, rounded. Maspero, *Musée Égyptien* II (Cairo, 1890-1924), 115, Fig.12 (Barnoughi [Delta], East tomb, Middle Kingdom). Actual examples in stone of this rounded shape are known (MDIAA, III /1932/,106. Bonnet, *Frühgeschichtliches Gräberfeld bei Abusir* (Leipzig, 1928), Pl.XXXV.5. Petrie et al., *Lahun II* (London, 1890), 22, PLXIV, 16 (Bashkatib, gr.769; "late Dyn.I or Dyn.II"). Von Bissing, *Receuil Maspero*, XXVI /Berlin,1904/, Figs. on p.178). Jequier, *Fouilles à Saqqarah: Les Pyramides des Reines Neit et Apouit* (Cairo, 1933), p.30., Fig.11, bottom right. Such forms in pottery are relatively common and seem to occur chiefly in First Intermediate period contexts. (Chassinat-Palanque, *Fouilles d'Assiout* [MIFAO XXIV (1911)], PLXV, 3, lowest row, 2d, 3rd from left). Petrie and Brunton, *Sedment* I (London, 1924), PLXXX, 38, a.h. (Dyn. VI-X). *Quo II*, PLXXXII, 70, 82 (Dyn. VI-VIII). Jequier, *Tombeaux de Particulier contemporaines de Pepi II* (Cairo, 1929) p.93. Fig.106. A number of carinated bowls with wavy rims from the fragmentary reliefs of Pepi II's funerary temple are published by Jéquier, "Coupes fleuries,"Annuaire de l' Institut de Philologie et d'Histoire orientales, II, (1935), 217-25. Cf. also Jéquier, *Monument funéraire de Pepi II*, Vol.II (Cairo, 1936), Pls.XCV, CIICIV. In these examples the flowers appear between the rim of the vases and wickerwork covers. Jéquier concludes that the blooms must be considered as really decorations floating on the surface of the liquid (and presumably hot) foods contained in the covered vessels.

267 Cf. Balcz in MDIAA, V (1934), 70, Fig.98, a,d,e; Pierre Lacau,"Sur quelque Representations de Vases Égyptiens," *Receuil Maspero*, XXV (1903), 177-80. *Ibid.*, 180-81 and accompanying plate shows a squat faience pot, apparently Middle Kingdom in date, with four tubular necks surrounding a larger central one; this is claimed by Von Bissing as an actual example of such a flower vase. The predynastic vessel with several necks also published here bears forged paintings and the entire pot is suspect.

268 MDIAA,IV (1933), 29, Fig.45 (bowl with high foot, splaying at the base); *ibid.*, IV (1934), 60, Fig.90, 3 (narrow-necked flasks with and without spout); 70, Fig.98, g (tall, narrow jars with biconical neck), h (oval flask with two long narrow spouts ?). Jéquier, *Frises d'Objets* (Cairo, 1921), p.293, Fig. 772 (hes vase with two spouts)
flower pieces of previous periods.\(^{269}\) The vessels of the earlier Eighteenth dynasty, usually “crateriform” bowls with feet, were often decorated by a series of alternating shorter and longer stems. Papyrus\(^ {270}\) and \textit{Nymphaeas}\(^ {271}\) repeatedly appear, but other floral types were also very common. Although these vessels are usually shown in private tombs among the offerings of foreigners to Pharaoh, and in the temples as dedications of booty to the gods, they are typical Egyptian products. Schäfer assumes that the Syrians must have imitated Egyptian models.\(^ {272}\) Although this suggestion cannot be ruled out, it is almost certain that the Egyptian artist, when wishing to show extremely precious and showy foreign gifts, resorted to the depiction of the most ornate indigenous products that he could visualize, just as in the Botanical Chamber of Tuthmosis III, he created weird combinations of native plants, such as branching waterlilies, to give the effect of exotic vegetation.\(^ {273}\) Such lapses on the part of the Egyptian draughtsmen are quite possible, despite the extraordinary accuracy of which they were at times capable. Vessels with such decoration were not limited to the use of king and gods, but also appear at the banquets of the great nobles.\(^ {274}\)

The coloring of the floral parts of the New Kingdom “craters” marks them as made of metals and inlaid stones. Rare New Kingdom representations do show flowers in vases

\(^{269}\) Cf. Schäfer, \textit{op.cit.}, pp.5-43, Figs.1-114 for a detailed discussion of these “Prunkgefässe.” He refutes decisively the theory propounded by Borchardt that the designs appearing above the rims of the New Kingdom vessels were in reality renderings of the patterns engraved on the inside (“Die Darstellung innen verzierter Schalen,” \textit{AZ}, XXXI /1893/,1-9).

\(^{270}\) \textit{Men. et al.}, Pl.XXXVI, XXXIV (Syrian tribute) (Amenmose, Qurna 42. Tuthmose III-Amehotep II; tribute craters of Syrian town). IV (Qurna 86; Tuthmosis III. Shallow bowl on tall foot; papyrus only). \textit{Atlas} II, Pls.LII (Seti I, Karnak, “Libyan booty”).

\(^{271}\) \textit{Atlas} II, Pls.XXXIII,a; XXXIII,b, no.35 (Tuthmose III, Amun gifts, Karnak). \textit{Puymere}, Pl.? \textit{Anc. Egypt. Paint}, I, Pl.XLII (Sebekhotep; Qurna 63; Tuthmosis IV, Asiatic tribute). One of the vessels carried by a Keftian in Rekhmire’s tomb, and another in Qenamun’s (\textit{Ken-Amun} I, Pl. XXXIX) are excellent examples connecting the New Kingdom Prunkgefässe with the vases of fresh flowers of earlier Egypt (Rekhmire, Pl.IV, Qurna 100, Tutmosis III- Amenhotep II). They are hemispherical bowls with wavy rim, directly comparable to those cited above (n. 266), set on a tall foot and containing fine flowers. The Rekhmire vessel is also an excellent example of the manner in which an Egyptian artist could place an age-old indigenous type in one hand of a foreigner while showing an actual foreign type, a funnel-shaped rhyton, in the other. \textit{Ibid}, Pls.V, IX, show other craters with \textit{Nymphaeas}.

\(^{272}\) Schäfer, \textit{op.cit.}, pp.42-3.

\(^{273}\) Cf. Schweinfurth, Engler, \textit{Botanische Jahresheften}.

\(^{274}\) Schäfer, \textit{op.cit.},13, n.1; 14, n.2. \textit{Two Officials}, Pl. XXIII (Nebamun 90; Tuthmosis IV; footed bowl
of other shapes. However, an experiment carried out by Winlock with a bronze bowl now in the Metropolitan Museum makes it appear probable that fresh cut flowers were also arranged in such forms. The bowl in question is one of three found by Newberry in the courtyard of Rekhmire's tomb, two feet below the surface, apparently hidden there in modern times. Inside each bowl a Hathor cow stands on a metal bridge. To test the purpose of these vessels Winlock filled the specimen in New York with waterlilies and found that the pedestal of the cow held the stems in place and that the sacred animal then appeared to be treading on the surface of the swamp in a most charming manner. The bowl, when filled with live flowers, reproduces almost exactly the motive carried out in metal on ornate Nineteenth Dynasty bowls where bulls gambol among the papyrus (or rosette) stems.

The representation of the *Nymphaeas* remained the same throughout Egyptian history. The two corners between the three sepals are filled by two large petals and the resulting interstices receive smaller inner petals until the triangular area outlined by the calyx is completely filled.

**DESIGNS**

Despite the immense popularity of the *Nymphaeas* as cut flowers and the shaping of several common types of objects in the form of a single blossom, they were by no means as productive a source of decorative designs as were the papyrus and other Egyptian plants to

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275 Five Theban Tombs, PL.IV. (Mentuherhepeshef, Dir Abu'n Naga 20; Tuthmosis III offering table with loop-handled jug.) Nagel, La Ceramique du nouvel empire à Deir el Médineh (Cairo, 1938), p.204. Fig.178 (Cairo coffin 5230, *Nymphaea* beaker [?] with “bent papyrus clump”).


277 Ibid., pp.154-55, Figs. 9,10. P.148, Fig.1 shows the larger of the two bowls now in Cairo.

278 Schäfer, *op.cit.*, p.37, Figs.100 (Seti I), 101 (Ramses II); p.34, Figs.84-85 showing footed bowls with bulls' figures at the rim may represent vessels like those from Rekhmire's courtyard.
be surveyed later. 279 One of the most important applications of *Nymphaeas*, as elements in the floral friezes popular in the New Kingdom, will be discussed in Chapter VI after the completion of the discussion of the chief species of decorative plants.

PARATACTIC DESIGNS

The earliest *Nymphaea* design known at present is a simple paratactic arrangement of three blooms alternating with two buds in a rectangular panel which, together with a series of others covered by geometric designs, forms a matting hung behind the seated figure of Re-shepses, who lived during the Fifth Dynasty (Fig. II.103). 280 Despite the simplicity of this pattern it apparently found no successors until the New Kingdom, when waterlilies are among the plants used in the monotonous paratactic series of dados on temple walls. A frieze of alternating large and small buds and flowers was used as part of the design of an elaborate pectoral ornament of Tutankhamun. 281 A freize of flowers and buds surrounds a pool incised in the cartouche-shaped bowl of an ointment spoon, and is used in a half-representative sense. 282

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279 One of the most important applications of *Nymphaeas*, as elements in the floral friezes popular in the New Kingdom, will be discussed in Chapter VI after the completion of the discussion of the chief species of decorative plants.

280 LD II, Pl.LXIV, a (Saqqara, Leps.16; Champollion, *Tombe de Deferdar*, Quibell 902). The only faintly analogous Old Kingdom applications of *Nymphaeas* is the use of their flowers as very short stemmed pendants, hanging from the edge of the Manikhet counterpoise. (Borchardt, *Statuen I* [Cat. Caire], p.171, No. 270 / Statue of Imhotep; Saqqara, Dyn.V) p.199, No.388 (unknown man; unknown provenance; Dyn.V).

281 *Tomb.Tut.III*, Pl.XIX, c.

282 Riefstahl, *Toilet Articles from Ancient Egypt* (Brooklyn, 1943), Pl.XIII, right. On Late altar, Miscellanea Gregoriana, p.74, Pl.X.
THE BUD-FLOWER FORMULA

Although Reshepses’ matting is at present the only Old Kingdom *Nymphaea* design, the floral gifts carried by Old Kingdom offering bearers provide the representative beginnings of a simple pattern, consisting of a central flower flanked by two buds (or occasionally leaves). Such arrangements occur often in Old, Middle, and New Kingdom scenes, most frequently as offerings, but also as bouquets held in the hand or tied around the necks of bulls, as arrangements in vases, or even as unplucked plants on the water’s surface. This formula was used to decorate the sides and foreheads of Middle Kingdom faience hippopotami, and apparently also occurs on a curious scarab sealing from Kahun, where a tall stem supports a three-petalled flower flanked by buds. However, it did not emerge as a full-fledged ornamental motive until the New Kingdom. It appears on scarabs where the stems of the buds or leaves are frequently attached to the base of the flower (Figs. II.104-109). The knops frequently curve downward, possibly showing the influence of papyrus clumps with bent stems, but more likely a reflection of the common scarab motive of sinuous lines ending in buds.

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284 *Meir IV*, Pl.XVII (Pepiankh the Middle; T.D.2; Pepi II)
286 C. Williams, *op. cit.*, Pls. XII, XIV. Jequier, “Coupes Fleuries,” (See n. 266), pp.221-25; (all flowers and leaves).
287 *Deir el Gebrawi I*, Pls.III-V (Aba, T.8) *Beni Hasan I*, Pl. XXXIII, XXXIV (Khmenhotp II; T.3).
288 REA, II (1928-29), 223, Figs.12,13; Pls.XII, 2-XV, 1.
289 Petrie et al., *Lahun II* (London, 1890), Pl.LXV, 373 (Dyn.XII).
291 Newberry, *op. cit.*, Pl.XII, 37201, 36844, 37192. Brunton,*Qau* III (London, 1927), Pl.IV, 19 (gr.523) is a Middle Kingdom hemispherical “seal” with a round base bearing a rough design with two such groups joined at the base. Firth, *op. cit.*, Pl.XXXVI, 132.
The motive appears on various categories of objects. Combined with papyrus and rosettes it was used on the inlaid pectoral of Tutankhamun already cited. Two oblong tapestries from the tomb of Kha are embroidered with bud-flower groups, some of which are joined end to end (Fig. II.110). The handles of a waterlily beaker from Tutankhamun's tomb are examples of the use of this motive in the round. The prows of ceremonial ships might sometimes assume this pattern; as could also the end of the curved "hook" projecting from the "shoulder plate" of a horse's harness. Three ointment spoons in the British Museum are designed in this form. In two the enlarged flower is itself the lid of the compartment, while in the simplest spoon the bud-flower group forms the handle for a long
triangular spoon-bill. In other spoons the motive is but one of several decorative elements combined into a more complex whole. One of the chief sources of bud-flower motive is the class of glazed faience bowls which became extremely popular in the New Kingdom. Their interiors are often filled by a square or oblong standing for a pool, and from its edges spring groups of waterlilies, their flowers and buds twisted to fit into the available space. In other examples, the center is not equated with a pool. Bud flower motives were also used on faience vessels of other shapes, and on unglazed painted ware. Aside from this formula, the faience bowls often bear symmetrical groups of waterlilies equivalent to the papyrus clumps. In addition to those bowls in which the arrangement of the Nymphaeas follows some recognizable pattern, there are others filled by disorderly arranged examples. Fish appear frequently on these bowls, at times with irregular groups of waterlilies projecting from their mouths, and the same motive appears as an ointment spoon or on scarabs or faience plaques. The origin

297 JEA, XIII (1927), Pls.IV, 5972 (formerly held by swimming girl, now broken away), 5966 (with Mimusops fruit attached to the Nymphaea; V, 5967. Cf. Petrie, Brunton, Sedment II (London, 1924), 25, Pl.LXI, 67 (group 419; Nymphaea plus Mimusops lid; rest of spoon lost; "Amenhotep III").
298 Steindorff, Kunst der Agypter (Leipzig, 1928), p.283, a (Berlin); 284 (Leiden).
299 Cf. Wolfgang Kröning, “Ägyptische Fayence-Schalen des Neuen Reiches”; MDIAA, V (1934), 144-66; Pls.XXIII-XVII, for general discussion and collection of a large number of examples, many reproduced from older publications. Wallis, Egy. Ceramic Art (London, 1898), Pl.VI, 2. Burlington 1922, Pl.XXXVIII, 9. Kröning, op.cit., 150, Figs.7-8 (Garstang, El Arabeh, Pls.XIX, top right; XII, top middle), 152, Fig.11 (pier coll.); 158, Fig.22 (Cairo 3688); Pls. XXV, d (Berlin 14406; triple flower group); XXVI, a (Berlin 19800), c (New York), d (Cairo 3708).
300 Ibid., 158, Fig.23; 160, Fig.27. WVDOG, XIV, 131, Fig.179 (flower flanked by two small buds alternates with larger buds), 132, Fig.180 (grape bunches substituted for the buds); both from Sekhmet cult period of Sahure's funerary temple.
301 Burlington 1922, Pl.XLI, bottom (tall jar).
302 MDIAA, V (1934), 153, Figs. 12, 13. City of Akhenaten I, Pl.XLIV,1 (four-handled jar; metope composition). Nagel, Céramique du nouvel empire. (Cairo, 1938), 11, Fig.5. 1.2 (Deir el Medineh, T.357, A); 37. Fig.24, 98.99 (T.359); 68, Fig.51. 2 (T.1159; A; leaf-flower). Schäfer-Andrae, Kunst des Alten Orients (Berlin, 1942), Pl.XIX, 1.3 (Deir el Medineh, Berlin 21,325, 21,326). Bryère, Deir el Medineh, 1933-34; Pl.I, Necropole de l'Ouest (FIFAO XIV [1937]), pp.112,113, Figs.48,49 (T. 1348).
303 Wallis, Egy. Ceramic Art (London,1898, Fig.12 (BM). City of Akhenaten I, Pl.XLV, 5 (pottery). Kröning, op cit., Pl.XXXV, c (Berlin 19814). WVDOG, XIV, 132, Fig.180, bottom (central flower and buds).
304 Burlington 1922, Pl.XXXVIII, 10. For fragments of bowls with waterlily decoration cf.Ayrton et al,
of such combinations apparently go back to the scrabbled ware of the Middle Kingdom.\(^{305}\)

### WATERLILY KNOTS

In representative scenes the long stems of the *Nymphaeas* were sometimes looped and knotted around themselves,\(^{306}\) and these bunches were reproduced exactly as the decorative handles of ointment spoons (Fig. II.111),\(^{307}\) and as the design filling the top of a small ebony box (Fig. II.112).\(^{308}\)

### THE APPLICATION OF SINGLE NYMPHAEA FLOWERS

By the New Kingdom single *Nymphaea* blooms had become standard motives for oval or semicircular areas in need of filling. This usage had begun in the Middle Kingdom when waterlilies fill the ends of the blades of model rudders (the vacant space in the middle contains rosettes (Fig. V.24-25),\(^{309}\) or were placed on the heads (sometimes flanked by two

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\(^{305}\) *Ibid.*, 146-7, 157-61, 164; Fig.30; Pls. XXIV, XXVI, e; XXVII. BMMA I (2d ser.; 1944), lower fig. on p.186 = Met. Mus. neg. 40037 (ointment spoon). Firth, *op. cit.*, Pl.XXXV, 5, 11, 41 (scarabs et al).

\(^{306}\) *Mereuka* I, Pl.LXV; II, Pl.CVI. *Beni Hasan* I, Pl. XVII (Amenemhet; T.2; Sesostris I.). *Ramose*, Pls.IX-XIII, XVI, XLVII, left (Qurna 55; Akhenaten).

\(^{307}\) Champollion, *Mon.* II, Pl.CLIX, bottom row, 2 = Fig. 24 J. Fechheimer, *Die Kleinplastik der Aegypter* (Berlin, 1922), 139, right (Paris).

\(^{308}\) Cat. MacGregor Coll., Pl.XXV, 574 (no provenience).

buds) and backs of faience hippopotami. A flower fills part of a shell-shaped pendant from the North Brick Pyramid at Dahshur. Keimer has pointed out how skillfully the rounded and pointed profiles of _N. Lotus L._ and _coerula Sav._ were fitted into broad and narrow spaces both in the hippopotami and on the rudders, and the same kind of adaptation was used on ointment spoons in the New Kingdom. The traditional decoration of rudders was continued (Fig. V.24-25). The flower of the blue waterlily could be greatly elongated to provide satisfactory filling for the narrow sides of boats (Fig. V.25) or the ends of model faience boomerangs. Such examples show that for the New Kingdom craftsman the waterlily flower was a useful filling motive which could be applied on a variety of miscellaneous objects.

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310 REA, II (1928-29), 217-23, Figs.7-15; Pl.XV.
311 J. de Morgan, _op. cit._, Pl.XX, 4 = Vernier, _Bijoux et Orfèveries_ III (Cat.Caire), Pl.LXXVII, 53070.
312 REA, II (1928-29), 249, 251. For ointment spoons cf. Fechheimer, _op. cit._, 143 (Berlin; cover); JEA XIII (1927), Pl. IV, BM 5965; Petrie, _Objects of Daily Use_ (London, 1927), Pl.XXXIII, 4-6 (University College). The square ends of the ointment spoon handles were often satisfactorily joined to the founded bowls by the insertion of waterlily flowers in the gaping holes.
313 _Five Theban Tombs_, Pl.LXI (User, Qurna 21; Amenhotep I), _Ken-Amun_ I, Pl.XLII (Qurna 93; Amenhotep II). _Nefertihotep_ I, Pl. XXII (Khokhah 49; Ai). _Huy_, Pls. XI, XII, XXXI (Qurnet Mur’; 40; Tutankhamun). Daressy, _Fouilles dans la Vallée du Rois_ (Cat. Caire), Pl.LV, 5169, 5172 (Amenhotep II). Calverly, _Temple of Sethos I at Abydos_ I (London, 1933), Pl.XXIII.
314 _Two Sculptors_, Pl.XIX (Nebamun and Ipuky; Qurna 181). _Atlas_, Pl.CXXXII,B Menna, Qurna 69, _Nefertihotep_ I, Pls.XXII, XXIII,XXLI. _Huy_, Pl.XXXI Bruyere, _Deir el Medineh_ 1927 (FIFAO VI, 1928), 121, Fig.82 (T.339). ILN, Jan.22, 1927, Pl.121, Feb.28, 1928) 266-7 (tut model).
315 _Carter, Tomb of Tuthmosis IV_ (Cat.Caire), Pl.XXV, 46404, 46406. Budge, _Guide to the 4th, 5th, and 6th Egy. Rooms_, 1922, Fig. on p.145 (BM 34213; with name of Akhenaten). Cf. also flask for holding cosmetics (?) showing similar application of _Nymphaea_ (Atlas I, Pl.CXXV, Imsibe, Qurna 65, Ramses X Syrian Tribute).
316 Blinkers: _Two Officials_, Pl.VI (Amenhotepse, ). _Tomb Tut_, II, Pl.XLI, 9, no.79; Pl.XX. Corners of Scarab: Jequier, _Le Mastabat Faraoun_ (Cairo, 1928), p.33, Fig.31, middle (Dyn. XVIII tomb). _City of Akhenaten_ II, Pl.XLIX, I.C.8; I.D.28. Openwork faience rings: Firth, _Nubia_ 1910-11, p.96, top (Cem. 170, Gr.308; Tuthmosis III-dyn.XIX; one of the two rings exemplifies the bud-flower formula). Supporting Bes heads on top of head rest (Petrie, _Sedment_ I, Pl.XV, 24 (Group 131; late Dyn. XVIII according to _Sedment_ II, 25). Ends of top of headrest shaped as a folding stool: _Tomb Tut_., III, Pl.XXXVI, A. Toe and heel of child’s beadwork sandal, ILN June 2, 1923, 958, upper left (Tomb Tut). Top of handle of bronze jug, Wilkinson, illegible, 2, II, 4, Fig.5. and Petrie, _Funeral Furniture_ (London,
OBJECTS

JEWELRY

As fillet decorations, waterlilies are much rarer than papyrus. Boatmen of Mereruka wear them at the back of their headbands. These are probably actual fresh flowers (Fig. II. 113), but the three blooms attached to the fillets of Hetpet (Fig. II.114) and of another Fourth Dynasty lady, as well as that of the wife (?) of Seshemu (Fig. II.115) may be artificial. A princess carved on a relief fragment from the mortuary temple of Lety, first king of Sixth Dynasty, wears a fillet with a *Nymphaea* flower at front and back and with three rosette(?) plaques, left plain, on the sides. A fillet painted on the funerary mask of Kheti has a single upright *Nymphaea* flower the back. Artificial flowers appear in the case of the Middle Kingdom headdress worn by the wife of Khnemhotp I and two daughters of Tethutihotp. Sat-ip's band bears three waterlilies and is in composition identical with the papyrus fillet of the wife of Pepionkh the Middle, and with the two Fourth Dynasty *Nymphaea* bands. The crowns of Tehutihotp's daughters are much more elaborate (Fig. II.116). At the back two *N. Lotus L*. substitute for the usual doubled papyrus group.

1927) Stone vases, Pl.XXXIX, 16,17
317 Mereruka I, Pl.XIII.
318 Atlas I, Pls.CCCLXXVI Saqqara, Hetpet, Dyn.IV [?] (Berlin 15420), CCCLXXVII (Berlin 14103). LD II, Pl.XCVII, a (Saqqara, Leps. 5).
319 Quibell, *Excavations at Saqqara* 1907-08 (Cairo) Pl.LIV,4.
320 Chassinat-Palaique, *Fouilles d'Assiout* (MIFAO XXIV [1911], Pl.XXVII, 2 (T.7,pit III).
Another flower bends over the brow (possibly standing for another group of doubled lowers), and alternating buds and flowers stand erect around the circumference of the bands. The artificiality of these decorations is marked by the red outlines of their petals, in contrast to the living *N. coerula* Sav. flowers with unoutlined petals which the girls hold. A fragment of relief has preserved most of the head of the wife of Ibu, son of the lady Htpwj (Fig. II.117). She wears a fillet surpassing in complexity even those of the Bersheh ladies, for it shows three different floral motives. The double papyrus group at the back of the head may have been matched by another over the brow, though the relief shows only a single umbel. At the side of the head the band bears two upright *N. coerulea* Sav. flowers and the space between them is filled by a seemingly geometric ornament, which can, however, be traced to a vegetal origin.

Less conspicuous than the Middle Kingdom diadems, is the shaping of the free ends of Twelfth Dynasty jewelry into waterlilies (and in one case papyrus). In the New Kingdom the finials, the ends of the ties, and the median frontal pendant of *wsh* collars were commonly of waterlily form. The son of Nakht wears such a flower as the main...
decoration of a simple necklace. Sometimes the finials or ties consist of bud-flower groups, and faience *Nymphaea* flowers and buds were apparently used to form the registers of such collars.

**ARCHITECTURAL ADJUNCTS**

Flat tiles in the shape of waterlilies were apparently fitted together to form friezes and used as inlays for wall decoration. Rectangular tiles were made and painted with waterlily ponds and must have had an analogous use. Also of faience are *Nymphaea* buds and flowers in the round, which appear to have served as kiosks erected over the thrones of kings.

**VESSELS**

Containers shaped in the form of *Nymphaea* flowers can be traced back to the beginnings of historical times. In the First Dynasty the makers of stone vases took delight in fashioning vessels of many forms, most of which have no successors. They carved wickerwork containers in stone, one even incised with grapes on the inside, a jar enclosed

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52674 (Th.Davis; *Tomb of Queen Tiyi, Biban el-Moluk* London, 1910), cache objects, T'y and Akhenaten.).

326 *Anc.Egy. Paint.*, I, Pl.XLII (52).


328 *City of Akhenaten* II, Pl.XLIX, IV.c.14; IV. C.22. Cf. also WVDOG, XIV, 133, Fig.182 for a hollowed *Nymphaea* pendant of uncertain use. (Sekhmet period of Sahure funerary temple).


331 Cf. painting in *Ken-Amun* II, Pl. IX A. Daressy, *op.cit.*, Pl.XXX 24527, 24536, 24544, 24547, 24554, 24556, 24557 (all buds; Amenhotep II). Wehye's *Ornament*, Pl.XV, 5, 7 (Amarna). Metropolitan Museum Studies II (1929-30), 143, Fig 4, and discussion of use, pp.142-143. Petrie, *Tell el Amarna*
within a net, a model waterskin, and what is apparently a dish in the form of a hand. Among their models were vegetal forms, as shown by a fragmentary bowl in the form of a leaf from the tomb of Hemaka at Saqqara.\textsuperscript{332} In addition, fragments apparently of hemispherical bowls, two carved in low relief and a third incised with triangular petals, are possibly modelled after \textit{Nymphaeas}, although differing greatly from the usual form into which the flowers were cast (Figs II.118-120).\textsuperscript{333} However, there can be no doubt as to the natural prototype of a fragment of crystal from the First Dynasty grave 1512 at Naga-ed-Der (Fig. II.121).\textsuperscript{334} It was part of a vessel, possibly a cup with fairly vertical sides, imitating a waterlily. The sepals are vertically ribbed and the smaller petals showing between them are left plain. It is succeeded by two complete miniature pots. One, 69 mm. high from grave 743 at Bashkatib, is dated by Petrie to the late First or Second Dynasty (Fig. II.122); the other, very slightly under 69 mm. in height, is from Qau, 429, considered by Brunton as belonging to the end of the Second or the beginning of the Third Dynasty (Fig. II.123).\textsuperscript{335} Both vessels are almost identical in shape, possessing a rolled rim.


\textsuperscript{333} Fig. II.118 = Petrie, \textit{Ibid.} I, Pl.XXXVIII,1 (marble), Fig. II.119 = \textit{Ibid.} Pl. XXXVIII,2 (crystal). Fig. II.120 = \textit{Ibid.} II, Pl.V, 12 (Zer).

\textsuperscript{334} Reisner, The Early Dynastic Cemeteries of Naga-Ed-Der I (Leipzig, 1908-32), p.40, no.67, "goblet"; Pl.XLI, a, 1512.

\textsuperscript{335} Fig. II.122 = Petrie et al., \textit{Lahun} II (London, 1890), p.22, Pls.XLIV,4; LIV, no number, middle of plate. Fig. II.123 = Brunton, \textit{Qau} I, pp.11-12; Pls.XVIII,4; XXII, middle right.
and a very small interior base. That from Bashkatib is of alabaster with two rows of white limestone petals surrounded by slate sepals. The upper part of the Qau potikin is alabaster; the lower part is made of a composition paste, and it possesses but one row of alabaster petals surrounded by slate sepals. These delightful little *Nymphaea* vases, which if put to use could hardly have served as containers for anything but cosmetics, did not, according to our present knowledge, give rise to any line of Old or Middle Kingdom vessels.

It is not until the New Kingdom that there again appear containers in the form of waterlilies. At that time footed beakers, representing the blue *Nymphaea*, if tall, or the white one, if squat, became indispensable in Egyptian households. They are drawn as finished products of the workshops, and were gifts acceptable to royalty or to a god. Two examples, of silver and blue faience, occur among the New Year’s gifts of Qenamun and others are part of the tribute brought by foreigners, proving that perfectly normal Egyptian types could be represented among the goods brought by non-Egyptians. However it is true that the popularity of *Nymphaea* beakers spread from Egypt to Asia. At least two examples have been found at Minet el-Beida, the port of Ras Shamra. At the banquet of Djeserkaseneb one is placed in a jar stand.

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336 *Atlas* I, Pls.LIX, a (Meri; Qurna 95; Amenhotep II), CCCXVIII (Rekhmire; Qurna 100; Tuthmosis III-Amenhotep II; cf. *Rekhmire*, Pl.XXXIII).

337 *Atlas* II, Pls.XXX,a; XXXI,b, Nos.10,121,140 (Presentation of "booty" to Amun, Karnak, Tuthmosis III).

338 Ken-Amun I, Pls.XVII, no.47; XX, no.76. N. deG.Davies, "Tehuti: Owner of Tomb 110 at Thebes," *Studies Presented to F.II Griffith*, p.286 (this tomb dates from around the eighth year of Tuthmosis III, when Hatshepsut assumed regal attributes, to her death, around twelve years later). *Men. et al*, Pls.IV (Qurna 86; Tuthmosis III-Amenhotep II); XXXXIV (Amenemose; Qurna 42; Tuthmosis III-Amenhotep II).

*Atlas* I, Pl.CCXXIII, A = *Anc. Egyp. Paint.* I, XLIII (Sebekhhotp; Qurna 63; Tuthmosis IV). The vessel of Sebekhhotp is very elaborate and consists of a beaker with dotted lobes (i.e. presumably fluting) supporting a waterlily beaker. Gazelle heads project from the sides of both and the upper one is topped by duck’s heads and stemmed rosettes. Half destroyed is another vessel and all that remains is a stemmed beaker (?) rising from a hemispherical bowl. *Atlas* I, Pl.XLVI, a (Thenuna; Qurna 76; Tuthmosis IV).

339 *Syria*.X (1929), Pl.LI, 6, *Syria*, XIII (1932), 12, Fig.8.

340 *Anc. Egyp. Paint.* I, Pl.XXXVI (T.38; Tuthmosis IV).
stands on a table beside Nebamun is decorated by a row of *Nymphaea* flowers and buds at the rim (Fig. II.124). That on the table of Haremhab is heaped high with a dark substance; Wreszinski interpreted the drawing as depicting the contents, wine, drawn above the rim, but this does not seem likely. Akhenaten is shown drinking from a vessel of this type.\(^{341}\) It appears as an accessory in offering scenes.\(^{342}\) Three stand within a funerary booth of Rekhmire.\(^{343}\)

Examples of these beakers glass,\(^{344}\) faience,\(^{345}\) stone,\(^{346}\) metal\(^{347}\) and pottery are common. The excavations at Deir el Medineh have yielded a number of clay examples, some painted with green sepals as well as green and red petals, others with floral friezes,
and one undecorated example.\textsuperscript{348} Beakers, fragmentarily preserved, from the tomb of Amenhotep II and from Amarna are painted with sepals and petals. Other examples of the same general shape form the latter site and from Qau are plain or decorated with horizontal bands.\textsuperscript{349} The upper part of a unique vessel apparently in the form of a half open flower, was found in the tomb of Peshedu.\textsuperscript{350} Another rather unusual example was found in an empty oval grave No.26 in cemetery 94 in Nubia.\textsuperscript{351}

In addition to the beakers, jar covers were made in the form of widely expanded waterlilies. Those represented in the tombs appear like inverted bowls.\textsuperscript{352} These covers of the Prunkgefäße must have been much more elaborate than the waterlily stoppers, one of which is pictured in the mouth of a gazelle vase of Qenamun; others appear in a number of vessels, gifts of Tuthmosis III to Amon;\textsuperscript{353} actual examples have been found in the tombs of Amenhotep II, and Tuthmosis IV.\textsuperscript{354}

Allied to the making of entire vessels in the shape of a waterlily was the custom of placing a design of \textit{Nymphaea} sepals and petals on those parts of vessels which possessed an appropriate conical or hemispherical form. Some of the elaborately worked vases (carinated bowls and spherical pot with broad neck) of Qenamun cited for their floral covers have such decoration on the lower parts of the body. Other examples from tomb pictures

\textsuperscript{348} Nagel, \textit{op. cit.}, p.201, Fig.171, D.M. 136; Pl.XVII, 359, 112; 359, 111 (with painted perianth); D.M. 22, 225 (= p.199, Fig.67), DM.22, 78-80 (= p.199, Fig.168) (all with freize decoration); DM 22, 106 = p.200, Fig.169, right (plain). This is Nagel's Type XXV, "footed chalices."

\textsuperscript{349} Daressy, \textit{Fouilles dans la Vallée des Rois} (Cat.Caire), Pl.XLV, 24879. BMQ II (1928), Pl.XXIX, b. \textit{City of Akhenaten} I, Pls.LII, no.XLV/1037: LIV, no.LXXIX/239. \textit{Qua} III, Pl.XXVI, 42 (Gr, 1125).

\textsuperscript{350} Bruyère, \textit{Deir el Medineh} 1923-24 (FIFAO II 2 /1925/), Pl.XXXV,4 (T.3223: Seti I, painted black paste.)

\textsuperscript{351} Firth, \textit{Nubia} 1909-10 pp. 105,107, Pl.XXXVII. fig.? This cemetary is classified as Late C group and is said to be either contemporay or somewhat earlier than a nearby New Kingdom cemetary. However it is said to have contained several graves that were undoubtedly New Kingdom.

\textsuperscript{352} \textit{Payemre} II, Pl.LVIII (offering table; Khokhah 39). \textit{Men.et al.}, Pl.XXIV (Amenmose, 42 among syrian tribute). \textit{KenAmun} I, Pls. XVII, no. 86 (topping ornate decorated bowl); XIX, nos. 57, 60, 99 (covering inlaid gold vases); \textit{Anc.Egy.Paint.} I, Pl.XLI (Sebkhotp; Qurna 63; Tuthmosis IV; Pl.XXXIX, asiatic tribute).  

\textsuperscript{353} \textit{Atlas} II, Pls.XXXIII a., XXXIII b, Nos. 27,28,39, 100. (Karnak)

\textsuperscript{354} Daressy, \textit{op.cit.}, Pl.XLVII, 3944, J (five examples), P. \textit{KenAmun} I, Pl.XX; cf. also in rotund jars,
and pictorial ointment containers carved in the round can be cited.\textsuperscript{355} Actual examples of vessels, usually of faience, in a number of different shapes are common.\textsuperscript{356}

**MISCELLANEOUS OBJECTS**

In the Middle Kingdom there was a slight vogue for objects in *Nymphaea* form. A wooden handle from Qau 5218, probably belonging to the Eleventh Dynasty shows a copper tang in the socket and was apparently a mirror handle. An identical specimen in ivory was found at Abydos, and has been assigned to the Twelfth Dynasty.\textsuperscript{357} The heads of ivory castanets from E 356, also presumably Twelfth Dynasty, at Abydos are carved as waterlilies and form a completely round flower when placed together.\textsuperscript{358} A headrest painted inside the exterior coffin of Nakhti is supported by two waterlily stems in addition to the main oblong support.\textsuperscript{359} The accuracy of this representation is, of course, uncertain. Cases in which objects, usually papyriform, are shown with *Nymphaea* handles, have already been noted.\textsuperscript{360} The New Kingdom has very little to offer; a flat plaque of bone from Qau 1450 is cut in the shape of a flower.\textsuperscript{361} The end core of the silver trumpet from

\textsuperscript{355} Atlas I, Pls.CCXLVII, CCXLVIII, 4 (Haremhab, 78; deep two-handled crater with foot); CCXXV (Imsibe, Qurna 65; Ramses X; variety of forms from Asiatic tribute but necessarily of Egyptian design); CCXC = Art Égy.II, Pl.CXXXIX, 5 (Qurna 41: Tuthmosis IV-Amenhotep III, Syrian tribute). Fecheimer, *Kleiplastik* (Berlin, 1922), pp.134-5 (Liverpool; male slave carrying pot; 136 (Paris). Some of the vessels of Imsibe have feet made in the form on Nymphaeas.

\textsuperscript{356} Long pointed jar: Daressy, *op.cit.*, Pl.XLVI, 3919 (Amenhotep II), spouted pot; Wallis, *Egy.Ceramic Art* 1898, Pl.XI, 5 ("Dyn XVIII") Spherical pot with pointed base: *Ibid.*, Pl.XIII, 1 (Tuneh; Dyn.XX); *Ibid.*, 1900, Pl.III, 3 (Probably from tomb of Amenhotep II) Oval jar: *Ibid.*, p.37, Fig.81; Bowls: *Ibid.*, p.13, Fig.24 (Berlin). Burlington 1922, Pl.XL, bottom middle (Amarna). *Qau* III, Pl.XXXV, 41. Bulbous beakers, straight sides, (situlae): *Tomb Tut.* III, Pl.XLIX, A (alabaster); REA, II (1928-29), 243, Fig.50 (Ramseses II); Petrie-Brunton, *Sedment II*, Pl.XVI, 7 (Group 2019, with a name of Ramses II). Elongated pointed jar: Burlington 1922, Pl.XLI no.18 (Nymphaea design close to base but the tip left undecorated. Small pot: *Qau* III, Pl.XX.II (Second Intermediate period; water-lily decoration suspended from neck).

\textsuperscript{357} *Qau* III, 2, Pl.IV, 24. Garstang, *El Arabeh* (London, 1901), Pl.XIV, upper left, E.1. Cf. also BMFA XXXIX, p.97 fig.8, Middle Kingdom.

\textsuperscript{358} *Ibid.*,10; Pl.XIV, upper left, E 356.

\textsuperscript{359} Chassinat and Palanque, *Necropole d'Assiout*, Pl.XVII, T. 7, pit 1.

\textsuperscript{360} Cf. n. 188.

\textsuperscript{361} *Qau* III, Pl. XXXV, 33.
Tutankhamun’s tomb, placed inside so that the tube would not lose its shape, is formed and decorated as a *Nymphaea* flower.\(^{362}\)

**NYPHAEA COLUMNS**

The making of columns in the form of *Nymphaeas* concords ill with the actual character of their stems, which out of water are too weak to hold even their own flowers upright. Nevertheless, the Egyptians unrestrained by theories concerning the desirability of harmony between function and ornament and stimulated by their partiality for the waterlily, proceeded to do just this. Actually their procedure in this regard accords perfectly with their use of *Nymphaeas* elsewhere. It was the form of the flower and the leaf that was important, and even in representative scenes the blooms were sometimes shown on long erect stems.\(^{363}\) It is only when held in the hand that due cognizance was sometimes, but not always, taken of the limp nature of the stalks. Since this was disregarded in pictorial contexts, it is no surprise that in ornamental design, as in Reshepses matting, temple dados, or the Prunkgefässe, *Nymphaea* flowers were set on solid stems.

The first examples of *Nymphaea* columns belong to the Fifth Dynasty, but it is possible that they can be traced back to the Third Dynasty. The evidence does not consist of actual examples as in the case of the open papyrus column, but of paintings on a battered wooden coffin from Gebelein. This has been published in passing by Schiaparelli, who states that it belongs to the Third Dynasty, without giving any indication of the circumstances of discovery (Fig. II.125).\(^{364}\) The long side is divided into nine simple niches painted either with twinned herringbone trees springing from thickened bases, or with a design which apparently represents a half-opened *Nymphaea* bud serving as the capital of a

\(^{362}\) ILN, June 27, 1925, p.1300, Fig.1.

\(^{363}\) Cf. n. 251. Beni Hasan II, Pl. XIV (Khety; T.17; Dyn. XI). Although there has been some conflation with the papyrus in this scene, it, nevertheless, shows that the nature of the stem did not concern the Egyptians. Frankfort, _Mural Painting of El Amarneh_ (London, 1929), Pls.?

\(^{364}\) Schiaparelli, *Cha*. p.19, Fig.16.
column. Two large "sepals" contain one large and two smaller "petals." In the best preserved of the designs an abacus appears to be shown above the bud, divided into three segments by vertical lines. The stem, apparently double, is bound by three cords immediately below the capital. We must certainly have here a *Nymphaea* column. The coffin has no close parallels, but much more elaborate recessed wooden sarcophagi have been found at Tarkhan and Medum, but these approximate more closely to the stone coffins with elaborate niching than to the Gebelein example. Accordingly its Third Dynasty date cannot be regarded as absolutely certain, but remains highly likely, and that would make the design it bears the earliest record remaining of an Egyptian *Nymphaea* column.

The Fifth Dynasty mastaba of Ptahshepses at Abusir contains excellent waterlily-bud columns. The six-membered shaft is bound together below the sepals and there the interstices between the stems are filled by six small stalks ending in buds. The columns of the vestibule and pillared court of Neferirkere's mortuary temple were of wood; only the limestone bases of the shafts and impressions in the bricks remain; the columns were formed by groups of four rounded stems, and were therefore presumably of *Nymphaea* type. Much of the work on Egyptian estates was done in the shade of columned porticoes, which are sometimes supported by *Nymphaea*-bud columns, but more commonly rest on

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capitals formed by open waterlilies. Although no actual open capitals have been found, they must have been frequent in light constructions, according to the evidence of the tombs. The lines dividing the shafts in two indicate a quadruple section, and often the subsidiary buds are indicated.

In the Middle Kingdom the proportions of open to closed Nymphaea columns appear to be reversed. Although this type lost much of its popularity to the papyrus order in the New Kingdom, examples of waterlily columns are still present in goodly numbers. Kiosks appear in the representations supported by a single shaft only, and the two buds often tied to the sides of the capital create examples of a bud-flower formula.

In addition to the use of Nymphaea among the main architectural units, they performed minor functions in the architectural decoration of Tell el Amarna. The pillars of the outer court of the temple of Group II at Maru Aten were carved with erect stems among which Nymphaea bloom; this is almost a translation into relief of the Green Room paintings. Two kiosks built inside the limits of a canal, belonging to the same complex, have a facade characterized by four pilasters. These were conjecturally believed to have been decorated with the same kind of reeding and Nymphaea flowers as were the columns of the temple. The concave, oblong capitals surmounting the pilasters are decorated with a simple design of disjointed Nymphaea “petals” and longer “sepals.” A single long perianth unit is set at the corners, flanked by shorter ones, producing a simple but adequate solution to the

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367 WVDOG, II, 21, Figs. 16-18.
368 Closed: Merenuka I, Pl.XXXVII, Deir el Gebrawi I, Pl.VII (Ibi; T.8; Dyn.VI). Open: Selim Hasan, *Excavations at Giza*, 1929-30 (Cairo, 1936), Pl.XL2 (Re-her Neferirkere), LD II, Pls. LII (ReShepes; Giza, Leps.16; Dyn.V.); XLI, b (Giza, Leps.89; Dyn.V.). Borchardt, *Die Aegyptische Pflanzensaule* (Berlin, 1897), p.9, Fig.15 (Imeni Giza, Leps.10, ? : Dyn.V.). LD I, Pl.LVII (Zawiyet el Meitin; Leps. 1,2; Dyn.VI); LD II, Pl.CX, a (Zawiet el Meitin, Leps. 9; Dyn.VI). von Bissing, *Gemmikai I* (Berlin, 1905), Pl.XXIX, 211.
problem of rounding a corner gracefully.  

CONCLUSIONS

The survey of Egyptian papyrus and *Nymphaea* decoration should bring with it some insight into the decorative traditions developed by the Egyptians, at least in so far as these particular plants are concerned, and the probable manner in which ornamental forms were created. The decoration involving the swamp plants is not functional. The plant columns, though the units of their shafts may be bound together by cords, do not seem to be derived from primitive reed architecture. Despite the fact that papyrus umbels frequently serve as handles or supports in various types of objects, this cannot be explained by assuming that papyrus stems originally served for some such purpose. Nevertheless, the ornament derived from the swamp plants was extremely realistic and substantive. It must be considered against the background of the importance of the plants in the daily life of the Egyptians of which the tomb paintings and reliefs tell. Aside from the numerous uses of *Cyperus papyrus* L., both it and the *Nymphaeas* were aesthetically pleasing to the Egyptians. When the plants appear in the tombs their essential features are reproduced in stylized form. The manner of this stylization was conditioned, not only by desire for clarity but also by the requirement of symmetry which is such a prominent feature of Egyptian art. The results of this process, which occurred in the earliest phases of Egyptian history, and of which we catch a momentary glimpse in the experimental papyrus forms on Scorpion's

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371 *City of Akhenaten* I, 120-1; Pl. XXXI,5.
372 *Ibid.* 121-2; Fig.21; Pl.XXX.
373 This non-functional characterization holds good for the papyrus and *nymphaea* decoration, but not for all Egyptian ornament. If the proposed explanations of the *kheher* design and *Ded* column as elements derived from the primitive construction of reed huts, are valid, they are then excellent examples of ornaments arising out of and conditioned by materials, in the manner postulated by Semper. Another example can be found in the brick architecture, imported into Egypt in the First Dynasty, which served as the basis for the prominent false door motives. Matting designs were superimposed on the recessed Scheintür; earlier and detailed renderings of the elaborate false door show mats lashed to their supports, but during the course of Egyptian development such explicit proof of the original source of the patterns disappeared and their use was widened until they served as ordinary components of the decoration of flat surfaces. Now that the flames of the Semper-Riegl controversy have long died away, it is evident that both viewpoints may contribute to the understanding of decoration, and that Semper's hypotheses do at times accord with reality; therefore they do not merit the intense scorn poured forth against them by Riegl, however justified his opposition to their
mace and Narmer's palette, were used both for representational and decorative purposes and in the script (for instance the triple papyrus and the papyrus clumps).\footnote{Cf. Kronig, MDIAA, V (1934), 151 for discussion of the inextricable mingling of representative,}

Papyrus and Nymphaea decoration at its simplest consist of mere addition of single inflorescences in the round to objects (papyrus umbels on chairs, beds, boats, handles) or flat surfaces (application of single Nymphaea flowers) in need of decoration. Somewhat more elaborate are the cases in which representative groups were used in a decorative sense without any change in form, except for a possible tightening in the requirement of symmetry (papyrus clumps, paratactic patterns, Nymphaea knots). All of these patterns betray a feeling of the immediacy of actual plants and flowers. However subserviently the Egyptian artist might follow the established canons for designing the swamp plants, or however much latitude he might allow himself in regard to the reproduction of their real habitus, he did not and could not forget that he was dealing with species of plants which pervaded innumerable phases of Egyptian life. Sometimes the vegetal decoration was actually but the substitution of imperishable inflorescences for fragile live blooms (floral fillets, New Kingdom flower vases).

The number of cases of papyrus and Nymphaea decorations that can be considered as ornamental designs without a representational background is exceedingly limited. The most prominent example is the twinned papyrus, but we must remember that we do not know the full story of its origin. It was evidently thought of as a thoroughly substantive group, two stems tied together, but never appears except in decorative contexts. From it was developed the purely ornamental triple papyrus group of Hetepheres. The ordinary triple papyrus group cannot be said to have a representative origin, yet it cannot be called primarily decorative, since it first appears as a hieroglyph. There its function was to express the class papyrus, which was naturally done by drawing three of the stems symmetrically arranged, just as three strokes expressed plurality. We have already noted that in a number exaggerated application may have been.
of cases the triple papyrus group was used as much for its symbolic as for its decorative value. In addition, both it and the bud-flower *Nymphaea* formula appear frequently as representations of bouquets. Unfortunately we cannot tell whether such drawings correspond to the actual grouping of the bunches (which were often securely tied together and would thus have retained any patterns imposed upon them). It is most likely, especially in view of the existence of the hieroglyph *ha* (Fig. II.64), that such arrangements are but examples of the Egyptian artist's tendency to reduce realistic features to a symmetrical pattern. Nevertheless, it is of great interest to observe that the triple papyrus, and to an even greater extent, the waterlily bud-flower group are frequently used in representation and show a gradual tendency to break away from pictorial contexts, until in the New Kingdom they both emerge as full fledged ornamental motives.

Not only do almost all of the decorative designs involving the Egyptian swamp plants occur originally in representative contexts, and retain their representative shape, but even in the more abstract twinned papyrus motive the nature of the flowers remains recognizable to the last. In only a few cases in which the individual umbels are fused together, are incipient patterns of a more abstract nature produced, but they are isolated examples that never developed into recognized motives. Throughout the centuries, the Egyptian craftsmen respected the identity of the papyrus and waterlily. The development of the ornamental use of the swamp plants testifies to the delight which the Egyptians took in their vegetation and bloom; it was sufficient for them to produce imperishable versions of those plants, versions which would not, like the real flowers, need constant renewal.

**SOURCES FOR THE FIGURES**

II.1 Encyclopaedia Britannica, 14th ed., Vol. 17, 247


II.3 Same as II.1
II.4  JdI 48 (1933), 19, Fig. 10 A, C
II.5  Frankfort, *Mural Painting at Amarna*, Pl. V and VI
II.6  *Hier.* I, Pls. XXV below; XXVI, C, 1-3; XXIX
II.7  *Hesy*, Pl XV, 5
II.8  *Giza* I, Pl. XXIX, a (Mastaba II N)
II.9  *Neuserre*, p. 38, Fig. 16 (WVDOG VII)
II.10  *Mereruka* I, Pl. 11
II.11  *Antefoker*, Pl. V
II.12  *Meir* II, III, Pl. XXI, 2
II.13  *Meir* III, Pl. VI, Ukhotep, son of Ukhotep, Amenemhet II
II.14  *Nakht*, Pl. X B
II.15  *Two Sculptors*, Pl. XXX, 1
II.16  *Amarna* III, Pl. VIII (Huya)
II.17  *Annales* II, 10, 7z. 10 (bronze bowl)
II.18  *Neferhotep* I, Pl. XLII (49)
II.19  Calverley, II, Pl. I
II.20  *KenAmun* II, Pl. LI, A
II.21  *Two Officials*, Pl. XXVIII (Neb.)
II.22  *Annales* XXXIII (1933), Pl. XIII Keimer pendeloques
II.23  *Men. et al*, Pl. XLV, A (226)
II.24  Same as II.15
II.25  *Hesy* Pl. XVI
II.26  *Two Ramesside Tombs*, Pl. V-VII (Userhet 51. Seti I)
II.28  *Panhesy*, p. 25, Fig. 12 (t. 16. Ramses IV)
II.29  *Hierakonpolis*
II.30  Unpublished Boston Museum photo
II.31 W. S. Smith, *Excavations at Giza* Vol. II (Reisner 2?)

II.32 LD II, Pl/ XVII, a

II.33 Macramallah, *Mastaba d’Idont*, Pl/ XXII, A (west wall of funerary chamber, painted

II.34 LD II, Pl. XXXIII, b; LD I, Pl. XXVI, upper left

II.35 LD II, Pl. X, a

II.36 Boreux, *Antiquités* I, Pl. XXXI

II.37 *Saqqara Mastabas* I, Pl. III, 2 = Pl. XXXIII Kaaper


II.39 *Saqqara Mastabas* I, Pl. XXVI

II.40 Selim Hassan, *op. cit.*., Pl. LXIII, Tomb of Fifi, West side of sarcophagus

II.41 LD II, Pl. XCVIII, d (Kagemni; Saqqara, Leps. 10)

II.42 P. Lacau, *Sarcophages antérieurs au nouvel empire* I (Cat. Caire), Pl. XXIV, 28083

II.43 LD II, Pl. CXLVIII, a

II.44 *Grabfunde* I, Pl. 1, Mentuhotep

II.45 LD II, Pl. CXLVIII, d (Asasif, Leps. 25)

II.46 Steindorff, *Grabfunde des MR* I, Pl. IV

II.47 *Meir* III, Pl. XX (Ukhotep, son of Ukhotep and Mersi; T. B. 4; Amenemhet II; walls of the statue recess, carved in stone and painted)

II.48 *Antefoker*, Pl. XXX (Qurna 60; Sesostris I)

II.49 *Ibid.*., Pl. XXXI, top (Qurna 60)

II.50 Naville, *XI Dyn Temple at Deir el Bahri* II, Pls. XIV (chapel of Ashatyt; S. side; reconstruction), XV (water color of the fragments; XIX (Ashayt; N side); cf. Capart, *Doc. Servor* I, Pl. XXVI for photographs of some of the fragments). Assholt

II.51 *Atlas* I, Pl. 405 (Saqqara, Ipi, Dyn VI) = AZ LXXXIII (1937), Pl. VIII, c (Kairoguide 61; now in Cairo museum)

II.52 E. Denson Ross, *Art of Egypt through the Ages*, p. 98, Ivory box in the British Museum

II.53 *Mereruka* I, Pls. LXXXVI, LXXXVII (Photo 30466)
II.54 Petrie, *Koptos*, pp. 5-6; Pl. V, 2 (Koptos sherds)

II.55 *Puyemre* II, Pl. XLV

II.56 *Amenemhet*, Pl. XXVIII (Qurna 82; Tuthmosis III).

II.57 *KenAmun* I, Pl. XXV, A (Qurna 93; Amenhotep II)

II.58 AZ LXXVIII (1937), Pl. VIII, a (Khokhah 48; Amenhotep III)

II.59 *Puyemre* II, Pls. LX, LXI. Cf. pp. 31-32 where Davies points out that this was an adaptation of a coffin composition used on a large scale. Painted

II.60 LD III, Pl. LXVIII

II.61 *Temple of Sethos I at Abydos* III, Pl. XVI

II.62 *Men. et al.*, pp. 19, 24-25; Pl. XXX, F

II.63 WVDOG VIII, p. 125, Ffig. 203 (Late period gr. 17; no grave goods)

II.64 Gardiner, *Egyptian Grammar*, M 16, M 17


II.66 *Hier.* I, Pl. XXVI c, 1, 3

II.67 Junker, *Giza* I, 110, Fig. 10, 3; p. 263; not assignable to a specific mastaba; the rim of the vessel is carved in the form of a cartouche.

II.68 *Beni Hasan* I, Pl. XXIX = Rosellini, *Mon. Civ.* , pl. XCIII, 2 t. 3(main chamber, W wall; Sesostris I)

II.69 Rosellini, *Mon. Civ.*, Pl. LXIX

II.70 *Two Officials*, Pl. XXX (Qurna 90; Tuthmosis IV-early Amenhotep III)

II.71 Schäfer-Andrae, *Kunst des alten Orients*, 2nd Ed, pp. 270, 1; 629 (Dyn IV)

II.72 Same as II.71

II.73 Schäfer-Andrae, *op. cit.*, pp. 270, 1; 629 (Dyn IV)

II.74 LD II, Pl. XC, left (Giza, Leps 54). Hetepheres

II.75 *Deir el Gebrawi* I, Pl. 12

II.76 *Mereruka* I, Pls. VIII, IX, XXIII, A; XXVI-XXVIII and *passim*

II.77 *Ibid.*, Pls. IX, XV, XVI (fowling) Plate 9

II.79 *Sedment* I, Pl. XXII, 2 p.2 (Petrie)

II.80 P. Lacau, *op. cit.*, Pl. XXII, 28120

II.81 P. Lacau, *op. cit.*, II, Pl. LIV, 491 Town II, Plate

II.82 J. de Morgan, *Dahchour*, 1894, Pl. XXXVIII, C, E (Awef-Re-Hor), G (Nubhetepti-Khrad probably daughter of Hor)

II.83 Boeser, *op. cit.*, III, p. 8; Pls. XVIII, XXII

II.84 *Tomb Tut*, II, Pl. LXXV, A, C

II.85 *Amenemhet*, Pl. XII (Qurna 82; Tuthmosis III)

II.86 Quibell, *Excavations at Saqqara*, 1911-12: *Tomb of Hesy*, Pl. XVIII,33

II.87 *Ibid.*, Pl. XVIII, 40

II.88 *Ibid.*, Pl. XIX, 44, 47

II.89 *Ibid.*, Pl. XX, 51, 52

II.90 Junker, *Giza*, I, 175, Fig. 31; Pls. XXVI,b; XXVII (offering slab of Yunu/Irnw/; Mastaba Is; Reisner 4150: Khufu)

II.91 LD II, Pl. XIV (Giza 86, Dyn. IV)

II.92 Lauer, *op. cit.*, I, 171-2; II, Pl. LXXVIII (LXXXI-LXXXIII)

II.93 Mortuary temple of Neuserre

II.94 WVDOG VII, 36, Fig. 16; Pl. XIII

II.95 LD II, Pls. LXI, a (Reshepses; Saqqara, Leps. 16; Dyn. V)

II.96 *Antefoker*, Pl. IX (Qurna 60; Sesostris I)

II.97 *Amarna* VI, Pl. XIV, left (Tutu)


II.99 *Men. et al*, Pl. XLI (T.226)

II.100 Schiaparelli, *Cha*, Fig. on p. 34

II.101 Gardiner, *Egyptian Grammar*, M15, M9, M10, M12, M8

II.102 Schweinfurth, *Heart of Africa* I, Fig. opp. p. 106

II.103 LD II, Pl. LXIV, a (Saqqara, Leps. 16; Champollion, *Tome de Defterdar*; Quibell 902)
II.104 Petrie, *Tell el Amarna*, Pl. XVI, 213 (blue glaze)

II.105 " " " 214 (mold)

II.106 " " " 215 (violet)

II.107 " " " 216 (mold blue)

II.108 " " " 217 (mold)

II.109 " " " 218 (blue)

II.110 Schiaparelli, *Cha*, pp. 131-33. Figs 114, 116 (Deir el Medineh 8, Amenhotep III)

II.111 Champollion, *Mon.* II, Pl. CLIX, bottom row, 2

II.112 Cat. MacGregor Coll., Pl. XXV, 574

II.113 *Mereruka* I, Pl. XIII

II.114 *Atlas* I, Pls. CCLXXVI (Saqqara, Hetpet, Dyn. IV[?]) Berlin 15420

II.115 *Ibid.*, Pl. CCLXXVII (Berlin 14103); LD II, Pl. XCVII, a (Saqqara, Leps. 5)

II.116 *Bersheh* I, Frontispiece, Pls. XXIX, ? XXIX (T.2)

II.117 H. Steckeweh, *Die Fürsteangräber von Qaw*, p. 15, b; Pl. XV, b (T8; probably Sesostris III according to Steckeweh, p.8)

II.118 Petrie, *Royal Tombs* I, Pl. XXXVIII, 1 (marble)

II.119 " " " 2 (crystal)

II.120 *Ibid.*, II, Pl. V, 12 (Zer)

II.121 Reisner, *The Early Dynastic Cemeteries of Naga-Ed-Der* I, p. 38, 1, 2; 40, no. 67. "goblet"; Pl. XLI, a 1512; II, V, 12

II.122 Petrie et al, *Lahun* II, p. 22, Pls. XLIV, 4, LIV, no number, middle of plate

II.123 Brunton, *Qau* I, pp. 11-12; Pls. XVIII,4; XXII, middle right

II.124 *Two Officials*, Pl. XXIII = *Atlas* I, Pl. XVIII, a (Nebamun, Qurna 90; Tuthmosis III-Amenhotep III)

II.125 Schiaparelli, *Cha*, p. 19, Fig.16