

CHAPTER V

CYPERUS ALOPECUROIDES *ROTTB.* AND THE EGYPTIAN VOLUTE

THE ORIGIN OF THE VOLUTE ROSETTE IN THE OLD KINGDOM

Cyperus papyrus *L.* was not the only sedge native to the ancient Egyptian swamps. There, also, grew *C. alopecuriides* *Rottb.*, which today is still to be found in the Delta, flourishing in moist spots and along the sides of canals (Fig. V.1). It is an annual, usually under one meter in height, and gives the impression very different from the imposing papyrus. Instead of leaves atrophied into basal sheathing, it possesses relatively broad, tapering foliage that may become as long as the flowering stems themselves.



Fig. V.1

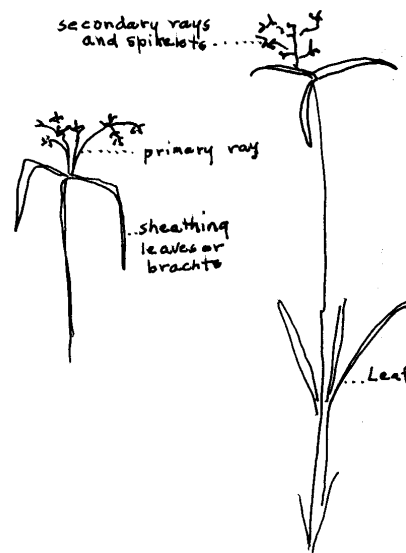


Fig. V.2

The compound umbels, too, are very different from those of *C. papyrus* *L.*, since in *alopecuroides* the leaves, or bracts springing from the base of the inflorescence, are much longer than the primary rays. The umbels are much less regular in form than those of the papyrus. Each primary ray bears a number of secondary rays densely set with the spikelets, which are made by their reddish-colored bracts into one of the most striking

elements of the inflorescence. (Fig. V.2).¹ Despite these somewhat colorful glumes, *Cyperus alopecuroides* Rottb. is certainly not a showy or spectacular plant. Nevertheless, its inflorescence was destined to be the source of one of the most characteristic and widespread motives of Egyptian decorative art, the volute rosette, which in turn gave rise to the Egyptian volute, a motive that played an important role in the ornament of the New Kingdom.

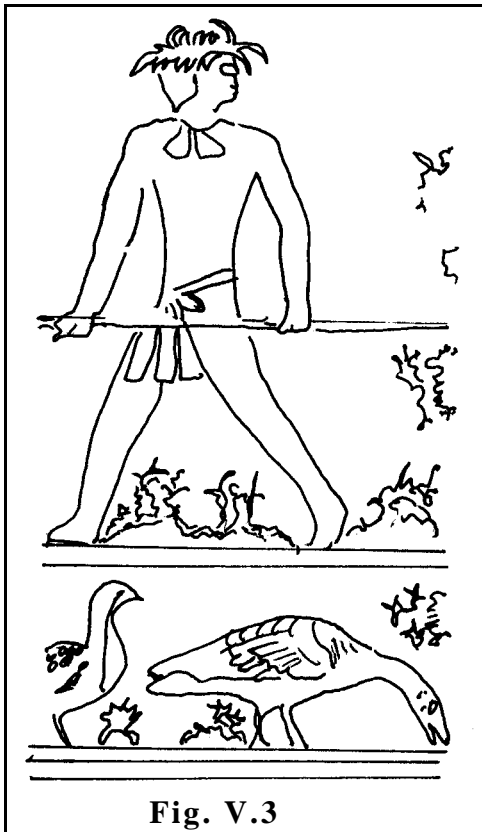


Fig. V.3

famous panel of geese which contains a number of these sedge plants. From mounds of leafage project the blooming stems, drawn with three graceful bracts, the corners of which are filled with red dots representing the spikelets bearing the brownish red glumes (Fig. V.3).²

The mastabas at Medum, belonging to the early part of the Fourth Dynasty, provide the first examples of several scenes of the classical Egyptian repertoire. Among these is the theme of peasants engaged in trapping birds swimming on a pool, which appears in the painted corridor from the chapel of Atet, wife of Neferma'at and daughter-in-law of Snefru. The scene has been reconstructed by William Stevenson Smith, and it is now evident that *C. alopecuroides* Rottb. clumps were shown growing from the circumference of the pond and between the feet of the men pulling the rope that closes the bird net. Below them is placed the

¹ Reno Muschler, *A Manual Flora of Egypt* I (Berlin, 1912), 166-7. Several authors have called attention to the fact that it is this plant which is represented in certain New Kingdom works: Borchardt, "Die Cyperussäule," ZÄS, XL (1902), 36-39; Petrie, *Tell el Amarna* (London, 1894), p. 13 refers to "Cyperus"; notes of Schweinfurth, cf. Keimer in Bull. IFAO, XXXI (1931), 126-7.

² Cf. *Anc. Egy. Paint.* I, Pl. X; Petrie, *Medum* (London, 1892), Pls. XVIII, XXIII. T. 16 (North T), according to Petrie's numbering.

The plants of the Medum painting have remained isolated. Unlike papyrus, this sedge was very rarely represented. A hieroglyph in the tomb of Senbi, son of Ukhhotp which is apparently meant as the sign common as a determinative for herbaceous plants is drawn in a form which resembles *C. alopecuroides* *Rottb.*, although the inflorescences are yellow tipped at Meir (Fig. V.4). This example is strikingly different from the normal form of this sign (Fig. V.5).³ Unequivocal renderings of this sedge do not recur again until the New Kingdom. One of the pillars in the tomb of Qenamun was painted with a scene showing a herdsman feeding his already stuffed oxen (Fig. V.6).⁴



Fig. V.4



Fig. V.5



Fig. V.6

He sits in the shade of an inordinately enlarged *C. alopecuroides* *Rottb.*, whose identity, however, is made certain by the prominent bracts of the inflorescence and the blocks of primary rays, bearing dots corresponding to the reddish glumes. It was not until the Amarna phase that painters rediscovered the charm and delicacy with which representations of this sedge could be endowed. At that time it was shown growing at the edge of the water in the Green Room of the North Palace and was carved in reliefs from Maru Aten. Large clumps were painted on pavements at Amarna, in the main palace itself (Figs. V.7)

³ *Meir* I, Pl. XI. *Meir* II, 33. Gardiner, *Egyptian Grammar* (Oxford, 1927), p. 466, M 2. In regard to the yellow tips of the Meir plants, cf. Muschler, *op. cit.*, who says that the glumes are a “dirty straw-colour.”

⁴ *Ken-Amun* I, Pl. LXI, E (lower part of pillar 2, W side).

and at the Hawata palace. A number of the floral tiles that were so popular at Akhetaten were devoted to its reproduction (Fig. V.8).⁵

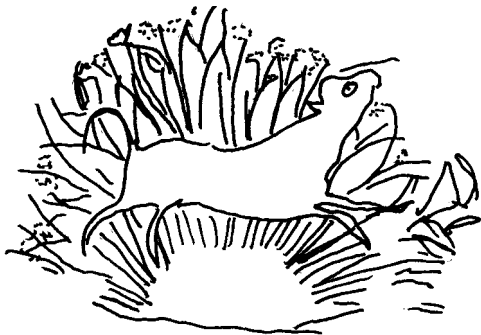


Fig. V.7

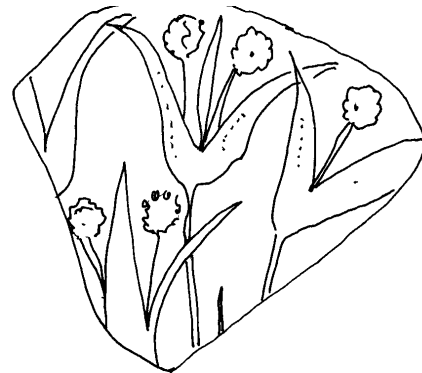


Fig. V.8

If we return to the peasants on the reconstructed wall of Atet we will notice that, to shade their eyes from the glaring Egyptian sun, they have wreathed their brows with the smooth green leaves of *Cyperus alopecuroides* Rottb., and that the red-tinged inflorescences project over their brows and at the back of their heads (Fig. V.3). Such bands of living plants must be the prototypes which stimulated the development of the artificial floral fillets which were already in existence at this time.⁶

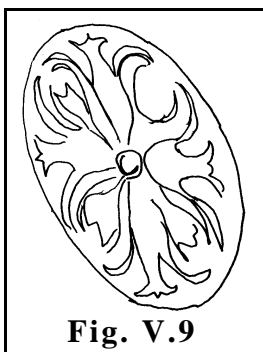


Fig. V.9

One of the statues from the northern part of Tomb 6 at Medum represents another daughter-in-law of Snefru, Nefert, wife of Re^chotep. She wears a fillet decorated by rosettes from which project on each side highly stylized flowers that defy identification (Fig. IV.8).⁷ However, the fillet belonging to a girl buried in Re^cwer's

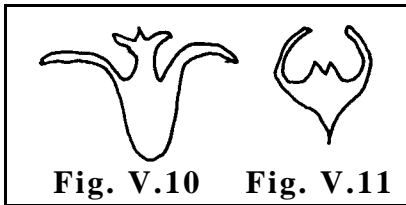
mastaba at Giza, already cited for its two papyrus plaques, provides an example, somewhat

⁵ Frankfort, *The Mural Painting of El Armaneh* (London, 1929), Pls. III, VI, VII a. Cf. also BMMA XXI (192) Dec, Pt. II, p. 14, Fig. 10. *City of Akhenaten* I, Pl. LXII, 251, 257; II, Pl. XXX.1, lower right. Petrie, *Tell el Amarna* (London, 1894), Pl. II, 3, 2, 4, 6. ZÄS XL (1902), 37, Fig. 3 (Hawata pavement, now in Berlin, removed in 1897 by the Service des Antiquités). Burlington 1922, Pl. XL, lower left.

⁶ Cf. Mace and Winlock, *Tomb of Senebtisi at Lischt* (New York, 1916), p. 57 (LD II, Pl. 46; Petrie, *Medum* (London, 1892), Pl. X, actual flowers).

⁷ Borchardt, *Statuen* I (Cat Caire), p. 5, no. 4; Pl. I, 4. Kurt Lange, *Ägyptische Kunst* (Zurich, 1939), Pl. XIII.

later than the Medum painting but belonging to the same dynasty, where the sedge inflorescence was actually used as a decoration for a metal headband (Figs. II.73, V.9). The front plaque is adorned with a complicated volute rosette that at first glance appears to have no connection with our sedge. Its eight members fall into two different categories. The larger units consist of a bulbous median form from which spring two outward-curving lateral projections (Fig. V.10).



This element alternates with a smaller unit consisting of two concave “tendrils” enclosing a notched spatulate form (Fig. V.11). The latter remains enigmatic, but the major units are none other than *C. alopecuroides* *Rottb.* blooms. The lateral projections and the middle lobe of the median section correspond to the three bracts as we see them in the Medum painting, and the two side lobes of the inner tube must represent the spikelets and glumes. This explanation of an extremely unrealistic design could hardly be given credence if it were not for the existence of a pattern typologically intermediate between it and the naturalistic wreaths of Medum, and dated to the reign of Snefru or Khufu.

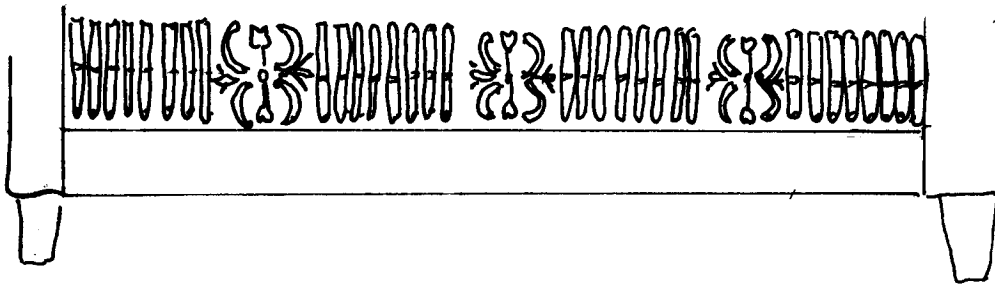
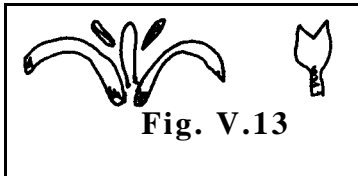


Fig. V.12
The footboard of the bedstead of Hetepheres I was decorated by faience inlaid in gold (Fig. V.12).⁸ Rows of oblong inlays are interrupted by three graceful blue and black faience designs in which all the parts of the sedge inflorescence shown in the representative

⁸ ILN, Aug. 24, 1929, p. 345. William Stevenson Smith, *A History of Egyptian Sculpture and Painting in the Old Kingdom* (London, 1946), p. 147, Fig. 57. *Ibid.*, Fig. 57 illustrates the same design used as decoration of a destroyed piece of furniture.

Medum painting are retained in an ornamental translation. The vertical axis of the rosette is formed by two radii with curious forked spatulate tips, which, though lacking the concave projections, are clearly the same as the smaller units on the Re^cwer plaque (Fig. IV.8).

Two *alopecuroides* “flowers” extend laterally (Fig. V.13). Although their side bracts are



much larger than the center one, and thus reverse the proportion of the inflorescence as painted at Medum, both renderings clearly refer to the same natural prototype. Small

black inlays on each side of the central bracts reproduce the dense spikelets in exactly the same manner as in Atet’s chapel. These designs of Hetepheres provide the link without which the connection of the Re^cwer plaque with the *alopecuroides* inflorescence would seem absurd. However, once we are in possession of the clue yielded by the designs of the footboard, it cannot be denied that this apparently unworthy sedge bloom was subjected in the Fourth Dynasty to a rapid and amazing transformation from which emerged a very pleasing and unrealistic ornamental form.

The popularity of the motive continued in the Fifth Dynasty, where, in the absence of actual examples, tomb and temple representations continue the story. Carefully worked examples of two types of volute rosettes decorate a shrine represented in the mortuary

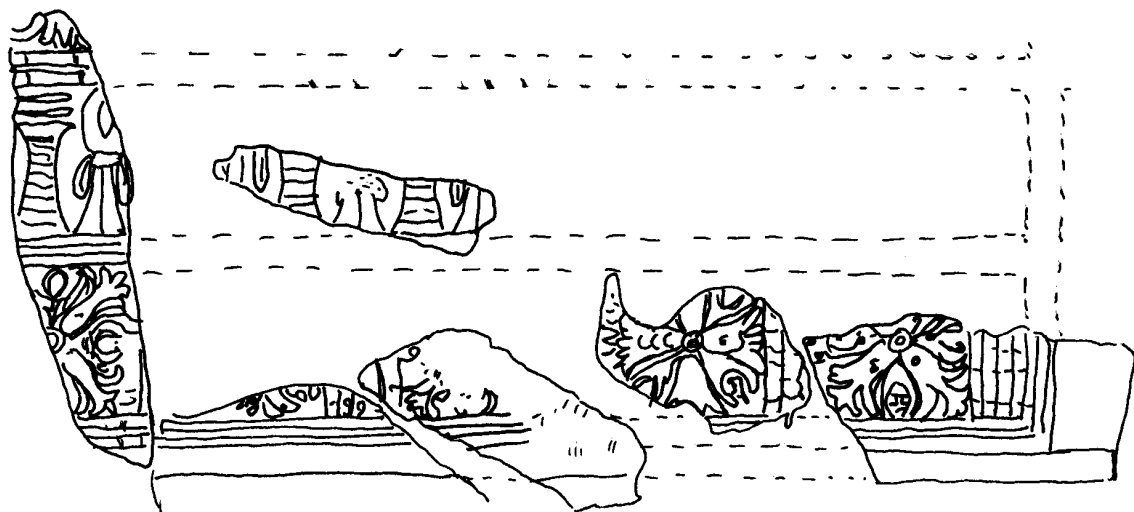
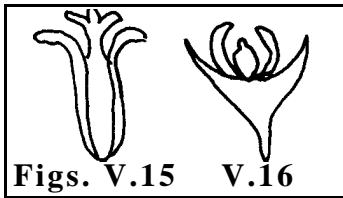


Fig. V.14

temple of Sahure (Fig. V.14). In one type, the sedge inflorescence itself is in all important respects the same as in the fillet from Re^cwer's mastaba (Fig. V.15), but the spatulate



element has been further elaborated (Fig. V.16). It is now divided into two lobes and retains the concave projections. New is the addition of a large triangular base with pointed corners that curve around the original pair of concave

elements. The complete rosettes are formed by four such units alternating with four sedge inflorescences, and are the most complicated volute rosettes preserved to us. In the other type of rosette, the examples of which alternate with the sedge forms, waterlily flowers have been substituted for the *C. alopecuroides* Rottb. blooms. Among the fillet decorations shown in reliefs of this dynasty are simpler variations of volute rosettes (simpler, for example, as drawn in the reliefs which may well be but schematized versions of their originals). Of these only that worn by the lady accompanying Sahure on an expedition into the swamps is possibly a true volute rosette made up of four *alopecuroides*



Fig. V.17



Fig. V.18



Fig. V.19

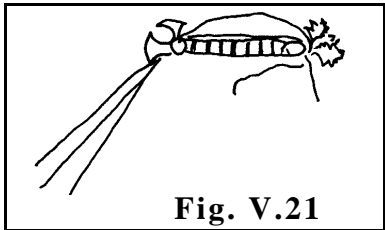


Fig. V.20

heads (Fig. V.17). Although the relief fragment is ill preserved, sufficient remains to show that the carving reproduced three main projections, with corners filled by oval elements, presumably derived from the spikelets of the sedge (Fig. V.17). However, boatmen of Sahure wear fillets that are very similar and are made of waterlilies.⁹ The other three examples, judging from the drawings of Lepsius' artists, possess spatulate and volute

⁹ WVDOG XXVI, Pl. XIV.

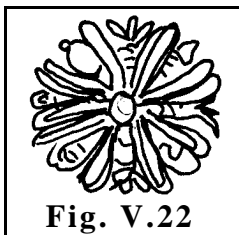
elements alternating with *Nymphaea* perianths (Figs. V.18, 19, 20).¹⁰ They correspond,



if the drawings we possess are accurate, with the rosettes having *Nymphaea* blooms of the Sahure shrine, rather than with true volute rosettes.

Although the Old Kingdom material available to us is limited, the comparison of the Medum representations with their natural prototype shows how the Egyptians seized upon the essential characters of this sedge inflorescence - its prominent bracts interspersed with the dense mass of reddish spikelets - and created from it the decorative volute rosette. By the Fifth Dynasty it is probable that the craftsmen no longer realized the meaning of the now traditional pattern.

THE SIMPLIFICATION OF THE MOTIVE IN THE MIDDLE KINGDOM



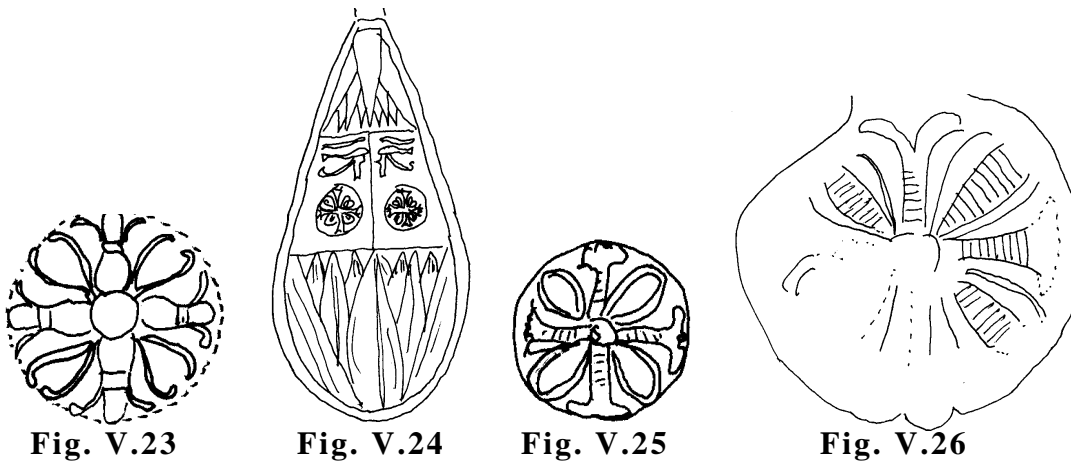
Sit-Hathor-Yunet, daughter of Sesostris II, and contemporary of Sesostris III and of Amenemhet III, possessed a diadem the narrow band of which bears a uraeus in the front and two gold feathers springing from a solid gold papyrus umbel in back. To the gold band are fastened fifteen volute rosettes of gold cloisonné filled with colored pastes (Fig. V.22).¹¹ They represent a simplified version of the outer designs of the Sahure chest. All the parts of the sedge inflorescence, the lateral, outwardly curved bracts and the central bract fused with the side lobes of the spikelets, are retained. However, the units alternating between the *alopecuroides* blooms have lost both the pairs of concave volutes which they possessed on the Sahure chest; all that remains in Sit-Hathor-Yunet's rosette is the rounded lobe with a projecting tip. The most important feature of these designs is that the side

¹⁰ Cf. Fig. V.21 for the fillet of the wife of the Senezemib called Mehi. At the back are two papyrus heads placed at right angles to each other, and over the forehead are two cone-shaped elements, each with two pairs of lateral shoots, possibly an attempt to render a flat volute rosette in "profile," just as the plaques were represented in profile in the drawing of the fillet of Hetep-ni-Ptah's wife (Fig. II.17F).

¹¹ Petrie, *Illahun I* pp. 26-7; Pls. V, XI, 4; XIII, 2-5. Winlock, *The Treasure of El-Lahun* (New York, 1924), pp. 24-6; Pls. II-IV. He interprets the rosettes as "lotus flowers with a lily pad in each quarter."

bracts of the sedges have to a great extent lost their close connection with the central part of the inflorescence; if we lacked older and clearer examples of volute rosettes we might be misled into considering the bracts as elements primarily flanking the pointed lobes. Since all elements of the Sit-Hathor-Yunet rosettes join at the base it is possible to claim that the narrow strips belong, not to the sedge inflorescences but to the spatulate lobes and are derived from the analogous concave elements of the Sahure chest rosettes. In fact, it is possible that Sit-Hathor-Yunet's goldsmith may have felt that the volutes belonged to the lobes, for the transference of the bracts of the sedge to the spatulate units was one of the most important steps in the evolution of the volute rosettes, and took place during the Middle Kingdom. On the other hand, it should not be forgotten that the lateral bracts are an integral part of the sedge in representative contexts, and are consistently part of it in the earlier and more complete stylizations of the inflorescence. The spatulate elements, when they first appear on Hetepheres I's bedstead, are without concave bordering elements. The Hetepheres I, Re'wer, and Sahure series of volute rosettes appear to illustrate the origin of the concave volutes, which must have developed by a kind of metathesis and doubling in which the bracts of the sedge were acquired by the spatulate units, while at the same time being retained by the *alopecuroides* inflorescence. In the Hetepheres I design (Fig. V.12), if attention is fixed primarily on the radii tipped by the notched lobes, these will appear as flanked by the bracts which are really a part of the sedge. It would have been exceedingly simple for a craftsman, working on the basis of the Hetepheres I pattern, to produce an imitation in which, while the sedge inflorescence retained all its parts, the spatulate lobe also received a border of concave elements. In fact, this is just what has happened in the Re'wer fillet; Sahure's volute rosettes show that the sedge inflorescence was a stable element in the Old Kingdom, but that it was the intervening, spatulate element which could undergo elaboration and modification. In view of this development, the question of whether the volute elements of Sit-Hathor-Yunet's rosettes are homologous with the sedge

bracts or one of the pairs of concave volutes of the Sahure patterns remains fairly academic, since the latter volutes were also originally *alopecuroides* bracts.



In the Middle Kingdom volute rosettes were used to decorate a number of objects, and all examples demonstrate a varying amount of simplification. The upright ends of two model boats from a Middle Kingdom grave near the mortuary temple of Neuserre end in flat circular tops on which are painted sedges which resemble the flowers of the Re'wer and Sahure chest rosettes more than those of Sit-Hathor-Yunet (Fig. V.23). The retention of the volutes despite the complete omission of the lobes shows that the full form of the motive was still current and that in some cases at least the sedge bracts were apparently still considered as part of this design, and not as borders of the lobes. The middle of the blades of rudders was often occupied by two volute rosettes. A very clear example occurs on a rudder from one of the wooden ships found near the North Brick Pyramid, which belonged to Sesostris III (Fig. V.24). Both it, and the designs on boat models belonging to a Mentuhotep (Fig. V.25),¹² are extremely close to the form found on Sit-Hathor-Yunet's diadem, varying chiefly in the substitution of red or deep blue dots for the center bract of the sedge inflorescence. The rosette painted on the inside of the sounding board of a harp

¹² Another volute rosette occurs on the rudder of a boat from the grave of Ma'a at Beni Hasan, but its exact details cannot be made out from the small photograph published (Garstang, *Burial Customs of the Ancient Egyptians* (London, 1907), p. 102, Fig. 91 top[T. 500]).

in Berlin is identical, except that even the dots, the disintegrated remnants of the tip of the central bract, have disappeared leaving a deeply grooved central shaft (Fig. V.26). In Figs. V.24-26 the original lateral bracts of the sedge have been appearing more and more as concave borders for the lobes.

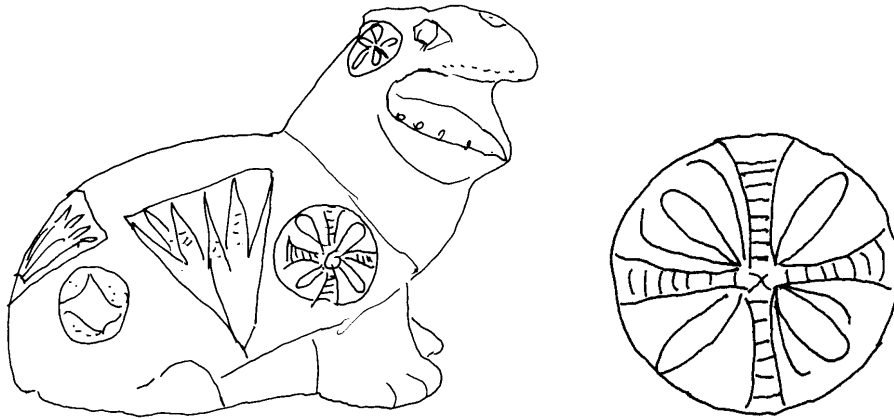
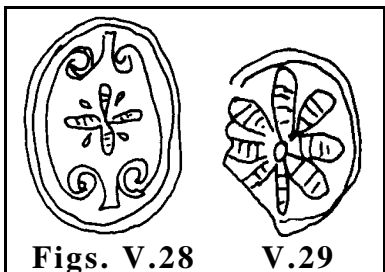


Fig. V.27

A volute rosette carelessly painted on a faience hippopotamus formerly in the MacGregor Collection gives evidence that its maker associated the volutes with the lobed element (Fig. V.27). The four sedges have degenerated into a cross, covered by horizontal lines and with splayed ends. Between are placed four lobes, but only one pair of volutes is shown; that is, only one of the eight units of this rosette is given in complete form (taking as the standard Re'wer's pattern in which there are both curved bracts and concave borders for the spatulate elements.) (Fig. V.9). Since the volute elements are arranged symmetrically around a lobe instead of around one of the segments of the cross, it is clear that the maker considered the concave volute filled by a lobe as a single unit. More conclusive evidence for the dissociation of the sedge bracts from the rest of the inflorescence is offered by the fillet worn by the wife of Ibu (Fig. II.117). Aside from the papyrus and *Nymphaea* blooms, it also bears a unit consisting of an oval lobe completely bordered by a band of lighter color, the whole being surrounded by dark colored volutes. This example also demonstrates the use of the new volute element as a design completely independent of its ancestral volute rosette. However, the emergence of the single volute as

an important independent ornamental feature, did not, according to present evidence, occur until the New Kingdom, and its Middle Kingdom use at Qau remains an isolated occurrence.¹³ Figs. II.117 and V.27 prove that the completion of the process by which the curving bracts were dissociated from the conventionalized sedge blooms (Figs. V.10, 13, 15) occurred in the Middle Kingdom. The resulting forms were used in the Twelfth Dynasty, often by less skilled workmen who needed to produce only schematic patterns (Figs. V.26, 27), at the same time that the traditional, undeteriorated motives albeit in somewhat simplified form, were employed by careful craftsmen (Figs. V.22, 23).

The simplified volute rosette, in its turn, had several derivatives. On scarabs the volutes could be omitted, producing what may be termed an interrupted rosette formed by



Figs. V.28

V.29

four rounded lobes alternating with four squarish ones (Figs. V.28, 29);¹⁴ after the Twelfth Dynasty similar forms recur in the New Kingdom. Just as in some of the Old Kingdom patterns (Figs. V.18, 19, 20, 14), it was possible for the cross of sedge blooms to be replaced by

Nymphaeas. Such motives fill the squares in fragments of ceiling decoration from W3h-k

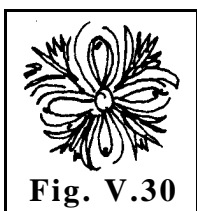


Fig. V.30

II's tomb at Qau (Fig. V.30).¹⁵ Although W3h-k II's ceiling provides the only known Middle Kingdom example of the architectural use of a "volute rosette," the existence of a similar New Kingdom usage suggests that such applications of the motive may have been more common than our present

evidence indicates.

¹³ In this connection the bezel of a gold ring found in the gallery of the princesses in the North Brick Pyramid of Sesostris III should be mentioned; J. de Morgan, *Fouilles à Dahchour* (Vienna, 1895), p. 68, no. 34; Fig. 145). On it appear two isolated and spiralforn volutes, without any traces connecting them with the volute rosette motive. Nevertheless, they may possibly represent extremely geometricized derivatives of that design.

¹⁴ The Hyksos scarab, Fig. V.51, is an elaborated interrupted rosette.

¹⁵ Steckeweh, *Fürstengräber von Qaw* (Leipzig, 1926), Pl. XII, c; cf. p. 8 where he assigns W}h-k II to Amenemhet III. Evers has dated this prince to Amenemhet II (*Staat aus dem Stein* Munich, 1929, I, 29).

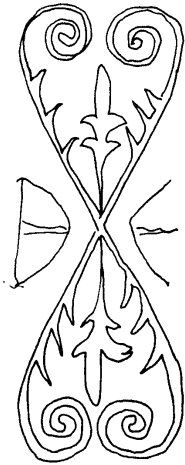


Fig. V.31

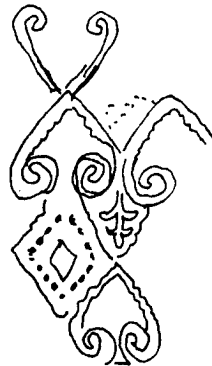


Fig. V.32

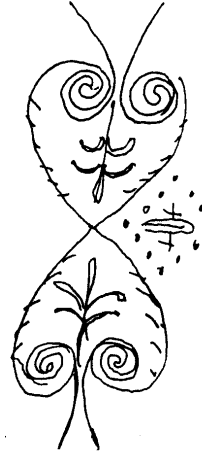


Fig. V.33

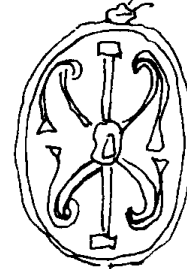


Fig. V.34

The derivate of the simplified volute rosette that was to become most widespread is the figure-8 motive used in the Twelfth Dynasty as a wall decoration, T. B, 4 at Meir (Fig. V.31), and as ceiling patterns in tombs at Assiut (Fig. V.32) and Qau (Fig. V.33). In these only two pairs of volutes remain; their ends have become spiralized, undoubtedly by analogy with the spiraliform ornament that was becoming popular at this time,¹⁶ and the space they enclose is filled by branched lobes, possibly related with designs such as that which adorns the front of the circlet of Hetep-ni-Ptah's wife (Fig. II.76).¹⁷ Some Middle Kingdom scarabs may also bear variants of the figure-8 patterns (Fig. V.34).

THE NEW KINGDOM AND THE EMERGENCE OF THE EGYPTIAN VOLUTE

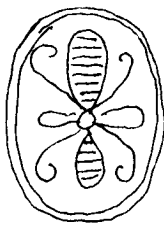
The gap between the simplified volute rosettes and the major transformation which the figure-8s represent is bridged only by the scarabs, chiefly New Kingdom in date,¹⁸ that

¹⁶ The spiraliform format secondarily imposed upon the volutes cannot be used as an argument for their non-Egyptian origin. In *Mélanges Dussaud* (Paris, 1939) II, Mallowan refers to the Meir and Qau designs as being almost identical with certain "Subartu" painting and as obviously derived from a common unEgyptian source. Matz concludes that this design, whose basis he considers to be crossed s-spirals, must have been "stimulated by Aegean work." He also feels that the leaf motive and the quatrefoils are Aegean (Matz, *Frühkretische Siegel* (Berlin and Leipzig, 1928) pp. 177-8).

¹⁷ Cf. n. 10 above.

¹⁸ Although it is true that these scarabs are later than the earlier figure-8s, this does not detract from their value as examples showing how the simplified volute rosette could be still further broken down.

provide a series of designs linking the figure-8 derivates with their parent motives. Some scarabs retain all four spatulate lobes of the volute rosette, but only two pairs of volute elements; the cross of sedges has disappeared (Figs. V.35-39).¹⁹ In others only the four volutes of the original pattern are retained, or two volutes may be combined with pairs of outcurving lines (Figs. V.40, 41) or with cross patterns which have lost all connection with the original cross of sedge inflorescence (Figs. V.42, 43). Each segment of the cross may be tipped with a papyrus umbel. One of those accidents of preservation, indicating how much has been lost, has given us a copper horse bit used at Akhenaten (Fig. V.44).



Figs. V.35



V.36



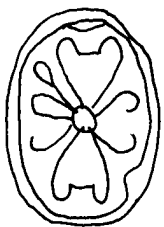
V.37



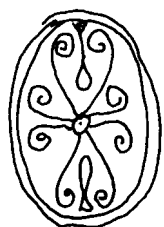
V.38



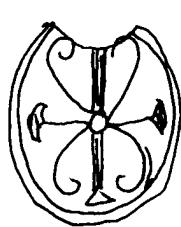
V.39



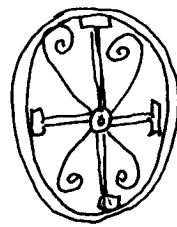
Figs V.40



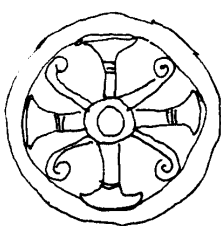
V.41



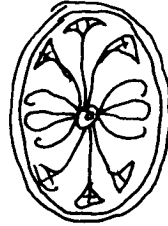
V.42



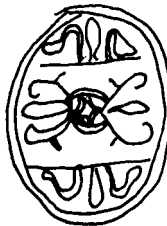
V.43



Figs. V.44



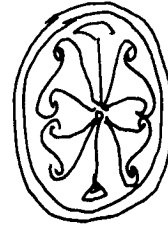
V.45



V.46



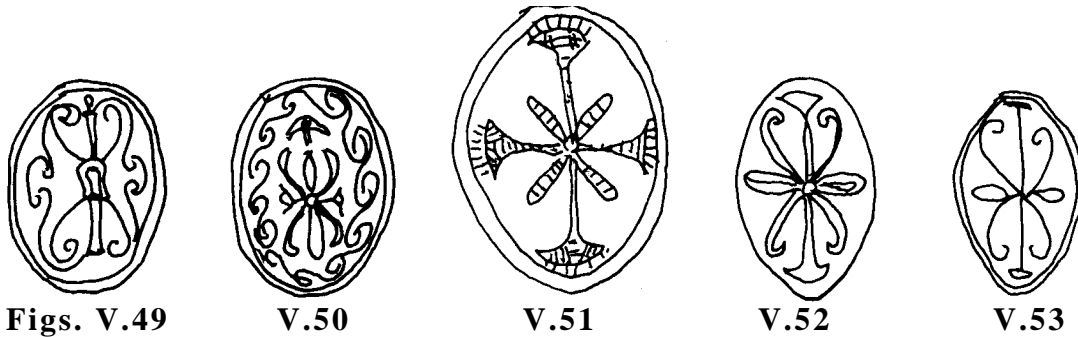
V.47



V.48

¹⁹ Figs. V.52 and 53 are hybrids between the form first cited and Fig. V.51. Newberry, *Scarab-shaped Seals* (Cat. Caire), Pl. XIII, 36839 (Dyn. XIX?).

It ends in circular plaques decorated with an openwork design of exactly the same pattern as on the scarab of Fig. V.42. Aside from these examples there are a number of other combinations involving the figure-8 motive (Figs. V.45-50).



This *Cyperus alopecuroisdes* *Rottb.* derivative was also used in other contexts. In the tomb of Menkheperra's sonb it decorates the kilt of a Cretan envoy, demonstrating the ease with which an Egyptian artist endowed representations of foreigners with attributes indigenous to the Nile (Fig. V.54).²⁰ The figure-8 recurs as a ceiling pattern in the



Fig. V.54

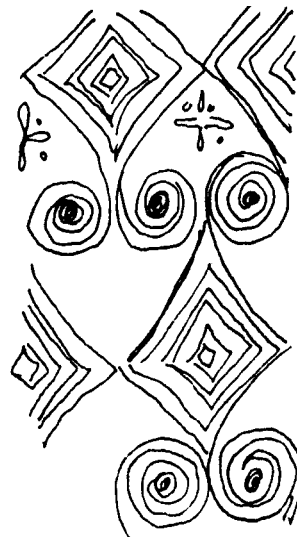


Fig. V.55

²⁰ Although Evans recognized the Egyptian character of this design (PM II, 744), it has been cited as a foreign pattern notably by Wainwright, who has adduced some far-fetched comparisons in an attempt to prove it as an indigenous Anatolian feature (Wainwright in JHS LI [1931]); Cf. Chs. X, XI. The addition of drops to the volute design can be paralleled on scarabs (Newberry, *op. cit.*, Pl. XIII, 36435 [Mitraheny; middle Dynasty XVIII]).

Nineteenth Dynasty tomb of an Amenmosi (Fig. V.55), and elaborate examples, presumably belonging to that dynasty or later, have been published without provenience by Prisse (Figs. V.56-58).²¹

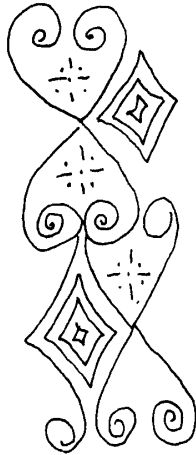


Fig. V.56

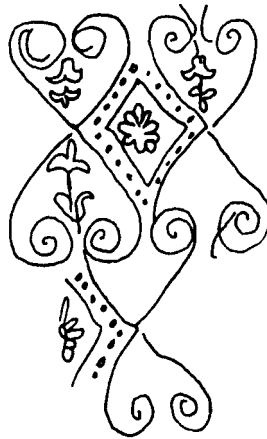


Fig. V.57

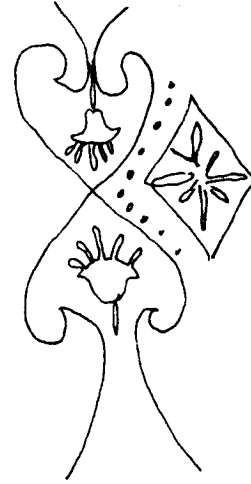


Fig. V.58

In the New Kingdom simplified volute rosettes derived directly from patterns such as those on Middle Kingdom rudders and the Berlin Harp became the normal decoration of a number of objects. In these designs the circular center is always emphasized and the elements that were formerly sedge inflorescences have degenerated into a shape resembling that of the mankhet pendant. The fringes often applied to the ends of the volute rosette funnels suggest that there may have been actual assimilation with the mankhets, which are shown with pendant beadwork.²² Between the arms of the cross are the elongated lobes that had become customary in the Middle Kingdom, and these are surrounded in carefully drawn examples by volutes; in careless work these might be omitted or fused with the edges of the funnels.

The commonest source of the New Kingdom simplified rosettes is the counterpoise of the menats, the bead necklaces sacred to Hathor, which were often labelled as coming from a specific temple and ceremonially presented to the Egyptian noble, so that he may

²¹ *Art Egy.* I, Pls. XXXI, 6, XXXIV, 1.

²² Jequier, *Frises d'Objets des sarcophages du moyen empire* (Cairo, 1920), p. 65, Figs. 171, 173-5.

receive by touching it the benefit of its sanctity; in offering scenes Egyptian ladies usually

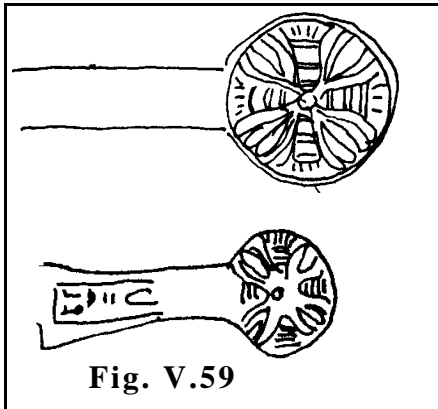


Fig. V.59

carry a menat. Sometimes it is shown as one of the products in workshop scenes. Although the counterpoise of the menat may often be left plain or appear on occasion covered by a daisy rosette,²³ its typical enlivenment is a volute rosette (Figs. V.59).²⁴

Part of a glazed faience menat painted with such a design comes from a votive deposit in Mentuhotep's temple at Deir el Bahri in which the majority of the offerings range between Amenhotep I and II, while Hatshepsut's is the commonest royal name. In the menat worn by a goddess carved in the Seti I temple at Abydos the funnel elements have become greatly enlarged, almost forming quadrants, and they completely surround the lobes.²⁵

In the early Eighteenth Dynasty the sounding boxes of harps were often ornamented by sections of volute rosettes. In the first example known, from the tomb of Anena, the

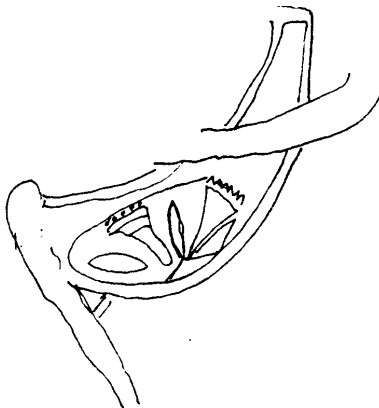


Fig. V.60

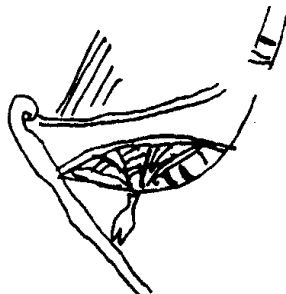


Fig. V.61



Fig. V.62

²³ Bruyère, "Deir el Medineh 1927," *FIFAO* V (1928), Pl. II (eight-rayed rosette on menat worn by Hathor cow).

²⁴ Other examples of menats: *Atlas* I, Pl. X; *Puyemire* I, Pl. XXXVIII; *Two Officials*, Pl. II, bottom, XIV; *Two Sculptors*, Pls. V, VIII; *Nakht*, Pl. XII; Or. Inst. Field Neg. 6105; *Two Ramesside Tombs*, Pl. XXIV.

²⁵ A. M. Calverly, *The Tomb of King Sethos I at Abydos* (London and Chicago, 1933-38), XL.

artist used two funnel elements and two lobes, discarding the volutes if Rosellini's drawing may be trusted (Fig. V.60). Of the two decorated harps from the tomb of Amenemhet, son of Dhutmosi, one is decorated by a funnel and two lobes surrounded by leafy volutes (Fig. V.61); the other consists of a lobe flanked by two pairs of volutes, which are also enlivened by the addition of drop-shaped "leaflets" (Figs. V.62). The exact details of the harp of Haremhab are not clear (Fig. V.63), but the design on Nakht's instrument consists of two arms of the volute rosette cross flanking a volute complete with lobe (Fig. V.64). In a harp from Wah's tomb two volute units appear (Fig. V.65).²⁶

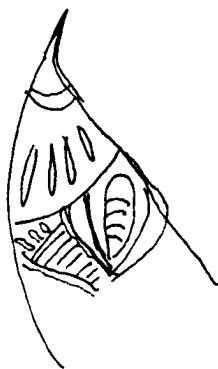


Fig. V.63

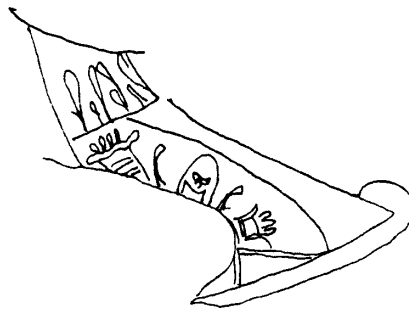


Fig. V.64

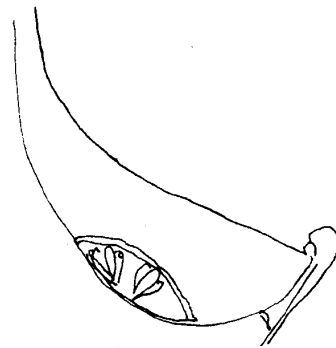


Fig. V.65

The design was used on a variety of other objects. The base of a tusk from a Seventeenth Dynasty grave is atypical, consisting of eight lobeless volutes alternating with lanceolate leaves (Fig. V.66). An Eighteenth Dynasty grave at Medum contained an ointment jar, the lid of which was decorated by a well-worked rosette, with all its parts

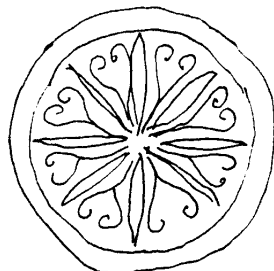


Fig. V.66

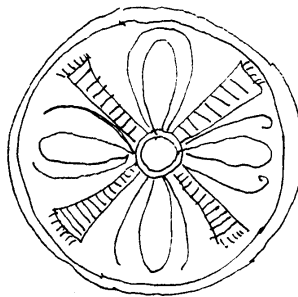


Fig. V.67

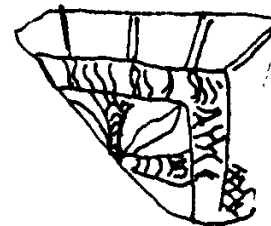
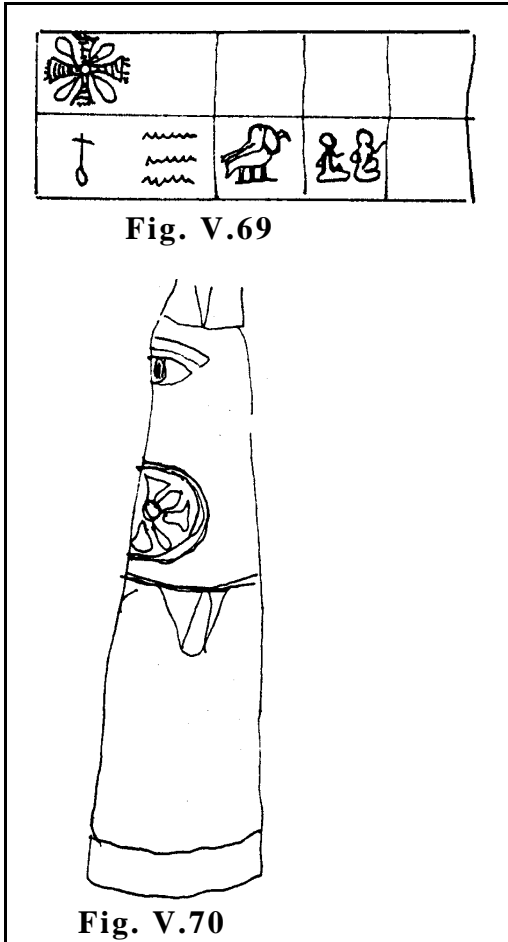


Fig. V.68

²⁶ Cf. also *Atlas* I, Pl. X for design on harp of Rekhmire, which is not clear in the photograph.

complete (Fig. V.67). The fragment of the center of a faience bowl shows that instead of the single rosette generally enclosed in the square central panel, a volute rosette might appear (Fig. V.68). One of the squares on a gaming board in Berlin is decorated (or



marked) by a rosette in which the volutes themselves are apparently missing (Fig. V.69). The general pattern of the rudders of ships remained the same in the New Kingdom as in the Middle Kingdom, although there were minor changes in the individual motives. On a model from the tomb of Amenhotep II, the volute rosettes have degenerated into a wheel of four papyrus heads separated by four lobes, with the volutes themselves completely omitted (Fig. V.70).²⁷

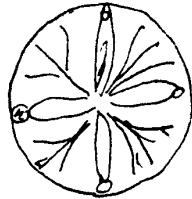
As an architectural decoration the volute rosette occurs only in the form with *Nymphaeas* substituted for the cross, in continuation of the precedent set in the Middle Kingdom. On the

ceiling of Amenemhet, son of Dhutmosi, rows of white circles are reserved in the blue-green background, and in these are the rosettes, corresponding exactly to the Qau pattern, though much less carefully executed (Fig. V.71).²⁸ Practically identical with this is one of the designs in the tomb of Nebamun and Ipuki (Fig. V.72).²⁹ Two patterns published by

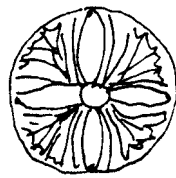
²⁷ In Huy's tomb the rudders of the viceroy's dahabeeyah bear a simple cross and those of freight boats, composite rosettes (Huy, Pls. XII, XXXI [Qurnet Murai' 40; Tutankhamun])

²⁸ Davies notes that this same pattern is also found in Tombs 83, 85 and 119 (*Amenemhet*, p. 12).

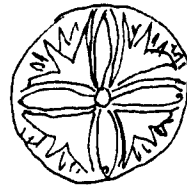
²⁹ Davies explained the rosette as a segment of a hypotactic floral frieze (Cf. Fig. VI.88). The lobes he takes as grapes and the volutes as tendrils of the vine (*Two Sculptors*, p. 21).



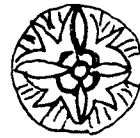
Figs. V.71



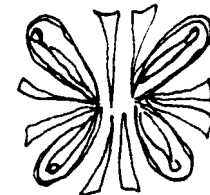
V.72



V.73



V.74



V.75

Prisse, although inaccurate representations of the originals, clearly fall into this same category (Figs. V.73, 74).³⁰ A design possibly related to the preceding forms occurs in the tomb of Hepusonb (Fig. V.75).³¹ Here, red-tipped lobes are enclosed within a larger whiter lobe. Instead of *Nymphaea* flowers, the lobes alternate with double broad-ended projections. Despite the unique features, this design appears to possess some affinity with the volute rosette series. To the same group belongs a pattern on a scarab from Grave III in

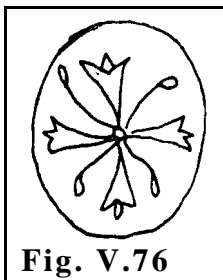


Fig. V.76

Cemetery 110 in Nubia (Fig. V.76).³² It bears a simple version, consisting of a figure-8 volute and four blooms, either *Nymphaeas* or possibly South-flowers.

The process which severed the curved bracts from the sedge inflorescences of which they were originally part, and joined them with the intervening spatulate elements began in the Middle Kingdom and was completed in the New Kingdom by the appearance as independent motives of the volutes thus formed. The emergence of the figure-8s in the Middle Kingdom had already meant a tremendous increase of emphasis on the two pairs of joined volutes, and often the almost complete suppression of the other elements of the volute rosette. In the New Kingdom the process of disintegration has progressed further, to the point where the two pairs of volutes have been separated, producing a single unit, the Egyptian volute. Although this development had been heralded in the Middle Kingdom on the fillet of the wife of Ibu, it was not until

³⁰ *Art Egy.* I, Pl. XXXII, 4, 6 (no provenience). No 4 (Fig. V.73) might be an inaccurate copy of either the design of Amenemhet, son of Dhutmosi or Nebamun and Ipuky.

³¹ G. Jéquier, *Decoration égyptienne* (Paris, 1911), Pl. XXVI, 40 (Qurna 67; Hapshepsut). These reproductions, like those of Prisse, are not accurate copies of the originals, but are always standardized, and often may differ considerably in color and form from the designs of which they are copies.

the empire that it became popular, not only as a design in itself, but as an important constructional element used in the creation of a number of new patterns.

The uncombined Egyptian volute, without lobe, appears most commonly arranged in registers (the units of which are often of different colors and interspersed with dots) on the textiles covering the cabins of boats or wrapped around the cargoes (Fig. V.77).³³

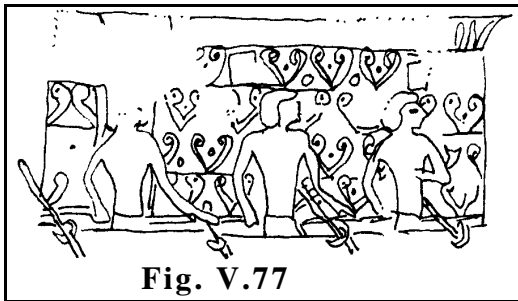


Fig. V.77

Single volutes either surrounding a normal lobe or some more unusual element, occur on a variety of miscellaneous objects. Of two lyres in the palace at Amarna, one is represented with the lower part carved in volute form (Fig. V.78),

and the second, similarly shaped, shows also a rounded lobe filling the volute (Fig. V.79).



Fig. V.78



Fig. V.79

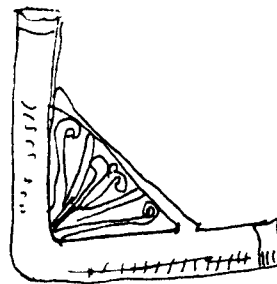


Fig. V.80

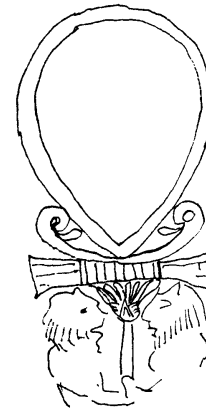


Fig. V.81

Part of a drinking straw from Amarna consists of a right-angled tube; a smaller piece of metal for the hypotenuse connects the two sides. In this triangle is an openwork design: a volute contains two straight “leaves” that in turn flank a trilobate element (Fig. V.80). An

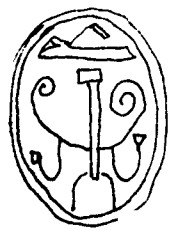
³² This grave contains another scarab bearing the name of Tuthmosis I (Firth, *op. cit.*, pp. x, 75).

³³ Examples include 1) *Amenemhet*, Pl. XII (82). 2) *Anc. Egy. Paint.* I, Pl. XXVIII = JEA III (1916), Pl. XIV (Kha'emwese, Dira Abu'n Naga 261; probably Tuthmosis III). 3) Wilkinson, *Manners and Customs.* (London, 1868), III, Pl. LXVI opp. p. 444 = Bouriant, *op. cit.*, Pl. V above = Or. Inst. Field Neg. 6100-78. 4) Or. Inst. Field Neg 6153 (Photo 41481) (Dhutnufer, Qurna 80; Amenhotep II). 5) Steindorff-Wolff, *Thebanische Gräberwelt* (Glücksstadt, 1936), Pl. VII + *Atlas* I, Pl. CCXXXII (Menena, Qurna 69; Tuthmosis IV ?). 6) Nina de G. Davies, *op. cit.*, II, Pl. LVI (Pere, Qurna 139; Tuthmosis IV ?). 7) AAA XIV (1927), Pl. XXVIII (Paheqmen, also called Benya; Qurna 343; early Dyn. XVIII). 8) Dira Abu'n Naga 24 = *Nebamun* (T. III) 9) Dira Abu'n Naga 161 = *Nakht* (A III?).

ointment spoon is connected with its bowl by the intermediary of a volute pair; in this case it is possible to regard the bowl as taking the place of the original lobe (Fig V.81). Single volutes sometimes appear on scarabs; in one case a cartouche with the name of Amenhotep II substitutes for the ordinary lobe (Fig. V.82); in others the volute appears to be combined with various symbols typical of the scarabs (Figs. V.83, 84). On an example from Nubia the volutes topping a sistrum have been conflated with the volute derived from the sedge inflorescence (Fig. V.85). There even exist examples in which the volute is used in representative contexts. In one case it occurred, with a pomegranate fruit as filling, as a plant growing in a spot frequented by carnivorous beasts, including a female sphinx and a griffin; these are all painted on a piece of stuccoed cardboard which may have been part of a model bowcase according to Borchardt (Fig. V.87). In an openwork, bronze stand in the Chicago Museum of Natural History, the volute is found as a plant with splayed base and enclosing three stems with circular ends (Fig. V.86). On a box lid from Amarna it appears conflated with herbaceous leaves shaped like those of a palm.³⁴



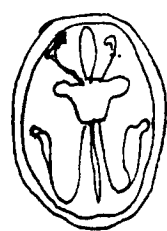
Figs. V.82



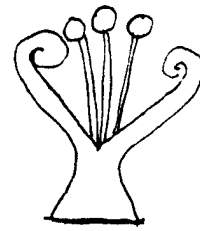
V.83



V.84



V.85



V.86

In addition to the patterns consisting primarily of single Egyptian volutes, there are a variety of designs using this element in different combinations. These do not illustrate any orthogenetic development; each is a unique example exemplifying the imaginative powers of New Kingdom craftsmen. As in the model bow case (?), the volute might

³⁴ JEA XX (1934), Pl. XVIII, 1.

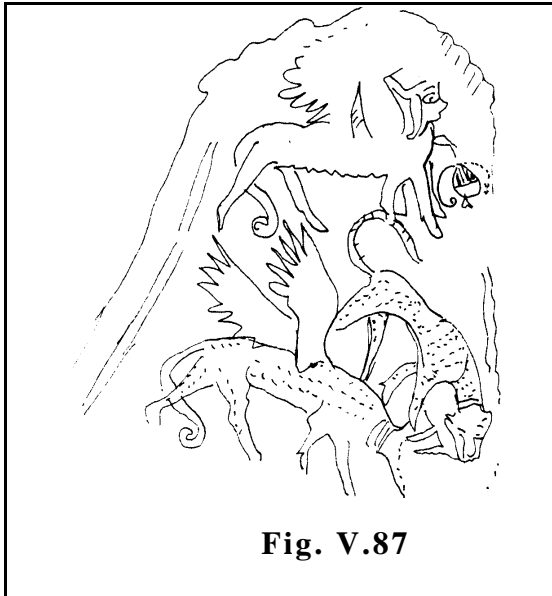


Fig. V.87

penetrate into a semi-representative context. Two of the designs decorating the interior of a faience bowl are ostensibly *Nymphaea* flowers, but they sport strange grafts. Small lines have been added producing the outline of the South-flower perianth, from which fall drops; the two branches of a volute flourish above (Fig. VII.8). In a design on an early Eighteenth Dynasty scarab a volute with lobe has been substituted for the median papyrus

of a clump with bent stalks (Fig. V.88)

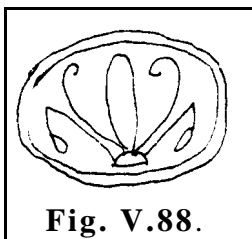


Fig. V.88.

More abstract is the use of the volute on the headdress of a female sphinx, a creature that apparently makes her first appearance in the reign of Amenhotep III; a brown sard plaque, presumably from Biban el Moluk, shows one of these monsters holding the cartouche

of that king between her hands (Fig. V.89). Around her head is wrapped a turban surmounted by a volute enclosing another complete with lobe, a design essentially the same as on one of the harps of Amenemhet, son of Dhutmosi (Fig. V.62). A number of sphinxes are drawn as parts of objects dedicated to the gods. The wigs of some, shown in reliefs of Seti I (?) at Karnak, are surmounted only by *Nymphaea* bud-flower groups (Fig.

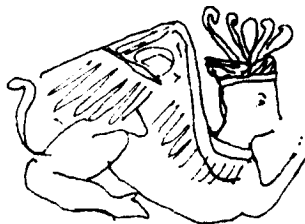


Fig. V.89

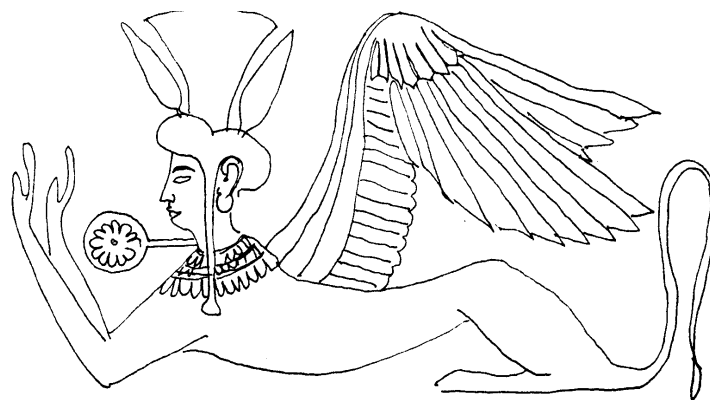
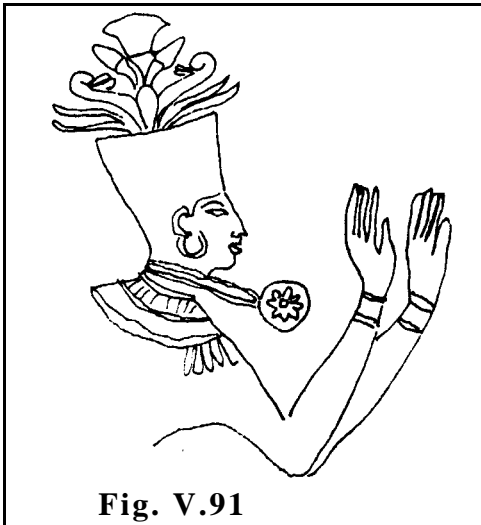


Fig. V.90

V.90), but another wears a cylindrical headdress crowned by an ornate group combining the designs affixed to the other two sphinxes (Fig.V.91). The central volute is flanked



by two pairs of lateral leaves, and from its lobe projects a bud-flower group. It is a characteristic example of the way in which the Egyptian created new designs by simply adding together formerly independent units, without changing them.

Volute motives were also used on military accoutrement. The tips of two quivers among the New Year's gifts of Qenamun show stems with opposite lobes, topped by a volute (Figs. V.92,

XI.46). On a horse blinker from the tomb of Amenhotep II two superimposed volutes support a large lobe from which sprouts a fan of smaller lobes (Fig. XI.48). A round

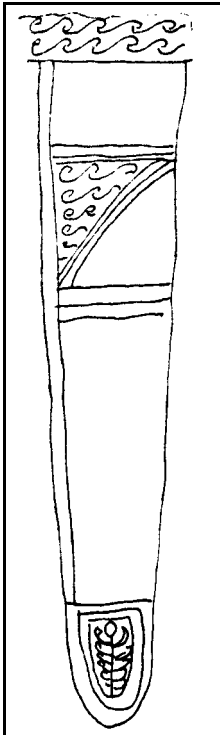


Fig. V.92

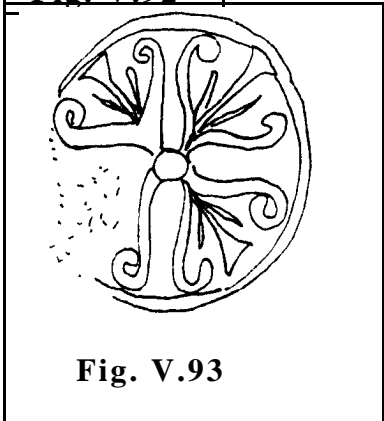


Fig. V.93

leather boss from the tomb of Tuthmosis IV is covered by a design, either derived directly from a volute rosette, or secondarily put together out of four independent volutes, each filled by a central papyrus, which was presumably flanked by two others (Fig. V.93). These examples of the production of compound designs by combining the Egyptian volute with other elements are but a small part of the large corpus of patterns in which the *Cyperus alopecuroides Rottb.* derivative played an important role. In the majority of such designs, which constitute the most striking of all New Kingdom plant ornaments and merit discussion in a separate chapter,³⁵ the volute has as a partner the South-flower perianth. Although it was paired with a motive which never lost its floral character, the Egyptian volute at this stage of its development was

considered a completely abstract ornament by the Egyptian craftsmen. It is only when this seemingly non-vegetal unit is traced back to the figure-8s and volute rosettes of the Middle Kingdom, and thence to the detailed Old Kingdom patterns, that its ultimate origin from the lateral bracts of a *C. alopecuroides Rottb.* inflorescence can be recognized.

The story of this sedge and its transformation is in great contrast to that of *C. papyrus L.* and the *Nymphaeas*, which never lost their identity. While the designs formed from them remained close to pictorial renderings, the *C. alopecuroides Rottb.* inflorescence developed early in the Old Kingdom into a stylized pattern whose natural prototype is barely decipherable. It was this stylized pattern which then became a traditional motive and was handed down to generations of craftsmen who knew it as nothing but a design. Even though some of the Middle Kingdom volute rosettes may still have been endowed with floral significance, they were no longer considered

pictures of the *alopecuroides* sedge, as the designs involving the major swamp plants were thought to be renderings of papyrus or waterlily plants. The reason for this contrast is not obscure. *Alopecuroides* held no such place in Egyptian life as did the major swamp plants; it was not present at every festive or ceremonial occasion, and possessed no dominating tradition of use in pictorial contexts. Thus it was possible for these sedge blooms to develop independently of their realistic prototype, and they rapidly changed into the ornamental patterns of the complex Old Kingdom volute rosette. By the Middle Kingdom this had given rise to secondary motives, the simplified volute rosette and the figure-8 combinations. The final stage of this long development is the Egyptian volute of the New Kingdom, which stands as a simple geometrical disintegration product of the original complicated floral ornament. The New Kingdom artists who used it in a variety of decorative contexts can have had no intimation of the fact that it had originally developed from the same sedge plants that some of their contemporaries had rediscovered and were painting on the walls and pavements of Akhetaten.

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- V.5 *Ibid.*, 34
- V.6 *Ken-Amun* I, Pl. LXI E (lower part of pillar, west side)
- V.7 Petrie, *Tell el Amarna*, Pl. III, 2, 3, Pl. IV, 6
- V.8 Weghe's *Ornament*, Pl. XV.12
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- V.10 Component elements of V.9
- V.11 " " "
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- V.13 Component elements of V.12
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- V.36 *Ibid.*, 4th row, 2nd from left
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- V.51 *Ibid.*, Pl. XXIV, 36
- V.52 Carnovan-Carter, *op. cit.*, Pl. LXXII, top row, second from left
- V.53 *Qau* III, Pl. XXXIV, 65

- V.54 *Men et al*, Pl. V
- V.55 Foucart, *Tombes thebaines* (MIFAO LVII 1935), Pl. XXXV, right
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- V.64 *Nakht*, Pl. XVII
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- V.90 Prisse, *Art Egy.* II Pls. XCVII, 5; CXLVIII, 3, CLIX, 2
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