

Relations between Byblos, Egypt and Mesopotamia at the end of the third millenium B.C. A Study of a Montet Jar.

In: Syria. Tome 43 fascicule 3-4, 1966. pp. 165-241.

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Tufnell O., Ward W. A. Relations between Byblos, Egypt and Mesopotamia at the end of the third millenium B.C. A Study of a Montet Jar. In: Syria. Tome 43 fascicule 3-4, 1966. pp. 165-241.

doi : 10.3406/syria.1966.5872

http://www.persee.fr/web/revues/home/prescript/article/syria_0039-7946_1966_num_43_3_5872

RELATIONS BETWEEN BYBLOS, EGYPT AND MESOPOTAMIA AT THE END OF THE THIRD MILLENNIUM B.C.

A Study of the Montet Jar

BY

O. TUFNELL and W. A. WARD
(Pl. XI-XVI)

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I. — Introduction.

During the first campaigns of excavations at Byblos undertaken for the Antiquities Service by M. Pierre Montet in 1921-2, he came upon a spread of broken offerings lying loose in the sand. They were scattered over a wide area affected by fire above the ruins of a building dedicated to the Lady of Byblos, which was in use during the third millennium B. C. Fragments of stone vases bearing the names in hieroglyphic characters of most of the kings of Old Kingdom Egypt show their respect for this particular shrine, and the last one to honour it was Phiops II.

Montet's chief discovery in the second campaign was a magnificent jar, standing upright in the sand, and covered by a lid. It originally

contained nearly a thousand objects which are the subject of this study for they constitute a closed deposit gathered together at one time.

It is known that the jar was found at least a metre below the paving of the upper building in the area which covered the third millennium shrine. In Montet's report, *Byblos et l'Égypte*, published in 1928, he described it as the *Temple Syrien*, and C.F.A. Schaeffer who studied the site in *Stratigraphie Comparée* called it *Bâtiment II* ⁽¹⁾; both authorities were agreed that it was a Middle Kingdom building erected soon after 2000 B.C. If this were certain, the problem of the date of the jar would be solved, for everything below the paving would be earlier. However, in an article published in 1941, M. Dunand made an excellent case on architectural grounds for his suggestion that the paving stones and column bases, which are all that remained of the structure above the jar were part of a Persian building used between the sixth and fourth centuries B.C. ⁽²⁾.

The position of the jar in relation to the paving above it has therefore no value as a *terminus post*, and the *terminus ante* is also uncertain. Based on his knowledge of subsequent campaigns, Dunand considers that the jar was found above two layers of burning—a partial one at the end of the Old Kingdom, and a more general destruction about 2000 B.C. Though it was buried in Old Kingdom debris, he thinks the deposit was made in Middle Kingdom times, a conclusion with which Schaeffer agrees on parallel evidence from Ras Shamra ⁽³⁾. Concerning the date Montet wrote: « Or, dans le dépôt de fondation, nous n'avons relevé aucun nom royal plus récent que Pepi II; parmi les objets dont la provenance égyptienne est certaine nous n'avons remarqué aucun que nous fussions obligés de dater du Moyen ou du Nouvel Empire ⁽⁴⁾. » But this statement applies to the

⁽¹⁾ P. MONTET, *Byblos et l'Égypte* (Paris, 1928), chap. II; C. F. A. SCHAEFFER, *Stratigraphie comparée et chronologie de l'Asie occidentale* (London, 1948), pp. 53-62.

⁽²⁾ M. DUNAND, *Bull. Mus. Beyr.* 5 (1941), 67, figs. 1-2.

⁽³⁾ M. DUNAND, *Byblos* (Engl. ed.; Beirut, 1964), pp. 22 ff.; C. F. A. SCHAEFFER, *Strati-*

graphie comparée, pp. 63 ff., 70. The dates proposed in these works are between 2400-2300 B.C. for the end of the Old Kingdom, about a century higher than those followed in this article, based on the revised edition of the *Cambridge Ancient History*, Vol. I, chap. vi (1962).

⁽⁴⁾ P. MONTET, *Byblos et l'Égypte*, pp. 129 ff.

spread of debris as a whole and not to the contents of the jar which did not include any object bearing an Egyptian royal name, a fact already noted by Schaeffer in his helpful synthesis, where the state of expert opinion on the date of the jar was summarised up to 1947, which differed among individuals by as much as six hundred years ⁽¹⁾.

However, in the assessment of the material, no one took much note of the seals and scarabs, largely because drawings were not provided in the publication and the photographs were not clear. Schaeffer did not even mention the seals in his work, and few people are prepared to accord them historical significance and they are usually dismissed as poor imitations of Egyptian originals. Moreover, the presence of concentric circles as the chief decorative element has led some people to assume that the collection dates from the Second Intermediate Period ⁽²⁾. It therefore seemed worth-while to assemble the seals together in more usable form, so that comparisons could be made with existing Egyptian material. With this end in view, I obtained permission in 1962 from the Emir Maurice Chehab, Director-General of Antiquities, to draw the seals in the Archaeological Museum of Beyrouth, and he very kindly arranged for photographs to be made by M. Richard Lian. My journey was made possible by a grant from the Maurice Burton Trust for which I am most grateful. As a result of this study, it appeared that a complete review of the contents of the jar would be rewarding. For this second phase I was joined by Dr. William A. Ward of the American University of Beyrouth, and between us over nine hundred objects were classified, drawn or photographed during May and June 1964. The project has thus become a joint one, and the co-operation of an Egyptologist adds greatly to the value of the conclusions.

Our thanks are due first and foremost to the Emir Maurice and Madame Chehab for their willingness to assist at every stage; the antiquities on show and in reserve were made readily available, and the Museum staff gave much help in technical matters. M. Henri Seyrig and M. André Parrot have encouraged us throughout, particularly in their acceptance of this stu-

(1) C. F. A. SCHAEFFER, *Stratigraphie comparée*, p. 58.

(2) H. STOCK, *Studien zur Geschichte und*

Archäologie der 13. bis 17. Dynastie Ägyptens (Glückstadt, 1942), p. 27.

dy for *Syria*. The jar (fig. 1) was drawn by Mr. M. P. A. Hankey and some of the seals were drawn by Mr. Lankester Harding in my absence. Our pencil drawings were all prepared for publication by Mr. William Ball. The photographs on pls. XI-XII, XIV-XVI were taken by Professor Strother Purdy of the American University and Mr. Roger Saidah of the Department of Antiquities. For illustrations of the other major objects found in the jar, the reader is referred to P. Montet's original publication. Mr. R. Nigel Young of the Department of Geology in the American University supplied the significant notes on occurrences of steatite in the Middle East (p. 176). Professor Edith Porada prepared a special section on the cylinder seals, and M. Fouad Matouk generously allowed us to examine his unpublished collection, rich in seals of the First Intermediate Period of Egypt. Miss Helga Seeden was responsible for several final drawings. So much expert help has lightened our task. Last, but not least, a financial grant from the British Academy has made the whole project possible.

* * *

II. — The Jar and its Lid (Pl. XI-XII, Fig. 1.).

The capacious jar, 54.5 cms. in height, is made of red ware containing both light and dark grits, of uneven size. Judging from the undulations on the outer surface, it was built up in coils or sections. The cylindrical body was then rounded out and fashioned by paddle and anvil, leaving a finely-rippled surface on the upper half of the jar, rather more even and regular than the characteristic finish of large 'comb-faced' vessels of the Early Bronze Age. On the lower half of the jar, where it tapers to a flattened base, vertical marks are visible under the horizontal lines (pl. XII). The interior of the collar rim shows striations which could have been caused by turning on a fast or slow wheel. Other pots from Byblos of the same size and surface show—in a broken section—how the neck was made separately and inserted, and no doubt the same method was applied on our jar. Two bands of rope moulding roughly notched with a sharp edge helped to mask the joins and provide an ornament. From one unrepaired

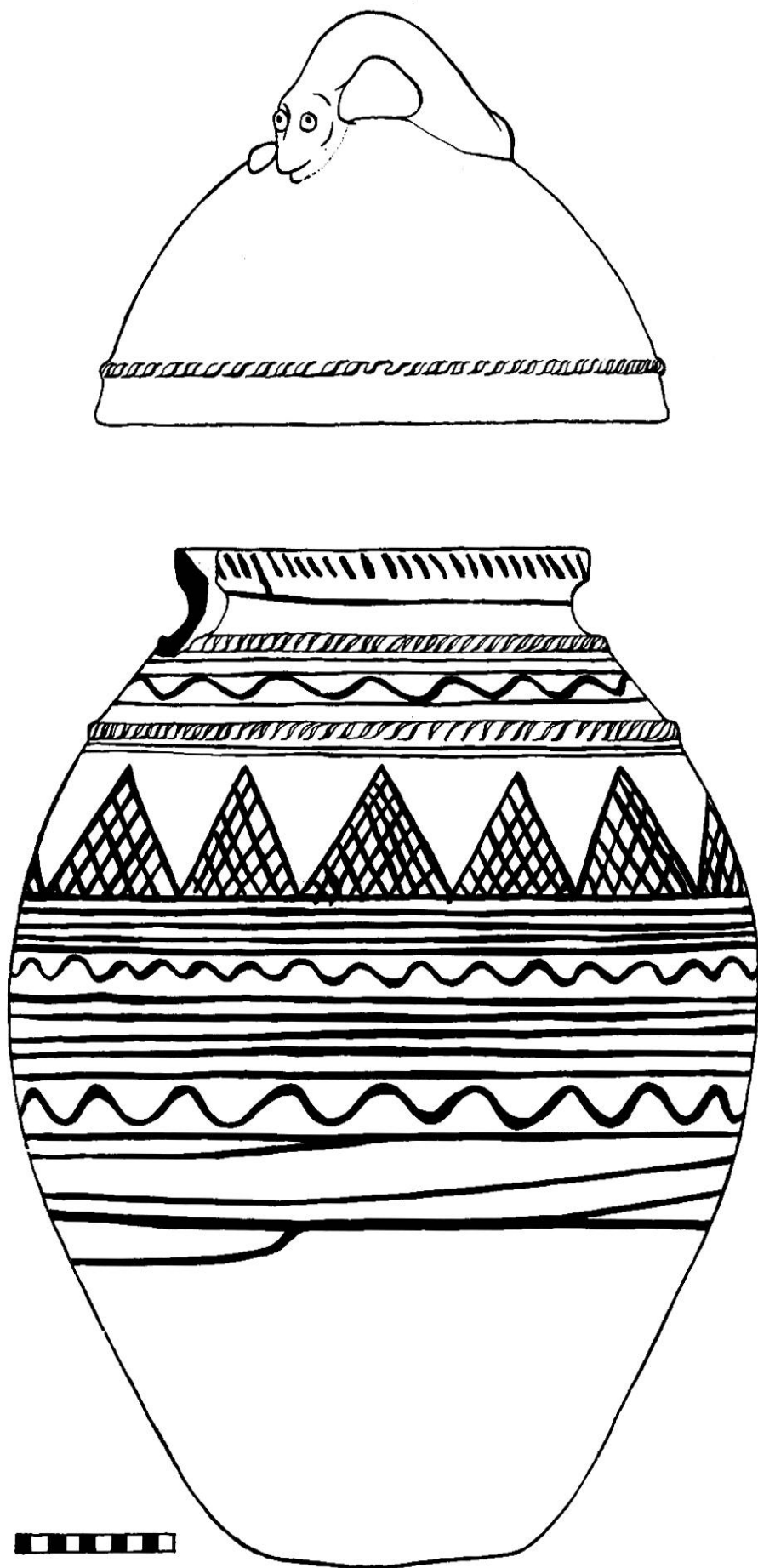


FIG. 1. — Jar and lid, red painted and rope moulded decoration. Cf. Pl. XI.

break in the rim, it appears that the pot was well-fired and had oxidised throughout the core.

The decoration consists of roughly-drawn hatched chevrons in red paint on the shoulder, with a series of painted bands below, interrupted in two places by wavy lines. The paint is no longer visible on one side of the jar, where it is disfigured by a large greyish patch caused either in the kiln or in a subsequent fire. During repair, the upper part of the jar was varnished to preserve the decoration, and the lid seems to have been similarly treated ⁽¹⁾. It matches the jar in material and workmanship and was originally decorated in red paint, though the pattern is now lost. The inner surface of the lid is reinforced by plaster and for the same reason the full section of the jar cannot be shown. The applied loop handle consists of a roll of clay with one end roughly modelled into the head of a snake; though the coils of the reptile are broken away, enough remains to indicate the approximate position of the tail (pl. XII).

During a short visit to Beyrouth, Professor F. R. Matson of Pennsylvania State University examined the jar from a technical viewpoint, and advised on the preparation of these notes.

Comparisons. Shortly after they were written, I was fortunate enough to visit Beit Chehab, about twenty minutes drive from Beyrouth on the Bikfaya road. A community of potters work on the outskirts of the village and make large jars to standard sizes. The clay is local and the methods of manufacture appear to preserve in all details those employed in the construction of the Montet Jar. A coil-built cylinder is formed in sections, and stands to dry until it is beaten out to a rounded form by a wooden paddle, whilst the potter holds a rounded wooden block (anvil) to the corresponding inner surface of the jar. The paddle is marked by irregular scoring in the wood, the impression of which is left on the surface. At a leather-hard stage, the body is lifted from the ground onto the wheel and an assistant brings the potter a tray of wheel-thrown 'bowls' each known as the hat or cap. The potter places one of them, rim down on the

⁽¹⁾ C. F. A. SCHAEFFER, *Stratigraphie comparée*, p. 55, note 4. A sketch of the jar was published in P. MONTET, *Byblos et l'Égypte*,

nos. 374-75, fig. 52, but there are better versions, e.g., *Stratigraphie comparée*, fig. 59P.

open neck and sets the wheel in motion with his foot; in just over two minutes he has transformed the 'bowl' into a collar neck with rolled rim, firmly attached to the body. In most cases, the join between the two can be seen and felt. The combination of hand and wheel technique on one and the same pot is striking, when it is considered that this stage was reached on the Syro-Palestinian littoral around 2000 B.C., and that no further technical development seems to have taken place in this hill village since then. In modern coastal industries, however, such as that of Khalde, south of Beyrouth, jars of similar size are produced entirely on the wheel.

Apart from the potteries of Beit Chebab, sherds from Byblos dating from the end of the third millennium demonstrate without doubt that the Montet Jar was made locally, and there is thus no need to look further afield for comparisons. The best parallel came from the same spread of deposits unearthed by M. Dunand in subsequent years ⁽¹⁾. It differs in having two loop handles attached at the widest point, and the painted designs consist of vertical bands of herring-bone pattern divided by wavy lines, which extend in three zones to the base of the jar. Similar bands decorate the lid of a cylindrical receptacle containing a deposit of the Obelisk Temple (first half of the second millennium or Middle Bronze Age), which were found in a level above the burning marking the close of the previous period ⁽²⁾. If not actually contemporary, the jar of this *dépôt d* must follow closely on our own.

With regard to the hatched chevron decoration, it does not appear to follow an Early Bronze Age tradition at Byblos, where a 'combed' surface was the usual finish. An uneasy compromise was reached between the two on the jar; the undulations were more rounded, and the red paint was dashed over them without special preparation of the surface. The bold design is comparable to bands of hatched chevrons on Khabur ware, in use according to M.E.L. Mallowan from 2000-1700 B.C., whereas Schaeffer would reduce the initial date by a century ⁽³⁾.

⁽¹⁾ M. DUNAND, *Fouilles de Byblos*. 2 vols. (Paris, 1939-58), I, pp. 145 ff., fig. 54, no. 2132, pl. LXV; ht. 60 cms.

⁽²⁾ *Ibid.*, II, p. 815, fig. 928.

⁽³⁾ C. F. A. SCHAEFFER, *Stratigraphie comparée*, pp. 91, 94, fig. 84.11 and 86.2,4 (site A.C.).

Taking the design alone, apart from the fabric of the pot, it seems to have a transitional history at more than one site. Within the Khabur area, there is a single example of this design from the lowest Level VIII at Tepe Gawra, where it only reappears in Level V, without cross-hatching ⁽¹⁾. There is another lonely piece at Yorgan Tepe—Nuzi, where its transitional character is emphasised, the form typical of the Ga Sur (Akkadian period), the paint “inseparably associated with the Hurrians.” ⁽²⁾ It is common in the two top levels of Tepe Giyan, the dates for which are by no means settled, and it is seen also in Stratum IV ⁽³⁾.

Moving west near the coast, Miss Goldman found hatched chevrons as a design in the transitional level between the Early Bronze Age Level III and the Middle Bronze Age Level II ⁽⁴⁾. It turns up at Antioch in Phase J with the first toggle-pins ⁽⁵⁾, and at Alalakh in Level VI ⁽⁶⁾.

A coil-made snake or snakes applied to a lid or jar occurs in similar contexts; at Gawra in Level VI, at Brak in Level III and at Nuzi from Temple F, all attributed to within the last three centuries of the third millennium ⁽⁷⁾. Furthermore, M. Dunand informed me in conversation

⁽¹⁾ E. A. SPEISER, *Excavations at Tepe Gawra I* (Philadelphia, 1935), pl. LXIV. 42 (Stratum VIII); cf. C. F. A. SCHAEFFER, *Stratigraphie comparée*, p. 97, before 2300 B.C.

⁽²⁾ *Ibid.*, p. 573, fig. 310.13, “I dynastie babylonienne” 1894-1595 B.C., but cf. R. F. S. STARR, *Nuzi I* (Cambridge, Mass., 1939), p. 389, who places this jar in the transition period IIB-III, represented by 2 m. of debris = Isin-Larsa Period (2170-1950 B.C.) or Third Dynasty of Ur (2270-2170 B.C.). Cf. below, p. 173, note 1.

⁽³⁾ *Stratigraphie comparée*, pp. 457 ff., fig. 243 nos. 39, 47, 66, and fig. 244, no. 42.

⁽⁴⁾ *Ibid.*, pp. 267 ff., fig. 172, no. 3 (Niveau transitoire II-III), fig. 171, nos. 5, 10 (Niveau II).

⁽⁵⁾ R. J. and L. S. BRAIDWOOD, *Excavations in the Plain of Antioch I* (Chicago, 1960), fig. 343-44 (Painted simple ware, Phase J) and fig. 351, nos. 3-4, p. 453.

⁽⁶⁾ *Stratigraphie comparée*, p. 103, fig. 98, no. 5 (Niveau VI); cf. L. WOOLLEY, *Alalakh* (Oxford, 1955), pp. 340 ff., where the reader is warned that the painted wares survived over a long period at Atchana-Alalakh. The jugs with handle to neck or rim (*Stratigraphie comparée*, fig. 98, nos. 3-4) support the conclusion for they compare with others decorated with hatched triangles and lozenges respectively from Ras el-Ain Tomb 4 (*ibid.*, fig. 149, nos. 3-4) and Mishrifé Tomb I (*ibid.*, fig. 100, no. 1). The latter is well matched in Tomb III at Gezer (*ibid.*, fig. 159, no. 7) dated by Schaeffer to 1900-1750 B.C. (p. 196). See M.V. Seton-Williams in *Iraq* XV (1953) 57-68.

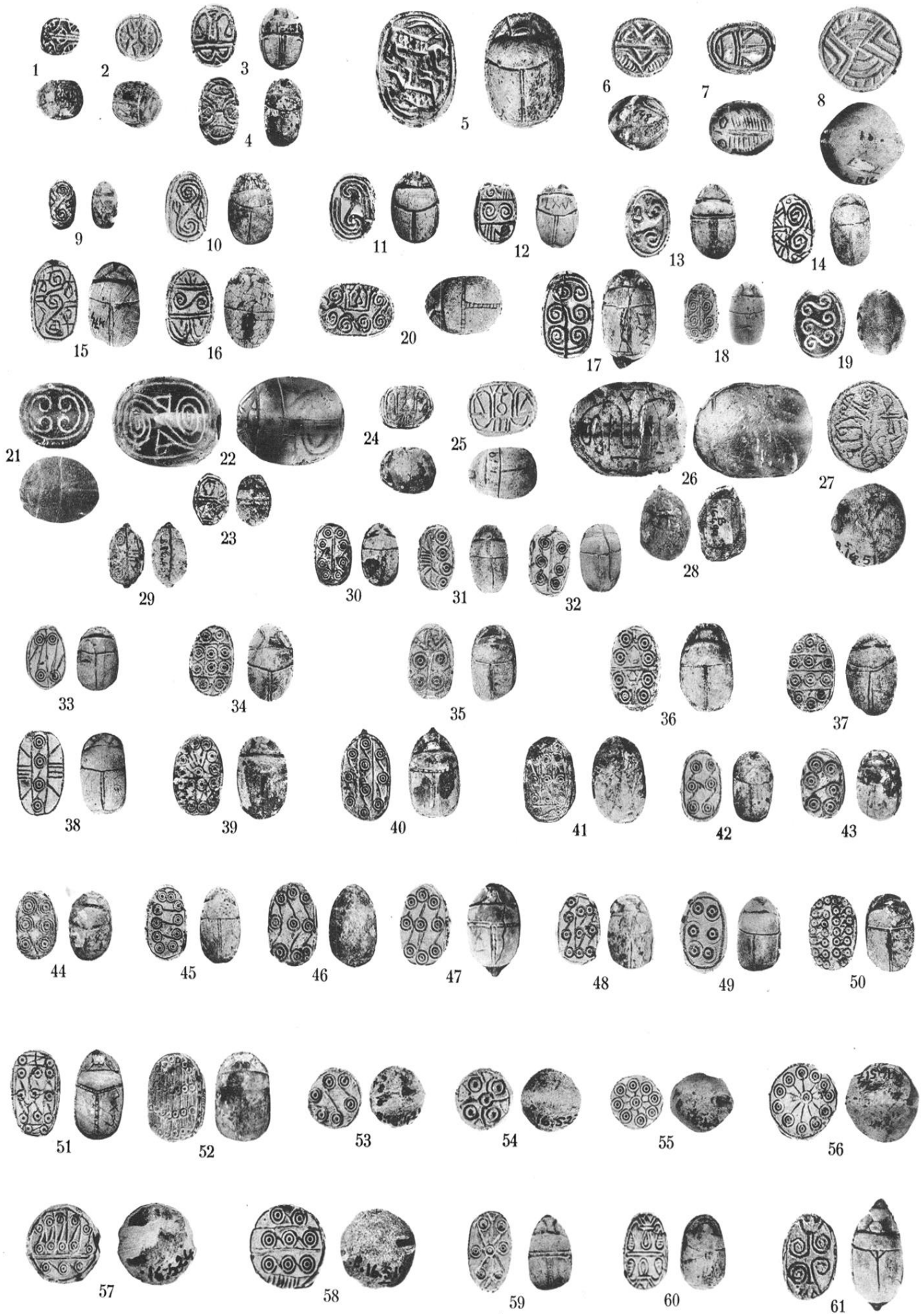
⁽⁷⁾ *Stratigraphie comparée*, p. 95, fig. 91, no. 37 (Gawra VI), p. 94, fig. 89, no. 20 (Brak); R. F. S. STARR, *Nuzi I*, p. 118, pl. 60, nos. E.1, E.2, from Temple F, dated in relation to L4 pavements IIB-IIA approximately 2200-2100 B.C. Cf. above, p. 172, note 2.



BYBLOS. - Jar, red painted and rope - moulded decoration. Cf. Fig. 1.



BYBLOS. - a) Handle on the lid. b) Close-up of « combed » surface.



BYBLOS. - Scarabs and Seals, n° 1-61. Scale 1 : 1.



81



82



83



84

BYBLOS. - Scarabs and Seals, n° 62-80. Cylinder seal impressions, see also Pl. XVII-XVIII below. Scale 1 : 1. Diadem n° 84 cf. Fig. 3.

that snakes were used as decoration on pottery of the Neolithic period at Byblos, though they did not occur at any later date except for the snake handle of the Montet Jar ⁽¹⁾. A summary of its Early and Middle Bronze Age features may help to place the jar in time, assuming that the interlude of the Intermediate Early Bronze-Middle Bronze period, or Caliciform phase occurred before rather than after 2000 B.C., or more strictly c. 1991 B.C. when the Twelfth Dynasty of Egypt came to power. This somewhat arbitrary date dividing the Early from the Middle Bronze Age may have to be adjusted later in our survey.

<i>Early Bronze Age</i>	<i>Intermediate</i>	<i>Middle Bronze Age</i>
Ware, firing and treatment of surface in EB tradition. Rope moulding ⁽²⁾ .	Hand-made body with separate attachment of wheel-thrown neck. ⁽³⁾ Red painted chevrons and bands. ⁽⁴⁾ Coiled snake. ⁽⁵⁾	Flattened base, as distinct from flat EB base or the flat or slightly concave base of the Intermediate phase. ⁽⁶⁾

On the evidence of the jar alone, it seems to stand between two cultures, bridging the apparent gulf between the old order and the new. It is now a question whether the rich contents can help to establish a more precise answer for the date of the deposit as a whole.

*
* *

III. — Seals.

This unique collection has not received the attention it deserves. There is no other closed deposit from Egypt or elsewhere to match it in

⁽¹⁾ It should further be noted that this feature appears in the Tigris-Euphrates region during the Isin-Larsa Period. A large funerary jar with two coil snakes near the rim was found during the twelfth campaign at Mari. Two other examples are known from previous excavations at this site; cf. A. PARROT, *Syria* 39 (1962), 175-77. Note also the small snakes on pottery from the Diyala River region, also dated to the Isin-Larsa Period; P. DELOUGAZ,

Pottery from the Diyala Region (Chicago, 1952), Frontispiece, etc.

⁽²⁾ O. TUFNELL, *Lachish IV. The Bronze Age* (London, 1958), p. 139.

⁽³⁾ K. M. KENYON, *Excavations at Jericho I* (London, 1960), p. 183.

⁽⁴⁾ See above, pp. 171 f.

⁽⁵⁾ See above, pp. 172 f.

⁽⁶⁾ O. TUFNELL, *Bull. Inst. Arch.* 3 (London, 1962), 9.

1			2			3			4 a		
											
1			9			23			29		
2			10			24			30		
3			11			25			31		
4			12						32		
			13						33		
			14						34		
			15						35		
			16						36		
			17						37		
			21						38		
			18						39		
			20						40		
			22						41		
5						26					

Chart showing details of head, back and sid of scarab in relation, to main design Groups 1-6.

4b		4c		5		6		↑mm ↓
								9
								10
								11
42	↓					71		
43	↓	48	↓			72	↓	12
44	↓					73	↓	
45	↓	49	↓	59	↓			13
46	↓			60	↓			
				61	↓			
47	↓	50	↓	62	↓			14
				63	↓	74	↓	
		51	↓	64	↓	75	↓	15
				65	↓			16
		52	↓	66	↓			17
				67	↓			18
				68	↓			19
				69	↓			
								20-23

* denotes scarabs which recur in Group 3.

size, and whatever its date may prove to be, the seals stand apart from those of a specific phase of the MBA in Palestine ⁽¹⁾, and are clearly the forerunners of that prolific period when scarab output was at its height. The seals of the Montet Jar can be judged only on style, but there are enough of them to attempt an analysis of their characteristics, which present a consistent picture. With the help of their counterparts in Egypt, it is hoped to establish a chronology for them within a century or two, and once this is fixed to general satisfaction, it will tie in the more tenuous contacts which exist with other parts of the ancient world.

A. *Materials.*

1. *Stone.* White steatite ⁽²⁾ was used for most of the scarab-backed seals and all but one of the seal-amulets; some if not all were originally covered with a greenish-blue glaze. Dark coloured steatite was used only for the cylinder seals. Judging from the widespread use of steatite, which is a kind of talc or soapstone, the sources for it are not as common as one would expect. There are deposits in Cyprus, where the quality is probably rather poor ⁽³⁾, but it is unlikely that the island provided the stone for the Byblos seals, as nothing like them has been found there. A more possible source is the south eastern desert near Ras Banas on the Red Sea ⁽⁴⁾, and the similarity of designs on our seals to those found at sites on the east bank of the Nile, south of Assiut, supports this view, from which it follows that the Montet Jar collection reached Byblos in a finished state, either singly or as a whole.

Eight scarabs, nos. 21, 65, 68, 77 and 78 are made of carnelian, with

(1) P. E. GUIGUES, *Bull. Mus. Beyr.* 2 (1938), 63 ff.

(2) That is, the material termed "steatite" by common archaeological usage. The proper mineralogical definition may differ.

(3) Notes by Mr. R. NIGEL YOUNG: "*Cyprus*. About ten miles north of Limassol in two places, Yerasa—an old working—and Marousa—now being exploited by the Limassol Brick and Tile Co. Here it is a bronzy yellow/white mineraloid associated with green serpentine."

(4) *Ibid.*, "*Egypt*. In the south of the Eastern Desert, near Ras Banas—Red Sea—between 24-25° N and 33-35° 30' East there are five localities: Wadi Gulan el-Atshan—Derhib—Mekbi—Bir Disi and Wadi Kharit. At the first there are open pits and quarries and the material is associated with dark green massive metamorphic rocks near a grey granite intrusion." These general conclusions on the sources of steatite have been confirmed by Dr. D. Amiran.

Montet nos. 426, 442-3 (not republished); there is one seal-amulet of the same stone (no. 19 = Montet no. 444) and four scarabs of quartz (Montet nos. 440-1, 466 and 473). The two latter, nos. 22 and 26 in this article, are translucent and inscribed, and no. 26 bears traces of blue colouring matter in the engraved lines, suggesting that it was once glazed, a practice which Petrie noted had begun in prehistoric times ⁽¹⁾. It is significant that amethyst does not appear among the materials in the Byblos jar from which seals were made; the bearing of this fact on the date of the jar deposit will be discussed below (p. 224).

2. *Metal*. It is unlikely that any of the smaller scarabs which appear to be made of metal are solid throughout; like the majority they are probably made of stone and covered with foil. Montet nos. 427-8 are of gold, set in the remains of silver rings; Montet nos. 420-3, 429 and 431 are silver, set in bronze rings, like no. 430, republished here as no. 28. A broken stone scarab, Montet no. 447, engraved with four spirals, was covered with gold-foil which had retained the impression of the design ⁽²⁾.

B. *Forms*.

The Montet Jar originally contained about a hundred seals, divided as follows:

1. Scarabs (in National Museum, Beyrouth)	62
— (in Musée du Louvre, Paris)	6
— etc. uninscribed	14
— etc., not seen. ⁽³⁾	8
	90
2. Frog-backed seals	2
3. Domed seal-amulets	10
4. Cylinder seals	3
Total	105

⁽¹⁾ F. PETRIE, *Scarabs and Cylinders* (London, 1917), p. 8.

⁽²⁾ Or else the gold-foil was retouched after being laid over the stone to bring out the design.

⁽³⁾ Not published in the present study as their whereabouts are unknown: P. MONTET,

Byblos et l'Égypte, nos. 424 (Group 4a), 425, 447 (Group 2), 462 (not illustrated), 469 (cf. 474 = no. 15, Group 2). There are also some unnumbered scarabs on pl. LXV; 6th scarab from left in 2nd row (Group 2), 4th scarab from left in 7th row (Group 4a).

All the seals are pierced through the longest axis from both ends, so that they could be strung as centre- or mid-pieces in necklaces, or set in a wire ring. The rings are all of a type known from Dahchour and Lahun, in which the wire is threaded through the seal and the ends are twisted round several times on the opposite side of the hoop. Late in the Twelfth Dynasty of Egypt, the hoop was made separately of solid metal, with the seal threaded on thin wire, which was then twisted round the two open ends of the finger-ring ⁽¹⁾.

In the study which follows the seals have been classified according to size and shape, starting with the smallest scarabs with clear First Intermediate connections in Egypt, and ending with those nearest to Twelfth Dynasty parallels in workmanship and design. The domed seal-amulets are placed according to design at the end of their respective groups 1-7. The cylinder seals are described on pp. 243, ff.

1. *Scarabs*. Apart from F. Petrie and G. Brunton few excavators in the past have taken note of the shape and style of scarab-backed seals, despite the value of these details as relative dating evidence.

a) *Heads*. Usually a plain lunate head is shown with the eyes marked within that outline, or they may project beyond it. An angular outline for the head is to be seen on nos. 20, 47, 51 and 66, all over 14 mms. in length.

b) *Wing-cases*. In all but three scarabs, the division between the *elytra* is marked by one, two or three lines. The exceptions, nos. 1, 24 and 46 are under 14 mms. in length. An unusual detail is a careful notching of the space between the vertical lines, seen on seven scarabs ranging between 11-17 mms. in length. This ladder pattern is rare in Egypt; of five examples published in BDS, one is most probably to be dated before the Twelfth Dynasty and another was made in the Twenty-fifth Dynasty ⁽²⁾.

c) *Legs*. The side or profile of the scarab is treated in half-a-dozen

⁽¹⁾ P. E. NEWBERRY, *Scarabs* (London, 1906), p. 93; G. BRUNTON, *Lahun I. The Treasure* (London, 1914), pl. XI.

⁽²⁾ F. PETRIE, *Buttons and Design Scarabs* (London, 1925), p. 15, pl. XXVII, H.43, p. 23,

pl. XXVII, E.97. For an example dated to the reign of Mentuhotpe II, see W. C. HAYES, *The Scepter of Egypt I* (New York, 1953), p. 230. In this example the ladder is between the *elytra* and *thorax*.

different ways. Nos. 3, 13, 69, 74 and 76 are hollow through the width of the piece, leaving a triangular space to show the legs of the beetle in relief, as in life. This attempt at naturalism is characteristic at Qau on scarabs dating from the Ninth to the Eleventh Dynasties, and isolated examples of the legs cut *à jour* continue at least as late as the Nineteenth Dynasty. ⁽¹⁾

The predominant side on scarabs of Design Group 2 and throughout the rest of the collection is simple, as in nos. 12, 16, 17 and 21, and it is further reduced in Groups 3 and 4 to a single scored line, as in nos. 24 and 29. Fully feathered legs make an appearance in Group 4 on scarabs of 14 mms. or over, and are usually associated with the more elaborate heads, continuing on into Groups 5 and 6.

2. *Frog-backed seals*. Two seals show the figure of a frog carved in the round on the back. No. 6 is a clever miniature of the natural form, though no. 7 is crude and clumsy. Small frog amulets were popular between the vth-viii th. dynasties in Egypt, and there is an example from a presargonic grave at Ur ⁽²⁾. They seem to have had a renewed appeal in New Kingdom contexts in Egypt and on the Syro-palestinian littoral. ⁽³⁾

3. *Domed seal-amulets*. Nos. 8, 19, 27, 53-58 and 70 have smooth backs which appear domed or triangular in section. Six out of ten are decorated with concentric circles.

4. *Cylinder seals*. Nos. 81-83 see pp. 243, ff.

C. *Designs and Comparisons* (see also under References on lists describing figs. 2-3).

1. *Linear Patterns*, nos. 1-8. The date of seals in Group 1 would seem to range from the vii th to xv th dynasties, but the discordant note at Harageh listed under no. 1 is cancelled by a better reference to the same design at Mostagedda attributed to the xith. dynasty. The xi th dynasty

⁽¹⁾ G. BRUNTON, *Qau and Badari*. 3 vols. (London, 1927-28), I, p. 56; *Mostagedda* (London, 1937), pl. LX, nos. 63, 67-68.

⁽²⁾ G. BRUNTON, *Qau and Badari* II, p. 11, pl. XCVI, class 34; L. WOOLLEY, *Ur Excavations II. The Royal Cemetery* (London, 1934), p. 585, no. U.12701.

⁽³⁾ F. PETRIE, *Amulets* (London, 1914, p. 12, pl. II, no. 18; F. PETRIE, *Buttons and Design Scarabs*, pls. IX, no. 320, XVI, no. 1214, p. 17; XIV, no. 931, p. 25; A. ROWE, *Catalogue of Egyptian Scarabs, etc., in the Palestine Archaeological Museum* (Cairo, 1936), nos. S. 51, S. 70, A. 45.



FIG. 2. — Scarabs and Seals, nos. 1-61. Seale 1 : 1. Cf. Pl. XIII.

reference for no. 5, based only on style, may be cancelled by the shape of the back already known in the xth dynasty. At this stage it is as well to recall Brunton's warning that the 'dates' must not be taken too literally; they are only intended to indicate the sequence of the various changes. "Thus" he wrote "it must be understood that viii means 'Early First Intermediate' and ix 'Late First Intermediate Period' only".⁽¹⁾

Nos. 1, 4, 6 and 8 bear simple segmented designs, which may be cruder renderings of the curious objects held by the little man of no. 2.⁽²⁾ Besides the published comparisons from Qau, the Matouk collection in Beyrouth provides another example of the design said to come from Mostagedda. It occurs on a conoid seal, a shape generally associated with the Second Intermediate Period, when the design would be quite out of place. The ibexes of no. 5 recall or anticipate a popular motif on the button seals, which were thought to have begun in Egypt as 'homeless strangers' in the vth. or vith. dynasty and had disappeared by the viiith⁽³⁾. The designs on the button seals are stylised, showing two or four ibexes conjoined, and among them two have frog backs like no. 6.⁽⁴⁾

2. *Z-S-and C-scrolls* nos. 9-22 In Group 2 the emphasis seems to lie on Middle Kingdom parallels, but the experts have dated them on style alone in default of other evidence and none were found with characteristic material of that period. Most of the scarabs are short and thick, as in Group 1. The dominant motif is a large Z-scroll, as opposed to an S-scroll which occurs only on nos. 12 and 16, the former with balancing rudimentary red crowns (?), the latter with equally vague plant designs. On no. 10 the scrolls end in flower buds,⁽⁵⁾ and the same decorative finish ends the C-scrolls of no. 13; its back and side compare with those of no. 3. The design of no. 14 and the double Z-scroll joined end to end of no. 15 combine with crude *nfr* signs, and both types of scroll recur in the Second Inter-

⁽¹⁾ G. BRUNTON, *Qau and Badari* I, pp. 56, 58.

⁽²⁾ *Ibid.*, p. 57, "small cross-hatched pointed ovals" (Dyn. ix).

⁽³⁾ F. PETRIE, *Buttons and Design Scarabs*, p. 1.

⁽⁴⁾ *Ibid.*, pl. III, nos. 138-48 (frog back of

143 in P. 1 on pl. I), pl. V, no. 332, Tomb 3748 = *Qau and Badari* I, pl. XXXIII, no. 115 (Dyus. vii-viii).

⁽⁵⁾ A. HAMADA and SH. FARID, *ASAE* 48 (1948), pl. X, no. 17, a good parallel from Kom el Hisn; H. HERZER, *Ägyptische Stempelsiegel* (Munich, 1960), no. 23.

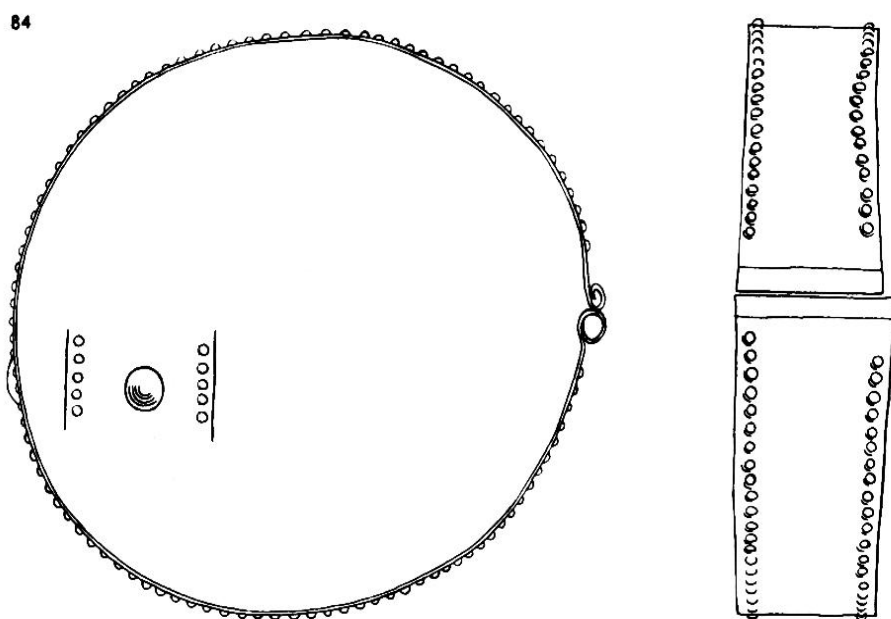
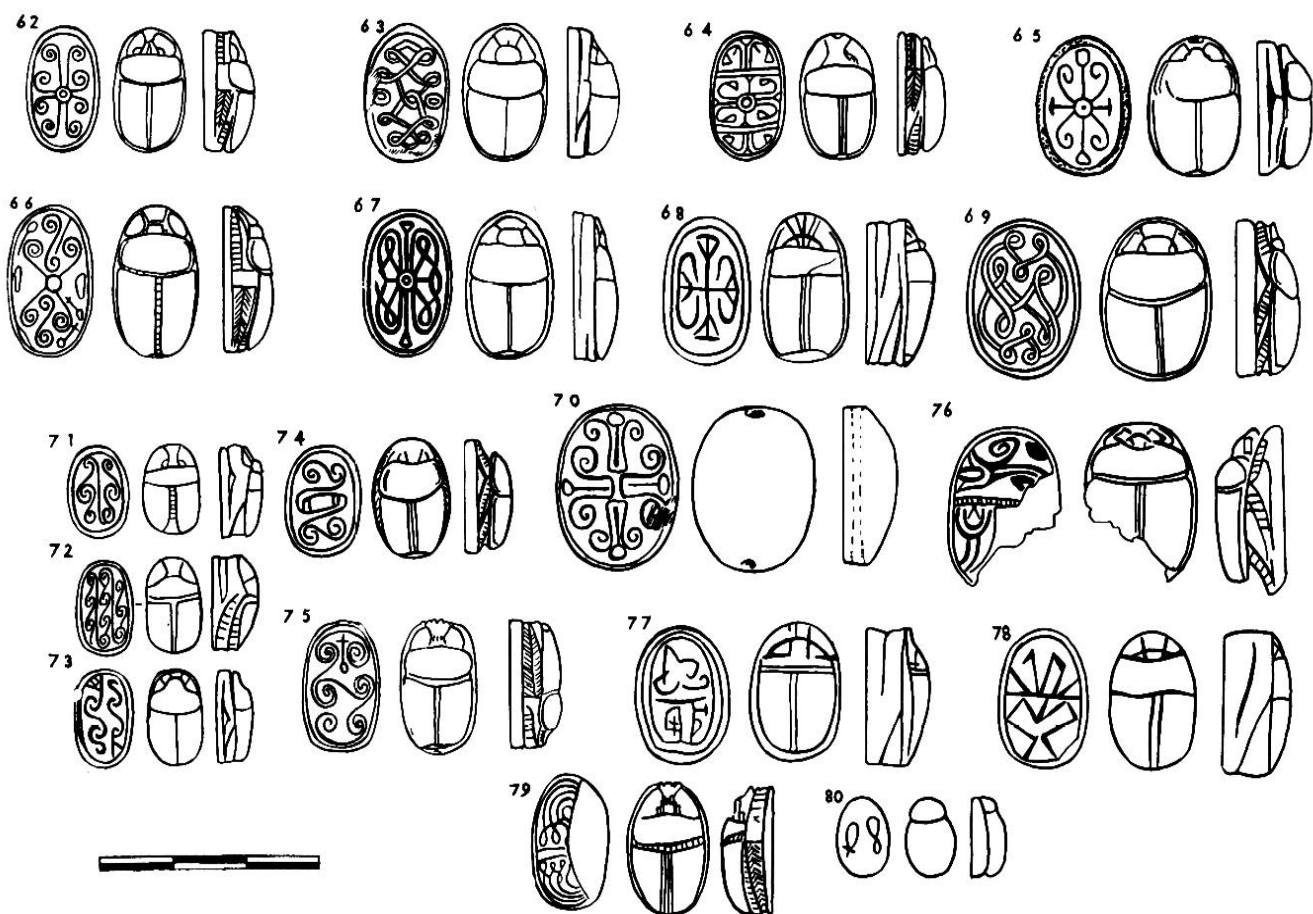


FIG. 3. — Scarabs and Seals, nos. 62-80. Scale 1 : 1. Cf. Pl. XIV. Diadem, no. 84. Scale 1 : 2.

mediate Period between borders of lines derived from the original hieroglyphs. ⁽¹⁾ For no. 20 see Group 3.

3. *Egyptian signs and symbols* nos. 14, 15, 20, 23-7, 66, 75 and 80. Exact Egyptian comparisons for these seals are elusive, but nos. 20, 24 and 25 are the only three scarabs to show an intelligible combination of two hieroglyphs, which can be read *k3 nfr* in each case. In no. 20 the signs are apart from the scrolls around them though in nos. 24-5 the *k3* arms blend with the plant design elaborated from the three-lotus motif of no. 3. These two hieroglyphs combine with others in Egyptian royal names of the Late Old Kingdom and of the Heracleopolitan ixth.-xth. dynasties. ⁽²⁾ Though it would be rash to attribute them to a particular reign within that period, the associations of these signs would tend to be unpopular during Theban rule. The four-lotus design is attested at Mostagedda from the ixth. dynasty, and it is seen at Qau about the same time, with 'n3 taking the central place; with variations it continues through the xith. dynasty and well into Middle Kingdom times. ⁽³⁾ No. 26 is an early version of the same theme. No. 80 is small and crude; it bears only an 'n3 sign alongside a 'figure of 8', which could also be read as *hm*.

The striking fact is that only eleven seals out of a hundred bear Egyptian hieroglyphic signs and these are of the simplest forms; apart from those already discussed, 'nh or *nfr* appear in one or more instances on the same scarab and *nb* is sometimes doubled as a filling below. Petrie noted that the first two signs were often accompanied in Egypt by the use of spirals and this is indeed the case at Byblos with regard to nos. 66 and 75. ⁽⁴⁾

4. *Concentric Circles.*

- a) Double with lines. Nos. 29-41 range in length between 10-16 mm.
- b) Double or treble, linked. Nos. 42-47 range in length from 11-15 mm.
- c) Small, single. Nos. 48-52 range from 12-16 mm.

⁽¹⁾ F. PETRIE, *Buttons and Design Scarabs*, p. 15, pl. VIII, nos. 220-21.

⁽²⁾ W. C. HAYES, in *Cambridge Ancient History*, Rev. ed., Vol. 1, chap. xx (1961).

⁽³⁾ G. BRUNTON, *Mostagedda*, pl. LX, no. 51 (T. 5008, Dyn. ix-xi?); G. BRUNTON, *Qau*

and *Badari* I, pl. XXXIV no. 193, (T. 4925, Dyn. ix); *ibid.*, III, pl. IV, nos. 6-7, p. 3 (Ts. 5001, 3200, M.K.).

⁽⁴⁾ F. PETRIE, *Buttons and Design Scarabs*, p. 12.

d) Domed seal-amulets, double and single with lines. Nos. 53-58, diameters from 11×10 rising to 15×15 mm.

Concentric circles arranged in various ways are the most popular design on seals from the Montet Jar, and they outnumber the running spirals (Group 6), by nearly five to one. The designs on the smaller pieces are not especially well-planned, but the circles on the larger scarabs and the domed seals are often precisely spaced between parallel lines. It is this feature which is reminiscent of Cycladic decorative design on pottery and seals. ⁽¹⁾ These delimiting lines are rare in Egypt and the domed seal is also uncommon. ⁽²⁾ Brunton found three at Qau and was puzzled: "Nos. 15-18 are of interest;" he wrote, "the pattern of concentric circles is common on scarabs just before the xviiith. dynasty (*Qau* III, 73-76); yet the former are certainly of M. K. date. The lines joining the circles in 15-17 seem to indicate a debasement of the linked spiral design such as 14, yet there can be very little difference, if any, in their dates." ⁽³⁾

Important for chronology are two scarabs similar to nos. 45-47 found in a single grave at Hu in Egypt, which also contained a ribbed dagger. ⁽⁴⁾ At the time of discovery, Petrie considered the grave to be of pre-Usertesen date (Sesostris I), an opinion which may still hold good. ⁽⁵⁾ Among European connections there is a striking parallel to no. 56 in the impression of a seal from the House of Tiles at Lerna having almost the same number of circles projecting from the hub, which dates from the end of the Early Cycladic period. ⁽⁶⁾ Adding to the Aegean interest in concentric circles are two scarabs, one in amethyst, the other in white steatite bearing double

⁽¹⁾ E.-M. BOSSERT, in *Jahrbuch Deutschen Archäologischen Instituts* 1960, p. 7, Abb. 8.

⁽²⁾ J. E. QUIBELL, *El Kab* (London, 1898), pl. XX, no. 25 (T. 300, Dyn. xii); A. HAMADA and Sh. FARID, *ASAE* 46 (1947), pl. LX, no. 12.

⁽³⁾ G. BRUNTON, *Qau and Badari* III, p. 3.

⁽⁴⁾ The Hu dagger is less evolved as it has no tang, unlike the group of ribbed daggers

from Palestine, which differs also in that there is in each case a raised central rib; see O. TUENELL, *Bull. Inst. Arch.* 3 (London, 1962), 16.

⁽⁵⁾ F. PETRIE, *Diospolis Parva* (London, 1901), pp. 37, 43, pl. XLI, nos. 5-6 (Grave W 65).

⁽⁶⁾ M. C. HEATH, *Hesperia* 1958, p. 112, pl. XXII, no. S 63.

concentric circles between lines, which were found in a prehistoric necropolis at Phaestos. ⁽¹⁾

It is impossible to explore the origin of the concentric circle as a design in an article, for the subject would need many pages to itself and has already received considerable attention. ⁽²⁾ Suffice it to say that J. Mellaart's excavations in Turkey have thrown the history of the concentric or dotted circle back into the seventh millennium with considerable force, establishing it among the first geometric designs exploited by man. ⁽³⁾ At that time it was a stylization of the human navel, but there is no reason why it should not have come later to represent the human eye, as Evans and Blegen suggested. ⁽⁴⁾ That it was a beneficent emblem is proved by its popularity on our seals, and it holds its place as a 'good' sign in modern gypsy lore. ⁽⁵⁾

5. *Cruciform patterns* nos. 59-70. Eleven scarabs and one seal-amulet show designs giving a cruciform effect, with balancing elements repeated each side of centre. The scarabs range in length between 13 and 20 mm., and there is a tendency to make them long and thin. The pattern of no. 59 is based on concentric circles with the addition of flowers, which figure also on nos. 60-61. The three-lotus pattern is stylised on no. 64, reverting to the design seen on no. 3. Nos. 62, 65-66 are variations on a theme which may connect with a plant design or with a formal bucranium on the seal-amulet no. 70, similar in style to a much later seal from Beycesultan. ⁽⁶⁾ It is easy to see how the looped designs embody a more fantastic approach to the cruciform theme on nos. 63, 67 and 69; the last is matched by domed seals in London at University College and in the Matouk collection at Beyrouth. ⁽⁷⁾

6. *Round running spirals* nos. 71-75. The parallel dividing lines worked

⁽¹⁾ A. EVANS, *Cretan Pictographs* (London, 1895), pp. 105 ff., fig. 77.

⁽²⁾ C. W. BLEGEN, J. L. CASKEY and M. RAWSON, *Troy*, 4 vols. (Cincinnati, 1950-58), II, p. 16 (text): "Though they had a long local history, 'the decorative motive of incised dotted circles is certainly at home in Troy III.'" According to Blegen's latest chronology in *Troy and the Trojans* (London, 1963), p. 174, the date of Level III is 2200-2050 B.C.

⁽³⁾ J. MELLAART, *Illus. Lond. News*, Feb. 8, 1964, p. 197, figs. 20-21.

⁽⁴⁾ A. EVANS, *Cretan Pictographs*, p. 34; C. W. BLEGEN, *Troy* II, p. 17.

⁽⁵⁾ J.-P. CLÉBERT, *The Gypsies* (1963), p. 200.

⁽⁶⁾ Ankara Museum, unpublished.

⁽⁷⁾ F. PETRIE, *Buttons and Design Scarabs*, pl. VI, no. 126A; Matouk Collection, unpublished.

into the designs of nos. 71-2 are reminiscent of the delimiting lines between circles in Group 4a, and they suggest that spiral patterns may have developed from the concentric circle rather than the other way about. All the spirals of Group 6 have a beginning and an end; in this they differ from the round spirals of the xi-xiith. dynasties which make a continuous pattern or border. ⁽¹⁾

A rarity of the first kind from Egypt, like no. 71 in design, differs in that the *elytra* are not marked on the back. No. 72 provides the first parallel to a scarab from a Palestinian site, and no. 73 is less successful in design than nos. 74 and 75, which is unusually fine for the balance of the spiral containing one *nfr* sign on the upper half. It is best compared with the spiral on the sealing of a casket from Lisht, bearing the prenomen of Sesostris I ⁽²⁾, but it is not possible to see on the impression whether or not the spiral is continuous.

7. *Varia* nos. 76-80. There is part of a flower design on the remaining part of the broken scarab no. 76; it is divided across the width by a hatched bar, and the profile is cut *à jour*. Nos 77 and 78 are of interest for their relationship to the fret or maze patterns of the button seals and to designs on scarabs from Mostagedda, Matmar and Qau, also divided into two parts ⁽³⁾; they may all be early attempts at the production of a linear script. No. 79, like no. 76, is broken, and the looped designs are divided from each other across the width by a bar.

D. *Cylinder Seals* nos. 81-83, see "Les cylindres de la jarre Montet," by E. Porada, below.

⁽¹⁾ Three stamp seals dated to the First Intermediate Period by S. R. K. GLANVILLE show that the continuous border engraved on the base was established by that time; *JEA* 17 (1931), 98. See below, p. 00, notes 00 ff.

⁽²⁾ J. E. GAUTHIER and G. JÉQUIER, *MIFAO* 6 (1902), 50, fig. 49; H. KANTOR, *The Aegean and the Orient in the Second Millennium B.C.* (Bloomington, 1947), p. 23, "apparently the earliest example of a well developed spiral motive known in Egypt"; but see the previous

note.

⁽³⁾ G. BRUNTON, *Mostagedda*, pl. LX, nos. 53-57 (Dyn. viii-ix); G. BRUNTON, *Matmar* (London, 1948), pl. XXXIX, nos. 11-12, pl. XLI, nos. 1-2, 7 (Dyn. viii-ix); G. BRUNTON, *Qau and Badari I*, p. 57, pl. XXXIII, nos. 141-56, 172-76, 178-82, 183-84 (Dyn. viii-ix). Our nos. 77-78 are placed with heads up to conform with the majority on the plates, but they could equally well be placed with heads down, as in P. MONTET, *Byblos et l'Égypte*, fig. 54.

E. *Summary.*

1. *Material* Most of the seals are made of white steatite which was freely employed for the manufacture of button seals and scarabs from the end of the Old Kingdom onwards. There is no known source of this kind of talc or soapstone in the Asiatic Middle East, and it is most likely that the industry relied on supplies from quarries which exist in the eastern desert of Egypt. If samples from them were found to agree with the material of the seals, it would establish the Egyptian origin of the button seals, which have been described as strangers in the land,⁽¹⁾ and dispose of a frequent charge that Syro-Palestinian seals were local copies of Egyptian originals.

As they are harder stones to cut, carnelian and quartz were seldom used by scarab-makers, and the lightly engraved emblems and designs which ornament them in the First Intermediate Period were omitted to a large extent in Middle Kingdom times. Though amethyst was also obtainable in the eastern desert, it rarely occurs as a material for scarabs in pre-xith. dynasty contexts.

2. *Form* The short thick scarabs of Group 1 starting at 8.5 mm. in length, are gradually replaced in the following ones by forms which are twice the length and thinner in proportion. The heads of the beetle are adequate reproductions of the natural form and the division between the wings is nearly always marked. A further attempt at naturalism occurs in some examples, where the legs are cut *à jour*, a detail characteristic of scarabs in the cemeteries of Qau and Mostagedda. Group 4 introduces the fully 'feathered' leg, and the absence of this feature from the cemeteries just mentioned should be noted. This fine detail is common in the xiith. dynasty and continues into the Second Intermediate Period.

3. *Designs* Like the forms, designs on scarabs and seals of Group 1 find parallels on Egyptian sites of the vii-xith. dynasties, but they are few in relation to the whole collection. Group 2 with large scrolls almost

(¹) See above, p. 181, note 3; also G. POSENER, in *Cambridge Ancient History*, Rev. ed.,

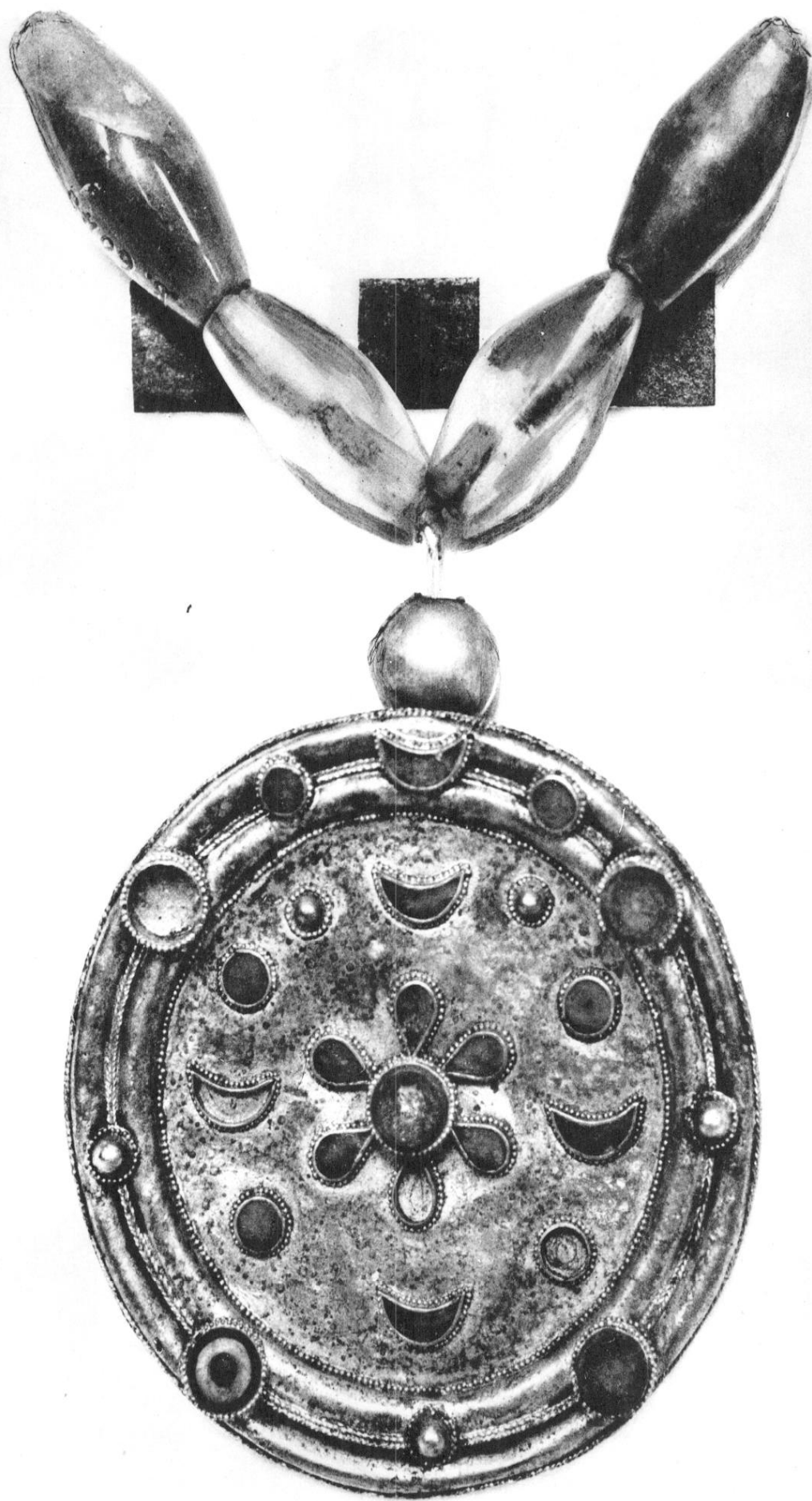
vol. 1, chap. XXI (1964), p. 4.

filling the field appears to represent an earlier manifestation of a trend which recurs in the Second Intermediate Period. Group 3 featuring rudimentary hieroglyphs runs parallel to the situation in Egypt itself, where the first scarabs bear only such simple signs as 'nh and nfr. The scarabs of Group 4 decorated with concentric circles are rare on Egyptian sites, and the careful workmanship, particularly the lines dividing the hard outer wing-case of the 'beetle', precludes an attribution of these scarabs to the Second Intermediate phase when they regained popularity. The cruciform patterns of Group 5 made up of elements already seen in previous groups succeed in producing balanced designs of some complexity and merit, equal to those for which a derivation from Asia Minor has been proposed.⁽¹⁾ All but one of the scarabs bearing round running spirals in Group 6 give the impression that they are early attempts at creating a continuous design, evolved from the concentric circle within delimiting lines. Far more successful is no. 75 with full round spirals almost as good as those associated with the unsurpassed craftsmanship of the xith. and xiith. dynasties, though it does not form a continuous border. That this stage was achieved by the xith. dynasty is seen on three stamp seals of the period, suggesting an earlier date for the primitive spirals of the scarabs in the jar.

In a collection which otherwise divides readily into six groups, it is only necessary to point out among the exceptions two scarabs in carnelian, divided like some others into an upper and lower register, which may bear attempts at a non-Egyptian linear script.

The real difficulty in the attempt to reach a closer date for our collection as a whole is the scarcity of contemporary products datable to the reign of Mentuhotpe II, say from the reunification of Egypt, c. 2040 B. C. through those of his immediate successors and namesakes to the death of Ammenemes I, founder of the xiith. dynasty, about 1972 B. C. With the accession of Kheperkare Sesostri I, scarabs bearing his name surrounded by round and hook spiral borders are common, and his prenomen, sometimes in a cartouche, is found on other objects as well from the Syro-Palestinian

(1) G. A. WAINWRIGHT, *Anatolian Studies* 4 (1954), 33-48.



BYBLOS. - Gold medallion, n° 85. Cf. Fig. 4



1



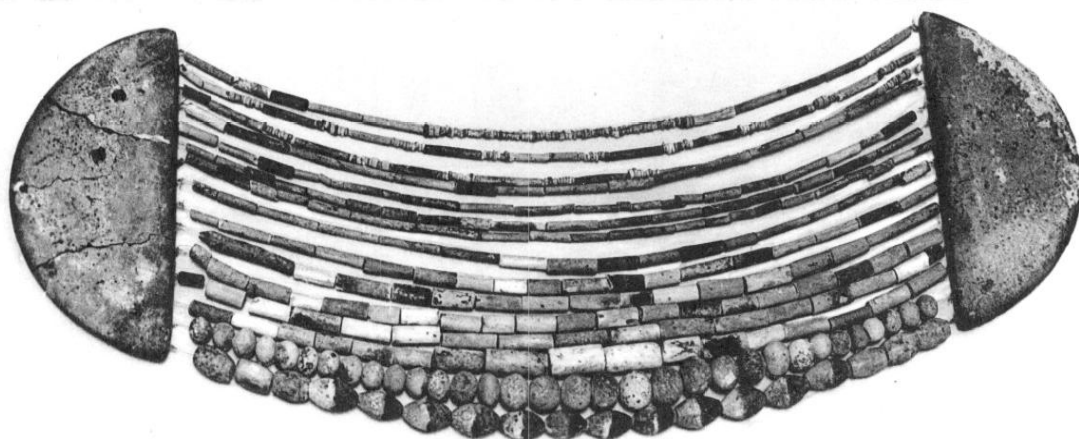
2



3



5



4

BYBLOS. - Figurines, n° 105, 107, 102. Cf. Fig. 5. Faience collar necklace.
Cf. Fig. 6, n° 180-187, Fig. 7, n° 188.

littoral. ⁽¹⁾ It would be surprising indeed if the contents of the Montet Jar and other contemporary deposits nearby at Byblos were buried during his reign that no trace should have been found of the particular styles and ornaments associated with his times.



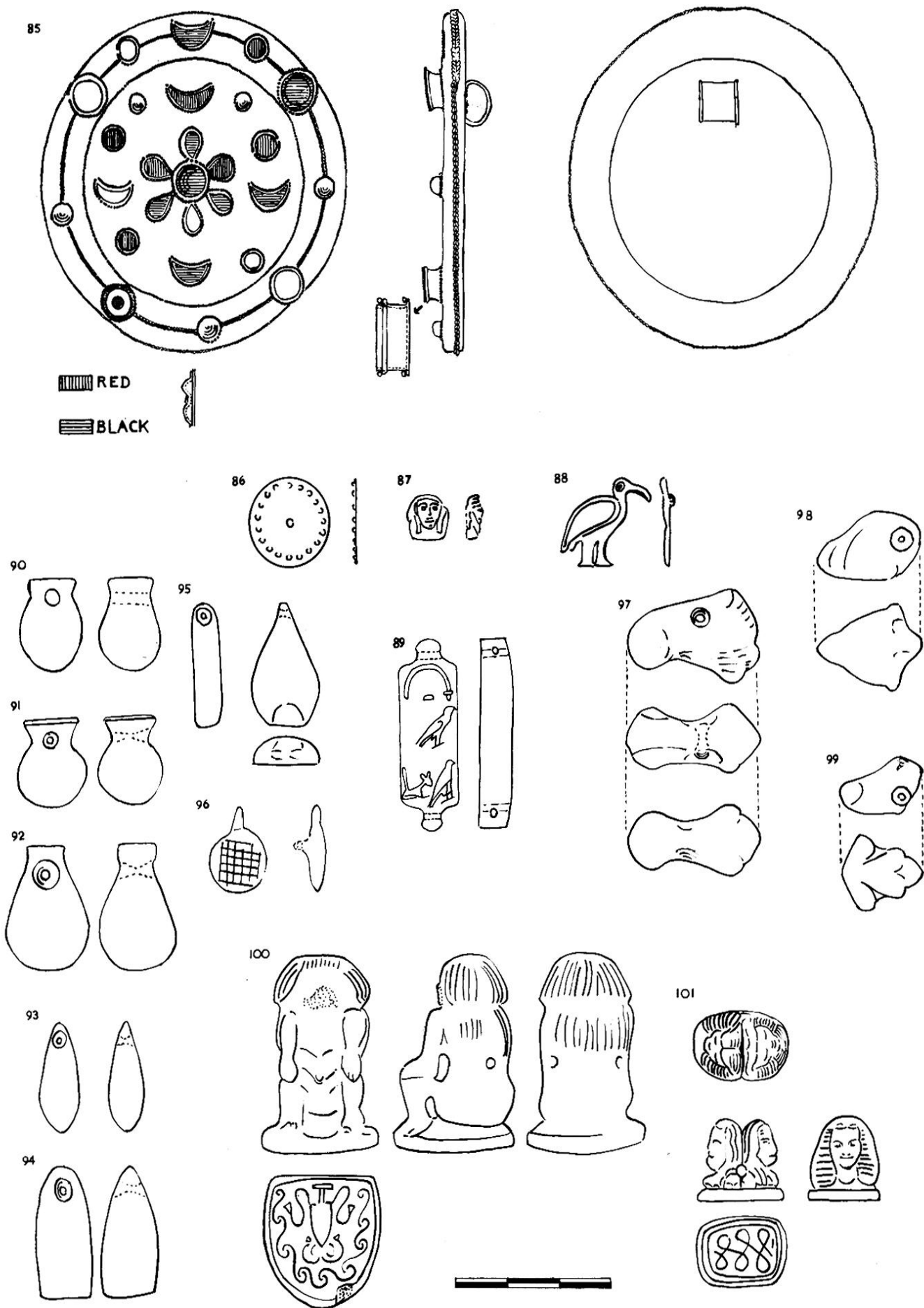
IV. — Pendants and Figurines.

A. *Gold and Electrum.*

1. *Gold medallion*, no. 85, pl. XV. The jewel is built up on a background of two disks, 58 mm. in diameter; they were apparently soldered together and the join on the edge between them was hidden by a flattened wire milled in imitation of a plait. A similarly worked wire was used on the inner periphery (see detail on fig. 4) between raised portions of the disk, perhaps worked *repoussé* from the back, though the existence of the wire may suggest that it was intended to hide the join between two parts. The inner limit of this border is marked by a single row of tiny balls, about 18 to each centimetre. Sweated to the middle of the background are the settings for a six-petalled flower. A polished dark stone occupies the central place, but the depression scooped in the middle shows that it was only part of the original inlay, which was probably similar to the sole surviving complete inset in the bottom left-hand corner of the jewel. Set in the cup-like depression is a shell or bone ring, slightly bevelled, surrounding a ball of the

⁽¹⁾ The list in *Stratigraphie comparée*, p. 25, requires revision. Besides the bead engraved with the prenomen of Sesostris I found at Ras Shamra, there is a stone fragment from Byblos; M. DUNAND, *Fouilles de Byblos* II, pp. 196 ff., pl. CLXXXVIII, no. 8503 (Levels I-V). There is a scarab from Tomb 66 at Ruweisé near Sidon; P. E. GUIGUES, *Bull. Mus. Beyr.* 2 (1938), 49, fig. 72, no. 3. Other scarabs are from Beisan: A. ROWE, *Topography and History of Beth-Shan* (Philadelphia, 1930), pp. 9 ff., pl. 34 (Level IX); Lachish: O. TUF-

NELL, *Lachish* IV, p. 94, pl. 32, no. 126, pl. 39 no. 347; and Gezer: R. A. S. MACALISTER, *The Excavation of Gezer*, 3 vols. (London, 1912), II, p. 315, no. 64; p. 319, no. 166; p. 330 (sealing on jar stopper); III, pl. CCIII b, no. 1, CCIX, no. 73, CCVII, no. 4. There are no scarabs of Sesostris I from Megiddo, Tell Beit Mersim or Gaza. Examples from Megiddo and Gaza were attributed to Sesostris II by Rowe, but in neither case is the full prenomen inscribed; A. ROWE, *Catalogue of Egyptian Scarabs*, nos. 11-12.



same material as the cup. ⁽¹⁾ Three other similar elements are attached to the border, two have lost their central stones and the third is reduced to the collar setting. A crescent moon inset in the same dark stone marks the top of the jewel on the border with another one below it in red jasper (?), and three others are symmetrically disposed on the lower half. Each side of the crescent moon on the flat surface are small gold balls, and three larger ones are attached to the border in the lower half of the design. Apart from the elegance of this small masterpiece, its most striking feature is the use of fine granulation as a finish at top and base of the box settings. For the method of attachment see the enlarged detail on fig. 4. Granulation is also used around the petals, the moons and the large gold balls.

The reverse of the disk is quite plain, except for the punch-marks left in the gold when the separate elements of the design were pressed down from the front. A single gold loop with rolled edge shows that the jewel was worn as a pendant, and since the granules are missing except where the loop is in contact with the disk, a certain amount of use can be inferred.

Comparisons. The medallion belongs to a group of gold ornaments known from Iran, Iraq, Syria, Lebanon and Cyprus, which are decorated in different techniques. The design may be applied box settings for inlay with added granulation, as in no. 85, or it may be embossed or worked *repoussé*, so that the punched dots serve as imitation of the globules. The nearest parallel to our jewel is a pendant from Tepe Giyan near Nihavend published by Herzfeld, and dated by him c. 2200 B.C. ⁽²⁾ It is published again with more ornate examples found near Hillah-Babylon in a closed jar, attributed to the First Dynasty of Isin, hence to the end of the third and early second millennia ⁽³⁾. All these have gold beads attached at the top of the disk, so that it can be worn as a pendant, whereas the Montet medallion has only a simple loop placed at the back where it cannot be seen.

This is not the place to discuss the art of granulation as a whole, for

⁽¹⁾ For the same style of shell inlay, see J. E. QUIBELL, *Ballas* (London, 1896), p. 21, pl. XVII, no. 25 (Dyn. vii ix).

⁽²⁾ E. HERZFELD, *Illus. Lond. News*, June 1,

1929, pp. 942 ff.

⁽³⁾ E. HERZFELD, *Iran in the Ancient East* (Oxford, 1941), pl. XXX, fig. 261 on. p. 145.

which the reader is referred to a forthcoming work on the jewellery of Western Asia by Mrs. K. R. Maxwell-Hyslop, nor is it possible to decide where and when the technique was developed. All that can be said is that the three pieces mentioned above must share with the Montet medallion the honour of being amongst the earliest examples of the granulated style, which was known to the Sumerians, though rare pieces in this technique appear to be confined to the latest phase of the cemeteries at Ur.⁽¹⁾ Its occurrence there and further south-east again at Susa, and to the north-west at Troy and Crete puts Byblos in the centre of the geographical picture, and the comparisons cited from these widely-separated places agree in introducing granulated gold-work about the twenty-third or twenty-second century B. C., reaching Crete perhaps a hundred years or so later.⁽²⁾

2. Disk, no. 86. Not parallel but similar, are a large group of small gold disks found at Lisht and a small group in the Cleveland Museum. These were originally used to decorate a wig and date to the reign of Ammenemes I.⁽³⁾ It is also possible that the Byblos disk is not an Egyptian object.

3. Head, no. 87. This must certainly be one of a rare group of amulets made up of female heads attached to miniature *pšs-kf* instruments, a number of which have been published by Brunton.⁽⁴⁾ Two of this group—no. 3 of gold from Hu (xth. dyn.) and no. 4 of silver from Deir el Bahri (xith. dyn.)—are extremely close in overall style to the Byblos example

(1) L. WOOLLEY, *Ur Excavations* II, p. 297: "gold ring only 2 mm. in diameter and composed of six balls sweated together." Cf. C. W. BLEGEN, *Troy* I, pt. 2, fig. 356, nos. 9-10 (Phase II g, ca. 2200-2050 B. C.). L. WOOLLEY, *op. cit.*, pl. CXXXVIII, no. U. 10409, p. 241: "an ornate example (of an ear-ring) comes from a larnax burial of the Larsa Period."

(2) R. de MECQUENEM and G. CONTENAU, *Mem. Miss. Arch. en Iran* 29 (1943), p. 114, fig. 84, no. 3, a gold ear-ring from a sarcophagus burial of type 2, apparently similar to the example from Ur; twenty-third century B. C. A. EVANS, *The Palace of Minos*. 5 vols.

(Oxford, 1921-35), III, p. 412: "minute form of granulation already known in Crete at the beginning of MM Age, the date, be it observed, of an early wave of direct influence from the East."

(3) A. C. MACE and H. E. WINLOCK, *The Tomb of Senebtisi at Lisht* (New York, 1916), pl. XXI; W. C. HAYES, *The Scepter of Egypt* I, p. 230, fig. 146; C. R. WILLIAMS, *JEA* 5 (1918), pl. XXVIII, no. 10 (Cleveland Museum); C. R. WILLIAMS, *Catalogue of Egyptian Antiquities, New York Historical Society* (New York, 1924), no. 155.

(4) G. BRUNTON, *ASAE* 35 (1935), 213-17.

and the sizes are approximately the same. ⁽¹⁾ While the Byblos piece is no longer attached to the *pšs-kf* instrument, certain features indicate it must have been so used. Another of the examples published by Brunton is described as follows: "The human bust is *repoussé* gold work with a flat sheet of gold back soldered on. The interior was filled with a dark brown material which looked exactly like iron rust." ⁽²⁾ The Byblos piece is made of *repoussé* gold work. It is probable that there was originally a back which would have given a hollow head of two pieces covering a core of some other material. The bottom surface is blackened which might indicate that the head was originally soldered to a *pšs-kf* blade. A date in the First Intermediate Period is the most likely.

4. Ibis amulet, no. 88. We may compare similar ibis amulets from Egypt, dating to the First Intermediate Period, in gold, silver or electrum. ⁽³⁾

B. Ivory.

1. Label, inscribed with Egyptian hieroglyphs, no. 89. The signs on this object clearly read *sd3w.tiw Hr Sth*, but there is some question as to what is intended. Montet rightly pointed out that the elements *Hr Sth* refer to the king in certain Old Kingdom inscriptions, ⁽⁴⁾ though these two signs could be read *nb.wy*. ⁽⁵⁾ The first three signs give the plural form of *sd3w.ty*, "Treasurer," normally found in the plural only in such titles as "Overseer of Treasurers," etc. ⁽⁶⁾ However, a singular form is evidently intended, for which there are parallels. ⁽⁷⁾ It is unfortunate that the whole title cannot be paralleled elsewhere, though the title "Treasurer of Horus" is known. ⁽⁸⁾

⁽¹⁾ Byblos: 9 mm.; Hu: 14 mm.; Deir el Bahari: 10 mm.

⁽²⁾ G. BRUNTON, *ASAE* 35 (1935), 214.

⁽³⁾ G. BRUNTON, *Mostagedda*, pl. LVII, no. 47; F. PETRIE, *Amulets*, pl. XLII, nos. 247 ff. (Dyn. XI); G. BRUNTON, *Qau and Badari II*, pl. XCVII, no. 47.

⁽⁴⁾ P. MONTET, *Byblos et l'Égypte*, p. 113. Note in particular the queen's title *m33.t Hr Sth* discussed by H. GAUTHIER, *ASAE* 24 (1924), 200 ff., and W. HELCK, *Untersuchungen zu den Beamtentiteln des ägyptischen Alten Reiches* (Glückstadt, 1954), p. 50.

⁽⁵⁾ That is, "The Double Lord" (= Horus and Seth), a usage attested in Empire times, but with the Falcon and Seth-animal resting on *nb*-signs. The king is called *nb. wy* as early as the Pyramid Texts, but the title is written here with two Falcon-on-Standard signs.

⁽⁶⁾ While the sign on the label is definitely the *tiw*-bird, it might be an error for the *w*-chick which is a usual writing of the singular.

⁽⁷⁾ For example, H. JUNKER, *Giza*. 12 vols. (Vienna, 1929-55), II, p. 165, and VII, p. 90.

⁽⁸⁾ *Ibid.*, p. 238.

The best interpretation of the Byblos piece seems to be "Treasurer of Horus-Seth (or: the Double-Lord)".⁽¹⁾ The designation *Hr Sth* (or *nb.wy* written without *nb* signs) would definitely indicate an Old Kingdom date. The shapes of the signs, while not conclusive, tend to bear this out.

2. Pendant seal in form of squatting baboon, no. 100. While the squatting position and other details are paralleled in early human figurines⁽²⁾, the Byblos figurine is an ape or baboon. The face is damaged, but the base of the snout still remains. The design on the base, a *hs*-jar with spirals and plants can certainly be as early as the First Intermediate Period.⁽³⁾ This plus the form of the base makes it reasonably certain that this piece is not later than the First Intermediate Period.

3. Double-headed pendant seal, no. 101. The back of this seal consists of two male heads, back to back, wearing the *nms* headdress. Several similar examples place this piece in the First Intermediate Period.⁽⁴⁾ The design on the base is a simple loop pattern for which there are analogies as early as the Old Kingdom.⁽⁵⁾

4. Baboon figurine, no. 107. The position as well as a First Intermediate Period date are verified by a similar example from Egypt.⁽⁶⁾ (Pl. XVI).

C. Stone.

1. Pendants, nos. 90-99. This group of pendants can generally be compared to examples from the First Intermediate Period, though unfortunately some of the closest parallels are undated in the publications. The material is milky quartz (nos. 90-91), and carnelian (nos. 92-99), stones

⁽¹⁾ Another, less convincing, interpretation would be that "Horus-Seth" is a personal name. This particular combination of divine names does not seem to be known elsewhere, though personal names such as Horus-Min, Horus-Thoth, Seth-Re, etc., are attested.

⁽²⁾ Cf. the figure of a child in F. PETRIE, *Abydos II* (London, 1903), pl. II, no. 8.

⁽³⁾ Note the similar spirals on scarabs discussed in the present study (nos. 71-75). Other comparisons are the designs on the bases of two of the First Intermediate Period Harpocrates figurines noted in connection

with no. 102, below.

⁽⁴⁾ Single head: G. BRUNTON, *Mostagedda*, pl. LX, no. 34 (Dyn. viii). Double head: F. PETRIE, *Buttons and Design Scarabs*, pls. I, no. E, and V, no. 360 (First Int. Per.); G. BRUNTON, *Qau and Badari I*, pl. XXXIII, no. 125 (Dyn. ix); H. HERZER, *Ägyptische Stempelsiegel*, no. 105.

⁽⁵⁾ G. BRUNTON, *Mostagedda*, pl. LX, no. 35 (Dyn. vi).

⁽⁶⁾ G. BRUNTON, *Qau and Badari I*, pl. XXXIII, no. 109 (Dyn. vi).

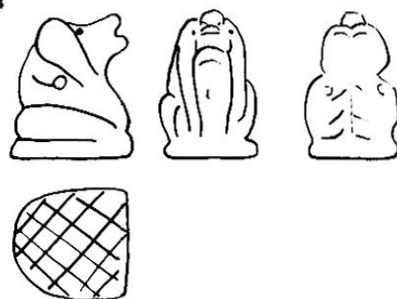
102



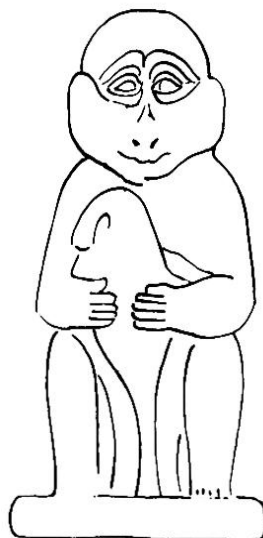
103



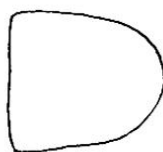
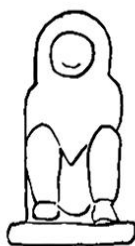
104



105



106



107



FIG. 5. — Figurines. Scale 1 : 1.

which were used extensively for amulets at this time. nos. 90-91 are miniature *nw*-bowls. ⁽¹⁾ No. 92 may again be a miniature bowl or the so-called 'bulla' type of Petrie. ⁽²⁾ Nos. 93-94 are 'drop-pendants' ⁽³⁾ and no. 95 is also of this class but with traces which show it to be a cobra-head. ⁽⁴⁾ No. 96 may be a tortoise, though this is rare as an amulet. ⁽⁵⁾ It is difficult to determine what no. 97 is supposed to represent; it is probably a couchant lion. ⁽⁶⁾ No. 98 would appear to be a ram's head ⁽⁷⁾ and no. 99 is a frog. ⁽⁸⁾

2. Monkey with young, no. 105, pl. XVI. This is one of the finest pieces in the Montet Jar. For artistic excellence and expression it can be placed among the better efforts of Egyptian *Kleinplastik*. There is little doubt that it should be dated to the Old Kingdom, probably the vith. dynasty. ⁽⁹⁾

1). *Bronze.*

1. Harpocrates figurine, no. 102. This belongs to a rare series of such figures dating to the third millennium from Egypt. ⁽¹⁰⁾ The earliest is a protodynastic ivcry figure of unknown provenience but of undoubted authenticity. ⁽¹¹⁾ Though this object has no base and one arm is broken off, there can be little doubt that it is of the Harpocrates type. An alabaster

⁽¹⁾ G. BRUNTON, *Qau and Badari II*, pl. CIII, no. 89E6 (Dyn. x-xi). Cf. F. PETRIE, *Amulets*, nos. 129 a-b (Dyn. vi-xii).

⁽²⁾ F. PETRIE, *Amulets*, no. 129h (no date); R. ENGELBACH, *Harageh*, pl. LI, nos. 44N-Q (M.K.); H. FRANKFORT, *JEA* 16 (1930), pl. XXXIV. 2, at left of string (Abydos Grave 829, First Int. Per.).

⁽³⁾ R. ENGELBACH, *Harageh*, pls. XLIX, no. 44F (Dyn. vi-xi), LI, no. 44K (M.K.); G. BRUNTON, *Qau and Badari II*, pl. CIV, no. 89M8 (Dyn. ix).

⁽⁴⁾ R. ENGELBACH, *Harageh*, pl. LI, no. 44s (M.K.).

⁽⁵⁾ F. PETRIE, *Amulets*, no. 239 (Prehistoric to Dyn. xii); cf. E. NAVILLE, *Cemeteries of Abydos I* (London, 1914), pl. VII, top, right of photo, and pl. II, fig. 6, 4th row, 2nd amulet (Dyn. vi).

⁽⁶⁾ T. E. PEET, *Cemeteries of Abydos II* (London, 1914), pl. IX, fig. 9, bottom row,

4th amulet (First Int. Per.).

⁽⁷⁾ F. PETRIE, *Amulets*, no. 212c (no date); E. NAVILLE, *Cemeteries of Abydos I*, pl. II, fig. 6, 3rd row, 3rd-4th amulets (Dyn. vi). This would be the ram's head type with straight horns as opposed to the type with curled horns.

⁽⁸⁾ F. PETRIE, *Amulets*, no. 18l (Dyn. vi); G. BRUNTON, *Mostagedda*, pl. LVI, no. 34C8 (Dyn. ix); G. BRUNTON, *Qau and Badari II*, pl. XCVI, no. 34C (Dyn. vi-viii).

⁽⁹⁾ Note the general resemblance to monkey-vases inscribed with Old Kingdom royal names: P. MONTET, *Byblos et l'Égypte*, nos. 56, 58, 62; W. C. HAYES, *The Scepter of Egypt I*, fig. 78; etc.

⁽¹⁰⁾ The figurine published by G. MASPERO, *ASAE* 8 (1908), 282-83, should be discounted: cf. P. MONTET, *Byblos et l'Égypte*, p. 115.

⁽¹¹⁾ G. LOUKIANOFF, *Ancient Egypt* June 1931, 42-44; ht. 1½ inches.

figurine of Phiops II, now in the Cairo Museum, is also of this class. ⁽¹⁾ The base is square in front and rounded in back as in the Byblos example. Finally, there are three such figurines in the British Museum which date within the First Intermediate Period and Middle Kingdom range. ⁽²⁾ BM 59853 is of bronze and very similar to the Byblos figurine in all respects, and there is a continuous spiral decoration on the base, a motif found in the First Intermediate Period. ⁽³⁾ The other two British Museum figurines are of ivory, but carry on the artistic tradition of the other examples noted here. The Byblos Harpocrates thus fits into a series of similar figurines from Egypt which date in time from the archaic dynasties to the early Middle Kingdom. ⁽⁴⁾ The design on the base of the Byblos figurine consists of three animals—a hare, a hound (?) and an antelope or gazelle—with a tiny figure of a man holding some object behind the latter animal. This looks very much like a hunting scene where a man and hound attack the quarry. Such hunting scenes appear frequently in Egyptian tombs, showing all the elements of the Byblos design. ⁽⁵⁾ The evidence is thus conclusive that the Byblos Harpocrates figurine is Egyptian and dates to the late Old Kingdom or First Intermediate Period, with the latter date the most likely. ⁽⁶⁾

⁽¹⁾ Cairo 50616: G. JEQUIER, *ASAE* 27 (1927), 60, pl. V; J. VANDIER, *Manuel d'archéologie égyptienne* III (Paris, 1958), p. 39, pl. IX no. 2; ht. 0.16 m.

⁽²⁾ S. R. K. GLANVILLE, *JEA* 17 (1931), 98-99, pl. XII.

⁽³⁾ For the continuous spiral, cf. F. PETRIE, *Scarabs and Cylinders*, pl. XI, no. J (Dyn. x-xi). With this spiral there is a hieroglyph $\omega\bar{z}h$ which Glanville considers a hypocoristic for a First Intermediate Period name. However, $W\bar{z}h$ appears as a full name at least as early as the xith dynasty; cf. the scarab in W. C. HAYES, *The Scepter of Egypt* I, fig. 145, which shows spirals similar to BM 59853. Not a conclusive feature, but one which should be noted, is the form of the $\omega\bar{z}h$ -sign which points to an Old Kingdom or First Intermediate Period date.

⁽⁴⁾ BM 54677 is from Abydos and was found in a xiith dynasty context; S. R. K. GLAN-

VILLE, *JEA* 17 (1931), 99, note 1. There is also a Harpocrates figurine of boxwood in the Metropolitan Museum: W. C. HAYES, *The Scepter of Egypt* I, p. 233, fig. 193, lower right. The inscription on the base is surrounded by a continuous spiral. This object may date either to the xith or xiith dynasty.

⁽⁵⁾ For example, P. E. NEWBERRY, *El Bersheh* I (London, 1894), pl. VII. L. KLEBS, *Die Reliefs und Malereien des mittleren Reiches* (Heidelberg, 1922), pp. 94-95, notes that hunting was done with a harpoon in the Old Kingdom and a bow or lasso in the Middle Kingdom. Just what the figure on the Byblos figurine is holding is impossible to determine.

⁽⁶⁾ The identification of this figurine with a known Egyptian type can also be applied to a similar object from Byblos (P. MONTER, *Byblos et l'Égypte*, no. 147). This is likewise a bronze Harpocrates with the same type of base on which is etched a line figure very

2. Baboon figurine, no. 106. Exact parallels are not forthcoming, but a copper seated baboon amulet, of approximately the same size, is known from Qau. ⁽¹⁾

E. *Glass.*

1. Baboon figurine, no. 103 and baboon head, no. 104. The material of these pieces is difficult to determine, but it appears to be a kind of imperfect glass. Glass, an offshoot of the glaze industry, was already made in Egypt at least as early as the Old Kingdom and many amulets from the First Intermediate Period are described as "openwork blue glaze with core dissolved in the glaze". ⁽²⁾ This description fits the two Byblos objects nicely. The kind of material, then, would point to an Egyptian origin for them and that amulets of this material are known to have been manufactured in Egypt during the First Intermediate Period is a good indication of date.

*
* *

V. — Beads.

A. *Materials.*

1. *Stone* Over six hundred beads were examined, and their materials are listed on fig. 6, though the definitions are unfortunately not those of a mineralogist. Beads classified as 'stone' are mostly white in colour and may be calcite. The long bicone, no. 117 is dark blueish-grey, opaque and unmottled, described most tentatively as lapis lazuli.

Carnelian or sard of exceptional quality was used for the bulk of the collection, the stone is sometimes banded with lighter translucent streaks, and the quartz beads are perhaps good enough to be defined as crystal (pl. XV). The workmanship is in keeping with the quality; a smooth high polish and an even form show skill equal to the bead-work of the Royal

much like those found on objects of the First Intermediate Period.

⁽¹⁾ G. BRUNTON, *Qau and Badari I*, pl.

XXXIII, no. 111 (Dyn. ix).

⁽²⁾ A. LUCAS, *Ancient Egyptian Materials and Industries*, 3rd ed. (London, 1948), p. 209.

Cemeteries of Ur or of Old Kingdom Egypt. The beads were perforated from both ends, and the only fault discernible in their making was a frequent failure of the drill holes to meet centrally.

2. *Metal* beads form a larger proportion of the whole than they would in an Egyptian collection; about seventy were made of copper or more possibly bronze, like a toggle-pin which has been analysed. ⁽¹⁾ The smaller beads, nos. 144-153 were hammered out from sheet metal, like the intermediate sizes, nos. 163-66, and in most cases the overlapping edges are still visible. The larger beads, nos. 160-162 are more massive in construction, and were probably mold cast locally; see molds of the same size as no. 160 found at Byblos. ⁽²⁾ A few silver beads, nos. 149-150 were made like those of bronze, but the faceted beads, nos. 168-176 were cast solid and the marks of the drill are still visible producing a straight perforation from one end. Nos. 178-179 were made in the same way, but a different method was used for no. 177, in which two broken pieces show that in these cases at least silver foil was applied to a wooden core. The silver caps of nos. 110-112 were hammered out from thin sheet metal.

3. *Faïence* Nos. 180-182, 183-185 and 187 are covered in green glaze, the core presumably consisting of "finely powered quartz grains cemented together by fusion". ⁽³⁾ Over three hundred were found, but all were needed to complete the collar necklace with semi-circular end-pieces, no. 188 and pl. XVI. This implies that the collar was threaded when placed in the jar, but there is now no means of knowing if the convincing reconstruction of the order, displayed in the Beyrouth Museum, is absolutely correct in all details. The row of pendants placed below it in the Montet photograph are now missing, though their presence would be in keeping with the style and date of the necklace. ⁽⁴⁾ It is suggested below that the large hollow bicone, no. 189 (and two smaller ones on the same Montet plate) were elements of the counterpoise hanging at the back between the end-pieces. A point of interest is the partial green and black glaze on bead type no. 183; one

⁽¹⁾ C. F. A. SCHAEFFER, *Stratigraphie comparée*, p. 605.

⁽²⁾ M. DUNAND, *Fouilles de Byblos* I, pl. CVI, nos. 3298-99, and p. 223.

⁽³⁾ J. F. S. STONE and L. C. THOMAS, *Proc. Prehistoric Soc.* 22 (1956), 38.

⁽⁴⁾ P. MONTET, *Byblos et l'Égypte*, pl. LXVII, no. 571.

example was inscribed before firing with a personal name, showing that the collar was made to order of the prospective owner. Rivet holes for repair in one end-piece suggest that he wore and cherished this fine ornament.

B. *Forms.*

Four main shapes follow the Egyptian tradition, Cylinders, Barrels, Rings and Spheroids. The equivalents in G. Brunton's Bead Corpus ⁽¹⁾ covering dynasties iv-xi are given on fig. 6 alongside the appropriate drawing.

A count of the frequency of these particular forms found in Egyptian tomb-groups is revealing:

<i>Forms</i>	<i>Egyptian Dynasties</i>					<i>Totals</i>
	iv-v	vi	vii-viii	ix	x-xi	
Cylinders	3	6	2			11
Barrels	24	31	9	24	3	91
Rings	3	16	33	12		64
Spheroids		5	6	12	4	27
	30	58	50	48	7	193

The tabulation shows that similar beads in the jar represent types current in Egypt during the Old Kingdom and First Intermediate Period with the majority firmly centred between the vith. and ixth. dynasties.

Foreign to the valley of the Nile are bicone beads, both plain and faceted. Using H. C. Beck's nomenclature, nos. 117-8 are Long Bicone beads, nos. 160-6 are Standard and Long Truncated Bicones and no. 167 is a Long Truncated Convex Bicone; nos. 168-175 are also Standard and Long Truncated Bicones, but they are faceted and octagonal in section. No. 175 is in gold or electrum and no. 176 is unique in the collection, having concave and faceted sides. ⁽²⁾

Comparisons. The bead parallels in Egypt, as noted above, are already conveniently summarised by Brunton, but the collar necklace composed

⁽¹⁾ G. BRUNTON, *Qau and Badari II*, pls. XCIX-CIV.

⁽²⁾ H. C. BECK, *Archaeologia* 77 (1927); reprinted separately in 1928.

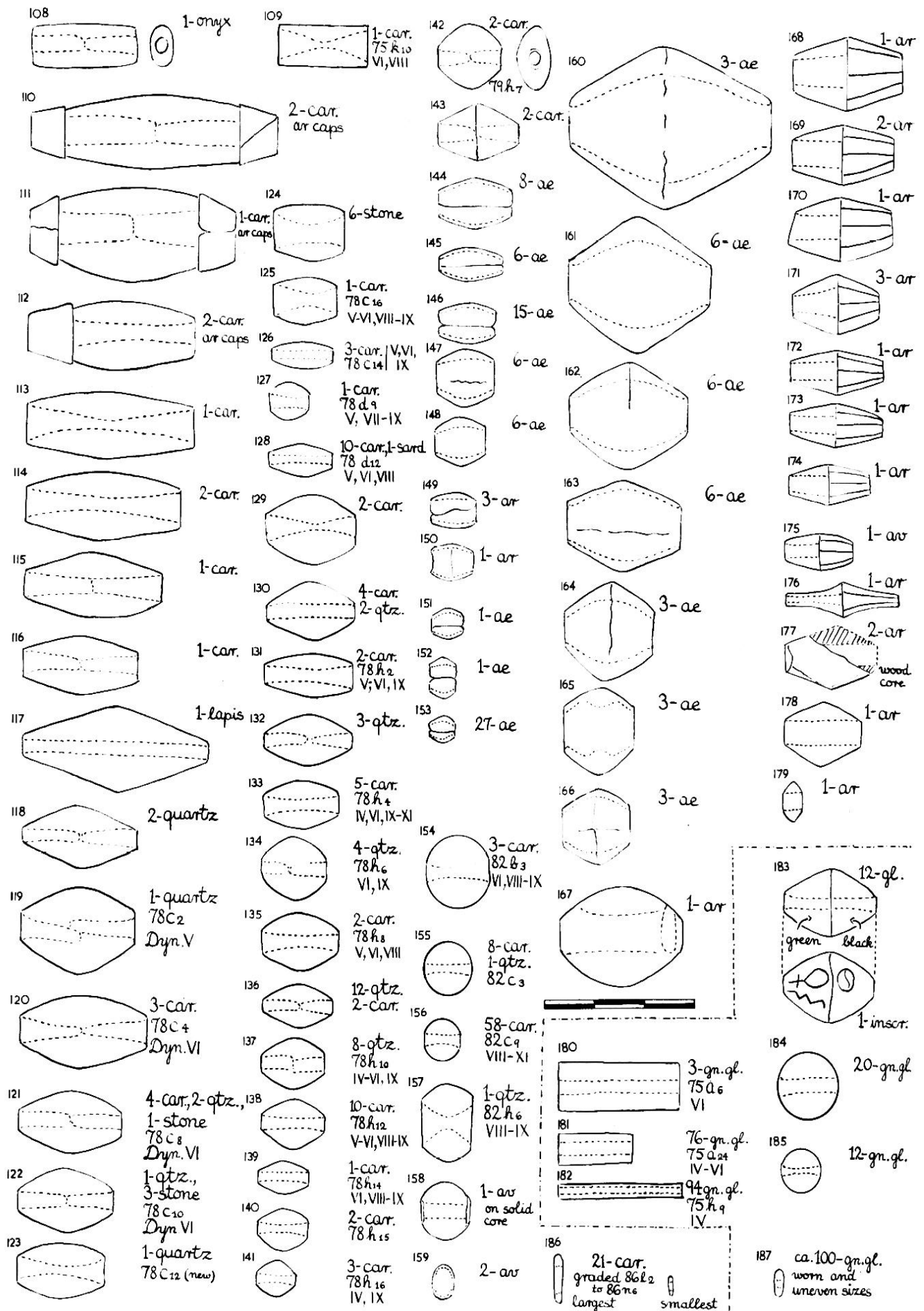


FIG. 6. Beads. Scale 1 : 1.

of beads nos. 180-5 and 187-8 is in a different category. Despite the uncertainty of exact reconstruction, the present museum arrangement of horizontal strings best suits the number and shape of the beads. Collars with semi-circular endpieces, and having horizontal strings of cylindrical beads, interspersed with other shapes are known from the Old Kingdom.⁽¹⁾ While the endpieces are sometimes covered with gold foil, this does not always have to be the case. The large counterpoise, no. 189 has a duplicate in late Old Kingdom—early First Intermediate Period deposits at Lahun.⁽²⁾ The late Old Kingdom date is borne out by the personal name *Ni-nḥ-R'*, inscribed on one of the barrel beads.⁽³⁾ The known examples of this name are restricted to the later Old Kingdom⁽⁴⁾ with one later (archaizing?) example of the Saite Period. The name formula itself is found only in

⁽¹⁾ S. HASSAN, *Excavations at Giza*. 13 vols. (Oxford and Cairo, 1932-60), I, pls. XLII, LXXVIII-LXXIX, p. 44; II, pl. LIII. Bead collars are shown everywhere in Old Kingdom reliefs, though these are mostly painted, with broad horizontal stripes representing rows of beads. There are, however, sculptures which show collars in relief. Some of these show only long incised lines which may represent strings of horizontally placed beads; P. DUELL, *The Mastaba of Mereruka*. 2 vols. (Chicago, 1938), II, pl. 212. Rare reliefs actually portray collars made up of horizontal rows of beads in which the individual beads are shown; H. FECHHEIMER, *Die Plastik der Aegypter* (Berlin, 1920), pl. 130.

⁽²⁾ F. PETRIE, *Lahun II* (London, 1923), pl. LXIII, no. 58B (green glaze, Dyn. vi-ix), and no. 68L (green glaze). Counterpoises of Syria and Mesopotamia have been studied by A. SPYCKET in *RA* 42 (1948), 89-97, who quotes Egyptian examples for comparison. She concludes (p. 96) that counterpoises appear in the Near East toward the end of the third millennium and notes their appearance in Egypt only as early as the xith dynasty. However, this does not take into account the elaborate bead-work counterpoises por-

trayed in Old Kingdom art; cf. J. COONEY, *Five Years of Collecting Egyptian Art* (Brooklyn, 1956), pl. 3; etc. The large pendant counterpoise represented by the Byblos and Lahun examples was apparently a cheaper style already in vogue by the late Old Kingdom.

⁽³⁾ Fig. 6, no. 183, and pl. VI. The circular sign is not a normal sun-disc (*R'*) and looks more like the *psf*-sign. This, however, does not seem to have been used as an element in personal names. It could also be *ḥ*, though again it would be an abnormal form. In the latter case, the name would be read 'nḥ or *Ni-nḥ*; cf. H. RANKE, *Die ägyptische Personennamen*. 2 vols. (Glückstadt, 1935-52), I, p. 62, no. 19. Both names are predominantly Old Kingdom. However, in the light of the numerous parallels given in the following note, it seems best to retain Montet's original reading of this sign as *R'*.

⁽⁴⁾ H. RANKE, *Personennamen*, I, p. 171, no. 16. To the four examples quoted here may be added: S. HASSAN, *Excavations at Giza*, III, fig. 143, and IV, pp. 151-56; II. JUNKER, *Giza XI*, p. 86; J. VANDIER, *Manuel d'archéologie égyptienne* III, p. 83, pl. XXXIII, no. 1 (Cairo 55). All are from Dyn. v-vi.

the Old Kingdom.⁽¹⁾ The sum total of the evidence makes this bead collar one of the best-dated objects in the Montet Jar. It comes from the late Old Kingdom, probably towards the end of the vith. dynasty.

A rare contact with southern Palestine is seen in a string of carnelian beads from a grave at Tell el-'Ajjul published by Petrie and compared by him to Egyptian beads of the vth.-vith. dynasties, which are equivalent to types 131, 133 of the Montet Jar. The actual range of these types according to Brunton's *Corpus* is ivth.-vith. and ixth.-xith. omitting the vii-viiiith. dynasties, and it may be significant that the jar and cup with the beads are exclusive to the Intermediate Early Bronze-Middle Bronze Age of Palestine.⁽²⁾

To sum up in relation to Egypt, it is seen that barrel beads extend through the Old Kingdom and First Intermediate Period and that the particular ring beads seen in the jar end with the ixth. dynasty. More valuable for our purpose in achieving a closer date are the types which are missing from the deposit, the crumb beads and the fancy cylinders of the vth.-ixth. and the melon or fancy spheroids which are exclusive to the viiith.-ixth. dynasties.⁽³⁾ These factors point to a date at the beginning of the xth. dynasty during the latter half of the twenty-second century for the burial of the Montet Jar.

Turning to Sumer, the beads in the royal and private graves at Ur show general similarities to those in the jar, though they are larger than the average in the Sumerian field.⁽⁴⁾ A recent study of the stratigraphy of the cemeteries by Dr. H. J. Nissen of Heidelberg suggests some specific comparisons and we are most grateful to him for allowing us to use his results. Nos. 110-116, three of which have silver caps, conform to Woolley's type 6, nos. 117-8 to his type 8, and the bicone beads nos. 161, 162 and 164 are well matched by Dr. Nissen's sub-division, type 29. The faceted

(1) H. RANKE, *Personennamen*, I, pp. 171-72; II, p. 294.

(2) F. PETRIE, *Ancient Gaza I* (London, 1931), p. 3; pottery types 30G³, 29Z. With the beads from Tomb A198 at the Institute of Archaeology, there are two metal discs, each 4 cms. in diameter, unpublished, for

which an excellent parallel is to be found at Qau; cf. G. BRUNTON, *Qau and Badari I*, pl. XXIX, no. 18 (T. 5009, Dyn. ix).

(3) *Ibid.*, pp. 72 ff.

(4) L. WOOLLEY, *Ur Excavations II*, pp. 366-75.

double conoids, nos. 168-175 are analogous to Woolley's type 10, which was only found in graves from early to middle ED III, and is thus the oldest type among them.⁽¹⁾ The others range from late ED III and tend to concentrate in the Akkadian period with types extending thinly into the Neo-Sumerian period or Ur III.

It will be seen that the types not matched in Egypt fit into the Sumerian or Akkadian orbit, and very occasionally they penetrate to the eastern Delta, as at Kom el Hisn, which shows other clear contacts with our group.⁽²⁾

Mari, halfway between the Persian Gulf and Egypt, should—like Byblos—reflect the impact of both cultures, and though the range of bead types there is still unknown, M. Parrot is extremely fortunate to have found the shell and lapis elements of a box or standard, inlaid in the same style as the famous Peace and War panel from Ur.⁽³⁾ Especially striking are the details of dress worn by priestesses in procession; their cloaks are secured by long toggle-pins in front and dangling from them is what appears to be a string of bicone beads terminated by a ring or cylinder.⁽⁴⁾ A 'chatelaine' of this kind, attached to a pin instead of a belt, is probably the reason for the strange position of a row of bronze bicones found in a woman's undisturbed grave at Ras Shamra, buried near the temple of Baal and Dagan.⁽⁵⁾

Summary. Sound comparisons with the carnelian beads of Egypt have placed those in the Montet Jar clearly in the Old Kingdom and First Intermediate Period. The century can be further defined through the absence of certain characteristic types which were current until the end of the ixth. dynasty, always remembering that these dates are not absolute, but merely an indication of sequence. The x-xith. dynasty would seem most suitable on the evidence available, though it is unlikely that

⁽¹⁾ Extracts from a letter dated October 15th, 1964.

⁽²⁾ A. HAMADA, and SH. FARID, *ASAE* 46 (1947), 199, pl. LIX, no. 3.

⁽³⁾ L. WOOLLEY, *Ur Excavations* II, pls. 91-92.

⁽⁴⁾ A. PARROT, *Syria* 39 (1962), 163-69,

pls. XI-XII.

⁽⁵⁾ C. F. A. SCHAEFFER, *Stratigraphie comparée*, p. 17, fig. 4. In this connection it is interesting to note that the Mari panel was also found in the precincts of a temple of Dagan, a useful point suggested by Mrs. Pamela Parr.

the deposit was buried as late as the reign of Mentuhotpe II, when amethyst beads came into fashion. In round figures, the date proposed for the bead content of the jar would be c. 2130-2040 B.C.

In relation to current estimates of Mesopotamian chronology, these dates would coincide with the Third Dynasty of Ur, c. 2113-2006 B.C., but there are enough pre-Sargonic silver beads in the jar to raise a doubt as to whether they would have survived in their original form for more than two centuries.



VI. — Ornaments and Utensils.

A. *Bone* (or ivory?)

1. Handle for spatula (?), no. 190, in the shape of an Isis girdle tie. There is an interesting parallel from Qau, a bone spatula with a handle which is precisely the same as the object from Byblos.⁽¹⁾ The latter, however, is about twice the size of the Qau spatula, indicating it served a different purpose. While not a perfect analogy, the Qau spatula shows that the Byblos object is probably an utensil, perhaps a spoon, of a style used in the First Intermediate Period.

B. *Metal*.

1. Bronze ornament, no. 191. It consists of three cobras, side by side, resting on a *nb*-sign. An exact duplicate in gold was found at Kom el Hisn in Egypt.⁽²⁾ Unfortunately, the date of the find-spot as given by the excavators is open to serious question. At the time the first of four preliminary reports on Kom el Hisn appeared, Brunton wrote a short note on the date of the finds published. He concluded in no uncertain terms

⁽¹⁾ G. BRUNTON, *Qau and Badari I*, pls. XL, no. 11, LXIX, Group 5009 (Dyn. ix-x).

⁽²⁾ First season: A. HAMADA and SH. FARID, *ASAE* 46 (1947), 101-11, pl. XXXII (two and four cobras); second season: *ASAE* 46

(1947), 195-205, pl. LVII (three cobras). The site of Kom el Hisn is located a few kilometers west of the Delta about halfway between the Mediterranean and Cairo.

that the material contained in the first report was of the First Intermediate Period.⁽¹⁾ Brunton's judgement of First Intermediate Period material cannot be taken lightly. The excavators, however, seem to have ignored his remarks and have continued to assert that the finds from Kom el Hisn belong to the Second Intermediate Period and later.⁽²⁾

The Kom el Hisn cemetery evidently covers several periods and an unfortunate error has been made in assigning all material from the first three seasons' work to the Second Intermediate Period, an opinion which the excavators still adhere to in their fourth report.⁽³⁾ There are, however, objects from all seasons which are of the First Intermediate Period, particularly button seals and scarabs.⁽⁴⁾ Since only short preliminary reports have been published, it is at present impossible to distinguish separate tomb-groups and to use these objects for dating individual graves. It is hoped that the final publication will take into account the obvious earlier date for part of this cemetery.

In spite of the difficulties encountered in studying the remains from this site, we can safely date the cobras-on-*nb* ornament from Byblos to the First Intermediate Period for the following reasons: (1) exactly similar ornaments were discovered during the first two seasons at Kom el Hisn, (2) Brunton has shown that the finds of the first season are of the First Intermediate Period, and (3) the finds of the second season are of the same nature as those of the first.

2. Silver rings, no. 192 is the best preserved of three identical finger-rings. They are composed of two bands of metal, joined by thin wire bent into alternating loops, which are lightly sweated to the bands. A parallel for this filigree work in gold comes from PG/1266 at Ur, which is dated by Dr. Nissen to the latest phase of the pre-Sargonid period, about the time of Lugalanda.⁽⁵⁾

⁽¹⁾ G. BRUNTON, *ASAE* 46 (1947), 143-45.

⁽²⁾ The third and fourth seasons' reports are in *ASAE* 48 (1948), 299-308, and 50 (1950), 367-79.

⁽³⁾ *ASAE* 50 (1950), 367.

⁽⁴⁾ *ASAE* 46 (1947), pl. LX; 48 (1949), pl. X, nos. 16-18; 50 (1950), 370-71, pl. VII,

nos. 1-14.

⁽⁵⁾ L. WOOLLEY, *Ur Excavations* II, p. 172, pl. 138, no. U.12134, Grave PG/1266. It was noted as unusual to find three burials in one grave. The body in the middle was the richest: on the forehead there was a broad fillet of plain gold with dotted border, no. U.12126,

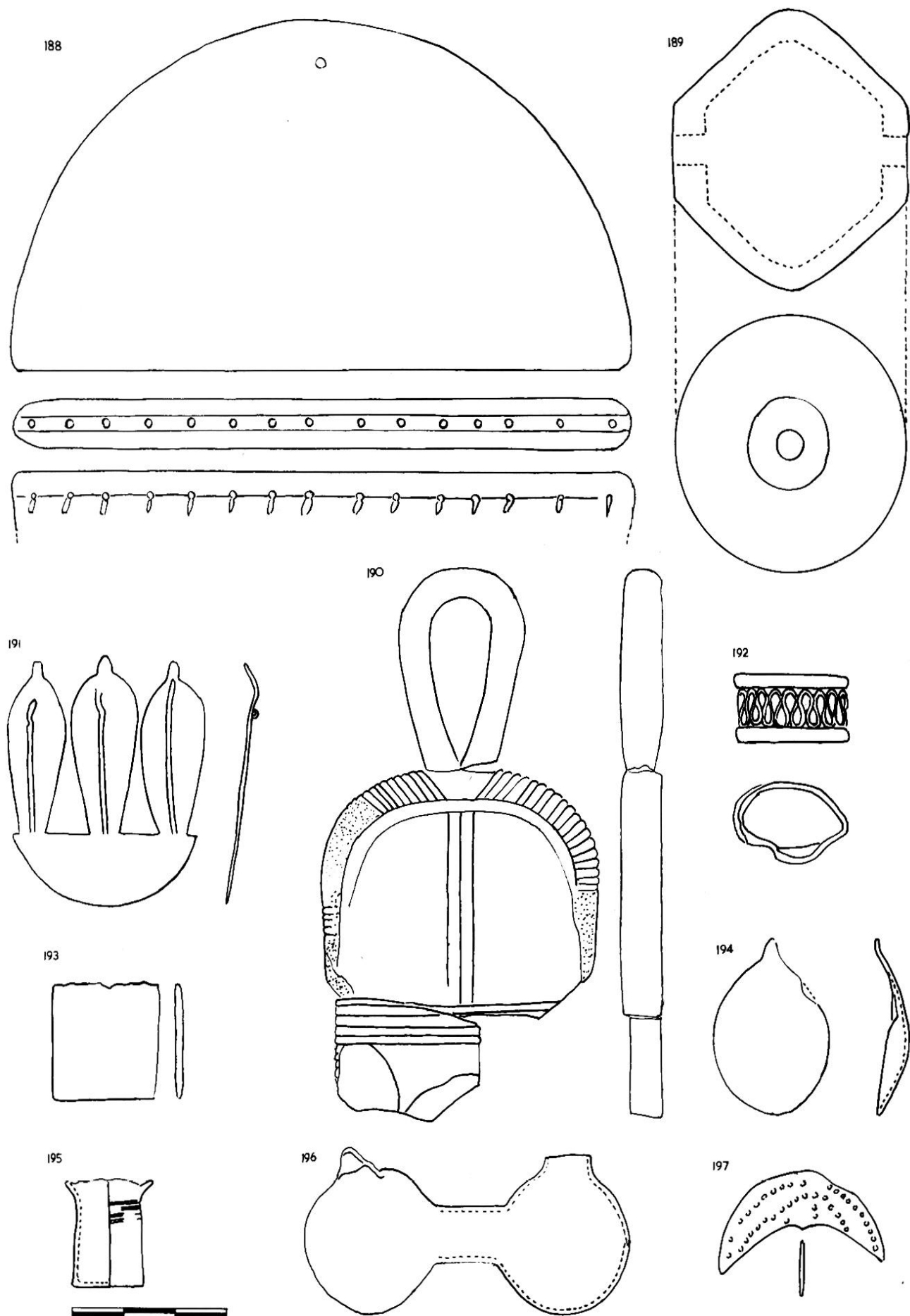


FIG. 7 — Endpiece and counterpoise of faience collar necklace, nos. 188-9.
Cf. Pl. XVI. Bone and metal objects, nos. 190-197. Scale 1 : 1

For other rings, see nos. 219-220 below and Montet nos. 416-426 (not republished here).

3. Varia, nos. 193-197. No. 193 is merely a slat of bronze broken at one end. No. 194 is a simple spoon or ladle hammered from sheet metal and having a tang for the insertion of a handle. No. 195 is either a small drinking cup or a ferrule; there are traces of spun thread wound below the rim. No. 196 is a twin globular vessel the two parts connected by a tube. We have not discovered any metal parallels, though specimens in pottery express the same idea, and Brunton stated that multiple vases are among the characteristics of ix-xth. dynasty graves.⁽¹⁾ No. 197 is a bronze crescent decorated with haphazard *repoussé* dots, without means of attachment to another object.

4. Bronze mirror, no. 203. While it is impossible to be dogmatic about dating Egyptian mirrors, No. 203 has its closest analogies to Egyptian examples from the Old Kingdom and First Intermediate Period, with near-perfect duplicates from the vith. to viiiith. dynasties.⁽²⁾ The circular shape and almost squared tang are much more common in this period, whereas the tang tends to be long and slender from Middle Kingdom times on. A similar mirror to no. 203 comes from a burial in Cemetery A at Kish (E. Mackay, *A Sumerian Palace and Cemetery 'A' at Kish* (Chicago, 1929) Burial 135).

5. Bronze and silver torques nos. 198-202, 204-206; spirals no. 224. There are over forty torques ranging in outer diameter between 18.3 and 12.7 cms; all are constructed in the same way, the metal bar is bent to shape by heating and hammering and the two ends are flattened and then curled. There is no decoration. Nos. 204-206 are made of silver in the

and by the side of the head two spiral gold wire hair-rings, no. U.12133. On the left was a gold filigree finger-ring. Dr. Nissen attributes this grave, like PG/1400, "to the latest phase of the pre-Sargonic period, about the time of Lugalanda. Both are in the upper layer of the early dynastic grave belt."

(¹) G. BRUNTON, *Qau and Badari II*, e.g.,

pl. XCI, no. 87R; cf. *ibid.*, I, p. 73.

(²) F. PETRIE, *Abydos II*, pl. XXII, no. 5 (Dyn. vi); G. BRUNTON, *Mostagedda*, pl. LXI, lower register, no. 18 (Dyn. vi); F. PETRIE, *Objects of Daily Use* (London, 1927), pl. XXVIII, no. 35 (Dyn. vii); *Mostagedda*, pl. LXVI, group 5116, no. 12 (Dyn. viii).

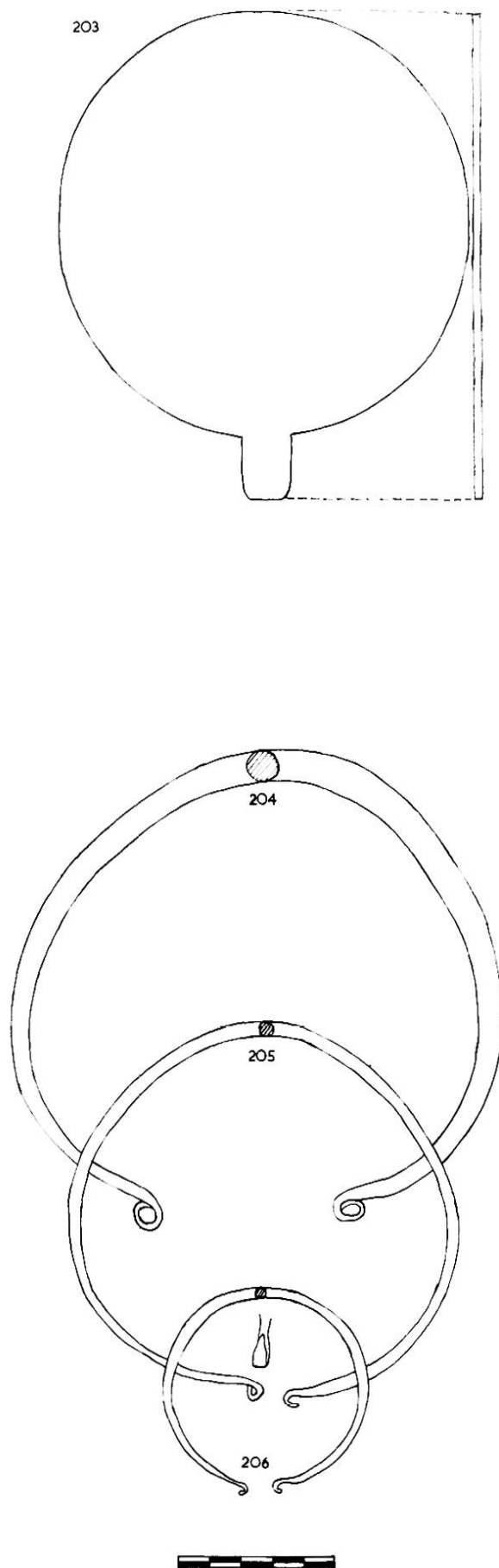
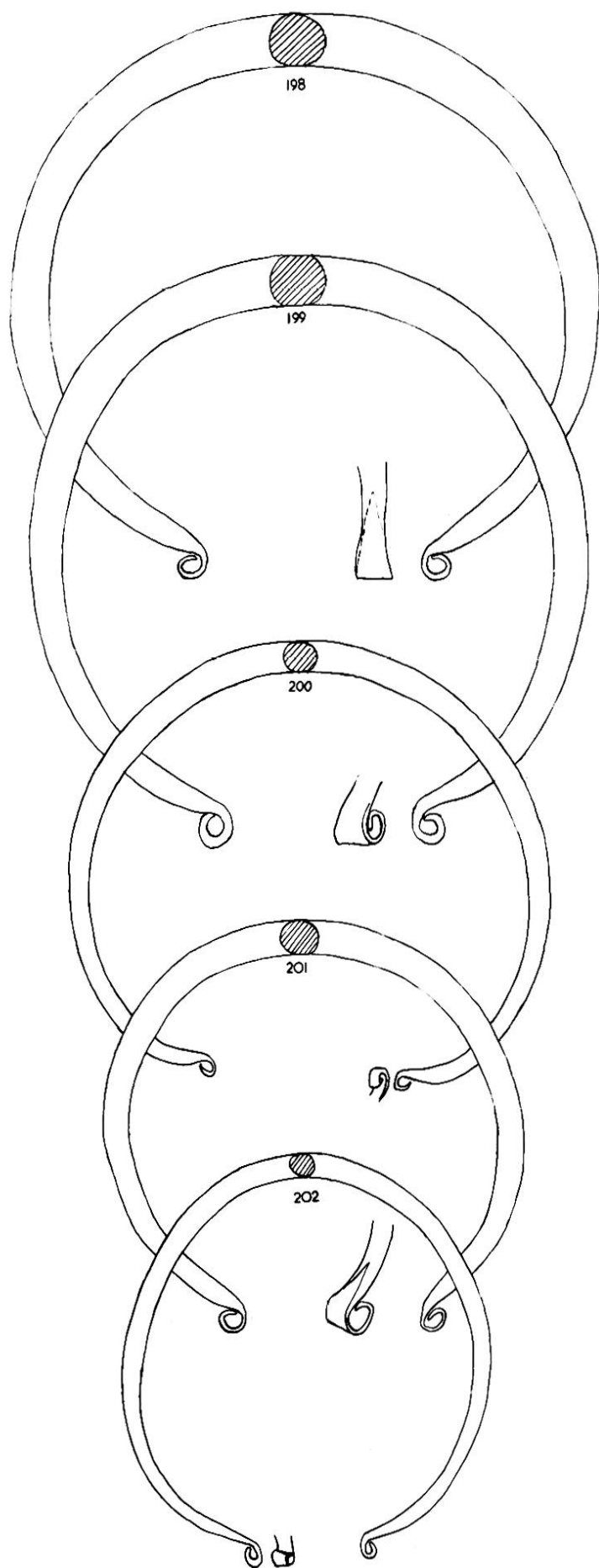


FIG. 8 -- Metal torques and mirror. Scale 1 : 2

same way but they are lighter in weight as befits the greater value of the metal. No. 206 must have belonged to a child.

Comparisons. Fired by the resemblance of the torques and associated ornaments from the Montet Jar to the same distinctive elements found in burials in his native Alsace, C.F.A. Schaeffer set out in 1929 to solve the problem of their origin and ten years later at Ras Shamra he came upon traces of his 'Torque Wearers'. Schaeffer has shown that both torques and pins at Byblos were made locally, which is an argument in his thesis that the torque wearers represent an intrusive ethnic element settled at Byblos and Ras Shamra at the beginning of the Middle Bronze Age who exploited local supplies of metal. He suggests that the descendants of these non-Semites set out by sea and ultimately found their way to the mining districts of Europe. He has also proved that the torques could be made of almost pure copper or of bronze containing a good proportion of tin, but as only two specimens have been subjected to analysis many more samples would be required to establish the relative frequency of use.⁽¹⁾

Though the find-spots of heavy bronze or copper torques appear to be geographically restricted to coastal sites or to places within easy reach of a port, this is not so for the slender silver torques, which are uncommon in the Montet Jar. One was found round the neck of a skeleton in PG/1400 at Ur and was noted at the time as an unusual feature. With it there were beads, a gold frog amulet, a cylinder seal and plain silver and copper bracelets, and the group is attributed by Dr. Nissen to the same date as the grave which contained the filigree ring.⁽²⁾

No actual torques were found at Antioch, but R. J. Braidwood has published a cache of six figurines in 'copper-base alloy', with added accessories in 'silver-rich alloy'; the males wear torques and the females have wire spirals hanging from their caps, which may explain the reason for the many spiraliform '*ressorts à boudin*', which are generally associated with

⁽¹⁾ C. F. A. SCHAEFFER, *Ugaritica* II (Paris, 1949), chap. II, « Analyses métallurgiques », p. 64. Another torque, analyzed as pure copper, comes from a hoard of metal objects found at Jezzine; cf. H. Seyrig, *Syria* 30 (1953), 38.

⁽²⁾ L. WOOLLEY, *Ur Excavations* II, pp. 175 ff., PG/1400, no. U.12701, Catalogue, p. 585. Like PG/1266, this grave is attributed to the last phase of the pre-Sargonic period. Cf. above, p. 206, note 5.

the 'torque wearers' (fig. 9, 224). Another point of interest on Figurine E is a fragment of silver, representing a fillet, decorated with *repoussé* dots.⁽¹⁾ The cache was found in a 'late G or early Phase H context' which is significant in relation to the sherds of Phase G, which included a small percentage of 'comb-decorated' wares characteristic on the one hand of the Intermediate Early Bronze-Middle Bronze Age in Palestine and akin on the other to the style of Beaker Folk pottery in Europe.⁽²⁾

Similar hoards of silver figurines, wearing gold torques, were found at Ras Shamra, and yet further south near the coast east of Sidon, another cache of metal included statuettes, torques, toggle-pins, and beads made of copper.⁽³⁾ Other figurines found at Megiddo, wearing silver torques, were attributed to Strata XIII-VII.⁽⁴⁾ At Abydos in Egypt a silver torque was found in a woman's grave; nearby at Ballas another belonged to a group which contained a scarab naming 'In son of Ib', and two more were recovered from Pan Graves at Mostagedda.⁽⁵⁾ In the Fayum an isolated grave contained part of a 'copper' torque with about two hundred spheroid beads of carnelian and amethyst.⁽⁶⁾ Further confirmation that torques were still being worn in Middle Kingdom times can be found in the hoard from the workmens' town at Kahun, where foreigners were employed in building the pyramid for Sesostri II in the nineteenth century B.C.⁽⁷⁾ Taking the torque from a pre-Sargonid grave at Ur as the earliest well-dated example, the use of these distinctive ornaments appears to extend over five centuries in the Western Asiatic sphere.

6. Silver and bronze vessels, nos. 207-209. The silver bowl, no. 207, is perfectly preserved and has a small stringhole in the rim. No. 209, now

(¹) R. J. and L. S. BRAIDWOOD, *Excavations in the Plain of Antioch I*, pp. 300-13.

(²) *Ibid.*, p. 296; cf. O. TUFNELL, *Lachish IV*, pp. 31, 171-75.

(³) C. F. A. SCHAEFFER, *Ugaritica II*, pls. XVII-XIX; H. SEYRIG, *Syria* 30 (1953), 24-50.

(⁴) G. LOUD, *Megiddo II* (Chicago, 1948), pls. 233, no. 5; 234, nos. 13-14; 235, no. 23.

(⁵) H. FRANKFORT, *JEA* 16 (1930), pl. XXXVII, p. 219, Tomb 1008; cf. his *Studies*

in the Early Pottery of the Near East II (London, 1927), pp. 149 ff.; J. E. QUIBELL, *Ballas*, p. 8, pl. LVIII, Q.188; G. BRUNTON, *Mostagedda*, p. 129, pls. LXXV, nos. 16, 18, LXXIV, nos. 3ab, ac.

(⁶) G. CATON-THOMPSON, *The Desert Fayum* (London, 1934), p. 140, pl. LXXXIV, no. 3.

(⁷) F. PETRIE, *Illahun, Kahun and Gurob* (London, 1889-90), p. 12, Group 9, pl. XIII, no. 18.

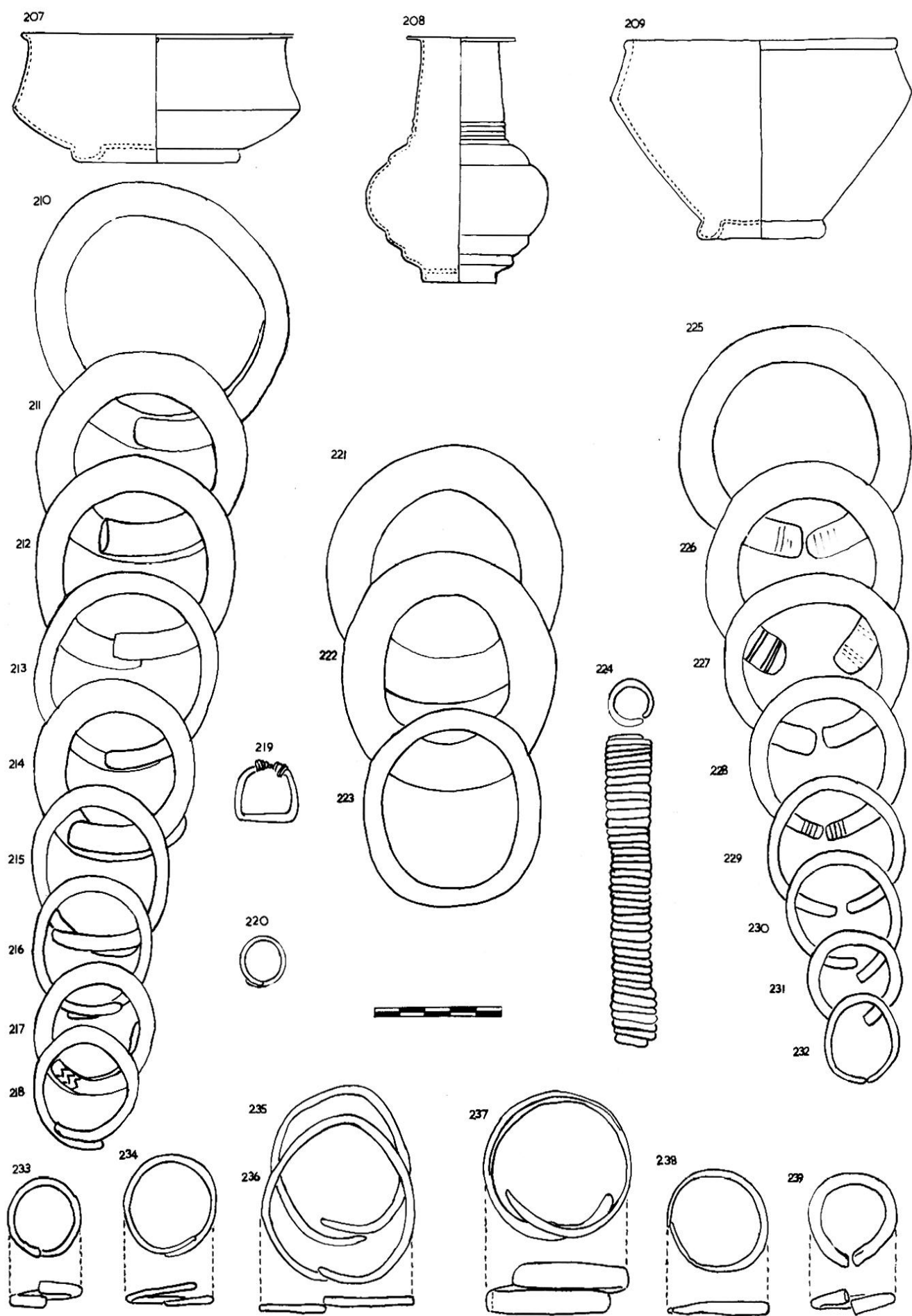


FIG. 9 Metal vessels and bangles. Scale 1 : 2

in the Louvre, is somewhat broken and corroded, but both are angular carinated bowls in which the diameter at the keel is greater than at the rim, and each one has the same kind of ring base. The attractive flask, no. 208, with a flat everted rim, undulations at the base of the tall neck and in the globular body, also has a pronounced ring base.

Comparisons. Considering these three pieces together, a local parallel for no. 207 in bronze could well come from the same workshop at Byblos, ⁽¹⁾ but nothing has been found there to match the flask, no. 208. It seems necessary to look much further afield for this type of vessel, and though there are no close comparisons, the form seems most at home among the "Luristan" metalwork of the third to first millennia. In particular, there is a lead and a silver vessel from Tepe Hissar III C and III B respectively, which show the same kind of rim and base, but without the undulations on the body. ⁽²⁾ According to Schaeffer, Hissar III B-C should date around 2200-2150 B.C. ⁽³⁾ Among features in common with the contents of the Montet Jar, it should be noted that both dot and circle as well as concentric circle designs occur in Hissar III C, ⁽⁴⁾ and there is moreover an alabaster bowl with a biconoid body and a slightly bevelled disc rim ⁽⁵⁾ which could be accepted as related to the angular carinated bowls with flat base, well-known on Palestinian sites. ⁽⁶⁾

Discussing the probable origins of the carinated bowls from Tell Beit Mersim G-F, Albright considered that they might have a good Mesopota-

⁽¹⁾ M. DUNAND, *Fouilles de Byblos I*, no. 2171 pp. 145 ff., pl. LXVI, diam. 0.085 m.

⁽²⁾ E. F. SCHMIDT, *Excavations at Tepe Hissar* (Philadelphia, 1937), pls. LVII, H.4014; LVIII, H.2380. We are grateful to Mr. R. P. S. Moorey for these and other references relating to flasks, mostly from unstratified contexts, and attributed to a first millennium date.

⁽³⁾ C. F. A. SCHAEFFER, *Stratigraphie comparée*, Tableau Synoptique VIII.

⁽⁴⁾ E. F. SCHMIDT, *Excavations at Tepe Hissar*, fig. 119 on p. 204, pl. XXXIII, figs. 128, 130 on p. 217.

⁽⁵⁾ *Ibid.*, fig. 125 on p. 213, H.3615.

⁽⁶⁾ The angular carinated pottery bowls

divide into two main groups; those covered with a thick red burnished slip and those finished with a cream slip lightly burnished. The first kind predominates at Tell Beit Mersim Strata G-F, and the second at Jericho, Khirbet Kufin and Gibeon. See W. F. ALBRIGHT, *AASOR* 12 (1932), pl. 41, no. 3; *AASOR* 13 (1933), pl. 22, nos. 26-27, 30-32; K. M. KENYON, *Excavations at Jericho I-II* (London, 1960-65), Bowl Classes B 1-7; R. H. SMITH, *Excavations in the Cemetery at Khirbet Kufin* (London, 1962), pls. XIII, no. 1; XVI, nos. 24, 26; J. B. PRITCHARD, *Bronze Age Cemetery at Gibeon* (Philadelphia, 1963), fig. 18, no. 1.

mian background, going back into the third millennium, and he quotes the Byblos bowls nos. 207 and 209 as likely prototypes for the pottery forms. ⁽¹⁾ The new drawings, however, show them to have a pronounced ring base, indicating a late stage in development. The Byblos bowls are therefore not the earliest in the series and in relation to similar pottery forms they are roughly equivalent to the end of Group 3 in the Courtyard Cemetery at 'Ajjul. ⁽²⁾ It is not possible to follow the implications of this statement in the present article, but it might suggest that an adjustment may eventually be necessary in the accepted dates for the early phases of the Middle Bronze Age.

7. Bangles Type nos. 210-228 represent the commonest forms of bangle in the deposit. They are solid throughout, round in section, with overlapping ends, ranging in outer diameter between 10 and 4 cms. The corrosion on most of them hides any decoration they may have had. Seven examples of type no. 221 are the heaviest bangles, with nos. 222-3 somewhat less in weight and diameter. Nos. 225-232 account for some thirteen examples with open ends, some of which have traces of decoration. Nos. 233-239 differ only from the first group in their fragility and the fact that the wire when hammered to shape was no longer round but flattened in section.

Comparisons. There is evidence to show that similar bangles were worn on the wrists as bracelets at Ras Shamra and at Mishrifé-Qatna, ⁽³⁾ but none to suggest that they were used as anklets at this time. Metal bangles are otherwise practically unknown in tomb-groups on the Syro-Palestinian littoral until the end of the Middle Bronze Age, and they did not become really common in south Palestine until the 10th.-9th. centuries B.C. ⁽⁴⁾ In the search for the ethnic connections of the torque wearers it may be rewarding to enquire which peoples wore bangles in the third millennium B.C.

Egypt can be dismissed as a possible source, for they are rare in ordinary burial groups. That they were not completely unknown, however, is sug-

⁽¹⁾ W. F. ALBRIGHT, *AASOR* 13 (1933), 68 ff.

⁽²⁾ O. TUFNELL, *Bull. Inst. Arch.* 3 (1962) fig. 11.

⁽³⁾ E. g., C. F. A. SCHAEFFER, *Stratigraphie*

comparée, p. 17, fig. 4; R. DU MESNIL DU BUISSON, *Le site archéologique de Mishrifé-Qatna* (Paris, 1935), p. 165.

⁽⁴⁾ O. TUFNELL, *Bull. Inst. Arch.* 1 (1958), 38.

gested by certain statues and bas-reliefs of high-born ladies of the Old Kingdom, who are represented wearing nearly a dozen rings up each lower arm. ⁽¹⁾ Queen Hetep-heres, the mother of Cheops, was provided with a set in her tomb ⁽²⁾ and a short-lived fashion for bracelets made of some perishable material faced with gold, distinguishes the vii-viiith. dynasties; ⁽³⁾ otherwise the endemic shortage of metal in the Nile Valley is enough to account for the absence of such ornaments.

An equal lack of metal may have prevented the fleece-wearing peoples of Sumer and their contemporaries at Mari from adopting the fashion, and bangles are not apparently represented on statues or inlays of the period. Silver bangles were occasionally found in graves dating from the time of Meskalamdug at Ur, and there are three recorded as contemporary with Lugalanda, one of which came from the torque-wearer's burial. With the early Akkadians, bronze gradually replaced silver for these ornaments, and by the late Akkadian and Neo-Sumerian (Ur III) periods no other metal was used. Taking all occurrences into account, it seems that men were wearing bangles more frequently than women, and contrary to Woolley's opinion the figures show a rise in proportion of these ornaments in male burials of the latest phases, ⁽⁴⁾ and single bangles were the rule.

With the rise to power of the Akkadian element in the population under Sargon and his successors, their traditions and preferences in personal attire spread out over the lands served by the two rivers. A hoard of jewelry from Brak including bracelets with overlapping ends, bicone, barrel and ball beads illustrates the trend, ⁽⁵⁾ and the changes in dress which accompanied the new ornaments are to be seen on statues and figurines, dated by various authorities around 2300-2100 B.C. ⁽⁶⁾ Naramsin, grandson

⁽¹⁾ W. S. SMITH, *History of Egyptian Sculpture and Painting in the Old Kingdom*. 2nd. ed. (Boston, 1949), pl. 4c, Neset; pls. 33-34, Nofret; pl. 43a, Khufuw-kaf's wife; Dyn. iii-iv.

⁽²⁾ G. REISNER and W. S. SMITH, *History of the Giza Necropolis II* (Boston, 1955), p. 43, fig. 44, pls. 36-38; Dyn. iv.

⁽³⁾ G. BRUNTON, *Qau and Badari I*, pp. 66, 73, pl. XLVIII (T. 1030, Dyn. vii-viii). Cf.

also *ASAE* 46 (1947), 199, for bracelets from Kom el Hisn.

⁽⁴⁾ L. WOOLLEY, *Ur Excavations II*, Tables on pp. 486-509, and Dr. Nissen's thesis where many "predynastic" graves become Akkadian, thus affecting Woolley's statement on p. 247.

⁽⁵⁾ M. E. L. MALLOWAN, *Iraq* 9 (1947), pl. XXXV.

⁽⁶⁾ *Ibid.*, p. 190.

of Sargon, the first ruler to be shown wearing bangles, shares this distinction with his rival the chief of the Gutî. ⁽¹⁾ When the balance of power had swung again to the south, Ibisin of the Third Dynasty of Ur had adopted the fashion and bracelets were shown on representations of gods, goddesses and commoners in the twenty-first century B.C., ⁽²⁾ though it does not seem that contemporary rulers of Lagash and Mari were affected by the change. ⁽³⁾ Without going more deeply into the subject, it is perhaps necessary to look north-east to places like Tepe Gawra, Tepe Giyan and to the Caspian in search of the metal users who could afford such luxuries. ⁽⁴⁾

It cannot have been shortage of metal which discouraged the peoples of Asia Minor from wearing bangles, yet Miss Goldman reports that only one complete metal bangle was found in Bronze Age contexts (EB III) at Tarsus, ⁽⁵⁾ and two other plain rings with overlapping ends came from pot burials at Alishar Hüyük. ⁽⁶⁾ They appear to be absent from Troy before the foundation of the Sixth Settlement, c. 1800-1300 B.C. ⁽⁷⁾

The conclusion is reached therefore that some court ladies of the Old Kingdom possessed sets of thick bangles to cover the lower arm, whereas in Sumer about the same time thin silver wire bangles were worn singly or in pairs by men and women, with the cheaper bronze replacing silver in the later phases of the cemetery. It will be noted that there are no silver bangles in the Montet Jar, and if it is agreed that they follow Akkadian

⁽¹⁾ N. C. DEBEVOISE, *JNES* 1 (1942), 76-105, figs. 2-3.

⁽²⁾ H. FRANKFORT, *Art and Architecture of the Ancient Orient* (Harmondsworth, Middlesex, 1954), pls. 56, 58c, 59B and 62.

⁽³⁾ J. B. PRITCHARD, *The Ancient Near East in Pictures* (Princeton, 1954), nos. 431, 433 and 435.

⁽⁴⁾ E. A. SPEISER, *Excavations at Tepe Gawra* I, p. 65, pl. XXXIII; p. 110: "With the exception of one bracelet from Stratum VIII and two from Stratum V, all the specimens of this type were unearthed in Stratum VI;" G. CONTENAU and R. GHIRSHMAN, *Fouilles de Tepe Giyan* (Paris, 1935), line drawings on pls. VIII-XXXV; cf. *Stratigraphie*

comparée, p. 465, ca. 2100 B.C. There are no bracelets in Level IV ending ca. 1700 B.C. T. J. ARNE, *Excavations at Shah Tepe* (Stockholm, 1945), pp. 298 ff., where most bangles were found in the oldest layer III.

⁽⁵⁾ H. GOLDMAN, *Tarsus* II (Princeton, 1956), Text, p. 287.

⁽⁶⁾ E. F. SCHMIDT, *The Alishar Hüyük, Seasons of 1928 and 1929* (Chicago, 1932), pp. 155, 157, fig. 198; H. VON DER OSTEN, *The Alishar Hüyük, Seasons of 1930-32. Part I* (Chicago, 1937), p. 146, fig. 146, and p. 153, fig. 155; *ibid.*, Part II (Chicago, 1937), p. 88, fig. 127, and p. 104, fig. 144.

⁽⁷⁾ C. W. BLEGEN, *Troy* III, Part 1, p. 22. Late Troy VI, 1800-1300 B.C.

fashion, then we should date the deposit no earlier than the end of the late Akkadian period.

8. Toggle-pins nos. 240-273. More than forty complete pins and many fragments were found in the jar. They can be divided into two main groups, in accordance with Mrs. Henschel-Simon's classification of "The 'Toggle-pins' in the Palestine Archaeological Museum". ⁽¹⁾ Nos. 240-242 belong to her first type, *Nail with semi-globular head*, containing (when she wrote) only one pin. Most of the Byblos pins belong to her small group, Type 2 *Club*, which, like the first, came from Megiddo. *Nail* and *Club* pins in our deposit have the thread-hole at about a third of the distance from the head, and it is either split or cleanly pierced. The average length of forty-five complete pins is 15.8 cms.

Nos. 240-250 are undecorated and the remaining illustrations on fig. 10 show how the longer pins tend to have fewer incised bands below the head and a less elaborate pattern round the thread-hole. Two pins are of exceptional interest because they are unfinished; no. 269 is in the state in which it left the mould, with duct still intact, though the thread-hole had been pierced; no. 270 on the other hand had been cleared of surplus metal, leaving the thread-hole solid. The state of these pins and of other metal pieces found with them was accepted by Schaeffer as evidence that they were local products. ⁽²⁾ Their condition also suggests the possibility that the jar contained a jeweller's stock-in-trade of damaged pieces, rather than a deposit of votive offerings worthy of the great Lady of Byblos. However, the same sort of explanation would have to apply to the contents of other jars found in the vicinity by Dunand, which could be metal workers' hoards in an industrial quarter of the temple precincts. ⁽³⁾

Comparisons. The development and diffusion of the 'toggle-pin' is too big a subject to discuss within these pages. It will only be possible to place the Byblos pins in relation to the series and indicate some of the closest parallels. The longest known of these dress pins—and they are probably the earliest—come from a site near Dera'a. Due north lies Mishrifé-Qatna

⁽¹⁾ E. HENSCHEL-SIMON, *QDAP* 6 (1938), 169-209.

⁽³⁾ M. DUNAND, *Fouilles de Byblos* I-II, *passim*.

⁽²⁾ C. F. A. SCHAEFFER, *Ugaritica* II, p. 64.

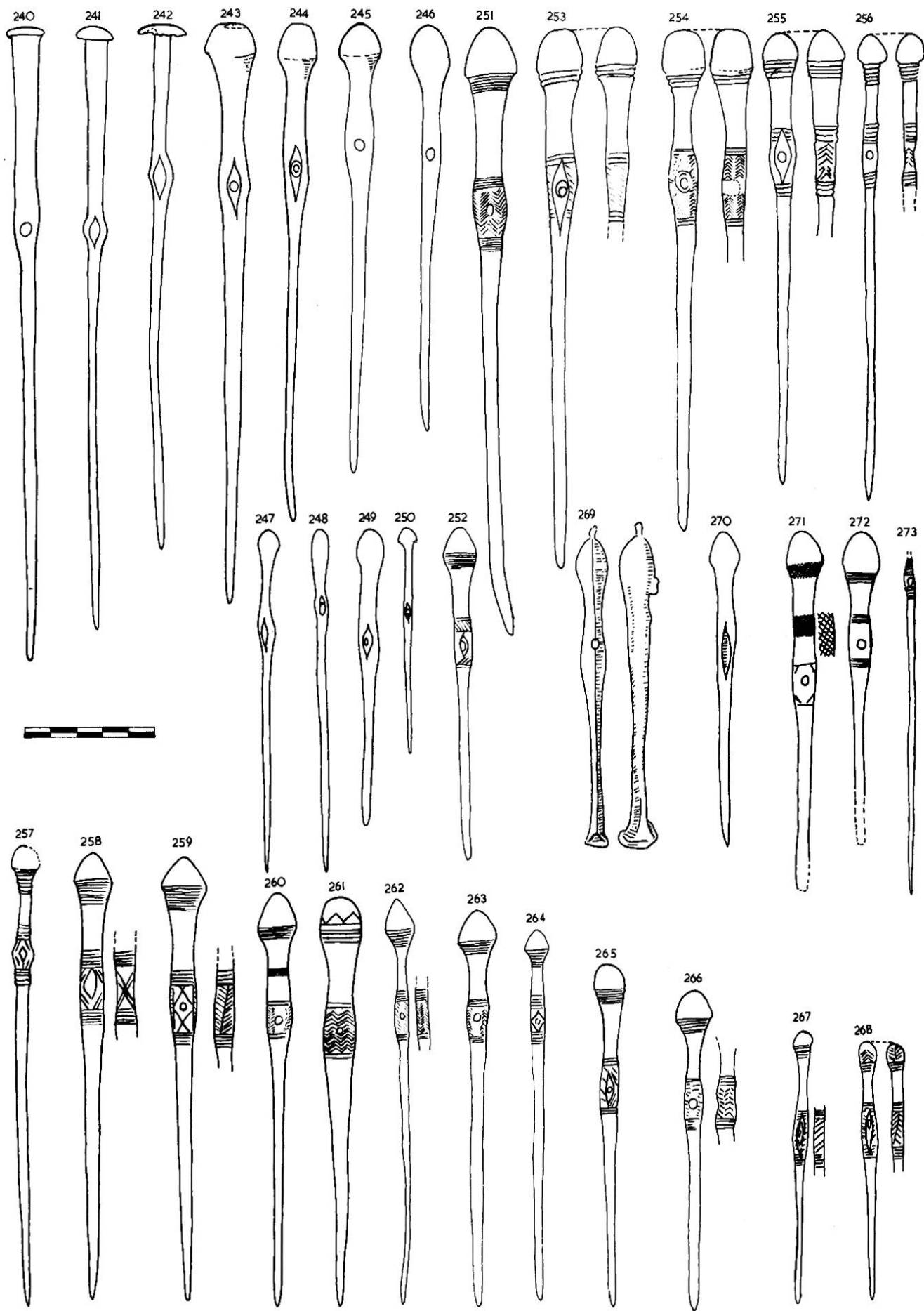


FIG. 10 — Metal toggle-pins. Scale 1 : 2

where over forty pins were found in Tomb IV. There is another concentration acquired at Homs, and other stout pins from Tell As, all of them sites on the north-south inland route. The pins range in length between 46-16 cms. ⁽¹⁾ Various methods of use are beautifully illustrated on shell inlay from Mari (p. 204), which is strikingly confirmed by the positions of the pins in Tomb IV at Mishrifé. They are also to be found at Ur and Kish. ⁽²⁾ If length is a guide to chronological position in the series, the pins from Ras Shamra and Byblos should follow between 22-9 cms., with the large group of pins from Palestine tailing off to no more than 3 cms. in length. ⁽³⁾

The analysis of metals already undertaken on Schaeffer's behalf suggests that there is a relationship between the length of the pin and the amount of tin in the composition of the metal, graded between the longest pin in the sample from Ras Shamra at 20.5 cms. with less than 3% of tin, down to the shortest at 13.8 cms. containing over 18%. A high proportion of tin was also found in the club-headed pin from the Montet Jar analysed on the same occasion. ⁽⁴⁾ Many more analyses would be needed to make use of this trend, which may only be valid for particular areas. Cf. for instance the tabular analyses for samples of the late third millennium from Geoy Tepe, which include two eyelet pins. ⁽⁵⁾

It appears that the main concentration of toggle-pins occurs within the northern arc of the Fertile Crescent, and the list of published comparisons is augmented by several pins from the Plain of Carchemish in the

⁽¹⁾ North of Mzerib, near Dera'a; the group is in the museum of the American University of Beirut (nos. 2904, 3475, 3613 and 3426) and we are grateful to Professor Dimitri Baramki for permission to see them. Mishrifé-Qatna, Tomb IV: a selection now in the reserve collections of the Musée du Louvre, made available by M. André Parrot. Special thanks go to Mlle L. Laroche for drawing attention to the resemblance of the pins with bent heads to those figured on the Mari inlay. See the tomb plan in R. DU MESNIL DU BUISSON, *Le site archéologique de Mishrifé-Qatna*, p. 153, pl. XLII. Acquired at Homs: Louvre AO 13074,

13073. Acquired at Tell As: A.U.B. 34126; cf. *Stratigraphie comparée*, p. 120, fig. 104, no. 18, Tomb 1.

⁽²⁾ L. WOOLLEY, *Ur Excavations* II, p. 247.

⁽³⁾ O. TUFNELL, *Lachish* IV, pl. 24, nos. 19, 23, 28 and pp. 79 ff.

⁽⁴⁾ C. F. A. SCHAEFFER, *Ugaritica* II, fig. 22 on p. 58, and p. 64; also *Stratigraphie comparée*, p. 605, fig. 58 B.

⁽⁵⁾ T. BURTON-BROWNS, *Excavations in Azarbaijan, 1948* (London, 1951), p. 193, eyelet pin 1213, length 7.5 cms., and 1227, length 9.2 cm., fig. 29 and p. 123, from Period D = First Intermediate Period in Egypt.

reserve collections of the British Museum. ⁽¹⁾ Shorter pins were a feature of Middle Bronze Age tomb-groups in Palestine, but they rarely penetrated to the warm climate of the Nile Valley. It would seem that the so-called toggle-pin evolved gradually to meet changes in the materials and styles of dress, and they were embellished according to the extent of local wealth and fashion; they came into prominence about the middle of the third millennium and lasted in use among a section of the population living in the Fertile Crescent, and especially on the Syro-Palestinian littoral for about a thousand years.

SOME COMPARISONS FOR THE TOGGLE-PINS IN THE MONTET JAR

<i>Type</i>	<i>Site</i>	<i>Publication</i>	<i>Length</i> cms.
NAIL	Chagar Bazar 3	<i>Iraq</i> IV (1937), 132 fig. 12,5.	15
	Chagar Bazar 1	<i>Iraq</i> IX (1947), 188, pl. XLI, 2, 3	13-13.5
	Chagar Bazar 1 late	— — 4	11.5
	Vounous, Cyprus,	<i>Antiquity</i> (1940), pl. ii, p. 205	14.2
	Tomb 84	<i>cf. Strat. Comp.</i> p. 341	
CLUB	Chagar Bazar 2, 3, 5,	<i>Iraq</i> IV (1937), 132, fig. 12,1	18
	Ras Shamra	<i>Ugaritica</i> II, p. 66, fig. 22 (D) with fig. 19 (8)	17.5
	Ras Shamra	<i>Ugaritica</i> II, p. 55, fig. 23 A on p. 6- (with scarab)	15.5
CONE	Tell As, Tomb 1	<i>Syria</i> XIII (1932), pl. XXXIX, 6	15
	Jezzine near Sidon	<i>Syria</i> XXX (1953), p. 50, pl. XII, 2, 3,	18,21
	Ras Shamra	<i>Ugaritica</i> II, p. 66, fig. 19 (8) with fig. 22 (D)	14
	Megiddo, Tomb 1014	<i>Megiddo Tombs</i> , fig. 174.2 = pl. 102, 9	12.4
		fig. 174.3 = pl. 102.10	14.3
	Syros	C. Zervos, <i>L'Art des Cyclades</i> , p. 196, fig. 260	10.2

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VII. — Conclusions.

A. *Contacts with Egypt.* An attempt to assess the absolute date of the Montet Jar and its contents is necessarily based on contacts with Egypt, for none of the other far-flung parallels offered in this study can provide

⁽¹⁾ Department of Western Asiatic Antiquities.

anything more certain than an attribution to the end of the third or the beginning of the second millennium. But Egyptian chronology at that same period is by no means fixed and the problems of succession remain to be solved in the disturbed centuries following the collapse of the Old Kingdom around 2181 B.C., within the so-called First Intermediate Period comprising the Seventh to Tenth Dynasties.

In contrast to the close relationship which Byblos enjoyed with Egyptian kings during the Old Kingdom, no royal name is found there—or in Syria and Palestine as a whole—between those of Phiops II and Sesostri I, though there is a Byblite seal bearing the name Sehetepibre, thought to be inscribed for the second king of this name, a ruler of the Thirteenth Dynasty and not for the father of Sesostri I. ⁽¹⁾ There is nothing in the Montet Jar to fill the gap, for the two small pieces inscribed with Egyptian hieroglyphs seem to date from the Old Kingdom.

The most striking feature of the First Intermediate Period in Egypt is the so-called button-seal, introduced in the Sixth and extinct by the end of the Eighth Dynasty, lasting according to modern chronology less than a century in all. There are but few reminders in the jar of these seals, and certain types of beads contemporary with them and ending in the Ninth Dynasty are missing from the contents. The omissions suggest that the jar cannot have been buried much before that time, say about 2130 B. C.

The instruction of Achthoes III to his son and heir mentions the presence of Asiatics in the Delta during the Tenth Dynasty, when this Heracleopolitan had helped to free the eastern provinces of nomad intruders and had strengthened the frontier defences. With improved conditions trade was resumed through the ports of the western Delta. ⁽²⁾ Sea-borne trade during the Tenth-Eleventh Dynasties would have by-passed the dangerous land routes still in control of the Asiatics or Amu, as they are called by Achthoes, and would account for the fact that there are no indisputable objects of the time in Asia, south of ports such as Byblos.

⁽¹⁾ G. POSENER, in *Cambridge Ancient History*. Rev. ed., vol. 1, chap. XXI (1964) p. 3, note 4.

⁽²⁾ *Ibid.*, p. 4.

With the rise to power of the Theban Nebhepetre Mentuhotpe II crowned by his reunification of Egypt about 2040 B.C., there is some indication that military operations took place against the peoples of the east and that there were also more peaceful contacts. The most significant of these is a stela of Henenu, an official also known from a graffito in the Wadi Hammamat. ⁽¹⁾ The stela, one of four in his tomb at Deir el-Bahri, preserves in the badly broken bottom line the words *Htyw n 'š*, and a reference to the cutting down of 'š trees. The expression "Terrace of 'Cedar'" must certainly refer to the Lebanese mountains, ⁽²⁾ and may throw light on other more ambiguous texts of Nebhepetre's reign, which mention the *Sttyw* ⁽³⁾ and 'š *m.w*, ⁽⁴⁾ two words which refer to 'Asiatics' in general.

About twenty years after Mentuhotpe's death, the Beni Hassan nomarch Khnumhotpe I, who ruled there in the reign of Ammenemes I notes that he and his king used a flotilla of 20 ships made of Asiatic wood in action against his enemies. ⁽⁵⁾ Though the usurper Ammenemes had Theban connections and built the Wall of the Ruler (a line of fortresses) to keep the Asiatics out of the Delta, ⁽⁶⁾ he appears to have continued the trade in Syrian timber, unless the actual import of the wood took place in the Eleventh Dynasty. ⁽⁷⁾

The *Tale of Sinuhe* preserves much of interest to our purpose for the reign of Sesostri I. Sinuhe at least intended to go to Byblos, found other Egyptian residents in Palestine, met regular couriers who went back and forth between Egypt and Syria and brought *Sttyw*-Asiatics back with him

⁽¹⁾ W. C. HAYES, *JEA* 35 (1949), pp. 43 ff.

⁽²⁾ While 'š is not specifically "cedar", it is definitely a wood imported from the Lebanon; cf. A. H. GARDINER, *Ancient Egyptian Onomastica* (Oxford, 1947), I, p. 8, note 1.

⁽³⁾ Cf. T. SÄVE-SÖDERBERGH, *Ägypten und Nubien* (Lund, 1941), p. 54; J. H. BREASTED, *Ancient Records* (Chicago, 1906), I, sec. 423H.

⁽⁴⁾ Cf. J. CLÈRE and J. VANDIER, *Textes de la première période intermédiaire et de la xième*

dynastie (*Bibliotheca Aegyptiaca*, vol. 10; Brussels, 1948), p. 37, no. 28 *gamma*.

⁽⁵⁾ P. E. NEWBERRY, *Beni Hassan I* (London, 1893), pl. XLIV.

⁽⁶⁾ The "Wall of the Prince" is known only from allusions in the *Prophecy of Neferty* and *Sinuhe*; cf. G. POSENER, in S. DONADONI (ed.), *Le fonti indirette della storia egiziana* (Rome, 1963), p. 15.

⁽⁷⁾ G. POSENER, in *Cambridge Ancient History*. Rev. ed., Vol. 1, chap. XXI (1964), p. 6.

when he returned to Egypt. ⁽¹⁾ For the first time, scarabs bearing a royal name were distributed abroad, though among those naming Sesostri I, none are in stratified deposits and only one is found in a tomb-group. ⁽²⁾

Peaceful contact continued during the reign of Ammenemes II, when livestock was imported from Asia, and the practice may have gone on in the reign of his successor Sesostri II. ⁽³⁾ Judging from the pottery found in the workmens' town of Kahun, his pyramid was built with the aid of Byblite craftsmen, ⁽⁴⁾ and it was during his reign that the famous visit of the Amu chieftain Ibsha took place. ⁽⁵⁾ Conversely, scarabs of Sesostri II may have been found at Gaza, and possibly at Megiddo. ⁽⁶⁾

Egypto-Syrian relations are thus seen to have existed almost throughout the whole period of importance to the present study, and they need not be pursued further though they became even closer in the latter half of the Twelfth Dynasty.

The next point at issue is to relate the rich contents of the jar to the historical framework outlined above, and to decide which are the latest things in the jar and when the whole collection was buried. Taking the items in historical order, most of the beads have Old Kingdom relations, like the ivory label no. 89, the finest ape no. 105, and the faience necklace on pl. XVI. These things may have come from the site of the Old Kingdom temple below, destroyed according to recent opinion between 2400-2300 B.C., though this date should now be brought down to suit the new chronology by at least a century. The lack of button-seals in the jar and the presence of scarabs with Ninth-Tenth dynasty connections suggests a date in the latter part of the First Intermediate Period, and there are other

⁽¹⁾ Translated by J. A. WILSON, in J. B. PRITCHARD (ed.), *Ancient Near Eastern Texts Relating to the Old Testament* (Princeton, 1950), pp. 18 ff. For a discussion of the historical background, see G. POSENER, *Littérature et politique dans l'Égypte de la XII^{ème} dynastie* (Paris, 1956), chap. III.

⁽²⁾ See above, p. 189, note 1, and W. A. WARD, *Orientalia* 30 (1961), pp. 38 ff.

⁽³⁾ G. POSENER, in *Cambridge Ancient History*. Rev. ed., vol. 1, chap. XXI (1964), p. 13.

⁽⁴⁾ C. F. A. SCHAEFFER, *Stratigraphie comparée*, fig. 53, nos. 13-14, 17.

⁽⁵⁾ P. E. NEWBERRY, *Beni Hassan I*, pls. XXX-XXXI.

⁽⁶⁾ See above, p. 189, note 1.

pieces besides for which that date is necessary, the gold female head no. 87, the ibis amulet no. 88 and the seal no. 101.

The Harpocrates figure no. 102 is a significant item for two of the comparisons for it from Egypt bear good Eleventh Dynasty names. Moreover, they are surrounded with continuous spiral borders, a stage of development which is unrepresented in the jar; the nearest attempt is the spiral design on the base of seal no. 100, appropriately placed in the First Intermediate Period. The conclusion to be drawn from the two stamp-seals in the jar is that both are slightly earlier than the Eleventh Dynasty parallels. The bronze ornament no. 198 and the mirror no. 203 are equally well established in a pre-Twelfth Dynasty context, and there is nothing among the pendants and figurines to suggest a date in the Middle Kingdom.

The first century of the Twelfth Dynasty is poorly represented by archaeological remains in Egypt itself, which makes it uncertain whether or not the contents of the jar should extend into the second millennium. It seems unlikely because there is no amethyst in the jar, which does appear with burials of the reign of Mentuhotpe II, and inscriptions in the Eastern Desert confirm that the stone was being mined by officials of his successor Mentuhotpe IV. ⁽¹⁾

At first glance, the designs on many of the scarabs in Group 2 and also the concentric circles of Group 4 resemble those which are commonly attributed on style to the Middle Kingdom or even the Second Intermediate Period. But a closer look at the well-spaced circles and the careful style of the back and sides makes it clear that the resemblance is superficial. The conclusion on this point seems to be that there were two very similar trends in decorative motifs, in which scrolls played an important part, and allied to the use of concentric circles. The earlier phase was suspected by Brunton in a passage quoted above, ⁽²⁾ and the second seems to coincide with the reign of Auserre Apophis, whose name sometimes takes an equal place alongside a Z-scroll. ⁽³⁾

⁽¹⁾ W. C. HAYES, in *Cambridge Ancient History*. Rev. ed., vol. 1, chap. xx (1961), p. 32.

⁽²⁾ See above, p. 184, note 3.

⁽³⁾ See, e.g., P. E. NEWBERRY, *Scarabs*, pl. XXIII, no. 35.

Any other solution or an attempt to bring the scarabs of Groups 2 and 4 down to the Second Intermediate Period would mean that the jar itself, still mostly Early Bronze Age in character would have remained intact for several centuries before it was filled with a thousand objects, otherwise of a homogeneous nature. Surely in that event something of a later date would have found its way into the jar.

On the evidence brought forward in this study, it seems probable that the Montet Jar included a miscellaneous collection of ornaments and utensils mostly acquired from Egypt through trade, barter, booty or as personal souvenirs in the last half of the twenty-second or the first part of the twenty-first century B.C., say broadly speaking between 2130 and 2040 B.C. Though the connections with Egypt were noted in M. Montet's report, whose opinion on the date of the deposit was justified at that time, those with Mesopotamia have come as a surprise.

B. Western Asiatic Jewelry. The relationship with Mesopotamia is centred on the metal-worker's art. The fine granulation on the medallion, no. 85, is an early example of the style, beginning in the latest phases of the Ur cemeteries and reappearing at intervals throughout the Eastern Mediterranean and Western Asiatic spheres. This special technique must have been developed by a guild of craftsmen in Sumer or elsewhere, who went to the courts of the ancient east moving from place to place according to the balance of power, and adapting their skill to the tastes and traditions of their clients. The art cannot be localized in any one place, but it has continued to reappear at intervals throughout the centuries almost up to the present day.

The large stone and most of the metal beads which cannot be matched in Egypt, appear to follow Sumerian tradition, with carnelian, silver, bronze and copper replacing gold and lapis lazuli. Among them, the faceted silver beads range only in the earlier phases of ED III, and other early contacts exist in the shape of a silver torque and filigree ring, attributed in Dr. Nissen's recent re-appraisal of the stratigraphy of the cemeteries of Ur to the latest phase of the pre-Sargonid period; in fact, the comparisons established with objects in the Byblos jar cover the whole period of Early Dynastic III.

It seems likely that the people who wore metal bangles in the third millennium came to Byblos from the east. These ornaments were not popular with ordinary Egyptians at any time in their history, and it was late in the second millennium before they became fashionable in Asia Minor. The early Sumerians are shown on their monuments without ornaments of any kind, but thin gold and silver bangles were found in pre-Sargonic graves at Ur. About the time of Sargon of Akkad, bronze replaced the more expensive metals, and it is significant that on the victory stele of his grandson, Narim-Sin, the king is shown wearing bangles, and the same detail appears on a similar monument commemorating the chief of the Gutis, who eventually overcame the Akkadian empire. These first royal personages to wear bangles were followed—in defiance of Sumerian tradition—by Ibbi-Sin of the Third Dynasty of Ur and his contemporaries.

C. *Syro-Palestinian elements*. The two ends of the Fertile Crescent have each contributed a quota to the contents of the Montet Jar. It remains to be seen which elements derive from the east Mediterranean coast. Metal torques, or representations of them on statuettes are to be found at many sites from Antioch and Ras Shamra to Tell el 'Ajjul, with an extension into Middle Kingdom Egypt. They seem to be worn by men, but the spiral ornaments, like no. 224, which go with them, hang from the women's caps, judging solely from the Antioch cache. In the same find, a diadem with dotted border was reproduced in miniature. This punched dot decoration on thin metal provides another link between Early Dynastic graves at Ur (p. 206) and Qau in Egypt; the diadem in the Ninth Dynasty grave circled a woman's brow and is exactly matched by fragments in the jar. Besides the complete diadem, no. 84, there were at least ten others. They figure therefore with the items of dress normally foreign to the Egyptian and Sumerian sphere.

The use of pins to fasten a shawl or toga-like garment is common to certain peoples within a broad band of territory between the Caspian and Aegean Seas in the late third and early second millennia. Their length and strength was dependent not only on available supplies of metal, but also on the dress materials in use, ranging from leather or felt as at Mari on the Euphrates to linen or palm as at Jericho in the Jordan Valley. A full

inquiry into the history of these pins, surely allied to a particular type of dress, could not fail to be rewarding in relation to the ethnic movements of the past.

D. *Links with Asia Minor and the Aegean.* In an earlier section of this study it was noted that concentric circles were by far the most popular design on scarabs and domed seals, a trend which is only faintly reflected in Egypt during the early Middle Kingdom, though it recurs in the Second Intermediate Period. The design was, however, established in Anatolia in the seventh millennium where it had a long local history; it was at home in Troy III at exactly the period of our deposit (ca. 2200-2050 B.C.); it is to be seen on the Greek mainland at the end of the Early Helladic Period, and it formed the dominant decorative motif on pottery of the Early Cycladic age, notably on the island of Syros, and it occurs on Cretan seals. The link with Syros is strengthened by the presence of a cone-headed togglepin. The cruciform patterns on the largest scarabs with the most elaborate back and sides are early examples of a design with a long history in Egypt, for which a derivation from Asia Minor has been proposed.

E. *Summary* Taking all evidence into account, our date for the Montet Jar and its contents would fall between 2130 B.C. (beginning of the Tenth Dynasty) and the reunification of Egypt under Mentuhotpe II, ca. 2040 B.C. Though there is jewellery in the jar which compares with rings, torques and beads in Early Dynastic III graves at Ur, they may have survived for their metal value. It would seem preferable to place the Montet Jar no earlier than the reign of Naramsin, 2291-2255 B.C. (Saggs). However, there is nothing to preclude a date for the deposit during the Third Dynasty of Ur, when Byblos is known to have maintained relations with the kings of this dynasty. ⁽²⁾

⁽²⁾ Cf. *AFO* 19 (1959-60), pp. 120-22, where E. SOLLBERGER studies a text of the Drehem archives listing, among other rulers, "Ibdādi, the *Ensi* of Byblos." On this reading of the name, see W. F. ALBRIGHT, *BASOR* 163 (1961), 45, note 44. As Sollberger notes, this and its

parallel text are important in that this is the earliest reference to Byblos in cuneiform sources. The title *Ensi* is used in Sumerian texts of the period for independent rulers as well as those who were actually part of the empire of the Third Dynasty of Ur; cf. W. HALLO,

In the detailed study of the three cylinder seals which follows, Prof. Edith Porada has assembled parallels for them which range from the end of the third millennium to the nineteenth century B.C. It may well be that the dates suggested by the Egyptian and Mesopotamian contents of the jar will help to fix the date of the cylinder seals in the earlier part of this period.

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EXPLANATION OF FIGURES 2 TO 10

List of Abbreviations

<i>Ballas</i>	J. E. QUIBELL, <i>Ballas</i> (London, 1895).
<i>BDS</i>	F. PETRIE, <i>Buttons and Design Scarabs</i> (London, 1925).
<i>Bethpelet I</i>	F. PETRIE, <i>Bethpelet I</i> (London, 1930).
<i>Diospolis Parva</i>	F. PETRIE, <i>Diospolis Parva</i> (London, 1901).
<i>El Kab</i>	J. E. QUIBELL, <i>El Kab</i> (London, 1898).
<i>Gizeh and Rifeh</i>	F. PETRIE, <i>Gizeh and Rifeh</i> (London, 1907).
<i>Harageh</i>	R. ENGELBACH, <i>Harageh</i> (London, 1923).
<i>Kahun, Gurob, Hawara</i>	F. PETRIE, <i>Kahun, Gurob and Hawara</i> (London, 1891).
<i>Matmar</i>	G. BRUNTON, <i>Matmar</i> (London, 1948).
<i>Montet</i>	P. MONTET, <i>Byblos et l'Égypte</i> (Paris, 1928).
<i>Mostagedda</i>	G. BRUNTON, <i>Mostagedda</i> (London, 1937).
<i>PSC</i>	F. PETRIE, <i>Scarabs and Cylinders</i> (London, 1917).
<i>Qau I, III</i>	G. BRUNTON, <i>Qau and Badari</i> . 3 vol. (London, 1927-28).
<i>Sedment II</i>	F. PETRIE and G. BRUNTON, <i>Sedment II</i> (London, 1928).
<i>Strat. comp.</i>	C. F. A. SCHAEFFER, <i>Stratigraphie comparée et chronologie de l'asie occidentale</i> (London, 1948).

Fig. 2 (Scale 1 : 1)

Unless otherwise stated, the seals are made of white steatite, and all are pierced to be strung on thread or wire. Abbreviations : B. = Beyrouth; LAO = Louvre, Antiquités Orientales; NN = no number; Matouk = private collection; NP = not published.

Early Mesopotamian Royal Titles (New Haven, 1957), pp. 45-46. The major value of this text to the present study is its verification of ties between Byblos and lower Mesopotamia at approximately the suggested date for the

Montet Jar. Ibdâdi of Byblos would have been a contemporary of the XIth or early XIIth dynasty, depending on which chronology is used.

Fig. 2 (continued)

NUMBER	DESCRIPTION	REFERENCES	MONTET	MUSEUM NUMBER
<i>Group 1. Linear</i>				
1	Segmented design	<i>Mostagedda</i> LX : 61 T. 5006 Dyn. x-xi <i>Harageh</i> XXI : 110, p. 20 T. 660 Dyn. xi-xvi	476	B.16.454
	Man with shields (?)	<i>Qau I</i> XXXIII : 167 T. 1680 Dyn. viii <i>Qau I</i> XXXIII : 169 T. 3428 Dyn. ix = <i>BDS</i> V; 368 'viiiith. on style' Matouk CC II 4	450	B.16.514
3	Three-lotus design on double <i>nb</i> . Side cut à <i>jour</i>	<i>Qau I</i> XXXIII : 176 T. 1735 Dyn. ix = <i>BDS</i> V : 404 'xth. on style'	476 bis	B.16.450 bis
4	Segmented design		482	B.16.472
5	Ibexes, <i>tête-bêche</i>	<i>BDS</i> XIV. 875, p. 24 Dyn. xii For back, see <i>PSC</i> LXXI, Z. 90 Dyn. x	451	LAO 9097
6	Segmented design Frog back	<i>Qau I</i> XLV frog with design of 4 ibexes, T. 3748 <i>Sedment II</i> LVII : 6, <i>I</i> p. 32 T. 2132 Dyn. ix-x	448	B.16.456
7	Scarab design. Frog back		449	B.16.455
8	Segmented design Lentoid back	<i>BDS</i> V : 340 — <i>Qau</i> <i>I</i> : NP T. 7887 Dyn. vii-viii	432	B.16.516
<i>Group 2. Z-S-C-scrolls</i>				
9	Z-scroll	<i>BDS</i> IV : 265 Abydos; <i>El Kab</i> XX : 20 Dyn. xii	NN	B.16.495
10	S-scroll ending in buds	<i>BDS</i> VIII : 175-6 Dyn. xii? <i>Mostagedda</i> LXIX : 13 T. 722 2nd. Int.?	467	B.16.473
11	Z-scroll		NN	B.16.510
12	Z-scroll between lines		NN	B.16.511

Fig. 2 (continued)

NUMBER	DESCRIPTION	REFERENCE	MONTET	MUSEUM NUMBER
13	C-scroll ending in buds. side cut <i>à jour</i>		475	B.16.467
14	Z-scroll with lines	<i>BDS</i> VII : 111, S- scroll, <i>Matmar</i> XLIII : 9 MK	NP	B.16.587
15	Double Z-scroll joined end to end	<i>BDS</i> VIII : 220-221 p. 15 Cf <i>Montet</i> 469	474	B.16.485
16	Scroll between lines		477	B.16.465
17	Scroll between C-scrolls	<i>Qau III</i> IV : 14 T. 5003 Dyn. xii? <i>Matmar</i> XLIII : 12 MK	NN	B.16.452
18	Four scrolls	<i>BDS</i> VIII : 241 p. 15 'like Dyn. xiii'	NN	B.16.472
19	Three scrolls Carnelian lentoid		444	B.16.522
20	<i>K3-nfr</i> between scrolls		468	LAO 9099
21	C-scrolls facing. Carne- lian?		NN	B.16.492
22	Z-scrolls and buds. Quartz		466	B.16.491
<i>Group 3. Egyptian Signs and Symbols</i>				
23	Large 'nh sign with lines		481	B.16.475
24	<i>K3-nfr</i> between droop- ing lotuses on <i>nb</i> signs	<i>Mostagedda</i> LX : 51 T. 5008 Dyn. ix-xii	471	B.16.513
25	<i>K3-nfr</i> between droop- ing lotuses on <i>nb</i> signs	<i>Kahun</i> , <i>Gurob</i> , <i>Ha- wara</i> X; 47 seal imp.	470	B.16.505
26	<i>K3</i> sign with drooping lotus plant. Quartz, tra- ces of blue colouring		473	B.16.497
27	Jumbled signs on domed seal		439	B.16.518
28	Uninscribed. Silver leaf on solid core		430	B.16.494
<i>Group 4. Concentric Circles</i>				
29	Three linked circles with lines		NN	B.16.453

Fig. 2 (continued)

NUMBER	DESCRIPTION	REFERENCES	MONTET	MUSEUM NUMBER
30	Eight circles, some linked		NN	B.16.479
31	Four circles above lines and <i>nb</i> signs		NN	B.16.476
32	Three circles linked, each side of central line		NN	B.16.499
33	Two circles linked, each side of central line		NN	B.16.474
34	Ten circles, paired between lines	<i>Gizeh and Rifeh</i> XIII E 7 Dyn. vii-xii	NN	B.16.504
35	Two circles, each side of lotus flower		NN	B.16.501
36	Above : two circles each side of ' <i>nh</i> ' sign, reversed; below central bar two circles each side of lotus		NN	B.16.409
37	Three circles linked in each of four rows, divided by lines		NN	B.16.462
38	Four circles linked in central band between lines		NN	B.16.470
39	Above: eight circles radiating from one in centre; below dividing line eight circles linked		NN	B.16.482
40	Three, four and three circles linked between lines		NN	Louvre NN
41	Thirteen circles linked between lines		NN	B.16.463
42	Six circles linked in two rows		NN	B.16.512
43	Six circles in two rows		NN	B.16.502
44	Six circles in two rows		NN	B.16.515
45	Ten circles, some linked		NN	B.16.453
46	Nine circles, linked in rows	<i>Diospolis Parva</i> Hu XLI : 5 Grave W. 65 p. 42	NN	B.16.466
47	Nine circles, linked	Do. do.	NN	B.16.458

Fig. 2 (continued)

NUMBER	DESCRIPTION	REFERENCES	MONTET	MUSEUM NUMBER
48	Ten circles, linked in rows		NN	B.16.477
49	Six circles		NN	B.16.503
50	Twenty-eight small circles, some linked		NN	B.16.468
51	Thirteen small circles, linked between dividing lines		NN	B.16.459
52	Twenty-six small circles, linked		NN	B.16.464A
53	Six circles linked in pairs Domed seal		NN	B.16.421
54	Five circles with flowers between		435	B.16.523
55	Eight circles radiating from central one. Domed seal	<i>Qau III IV : 16</i> T. 5250 Dyn. xii	433	B.16.420
56	Eleven circles radiating from central one. Domed seal	<i>Hesperia</i> 1958 XXII : S 63, p. 112	434	B.16.517
57	Ten linked circles above between delimiting lines, three below bar. Domed seal		438	B.16.524
58	Eight circles linked in three rows between lines. Domed seal	<i>El Kab XX : 25.</i> T. 300 Dyn. xii	436	B.16.519
<i>Group 5. Cruciform patterns</i>				
59	Six circles radiating from central one with vertical line ending in flowers		NN	B.16.500
60	Flowers and buds divided by central bar		480	B.16.506
61	Flowers and spirals		464	B.16.451

Fig. 3 (Scale 1 : 1)

NUMBER	DESCRIPTION	REFERENCES	MONTET	MUSEUM NUMBER
62	Cruciform pattern ending in spirals	<i>BDS VIII : 269 p. 16</i> <i>Dyn. xiv? Harageh</i> <i>XX : 10 T. 40 Dyn.</i> <i>xii</i>	460	B.16.461
63	Looped design <i>Cf.</i> 69		453	B.16.484
64	Opposed three-lotus design with dividing bars		461	LAO 9100
65	Cruciform pattern ending in buds and spirals. Carnelian	<i>BDS IX : 370</i>	456	B.16.480
66	Cruciform pattern ending in spirals. Scrolls and <i>nfr</i> signs in field		457	B.16.487
67	Cruciform looped pattern with flowers		459	B.16.486
68	Cruciform pattern ending in flowers. Carnelian		478	B.16.498
69	Looped design. <i>Cf.</i> 63 side cut <i>à jour</i>	<i>BDS VI : 126A</i> <i>XXIII : 'gn. stea. dome'</i> <i>Matouk CC IV 8</i>	452	LAO 9098
70	Four plant designs or buchrانيا opposed. Domed seal		458	B.16.481
<i>Group 6. Round Running Spirals</i>				
71	Spiral with beginning and end divided by central line	<i>BDS VII : 103</i>	NN	B.16.478
72	Spiral with beginning and end divided by lines	<i>Bethpelet I VII : 38</i> <i>T. 568</i>	NN	B.16.509
73	Rough spirals ending in flowers		NN	B.16.469
74	Spiral with beginning and end, divided by central motif. Side cut <i>à jour</i>		465	LAO 9101

Fig. 3 (continued)

NUMBER	DESCRIPTION	REFERENCES	MONTET	MUSEUM NUMBER
75	Spiral with beginning and end, one <i>nfr</i> sign above., <i>Varia</i>		NN	B.16.483
76	Flower design divided by hatched bar across centre. Side cut <i>à jour</i> . Part missing		463	
77	Enigmatic signs divided by bar across centre. Carnelian	<i>Ballas</i> LVIII : Z 10	455 Fig. 54, p. 120	B.16.490
78	Enigmatic signs divided by bar across centre. Carnelian		454	B.16.496
79	Two loop designs divided by plain bar across centre. Partly broken		NN	
80	' <i>nh</i> ' and figure-of-eight sign. Light blue stone	see p. 183	NN	
81	Cylinder Seal, dark steatite	see p. 244		
82	— —	250		
83	— —	253		
84	Diadem, punched (<i>repoussé</i>) dot border. String holes at each end. Silver. See also <i>Strat. Comp.</i> fig. 58G, fig. 59J	<i>Qau I</i> , XXIX : 13 T. 1107 Dyn. ix cf. Montet, pl. LXVIII and p. 226 above Scale 1 : 2	579	B.16.450

Fig. 4 (Scale 1 : 1)

NUMBER	DESCRIPTION	MATERIAL	MONTET	MUSEUM NUMBER
85	Medallion, applied settings for inlay, border of granular decoration	Gold	411	B.16.449
86	Disk, <i>repoussé</i> dots, hole in centre	Gold	547	B.6052
87	Head, <i>repoussé</i>	Gold	403	B.6054

Fig. 4 (continued)

NUMBER	DESCRIPTION	MATERIAL	MONTET	MUSEUM NUMBER
88	Ibis, front <i>repoussé</i> , attached to flat back, joined at edge	Electrum	410	B.6056
89	Label, inscribed with Egyptian hieroglyphs	Ivory	396	B.6087
90	Pendant	Milky qtz.	560	B.5347
91	Pendant	Milky qtz.	562	B.5346
92	Pendant	Carnelian	561	B.5353
93	Drop-pendant	Carnelian	564	B.5349
94	Drop-pendant	Carnelian	563	B.5348
95	Drop-pendant	Carnelian	565	B.5353 <i>bis</i>
96	Tortoise (?) pendant	Carnelian	559	B.5345
97	Lion (?) amulet	Carnelian	558	B.5344
98	Amulet	Carnelian	567	B.5352
99	Frog amulet	Carnelian	—	B.5340
100	Pendant seal, baboon, inscribed on base	Ivory	405	B.16.540
101	Double-headed pendant seal, loop design on base	Ivory	402	B.16.536

Fig. 5 (Scale 1 : 1)

NUMBER	DESCRIPTION	MATERIAL	MONTET	MUSEUM NUMBER
102	Harpocrates figurine, inscribed hunting scene on base	Bronze	401	B.16.545
103	Baboon figurine, pierced for suspension	Glass?	407	B.16.527
104	Baboon figurine, diagonal scored lines on base	Glass?	408	B.16.538
105	Monkey and young, figurine	Sandstone?	404	B.16.526
106	Baboon figurine	Bronze	409	B.16.546
107	Baboon figurine	Ivory	406	B.16.539

Fig. 6 — Beads (Scale 1 : 1)

NUMBER	DESCRIPTION	MONTET	MUSEUM NUMBER
		pls. XLIV XLVI	
108	Flattened cylinder		
109	Cylinder		
110	Barrel, silver caps	541	B.6038

Fig. 6 (continued)

NUMBER	DESCRIPTION	MONTET	MUSEUM NUMBER
111	Barrel, silver caps	540	B.6036
112	Barrel, silver caps	538	—
113	Barrel		
114	Barrel		B.6035
115-16	Barrel	536	B.6045
117-18	Bicone	536	B.6045
119-27	Barrel	—	—
128	Barrel	536	B.6045
129-30	Barrel		
131-32	Barrel	536	B.6045
133-41	Barrel		
142	Flattened barrel		
143	Bicone		
144-48	Barrel		B.5631
149	Barrel	551	B.5631
150	Barrel		B.5823
151-52	Bicone convex		B.5823
153	Barrel		
154-57	Spheroid		
158	Spheroid, solid core	546	B.16.448
159	Spheroid	547-48	B.16.446-47
160-67	Bicone, standard or long truncated		
168	Bicone, faceted		B.5823
169-70	Bicone, faceted		
171	Bicone, faceted	551	
172-74	Bicone, faceted		
175	Barrel, faceted	550	B.16.543
176	Bicone, faceted, concave	551	
177	Bicone, wood core	551	
178	Barrel	551	
179	Bicone, short convex		
180-82	Cylinders	571	B.6046
183	Barrel, one inscribed	571	B.6046
184-85	Spheroid	571	B.6046
186	Ring		
187	Ring	571	B.6046

Fig. 7 (Scale 1 : 1)

NUMBER	DESCRIPTION	MATERIAL	MONTET	MUSEUM NUMBER
188	One of pair of end-pieces for necklace composed of beads 180-85, 187. Rivet holes in second example for repair in antiquity	Green glaze	571	B.6046
189	Hollow bead, probably part of necklace 180-85, 187-88			B.16.534
190	Handle for spatula (?) (in three pieces)	Ivory or bone	572	B.5275
191	Three cobras on <i>nb</i> -sign, cut from sheet bronze. Small loops attached at back center	Bronze	412	B.6026
192	Hoop ring composed of two bands joined by thin wire lightly soldered in loop bends. Two similar examples : B.6049-50	Silver	413	B.6048
193	Thin square fragment broken at one end	Bronze		B.5545
194	Spoon or ladle, thin sheet metal	Bronze	601	—
195	Cylindrical cup, traces of thread wound below rim	Bronze	604	B.16.535
196	Globular vessels joined by hollow tube. Rim on left side bent and distorted. Scale 1 : 2	Bronze	609	B.16.525
197	Crescent, thin sheet metal, decorated with <i>repoussé</i> dots	Bronze	602	B.6027

Fig. 8 (Scale 1 : 2)

Asterisk: Example drawn.

NUMBER	DESCRIPTION	AVER. WIDTH	MATERIAL	MONTET	MUSEUM NUMBER
				pl. LXX	
198	Torques	18.3 cm.	5 Bronze:		*B.5586. + B.5584, B.5584 <i>bis</i> , B.595/38, B.5562.
199	Torques	16.7 cm.	4 Bronze:		*B.5546. + B.5583, B.5759, B.5574.
200	Torques	14.9 cm.	17 Bronze:		*B.5546 <i>bis</i> . + B.5557, B.5554, B.5578, B.5580, B.5560, B.5569, B.5564,

Fig. 8 (continued)

NUMBER	DESCRIPTION	AVER. WIDTH	MATERIAL	MONTET	MUSEUM NUMBER
					B.5550, B.5547, B.5679, B.5577, B.5558, B.5573, B.4064, B.5552, LAO. 9107.
201	Torques	13.4 cm.	10 Bronze:		*B.5567. + B.5549, B.5555, B.5575, B.5558 <i>bis</i> , B. 5561, B.5558 <i>bis</i> , B.5568, B.5567 <i>bis</i> , B.5563.
202	Torques	12.7 cm.	5 Bronze:		*B.5549. + B.5551, B.4067, B.5256/13, B.5576.
203	Mirror	13.0 cm.	1 Bronze:	603	*B.6044.
204	Torque	15.6 cm.	1 Silver:	593	*B.6032.
205	Torque	12.4 cm.	1 Silver:	594	*B.6033.
206	Torque	6.4 cm.	1 Silver:	592	*B.6034.

Fig. 9 (Scale 1 : 2)

Asterisk: Example drawn.

NUMBER	DESCRIPTION	DIMENSIONS	MATERIAL	MONTET	MUSEUM NUMBER
		cms.			
207	Bowl, beaten silver with small string- hole below rim	Ht. 4.4	Silver	605	B.6029.
208	Flask	Ht. 8.6	Bronze	608	B.16.529.
209	Bowl, corro- ded, part of base missing	Ht. 7.0	Bronze	607	LAO 14.687.
210	Bangle, over- lapped ends	Diam. 9.9	—		B.5511.
211	—	Diam. 8.1	—		B.5561.
212	—	Diam. 7.7	—		*B.5664. + B.5680, B.5528, B.5530, B.5532.
213	—	Diam. 7.2	—		*B.5523. + B.5519.

Fig. 9 (continued)

NUMBER	DESCRIPTION	DIMENSIONS	MATERIAL	MONTET	MUSEUM NUMBER
214	—	Diam. 6.3	—		*B.5665. + B.5667, B.5656.
215	—	Diam. 5.5	—		*B.5660. + B.5637, B.5662, B.5663, B.5666, B.5670, B.5674, B.5676, B.5679, B.5683, B.5685.
216	—	Diam. 4.6	—		*B.5657. + B.5538, B.5668, B.5669, B.5682.
217	—	Diam. 4.5	—		*B.5655. + B.5660, B.5653.
218	—	Diam. 4.1	—		*B.5684. + B.5540.
219	Ring, twisted ends	Diam. 2.4	Electrum	419	B.6051.
220	Ring, hoop circle	— 1.7	Gold	417	B.6057.
221	Bangles, hoop circle	— 9	Bronze	598	*B.5512. + B.5513, B.5517, LAO 9110.
222	Bangle, hoop circle	— 8:3	—	—	B.5518.
223	Bangle, hoop circle	— 6.8	—		B.5513 <i>bis</i> .
224	Spiral ornament, 17 examples		—	596	B.5633-5650.
225	Bangles, open ends	— 9	—	598	B.5510.
226	Bangles, open ends	— 7.8	—	598	*B.5521. B.5524, B.5526, B.5531.
227	Bangles, open ends	— 7.3	—	598	*B.5522. B.5520.
228	Bangles, open ends	— 5.9	—	598	*B.5225. B.5059.
229	Bangles, open ends	— 5.3	—	598	*B.5542.
230	Bangles, open ends	— 4.5	—	598	*B.5539.
231	Bangles, open ends	— 3.7	—	598	*B.5587.
232	Bangles,	— 3.1	—	598	*B.5544.

Fig. 9 (continued)

NUMBER	DESCRIPTION	DIMENSIONS	REFERENCES	MONTET	MUSEUM NUMBER
233	open ends Bangles, overlapped ends	— 2.8	—	—	
234	Bangles, overlapped ends	— 3.5	—	—	
235	Bangles, overlapped ends	— 5.4	—	598	*B.5530.
236	Bangles, overlapped ends	— 5.9	—	598	*B.5543.
237	Bangles, overlapped ends	— 5.7	—	598	B.5641 <i>bis</i> .
238	Bangles, clo- sed ends	— 3.9	—	—	
239	Bangles, clo- sed ends	— 3.4	—	—	

Fig. 10 (Scale 1 : 2)

All toggle-pins are made of metal, probably bronze, except no. 252 made of silver = Montet 587. The others are grouped under his numbers 588 and 589. See also Strat. Comp. p. 605 for analyses and figs. 58 A-F, fig. 59, A, C, D, fig. 66 1-5. The range of lengths is given where there are more than two pins of a kind.

NUMBER	DESCRIPTION	LENGTH cms.	MUSEUM NUMBER
240	Nail, pierced thread-hole	22.1	B.5485
241	— split —	21.0	B.5445
242	— — —	18.3	
243	Club, split and pierced thread-hole	20.2	
244	Club, —	17.4 — 15.3	B.5462, B.5483
245	— pierced thread-hole	16.3 — 13.5	28B, B.5459, B.5453, B.5461, B.5441, B.5505, B.5440
246	— —	13.8	B.5468

Fig. 10 (continued)

NUMBER	DESCRIPTION	LENGTH cms.	MUSEUM NUMBER
247	Cone, split thread-hole	11.2	B.5498
248	Club, —	12.1 — 11.2	B.5482, B.5446
249	Club, split —	11.3 — 10.3	B.5460, B.5508, B.5504
250	Cone, —	8.0	B.5484
251	Club, incised decoration, split and pierced thread- hole	21.0	LAO. 9104
252	Club, —	18.8	29B, B.5455, LAO. 9103
253	— —	17.5	27B
254	Club, incised decoration, split and pierced thread- hole	17.5 — 15.6	B.5506, B.5470
255	Cone, incised bands, pierced thread-hole	16.0	B.5509
256	Club, incised decoration split thread hole	11.0	B.5501
257	Cone, incised decoration split thread-hole	15.9	37B
258	— —	15.4 — 15.2	B.5444, B.5494
259	— —	15.2 — 13.9	B.5480, B.5466, B.5442
260	pierced thread-hole	14.3	B.5439
261	— —	14.0	B.5469
262	— —	13.9	B.5496
263	— —	13.7	B.5474, LAO. 9105
264	— —	12.7	B.5451
265	— split and pierced thread-hole	11.9	B.5475
266	— pierced thread-hole	11.0	B.5450, B.5473
267	— split thread-hole	9.2	B.5487
268	— —	9.0	B.5440
269	Casting for toggle-pin pierced thread-hole	11.0	B.5477
270	Casting for toggle-pin, split but not pierced	10.8	B.5447
271	Cone, criss-cross hatched decoration, incomplete, pierced thread-hole	12.0	B.5499
272	Cone, — incomplete	9.0	B.5497
273	Shaft for long, thin tog- gle-pin, head missing, pierced thread-hole	10.5 — 8.5	B.5481, B.5449, B.5443, B.5470