

UNIVERSITY OF TORONTO



3 1761 00071044 2

Digitized by the Internet Archive  
in 2008 with funding from  
Microsoft Corporation

<http://www.archive.org/details/publications07brituoft>









261

(64) 8580 T

EGYPTIAN RESEARCH ACCOUNT, 1901.

SEVENTH YEAR.

---

MAHĀSNA  
AND  
BĒT KHALLĀF

BY

JOHN GARSTANG, B.LITT.

*READER IN EGYPTIAN ARCHÆOLOGY AT UNIVERSITY COLLEGE, LIVERPOOL.*

WITH A CHAPTER BY

KURT SETHE, PH.D.

*PROFESSOR OF EGYPTOLOGY IN THE UNIVERSITY OF GÖTTINGEN.*

200381  
5/2/26

LONDON:

BERNARD QUARITCH, 15, PICCADILLY, W.

1903.

DT  
57  
B8  
v. 7

LONDON :  
PRINTED BY WILLIAM CLOWES AND SONS, LIMITED,  
DUKE STREET, STAMFORD STREET, S.E., AND GREAT WINDMILL STREET, W.



# CONTENTS.

CHAPTER I.		PAGE
INTRODUCTION . . . . .		1-4
<i>Sect. 1, The season and site of work. 2, Boundaries to the district explored. 3, Special indications; Alawniyeh. 4, The necropolis of Maḥasna. 5, Main results of its excavation. 6, One elaborately furnished tomb. 7, Exploration continued northward; the Dêr at Bêt Khallâf. 8, Real nature of the structure; a great tomb of the IIIrd Dynasty. 9, Architectural features; the earliest arch. 10, Other neighbouring tombs. 11, The step-pyramid at Saqqara. 12, The traditional burial-place of Neter-Khet. 13, The tomb of Neter-Khet.—Bibliography.</i>		
CHAPTER II.		
THE PRE-DYNASTIC SITES (L. AND MS.) . . . . .		5-8
<i>(a) The Cemetery at Alawniyeh: 14, General features. 15, Some special objects. 16, Sequence dates of pottery. (b) The Settlement near Maḥasna: 16, Its position in the middle of a necropolis. 17, Nature of the ground. 18, Nature and results of excavation. 19, Summary; its situation. 20, Its houses and dwellings; traces of habitation. 21, A large pottery kiln. 22, Flint implements, their variety and character; co-relation with the Cemetery. 23, The pre-dynastic civilisation.</i>		
CHAPTER III.		
THIRD DYNASTY TOMBS AT BÊT KHALLÂF (K).		
THE TOMB OF NETER-KHET (K 1) . . . . .		8-11
<i>24, Position and appearance. 25, Its chief architectural features. 26, The arch and barrel roof. 27, The descending passage</i>		
<i>closed with stone doors. 28, Entrance of the burial chamber. 29, The shaft by which the chambers were reached. 30, The surface deposits and objects found on the stairway. 31, Copper and flint implements. 32, Objects from the chambers. 33, The sealings and royal names. 34, The alabaster vases.</i>		
CHAPTER IV.		
THE TOMB OF HEN NEKHT (K 2) . . . . .		11-14
<i>35, Appearance and identification. 36, Analogy with the Step Pyramid. 37, Details of plan and section. 38, The remains of the King. 40, State of the burial chamber. 41, Details of Construction. 42, Dr. Myers' statement with regard to the bones and skull, with measurements and details.</i>		
CHAPTER V.		
THE TOMBS K 3, K 4, AND K 5 . . . . .		14-16
<i>43, Situation and character. 44, Comparison of details. 45, Skull and bones from K 3. 46, Position and construction of K 5; the tomb furniture.</i>		
CHAPTER VI.		
ARCHÆOLOGICAL TYPES OF THE IIIRD DYNASTY . . . . .		16-18
<i>48, Paucity of material. 49, Evolution of tomb construction. 50, The hard stone bowls. 51, The vessels and tables of alabaster. 52, The implements of copper. 53, The flint implements. 54, The Pottery.</i>		

	PAGE		PAGE
CHAPTER VII.			
REMARKS ON THE INSCRIPTIONS. BY PROF.			
SETHE . . . . .	19-27	M 401, A typical burial. M 420, 421, 424,	
55, General. 56, Sealings of Neter-Khet. 57,		Burials in curious positions. M 441, Deposit	
Sealings from tomb K 2. 58, Sealings from		of vases in wooden box. M 442, Simple	
tombs K 3-5. 59, Cursive ink-written in-		burial in irregular position. 63, Contracted	
scriptions.		burials. 64, General results of the excava-	
		tion. 65, Special features. 66, Dr. Myers'	
		note on the skulls and bones.	
CHAPTER VIII.		CHAPTER IX.	
THE CEMETERY AT MAHÂSNA (M).			
THE TOMBS AND BURIALS . . . . .	28-33	THE TOMB DEPOSITS . . . . .	33-36
60, Character and (61) Construction of the		67, The inscribed stones. 68, The button	
tombs. 62, The undisturbed burials. M 70,		seals compared with Cretan pictographs. 69,	
unusual position. M 87, Gold pendants.		Copper implements and mirrors. 70, Group-	
M 100, Carnelian beads and pendants.		ing of the tomb deposits, indexed.	
M 107, An elaborately furnished tomb.			
M 114, Burial in shaft. M 349, Representa-		CHAPTER X.	
tive group. M 386, Scarab pendants.		DESCRIPTION OF PLATES, INDEXED . . . . .	36-39
		GENERAL INDEX . . . . .	40-42

## LIST OF PLATES.

<i>General.</i>		XI. Types of alabaster vases.
I. El Mahâsna and Bêt Khallâf: the dis-	tricts explored, 1900-1.	XII. Types of stone bowls.
II. The sites excavated at Mahâsna and Bêt	Khallâf.	XIII., XIV. Types of alabaster vases and vessels
		(i. and ii.).
		XV. Copper and flint implements.
		XVI. Copper tools and implements.
		Tomb of Hen Nekht:
		XVII. Architectural features.
		XVIII. Plan and section.
		XIX. Sealings.
		XX. Skull, vessels and implements.
		XXI. Types of alabaster vessels.
		XXII. Model cylindrical vases of alabaster.
		XXIII. Copper implements and fittings.
		Tombs K 3, K 4, K 5:
		XXIV. Architectural and miscellaneous.
		XXV. Plans and sections.
		XXVI. Sealings.
		XXVII. Types of stone vases.
<i>El Mahâsna: Predynastic.</i>		
III. Dish, flint objects and kiln.		
IV. Settlement and cemetery.		
V. Flints and other objects from cemetery.		
<i>Bêt Khallâf: IIIrd Dynasty.</i>		
Tomb of Neterkhet:		
VI. Architectural features.		
VII. Plan and section.		
VIII., IX., X. Sealings (i., ii. and iii.).		

## Tombs K 1-5 :

- XXVIII. Cursive inscriptions written in ink, and  
pot-marks.  
XXIX. Alabaster tables of offerings.  
XXX., XXXI. Types of pottery.

*El Mahâsna : IVth-XIth Dynasties.*

- XXXII. Burials, pottery, etc.  
XXXIII. Copper implements, inscriptions, etc.  
XXXIV. Gold pendants, vessels of alabaster and  
hard stones.

- XXXV. Groups of stone vases and alabaster  
vessels.  
XXXVI. Alabaster vessels of the IVth-VIth  
dynasties.  
XXXVII. Tomb deposit from burial M 107,  
IVth-Vth dynasty.  
XXXVIII. Tomb group of alabaster vases, 107.  
XXXIX. Button seals, amulets and pendants.  
XL. Copper mirrors of the Old Kingdom and  
subsequent period.  
XLI., XLII. Pottery types.  
XLIII. Diagrams of burial types.



---

## CHAPTER I.

### INTRODUCTION.

[With Pls. I., II.]

1. The present volume deals with the results of excavations made for the Egyptian Research Account during the season 1900-1901, from the end of November to the beginning of May. It had been arranged by the Director that the exploration should proceed from near the scene of the previous season's work at Abydos over the desert lying immediately to the north. The camp was fixed in the open desert south of the village of Maḥasna, not far from a walled village (originally a large garden enclosure) called the Maṣlahet-Harun, at a point where some partly-cleared tombs of the Old Kingdom disclosed the presence of a cemetery not completely plundered.

2. The scene of work was marked off on the south by the northern boundary to the bay of Abydos—a great headland which reaches down almost to the cultivation near the village of Alawniyeh. From here, after trending north-west, the hills again break away westward so sharply that above the village of Maḥasna the lower desert is nearly six miles wide. The surface is not all even, being broken in its western half by a series of foothills fringing a small plateau. North of Maḥasna, above the village called Ilg, the conformation becomes more regular; and the Libyan hills, curving inwards, narrow the desert to three or four miles (some six kilometres). At this point the surface lies unbroken, and the stretch of waste sand is wide and impressive. Just to the north, however, above the village of Bêt Khallaf, where the hills again fall westward behind a still wider bay, the desert assumes a new character. It is caused by a series of sand-dunes and pebbly mounds, for the most part unconnected yet lying in curious symmetry, which reach down to within two miles of the cultivated land. It is here that the northern limit to the season's work was reached.

The region examined was thus some ten miles in length, embracing the villages of Alawniyeh on the one hand and of Bêt Khallaf on the other, with El Maḥasna about its centre, and with the smaller settlements at Bêt Allam, the Maṣlahet Harun, Bêt and Ilg, intervening along its edge. The more accessible portions of this stretch of desert, where it abuts upon the cultivation, or is of level or merely undulating surface, were examined with some care; but the portions of it on the west that are broken by low hills were not explored systematically. The wildness and isolation of the district would have required more time for its exploration than could have been spared from the work in hand. A cave-tomb, found half way up the face of the further cliffs above the village of Alawniyeh, apparently of Roman date, was the only result of following up many stories brought by local people.

3. Near to Alawniyeh, just above the houses clustered together as Bêt Allam, were traces of a prehistoric cemetery already much disturbed. It proved to be a small site, almost completely plundered; nevertheless some interesting objects of pottery and flint were found in the few tombs that remained, with a sufficient quantity of the more ordinary types to enable its character and date to be determined.

Meanwhile, in the middle of the site first fixed upon between El Maḥasna and the Maṣlahet Harun, great numbers of worked flints and some domestic pottery indicated the presence of a Settlement also of the prehistoric period. A great downpour of rain helped materially to define its area and suggest the lines for its excavation. It was almost in the centre of the cemetery, between (and for the most part avoided by) tombs of the IVth and VIth Dynasties. Its houses had been constructed of wicker, or, more probably, of "wattle and daub," and in a few cases their stouter piles remained in position to show how they had been arranged. The spot they covered was small; but the flint-strewn area was much larger, reaching southward along the desert-edge, in a strip

two to three hundred feet wide, beyond the confines of the cemetery, and thus partly disturbed by the tombs placed there in the early dynasties. For the purpose of defining these better preserved portions of the settlement they have been accorded different letters according to their positions in the general plan of the site on PL. II.

4. The tombs of this cemetery were for the most part of the period between the Old and Middle Kingdoms; yet the earlier dynasties were also represented. The excavation when completed showed remarkably how the cemetery had spread slowly and consistently northward through a long sequence of years. Its earliest tombs must date back to the early II<sup>nd</sup> or perhaps the I<sup>st</sup> Dynasty. These had been already excavated (it was said by De Morgan), but they were re-opened to verify their dates and character. It was found that they formed the southern limit to the cemetery. A few uninformative and plundered pit-tombs led on to some characteristic graves of the IV<sup>th</sup>-VI<sup>th</sup> Dynasties, bordering upon the knoll on which the prehistoric settlement had formerly stood. There were found in them some stone bowls and small objects of art characteristic of the period. The knoll itself was devoid of tombs: possibly the character of its sand had been unsuitable for sinking shafts, or perhaps the ruins of the former habitations had still remained conspicuous obstacles, and so caused it to be avoided. Beyond, in a small valley to the north, tombs of the VI<sup>th</sup> and later Dynasties were plentiful, and spread over the farther rise to the number of several hundred, all undisturbed. With the XI<sup>th</sup> Dynasty they came to an end. It does not appear that this was the necropolis of any large or important town, but rather the burying place of some small village or villages, which then, as now, rose here and there in the cultivation, built and rebuilt upon the ruins of the past.

5. The tombs of the later period yielded little, though they were numerous and undisturbed. The same feature has been noticeable in other sites of the same date wherever they have been examined. This general poverty and rudeness of the known works of this period between the VI<sup>th</sup> and XI<sup>th</sup> Dynasties, while it provides a marked contrast, is seemingly not to be attributed to any real change of burial custom. The reason must rather be seen in a general depression of art and artistic sense, the products of which in those brighter ages found their way into the graves of the time. Thus the excavation of these tombs, following upon those of the Old Kingdom, was useful

in supplying further evidence of local detail, shewing how a small and presumably average rural district of the ancient country was beset by the same depression and decline as seem to have prevailed in general during this period throughout the whole of Egypt.

Archæologically, too, this period provides a unique interest, in the small "button seals," glazed or of worked stone, which (with the increasing number of preserved specimens) are attracting a corresponding increase of attention. Twenty-eight were found in this excavation in their original position upon the bodies. With women, they were mere pendants, attached to a necklet of beads or other trinkets that adorned them; but with men they always occurred singly, suspended from the neck or attached to a finger of the left hand. The designs upon them are always symmetric, often geometric and conventional; yet no two from this site were alike, nor are any strictly the same as those existing in private collections with which they have been compared. They were almost certainly signets.

6. Apart from these objects, the period yields nothing comparable in interest to the small objects of art, jewels, and pendants, that characterise the IV<sup>th</sup>, V<sup>th</sup> and VI<sup>th</sup> Dynasties. The furniture of one rich burial of the Old Kingdom from Maḥasna (No. 104) was chosen entire by the Government for exhibition in the Museum at Cairo. It comprises, among its larger objects, thirteen vessels of alabaster and hard stones, finely wrought and of delicate finish, an alabaster head-rest, with fluted column upon a plain base and square abacus, and a mirror of copper. Its beads are chiefly carnelian, glazed and gold, with a pendent carnelian centre. But the chief feature of the deposit is a long chain necklet of gold, of remarkable fineness and finish, each link delicately welded, in the manner in which each link is doubled through the two loops of that which precedes it in the chain. Other objects of good quality were found, and are pictured in the plates. They do not, for the most part, establish any new archæological types.

In the village of Maḥasna itself were found some traces of a former burying place. A tomb in the road, revealed by the falling in of the surface, yielded some good pieces of red polished pottery of the Old Kingdom. A few other tombs were either difficult of access or unsafe to dig; many must have been built over by an arm of the village; the search in other accessible places around was devoid of result.

7. Work having reached this stage by the end of

January, it was decided after consultation with the Director to make an examination of a large brick structure standing prominently in the desert above the village of Bêt Khalláf. It was already a feature well known, conspicuous for miles around: it had been thought by some to be a fortress of the Old Kingdom; by others to be of Greek date; the Arabs themselves had sanctified it with the name of a Dêr. It had thus escaped plunder and serious attention. From above, it might well have been taken for a walled enclosure full of rubbish. But the filling was by no means of the nature of blown sand: it was desert gravel mixed with large stones, themselves evidence that the filling was not the work of nature.

8. A few days' work sufficed to show that it was not a building of known kind, but it was some weeks before its unique character became finally apparent. Meanwhile the clearing away of some accumulated rubbish on the eastern side had revealed a stairway, which had been anciently filled up and bricked over to conceal its existence. Following this down somewhat laboriously through hardened Nile-mud, the steps were found one after another laden with alabaster vessels and tables of offerings, wine-jars and pottery, all of an early date. The usual caps of mud on these jars were found to be sealed with the royal name of NETER-KHET, and bore the names of his officials, vineyards, palaces, etc. It then became evident that at last it was possible to identify a royal tomb of the IIrd Dynasty—a discovery which dates the beginning of any definite archæological history of that period. The prevailing motive of the time was soon made plain; it is what might have been looked for at the beginning of the Pyramid Age. The striving after great size and massive, even ponderous, effect, was to be seen alike in the construction of the tomb as in the nature of the offerings and monuments in general. The cylindrical vases of alabaster, for example, which were found upon the steps, were solid, weighty, and roughly (but not rudely) made. Their mere numbers were astonishing; each step had been piled up until it could contain no more. On successive steps were seventeen, eleven, thirteen, and so on, as well as alabaster tables in similar profusion. The total removed from the whole stairway was nearly eight hundred. Towards the bottom the numbers decreased, while the quality improved. The fragmentary condition in which the objects were found, however, suggested that here they had been crushed by the settling down of a great slab of stone, which, though not remaining in its place, was shown

to have been one of a series of doors designed to guard the approach to the burial chamber.

9. Turning at the foot of this stairway southward under an arch, the passage began to descend steeply below the desert. It was stopped at intervals by massive stones of increasing heights, and from eight to thirteen tons in weight. The shafts by which these had been anciently dropped into position were dug out in succession. The last of all gave access to the chambers. It was eighty-seven feet deep from the surface of the Mastaba; and for fifty-four feet its sides were unprotected by brick, being sunk through the desert gravel. The stone at the bottom of the shaft which covered the chamber door was seventeen feet in height; and fortunately of width sufficient to allow a small hole to be made below its centre to get access to the chambers within. A short passage still descending led down to them, at a total depth of ninety-one feet below the summit of the tomb.

There were eighteen chambers leading out from the central passage in somewhat bewildering fashion. A large stone-walled room in the centre had been the burial place. Its walls had been broken and its floor torn up: some bones of a man lay broken and scattered. Vessels of offerings by hundreds, and pottery, lay piled in heaps or strewn about in confusion. Two Roman Amphoræ above the *débris* revealed the plunderers. After making trial attempts in every likely place, these, most skilful of all tomb-robbers, had descended by means of a hole so small that the workmen had declared it to be the work of a jackal.

10. Meanwhile, examination of the tract around had disclosed the existence of other tombs similar in character and design. The largest of these, a little way to the north, disclosed another royal name, as yet unidentified, which may be read variously, Hen-Nekht, Hen-Khet, or with Professor Sethe, Sa-Nekht; a fragment, which may be part of a cartouche oval (the earliest recorded), is unhappily not capable of restoration. Other tombs proved to be those of servants of Neter-Khet: and a fifth one of some size and magnificence, lying to the east, was that of a Ha-Prince during the same reign.

11. The step-pyramid at Saqqara having long been reputed to be the burial place of Neter-Khet, it may be well to look briefly into the origin of this tradition. It will probably be sufficient to recite briefly a few facts, some new, and some old but forgotten.

In the first place the Pyramid was entered by

Minutoli, who recorded his observations in 1824. After lamenting the loss of some fragments of alabaster and hard-stone, amongst other objects observed, he related that he secured a small portion of the broken pieces of a valuable mummy, "doubtless the remains of the prince who was buried there" (ohne Zweifel die Reste des hier beigesetzten Fürsten). In this one sentence, as it will be seen, lies the foundation of the tradition. Its quotation is sufficient for the present purpose; but it is of interest to notice that the burial described in the ensuing context, with its gilded head and feet-soles, which he regarded as that of the prince, was probably of the later dynastic or even Ptolemaic period; and that there is neither evidence nor indication of a burial of the early dynasties.

In the second place, there exists a doorway of glazed tiles, bearing a name identified with Neter-Khet. It came from within the pyramid, and is now at Berlin. Opinion is divided as to its date. Dr. Borchardt, after a detailed examination, drawing his evidences from the material, its construction, fixing, the characters upon it, and the forms of the hieroglyphs, decided that it was certainly of the XXVIth Dynasty. Yet in view of recent discoveries in early tombs, it is to be admitted (as did Dr. Borchardt at the time he wrote) that the point is at least open to reconsideration. Some archaeologists believe that the door-frame in the main is of date contemporary, or nearly so, with the inception of the Pyramid; while some who have examined it see signs of restoration on the lintel upon which the name is inscribed.

12. However that may be, sufficient has been made clear to account for the tradition. It is embodied in these two facts, stripped clean of their later growths; the one, that the first observer believed he had seen signs of a royal burial within the Pyramid; the other, that later observers believed they had found evidence that Neter-Khet was builder of the Pyramid. It was perhaps not unnatural, without other evidences, for still later observers to think as a result that Neter-Khet was buried at Saqqara; and so the tradition grew until it was believed, and myth-like assumed to itself, with time and neglect, the similitude of a fact. It is needless to recall the many theories that have been built and rebuilt upon this slender foundation. All that is proved in this respect with regard to the step-pyramid at Saqqara, upon actual evidence, is that its origin was traditionally ascribed to a king now reasonably identified with Neter-Khet, and that this tradition was at least as

old as the XXVIth Dynasty: and further, that when the pyramid was entered a number of burials were found within, all of which seem to have been later than the XXVIth Dynasty. Archaeology agrees readily that the date of the pyramid may well have been of the IIIrd Dynasty; but it cannot admit, however much the literature on the subject be sifted and searched, that there exists at the present time any real evidence to show that an early royal burial was placed within the pyramid. There is sufficient analogy to show that a king was by no means necessarily buried in the pyramid he had constructed.

13. On the other hand, at Bêt Khallaf this great tomb of the IIIrd Dynasty stands unique in character and size, not far from the royal burial place of the earlier dynasties and from the site of ancient This. It is attended by tombs, also large and imposing, of the chief officials of this king, while the tomb of another king of the same age is close by it to the north. A great necropolis of the same period, as it appears from more recent excavations, is separated from it by a short distance only. Its stairways were concealed and its passages guarded by enormous stones. Its superstructure stands thirty feet or more clear of the desert, and its burial chamber lay nearly a hundred feet below the top. Precautions more extensive and more elaborate than in any earlier royal tomb had been taken to guard against robbery and to preserve the security of the remains. The bones found within attested the burial of one man; there was no suggestion of a second or a later burial, the character of the tomb almost precluded the possibility. The thousand offerings, many of them sealed with the royal and official names of Neter-Khet, bore out in detail the analogy afforded as to the tomb-furniture of the early kings by the royal cemetery at Abydos. The absence of some particular object familiar in the earlier tombs is to be attributed to a possible change of custom rather than to other causes: there is here the unique instance of the tomb of a king with its contents almost complete, unmixed with later offerings.

#### BIBLIOGRAPHY.

- 1824. Minutoli: *Reise zum Tempel des Jupiter Ammon* (p. 298, etc.).
- 1829. Perring: *The Pyramids of Gizeh*, III. (Pl. XII.).
- 1839. Valeriani and Segato: *Atlante Monumentale del Basso e dell' Alto Egitto*, Tomo I. (Pl. 37 A-D).
- 1849. Lepsius: *Denkmäler*, II. (i. and text).
- 1891-2. Borchardt: *Zeitschrift* (p. 83). Also 1898.



## CHAPTER II.

## THE PRE-DYNASTIC SITES.

(a). *The Cemetery at Alawnîyeh.*

14. It has already been mentioned in the opening chapter that near the village of Alawnîyeh, some two miles to the south of the site selected for the camp, the remains of a ransacked prehistoric burying place were found. The graves had been placed somewhat thickly on the northern slope of a slight incline that stretches out from Bêt Allam to the desert. They may have numbered originally some two or three hundred, but there remained to be examined only about forty-five of them, hidden for the most part by the sand thrown out from those which had been plundered. Of these the half were uninformative, but about twenty were recorded in detail. With so small a number it would have been difficult to have established any new conclusion, had the graves been unusual; but they proved to be characteristic of an early period in the prehistoric scale, without marked deviation from the established types. The importance of this little site, as it appears, is its proximity and relation to the prehistoric settlement lying amid the tombs of nearer Maḥasna.

The burials lay in contracted positions, with heads to the south, and, with two exceptions, on the left side. The arrangement of surrounding objects presented no features unusual to the period, which has been profusely illustrated by the excavations of Professor Petrie, Mr. Quibell, Mr. Mace and Mr. Randall-MacIver.

15. Some few objects found in these graves, however, from special causes, are worthy of separate mention, and are pictured on PLS. III. and IV. Chief among them is a four-legged dish, of which side and top views are given in the upper photographs of PL. III. The dish itself is oval in outline; the legs seem to have been separately made and attached, and the whole then baked together. The pottery is dark and of good surface, the interior decoration being in light yellow. It is a design of human figures and animals, with other portions which may be merely ornamental. It may be compared with that numbered 24A on PL. XXV. of Professor Petrie's *Nagada and Ballas*. This object was found in a grave which had already been partly robbed, the burial itself being broken and disturbed. There remained, however, a pot of type 22A, Class B,

which is accredited with a range of 31-52 in the scale of Sequence Dates.

Of more importance was the deposit of fragile clay models, pictured lower down on this same plate. Though in some cases broken, and in others scattered, it was fortunately possible to recover the forms of some of these models of flint implements and human figures. By comparing the models of doubly-barbed flint arrows with the actual weapons from the neighbouring settlement, shown in the adjoining photograph, any doubt that may have existed as to the real prehistoric character of these implements is finally removed. The other object found in the remains of this interesting tomb, was the slate marked N. 209 on PL. IV., possibly a shuttle. *M ?*

16. In view of the few graves left for examination in this small cemetery at Alawnîyeh, it was a matter for satisfaction that its relative position in the pre-dynastic date scale could be fixed with some certainty. From a number of graves, pots and groups of pottery were recovered, which, when tabulated on the system of Professor Petrie, gave the following results, selecting for tabulation here, however, only those tombs containing large groups:

Tomb 200	.	.	.	.	S. D.	36-38
„ 202	.	.	.	.	„	33-46
„ 204	.	.	.	.	„	32-44
„ 210	.	.	.	.	„	34-40
„ 212	.	.	.	.	„	33-47
„ 219	.	.	.	.	„	34-56
„ 229	.	.	.	.	„	36-43
Central date . . .						36-38

(b). *The Pre-dynastic Settlement near Maḥasna.*

17. In the plan shown on PL. II., the site lying to the south of Maḥasna is arbitrarily divided into four portions, suggested by the contour of the ground: these are marked M 1 . . . 4. It was in the portion M 2 that the remains of an early settlement were chiefly noticeable: hence it is called S 2. Another portion lying to the south of the division M 1 is referred to separately as S 1, though, as will be seen, it was probably attached to the former—indeed, the two portions may have been part of a continuous village.

Between them, as was mentioned in the opening chapter, lie tombs of the early dynastic ages. In the vicinity of S 2 they become partly discontinuous, but whether from unsuitability of the subsoil or from visible obstacle is not clear. It seems certain, however, that the confines of the settlement were en-

croached upon, from objects found (apparently as they had been left) in undisturbed patches lying between the tombs. But in most places the further indications were unreliable, the traces having been scattered by the constant turning over of the sand.

17. The ground itself was darker than the desert around, an appearance caused by the mixing of the sand with dust of a dark colour. The same effect can be secured experimentally by grinding to powder bricks or hard pieces of Nile mud, and mixing with sand in sufficient quantity. If the amount of dust is small, a greater contrast with pure sand can be gained by sprinkling with water. It is a matter of common experience that the presence of underground tombs, when built of brick, may often be detected by the character and colour of the desert just below the surface. This darker earth is well known to the natives, who find it excellent ground from which to sift the *sebakh* required for agricultural purposes, as they do from ancient town mounds. On this account it is difficult to secure for excavation the site of a settlement that has not been more or less disturbed; the examination of such a spot would be in any case a minute process, but its difficulties become extreme when the disturber has been at work. It is like the attempt to trace the lines of a camp that has been moved in fields turned over by the plough.

18. In the present case, a mound that superficially looked promising was found to have been thoroughly trenched and sifted by the *sebakhtin*. A small flat area adjoining it, however, remained in better condition. Pottery of the pre-dynastic character was common; fragments lay strewn thickly about, while more rarely was to be seen "black-topped" pottery, or an occasional piece decorated with white lines of the kinds familiar in the tombs. Among the cases in which these were found there was little indication that this pottery had been in use; on the contrary, it seemed to have been carefully deposited, in some cases buried, where it lay. In type it corresponded exactly with the period of the pots found in the neighbouring cemetery at Alawniyeh. More interesting, and more common, were the domestic pots, large and small, which were found in the various places noted in the plan. Some of them had been used for storing, but the black traces of fire clinging to the majority indicated that they had been used for cooking purposes. The bones of fish and small animals and pieces of crocodile hide were not uncommon. In one place only a *majur*, or large earthenware vessel, was found, inverted but empty.

Among other small objects found are those shown in the upper photograph on PL. V. On the left hand is a small stone vessel, of excellent work, fashioned in the form of a seated frog. The limbs are faithfully delineated, but the photograph shows the effect poorly. On the right are some mace-heads and fragments of them, pieces of characteristic stone vases, a polished "celt," and some small round objects (generally of pottery) pierced with a hole, hence probably spinning-whorls.

It is thus seen that the indications of a settlement were plentiful; but the main features of interest connected with early village communities—their choice of site, their habitations, their social relations and domestic conditions—are problems waiting to be solved. It is only possible, in this instance, to illustrate one or two features from a new point of view.

19. The position chosen for the settlement was a prominent rise in the sandy desert at the present edge of the cultivated lands. There can be no certainty that this was also the ancient limit to the annual inundation, but the steepness of the desert edge just at this point indicates the action of water. Considering all things, it seems probable that there was at this place some quantity of water, probably stagnant. Around the northern side (PL. II.) a considerable valley breaks through the sands. It has presumably been formed by water, but at what age it is impossible to say. It is at least older than the middle empire tombs built in it. A similar valley bounds the southern limit to the portion S 1, while the two portions called S 1 and S 2 are separated by a less marked depression. To the west the situation is wholly exposed to the wide desert, of which it commands a view.

20. The indications of dwellings are enigmatical. In the part S 2 there were found the remains of some wood-piles arranged in some system, and between them the abundant traces of small twigs intertwined and of powdered mud. There can be little hesitation then in saying that the essentials of the shelter were provided by a "wattle and daub" construction. A difficulty then arises as to the arrangement. In the sketch plan on PL. IV., the position of all the piles found within that area is indicated. A pencil line drawn through the numbers 14, 15, 16, 17, 19, 25, 13, 24, in succession, reveals the curious fact that only two sides of any rooms are represented in the plan. The same effect occurs with 29, 30, 31 and 32. The "room" in each case, indicated by the litter of bones

and pottery scraps upon its floor, was to the south of these piles. Is it to be supposed that, like the nomads of to-day, these pristine settlers raised their shelter only against the cold northerly winds? In the portion S 1 the indications were less definite; there was the appearance of twigs and mud, but no accompanying piles. Instead, there appeared here and there, in no apparent system, the traces of walls of mud. The traces of actual habitation were scant, but the ground had been too much turned over in recent years to allow of any satisfactory conclusion being deduced. At one point a large stem (apparently of a then growing tree) had been built up to by a low wall, from one direction only. The number of small worked flints of the finer quality taken from this portion, was greater than from the other.

The whole area was strewn with flints, some rough, others worked or chipped. At one point on the outskirts was found a deposit of curious natural flints, a selection from which is illustrated on PL. V. Though some of them are of a snake-like appearance, not all are so. They were found buried in clean sand at a depth of one metre.

21. At another point just to the south of the place S 1 was cleared a series of pot kilns, unique in character. The photographs of PL. III. at the bottom show the best preserved kiln, with pot in position, supported by vertical bars of brick. Owing to the difficulty of getting good light from this point of view (from the north) the photographs do not show the details with satisfactory clearness. [A diagrammatic drawing appeared in "Man" for March, 1902, Art. 29.] A large earthenware pot (or *majur*) is apparently in the act of being baked. It is supported upon a bed of clay, which is lined with a thin layer of charred material, probably some kind of herbage. This clay is held in position by a series of fire-bricks arranged vertically, in graduated sizes, at equal distances apart, and so entirely supporting the superimposed weight. These bars are flat on one side and round on the other; similar bricks (but broken) had been noticed by Professor Petrie at Naqada, but their use was not known. One of the longest of these measured 28 inches. The whole rested upon a prepared clay-bed, and was surrounded by a wall of fire-brick of ordinary character. It seems probable that the obvious explanation is correct: that the fire was placed between the bars below for the purpose of baking the pot that rested above. Possibly there was a roof to the kiln, but it had been destroyed.

The kiln proved to lie in the corner of a group

arranged somewhat regularly together, though all appeared to be independent, and not merely parts of a common furnace. Several other isolated examples, and groups of two and three, were found near, but were in bad preservation. The large pot could not be removed, being already broken and not thoroughly baked; so the whole kiln was carefully covered over, and the authorities of the museum informed of its position. A similar large pot, well baked, but unfortunately cracked, was found in the settlement. It was of unusual size, being 4 feet 6 inches high, and it was indented along the rim with regular rectangular indentations like that which was in the kiln.

22. The flint objects found within the area of this settlement possess some special features of interest. As may be seen by a glance at the plate, there are two distinct types, which in Europe would be named Palaeolithic and Neolithic respectively. On PL. III. is figured a group of the finer-worked examples from the point S 2 of the settlement. These include pieces of knives and cutting implements, some saw-edged pieces, and portions of bracelets. Two other kinds require special consideration. The one is a round flint, somewhat thick, worked down nearly all round to a fine cutting edge on one side only; two examples are shown on the right hand of this photograph; another, of rougher sort, appears on PL. V. in the last photograph on the left hand at the bottom from the site S 1. The other is the arrow or lance-head, of which several varieties are shown in the photograph. It has a double barb only. In the adjoining photograph of clay models from a tomb of the cemetery at Alawniyeh are shown some models in unbaked clay of the identical form. There can remain no longer any doubt as to the real pre-dynastic character of these flint-heads.

Turning now to PL. V., there are three groups of flints selected for illustration from the great quantity that were found as representatives in the main of the different classes which they typify. Perhaps the best series is that of the Flint Hoes, unfortunately photographed on a scale somewhat too small. There is one of these in particular, now in the Pitt-Rivers Museum, which is noteworthy; it is shown in the centre of the bottom row. One side, on the upper half, has received and retained a remarkable polish, as by long-continued friction with a non-gritty earth. The action of sand alone (says Mr. Balfour) would not have created such perfect smoothness. The other side, at the same end, has a polish not so marked; while the other end is hardly smoothed at all, having

probably been fitted to the haft. On the same plate, just to the right above this object, is shown a somewhat perfect saw-flint; it is thicker, and of better finish in the body than the selection illustrated in the photograph below. These latter are not worked equally on the two sides, being for the most part flat on the under side, while the flint is worked in long flakes down the length of the implement; the saw-edge, however, is prominent in them all. Another object of special interest is the forked lance, which appears in the centre of the lower photograph. Its workmanship in the lower half containing the forks (below the notches about the middle) is particularly fine, the dressing of the edge being uniform and close. The special interest of this object, however, appears in another fact. From one of the graves of the cemetery at Alawniyeh there were taken out the pieces of a lance which, when put together, resembles this one in every respect, even in the blunted top. It had not been restored at the time the PL. V. was prepared; but now that the two lie side by side in the Pitt-Rivers Museum, the resemblance is remarkable. The one here figured, from the settlement, is browned, presumably from exposure; but that from the cemetery is of a pale and unpolished appearance. The former, it may be added, was found in a small black-topped pot, itself placed inverted in a large dark pot of domestic character. The other flint objects pictured, while of interest from their *provenance*, call for no special comment. The large and bolder pieces seem to have been used in the settlement concurrently with the implements more finely wrought.

23. Unsatisfactory and inconclusive though this examination of the much-disturbed settlement may be, there yet remain one or two points of interest to be noted. The site was probably on the edge of water, on a prominent rise which commanded a wide view on all sides. The houses or shelters were constructed of wattle and daub, and were arranged with some show of system. Fish and small animals were used as food; the cooking was done in large earthenware pots, over fires of twigs. Arrow-heads, knives, weapons and implements generally were of flint: the working of these was not uniform, but the art of fine working (of the neolithic class) was already known. Copper, though not unknown, was extremely rare, occurring in only two small pieces (the one apparently a drill). The domestic vessels were coarse, but fine work in pottery, flint and stone was accomplished and reserved for the graves of the dead. Their

cemetery was two miles distant, to the south, in a site not physically related to that of the settlement. To judge from their art, in outline and in form, this people was essentially civilised: that is to say, but for the absence of written language (about which there is little indication), the people of this time were as advanced in industrial processes as those of the earliest dynasties. Hence it seems more fitting to speak of them as a pre-dynastic but not a pre-historic people. And yet in date they must be placed at the beginning of the period which has now been archaeologically but not yet historically treated.

### THIRD DYNASTY TOMBS AT BÊT KHALLAF.

WITH PLS. VI.-XXI.

#### CHAPTER III.

##### THE TOMB OF NETER-KHET, K I.

PLATES VI.-XVI.

24. The superstructure of the tomb of Neter-Khet, described in the opening chapter, rises some 33 feet (8 metres) above the present level of the desert upon which it is built. It stands prominent upon a rise of sand a mile or more behind the village of Bêt Khallaf, conspicuous from the surrounding country, and visible even from the farther bank of the Nile. Its south end and western side were found clear of sand, but to the north-east it was partly hidden by some accumulated rubbish. It is about 280 feet (some 85 metres) long, and 153 feet (or 45 metres) in width. Its axis is  $12^{\circ}$  W. of magnetic north, which, from data supplied by the Department of Surveying was at the time  $4^{\circ} 5'$  W. of true north, giving as the real angle  $16^{\circ} 5'$  W. Its sides and ends had an average batter of 5 feet at the top, but the slope is not uniform. The base line, from corner to corner, was straight; but at the top the side curved slightly inwards to the extent of 20 inches at the middle. The side was built up symmetrically to this curve. The systems of bonding employed were not uniform: externally the west side is almost entirely faced with "headers," with occasionally a course on edge to adjust the levels; on the south end nine courses of headers appear below three of stretchers, with four of headers above. Internally, except in special cases, the system

was more generally two or three of stretchers to one of headers.

25. The structure was approximately solid. It was built in sections, in both directions, which fitted up to and sometimes into one another in a manner the plan of which could not have been recovered without seriously destroying the tomb. In the centre, where a clearance was necessary, some notion of the system was disclosed and will be described. Except at this point the bricks employed were in nearly all cases sun-dried, of dimensions averaging 11 inches by 5 by  $3\frac{1}{2}$  (or 28 cms. by 12·5 by 9).

On the eastern side, towards the north end, a sloped way gave access to the summit of the building. It was possibly ancient, but more probably dated only from Roman times, since its lowest point was level with a mound of that date. It is marked L in the plan on PL. VII. From the point E, near to which it leads up, a stairway begins to descend, in a northerly direction. After (approximately) 8 steps, it turns a right angle to the left at the point F, and so descends at a distance of 30 feet (or 9 metres) to the level of the desert, at the point G. This main portion of the open stairway consists of a flight of 30 steps, each 50 inches (125 cms.) wide for two-thirds of the descent; the remainder wider, being 56 inches (or 140 cms.). Its walls are uniformly battered, so that the total increase of width at a height of 24 feet (7·2 metres) due to the inclination of both walls is 3 feet 10 inches (or 110 cms.). At points marked *a*, *b*, *c*, in its sides are recesses descending almost to the steps. They appear to be originals in part, but their purpose is not clear; no deposit was found within them. The foot G of this portion of the stairway is not exactly on the middle line of the structure, being 19 metres from the western side and 26 from the eastern. The descent, which turns south at this point, parallel to the sides of the building, is thus by some three or four metres out of the true axial line.

26. The stairway from this stage, descending under the desert, is covered by a barrel roof of brick, built upon a slope. The opening, visible as an archway, is not well preserved, having been partly destroyed by plunderers in their efforts to force the passage from the recess *c* at its side: but the photograph of PL. VI. shows fairly well its method of construction and the outline of the middle vault in the shadow below. The arch, like others of the same period that have been found, was built of the ordinary form of bricks, placed edge-wise, side to side, and packed above with pebbles and mud-mortar to provide the

necessary wedge form. Some of the bricks of which it was formed bore distinct trace of special hardening, as by fire. An arch in better preservation and of more perfect technique was subsequently found in the adjoining tomb of Hen-Nekht, and others are plentiful in the necropolis of Reqaqnah.

Reverting to the plan and section BA on PL. VII., the passage is seen to continue under the ground at an angle of about 30° (such that in proceeding 2 units the actual descent is 1 unit), to a point approximately under the centre of the mastaba, where it gives access to a series of galleries and chambers at a depth of 91 feet (about 27 metres) below the summit, and of 54 feet (or 16 metres) below the surface of the desert.

27. The descending passage was found to have been closed at six separate points by large slabs of limestone placed across it. One had been designed to protect the opening below the archway at G, but owing to having only one guide (*d*), it had not been truly adjusted and had fallen backwards aslant against the northern wall of the passage. Its dimensions in feet are 11 by 5 by 1 foot 6 inches (or in metres 3·3 by 1·5 by ·45). The other five stones had been lowered into position, portcullis-wise, by means of shafts provided for the purpose. The stones were in general wider than the shafts, in the sides of which grooves had been cut for the slabs to slide in. When finally in position, being thus wider and higher than the passage and being sunk also partly into the floor, they effectively barred the way. Any attempt to dig round them or over them could only be attended with danger of subsidence. In some cases, as will be seen, their very width provided a means of evading their design.

The stones are of increasing size as they are nearer to the chamber entrance. The second stone encountered (the first within the passage) was as large in area as the first, with the greater thickness of 2 feet 6 inches (or 65 cms.). The third was wedged in a position so insecure that its size could only be estimated from that of the shaft: the fourth was found broken, possibly by plunderers. Owing to its proximity to the final shaft, the fifth was not excavated; while that which guarded the mouth of the chambers was 17 feet by 11 with a thickness varying from  $1\frac{1}{2}$  to 2 feet (or 5 metres by 3 by 45 to 60 cms.).

From the bottom of this ponderous mass a small piece had been chipped away, presumably by the Roman plunderers, and by further scraping the sand from below its centre, leaving the ends supported, a sufficiently large opening was thus formed to enable the excavation to proceed within.



28. The narrow and sloping doorway changed almost at once to a spacious passage, cut in a hard stratum of the desert subsoil. On either hand were two small chambers, both filled with sand and dust. Proceeding, on the right hand a narrow doorway led to a side gallery (*g*) with further chambers, which proved to have been stored with grain in sacks. Opposite was another doorway, leading to a series of rooms and ante-rooms (*h-s*) in which were piled in confusion innumerable fragments of alabaster vessels and stone bowls. The main passage hereabouts was strewn with similar pieces, mingled with large wine-jars and pots, all thrown back from the room beyond. Passing by a small chamber on the left, there opened out a spacious stone-walled room (*f*) 16 feet (or 5 metres) square, and 10 feet (or 3 metres) in height, with a roof naturally domed in the desert-gravel. Its walls were built of large blocks of stone carefully dressed and adjusted but without decoration. The contents were hopelessly disordered and in confusion. Passing on again, two large chambers similar to one another (*m* and *n*) appeared on the left hand, seemingly quite empty; and a further turn on the right led on to the last chamber (*p*) some 80 feet (or 25 metres) from the entrance. The sides and roofs of all these rooms seemed to have been prepared by some process of burning. The position of the chambers is indicated on the general plan, and they are distinguished from wells which open to the surface by a line-hatching diagonally across them.

29. The shaft by which access had been gained to these chambers was dug without support through the desert strata. To relieve its sides so far as possible from pressure, it was found necessary to clear out a considerable mass of brick-work from the centre of the superstructure about its mouth. In so doing the system of sections in which the structure was built was partly disclosed. It appeared that the outer sections had been first completed, and that the building had gradually drawn up to and around the mouths of the shafts. A long portion of masonry over the line of the passage seemed to have been inserted last of all, being fitted nicely between two sections on either hand with finished faces and battered sides.

30. Upon the surface of the tomb were two recent deposits: the one was Arabic, of some centuries ago, consisting of a series of decorated wooden boxes, a metal bowl and a fragment of chain-mail. It was placed, without a burial, over the spot marked G. The other deposit was of Roman times, a few large

pots decorated with colours in patterns of the period; they were found in the mouth of the northerly well K, and were probably in relation to a small recess of the same period cut in the eastern face of the tomb, and some fragments of a broken stele.

Once below the surface, owing to the character of the tomb, the deposits were free from all chance of mixture. The original filling of the stairway had to be hewn out with pick and crowbar. The clearing of the steps was done carefully by hand, but all the more fragile vessels had perished anciently with the throwing in of the tenacious mud filling. The vessels had fallen in many cases from step to step as the mud poured down, and those which had thus reached the bottom had been further pounded by the lowering of the portcullis. The solid cylindrical model-vases of alabaster, however, were preserved for the most part entire, to the number of several hundred. They were similar in all respects to the types selected and illustrated on PL. XXII. The alabaster tables, too, the typical forms of which were outlined on PL. XXIX., were in some cases little broken, and could be readily put together. The fragments of bowls were all sorted piece by piece by the nature of their stone, whether alabaster, breccia, diorite, porphyry, or steatite; they were then re-sorted in lots according to their forms, the nature of their rims, their circumference and height. The comparing of results led in a few cases to the restoration of the bowls as shown in the photographs on PL. II.; in others to the recovery of their forms, which are outlined on PLS. XII.-XIV.

31. A copper axe and two castings, with a few implements, were found towards the bottom of steps. Higher up a find of some interest was that of the two flint knives shown in the left hand photograph at the bottom of PL. XV. The one has lost its handle, the other has been worn down on its edge by scraping; but the character of the flaking, and the forms, are readily discernible. Other objects found in plenty in the stairway were wine jars of the forms shown on PL. XXXI., Nos. 21-26. They were sealed with various devices, but the impressions 5A and 5B on PL. IX. were perhaps the most frequent. The seals 1 and 2 on PL. VIII. seem also to have been rolled over the caps of vessels of this form.

32. The same types of deposits prevailed in the different sections of the passage; and the same process of work was carried out in regard to them as to the objects from the different chambers when finally they were reached. In the chamber immediately to the left of the entrance (*e*) were found some small

beads of glaze. In the large room (*f*) also, were a couple of unworn examples of the crescent flints of which numerous specimens from the neighbourhood are pictured on PL. XV. These two from within the tomb appear separately in the left hand photograph at the bottom of the same plate.

33. Of the sealings represented on PLS. VIII.-X. (which though done with care are not exact facsimiles), those numbered 1-6 and No. 11 were all impressed upon the conical caps of mud which covered vessels of such forms as 21, 29 (PL. XXXI.). The smaller impressions on hard black clay, similar to some on PL. X., were in the main the sealings of vessels of alabaster.

The one sealing of Per-ab-sen, No. 8 on PL. X., which occurred in one instance only, was found in the small remote ante-chambers on the eastern side. The sealings of Hapi-n-maat were eight in all, and occurred both in the stairway and in the passage *ef*. Of the nine different sealings bearing the royal name Neter-Khet, there were numerous instances of each kind in the different parts of the tomb. The first one, for example, giving *suten bity* title, occurred on twenty to thirty pieces, while fragments bearing the Ka-name numbered more than a hundred.

34. The quantity of alabaster recovered from the chambers was so great that it has been found impossible up to the time of publication to work through and sort it. Doubtless at some future time it will be found desirable to publish a few addenda to the types pictured on PL. XII.-XIV. In making this selection, however, an attempt was made to leave no conspicuous type unrepresented, and to reproduce examples of those which in form or in quality differed from one another, whether among those vessels which were found entire or those which were found in fragments and are here in part restored.

#### CHAPTER IV.

#### THE TOMB OF HEN-NEKHT. K 2.

[With PLS. XVII., XXIII.]

35. On a mound just to the north of the tomb last described, from which it is separated by some 300 metres, was found the ruined superstructure of a tomb built upon a similar principle; it proved to be the burial place of a king whose name is new to history, tentatively read during the excavation Hen-Nekht, and now by Professor Sethe Sa-

Nekht. In detail of its construction it showed some marked differences from the larger tomb to which it is near. It consisted essentially of two parts alike, with common superstructure, each with its own stairway and set of chambers underground. The one group to the north was supplementary and empty; its portcullis had never been lowered, nor its purpose fulfilled. But the stairway of the central and deeper portion was barred with two great slabs, and in the chambers was found the funeral furniture of a man whose bones and coffin remained in one of the larger rooms.

36. The superstructure of this tomb was not, apparently, a mastaba of ordinary character. Though so ruinous that it was difficult to discern more than its outline amid the mass of brick-work, yet it had seemingly been built up originally in steps, after the manner shown in the photographs of its eastern side, on PL. XVII. Its analogy with the form of the step pyramid at Saqqara is striking. The whole rested upon a low platform of brick laid upon the desert. On the east there was some sign of an ancient pathway leading towards but not up to the building.

At the southern end two narrow walls, projecting perpendicular to the face, enclosed between them (as may be seen in the plan on PL. XVIII.) a recess the use of which was not apparent. A smaller enclosure, built of a single thickness of bricks in the angle formed where the easterly wall joined the main building, was found to contain deposits of various forms of pottery. The divisions marked E F on the plan represent the position occupied by the rising portion of the steps, as illustrated by the section C D.

37. The main passage begins to descend at the point *a*, which is somewhat confused; then turns southward at *b*, descending from that point below the desert level. At *c* it is blocked by a great mass of stone, neatly fitted into position, as shown in the photograph on PL. XVII. It was found by excavation from within that this stone covered the mouth of an arched passage, which led down from this point to the well beyond, where another slab *d* further barred the way. This stone was of great size, being 17 feet high and 8 to 9 feet wide, with a thickness in places of 2 feet. By scraping a hole under its middle, leaving the outer edges resting upon the sand, it was possible to creep through, and so enter the chambers beyond. These are outlined by a white line in the plan, and their vertical depth is shown on the section A B below.

38. After entering, the passage widens out, and is

high enough to enable one to walk upright within. Three small chambers branch off on each side. A long narrow room lies at the end, but turning to the right hand (the west) just at its door, a short passage leads into the spacious burial chamber. Here were found in confusion the remains of a stout wooden coffin (its fragments destroyed by the white ant) and the bones of a man. Dr. C. S. Myers, who has examined these in detail, and whose notes thereon are appended to the end of the present chapter, writes that "the skull is extraordinarily massive, remarkably long, and with marked grooves and ridges. . . . We shall not be far wrong if we conclude that the stature of Hen-Nekht was 1860 millimetres (or 6 feet 1 inch). The skeletal stature thus appears to have been 200 millimetres greater than that of the average pre-historic or early empire Egyptian."

The tomb contained deposits of alabaster and copper vessels, illustrated on PLS. XX., XXI. and XXII.; also some flint and copper implements and pottery; which will be comparatively treated of in Chapter VII.; and further a few fragmentary seal impressions, bearing a royal name, possibly Hen-Nekht, as shown in facsimile on PL. XIX. One fragment, No. 7, may be part of an oval cartouche; if so it is the earliest yet recorded, but unhappily it falls short of giving the necessary clue to the identity of this king.

39. The very stature indicated by his bones, however, may provide a clue. A height of 20 cms. (nearly 8 inches) more than the average of his time, must have constituted him conspicuous among men. Professor Sayce, upon seeing the bones before measurement, was so struck by their remarkable strength, that he immediately recalled the passages in Manetho and Eratosthenes giving mention of one (or two) giant kings of the period. The names given by these historians are Sesochris and Momcheiri; but the question of his identity from this coincidence is hardly an archæological problem.

40. As in the other case, the chambers were plundered and disturbed, and their contents were confused and broken. So far as could be determined, every class of offering, whether alabaster, hard stone pottery or copper, had been represented in the burial chamber. In the process of sifting the sand within, two scraps of jewelry were recovered, being pieces of thin gold-foil doubled over to a triangular form, possibly as pendants. Further than this there is no special feature to record, and the archæological types will be referred to in comparison with others in a later chapter.

41. The other series of chambers in the northern portion of the tomb, as has been indicated, contained no deposits. The descent to them was similar and better preserved: it showed that, as in the tomb K I, the original direction of the first few steps, *g-g*, was to the north; at *h* there was a similar turn to the south, but no stone blocked the passage at K. Here was (and still remains) an archway of singularly perfect construction and preservation. It consists of fifteen bricks, most of which have been purposely shaped as *voussoirs*. This has been effected in a few instances by chipping the ordinary form of brick, but more often by adding a wedge-thickening of mud and allowing it to dry on and harden before use for building. They fit together nicely, and form an arch which is, roughly, the third of a circle. The course is single; and the bricks of the wall are built up to it in horizontal courses, the interstices being filled with broken pieces and hard mud. Passing down, it is seen that the barrel roof consists of three successive descending portions, to follow the steep angle of the passage floor.

Beyond, a few steps spirally in a corner lead down to the bottom of the main shaft, where another interesting feature presented itself. A great portcullis-stone remained supported above the entrance by slender walls of brick built under its edges, about four feet above the floor of the passage, leaving the way clear. The tomb within had never been used, and the door in consequence had not been closed. By this instance the whole process by which these tombs were designed to be protected was made clear. The funeral ceremony performed, and the pathway laden with offerings, the slender walls of brick were removed, and the great stones fell into position before the successive doors, sliding in their grooves. The wells were then filled with mud of a hard and tenacious quality. The surface over all was probably bricked up, to finally conceal the approaches to the tomb. In this way the broken and pounded state of many of the objects is accounted for; for these passages had not for the most part been previously dug out so as to clean the steps, former plunderers having been content to make speculative holes through the solid mass in the hope of reaching the burial and its jewels.

42. With regard to the bones recovered from this tomb, Dr. C. S. Myers kindly furnishes the following statement:—

"The skeleton of Hen-Nekht is particularly interesting; for he is by far the earliest king whose



remains have been found, and they are the first which can with fair certainty be attributed to the IIIrd Dynasty. The Cairo Museum now possesses his skull, two tibiae, his left femur, left clavicle, and left humerus, together with fragments of pelvis, scapulae, and fibulae.

"The skull of Hen-Nekht is extraordinarily massive and capacious. The roof is perfect, save for a gap in the left parietal bone. Its shape corresponds to the term *Beloides* used by Sergi (*Specie e Varietà Umane*, p. 84). The parietal eminences are very strongly developed; the frontal eminences are prominent. The face is intact, save that the zygomatic arches are broken and the maxilla is worn and toothless. The occipital bone is much broken around the foramen magnum. The squamous portions of the temporal bones are much damaged at the upper margins. In side-view, a depression is seen in the profile-line of the forehead between the strong frontal eminences above and the glabella below. The supra-orbital ridges are indicated only over the inner half of the orbits. The nasion is deeply sunk. The nasal bones are short: the shape of the nose is slightly concave near the root, but distinctly convex towards the free end of the nasal bones. The nasal spine is moderately developed. The lower jaw is unusually massive, and marked by strong ridges giving attachment to powerful muscles. The chin is triangular, and very prominent. The angle of the jaw appears almost a right angle. Three right lower molar teeth are present. The face seems orthognathous. The temporal crests are strongly indicated; the mastoid processes are also very powerful. The pteria are in H. The profile curve of the skull-roof is a long low arc traceable from the frontal eminences backward. The hinder half of the parietal region is more flattened; but the supra-occipital part of the occipital bone is well developed, and protrudes noticeably in side-view beyond the parietal region that lies above. Seen from behind, the occipital region is of a rounded pentagonal shape, the two upright sides being unusually long and vertical. The parieto-occipital sutures contain numerous large Wormian bones. The outer surface of the occipital bone is exceedingly rugged. One, in particular, of its many ridges, stretching across the greater part of the width of the bone, at the level of the superior nuchal line, is so prominent as to form a spur projecting nine millimetres beyond the surface of the bone beneath it. On this spur the skull naturally rests, when placed in a horizontal position. In a view from below, little is

noteworthy. There are deep depressions behind and internal to the mastoid processes. The palato-maxillary and inter-maxillary sutures are open. Seen from the front, the forehead is high, full, but a little narrow. The nose is high, but its bridge is broad. The lower margins of the nasal apertures are well defined. The cheek-bones are massive, rugged, and broad. The internal bi-orbital distance is wide.

"The long bones are very massive, remarkably long, and well marked with grooves and ridges. The olecranon fossa of the humerus is imperforate. The femur is very broad at its lower end. The tibiae are highly platycnemic, very massive, and have a strongly convex bend forwards.

"The following are the several measurements given by the skeleton of Hen-Nekht, and by that of another Egyptian of the same dynasty described in sections 44, 45.

SKULLS.	HEN-NEKHT.	K. 3.
	m.m.	m.m.
Glabello-occipital length . . .	193	194
Maximum breadth . . .	153	152
Minimum frontal breadth . . .	97.5	93.5
Basio-bregmatic height . . .	...	147
Nasio-alveolar length . . .	67	64
Nasio-mental length . . .	...	108.5
Nasal length . . .	52	51
Nasal breadth . . .	27	23.5
Orbital height . . .	38	{ 33 (r.) 34 (l.)
Orbital breadth . . .	{ 32 (r.) 30.5 (l.)	{ 39 (r.) 40 (l.)
External bi-orbital breadth . . .	110	100
Internal bi-orbital breadth . . .	25	17
Basio-nasal length . . .	...	100
Basio-alveolar length . . .	...	96
Bizygomatic breadth . . .	...	131
Bi-malar breadth . . .	...	89
Bi-mastoid breadth . . .	107	95
External bi-maxillary breadth . . .	...	63
Bigonial mandibular breadth . . .	105	90
Palatal length . . .	57.5	...
Orbito-malar arc . . .	...	104
Bi-auricular arc . . .	351	343
Horizontal circumference . . .	547	552
Cranial breadth index . . .	79.3	78.4
Cranial height index . . .	...	75.8
Upper facial index . . .	...	48.9
Lower facial index . . .	...	82.8
Gnathic index . . .	...	96.0
Nasal index . . .	51.9	46.1
Orbital index . . .	{ 84.2 (r.) 80.3 (l.)	{ 84.6 (r.) 85.0 (l.)
LONG BONES.*		
Humerus (maximum length) . . .	{ .. (r.) 344 (l.)	{ 334 (r.) 328 (l.)
Radius . . .	...	{ 266 (r.) 260 (l.)
Ulna . . .	...	{ ... (r.) 285 (l.)

\* It is to be regretted that these measurements were not taken with a properly devised osteometer: they may nevertheless be regarded as sufficiently accurate for most anthropological purposes.

LONG BONES—(continued).	HEN-NEKHT.	K. 3.
Tibia (maximum length) (excluding spine)	$\left\{ \begin{array}{l} \text{m.m.} \\ 433 \text{ (r.)} \\ 430 \text{ (l.)} \end{array} \right\}$	$\left\{ \begin{array}{l} \text{m.m.} \\ 418 \text{ (r.)} \\ 418 \text{ (l.)} \end{array} \right\}$
Femur " " " "	$\left\{ \begin{array}{l} \text{... (r.)} \\ 511 \text{ (l.)} \end{array} \right\}$	...
Tibia (ant. post. diam. at nutrient foramen)	$\left\{ \begin{array}{l} 42 \text{ (r.)} \\ 40 \text{ (l.)} \end{array} \right\}$	$\left\{ \begin{array}{l} 33.5 \text{ (r.)} \\ 34.5 \text{ (l.)} \end{array} \right\}$
Tibia (transverse diam. at nutrient foramen)	...	$\left\{ \begin{array}{l} 21.0 \text{ (r.)} \\ 20.5 \text{ (l.)} \end{array} \right\}$
Femur (maximum breadth of lower end)	$\left\{ \begin{array}{l} \text{... (r.)} \\ 79 \text{ (l.)} \end{array} \right\}$	...
Clavicle (maximum length)	$\left\{ \begin{array}{l} \text{... (r.)} \\ 170 \text{ (l.)} \end{array} \right\}$	...
Platycnemic index	...	$\left\{ \begin{array}{l} 62.7 \text{ (r.)} \\ 59.4 \text{ (l.)} \end{array} \right\}$

"The accompanying Table makes it clear that the relative bone-lengths of Hen-Nekht, as indeed those of the early Egyptians generally, correspond more nearly to what is met with among negroid than among European races, if Broca and Humphry's figures can be accepted as true, and if one is justified in taking the mean bone-lengths in a series as representing the average skeletal measurements. The same fact seems indicated if we attempt to construct the stature of Hen-Nekht from his humerus, femur, tibia, and femur and tibia conjoined, by multiplying each bone-length, first, by a factor calculated for Europeans, and, secondly, by another calculated for negroes. The statures in the series obtained by the second method are far more closely identical than those obtained by the first. The humerus of Hen-Nekht is exceptionally short. His leg-bones give a skeletal stature of 1858 millimetres. To this have to be added a few centimetres for the conversion of the skeletal into the living stature; from it have to be deducted a few centimetres to allow for over-estimation

Ratio of Bone-Lengths.	Hen- nekht.	Euro- peans.*	Ne- groes.*	Prehistoric Egyptians.†	Egyptians, VI.-XII. Dyn.‡
$\frac{\text{Humerus} \times 100}{\text{Femur and Tibia}}$	36.56	40.11	38.20	38.64	37.90
$\frac{\text{Clavicle} \times 100}{\text{Humerus}}$	49.40	44.63	46.74	46.73	47.20
$\frac{\text{Tibia} \times 100}{\text{Femur}}$	84.10	80.52	84.78	82.67	84.60
$\frac{\text{Radius} \times 100}{\text{Humerus}}$	...	73.93	79.40	78.78	79.20

\* Cf. TOPINARD'S *Anthropology* (Eng. Trans.), p. 303.

† From the Monograph by E. WARREN (*Phil. Trans. R. S. L., ser. B, vol. 189, p. 173*).

‡ Prepared from Randall-MacIver's figures in Prof. PETRIE'S *Denderah*.

due to excessive macroskely.\* We shall not be far wrong if we conclude that the stature of Hen-Nekht was 1860 millimetres, or 73.23 inches. Beddoe's formula gives a closely similar result.†

"Thus the skeletal stature of Hen-Nekht appears to have been about 200 millimetres greater than that of the average prehistoric or early kingdom Egyptians."

## CHAPTER V.

### THE TOMBS, K 3, K 4 AND K 5.

[With Pls. XXV.-XXXI.]

43. Situated slightly to the east of the tomb of Neter-Khet were three private tombs of the same age. They were related to it in the nature of their construction, by the character of their deposits, and also in the references on the sealings within them. Of these, two were at a distance of some four or five hundred metres only. The third was farther removed, by half the distance to the cultivated lands; it was of more elaborate character, both in construction and in furniture, and proved to be the burial-place of a Ha-Prince of the time.

Of the two that are near to one another, numbered K 3 and K 4, the former is the larger, its superstructure covering twice the area occupied by the latter. In both cases the surface-bricks had been so far removed that it was impossible to recover the plan of any chapel or accessory building that had been raised upon the tomb; but in each case a quantity of chipped limestone on the east side, towards the south end, gave indication of a former construction built of that material. The smaller tomb, K 4, was surrounded by the foundations of a wall enclosing it on all sides, with an internal stuccoed face; its position is shown on the plan of PL. XXV. In both tombs the descent to the chambers was direct, and the door below was closed by a large stone dropped down from above by means of guides grooved in the sides of the shaft. In the larger tomb the passage was cut down through the firm desert, and its floor was nicked horizontally at intervals to prevent slipping. In the smaller tomb the steeper descent was built of brick at the top, with thirteen steps below cut out in the desert. Both of these approaches are illustrated by

\* Cf. *La détermination de la taille, etc.*, by L. MANOUVRIER (Mém. de la Soc. d'Anth. de Paris, 1892).

† "On the Stature of the Older Races," etc. by J. Beddoe (*J. Anth. Inst.*, XVII., p. 202).

the photographs shown on PL. XXIV. The sides of both passages are cut down at a slight slope, which becomes conspicuous as the shafts deepen.

44. In the tomb K 3 there are three chambers: two open out from the passage which leads from the door, and were found to contain vases and tables of alabaster, pottery, and some copper implements, of the types illustrated. The third chamber was larger, formed by the widening out of the passage at its end, and, as in the tomb K 2, was on the western side. This was the burial chamber: a small recess had been cut in the floor to receive the coffin, which had apparently been of wood, but was destroyed. The bones and skull of the burial remained in fair preservation. The furniture of this tomb was chiefly remarkable for the unusual size of some of the vessels and tables of offerings; an example of each kind is outlined, the former on PL. XXVII., No. 14, and the latter on PL. XXIX., No. 6.

In the other tomb, K 4, there was a slight difference in the arrangement of the chambers, but the same general plan was carried out. Within these were three small recesses for offerings, and the burial chamber opened out in a similar situation beyond. A single sealing of rough characters only was legible, giving reference to the King Neter-Khet.

45. Of the bones recovered from the tomb K 3, the measures of which have already been tabulated in section 42, Dr. C. S. Myers writes:—

"The skull is intact save for a broken mandible and left pterion, and the loss of teeth. It is capacious, but somewhat lightly built. It is of the *forma beloïdes* (Sergi) in vertical view. The frontal region is very narrow, the parietal region is correspondingly broad between the eminences. In *side view* the frontal eminences are strongly developed; between them and the well marked glabella is an obvious depression. Ill-defined supra-orbital ridges are present over the inner third of the orbits. From the glabella the profile line passes without sensible depression down to the nasion. The nasal bones are short, and highly concave. The nasal spine is moderately developed. The face is orthognathous. The temporal crests are very faintly marked. The mastoid processes are of average size. The profile curve is long and low, taking an almost vertical direction below the parietal foramina down to 25 m.m. below the lambda, whence it passes in a long straight line downwards and forwards. The pterion on each side is in H. Seen from *behind*, the parietal eminences are high, large, and round, giving the norma occipitalis a rounded pen-

tagonal shape. The parieto-occipital sutures, like the anterior part of the interparietal suture, are very complicated. The superior nuchal line is exceedingly prominent, terminating at its middle in a projecting spur. Seen from *below*, the skull presents unusually deep depressions behind the occipital condyles. The inter-maxillary and palato-maxillary sutures are open; the basi-sphenoid suture is closed. The third right upper molar is just appearing; the corresponding left upper molar is absent. All the remaining molars and two left upper bicuspid are present. From *in front* the forehead appears high, full, but narrow. The nasal bones are very narrow, rounded, and somewhat flat. The lower margins of the nasal apertures are well defined. The cheek-bones are small and widely set; the zygomatic arches are not powerfully developed. The mandible is a slight, weakly-ridged bone."

46. The remaining one of these three tombs, number K 5, is situated apart, somewhat conspicuously upon the plain, between the group of tombs and the cultivation. It is in every way larger than the group of tombs K 3, K 4, covering an area almost as great as that of Hen-Nekht, K 2, and in several parts of its construction showing features of interest not preserved by any of the others. Like the other private tombs, the descent to its chambers was straight, or that portion of it which may have existed in the superstructure had been denuded. It consisted of two flights of stairs, with a horizontal footway in the middle, the portion marked *bc* in the section AB on PL. XXV. The sides of the passage were strongly walled with brick to a depth of about 10 feet, to support a roof which had covered its whole length. In the course of time this had collapsed, and its bricks were found lying upon the floor of the passage. Sufficient remained, however, of the courses from which it sprang, to show the manner in which it had been constructed; a photograph is reproduced on PL. XXIV. It was built on the principle of the false arch, of overhanging bricks, the opposite sides supporting one another when united by mutual pressure.

47. As usual, a large stone protected the doorway. It was avoided on this occasion by forcing an entrance from above it, a course which the nature of the desert did not permit in all cases. The chambers within were found to have been anciently plundered by a vertical hole sunk from above. [The same course is found to have been taken in some of the tombs in the necropolis of this period at Reqaqnah, some two

miles to the north, which was excavated in the following year. It was, as a rule, the plunderer's most expeditious method of reaching the burial-chambers, and so preserved considerable portions of the tombs undisturbed.] In this case only there seems to have been provision made for a double burial; the one in a chamber as usual at the end of the underground passage, to the west; another in a large chamber to the immediate east of the entrance.

This latter had been apparently a secondary consideration; its two chambers contained deposits of alabaster and pottery of the characteristic forms of the IIIrd Dynasty, but no sealings or well-fashioned bowls such as furnished the chief burial in the remoter chamber. From this one there came, on the other hand, some vessels of finer quality than any others found on the site. These are illustrated by the photographs on PL. XXV., and the typical outlines appear in numbers 1-8 on PL. XXVII. The three syenite vases with small handles, while retaining the weight and solidity characteristic of the period, are of special quality of work and of stone. Two of them were selected for the museum at Cairo. The other forms of the period, in alabaster and pottery, were plentiful; a number of sealings refer to Nezm-Ankh, apparently a Ha-Prince of the time. The name of Neter-Khet also appears on an interesting sealing reproduced on PL. XXVI., No. 8.

## CHAPTER VI.

### ARCHÆOLOGICAL TYPES OF THE THIRD DYNASTY.

#### *The Tombs.*

PLS. VII., XVIII., XXV.

48. With only five tombs of the IIIrd Dynasty excavated, at the time this chapter was written, and these confined to one locality, it is impossible to speak of the types found in them as necessarily prevailing throughout the whole period, or indeed to regard the results as otherwise than tentative and perhaps local. The excavation of the necropolis at Reqaqnah, two miles to the north, will probably show, when the results are analysed, to what extent and throughout what period the types here illustrated may be considered to have prevailed. But the fact that no other tombs of the IIIrd Dynasty have previously been recognised, and the complete blank that

has been hitherto in the history of that age, render it desirable to publish these results, so far as they lead, independently, even though some of the questions of detail have not yet received that consideration which must ultimately be given to them.

49. The tomb of Neter-Khet is first to be noted, alike on account of the complexity of its design, as of the great size and new features observable in its construction. The change from the characteristic forms of the largest tombs of the Ist and IInd Dynasties is apparently so great that at first glance it is difficult to perceive any relation between them. The smaller tombs K 3 and K 4, however, help materially to show the connection.

It is unnecessary, and it would be speculative, to attempt to trace the development in detail: a glance at a few characteristic earlier tombs in sequence, however, is interesting. In the season 1900-01 Messrs. Randall-MacIver and Wilkin, working at El Amrah, to the south of Abydos, were enabled to follow the links, and connecting the simple form of the predynastic grave with a class of tomb which in the Ist Dynasty seems to have been typical of the more important burials, they were able to trace the stages by which the burial chamber became enlarged and made rectangular, and finally divided into separate compartments, the larger one for the chief burial, the smaller for the accessories. The whole was roofed over with timber and mud, and in many cases a descending passage led down to it from without. The tombs of Den-Setui and Qa-Sen at Abydos show a further development of this form, as may be seen in Professor Petrie's *Royal Tombs*, II., PL. LXII., and I., PL. LX. After descent of the stairway, the effect of entering the tomb (roofed over as it was with wood and mud, and covered probably with drifted sand) must have been exactly that of entering an underground chamber. The difference between this type and that of the tombs K 3, K 4, becomes one of construction only; the chamber was hollowed out in the desert, leaving a natural roof above it. Possibly the ease with which a wooden roof might be entered, and the tomb robbed, had led to the change. The same cause probably led to the closing of the doorway by a stone, and to the deepening of the passage, so securing a greater thickness of roof. The tomb K 1 is exceptional, yet it is already linked with the type. Its every feature is a development on the same principles, prompted by the same causes. Only the chambers are more numerous, the passage is larger and deeper, the doors are more ponderous and

frequent, and the superstructure is built up high above all to give final strength and effect to the tomb. Thus protected, with its passages and shafts sealed up and disguised, it may well have been regarded as the most secure burial place existing in Egypt at the time. A stone pyramid could hardly have been more deceptive or difficult to enter than this great tomb, which, though it had been once previously opened, at this the second attempt, with a gang of sixty men, for seven weeks defied an entrance.

*The Hard Stone Bowls.*

PLATES XI., XII.; XX.; XXIV., XXVII.

50. There was a general similarity between the bowls from all the tombs. An exception perhaps was the case of three vases of syenite found in tomb K 5, of a form not appearing, in that stone at any rate, in the other tombs. Syenite of various qualities was the most abundant of all the hard stones: porphyry also was common, but breccia was more rare. There are in the main three chief features distinguishing the types, (a) the curve of the outline, (b) the shape of the rim, and (c) the proportional height of the vessels. Among the vessels discovered the first of these features showed little variation, nearly all being worked to a slight but regular convex curve, increasing towards the top.

The second feature was represented by two classes, the one provided with an in-curving lip on the inner side, the other having no such lip, but ending smoothly from the inner as well as the outer sectional curve. The shapes of the lips in the former class showed some variety; and this variation, together with the third chief feature, which was also variable, serves best to define the types. The essential difference, for instance, between the forms 10 and 12 on PL. XII., apart from the quality of the material, lies in the nature of their rims: but between 12 and 7 it lies in the differing proportional heights, as between 10 and 8. The bases of all these vessels were flat, some by obvious design, as Nos. 4 and 6; others seemingly with the outer curve merely flattened at the bottom, as No. 2 on the same plate. With regard to this series of bowls, numerous though they were, it is noticeable how small is the essential variety in their types. Their forms also are not new, being prevalent also generally during the Ist and IInd Dynasties; even at that early date they may be regarded as survivals of still earlier forms of the pre-dynastic period, as may be seen from the numerous examples found at Abydos (PETRIE, *Royal Tombs*, II.) and at Naqada (PETRIE and QUIBELL).

The three forms in syenite outlined on PL. XXVII., numbered 1, 2, and 3, from tomb K 5, and the breccia bowl from the tomb of Hen-Nekht, PL. XVII., are also of known types, lasting an earlier date, and continuing to prevail in general through the time of the Old Kingdom.

*The Vessels and Tables of Alabaster.*

PLATES XIII., XIV.; XXI., XXII.; XXVII., XXIX.

51. The same remarks apply to the vessels of alabaster: the forms outlined on PL. XIII. and XIV. (excepting those numbered 9, 13, 14 and 25), as well as those on PL. XXI., as far as number 8, are in many cases almost the same as the prevailing types of the hard stone bowls. But this alabaster being far commoner has proportionately a greater variety of form.

The tall cylindrical vessel of alabaster, numbered 9 of finely polished surface, with a rope pattern below the rim, is of a type well known in the preceding dynasties. It occurred only in a few examples in these tombs, though models of this type, with surface hardly smoothed and the inside in many cases hardly worked at all, abounded by hundreds: a selected series of types of these is given on PL. XXII.

Spouted vessels are features of the deposits; they occurred in both large tombs, but in particular were noticeable in that of Hen-Nekht, both of alabaster and of copper. The shape of spout is not always the same: in the cases numbered 13 on PLS. IX. and XXI. they are short and open; that numbered 14 on the former plate, from tombs 1 and 2, is smaller and with narrower channel. But a more prevailing and interesting form occurs in the cases 10 and 12 on PL. XXI. as it does in the copper vessel found in the same tomb. In these cases the spout has two channels, connected with the inside by small round holes, and being prolonged externally, extend some way without cover.

The tomb K 5 on the whole revealed the greatest variety of types. In the alabaster vessels numbered 5 and 6 on PL. XXVII. there is a noticeable resemblance to forms dating so far back as the graves of Naqada. The large base 15 again is indicative of the large vessels of alabaster that have been recovered at various times from the necropolis of Abydos.

Another feature of these deposits of the IIIrd Dynasty was the great number and variety of the tables of offerings. They were always made of alabaster; in some cases the stem was cut in one block with the table; in other cases it was a separate piece attached sometimes by cement. The tables were in nearly all cases found shattered, particularly



those which had the leg as an intrinsic part. They had evidently been piled with offerings, and the liquid Nile mud had poured down the stairway (in which they chiefly abounded) and had splintered them the more.

*The Implements of Copper.*

PLATES XVI. and XXIII.

52. The two royal tombs contained an interesting series of small copper implements in considerable quantity. The real objects were more plentiful than the thin models which abounded in the earlier kings' tombs. On PL. XVI., amongst those from the tomb of Neter-Khet may be specially noticed the three knives, 1, 2, and 14, the first of which had become bent and corroded, while the last has a nicely riveted handle. Among the chisels, 23 and 24 are the strongest forms, recurring in the examples 13, 30, 31. Numbers 6, 10, 11, 25, and 26 form another type of which 7, 19, and 29 appear to be rough castings to which parts of the mould still adhere. The axes 21 and 22 are so thin that they are possibly to be regarded as models. The implements are arranged in groups according to the chambers in which they were found. Numbers 14-18, for instance, marked [a], and 23-31, marked [b], are from consecutive portions of the main passage leading to the burial chamber.

The group from tomb K 2 figured in PL. XXIII, includes a number of similar types; the two axes 25 and 26 are thicker and of more serviceable character, and there are also some riveted fittings, possibly from the coffin itself. The two chisels from the tomb K 4, however, are the best of all that were found, and the fine saw-model from tomb K 5 is also of special interest.

*The Flint Implements.*

PLATES XV., XX.

53. From the vicinity of Neter-Khet's tomb there came a variety of rough flints (palæolithic in appearance); while from within the tomb came some of finer workmanship and interesting in form. They are all figured on PL. XV. Of the two knives shown in the left hand photo at the bottom, that with a handle, which is upright, is somewhat rough, and one edge has been worn down as though by scraping. The back of the blade is noticeably concave. The other (in the top of the same photograph) is of better finish, the cutting edge being worked somewhat finely; but the handle is broken away, anciently, as it seems. These two knives were both found in a deposit on one of the steps descending through the superstructure

of the tomb, low down near the first archway. Small flakes or worked pieces like those shown at the top on the right hand are already known in the earliest dynasties: see, for instance, *Royal Tombs*, II., PL. XXXIII.

The crescent-shaped flints below are of special interest. Not only were they found in great quantity and variety near to the tomb, and particularly to its east, but four of a similar shape were discovered within the burial chamber itself. A selection of these "Flints from the vicinity of the tomb" is shown in the group photograph on PL. XV. They are all brown in colour, with a surface polished by continual drift of sand blowing over them. The two found within the tomb, on the other hand (shown on a larger scale with the knives already mentioned), are pale in colour and of rough surface, having been subjected to none of the natural agencies that had affected the others. Similar crescent flints were found during the past season by Professor Petrie within the early *temenos* of Abydos (see PETRIE: *Abydos*, XXVI., 305-314); while Drs. Grenfell and Hunt have observed them commonly in the Fayûm lying about on the open desert.

Below is a group of larger hand weapons of flint, with rough point and edge. They were found on the surface of the desert in the neighbourhood (in which natural flint is plentiful), but they are not necessarily connected in date with the tomb.

Another interesting flint is that which is figured on PL. XX., on the left hand side at the bottom. It may be conveniently called a "gun flint," from its shape. Several good examples were found in the burial chamber within the tomb of Hen-Nekht. It is of rectangular form, with each edge cleanly bevelled, without rippling: its exact use is not apparent.

*The Pottery.*

PLATES XXX., XXXI.

54. As in the case of the vessels of stone, so with the pottery, the numerous fragments seemed to belong to a few standard types. The three forms at the bottom of PL. XXX., numbered 18, 19, and 20, seem to be more unusual; but the remainder are found freely in earlier times. The type 31, for instance, a rough pot of porous brown earthenware, of which 32-38 are deviations, has its prototype in the pre-dynastic period. No. 28 occurs in the Ist Dynasty (cf. Petrie's *Royal Tombs*, I., No. 27), as do 13 and 17 (*ib.* 146) and 16 (*ib.* 19).

## CHAPTER VII.

## REMARKS ON THE INSCRIPTIONS

By Prof. KURT SETHE.

[The transliterations given here have been added to the phonetic equivalents used by the author.—F.P.]


55. The sealings from the wine jars found in the tombs K 1-5 at Bet Khalláf are, some official, and others private. The official seals bear the king's name and the title of the office or official, but never the personal name of the latter; the private seals bear the name of the owner and his titles. The names, whether royal or private, appear either once or thrice on the seal. If repeated, the rest of the inscription is placed between the names, a custom maintained till the VIth Dynasty. The titles and name of the king are almost always written in a direction contrary to that of the other words, apparently as a mark of respect. The same custom appears in Ptolemaic temple inscriptions, where the names of deities are thus reversed.






56. *Sealings of Neterkhet*, K 1, PLS. VIII.-X. No. 1. Official seal of a priest, with royal titles and name facing the priestly titles. *The royal titles* are as on the architrave of the doorway from the step pyramid of Saqqara (Berlin 1185; LEPS. *Denk.* II. 2, f):—

(1) *Suteny bāti* (*štnj-bjtj*) "King of Upper and Lower Egypt";

(2) *nebti* (*nbtj*), a title signifying the identity of the king with the "two mistresses" of the united double kingdom, the vulture goddess of El Kab and the uraeus goddess of Buto;




(3) *Neter khet* (*Ntr-ht*) the Horus-name of king Zeser, here belonging to the *nebti* title, and therefore not enclosed in the usual frame of the Horus-name;










(4)  "gold," which here takes the place of the "golden" Horus-name of later kings.

On the door from the step pyramid  appears instead; and in the Sehel stele  (ERMAN, *A.Z.*, 1900, 120). But here *Neterkhet* being placed over the  may possibly mean "Neterkhet who has conquered the god of  (Set of Ombos)." This would agree with the Rosetta translation of ἀντιπάλων ὑπέρτερος for the royal title . The rendering of this as *bak en nub* (*bjk n nb*) "golden hawk" in later texts (MORET, *Rec.*, XXIII., 23) has no appearance of

conveying the original meaning, and does not agree with usage just described.



The *titles of the priest* begin with—

(5) The name of the jackal god Up-uat (*Wp-wwt*), followed by his figure on a standard, a jackal with only two legs visible as in prehistoric drawings (DE MORGAN, *Rech. sur origines*). Before the animal is an enigmatical object , which is often on the front of standards. In the pyramid texts it is called   (*shed-shed am upt, šdšd imj wpt*), "the *shed-shed* which is in front" (T. 31, 32); and it is on this that the dead king was supposed to ascend to heaven. Behind this was the uraeus serpent (obliterated), seen also in *R. T.*, II., XV., 108, 109, where the serpent is mistaken for a leg of the jackal. A mace is placed across the pole of the standard. Figures of Upuat as here described are usual in the Old Kingdom (L., *D.*, II., 2, 39) and in pyramid texts for the god's name.

(6) The title *sam* (*šm*), which follows, must be connected with the god, as "the high priest of Upuat"; the divine name preceding the title, the usual mark of respect. In later times *sam* (*šm*) was only the title of the high priest of Memphis; but it was more widely applied in the IIIrd Dynasty, as in          *sam hat neter Anpu khenty Ta-zeser* (*šm ht-ntr Inpw hntj Tj-šsr*) "high priest of the temple of Anubis lord of Ta-zeser" (Berlin 13502-3, reign of Nebka).

(7) The title *khery-a* (*hrj-ʿ*) usually, though inexact, translated "assistant"; see "*kherya* of the white house," *R. T.*, I., XXIII., 40.

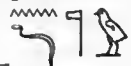
The next seal, VIII., 2, is an official one of the same period. The Horus-name of the king is thrice repeated, and between these are titles written in the opposite direction.



(1) *Uty* (*Wtj*) "he of the town of Ut," a title of Anubis, followed by the jackal-god above the front view of his shrine (as in Berlin 13,502, above). As *Uty* is also a priestly title (usually  ), the "Uty priest" or "Uty priest of Anubis" might be the meaning (see *R. T.*, II., XII., 5).

(2) A fortress named *Neru-tai* (*Nrw-twj*), "the terror of the two lands," enclosed in a fortification; then the title *amy ab* (*imj-ib*) "favourite," probably connected with it, and to be read as "favourite of Neru-tai" or of the Nerutauite; finally the title *kherya* (*hrj-ʿ*) described at the end of the last seal.


(3) The epithets *mery-seten* (*mrjj štnj*), "beloved

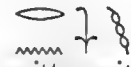





of the king," and *dua neter ra neb* (*dꜥw ntr r nb*), "he who praises the god [i.e. the king] every day," or, "he who daily thanks the king."






K 1. 3A. This is the private seal of an official whose name seems to be  *Nes-neteru* (*Nḏ-ntrw*).












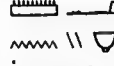
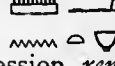

(1) He is called . This group however occurs in K 2, 11, 12, but reversed, , consequently


*nefer* (*nfr*) "good" must be connected with *ankh* (*nh*) "life," and *neter* (*ntr*) "god" with *uz* (*wꜥ*) "command." (This view is supported by *R. T.*, II., PL. XXIV., 212, where the signs *nefer ankh* (*nfr nh*) occur together by themselves in the same relative





position ). The meaning of the two epithets is perhaps "good in life, a god [or, godlike] in commanding."

(2)  *ren nezem* (*rn ndm*). The first word, written with the phonetic signs *ren* (*rn*) and the sign , is found, with the masculine termination *u* (*w*)  *renu* (*rnw*) in seal K 1. 13, and *R. T.*, II., PL. XXIV., 213 (reign of King Khasekhemui), where also it occurs as a title or epithet. The same group of signs, in a different sequence , is to be found on the Palermo stone, in a passage which has been much discussed and, hitherto, always misunderstood,  . Here the word introduces the

name of the king's mother , and must mean something like "child": "King Horus Neter-en (*Ntr-n*) the child of Nub..... (*Nb*.....)" (see the corresponding inscription in the preceding line of the same monument, where only the end of the mother's name  .....rt remains). It is obviously identical with the word  *ren* (*rn*) "the young of animals," written in later times  *reru* (*rrw*) (*BRUGSCH, Dict. géog.*, 714), and  *rer* (*rr*) "boy" (*demot. lwl*, *Copt.* *MAOꜣ* or *AAOꜣ*, *BRUGSCH, Wörterb.* 867), the

feminine of which is  *renent* (*rnnt*) "heifer" (*ib. Suppl.* 729),  *renent* (*rnnt*) "girl" (translated *παρθένος* in the Decree of Canopus). The sign  in the seals of Bêt Khallaf and Abydos follows, and in the Palermo stone precedes, the phonetic signs *rn*. It cannot be used therefore in these instances in its later phonetic value of *ny* (*ny*) or *n*, but must be a word-sign for *rn*. And as the sign  in itself represents apparently an unblown southern plant , the original meaning of the word *ren* ("child," "young") must have been "a young plant," "shoot," or "sprout." The title or epithet *ren* (*rn*), *renu* (*rnw*), on the sealings is certainly not this word itself, but rather a derivative of it. From *ren* (*rn*) "child," etc., was derived in the first place the verb  *renen* (*rnn*) "to suckle," "to bring up." It was written  in the Old Kingdom,  *rer* (*rr*) in later times (cf. the Greek *παιδεύω* from *παῖς*). From this verb comes the feminine noun  *renent* (*rnnt*) "nurse" (see *L., D.*, III., 196, 10, *rnnt-f*, "his nurse"), which is written later  *reret* (*rrt*) or  (the female hippopotamus, as nurse of the gods). Apparently it is this feminine form to which the title *ren* (*rn*) *renu* (*rnw*) belongs, and is a synonym for the later word  *menay* (*mnꜥj*) "teacher," which is derived in an exactly similar manner from  *menat* (*mnt*) "nurse." The whole expression *ren nezem* (*rn ndm*) should therefore mean "pleasant teacher." (For the archaic form of the sign  *nezem* (*ndm*) cf. seals K 1. 15, K 5. 7).

(3)  *neza* (*ndj*), a form of the verb *nez* (*nd*) "to ask advice," "to make enquiries," "to consult"; perhaps the 3rd pers. sing. masc. of the pseudo-participle, as a circumstantial clause to the preceding phrase, "a pleasant teacher, when asked for advice."



(4)  *sesh* (*sš*) "scribe." For the writing with  as sole phonetic complement instead of the usual  *sesh* (*sš*) "to write," see , *L., D.*, II., 7 b (IIIrd Dyn.).










Thus the whole inscription should be translated



—*salvo errore*—as follows: "One who was good in his life, a god in commanding, a pleasant teacher when asked for advice, the scribe *Ner-neteru* (*Nḏ-ntṛw*)."




K I. 3B. Private seal of an official Ra-khuf (*Rḫw-f*). This name, which occurs elsewhere in the Old Kingdom (MAR., *Mast.*, 430), is formed with the name of the sun-god Ra in the same way as other well-known Old Kingdom names, e.g. Khnum-khuf (*Hnm-ḫw-f*) the name of King Cheops, and Her-khuf (*Hr-ḫw-f*) the famous explorer of the Sudan, which are compounded with the names of the gods Khnum and Horus. The name of Ra-khuf (*Rḫw-f*) is repeated three times, with his titles between.

(1) Incomprehensible titles, obviously having some connection with the ornaments  and clothing  of the king.






(2)  *sesh smt* (*sš smt*) "scribe of the desert" (cf. the titles  *and-mer smt* [*nd-mr smt*] "district-chief of the desert" [L., D., II., 3, 100 b],  *mer smut* [*mr-smwt*] "superintendent of the deserts" [L., D., II., 100 b]). If the  *s* belongs to *sesh* (*sš*), as in seal K I. 3A, the word *smt* would be written in its ordinary abbreviation . If however the  *s* belongs to *smt*, the word would then be written  and would differ from both the usual later writing  and the rare  of the IIIrd Dynasty (L., D., II., 3) only by the omission of the feminine termination, a common omission in the earliest times (cf. K I. 7).

(3) An illegible title.






K I. 4. Official seal of an administrator of the vineyard of King Zoser (*Dsr*). The Horus-name of the king, Neter-khet (*Nṛ-ḫt*) is repeated three times; between, and in a contrary direction, are the following words:—




(1) The name of the vineyard, and the title of its administrator. The sealing-inscriptions from the Royal Tombs at Abydos show that every king of the early dynasties possessed a special vineyard, which supplied wine to the tombs of himself, his family, and his servants. The names of these special royal vineyards are usually enclosed within a wall, as, probably, were the vineyards themselves. According to the present inscription, the name of King Zoser's (*Dsr*) vineyard was    *Dua-Hor-khenti-pet* (*Dwḥ-Hr-ḫntj-pt*) "Praised be Horus who is in

the front of heaven" (cf. the similar name of King Kha-sekhemui's vineyard: *Dua-bau-Hor* [*Dwḥ-bṛw-Hr*] "Praised be the souls of Horus." R. T., II., PL. XXIII., 199, 200). The vineyard of King Zoser appears to have been exceptionally famous, for it is mentioned in many instances, even in much later times. Peh-er-nefert (*Ph-r-nfrt*), who may have been contemporary with King Zoser, is called in his tomb


at Sakkara  *and-mer* (*nd-mr*) of this vineyard (MASPERO, *Etudes égyptiennes*, II., 267), which post existed in the vineyards of the earlier kings (cf. jar-sealings, R. T., I. and II.). The same title, written without the enclosing wall,    

is frequently found in the tomb inscriptions of the IVth and Vth Dynasties at Gizeh and Sakkara (see MASPERO, \* *ibid.*, 269). In the Middle Kingdom, many of the old titles were revived, often without being understood, and thus the name of King Zoser's vineyard in the title above mentioned was mistaken for an independent title, "He who praises Horus, who is in the front of heaven," and used without the accompanying *and-mer* (*nd-mr*) (cf. L., D., II., 121; GRIFFITH, *Siut*, I., 83, II., 12, etc.). Finally, wine




of this famous vineyard,      *arep Dua-Hor-khenti-pet* (*irp-Dwḥ-Hr-ḫntj-pt*), is mentioned in a list of wines in the temple of Abydos as late as the XIXth Dynasty (MARIETTE, *Abydos*, I., 35a).

The title  *za-her* (*dḥ-hr*), which follows the name of the vineyard, occurs frequently on vineyard sealings of the earliest dynasties, often in reversed order (R. T., I. and II.). The first sign is read  *hetep* (*ḥtp*) by Mr. Griffith and Mr. Thompson (R. T., II., p. 52), but it should surely be  *za* (*dḥ*) (cf. R. T., I., PL. X., 9). The title may perhaps consist of the expression *zay-her* (*dḥj-hr*), "to turn the face towards," "to assent to," and thus mean an "overseer."

(2) The name of a second vineyard, also enclosed within a wall, *Sen-Dua-Hor-khenty-pet* (*Šn-Dwḥ-Hr-ḫntj-pt*), "the brother or the 'fellow' of the above-mentioned vineyard *Dua-Hor-khenty-pet* (*Dwḥ-Hr-*


\* Maspero is mistaken in denying the identity of the titles. When  *sab* (*sḥb*) "judge" does not occur before the title, the words following *and-mer* (*nd-mr*) must contain the name of the place administered by the *and-mer* (*nd-mr*). Where not followed by such a place-name, the *and-mer* (*nd-mr*) title is invariably preceded by the judge-title, *sab* (*sḥb*) in inscriptions of the Old Kingdom.








*hntj-pt*." The meaning of the inner transverse curve over the sign *khent* (*hnt*) is doubtful.

(3) The god  Horakhti (*Hr-i:htj*) "Horus of the horizon," represented as a human figure with a hawk's head, holding in his hands the symbols of life  and happiness . In front of him are the words *dä-ef ankh, uas, dedet* (*dj-f 'nh wäs ddt*) "he gives life, happiness, and stability," viz. to the king, whose name is opposite to the god (see *R. T.*, II., PL. XXII., 179; PL. XXIII., 199, 200, for similar representations on sealings of earlier royal vineyards; also K 5. 8).

K 1. 5A, B. Two similar official seals of public vineyards. The Horus name of King Zoser is repeated three times; between, and in a contrary direction, are the following words:—

(1)    *kanu* (*k:nw*) "vineyards."


(2)  *as zefau* (*is dfrw*) "provision office," to which apparently the vineyards were subject.


(3) The name of the place where the vineyards were situated. It is in *a*,  *sert* (*drt*) "Wall," the feminine termination being omitted as usual. It is probably the same as the later  (BRUGSCH, *Thes.*, V., 951), or  (*Dict. géog.*, 56), which is believed to be a name for Memphis. In *b*,  *sebtu*, or *anbw, hezu* (*sbtjw* or *inbw hdw*) "the white walls" (*λευκὸν τεῖχος*), the common  name for Memphis in the earliest times, before it was superseded by the name of King Phiops' pyramid, Men-nefer (*Mn-nfr*), Memphis. For the irregular position of  before the third , cf. the writing of *nezem-ankh* (*ndm-nh*) in K 5. 7.


Sealings with inscriptions similar to 5B were found in the tomb of King Kha-sekhemui at Abydos. They differ only in the name of the king—Kha-sekhemui instead of Zoser—and in the relative positions of the three interposed columns of words (*R. T.*, II., PL. XXIII., 193). From the close agreement of these inscriptions it appears probable that the reigns of these two kings occurred near together, one succeeding the other. Other facts pointing to the same supposition will be found below (K 1. 6, 7. Note also an injured sealing from the tomb of King Kha-sekhemui, which seems to show the name of King Zoser, *R. T.*, II., PL. XXIV., 211).

K 1. 6. Sealing of another government vineyard.





The Horus name of King Zoser is thrice repeated; between, and in the same direction, are the following words, now almost destroyed:—





(1)  "the Western nomes," i.e. of the Delta (cf. K 5. 8 and *R. T.*, II., PL. XXI., 172.).

 The only legible sign has the shorter vertical line doubled, as in K 5. 8, and placed before the longer one, as in *R. T.*, II., PL. XXIV., 203.

(2)  *per-seten per-desher kanu* (*pr-stnj pr-dsr k:nw*) "King's house, red house, vineyard." Cf. *R. T.*, II., PL. XXIII., 191; PL. XXIV., 206. For the "red

house," see Mr. Thompson's very ingenious interpretation, *R. T.*, II., pp. 54, 191.

(3)   A place name. The same name apparently occurs as   on a sealing of King Kha-sekhemui in an inscription similar to those discussed above, K 1. 5A, B (*R. T.*, II., PL. XXIV., 202, 204).

The first sign, of which in every case the upper part is lost, might with equal probability be  *waz* (*w:q*), in its early form which is like  *sen* (*sn*) (see the name of the uraeus goddess  Uazit (*W:djt*), *R. T.*, II., PL. XXIII., 192, 196; and the word  *Uaz-ur* (*W:d-wr*) "sea," *ib.* PL. XIX., 152).

The three columns should perhaps be read in this order, 2, 3, 1: "Vineyard of the red house of the king's house in the town of Sen(?)pu in the Western nomes." The inscription would thus correspond very nearly to the inscriptions K 1. 5A, B. The seal *R. T.*, II., PL. XXIV., 203, may have the same inscription, but with the name of King Kha-sekhemui instead of King Zoser.




K 1. 7. A sealing of the famous queen Ne-maat-Hap (*N-m:t-Hp*), whose name, "Truth belongs to Apis,"\* is remarkable for its apparently Memphitic character. The name of the queen is repeated three times, and is followed (as is shown by the vertical line before the name) by her titles:

(1) *Mut-suten-bati* (*mw:t-stnj-bjtj*) "mother of the king of Upper and Lower Egypt." On an earlier sealing of the reign of King Kha-sekhemui (*R. T.*, II., PL. XXIV., 210), she bears another title, *mut mesu seten* (*mw:t msw stnj*) "mother of the king's children," i.e. "wife of the king"; which title she receives also in the somewhat later tomb of Meten in the reign



\* A name like Ne-maat-Ra (*N-m:t-r*) = Lames (Amenemha III.).





of Snefru (L., D., II., 6).<sup>\*</sup> This latter appears to have been her chief queenly title, which she bore in the reign of her husband—presumably Kha-sekhemui—and by which she was known in later times; whereas the former was her title as queen-mother, which she assumed in the reign of her son. Hence she was probably the mother of King Zoser, who was the son of Kha-sekhemui. This conclusion would entirely agree with what we suggested from the sealings K I. 5A, B.

(2) *Zedet akhet nebt ary-n-s* (*ddt iht nbt irj(w)-n-s*) “if she says anything, it is done for her.” The feminine terminations to *zedet* (*ddt*) and *nebt* (*nbt*) are omitted as usual. The same title is found on the queen’s sealing of the reign of Kha-sekhemui (R. T., II., PL. XXIV., 210).



(3) An injured title which one would gladly complete as  *Khet-Hor* (*ht[t?]-Hr*) “servant of Horus” (cf. MASPERO, *Etudes égyptiennes*, II., 265), a title borne by the queens of the IVth Dynasty (DE ROUGÉ, *Inscr. hiérog.*, 62, 77; MAR., *Mast.*, 183). But in Mr. Garstang’s judgment the traces which remain do not correspond to . One may also suggest the title  *mat Hor-Set* (*mt Hr-Št*) “she who sees Horus-Set” (the king) which was borne by the queens of both the I<sup>st</sup> and the IVth Dynasties (cf. R. T., II., PL. XXVII., 95, 96, 128, 129, written without the feminine termination).


K I. 8. Remains of a sealing with the name of King Per-âb-sen (*Pr-ib-šn*) of the II<sup>nd</sup> Dynasty, the inscription being incomplete both at the top and bottom. As in the Abydos inscriptions the name Per-âb-sen (*Pr-ib-šn*), though the personal name of the king, is enclosed in the usual frame of the Horus-name, and is preceded by the name of the god Set, as a royal title corresponding to Horus. This method of writing the king’s personal name as a counterpart to his official Horus-name has as yet been found only in the case of Per-âb-sen and, in a slightly different manner, in that of Kha-sekhemui, the probable predecessor of Zoser. This, then, would seem to be the fore-runner of the later custom of enclosing the king’s personal name in an oval, which arose in the III<sup>rd</sup> Dynasty. The signs *per-âb-a* (*pr-ib-‘*) placed opposite the king’s name may be either a place-name or the name of a building (see the corresponding sealings from the tomb of Perâbsen at Abydos, R. T., II., PLS. XXI., XXII.).


<sup>\*</sup> For the extraordinary writing of *mesu-suten* (*mšw-štnj*) with  instead of , compare MAR., *Mast.*, 256.


K I. 9. Private seal of a scribe, whose name   should probably be read Hotep-(uy)n (*Htp-[wj]n*) (pseudo-participle 1<sup>st</sup> pers. plur.), the meaning being “We are satisfied,” which expresses the feelings of his parents. Between the three repetitions of the name were the man’s titles, now entirely destroyed with the exception of the first. This may have been either  *sesh* (*sš*) “scribe” (cf. K I. 10; R. T., PL. XXII., 189), or  *sesh semt* (*sš smt*) “scribe of the desert” (see above K I. 3B).



K I. 10. Official seal with the Horus-name of King Zoser. Opposite the king’s name are the incomprehensible signs *khet-ekh* (*ht-h*).


K I. 11. Private seal of a scribe whose name  is apparently an archaic writing of the later  *Ne-ankh-Sekhmet* (*N-‘nh-Šhmt*) “life belongs to Sekhmet,” which occurs in the Vth Dynasty (MAR., *Mast.*, 203) and is of a very usual type of personal names of the Old Kingdom. (For the peculiar order of the signs see the writing of the name Mer-âb [*Mr-ib*] in K 5. 6). Between the three repetitions of the name are the following words:—

(1) The title  *sesh* (*sš*) “scribe.” See above, K I. 9.

(2) The name of the Memphite nome  *Sebety-hez* (*Šbtj-hd*) (see DAVIES, *Ptah-hotep* II., PL. XV.); probably connected with the preceding; “Scribe of the Memphite nome.”







(3) If Mr. Garstang’s restoration of what remains is correct, probably  *Het-nub* (*Ht-nb*), the name of the place where the alabaster quarries were situated, near El Bersheh in Middle Egypt.



K I. 12. Official seal with the Horus-name of King Zoser facing the following words:  *sa* (*sš*) “guard,”  *arep* (*irp*) “wine,” an unrecognisable sign, and an enclosing wall containing perhaps a vineyard name, which cannot be deciphered.


K I. 13. Private seal of a man whose name  *Ary-sen* (*Irj-šn*) is repeated three times; between the repetitions of the name are the following titles or epithets:—

(1)  *nefer medu maa* (*nfr mdw mš*)






K 2. 21, found in the same tomb as those which we are now considering. It seems therefore very probable that the King of the Horus-name Sa-nekht (*Sṯ-nḥt*) was one of the immediate successors of Zoser. The cartouche, on which this conclusion is based, contains a name which is almost broken away on the sealing, but some traces of the last sign are still visible. From examination of the original I am led to believe that it can hardly be restored otherwise than as  *ka* (*kṯ*) in its archaic form with a curved base, which was the usual form in inscriptions of the three earliest dynasties (*R. T.*, I. and II. *passim*; *L., D.*, II., 39a, b, from the reign of Neb-ka). Among the personal names of the kings of the IIIrd Dynasty two end with the sign  *ka* (*kṯ*), viz.  Neb-ka (*Nb-kṯ*), and  Nefer-ka-Ra (*Nfr-kṯ-r*). Judging by the other sealing inscriptions the cartouche could not extend above the head of the hawk of the Horus-name opposite. The remaining space within the oval would not then be sufficient for the signs  and , even if they were written beside


each other,  instead of the usual . There



would, however, be just room enough for the smaller sign . I think therefore that we are entitled to regard the royal name within the oval as that of King Neb-ka, who, according to the Turin Papyrus and the Abydos tablet, was the predecessor of Zoser, or, according to the Westcar Papyrus and the Sak-kara tablet, one of his immediate successors. But whether the Horus-name Sa-nekht (*Sṯ-nḥt*) belonged to the same Neb-ka or to a later king, cannot be decided yet.


Between the repetitions of the Horus-name—probably three as usual—stand the titles of the official, written in a contrary direction. What remains is as follows:—


(6) The word *kha* (*ḥṯ*), which means “to appear,” “to rise,” “to be crowned as king,” “festival,” or “crown”; and the word  *shems* (*šmṯ*) “to accompany, to follow.”

(7)  *hen shenut Neb-ka* (*ḥn-šnwṯ Nb-kṯ*) “servant of King Nebka’s granaries.” The sign  *hen* (*ḥn*) is quite clear in the original. (For the peculiar use of *hen* (*ḥn*) “servant,”






cf. the title of Meten  *hen per mut seten* [*ḥn pr mwt ṯnṯ*] “servant of the house of the king’s mother.” *L., D.*, II., 120).

(8)  *nekht kheru* (*nḥt ḥrw*) “strong of voice,” a title frequently borne in the Old Kingdom by officials of the granaries (MASPERO, *Etudes égyptiennes*, II., 135-139. Examples of the IIIrd Dynasty are *L., D.*, II., 5; Berlin 13,503). The horizontal line above the  is perhaps the margin of the inscription.

(9) The signs  *t...sh* (*t...ṣ*); below them, what appears to be the lower margin line. This fragment possibly gave the continuation of the titles on 7 or 8.






(10) Apparently the hieroglyph  *r*. This may fit on to the lower part of fragment 8 or the upper part of fragment 9.

11-16, 18, 19. Fragments of sealings made by the intermingled rolling together of two separate seals on the clay. Both seals belonged to the same man, Anpu-hotep (*Ḥnpw-ḥtp*), a common name in the Old Kingdom (MAR., *Mast.*, 203, 327; DAVIES, *Ptah-hotep*, II., PL. XX.).

The inscription on the first seal apparently reads     . The name comes first, as on the seal of queen Ne-maat-hap (*N-mṯ-ḥp*), K 1. 7; then the titles follow:

(1) *Mer shent Anpu* (*mr šnt Ḥnpw*) “chief of the *shent* (hundred?) of Anubis.” (For the title *mer shent* (*mr šnt*), a common one in the Middle Kingdom, see SPIEGELBERG, *A.Z.*, XXXVI., 138. For the writing of the god’s name [jackal and temple] see above, K 1. 2).

(1) *Neter uz nefer ankh* (*nṯr wḏ nfr nḥ*) “a god in commanding, good in life” (see above, K 1. 3A).

The second seal gives the name Anpu-hotep repeated three times between the titles. To this inscription belong also the signs    on fragment 12, the signs   on fragment 11 (below, to the right), and fragment 19.











K 2. 17. A few signs *er-neb-ary* (*r nb ṯry*) from another sealing.





K 2. 18, 19. See above, 11-16.

K 2. 20. Fragment of an official sealing containing a Horus name; the frame in which the name was enclosed has a different ornamentation from those on the other sealings. In addition to the

frame, only the phonetic signs *s* and *z* (*s* and *d*) are visible.


K 2. 21. Fragment with traces of King Zoser's Horus-name, Neter-khet (*Ntr-ḥt*); cf. above, 1-10.

K 2. 22-24. Three fragments of sealings with very large writing, all apparently from the same seal. In 22 and 23, the title *rekḥ-seten* (*rhj-ṣtnj*) "acquaintance of the king," is quite clear. The other signs may be part of the name of the owner of the seal, which name was probably repeated as usual three times. If this suggestion is correct, the name would begin with  *sekhmet* (*sh̄m*) in 23, then would follow the sign in 22 which was apparently *mery* (*mrj*) and which recurs in 24. Thus the name may have been     *Mery-Sekhmet-maat* (*Mrj-Sh̄mt-m̄t*) "Sekhmet loves truth,"    *Mery-her-en-Sekhmet* [*Mrj-ḥr-n-Sh̄mt*] "Loved is the face of Sekhmet," or some similar compound containing the word *mery* (*mrj*) "to love," and the name of the goddess Sekhmet written in the same archaic and abbreviated manner as in K 1. 11 (see *Mery-Ra-maat* [*Mrj-r̄-m̄t*], MAR., *Mast.*, 316, also *Mery-her-en-Ptah* [*Mrj-ḥr-n-Pth*], MAR., *Mast.*, 270). The sign  *kheru* (*ḥrw*), which stands beside the  *mery* (*mrj*) in 24, must belong to a title; it may perhaps be all that remains of *nekht-kheru* (*nḥt-ḥrw*), see K 2. 8.

K 2. 25. Private sealing with large writing; greatly injured. The isolated words   *an* (*in*) "to bring,"  *maa* (*m̄*) "true" (cf. K 1. 13.), and  *khem?* (*ḥm*) "to forget"? are still recognizable.

## 58. Sealings from tombs K 3-5. PL. XXVI.


K 3. 1. Fragment of an official sealing with the Horus-name of King Zoser.




K 3. 2. Isolated signs, of which the two first may perhaps be  *up* (*wḫ*).


K 3. 3. Disconnected signs.

K 4. 1. Official sealing with the Horus-name of King Zoser repeated three times as usual.










K 5. 1. The royal titles *seten-bati nebti* (*ṣtnj-btj nbj*) from an official sealing, like K 1. 1.




K 5. 2. Fragment of the frame of a Horus-name; beside it is the word  *sa* (*si*) "protection."







K 5. 3. The isolated group    *khaten* (*ḥ(?)tn*).

K 5. 4. Perhaps the sign  *het-neter* (*ḥt-ntr*) "temple."



K 5. 5. Fragment of an official sealing with the Horus-name of King Zoser, written in the same order as in K 1. 5A, B.





K 5. 6. Private sealing of a scribe, whose name appears to be  *Mery-ab* (*Mrj-ḥb*), a common name in the Old Kingdom (L., *D.*, II., 18-21, *Text*, I., 90; MAR., *Mast.*, 435-441; *Louvre, Inv.* 3389). For the peculiar position of the final  *b*, cf. the writing   for Ne-ankh-Sekhmet (*N-ḥb-sh̄mt*) in K 1. 11., and the usual Old Kingdom writing  for *merhet* (*mrḥt*) "oil." The  *s* behind the name probably belongs to a title, and therefore it would be incorrect to restore it in the repetition of the name. The titles, which were placed between the repetitions of the name, are wholly destroyed with the exception of    which may be either *sesh* (*šš*) "scribe," or *sesh sh(a)* (*šš š[ʔ]*) "scribe of the lake."

K 5. 7. Private sealing of a priest, whose name   is to read *Nezem ankh* (*Nḏm-ḥb*) "sweet-life," a very common Old Kingdom name (L., *D.*, II., 107; MAR., *Cat. d'Abyd.*, 359, 538, *Louvre, Inv.*, 3389; as a woman's name, MAR., *Mon.*, *div.* 18A). For the archaic form of the sign  *nezem* (*nḏm*) see K 1. 3A, 13, 15; for its irregular position, cf. the writing of *Sebtju hezu* (*Šbtjw ḥḏw*) in K 1. 5B, and of *kherp shemsu* (*ḥrp šmšw*) in K 5. 8. Between the three repetitions of the name are the following titles:—








(1)    *Kher-heb* (*ḥrj-ḥb*) "lector-priest"; and a title which must obviously be restored as   *nezer?* or *akeh?* *ams* (*nḏr?* or *ḥḥ?* *ims.*) This title occurs occasionally in inscriptions of the IIIrd Dynasty (*Louvre*, A 39; MAR., *Mon.*, *div.* 18-20), and is the only Old Kingdom title compounded with  that agrees with the remaining signs. The meaning of this archaic title, which contains the name of the *ams* (*ims*) sceptre, is very obscure.







(2)  *kety-a* (*htj-<sup>a</sup>*) (see my remarks in *A.Z.* XXXIX.) "prince," and  *ary Nekhen* (*irj Nhn*) "guardian of Hierakonpolis," i.e., of the capital of the Kingdom of Upper Egypt in prehistoric times. These two titles often occur together in inscriptions of the Old Kingdom.

(3)  *sam* (*sm*) "high-priest" (see above K I. 1.) and  *ary Pe* (*irj P*) "guardian of Buto," i.e., of the capital of Lower Egypt in prehistoric times; a parallel title to that of Hierakonpolis mentioned above. This latter title is frequently written  or  in Old Kingdom inscriptions.

K 5. 8. Official sealing, with the Horus-name of King Zoser repeated three times; between and in a contrary direction are the following:—




(1) A title, now completely obliterated; and then the title  *kherp shemsu* (*hrp šmsw*) "leader of the servants." In the IIIrd Dynasty this is written  (Louvre B 1) or  (Berlin 13,502-03), and in these instances it is followed by  *meru* (*mrw*) "waters." Note the form of the sign  which clearly shows that the word "leader" is not to be read *sekhem* (*škm*), as some scholars believe, but *kherp* (*hrp*). For the inversion of the two signs,  *kherp* (*hrp*) following  *shems* (*šms*), see above, K 5. 7.



(2) An obliterated word, and then  *Amentiu* (*Imntjw*) "the western nomes," viz.,  of the Delta. See above, K I. 6.













(3) A goddess in human form, holding the symbol of life  and happiness  in her hands (cf. K I. 4 for similar representations).

## 59. PL. XXVIII.

The cursive ink-written inscriptions. These are so much injured that only isolated words can be distinguished. Nevertheless, as the first examples of the cursive writing (hieratic) of the IIIrd Dynasty, they have a special value.

1. ....  [  ] ....  containing the word *hur* (*hwr*) "small, little, weak."

2. ....  [  ] containing the archaic word *haau* (*h<sup>aw</sup>*) "young men, adolescents."

3. The upper line   may have given the name of the place from which the contents of the vessel originally came. The lower line gives the contents themselves:             

# THE CEMETERY AT MAHASNA.

## CHAPTER VIII.

### THE TOMBS AND BURIALS.

#### (a). *Character and Construction of the Tombs.*

60. The general features of the necropolis which was found to lie between the village of Mahasna and the Maslahet Harun have been already outlined. This cemetery, extensive though it is, does not seem to have commenced definite growth before the time of the Old Kingdom, so that the few earlier tombs must be regarded as original and isolated examples. The second and third dynasties, for instance, are not plainly represented, whereas the first dynasty characteristics are found in a fine tomb, which, being the first excavated, is called M 1. Its plan is given on PL. XXXIII. It is of the simple character of the earliest stairway tombs, with three recesses or antechambers leading from the main chamber. The stairway descends from the north, between walls of brick. To judge from analogy, it was probably roofed over with timber and mud, of which, however, the traces are lost. The objects found in the *débris* of this tomb (which had been previously excavated by De Morgan), were of uniformly early character. They included the dishes of slate and limestone numbered 12 and 15 on PL. XXXV., the fragments of stone bowls numbered 16 and 17, and the more perfect vase of alabaster numbered 19. The piece of polished ivory shown on PL. XXXIII. is fitted with a copper cap. The tomb M 2, with two sets of antechambers leading out respectively from two wells, was less instructive, having been quite cleared out in recent times by the fellahcen.

61. The character of the five hundred or six hundred tombs of the general necropolis will become evident in considering the details concerning the burials placed within them; but something in their construction enables them to be reduced to a few types which may be briefly summarised.

Examples of the familiar well or pit-tomb were numerous. The vertical shaft was usually from three to five or six metres in depth, and with a length and width uniform in the same case, but varying in differ-

ent instances from two to two-and-a-half metres, and from half a metre to one-and-a-half metres respectively. These were uniformly placed north and south (in general tendency), and had usually one or two burial chambers leading out from the bottom of the shaft, one at each end. Sometimes there were no chambers, the burial being placed in the shaft itself. Sometimes, too, but more rarely, a small recess was hollowed under the side of the shaft, and after the interment the opening was then bricked over. In the better-constructed pits, the sides were walled with brick down to a considerable depth, until a firm stratum of desert gravel was reached; in the majority of cases, however, a few courses only through the drift sand were employed.

Another distinctive class of tomb was of simpler construction. Commonly no brickwork whatever protected it. A hollow in the sand (corresponding to the shaft of the pit tombs) gave way to a recess along its side, generally the western side. Undoubtedly this form is linked directly in development with that in which a bricked shaft leads to a chamber in its side; but so completely was all trace of architecture wanting in general, that it becomes a class by itself. Other tombs were for the most part mere modifications of these forms. Sometimes there was only one chamber, which was generally to the south (as in tombs elsewhere of the Old Kingdom); in two or three instances the number of chambers exceeded two, in which case they were arranged one above the other at the ends; but the strata of gravel were rarely of sufficient strength for this purpose. There were isolated cases of burials differing in character—some few, for instance, being found in shallow round graves like those of pre-dynastic times.

#### (b). *The Undisturbed Burials.*

[PLS. XXXII.—XLIII.]

62. On account of the unusual number of burials found undisturbed in this necropolis of Mahasna, it has been found convenient to select a certain few for description in detail, and to regard these severally as types with which to compare the three hundred others



that were recorded. This selection has been made with a double aim, chiefly to secure an average representation of the burials accompanied by deposits, but partly also to illustrate in detail the features of one or two burials of exceptional interest. Thus the thirteen diagrams on PL. XLIII. convey a correct impression of the more interesting burials, but are not an average general selection from the whole number. A great majority of the graves contained burials that were undistinctive, being unaccompanied by any deposit, and so were less directly instructive. The furnished burials, however, were sufficiently numerous to provide cumulative evidence as to their own special character. In addition to those remarkable for richness of their tomb furniture, the features generally characteristic are deposits of stone vases or the presence of beads and amulets. Before making any general comment as to the distribution or dating of these features, it will be best to examine more closely the details of the cases selected on PL. XLIII. They are assigned numbers merely in working routine, and arrange themselves only roughly and by accident in anything like sequence.

M 70. The first diagram on PL. XLIII. shows a skeleton in a somewhat unusual position, the right hand only being before the face, and the left leg fully bent at the knee. The body lay on its left side, with its head to the north. It was in a recess in the west side of a shallow pit dug in the sand, walled about on the two exposed sides with brick. Under the head, and wholly hidden, was a mirror (PL. XL. 17); while the other tomb furniture consisted of a deposit of four alabaster vases, whose forms are outlined on PL. XXXVI., the numbers 12-15 corresponding to the a, b, c, d, respectively in the diagram. Photographs of these objects appear on PL. XXXIV.

M 87. This burial lay in a small chamber, one metre high and wide, and two metres long, in the south end at the bottom of a pit tomb three metres deep, of which the upmost metre was strengthened with brick walls. The tomb was not furnished with any large objects, but around the neck of the burial were two necklaces of uncommon quality. The one consisted chiefly of white beads, with which pendants of carnelian and green glaze were occasionally threaded with good effect, as shown in the left hand of the diagram. The other contained, as a special feature, a series of gold pendants (shown in the photograph on PL. XXXIV.) which were threaded on a string with other pendants (PL. XXXIX.), beads, and a seal (PL. XXXIX.), as shown in the right hand

of the diagram. The arrangement shows a pendant of carnelian between two white beads in a string of black; then follows another bird-pendant of carnelian between two pairs of white beads; after which comes a gold pendant of the vulture and uræus combination, representing the *sma-wti*, uniter of the two Egypts. A crowned figure of gold follows, between a bead of carnelian and two glazed beads, after which comes another *sma-wti* pendant of gold between a similar combination. A hieroglyphic sign as a golden pendant and a glazed seal complete the portion of the necklet represented in the diagram. The remainder was continued in the same fashion, the alternation of gold and carnelian pendants with small beads, and ended in a long thread of black glazed beads. It is noteworthy that, although the seal, as usual, is of somewhat conventional geometrical pattern, without any use of hieroglyphs as on the scarab of later times, yet the use of special hieroglyphic signs as pendants is quite familiar. The burial lay almost extended on its back, with the head to the north, and face towards the east.

M 100. In the case of the burial represented by the third diagram on PL. XLIII., there is an absence of larger objects, but it is noticeable on account of some special features among its smaller ornaments. The head was to the north, as was invariably the case, and the burial lay in the northern chamber, which was just large enough to receive it, in a shaft some four metres deep. The body lay in a usual position, extended, and chiefly on its back, being only partly turned over on its left side. The face, as usual, lay on the left side also, and in this position partly rested upon a mirror (*a*). Probably the head had been originally upon its back, with the mirror sticking vertically into the sand, but had fallen in time into the position in which it was found. The remains of a wooden handle, rotted, were found associated with the mirror. Around the neck, and over the breast, lay a necklace (*b*), consisting of beads of carnelian and glaze on different threads, and in the centre some small beads and bird-pendants of gold. A long string of glazed beads, with which was threaded also the button seal shown on PL. XXXIX., seems to have been held loosely in the left hand (*c*). With the right hand was found one large carnelian bead (*d*); but it had fallen away, and so it cannot be said whether it had been the chief ornament to a thread ring or bracelet, or whether it had been held in the hand. Around each ankle (*e, f*) was a string of medium-sized carnelian beads, and threaded with each a pen-

dent leg also of carnelian, shown on PL. XXXIX. These pendants, in the form of a leg and foot, generally of carnelian, were not uncommon, and were invariably found attached to the ankle. Similarly small pendent forearms, made of the same stone, were occasionally found attached to the wrist, either alone, or threaded to a string of beads or other charms. This burial typifies a considerable class, accompanied by beads and charms, but without larger tomb furniture.

M 107. The furniture of the unique burial numbered 107 (the fourth of PL. XLIII.) is more fully illustrated by photograph on PL. XXXVII. and in outline on PL. XXXVIII. The tomb was of an ordinary character; its shaft was three or four metres deep, with a little brickwork at the top. The chamber mouth, to the south, was bricked up; and on opening it the usual small recess was disclosed, being little larger than was necessary for the interment. After clearing away the dust and sand which lay upon the surface of everything, the group of vases was disclosed in the southern end of the chamber, and special care was taken accordingly with the further stages of clearing the burial. The body lay in a contracted position, with hands in front of the face, and the knees drawn up so that the upper leg made a right angle with body, while the lower leg was also doubled under as much as possible. The head was to the north, and the body lay on its left side. The objects which furnished the burial included thirteen vases, eleven being of alabaster, of varying forms and sizes, an alabaster head-rest with fluted column, a copper mirror, a chain necklet of delicate workmanship, five feet long, with necklace, bracelets, etc., of carnelian, gold, and glazed beads. The group A includes all the vases, in their relative situations as found; but it seems probable that nearly all of them had been placed upright with their points in the sand, and had fallen to the positions in which they were found. The numbers by which they are indicated in the diagram correspond to those on PL. XXXVIII. when their forms are outlined. The head-rest lay some few inches removed from the head: it is, like the rest of the group, of beautiful finish and proportion. The mirror also did not lie opposite the face as was usual, but just above the hands. The necklet of gold chain-work is sufficiently illustrated by the photograph of PL. XXXVII. Its two small lockets were connected apparently with the two long tube beads of gold upon the other necklace, which are separated from the central carnelian pendant by three large beads on either

side. The arrangement of this second necklace is also fairly clear from the photograph. Its larger jewels are separated from one another by smaller beads of gold which occur symmetrically in threes or singly or in pairs. The string is fairly uniform, the beads decreasing regularly in size, the smallest of all being small and of green glaze. The bracelets were less splendid, but were none the less of appropriate character. On the left wrist (*b*) small beads of blue glaze and carnelian alternated in groups with beads of gold and green glaze, alternating also in themselves. The other bracelet, *c*, followed the arrangement indicated in the plan, in which gold and glaze beads alternately in twos and threes separate long beads of carnelian and ribbed beads of glaze, which also alternate with one another. The whole of this tomb group was selected by the authorities of the Department of Antiquities of Egypt and occupies a case in the Museum at Cairo.

M 114. This burial lay in a shaft of ordinary character, about two metres down, with head to the north, lying half over on its left side. Around the neck, *a*, was a string of beads miscellaneously composed. It included for half its length beads of carnelian with both long and round beads of green glaze, and for the other half dark glazed beads with pairs of light shell beads occasionally. From the vicinity of the left wrist, *b*, came one large bead of carnelian, the original position of which cannot be definitely assigned. Similar single beads have been found indubitably as the ornament of finger rings, threaded with a few small beads or otherwise. Around the right wrist, *c*, were some small beads of green glaze. Around the ankles, *d* and *e*, were strings of large carnelian beads, with leg pendants also of carnelian. In the position *f*, behind the right humerus, was found the fine vase shown in outline on PL. XXXVI. (No. 6), and by photograph on PL. XXXIV. It is made of good alabaster with a vein of pink around the rim.

M 349. This burial lay in fully extended position. Its chief interest lies in a representative group of objects with which it was furnished. The deposit was laid above the head. 1 and 4 are two pots (the latter of black ware). The dish, with spout, numbered 2, is of red polished pottery ware; a photograph of it appears on PL. XXXII.: 3 is a copper mirror (number 2 on PL. XL.). The numbers 5, 6, 7, and 8 are given to four vases of alabaster which appear in outline also on PL. XXXVI. A special feature is the small group of copper implements, numbered 7

in the diagram, and represented more fully on PL. XXXIII. They include a needle, spatula, tweezers, and other small objects. There were no beads or pendants accompanying this burial. The tomb itself was merely dug out in the sand, to a depth of two metres, with the burial placed under the western side in a recess prepared for it.

M 386. The seventh diagram represents a burial which was found lying in a recess under the west side of a shaft, amidst the traces of a decayed coffin of wood. It lay on its left side, with hands in front of face, and left leg slightly bent. It was furnished with a mirror, *b*, to which the remains of a wooden handle still adhered, and a group of vases, of which the largest is shown in outline on PL. XXXVI., No. 4. In the ear was a round green glaze bead, the hole through which was very small. Around the neck and over the breast were the pendants grouped together on PL. XXXIX. They are entirely of glaze or carnelian, occurring largely in duplicate, representing birds and small animals, bees, human faces, weeping eyes, hands, etc. Of chief interest is perhaps the pair of small beetle or scarab pendants, on which the back of the beetle is well shown as on the scarabs of later times, but the front or under side is provided only with a small raised threading hole. Outside the coffin were two unpolished pots, one of them large.

M 401. This was a burial in a wooden coffin placed in the chamber of a pit tomb. The position is as usual, half over on the left side, with head to the north. The legs are slightly contracted, and the right arm is bent across the front. Two alabaster vases, *a* and *b* (PL. XXXVI. 25, 26), and a mirror, *c*, lie grouped in front of the face; but there are no beads or pendants. Outside the coffin, on the eastern side, is a largish pot, *d*.

M 420. The ninth diagram represents another burial which had been placed in a coffin under the side of a pit. Its position was not quite usual: the knees were partly contracted in an ordinary way, but the forearms were crossed in front of the body, in a manner less common. A piece of the coffin bore a hieroglyphic sign: in front of the face were a mirror, *d*, two vases of alabaster, *b*, *c* (Nos. 7 and 10 on PL. XXXVI. and PL. XXXIV.), and a large pot with flat bottom (PL. XLI., type K 1). A few glazed beads of tubular form were found on the under portion of the neck.

M 421. This burial, like the rest, lay under the side of a pit, but one of a differing type, being only

a little more than one metre deep, and unsupported by brickwork. There was no trace of a coffin: the burial lay on its back, inclined as usual to the left side, with its knees doubled up and the lower legs completely bent back. A mirror (PL. XL. 15) lay in front of the face, with two alabaster vases, *b*, and a small cup, *c*, containing some beads. Around the neck was a string of glaze beads and a few pendants of glaze, shown on PL. XXXIX.

M 424. The eleventh diagram illustrates a simple type, in which the only noticeable feature is the curious position chosen for depositing the group of vases. The attitude is usual, with knees partly contracted and arms straight. A mirror rests in a vertical position before the face, sticking upright in the sand. Three alabaster vases, marked 2, 3, and 4, corresponding to 8, 9, and 10 on PL. XXXVI. (see PL. XXXIV.), lie grouped behind the knees.

M 441. This burial presents one unique feature, in that the vases (in this case an unusual set) were collected together in a small box placed at the foot. The burial was placed under the side of a pit two metres deep; the hands, as usual, were in front of the face, and the head seems to have lain upon a wooden rest which was found behind the neck. The right knee was partly drawn up, seemingly to accommodate the box below the foot. In this box, of which only the traces remained, had been placed the set of vases, made variously of steatite, diorite, alabaster, as well as the shell knife and beads that made up this group of offerings. The bowl, 1 (PL. XXXV. 3, and PL. XXXIV.), was made of steatite, and over it was inverted the cup of diorite numbered 10 (PL. XXXV. 10, and PL. XXXIV.). Nos. 2, 3, 4, 5 (PL. XXXV.) are vases of alabaster; 6 is a small shell containing some pink material. A large bead (7) was seemingly placed away by itself in the corner; while a long thin knife, 8, lay alongside the vase number 3. A bracelet of wood (*a*) had encircled the right arm, and a string of beads (*b*) lay round the left wrist.

M 442. The last diagram of PL. XLIII. represents a simple burial again in somewhat irregular attitude, the knees being drawn up square, but the arms stretched out to their full. It lay inside a wooden coffin, of smaller size than was usual. *a* is a bowl of alabaster (PL. XXXVI. 2), *b* a vase (number 3 on the same Plate), and *c* a mirror of copper.

63. On PL. XXXII. there are reproduced photographs of two burials, and it has not been thought necessary to supplement them by diagrams.

M 31 is a burial partly contracted, accompanied

by a numerous deposit of pottery characteristic of the period between the Old and Middle Kingdom. It lay in a built rectangular tomb, like the top part of an ordinary shaft, but only one metre in depth. The head is to the north, and the body lies on its left side.

M 501. The photograph shows a fully contracted burial, lying in the attitude and shallow grave familiar in predynastic times. This is an exceptional case, but it is useful in showing that no special form of tomb was rigidly adhered to. It was accompanied by the seal with "labyrinth" pattern shown on PL. XXXIX.

64. The burial last described is sufficient deterrent against any attempt to point out a definite alliance between the different kinds of tombs and the varying types of burials and deposits. It is only possible to indicate a general impression which was formed during the process of the excavation, and is borne out by a majority in tabulating a number of representative burials. The cemetery seems to have definitely begun with the IVth Dynasty in the portion marked M 2 on PL. II. The graves were dug roughly rectangular in the sand, to a depth of a couple of metres, and the burial was laid under the west side in a recess provided for it. A deposit of stone vases generally was laid in some convenient position with the burial. A few tombs then were added in the patch M 1, but a more steady expansion began and continued in the opposite direction, towards the north. In the portion M 3 are mostly pit-tombs with partly bricked shaft and one or more chambers at the bottom, to the south or north. In these, burials were laid in coffins in an extended or partly contracted position: they were commonly decked with beads, pendants, mirrors, or a seal. These seem to represent a period about the VIth Dynasty. The tombs still spread onwards (more numerous than the plan shows), and are characterised by burials unaccompanied by tomb furniture of any kind, with the exception, maybe, of a few unpolished pots. On the knoll which rises in the portion M 4 were found a few deposits suggestive of the approach of the Middle Kingdom, indicated in particular by the large globular beads of green glaze familiar in that period. It is thus possible that the necropolis is representative of a continuous local history from the IVth Dynasty onwards to the advent of the Middle Kingdom.

65. In spite of their poverty in museum objects, there are some features of the burials in this intervening period of extreme interest. They illustrate by more than a hundred instances the origins and

development of stucco-covered burials described in the last Report of the Egyptian Research Account (*El Arabe*, pp. 10, 11). A number of burials lying in rectangular walled graves about one to two metres deep, were found preserved by a thick coating of hard Nile mud. The mud must have been prepared by some process for the purpose, being of peculiar tenacity and adhesive properties, so that it was found impossible to clean the bones without damage to them. In some cases the superfluity of mud concealed the form of the body; in others, which were commonly within the chamber of a simple pit-tomb the coating of mud followed more the outline of the body. Some of these burials were accompanied by pottery, chiefly of the type A on PL. XLI.; but more often they were entirely unfurnished. Another stage shows the body concealed also within a wooden coffin, the inside of which, as well as the mud covering of the body, was plastered white. One instance showed the plaster hidden below a further coating of the mud, which was again whitened. But the tendency was to reduce the thickness of the mud, so that the outline of the form was better preserved. One burial showed on the crumbling surface-plaster the fingers, hands, and face outlined in green upon the white, while some rectangular pattern in green had decorated the interior of the coffin also. This method was observed in other cases, but the collapse of the wooden coffin, caused by the action of the white ant, had in most instances rendered it difficult to recover the traces on the thin plaster. One or two instances occurred in which the mud was seemingly absent, but the body was covered by a thicker coating of plaster, in some cases plain, in others decorated. On one instance, instead of the features being delineated in paint, the face had been separately modelled in plaster and fixed before the real face in the wet plaster to which it had adhered.

#### NOTE ON THE SKELETONS FROM THE LATER TOMBS OF THE EARLY KINGDOM.

By DR. MYERS.

66. Many skulls were found, but comparatively few were sufficiently whole to be utilised for measurement. Even these were so brittle and so much worn, that they could only be packed for removal with considerable risk of breakage. Accordingly, I decided to measure a few long bones, and nearly forty skulls; after which the remains were re-interred at a known spot, possibly to undergo further examination in the future.

These skulls date between the fifth and the eleventh dynasties. Their number is too small, the period covered by them too wide, and our present craniological knowledge too scanty, to warrant the full publication of these measurements in the present report. They may advantageously be set out later, when a further discovery of skulls from the same periods is made. Suffice it here to say that in all characters the skulls show remarkable variations. The cranial breadth-index of the series extends from 68.3 to 82.9, the cranial height-index from 70.9 to 79.3, the gnathic index from 91.7 to 103.2, the nasal index from 42.7 to 56.8, the upper facial index from 47.6 to 61.7, and the orbital index from 82.9 to 101.4. Equally wide divergencies were noted by Mr. Randall MacIver in the far larger series of contemporary skulls found at Denderah. It is curious how nearly the mean cranial breadth, the mean nasal, and the mean gnathic indices, agree in the two series. In the Denderah series they are respectively 74.4, 50.6, and 95.6; in the present series they are 75.3, 49.0, and 96.8.

## CHAPTER IX.

### THE TOMB DEPOSITS.

#### (a). *Inscribed Objects.*

The Stones: PLS. XXXII., XXXIII.

67. The table for offerings from tomb M 336 is inscribed with the name of (?) *Thjes, Veteran, First under the King*. This title, *seten tep kher* (says Mr. Newberry), is fairly common for the VIth Dynasty, and does not appear to signify any great rank. The photograph shows the character of the monument, and the facsimile of the inscription shows an irregularity in cutting and grouping the hieroglyphs, some of which are of crude and unusual form.

The longer inscription of PL. XXXIII., from tomb M 41, is translated in this way by Mr. Newberry: "May the King give an offering to Anubis upon his hill, within the Oasis, and Lord of *Ta-zeser* in all his good places, for *perkheru* offerings for the Mayor, the Royal Sealer, the Royal Friend, the Veteran in the service of the Great God, Lord of Heaven, HENÛ." The hieroglyphs are incised. This stone is of rough surface; it probably formed the lintel of a door-frame, some smaller pieces of the jambs also being found.

68. The button-seals. PL. XXXIX.

This series of twenty-eight seals was found almost exclusively with those burials which are assigned to the VIth and following dynasties. They were sometimes threaded to a string of beads and pendants in the manner followed in the burial 87; but more were found attached to a finger by a thread (on which might be a few small beads only), or held within the left hand. The deposits associated with them in each case will be found in a subsequent list.

The designs upon these seals differ in each case, and are also unlike those with which they have been compared in the hands of private collectors, and not yet published. They were thus almost certainly signets. The patterns upon them are in nearly all cases conventional, in many instances symmetrical, whether labyrinthine or naturalistic. In cases of symmetry the likeness may occur in opposite halves merely, as in those numbered 100, 28, 400; or may appear in opposite quarters as 417, 43; or the symmetry may be perfect in each quarter, as in Nos. 316, 76, 348.

The motive for some of the designs is clear. No. 343 seems to be possibly a seated figure with arms outstretched; Nos. 427, 348, 76, 316, are derived from beetle or spider patterns, while 112 is possibly evolved from a similar idea. The figures of animals appear symmetrically on each half of 417, 43, and 470, and singly upon Nos. 348 (2) and 389. This last is of exceptional form, being on the obverse dissimilar in character to the rest, and having the simple threading-hole usual on the reverse replaced by a small animal figure in model. The other designs are chiefly geometrical or tortuous. In no case does a hieroglyph occur, nor any definite sign of a known script. The analogies, however, with some designs of Cretan or proto-Ægean characters, are strikingly close. Compare, for instance, No. 440 with two from the *Hagios Onuphrios* deposit, pictured on p. 108 of Mr. A. J. Evans' *Cretan Pictographs*. No. 72A on p. 76 of the same work, an object of black steatite bought at Candia, implies a conventional expression of the class to which 417 and 43 on PL. XXXIX. belong also. The four-sided seal numbered 319, on the left, is so particularly of interest in this connection that an enlarged photograph of the impression in plaster of each side is here reproduced from a block kindly lent for the purpose by the Keeper of the Ashmolean Museum and the Clarendon Press at Oxford. The analogy in detail, however, is not so convincing as that of general motive. The symmetrical forms and spider patterns shown in the



plates of the same writer's *Further Discoveries of Cretan and Aegean Script*, are worthy of careful com-



parison; but at present the published material is insufficient, and the collected specimens are not available for the purpose. It cannot, therefore, be said whether the similarity is accidental, or due to a common or mutual influence, or the result of direct copy from one side or the other. With regard to this present series, it is seen that they are found (as in tomb 87) in association with signs strictly Egyptian in origin, in a cemetery which, but for these objects alone, might have been said from analogy to be thoroughly representative of a certain period of Egypt's history.

(b). *Copper Implements.*

[PL. XXXIII.]

69. There is some paucity in the number of copper implements and objects, but among their number are two somewhat exceptional in form. These are represented on PL. XXXIII. That numbered M 131 was found without anything else in the filling of an ordinary pit tomb. The long-pointed portion is square-edged, but the wider part is more like a double-edged blade, the central ridge suggesting the finish of a "hollow ground" razor. The remainder had presumably been fitted to a handle. The other object, M 347, is even more curious. It might suggest a broad cutting-knife with double edge; but the bones with which it was found are undoubtedly those of a female, an indication further borne out by the pendants of PL. XXXIX., and the bodkin with wood handle which accompanies it. It seems possible, therefore, though no trace of polished surface remains, that this object is really a tarnished mirror of peculiar form. The group of small copper implements from tomb M 349 has been already referred to. It was found with the polished red pots of PL. XXXI., the stone vases of PL. XXXVI., and the mirror on PL. XL.

The copper mirrors are shown in outline on PL. XL., after the manner regularly adopted by Professor Petrie, and those whom he has trained. The use of this systematic record of details may not be immediately obvious, but it is none the less a duty which each excavator owes to the student of the future. These forms require no comment; the use of rivets on those numbered 6 and 14 from tombs 386 and 76 respectively is a noticeable feature.

(c). *Grouping of the Tomb Deposits.*

*Predynastic.* Site L., Alawniyeh. PLS. III., IV.

TOMB.

202. Slate palette (PL. IV.).

209. Four-legged dish, clay models of arrows and figures (PL. III.). Slate shuttle (PL. IV.).

212. Ivory bracelet and bead (PL. IV.).

215. Slate palette, and hour-glass stone (PL. IV.).

229. Bone pin and bracelet (PL. IV.).

*IIIrd Dynasty.* Site K, Bêt Khallâf (PLS. VI.-XXXI.).

K 1. Sealings (PLS. VIII.-X.). Alabaster vases and stone bowls (PLS. XI.-XIV.), copper and flint implements (PLS. XV., XVI.), cursive inscriptions (XXVIII.), pot marks (XXVIII.), alabaster tables (XXIX.), pottery (XXX.-XXXI.).

K 2. Sealings (PL. XIX.). Vessels and vases of stone (XX.-XXII.), flint implements and wood handle (XX.), implements of copper and fittings (PL. XXIII.), cursive inscriptions (XXVIII.), alabaster tables (XXIX.), pottery (XXX.-XXXI.).

K 3. Sealings, fragments (XXVI.). Fragment of large alabaster vessel (PL. XXVII.), cursive inscription (XXVIII.).

K 4. Group of alabaster vessels, two stone vases (XXIV.), sealings (XXVI.), five alabaster vases (XXVII.).

K 5. Vases of hard stone and alabaster, copper and flint implements (XXIV.), sealings (XXVI.), stone vessels, base of large alabaster jar (XXVII.), cursive inscription and pot mark (XXVIII.), alabaster tables (XXIX.), pottery (XXX.-XXXI.).

*IVth-XIth Dynasty* (chiefly), site M, Mahâsna (PLS. XXXII.-XLIII.).

TOMB.

1. Polished ivory (XXXIII.). Bowls of stone (XXXV.). Plan (XXXIII.).

4. Vase (XXXVI). Mirror (XL). Glazed beads, small carnelian pendants, small copper fittings and needle.
- 13 (2). Beads and small pendants of green glaze, including some unusual "tie" forms (Edwards' Library Collection, University College, London).
- 13 (3). Seal (XXXIX.).
31. Burial (XXXII.).
41. Inscribed stones (XXXII.-III.).
43. Seal (XXXIX.). Beads.
- 50 (2). Mirror (XL). Pottery.
- 53, 56, 58. Pottery (XLI.-II.).
70. Vases (XXXIV., XXXVI.). Mirror (XL). Burial (XLIII.).
78. Seal (XXXIX.). Beads of green glaze and disc beads of carnelian.
82. Seal (XXXIX.). Alabaster vases. Small glazed pendants, small beads of green glaze and carnelian.
- 87 (1). Gold pendants (XXXIV.). Seal (XXXIX.). Burial (XLIII.). Beads of shell and blue glaze and a few carnelian pendants.
96. Pottery and mirror.
100. Seal (XXXIX.). Pottery. Mirror (XL). Burial (XLIII.). Gold beads and pendant Ibis. Beads of green glaze and carnelian; pendant carnelian legs.
104. Polished pottery (XXXII.).
107. Vases, jewels, pendants, beads (grouped) (XXXVII.-VIII.). Burial (XLIII.).
112. Seal (XXXIX.). Beads of carnelian (Ashmolean Museum).
114. Vases (XXXIV., XXXVI.). Burial (XLIII.). Beads of blue glaze, carnelian leg pendants, glazed tube beads, and small beads of carnelian. Large pendant (calcite).
130. Mirror (XL). Beads of glaze.
131. Copper dagger (XXXIII.). Cairo Museum.
150. Pottery (XLI.).
- 200-299. See under site L.
300. Pottery (XLI.).
316. Seal (XXXIX.). Beads of glaze.
322. Pendants (XXXIX.); some glazed beads.
327. Seals (XXXIX.).
329. Seal (XXXIX.). Beads of glaze and carnelian. Black shell beads, long carnelian and green glaze pendants.
336. Stone table (XXXII.-III.).
338. Vases (XXXIV., XXXV.).
- 341 (3). Pendants (XXXIX.).
343. Seal (XXXIX.). Beads of black glaze, carnelian leg pendants.
344. Mirror (XL). (Burial of a male.)
347. Copper implements (XXXIII.). Pendants and needle.
348. Seals (XXXIX.).
349. Polished red pottery (XXXII.). Copper implements (XXXIII.). Vases (XXXVI.). Mirror (XL).
360. Gold pendants (XXXIV.).
379. Pendants (XXXIX.).
386. Vase (XXXVI.). Pendants (XXXIX.). Mirror (XL). Burial (XLIII.).
389. Seal (XXXIX.). Beads of carnelian, blue and white glaze.
400. Seal (XXXIX.). Pendants (XXXIX.). Beads of carnelian with pendant.
401. Vases (XXXVI.). Mirror (XL). Burial (XLIII.). Small alabaster vases and beads.
417. Seal (XXXIX.), with beads. (Cairo Museum.)
418. Vases (XXXVI.).
420. Vases (XXXIV., XXXVI.). Pottery (XLI). Burial (XLIII.). Beads of glaze.
421. Pendants (XXXIX.). Mirror (XL). Burial (XLIII.). Alabaster vases, beads, and glazed pendants of fish and two dwarfs, &c.
424. Vases (XXXIV.-VI.). Mirror (XL). Burial (XLIII.).
427. Seal (XXXIX.). Beads of carnelian and blue glaze (Cairo).
432. Polished red pottery (XXXII.).
435. Gold pendants (XXXIV.). Seals (XXXIX.). Mirror (XL). Beads of carnelian, blue glazed quartz and amulets.
438. Pendants (XXXIX.).
440. Seal (XXXIX.). Beads of blue glaze, carnelian; blue glass pendant.
441. Vases (XXXIV.-XXXV.). Burial (XLIII.). Oval beads of carnelian, blue glaze: ass's head amulet.
442. Vases (XXXIV., XXXVI.). Mirror (XL). Pottery (XLII). Burial (XLIII.).
443. Pottery stand (XXXIV.).
445. Pendants (XXXIX.). Pottery (XLII). Small beads of carnelian, blue glaze and gold.
448. Pendants (XXXIX.); blue glaze amulets, two blue glazed cowries.
460. Pottery (XLII). Small carnelian and blue glazed beads.
461. Pendants (XXXIX.). Beads of carnelian and

- glaze; two amulets of crystal, lion, shell, crocodile, &c.
470. Vases (XXXIV., XXXV.). Seal (XXXIX.). Mirror (XL.). Pot with spout, beads of gold and carnelian. (Philadelphia.)
476. Seal (XXXIX.). Inscribed mud figure, not deciphered (Ashmolean Museum).
478. Vases (XXXVI.). Carnelian and blue glazed pendants, one shell and two jackal heads.
490. Pottery (XLI.). Beads of blue glaze, bell and disc.
493. Vase (XXXVI.). Beads of carnelian and shell, glazed pendant.
499. Seals (XXXIX.). Pottery (XLII.). Beads of black glaze.
501. Burial (XXXII.). Pendants (XXXIX.).
560. Blue glazed hippopotamus.

## CHAPTER X.

## DESCRIPTION OF PLATES.

PL. I. El Mahasna and Bêt Khallâf—the district explored, season 1900–1901.

The map shows the main contours of the lower desert and edge of the higher desert for a distance of fifteen kilometres, with Mahasna as centre. Along the edge of the cultivation are the villages Alawniyeh, Bêt Allam, the Maslahet Harun (enclosed), Mahasna W, Bêt, Ilg, Bêt Khallâf and Sarârwah. The sites of excavation are enclosed in a double rectangle and marked with letters as follows.

- Site L. Near Alawniyeh, Predynastic Cemetery. P. 5.
- „ M. Near Mahasna, Predynastic Settlement (S). Pp. 5–8.
- „ „ Near Mahasna, IVth–XIth Dynasty Necropolis. Pp. 28–35.
- „ N. In Mahasna. ? VIth–XIth Dynasty Burials. P. 2.
- „ K. Near Bêt Khallâf, IIIrd Dynasty Tombs. Pp. 8–27.

To the south of the site lies the Bay of Abydos, the spur of limestone which bounds it to the north being visible on the map. On the north it adjoins the scene of further excavation of a IIIrd Dynasty necropolis discovered in the following season near Reqaqnah—the results of which are incorporated in another volume.

The tracing from which this map is prepared was

kindly supplied for the purpose by Capt. Lyons, from the Survey Department of Public Works.

PL. II. The sites excavated at El Mahasna (M) and Bêt Khallâf (K).

*Site M.* Position of the tombs at El Mahasna. This plan shows on a scale of 1 : 3600, the relative situation of the 500 tombs to one another (p. 2), and of the more defined portions of the predynastic settlement to their surroundings (pp. 1, 2, 5). Only those tombs are inserted which are mentioned in this volume, as the number was great and the tombs closely crowded together, while many of them yielded no information of present interest. The survey points A, B, C, D, are arbitrarily chosen in a straight line upon prominent mounds, with the points E and F not collinear to serve for a base line when necessary. All the tombs were inserted by plane table with reference to three base points.

*Site K.* Situation of the tombs at Bêt Khallâf.

In this map are shown, on a scale of 1 : 15,000, the relative positions of the five great tombs of Bêt Khallâf with regard to one another and to the village itself. The prominent contour lines are roughly indicated.

K 1 is the tomb of Neter-Khet (p. 8).

K 2 is the tomb of Hen-Nekht (or Sa-Nekht) (p. 11).

K 3, K 4, are tombs of servants of Neter-Khet (p. 15).

K 5 is the tomb of Nezem Ankh, Ha Prince of the time of Neter-Khet.

K 6 was an unfinished stairway of a tomb.

PL. III. El Mahasna. Dish, flint objects and kiln, predynastic.

(a). Two views of four-legged dish of pottery, decorated in white lime with human figures, &c. 1 : 2. L 209. P. 5.

(b). Flint arrows, bracelets, &c., from settlement (S 1) and vicinity at Mahasna. 1 : 3. P. 7.

(c). Clay models of flint arrows, figures, &c. 1 : 4. L 209. P. 5.

(d). Kiln of firebricks, with large vessel in position, from the settlement (S 1). Two photographic views. P. 7.

PL. IV. Prehistoric Settlement and Cemetery.

(a). Plan of Prehistoric Cemetery (S 2). The numbers 1–42 are explained in the letterpress. The survey points B 2, F 2, are points triangulated with B and F in the general plan on PL. II., and were used as base for plotting the objects found in situ. The Settlement is named S 2 to distinguish it from another



portion (probably of the same) named S 1, being in the arbitrary divisions M 2 and M 1 respectively of the whole site (PL. II.). Pp. 5-8.

(b). Graffito of giraffe (1:2) scratched in surface of a large polished pot (1:14) from the Settlement.

(c). Bone objects, pins (?), horned head and bracelet, tomb 229 of the Cemetery (L).

(d). Ivory bracelet and bead from tomb 209.

(e). Slate shuttle (?) from tomb 209 (p. 5).

(f). Stone objects from tombs 202, 215 and .

(g). Marks on pots from the Cemetery L.

PL. V. Flints and other objects from Predynastic Settlement.

(a). Vessel in form of a frog (lower surface reflected). P. 6.

(b). Mace heads and fragments of stone vases, &c. P. 6.

(c). Deposits of curious natural flints (a selection). P. 7.

(d). Hoes and small knives of flint found in the Settlement. Pp. 7, 8.

(e). Flint lance and implements found in the Settlement. Pp. 7, 8.

(f). Flints collected from the desert, at the south of the site. P. 7.

PL. VI. Bêt Khallâf. Tomb of Neter-Khet. Architectural features.

(a). General view of superstructure; photograph taken from the south-west, afternoon. At the south end are some small huts built by the workmen and a tent, and against the left side some quantity of rubbish thrown out from above during the excavation. The scale is roughly 1:2,000. P. 8.

(b). Archway in descending passage, scale approximately 1:20. P. 9.

(c). West side of the tomb, view from the north-west, in course of excavation.

(d). South end of the tomb, from south-east, on day of arrival.

(e). Internal masonry of brick, showing the method of building in sections without bond. P. 10.

(f). The necessary excavation of the internal masonry to relieve pressure from about the mouth of the shaft by which the descent was made. P. 10.

PL. VII. Tomb of Neter-Khet. Plan, with longitudinal and transverse section of superstructure and substructure combined. The letterpress explains the reference-letters. It may further be noted that in the plan those parts of the structure which are open to the sky are left blank, while those parts which are

under masonry or below the desert surface are indicated by a hatching. The section AB shows also the descent EF (which is not in the section line, but parallel to it), and in a similar way such features are shown in the section CD as do not obscure the main purpose. Pp. 8, 9.

PLS. VIII., IX., X. Sealings from the tombs of Neter-Khet—the impressions of cylindrical seals rolled over caps of hard mud placed upon the pottery and stone vessels. These drawings are enlarged from the originals; they are as nearly as possible facsimile, but the great difficulty of reading and arranging the signs and groups from broken and crumbling fragments, must be an excuse for any deviation from the original. In many instances the recovery of a single sign involves the examination and fitting of twenty or thirty pieces. Pp. 11, 19-24.

PL. XI. Types of alabaster vases from tomb of Neter-Khet, with a small group selected from the adjoining tomb K 2, and including twelve vases photographed on a larger scale. This selection was made with a view to showing the forms typical of the period. P. 17.

PLS. XII., XIII., XIV., contain scale diagrams, showing the true outline and section of the different forms and varieties of stone vases from tomb K 1, pictures of which appear on PL. XII. The series is published to a scale of 1:3, uniformly with similar diagrams in the volumes of the Research Account and Exploration Fund. To some of the forms the name of the material has been tentatively added; but a more minute examination made subsequently by and with the help of Professor Miers, has shown that the varieties of stone employed, though often superficially alike, were more numerous than at first supposed. Stone of igneous character, as granite, porphyry, syenite, diorite and basalt, is most common, while the aqueous group is represented chiefly by limestone in many varieties of colour and quality. The Egyptian "alabaster" is to be included herein. Pp. 17, 18.

PL. XV. Copper and flint implements from tomb of Neter-Khet. The copper implements, a selected group of models and serviceable instruments, are figured to a scale of 1:6 (p. 18), and a group of five from a deposit in the stairway of the tomb is shown 1:4. The flint implements include two knives from the stairway, shown with the deposit (K 4) and on a larger scale (2:3) below; two crescent-shaped flints (2:3) from the burial chambers, and a large group of similar form (1:5) from the vicinity of the tomb. The

remaining photograph shows some miscellaneous flints of palcolithic character found near the tomb (1:4).

P. 18.

PL. XVI. shows the types of copper tools and implements from the tomb of Neter-Khet in diagram outline to a scale of 1:2. The dots indicate a sharpened or cutting edge.

P. 18.

PL. XVII. Tomb of Hen-Nekht. Architectural features. Six photographs illustrating the external and internal construction, including two views of superstructure, showing steps of the Mastaba (p. 11). Corner of descending passage (p. 11) and external chamber attached to the south end of the Mastaba, with deposit of pottery (p. 11), and two views of drop-stone door in position at foot of descent to chambers (pp. 11, 16).

Pp. 11, 12.

PL. XVIII. Tomb of Hen-Nekht (Sa-Nekht), K 2. Plan and sections. In the plan the position of the underground chambers is indicated by a white line on the black which denotes the superstructure. The sections show also the positions of the various openings, &c., along and near the section line.

Pp. 11, 12.

PL. XIX. shows in enlarged form the impressions of seals rolled on the mud caps of jars from the tomb K 2. No. 5 shows the restoration (to double seals) of the fragments 1 to 4, from which is derived the name of this king Sa-Nekht (Professor Sethe, p. 24) or Hen Nekht (as read during excavation, p. 11).

Pp. 24-26.

PL. XX. The skull of Hen-Nekht, four views (p. 13). Photographs of stone bowls from the tomb (pp. 12, 17), and a copper vessel (p. 17) and flint implements (p. 18).

PL. XXI. The outlines and sections of types of stone bowls from tomb K 2, produced as before to a scale of 1:3. Nos. 10, 12, 13, 14, present features found less commonly or not at all in the other tombs of the site.

P. 17.

PL. XXII. There are here figured the outlines and sections of thirteen selected "model" vases of alabaster. These were for the most part of rude surface and form, and not finished inside. Excavation both at this site and in the neighbouring necropolis of Reqaqnah and in other sites of this period (see, for instance, 'El Kab,' Quibell), has shown that these vases are characteristic. The number found in the tomb of Neter-Khet was great, being in all eight or nine hundred (p. 10), while the number from the other tombs was almost proportionate (p. 17).

PL. XXIII. shows the outlines of various imple-

ments and fittings of copper from the tombs K 2, K 4, K 5.

P. 18.

PL. XXIV. illustrates by photograph architectural features of the tombs K 3, the stairway, of K 4, the long descending passage, and of K 5, the stairway covered by false arch (pp. 14-16). There are also figured some of the vases of hard stone and alabaster (p. 17), and the flint and copper implements from tombs K 4, K 5 (p. 18).

PL. XXV. Plans and sections of the tombs K 3, K 4, K 5 (pp. 15, 16). The scale of K 4 is twice that of the other tombs.

PL. XXVI. Sealings from the tombs K 3, K 4, K 5 (pp. 26, 27). Three fragments are from tomb K 3, one only from K 4, and the remainder, including the more perfect impressions, 7 and 8, are from the tomb of the Ha Prince Nezm-Ankh.

PL. XXVII. shows in outline and section the various and varied types of vases found in the tombs K 3, K 4, K 5 (pp. 15, 17).

PL. XXVIII. The cursive ink-written inscriptions and pot marks, from the tombs of the IIIrd Dynasty at Bêt Khallâf.

P. 27.

PL. XXIX. shows in outline and section the forms of alabaster tables of offerings from the five tombs.

P. 17.

PLS. XXX., XXXI. Pottery types of the IIIrd Dynasty. In this series is included a representation of each variety of pottery observed, in some cases in fragmentary condition, during the excavation. With the exception of type Nos. 21-26, the variations of each type within a certain limit are not illustrated. The numbers of the tomb from which the type figured is taken, is in each case written at the bottom; and to some examples a few initial letters, explained under the title, tell of the nature and condition of the ware.

PL. XXXII. El Mahâsna. Burials, pottery, &c. The previous plates have dealt with the predynastic and proto-dynastic periods. The remainder, from XXXII. to XLIII., illustrate the excavation of a VIth-XIth Dynasty necropolis. Two contracted burials of VIth-VIIIth Dynasty, M 51 (pp. 31, 32), M 501 (p. 32). Stone tables, M 336, and jamb, M 41 (p. 33). Pottery from tombs M 349, 432 and 104, of the IVth-VIth Dynasty.

PL. XXXIII. Copper implements, inscriptions, &c. Two copper implements (p. 34). Table of offerings (facsimile), M 336 (p. 33). Plan of tombs, M 1, M 2 (p. 28). Inscriptions, M 336, M 41 (p. 33).

PL. XXXIV. Gold pendants, M 87 (1) (p. 29),

360, 435. Vases from tombs, M 441 (p. 31), 442 (p. 31), 70 (p. 29), 420 and 424 (p. 31).

PLS. XXXV., XXXVI. Groups of stone vases and alabaster vessels, chiefly illustrating diagrammatically the photographs of the previous plate. The objects are numbered in sequence, and their tomb register number is also written at the foot of each.

PLS. XXXVII., XXXVIII. Group of vases, head rest, necklet jewels, &c., from burial and tomb deposit M 107, photographs and diagram. P. 30.

PL. XXXIX. Button seals, armlets and pendants, from various tombs at Mahasna. Pp. 29-31, 33, 34.

PL. XL. Outlines of copper mirrors. P. 34.

PLS. XLI., XLII. Pottery types of the Vth-XIth Dynasties from Mahâsna. These types are designated by letters, and the variations of each type (the limit being determined by practical usefulness of the selection during excavation) are denoted by suffixes. For example, four pots of type A are shown, two from the tomb 150 (2), and one from each of the tombs 53, 50. The variations in form, which though slight are distinct, are denoted by the figures below the A, 1-4. Thus the pot from tomb M 53 falls into type A, being variation No. 3 of the average form. The pottery was very plentiful, particularly in forms A to H.

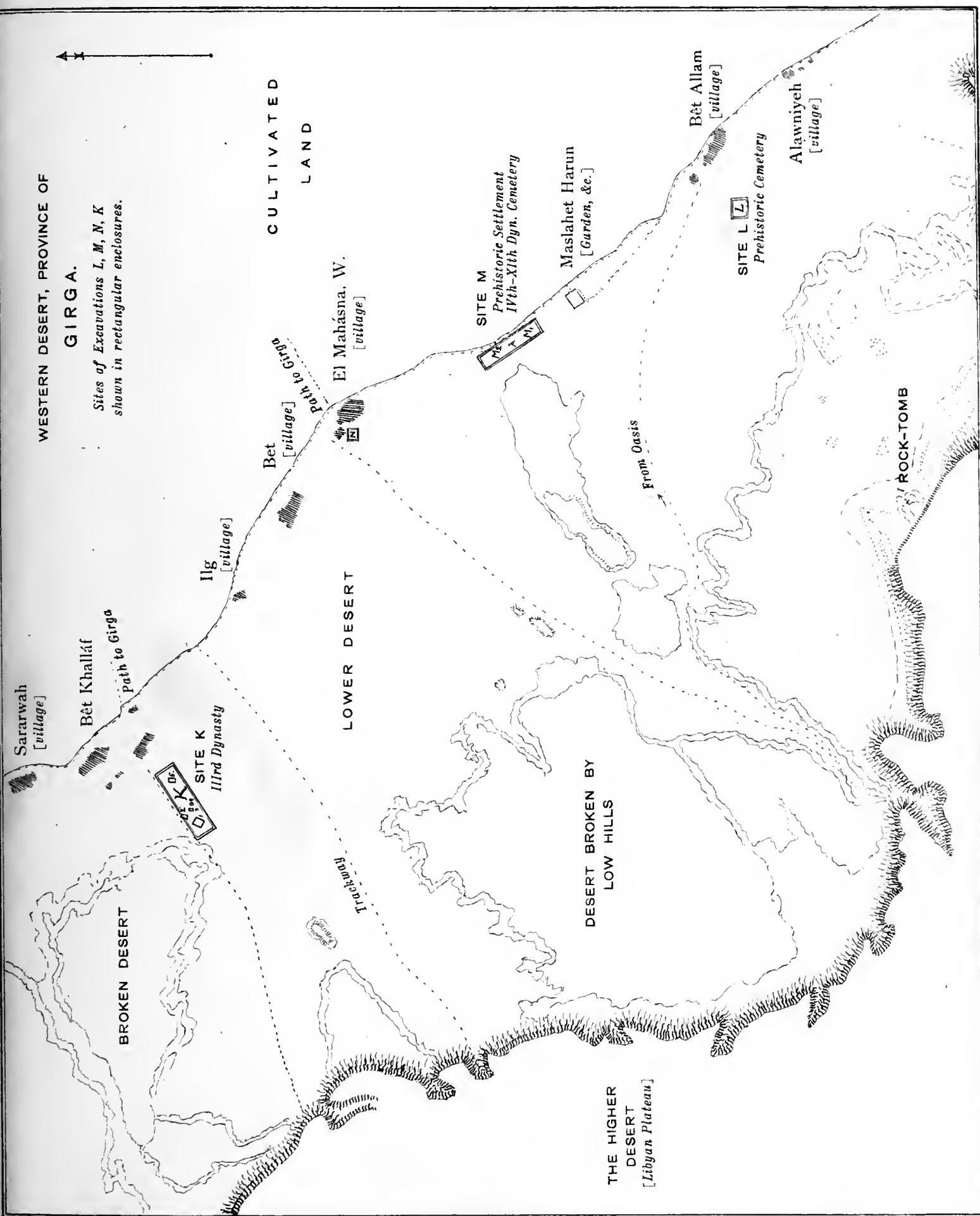
PL. XLIII. Diagrams of burial types. Pp. 28-31.

## I N D E X.

	PAGE		PAGE		PAGE
Abydos . . . . .	1, 4, 17	Cairo Museum . . . . .	2, 13, 16, 30	Dynasties, IVth and VIth . . . . .	1, 2
Alabaster . . . . .	2, 3, 10, 15, 30, 31	Carnelian, use of . . . . .	2, 29-31	„ XIth . . . . .	2
Alawniyeh, village . . . . .	1	Cartouche, oval . . . . .	3, 25	„ XXVIth . . . . .	4
„ predynastic cemetery at . . . . .	5	Castings of copper . . . . .	10	Egyptian Research Account . . . . .	1
Amrah, El-, village . . . . .	16	Cave tomb . . . . .	1	Eratosthenes . . . . .	12
Analogies with Cretan designs . . . . .	33	Celt, polished . . . . .	6	Evans, Mr. A. J. . . . .	33
Ankle, pendants on . . . . .	29	Chain of gold . . . . .	2	Fayûm, flints from . . . . .	17
Anpu-hotep (P. N.) . . . . .	25	Chamber, burial- . . . . .	3	Flint, arrow-heads and models, chippings . . . . .	7
Anubis, a title of . . . . .	19	Cheops (royal name) . . . . .	21	Flint implements . . . . .	7, 17
Arabic mediæval deposit . . . . .	10	Chisel of copper . . . . .	18	„ knives . . . . .	17
Arch, false . . . . .	15	Clarendon Press . . . . .	33	„ saw, lance head . . . . .	8
Archway (earliest recorded) . . . . .	9	Clay models . . . . .	7	Flints, crescent-shaped . . . . .	11
„ tomb of Hen Nekht . . . . .	12	Coffin, decayed wood . . . . .	31	„ deposit of curious natural . . . . .	7
Arrows of flint, barbed . . . . .	5	Colour of sand indicative . . . . .	6	Frog, vase in form of a . . . . .	6
Arÿ-sen (P. N.) . . . . .	23	Column, fluted . . . . .	2, 30	Furniture of tomb M 107 . . . . .	30
Ashmolean Museum . . . . .	33	Contracted burials . . . . .	32	Glaze . . . . .	2, 32
Axe of copper . . . . .	10	Cooking vessels, predynastic . . . . .	6	Gold, chain necklet of . . . . .	2, 30
		Copper axe . . . . .	10	„ pendants of . . . . .	29
		Copper implements . . . . .	15, 18, 34	Grain in sacks . . . . .	10
Balfour, Mr. . . . .	7	Crescent-shaped flints . . . . .	11	Granaries of Neb-ka (?) . . . . .	25
Beads with burials . . . . .	29-32	Cretan pictographs . . . . .	33	Graves, round, recurrence of . . . . .	28
Berlin Museum . . . . .	4	Crocodile hide . . . . .	6	Grenfell, Mr. . . . .	18
Bersheh, El-, quarries . . . . .	23			Griffith, Mr. . . . .	21
Bêt Allam, village . . . . .	1, 5	Davies, Mr. . . . .	23	„ Gun-flint ” . . . . .	18
Bêt Khallâf, village . . . . .	1, 3, 8	De Morgan . . . . .	2	Hagios Onuphrios deposit . . . . .	33
Bird pendants . . . . .	29	Den Setui (R. N.) . . . . .	16	Handle, riveted . . . . .	18
Borchardt, Dr. . . . .	4	Denderah . . . . .	33	„ wooden . . . . .	29
Bowls of hard stone . . . . .	17	Department of Antiquities . . . . .	30	Hapi-n-maat (R. N.) . . . . .	11
Box, deposit in wooden . . . . .	31	„ Surveying . . . . .	8	Ha-Prince . . . . .	3, 16
Bracelets on burials . . . . .	30	Deposits, grouping of tomb . . . . .	34, 35	Hard stone bowls . . . . .	17
Breccia, use of . . . . .	10, 17	Depression of artistic sense . . . . .	2	Head-rest, fluted column . . . . .	2
Bricks, fire- . . . . .	7	Dêr at Bêt Khallâf . . . . .	3	Hen Khet (?), (R. N.) . . . . .	3
Brickwork of pit tombs . . . . .	28	Diorite . . . . .	10-31		
Burial chambers, separation of . . . . .	16	Dish, four-legged . . . . .	5		
Burials, contracted . . . . .	32	Door-frame of glazed tiles . . . . .	4		
„ stuccoed . . . . .	32	Doors of stone . . . . .	3		
„ predynastic . . . . .	5	Dua-Hor-khenti-pet, name of . . . . .	21		
„ VIth-XIth Dyns. . . . .	28	vineyard . . . . .	21		
„ undisturbed . . . . .	29-32	Dynasties, Ist and IInd . . . . .	2, 28		
Buto, guardian of . . . . .	27	„ IIIrd . . . . .	3, 4, 8-27		
Button-seals . . . . .	33				

	PAGE		PAGE		PAGE
Hen-Nekht (R. N.) . . . . .	3	Museum, Ashmolean . . . . .	33	Qa-sen (P. N.) . . . . .	16
„ skull of . . . . .	13	„ Berlin . . . . .	4	Quibell, Mr. . . . .	17
„ stature of . . . . .	12	„ Cairo . . . . .	2, 13, 16, 30		
„ tomb of . . . . .	11	„ Pitt-Rivers . . . . .	7, 8		
Henÿ (P. N.) . . . . .	33	Myers, Dr. C. S. . . . .	12, 15, 32	Ra, sun god . . . . .	21
Her-Khuf (P. N.) . . . . .	21			Ra-Khuf (P. N.) . . . . .	21
Hierakonpolis, "guardian of" . . . . .	27			Rain, help of . . . . .	1
Hieroglyphs as pendants . . . . .	29			Randall-MacIver, Mr. . . . .	16
Hoes of flint . . . . .	7	Ne-ankh-Sekhmet (P. N.) . . . . .	23	Reqaqnah, village . . . . .	9, 15
Horakhti, the god . . . . .	22	Neb-Ka (R. N.) . . . . .	24, 25	Research Account. . . . .	1
Horus, the god . . . . .	21	Necklaces . . . . .	29	Rivet in handle . . . . .	18
Hotep (uy) n (P. N.) . . . . .	23	Necklet, gold chain . . . . .	2, 30	Robbery, tomb-, precautions against . . . . .	4
Hunt, Mr. . . . .	17	Necropolis of IIIrd Dynasty . . . . .	4	Roman plunderers . . . . .	3, 9
		Needle . . . . .	31	Rope pattern on vase . . . . .	17
Ilg, village . . . . .	1	Nefer-Ka-Ra (R. N.) . . . . .	25	Royal title of Neter-Khet . . . . .	19
Implements of copper and flint . . . . .	18	Ne-Maat-Hap (R. N.) . . . . .	22	Rudet (P. N.) . . . . .	27
„ from Mahâsna . . . . .	34	Neqada . . . . .	27		
Inscribed objects from Mahâsna . . . . .	33	Neru-taui, favourite of . . . . .	19	Sa-ef (P. N.) . . . . .	27
Inscription between names . . . . .	19	Neter-Khet (R. N.) . . . . .	3, 4, 19	Sa-Nekht (Hen-Nekht) . . . . .	3, 11
Inscriptions, remarks on the . . . . .	19	„ tomb of . . . . .	8	„ identity of . . . . .	24
Ivory, polished, use of . . . . .	28	Nezem-Ankh (P. N.) . . . . .	16	Saqqara, step pyramid, door . . . . .	19
		Nez-neteru (P. N.) . . . . .	20	Sayce, Professor . . . . .	12
		Nile mud . . . . .	3, 10, 32	Sealings of Neter-Khet . . . . .	19
Jars for wine . . . . .	10	Nomes, western . . . . .	22	„ of Sa- (or Hen-) Nekht . . . . .	24
Jewelry, scraps of . . . . .	12			Seals, button . . . . .	2
		Oasis, reference to . . . . .	33	„ impressed on mud . . . . .	10, 15
Kha-sekhemui (R. N.) . . . . .	21, 23	Official sealings . . . . .	19	Sebetyu-hezu (Memphis) . . . . .	27
Khnum, the god . . . . .	21	Ombos, Set of . . . . .	19	Sehel, stele at . . . . .	19
Kiln, pottery . . . . .	7	Ornaments of burials . . . . .	29-32	Sekhmet, the god . . . . .	26
Knife, shell- . . . . .	31	Orthognathous, face of Hen-Nekht . . . . .	13	Sen (?) -pu, town name . . . . .	22
Knives of flint . . . . .	17			Sequence dates, predynastic . . . . .	5
		Palermo Stone, the . . . . .	20	Sergi . . . . .	13
Lance, forked flint. . . . .	8	Patterns on seals . . . . .	33	Set of Ombos . . . . .	19
		Peh-er-nefert (P. N.) . . . . .	21	Sethe, Professor . . . . .	3, 19
Mahâsna, village . . . . .	1, 2	Pendants of carnelian and gold . . . . .	29	Settlement, predynastic . . . . .	1, 5
„ cemetery at . . . . .	28	Per-ab-sen (R. N.) . . . . .	23	Shell-knife . . . . .	31
Manetho . . . . .	12	Petrie, Professor . . . . .	7, 17	Skeletons from Mahasna . . . . .	32
Mariette . . . . .	21	Pictographs, Cretan . . . . .	33	Skull of Hen-Nekht . . . . .	13
Maslahet Harun . . . . .	1, 28	Pit-tombs . . . . .	28	„ from tomb K 3 . . . . .	15
Maspero, M. . . . .	21	Pitt-Rivers Museum . . . . .	7, 8	Snefru (R. N.) . . . . .	23
Mastâba . . . . .	3	Plunderers . . . . .	3	Spatula . . . . .	31
Memphis . . . . .	22, 27	Plundering, methods of . . . . .	16	Spider pattern . . . . .	33
Mery-ab (P. N.) . . . . .	26	Polished pottery . . . . .	2	Spouts to vessels . . . . .	17
Meten, tomb of . . . . .	23	Porphyry . . . . .	10	Stairway, concealed . . . . .	3
Minutoli . . . . .	4	Pottery . . . . .	18	Steatite, use of . . . . .	10, 31
Mirrors . . . . .	29, 30, 32	Priest, official seal of . . . . .	19	Stele, broken . . . . .	10
Model vases of alabaster . . . . .	10	Prince, Ha- . . . . .	3, 14	Step pyramid . . . . .	3, 4
Models in clay . . . . .	7	Private sealings . . . . .	19	Steps, construction in . . . . .	11
„ copper . . . . .	18	Private tombs of IIIrd Dynasty . . . . .	14	Stone doors . . . . .	3, 9
Mud, Nile, prepared as cement . . . . .	10, 32	Protective construction of tombs . . . . .	17	Structure in sections . . . . .	9
Mummy . . . . .	4	Ptolemaic period . . . . .	4	Stuccoed burials . . . . .	32
		Pyramid age . . . . .	3	„ walls . . . . .	14
		Pyramid, step-, at Saqqara . . . . .	3, 4	Syenite, bowls of . . . . .	17
				Symmetry in design . . . . .	33

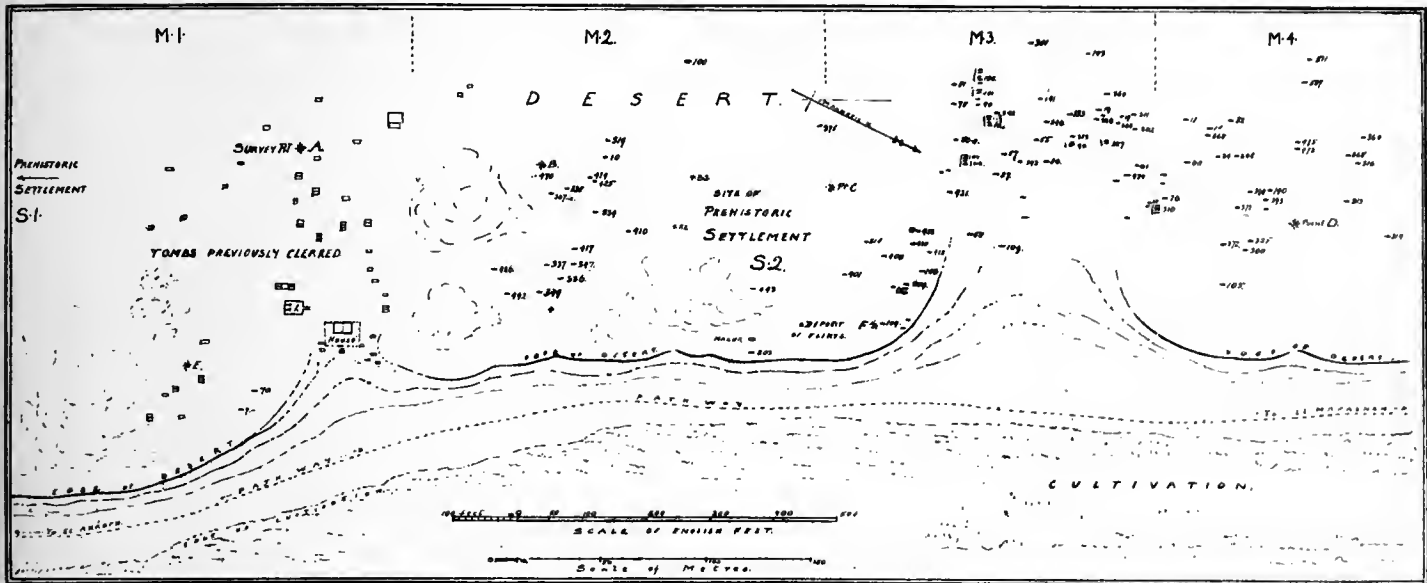
	PAGE		PAGE		PAGE
Tables of alabaster . . . . .	10, 17	Up-uat, jackal god. . . . .	19	Wattle and daub, construction in	1, 6, 7
This (ancient Thinis) . . . . .	4	Ut, "he of the town of" . . . . .	19	Western nomes . . . . .	22
Thompson, Mr. . . . .	22			Whorls, spinning . . . . .	6
Thyès (P. N.) . . . . .	33			Wilkin, the late Mr. A. . . . .	16
Tomb construction, development in	16			Wine jars . . . . .	10
Tomb of Ist Dynasty . . . . .	28	Vase in form of frog . . . . .	6	Wrist, pendants on . . . . .	30
Tomb-deposits, grouping of . . . . .	34, 35	Vases of alabaster . . . . .	10, 15, 29, 31		
Tradition, growth of . . . . .	4	Vessels for cooking purposes . . . . .	6		
Tweezers . . . . .	31	„ of alabaster . . . . .	17	Zeser (R. N.) . . . . .	19
Types of bowls, distinguishing		Vineyard of Neter-Khet . . . . .	21	„ vineyard of . . . . .	21
features . . . . .	17	Voussoirs . . . . .	12	„ parentage of . . . . .	23





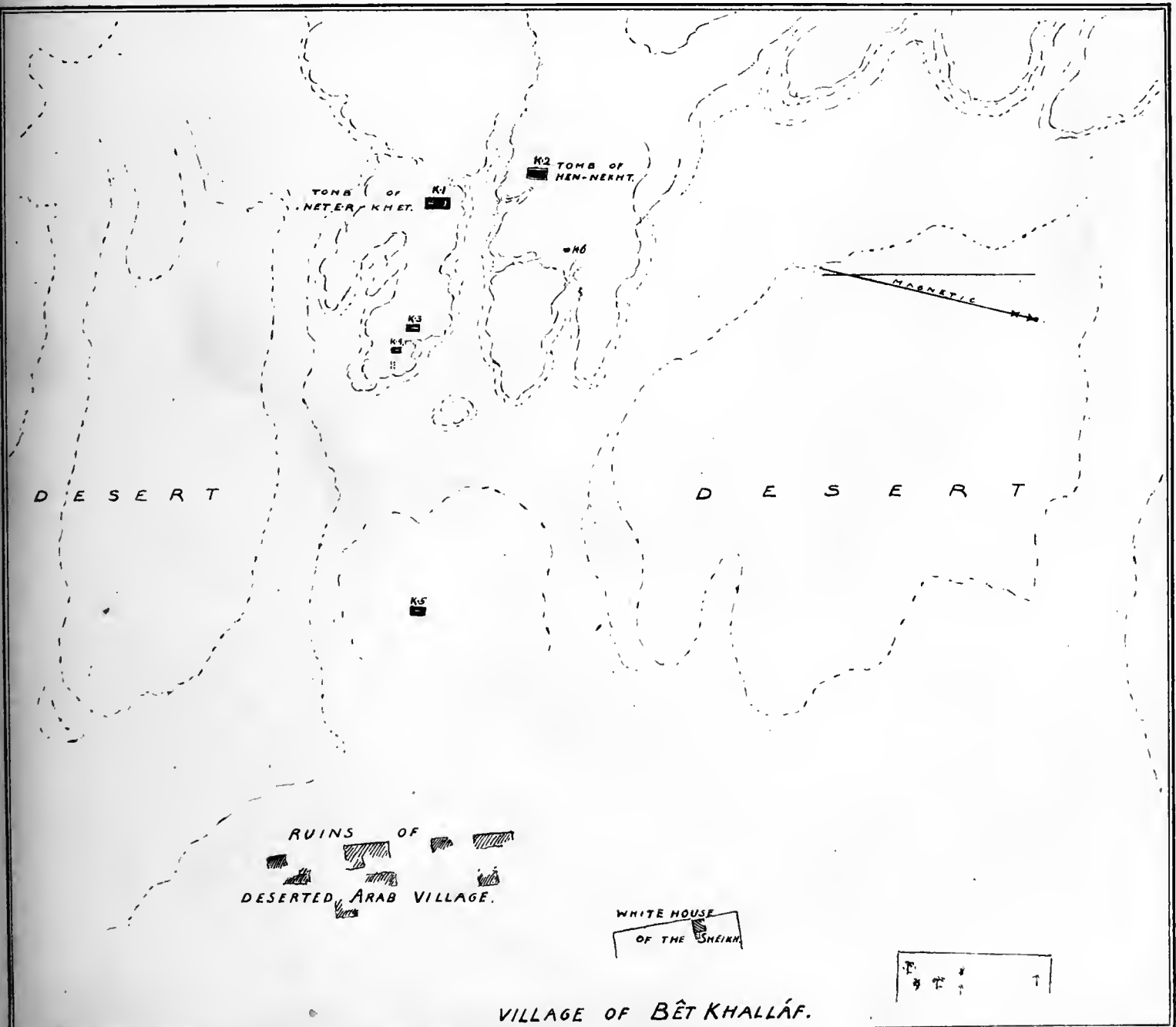


## SITE M.



1:3600 POSITION OF TOMBS AT EL MAHASNA.

## SITE K.



1:15,000 SITUATION OF THE TOMBS AT BÊT KHALLÁF.





1:2

TWO VIEWS OF FOUR-LEGGED DISH.  
*Decorated in white line with human figures, &c.*

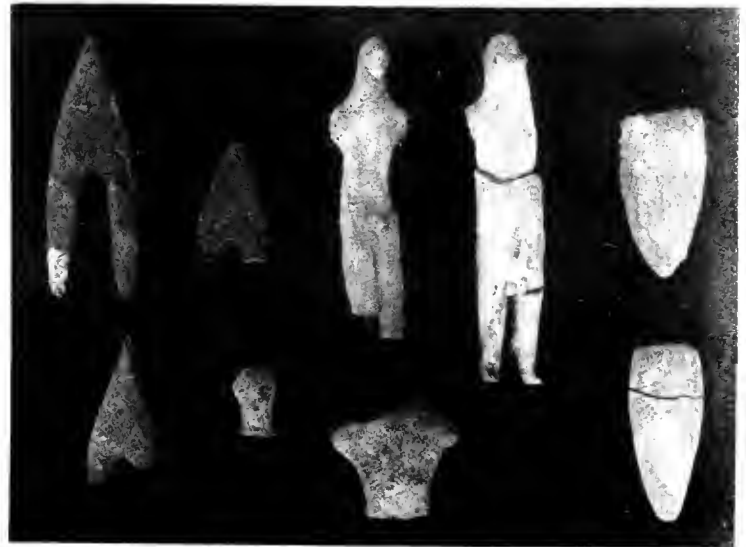
L 209



1:3

FLINT ARROWS, BRACELETS, &c.

S (i.)



1:4

CLAY MODELS OF FLINT ARROWS, FIGURES, &c

L 209

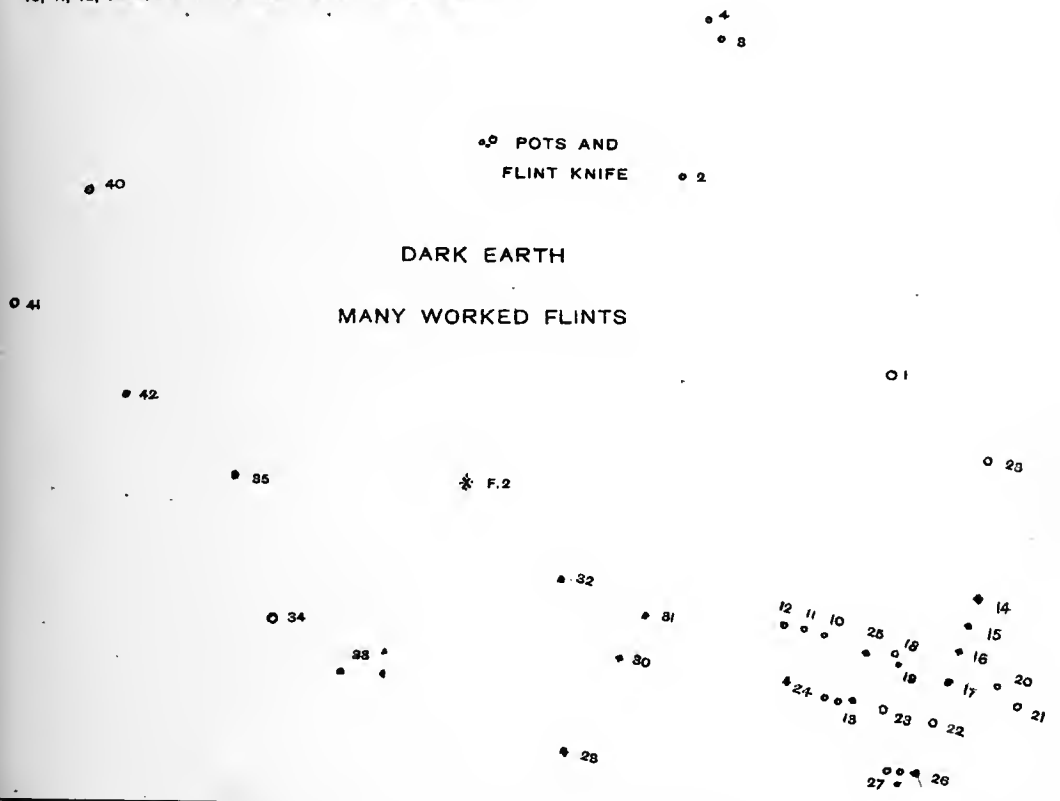


KILN OF FIRE-BRICKS WITH MAGUR IN POSITION. FROM SETTLEMENT S //

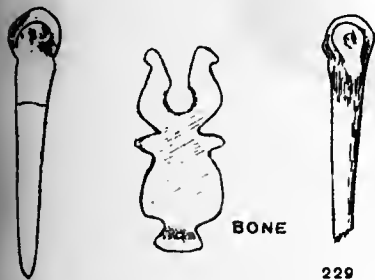


\* B 2

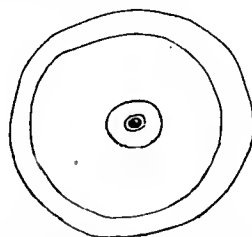
1, MAQUR.  
2, 3, 4, 10, 11, 12, 13, 20, 21, 22, 23, 27, 28, 34, DOMESTIC POTS.  
13, 14, 15, 18, 17, 19, 24, 25, 28, 29, 30, 31, 32, 33, 35, WOODEN PILES.  
40, 41, 42, CIRCULAR MUD RECEPTACLES ? POT STANDS.



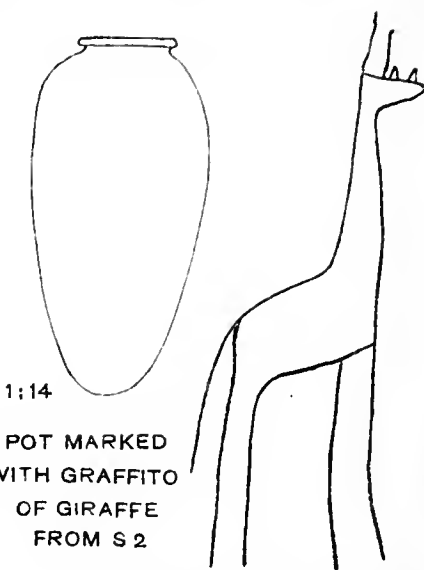
1:600 PLAN OF PREHISTORIC SETTLEMENT, S2



229



IVORY BRACELET AND BEAD 212



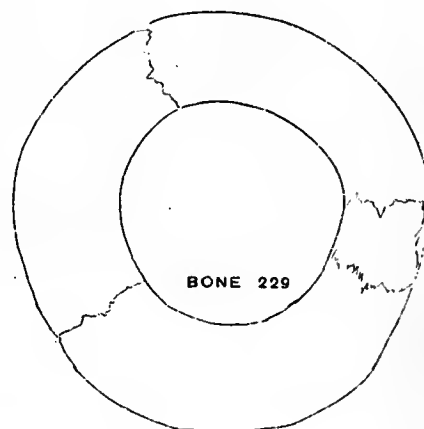
1:14

POT MARKED  
WITH GRAFFITO  
OF GIRAFFE  
FROM S 2

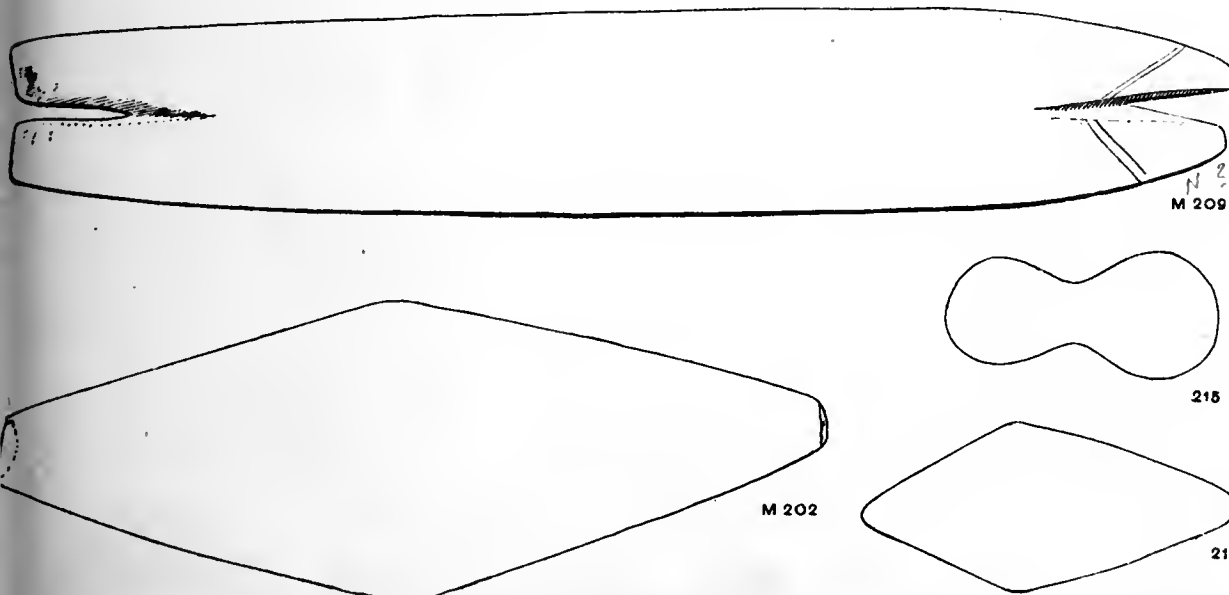
1:2 GRAFFITO OF GIRAFFE



1:2 FLINTS FROM SETTLEMENT, S1



BONE 229



M 209

218

215

1:2 SLATE PALETTES, OBJECTS OF BONE AND IVORY, AND MARKS ON POTS FROM CEMETERY L

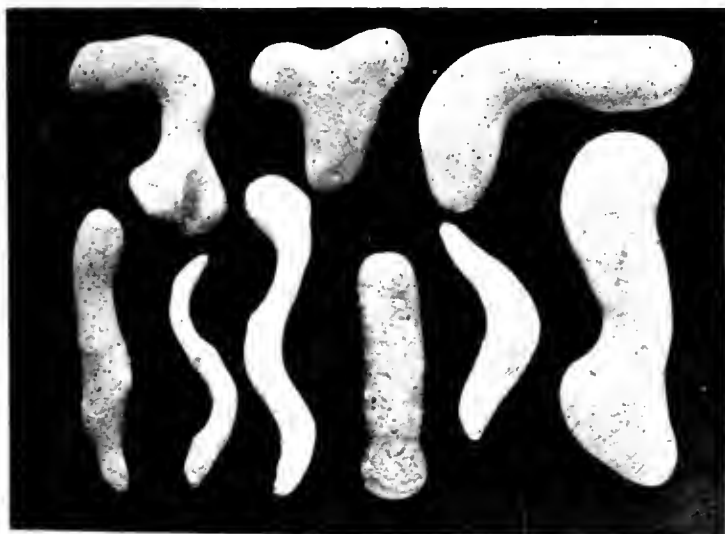




1:1 VESSEL IN FORM OF A FROG. S (i.)  
*Lower surface reflected.*



1:3 MACE-HEADS AND FRAGMENTS S (i.)



1:4 DEPOSIT OF CURIOUS NATURAL FLINTS S (i.)



1:5 HOES AND SMALL KNIVES OF FLINT S (i.)



1:3 FLINTS COLLECTED FROM THE DESERT S (ii.)



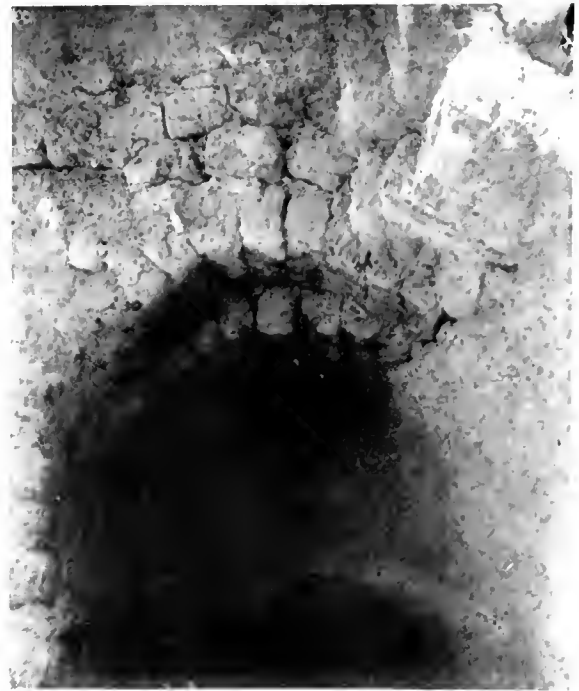
1:3 FLINT LANCE AND IMPLEMENTS. S (ii.)







GENERAL VIEW OF SUPERSTRUCTURE.



ARCHWAY IN DESCENDING PASSAGE.



WEST SIDE OF THE TOMB.



SOUTH END OF THE TOMB.



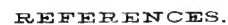
INTERNAL MASONRY.



EXCAVATION OF THE TOMB.



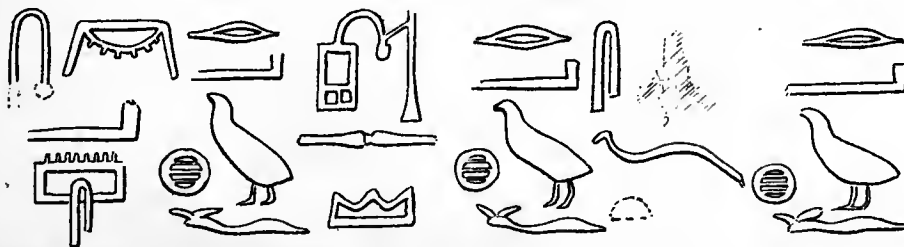
□



- A B C D SECTION LINES  
E TOP OF STAIRWAY, BROKEN AWAY  
E F G DESCENDING STAIRWAY  
G STAIRWAY PASSES SOUTH UNDER ARCH  
H H SHAFTS FOR LOWERING PORTCULLIS STONES  
K K WELLS FOR OFFERINGS  
L SLOPED WAY OF ACCESS  
F G STAIRS FILLED WITH OFFERINGS  
a b RECESSES FOR OFFERINGS  
c RECESS USED BY PLUNDERERS  
d GUIQE FOR PORTCULLIS STONE  
G e PASSAGE DESCENDING UNDERGROUND  
f LARGE STONE-WALLED CHAMBER  
g GALLERY STORED WITH GRAIN IN SACKS  
k CHAMBERS FILLED WITH VESSELS OF OFFERINGS  
m n p CHAMBERS FOR OFFERINGS  
S CHAMBER IN WHICH WAS SEALING OF PER-AB-RE-N

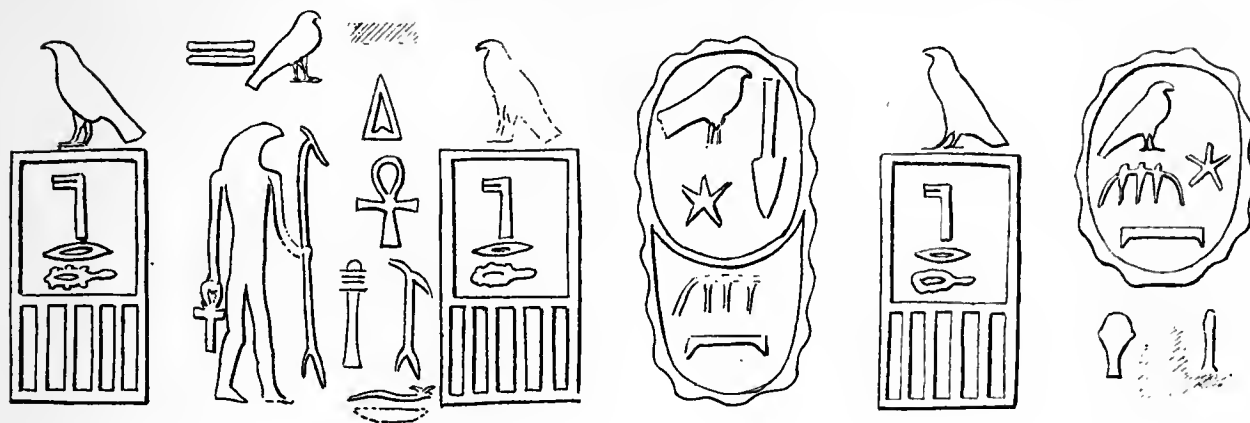


1



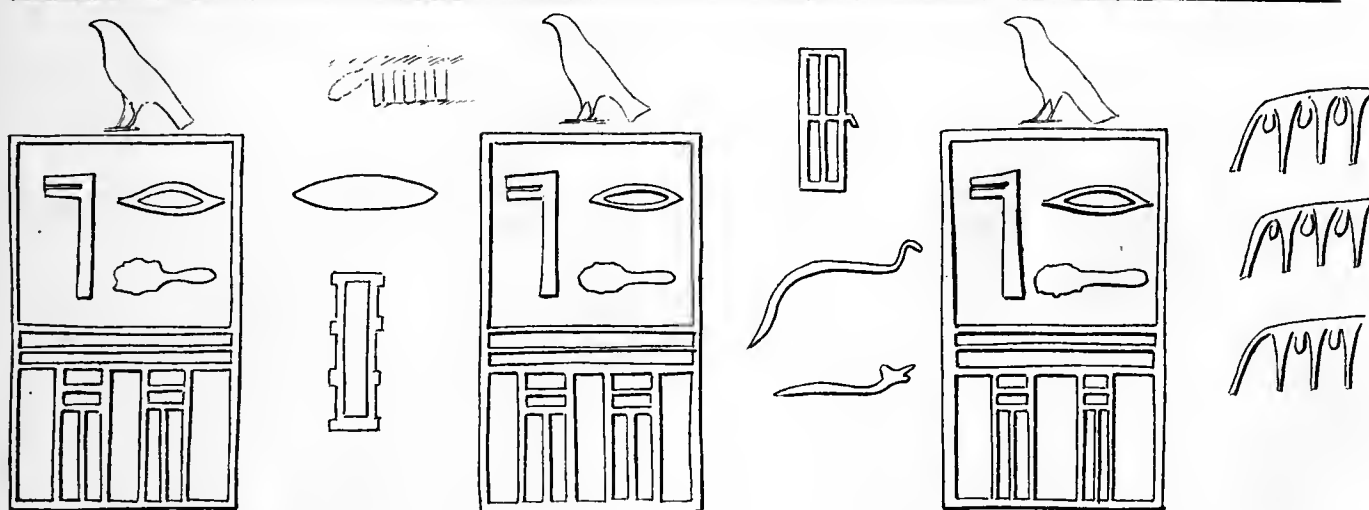




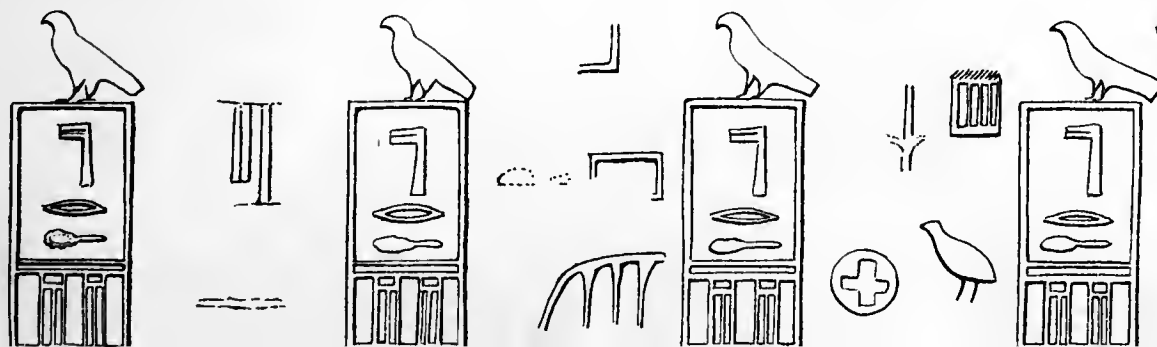
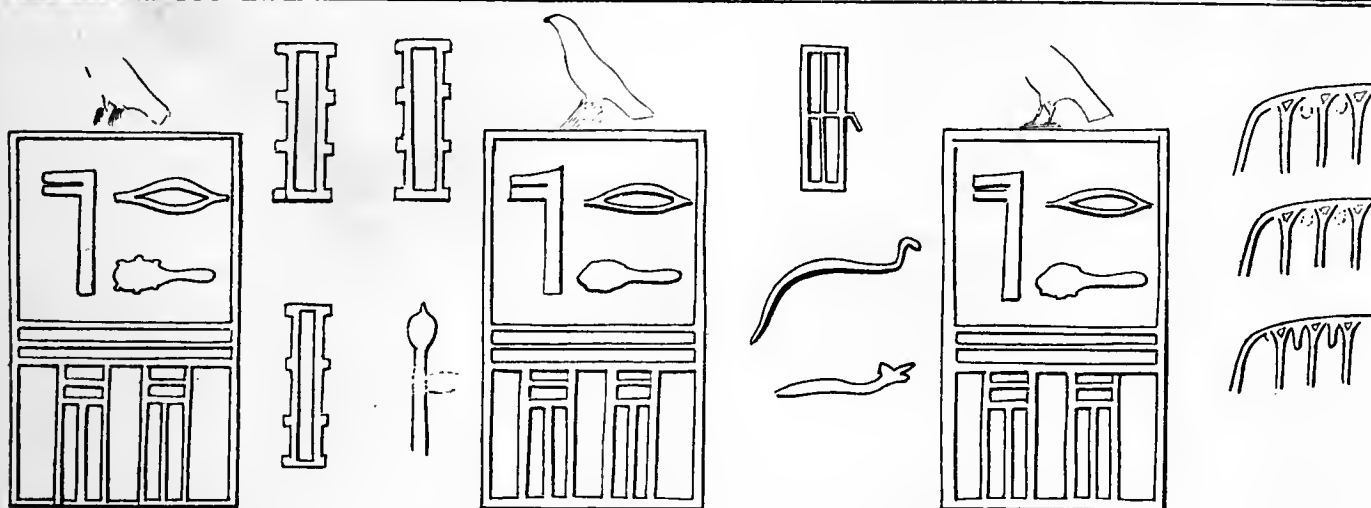


4

5a

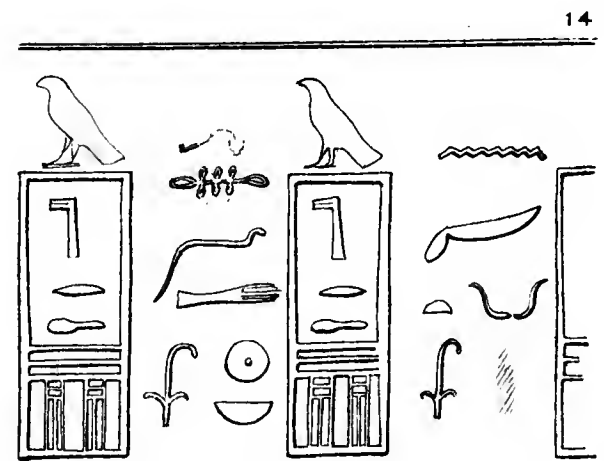
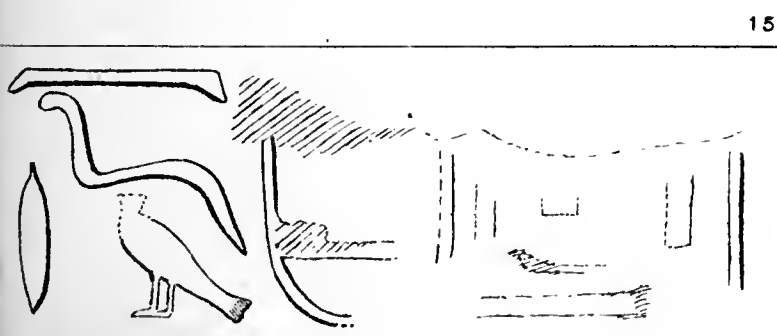
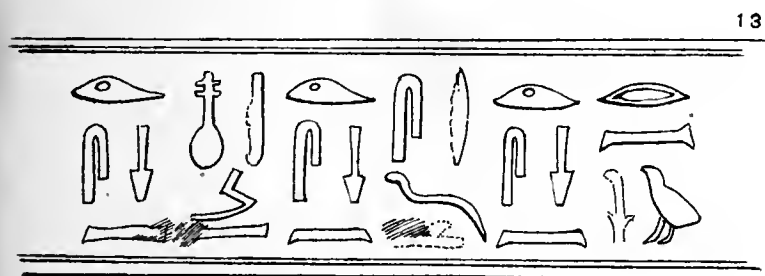
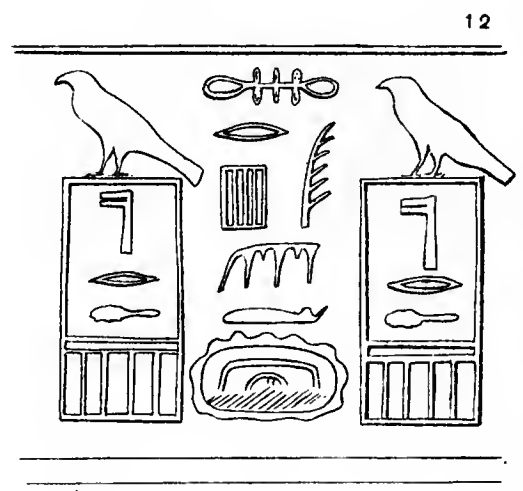
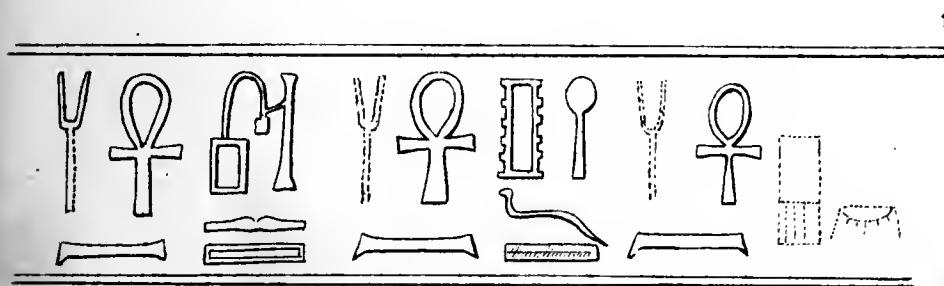
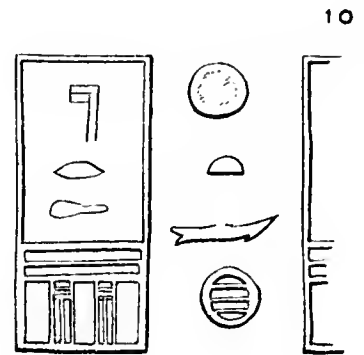
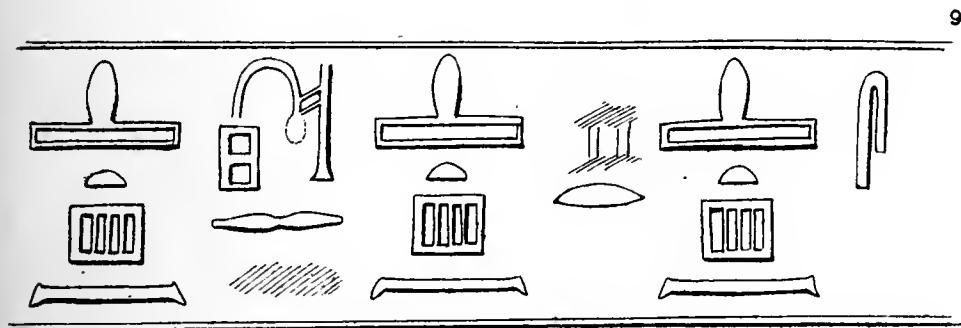
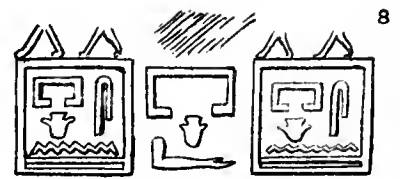
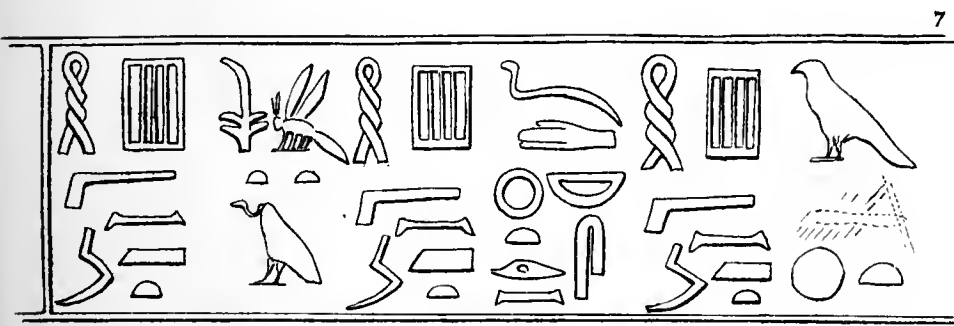


5b



6









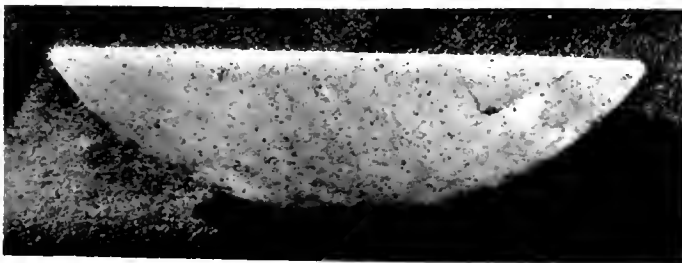
TYPICAL GROUP.

K.1



SELECTED GROUP.

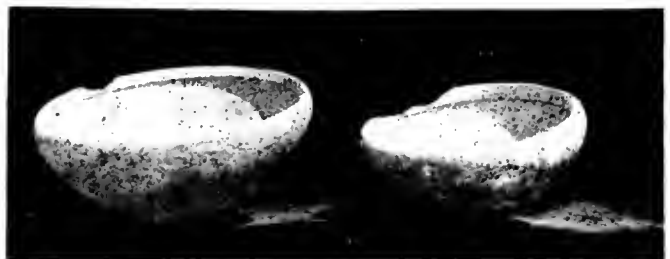
K.2



1:3

ALABASTER DISH.

K.1



1:4

STONE BOWLS.

K.1



1:3

ALABASTER DISH.

K.1



1:4

ALABASTER VASES.

K.1



1:4

ALABASTER VESSELS.

K.1



1:4

ALABASTER VESSELS.

K.1

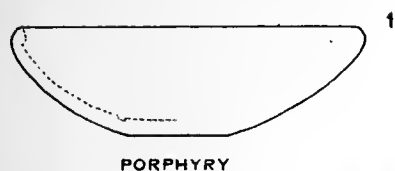


1:4

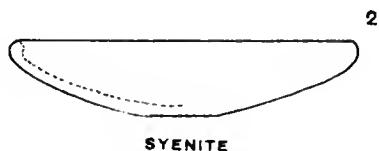
STONE BOWLS.

K.1

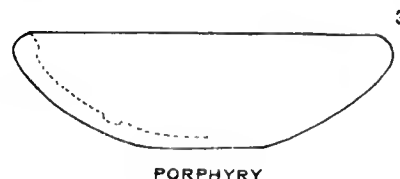




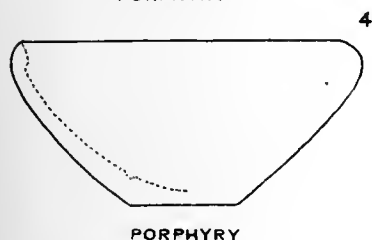
PORPHYRY



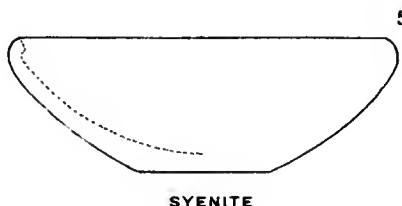
SYENITE



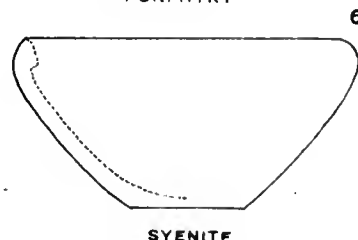
PORPHYRY



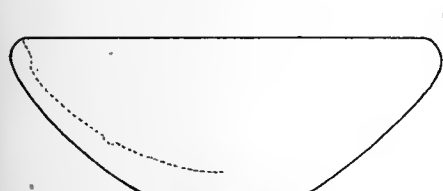
PORPHYRY



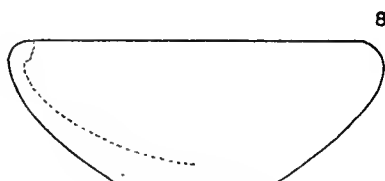
SYENITE



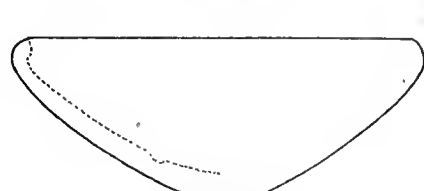
SYENITE



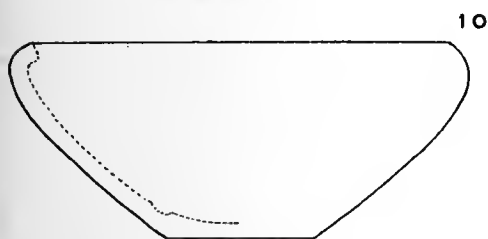
SYENITE



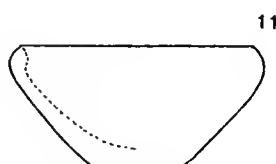
PORPHYRY



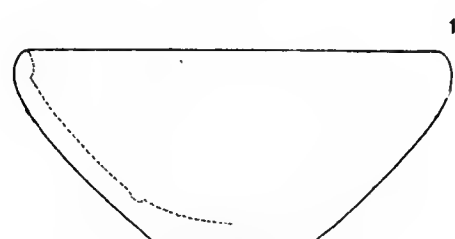
PORPHYRY



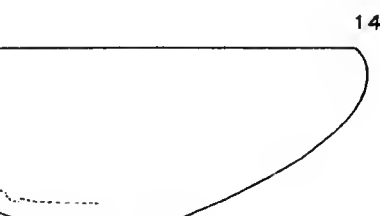
SYENITE



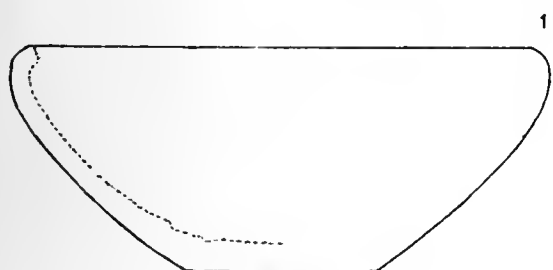
PORPHYRY



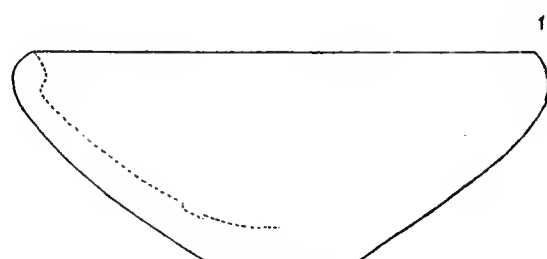
FINE SYENITE



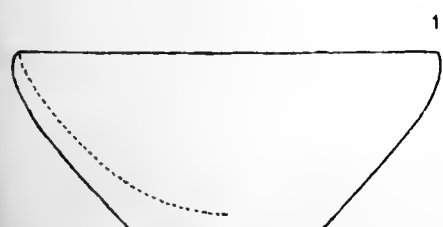
LARGE CRYSTALS  
SYENITE



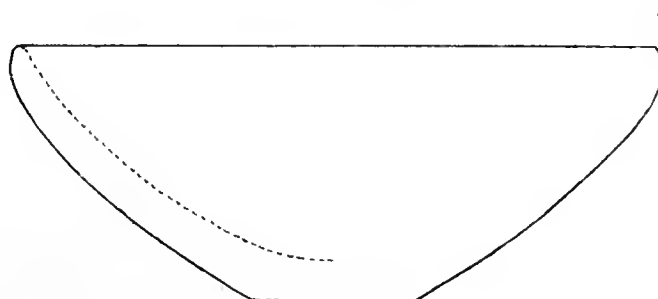
SYENITE



PORPHYRY



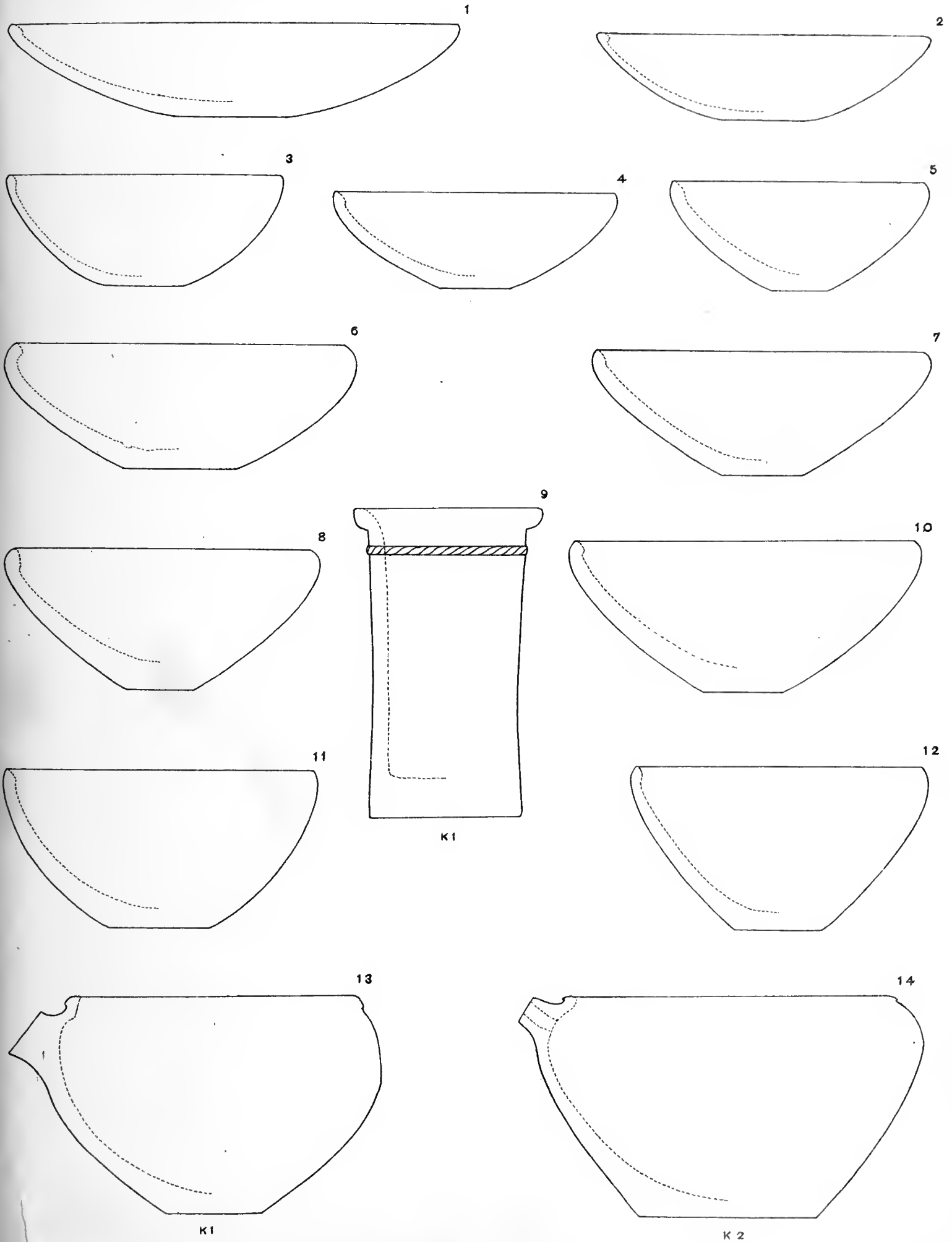
BRECCIA



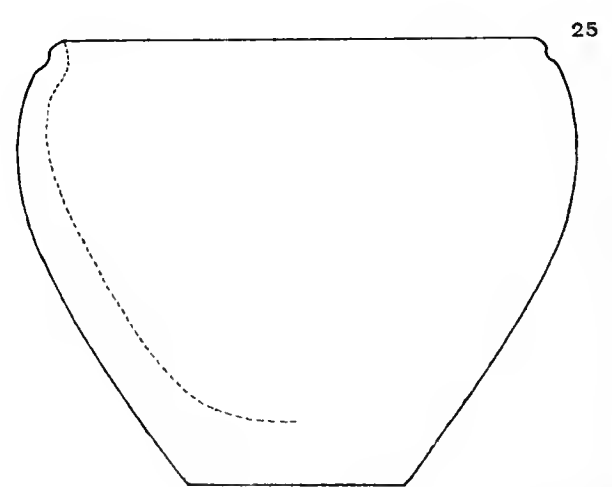
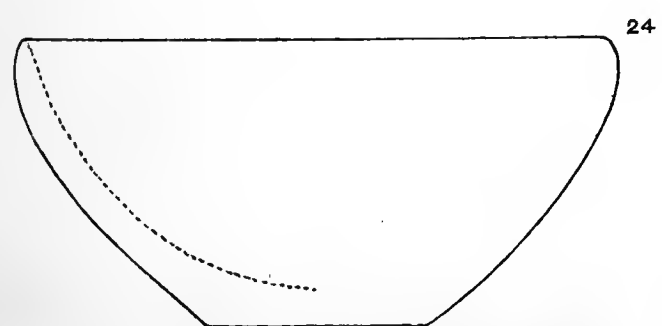
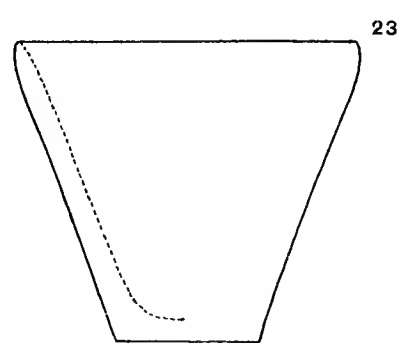
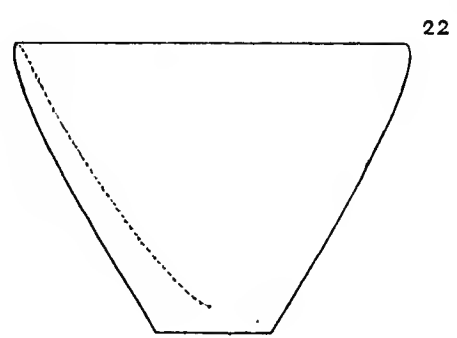
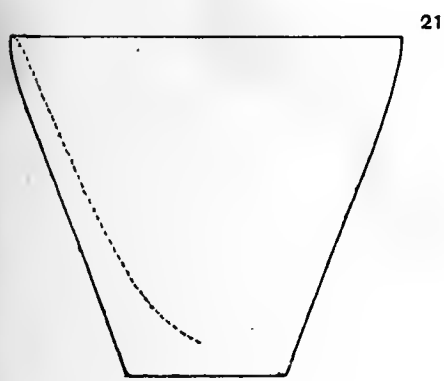
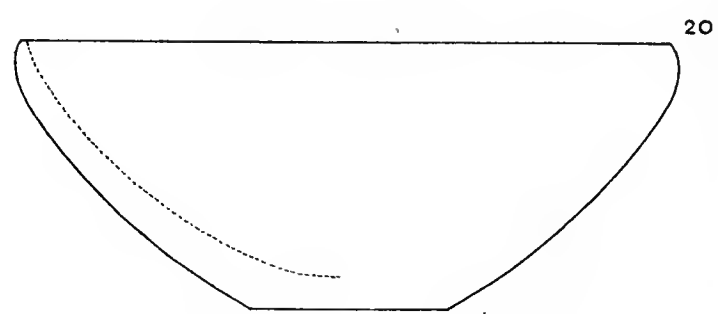
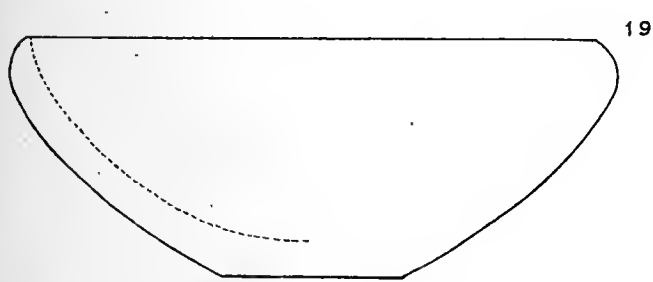
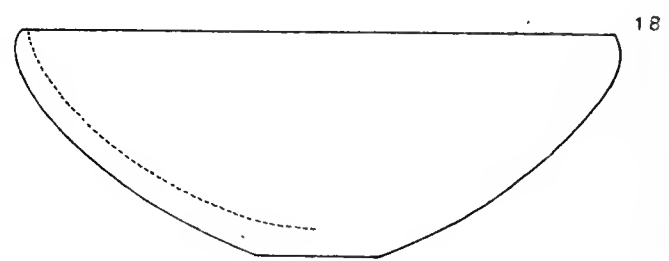
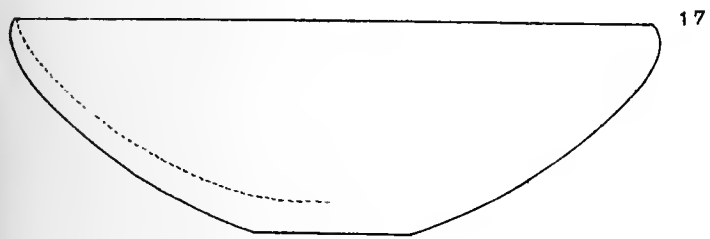
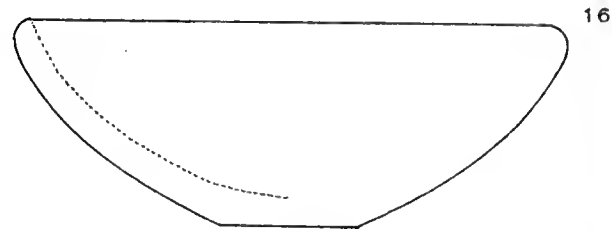
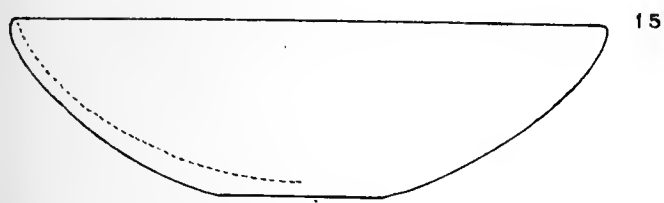
K1















1:6 SELECTED TYPES OF COPPER IMPLEMENTS



1:4 DEPOSIT OF COPPER AND FLINT IMPLEMENTS.



2:3 FLINT KNIVES AND CRESCENT FLINTS FROM TOMB.

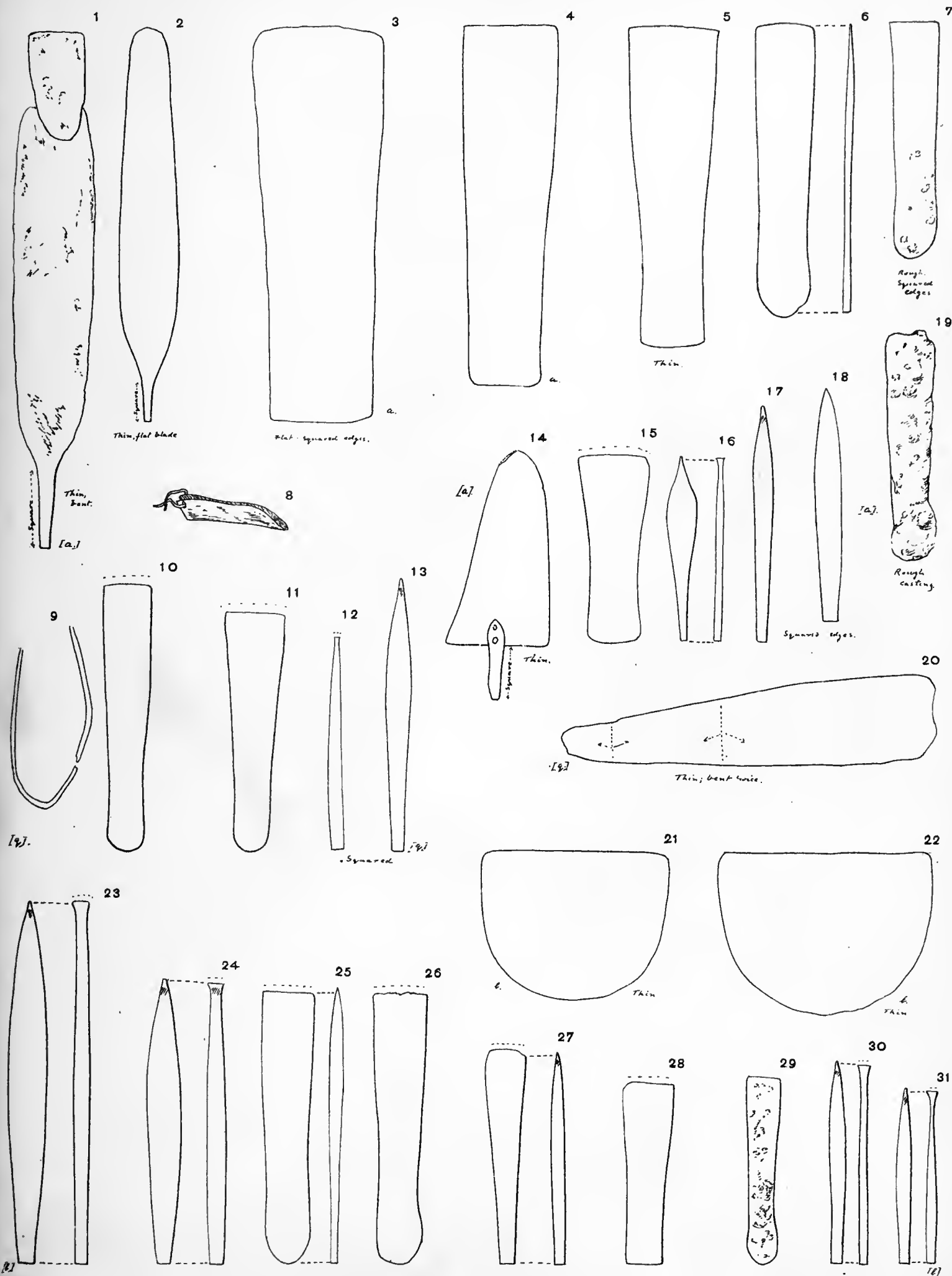


1:5 FLINTS FROM VICINITY OF TOMB.



1:4 FLINTS FROM DESERT NEAR TOMB.











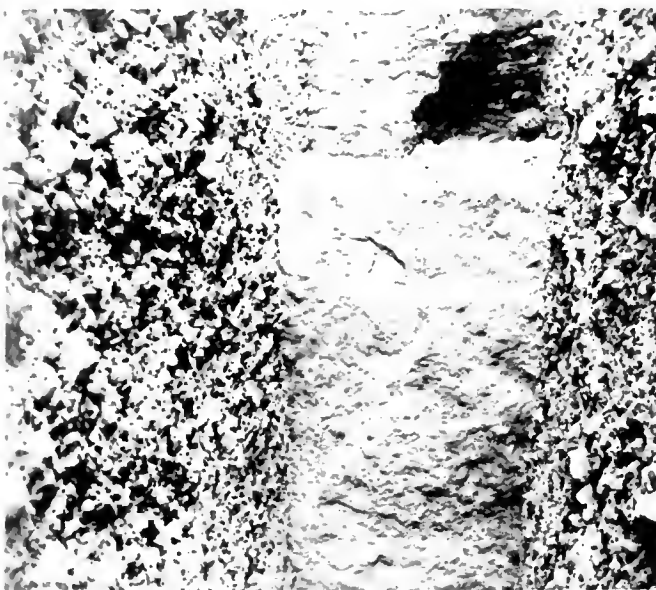
TWO VIEWS OF SUPERSTRUCTURE, SHOWING STEPS OF THE MASTABA.



CORNER OF DESCENDING PASSAGE.



EXTERNAL CHAMBER WITH DEPOSIT.



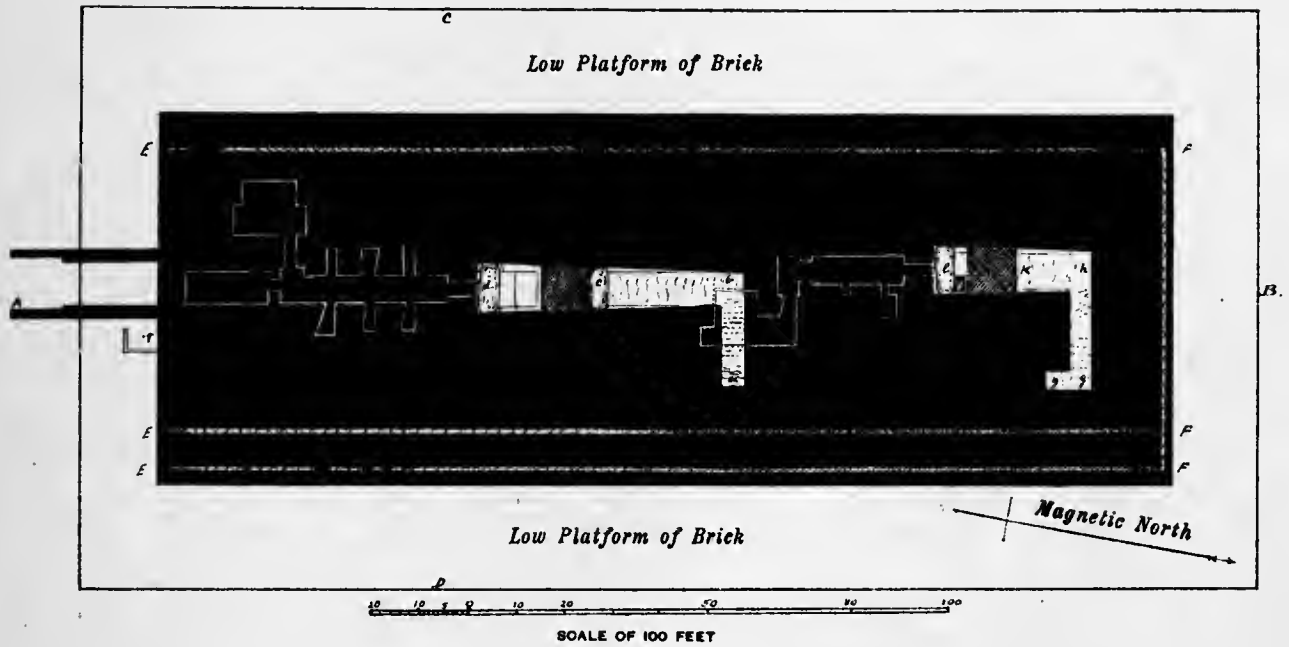
PORTCULLIS-STONE IN POSITION



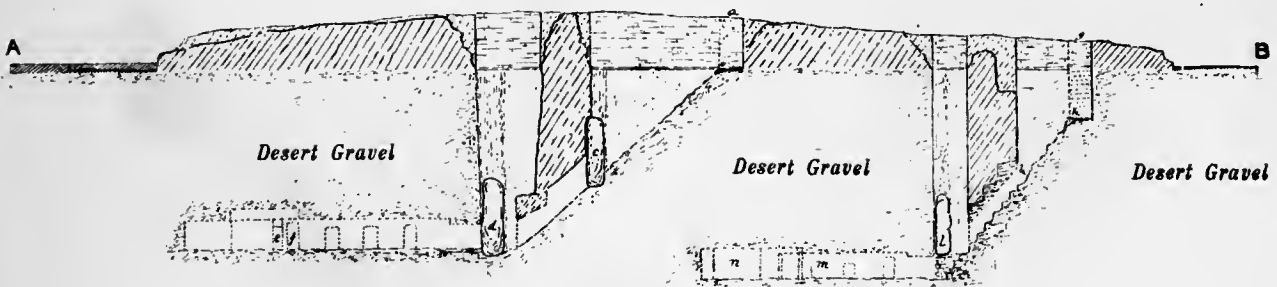
AT FOOT OF DESCENT TO CHAMBERS.



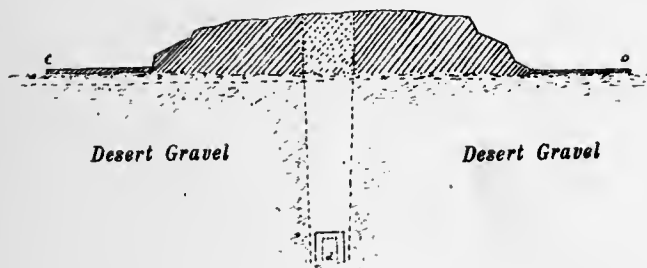
PLAN



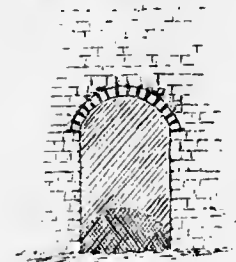
SECTION A.B.



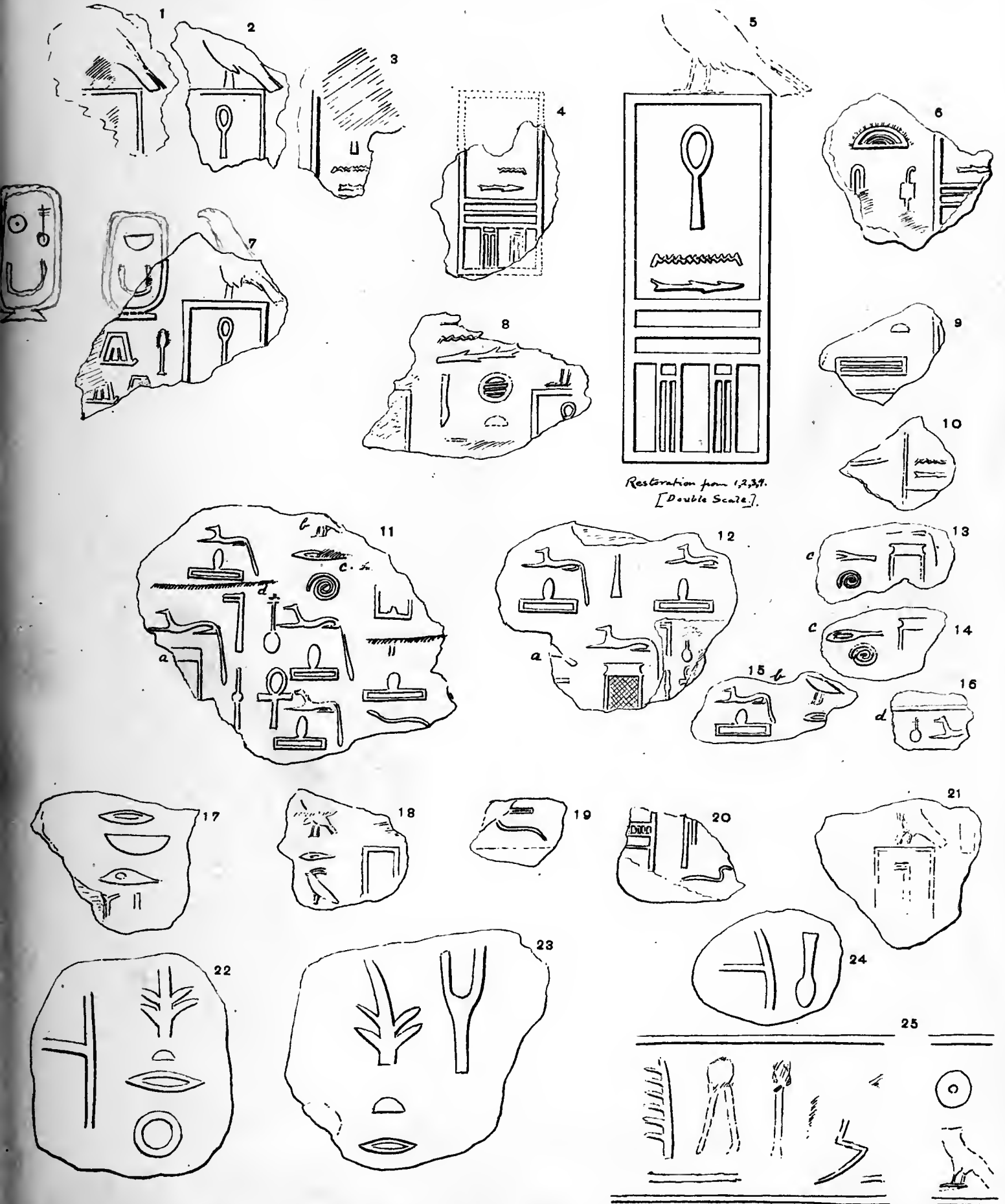
SECTION C.D.



ARCHWAY AT K









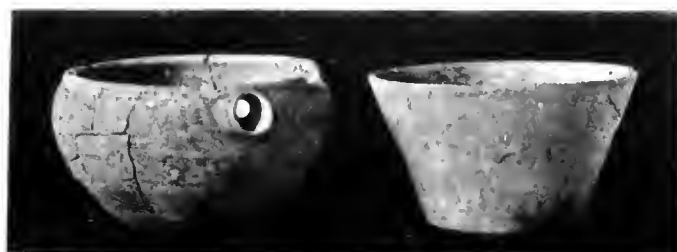


THE SKULL OF NETER-KHET IN FOUR POSITIONS.



1:4

BOWL OF STEATITE.



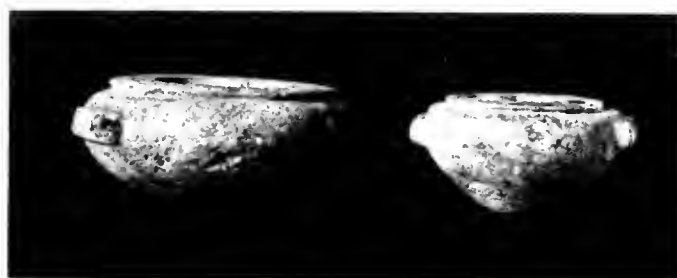
VEINED ALABASTER

ALABASTER



1:3

BOWL OF STEATITE



COARSE ALABASTER

BRECCIA



2:3

FLINTS AND WOOD HANDLE



1:3

STEATITE.



1:4

STEATITE



1:3

COPPER VESSEL.

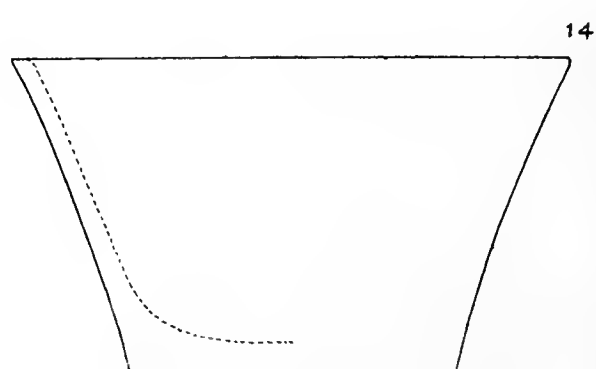
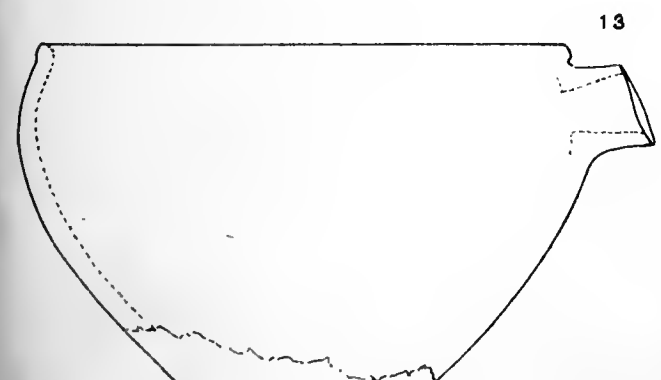
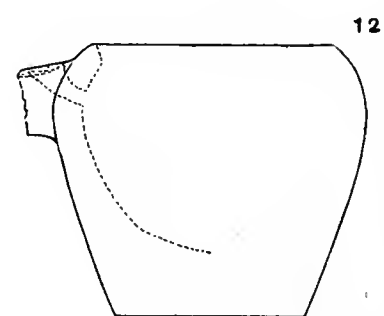
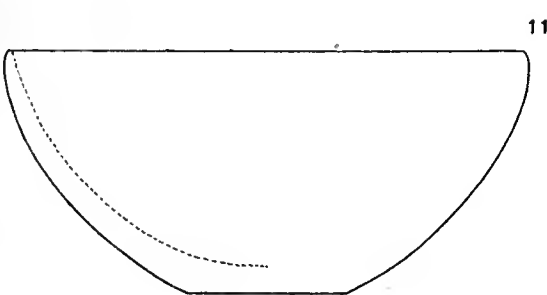
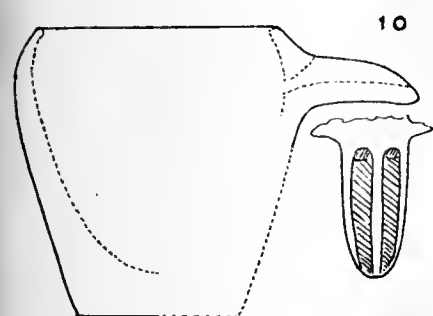
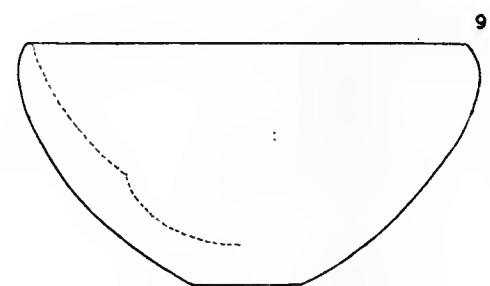
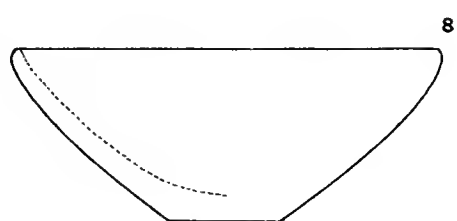
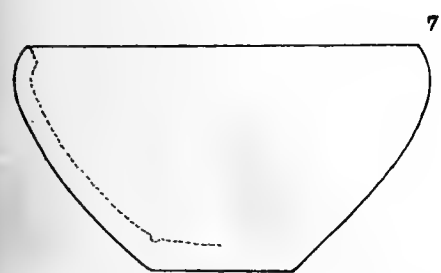
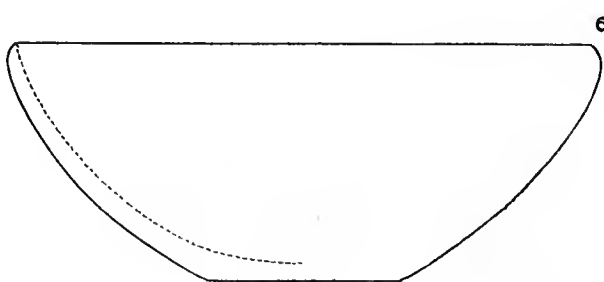
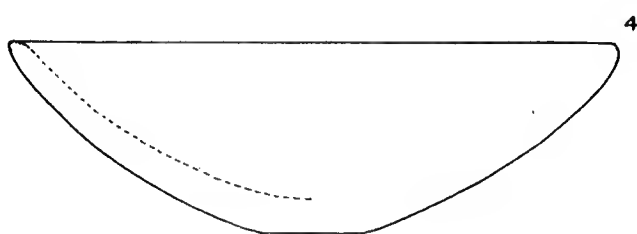
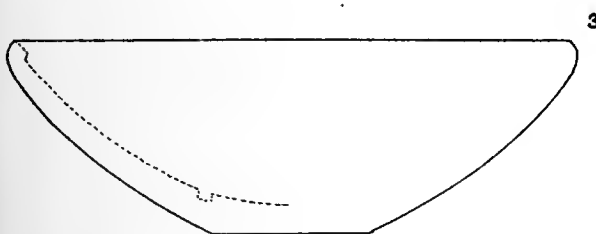
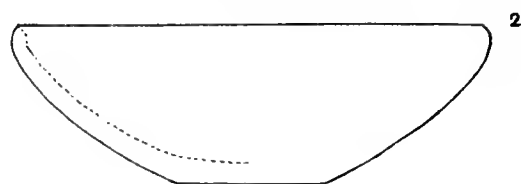
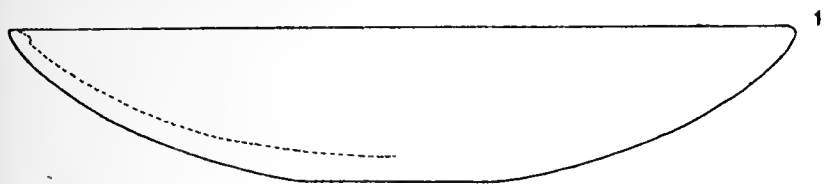


1:3

ALABASTER VESSEL

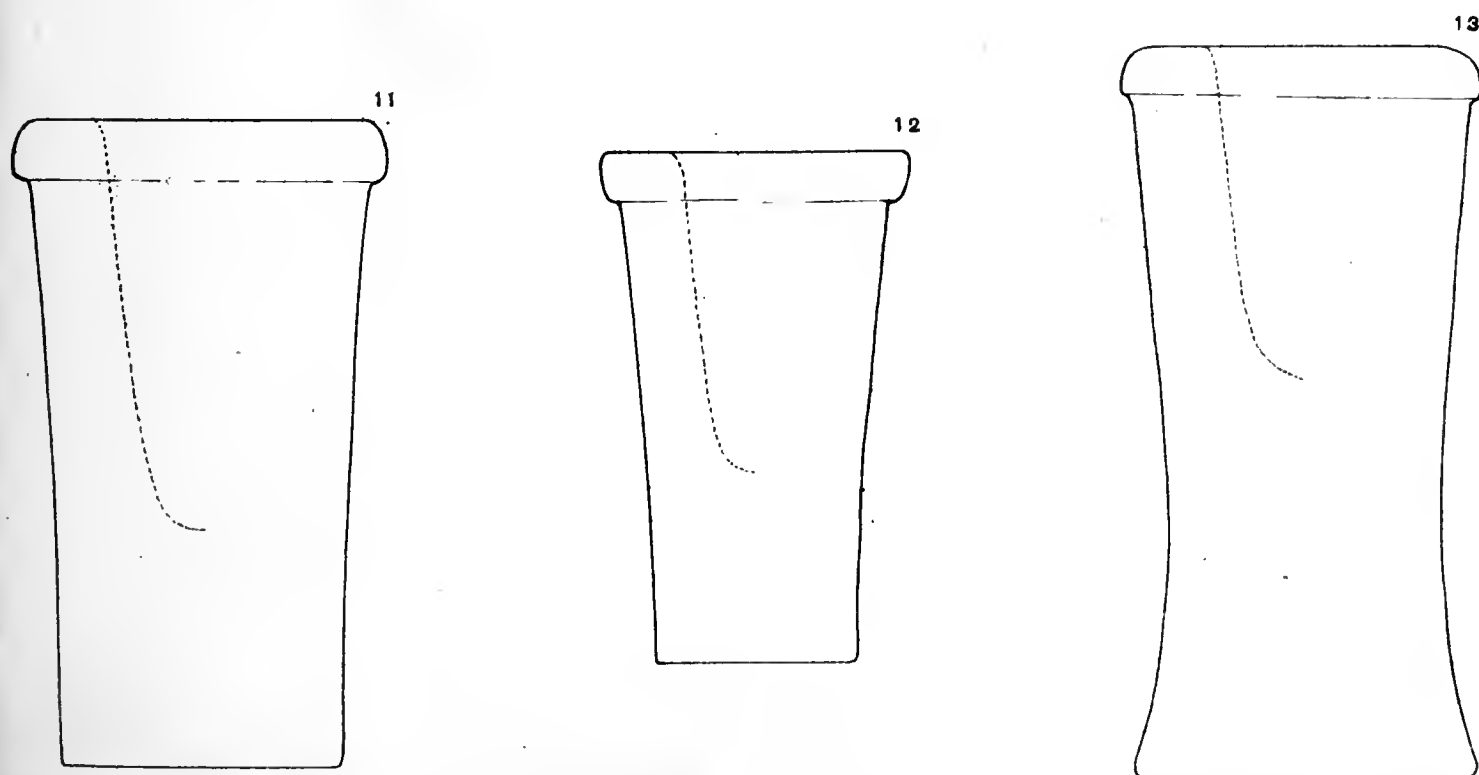
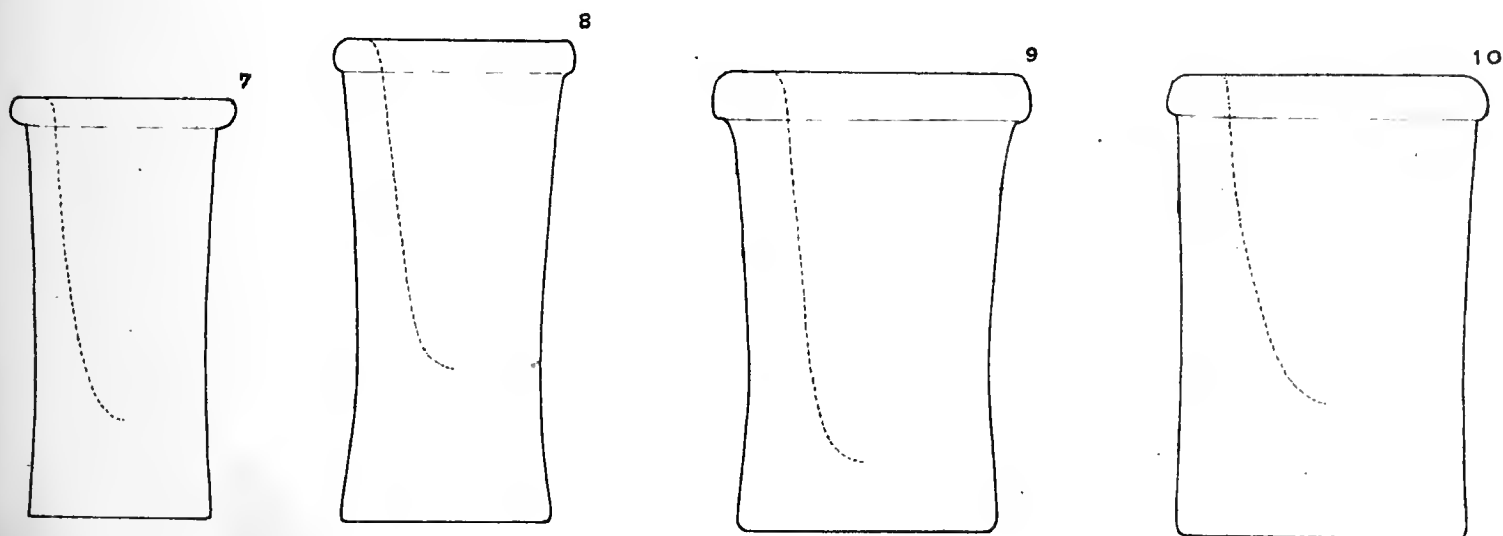
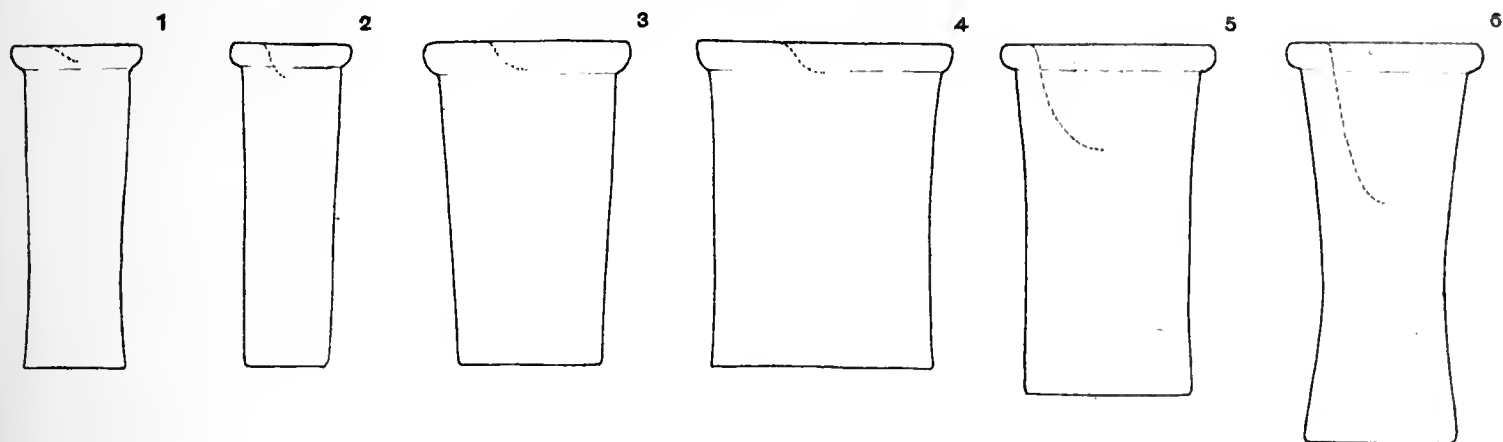






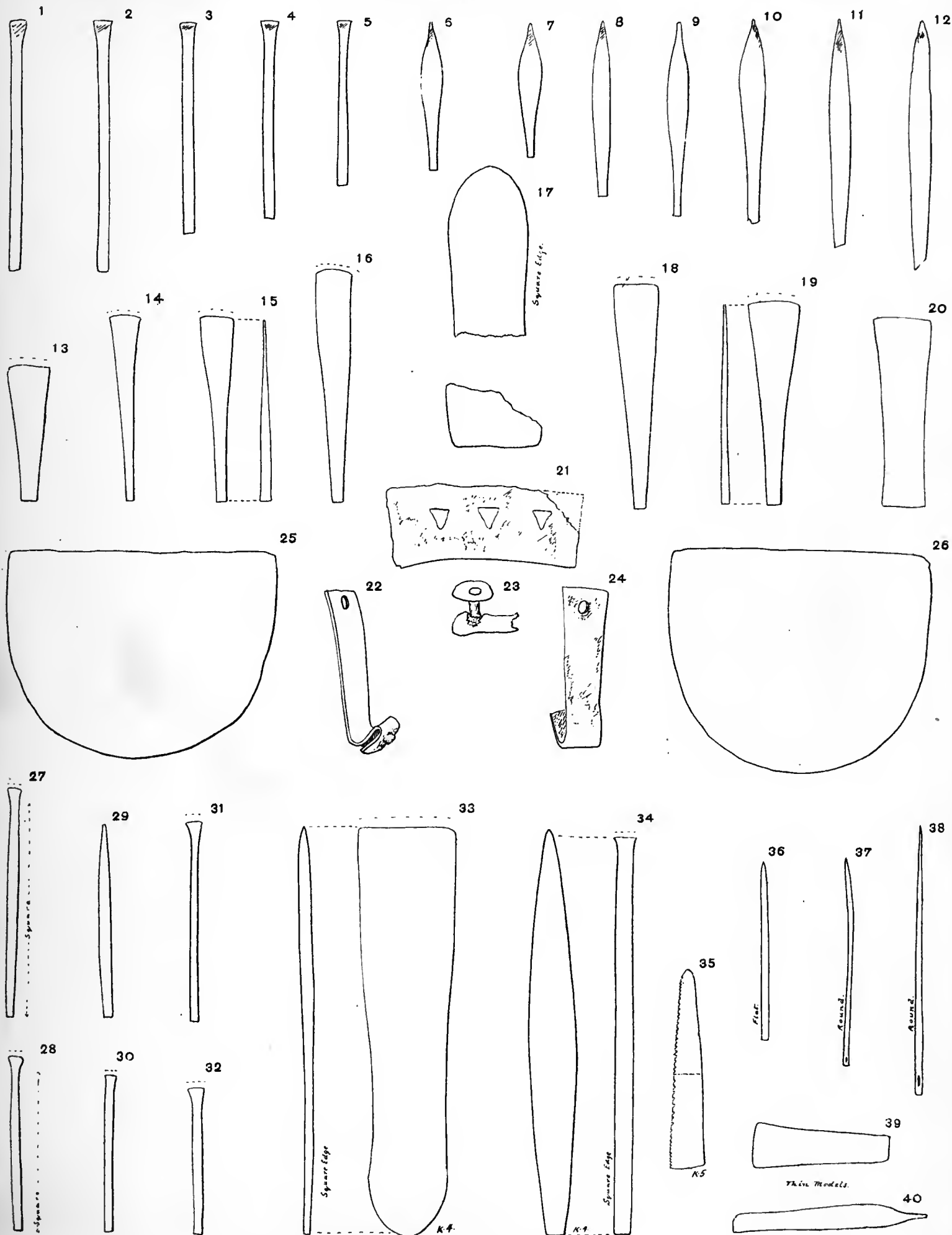


[TYPES SELECTED FROM TOMB K 2].





[TWO CHISELS, K 4: SAW-MODEL, K 5].







STAIRWAY OF TOMB

K 3



STAIRWAY WITH FALSE ARCH.

K 5



PASSAGE DESCENDING TO CHAMBERS.

K 4



1:6

GROUP OF ALABASTER VESSELS.

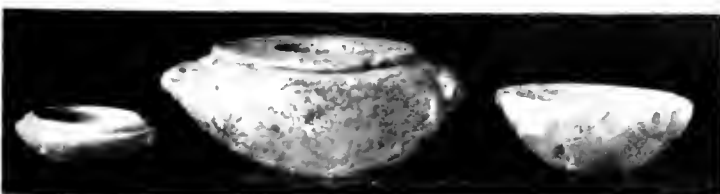
K 4



1:4

TWO STONE VASES.

K 4



1:4

VASES OF STONE AND ALABASTER.

K 5



2:3

COPPER AND FLINT IMPLEMENTS.

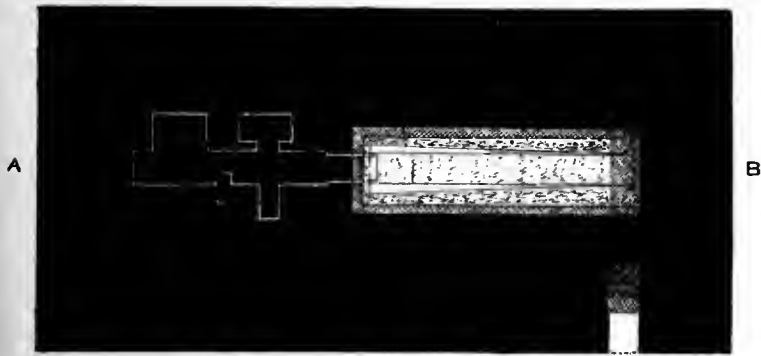
K 5





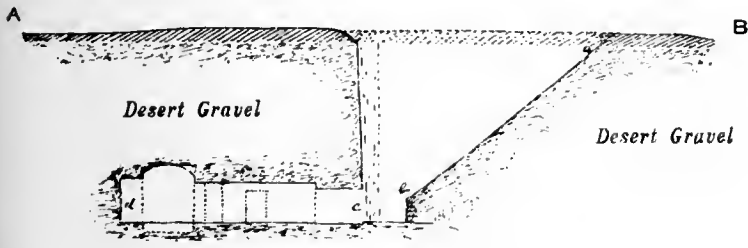
1:480

K 3, PLAN



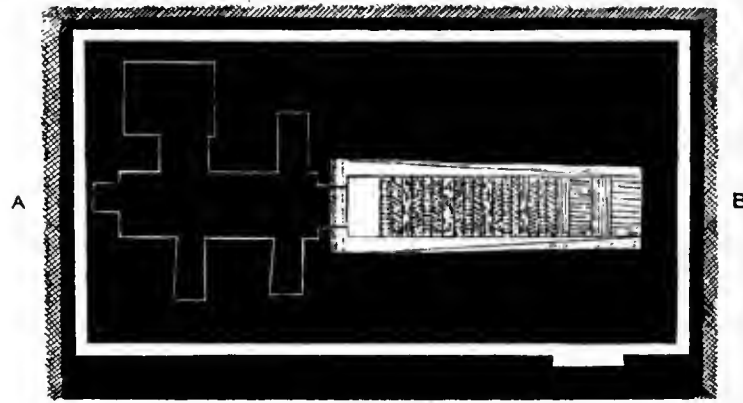
SCALE OF 100 FEET

SECTION A.B.



1:240

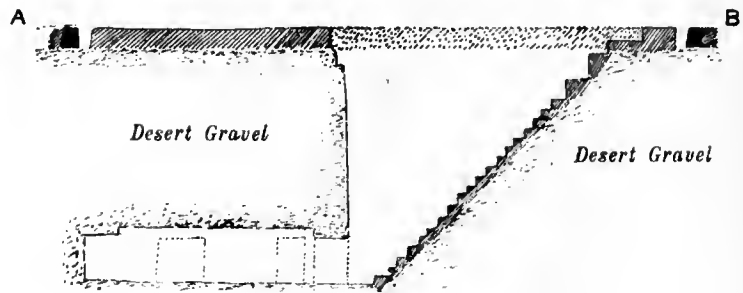
K 4, PLAN



SCALE OF 50 FEET

Magnetic North

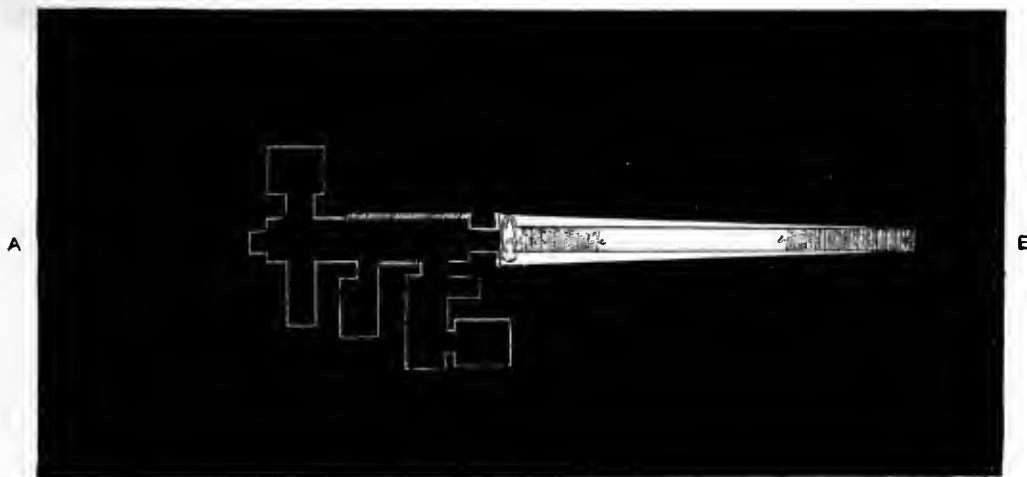
SECTION A.B.



K 5, TOMB OF THE HA PRINCE

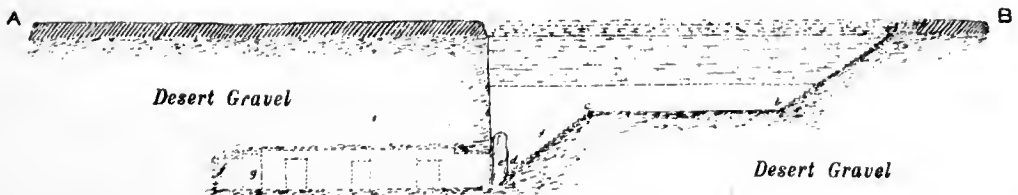
PLAN

1:480

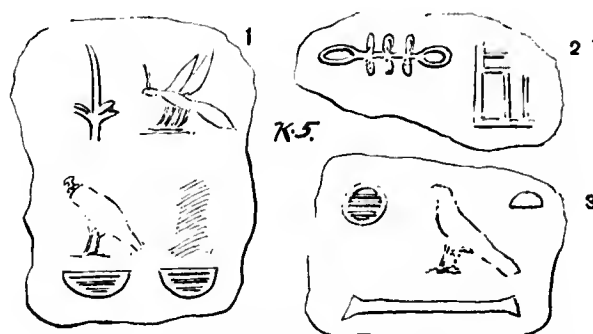
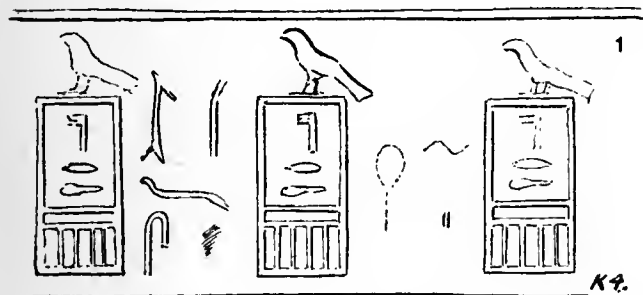
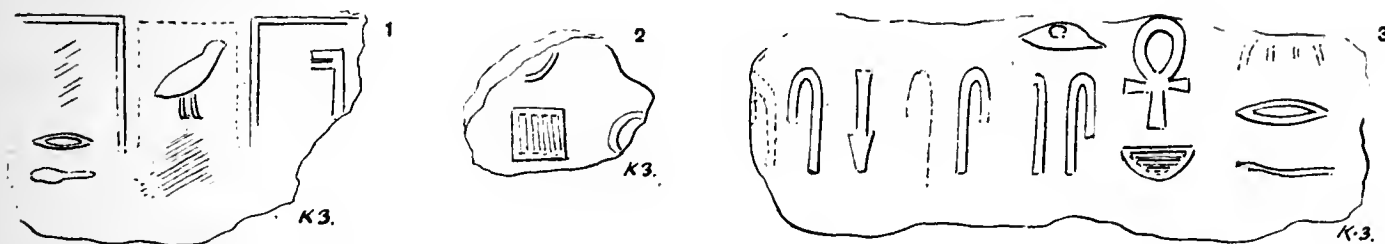


SCALE OF 100 FEET

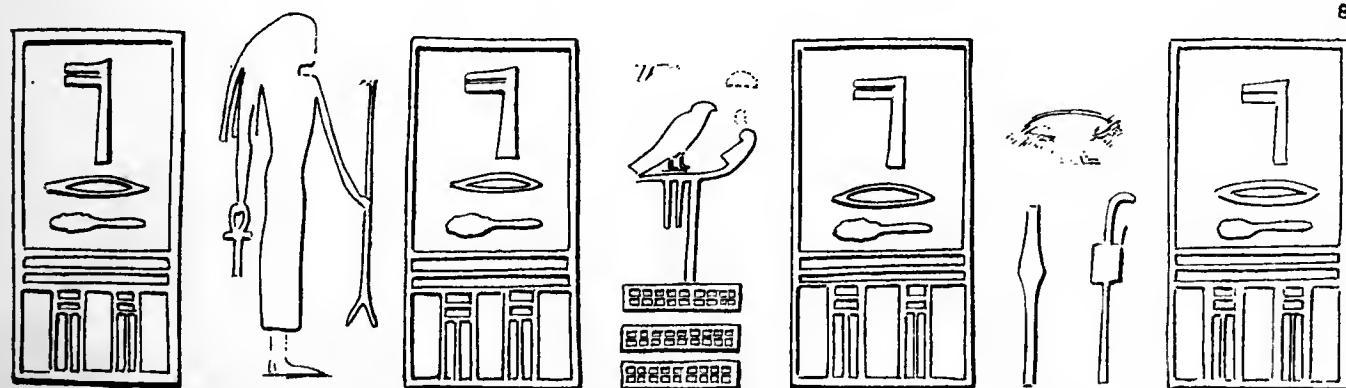
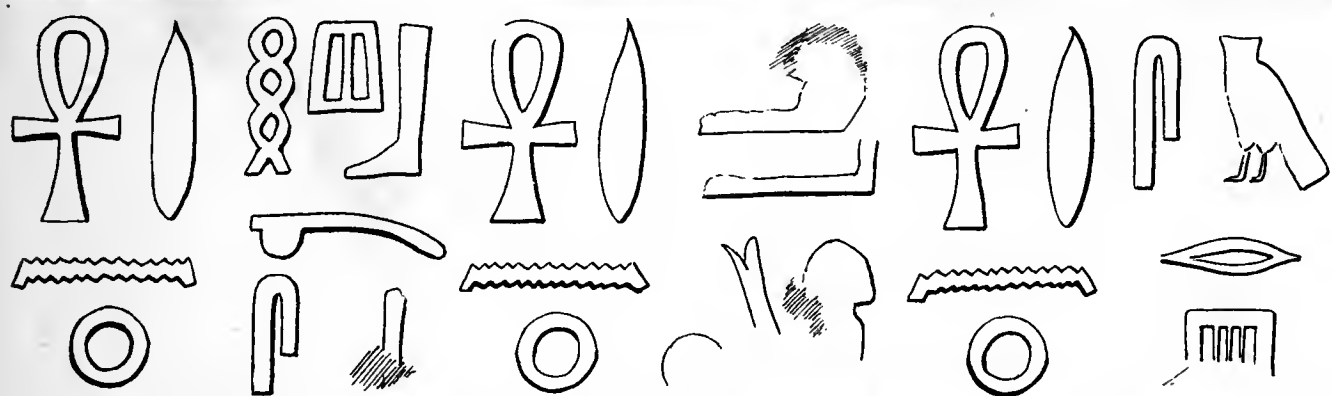
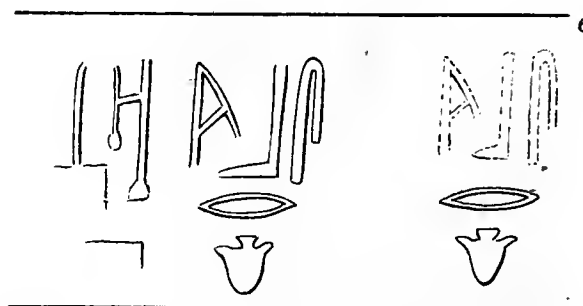
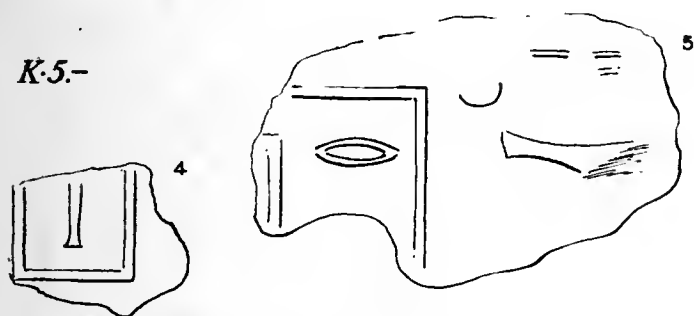
SECTION A.B.





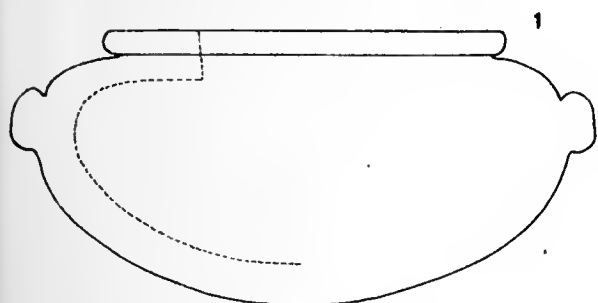


K5.-

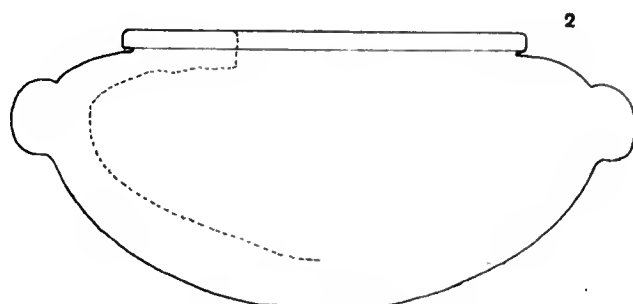




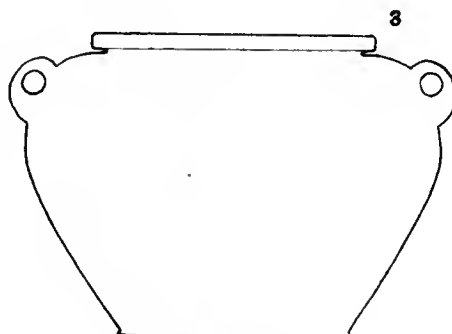
TYPES OF ALABASTER VESSELS FROM TOMBS K3, K4.



SYENITE



WHITE SYENITE



SYENITE



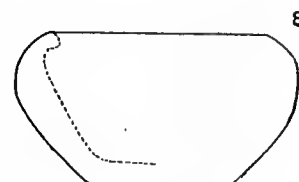
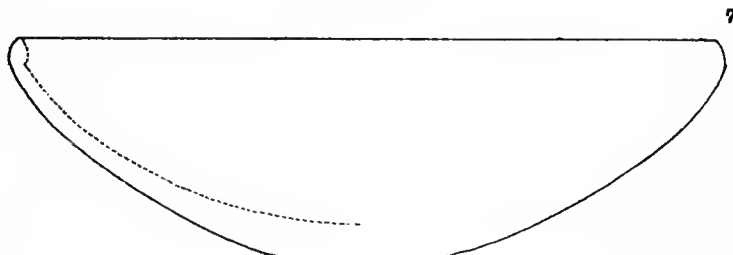
ALABASTER



ALABASTER

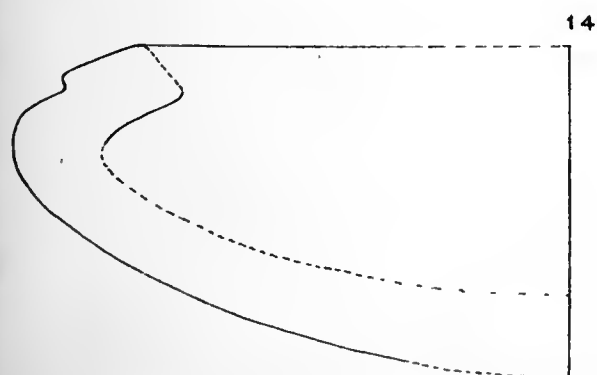
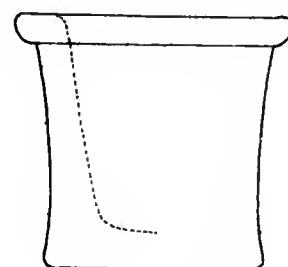
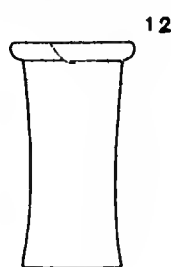
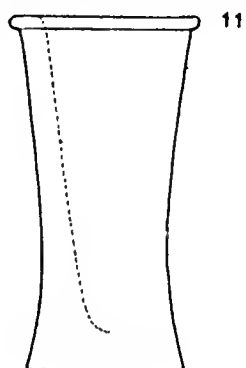
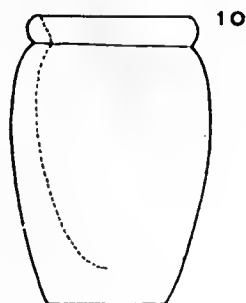
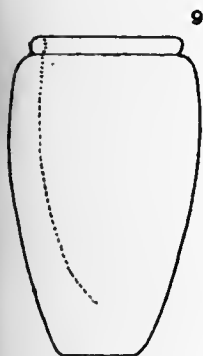


K 5

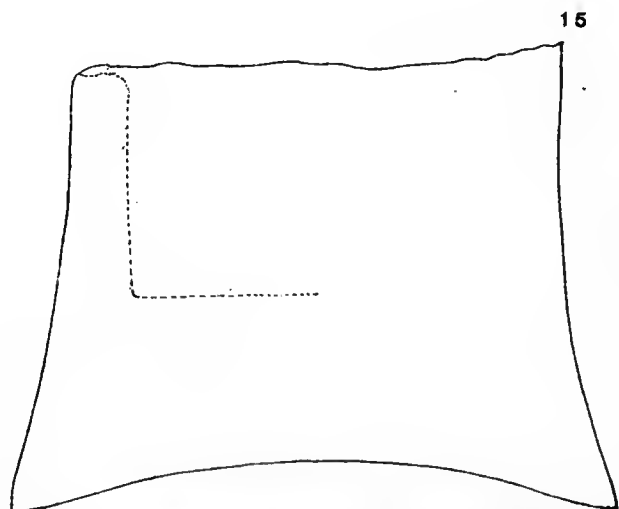


K 5

FIVE ALABASTER VASES FROM TOMB K4.

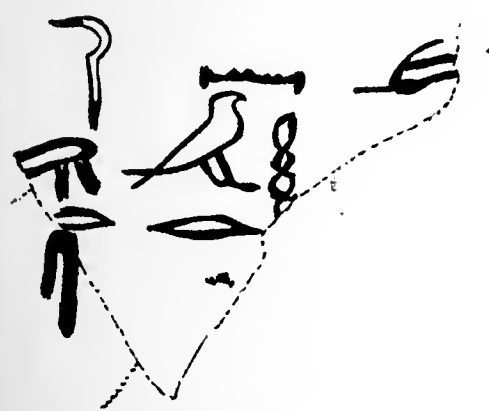


K3, FRAGMENT OF LARGE ALABASTER VESSEL.

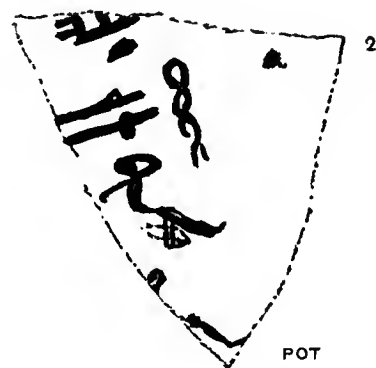


K 5. BASE OF LARGE ALABASTER JAR

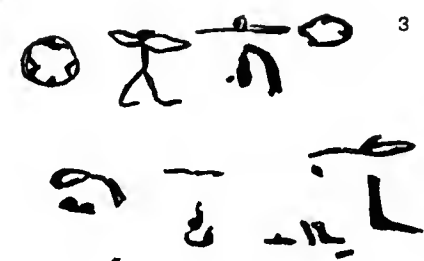




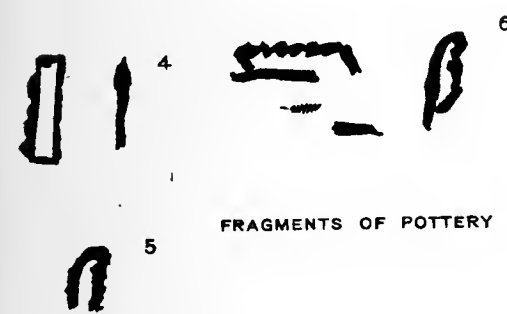
POTTERY FRAGMENT



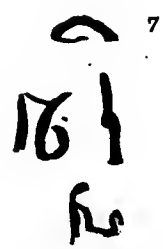
POT



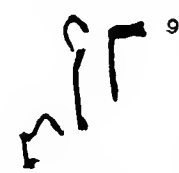
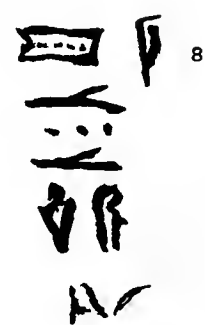
POT



FRAGMENTS OF POTTERY

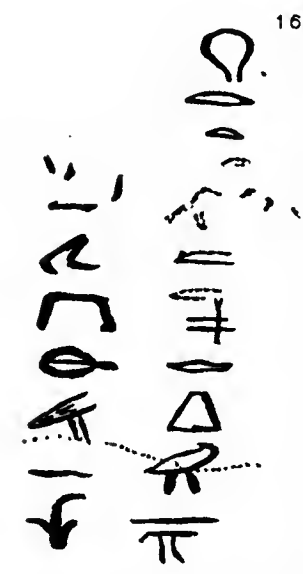
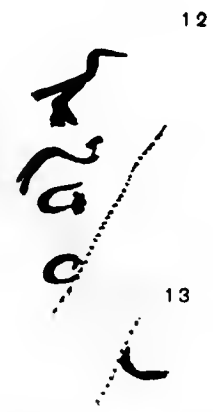
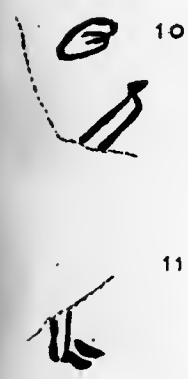


ALABASTER BOWL



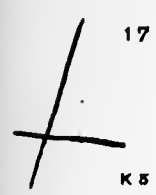
8, POT FROM TOMB K2

1-7, CURSIVE INSCRIPTIONS FROM TOMB K1



9-15, FRAGMENTS OF ALABASTER TABLE, K3

16, ALABASTER TABLE, K5



K5



K5



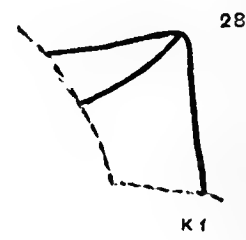
K1



K5



K1

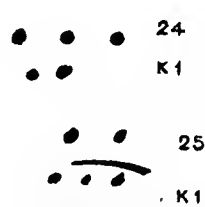


K1

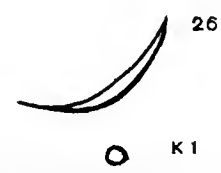


K1

K1



K1



K1

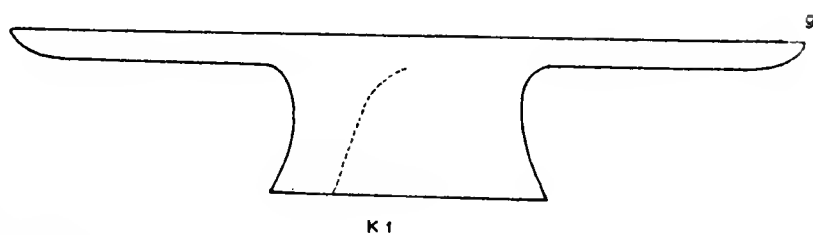
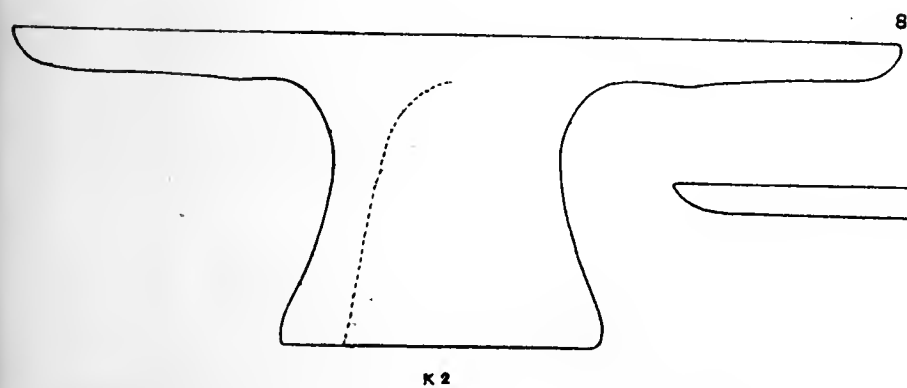
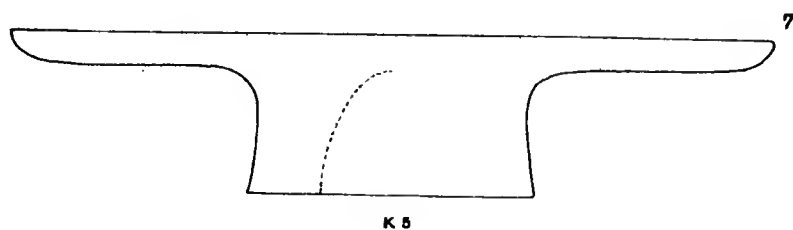
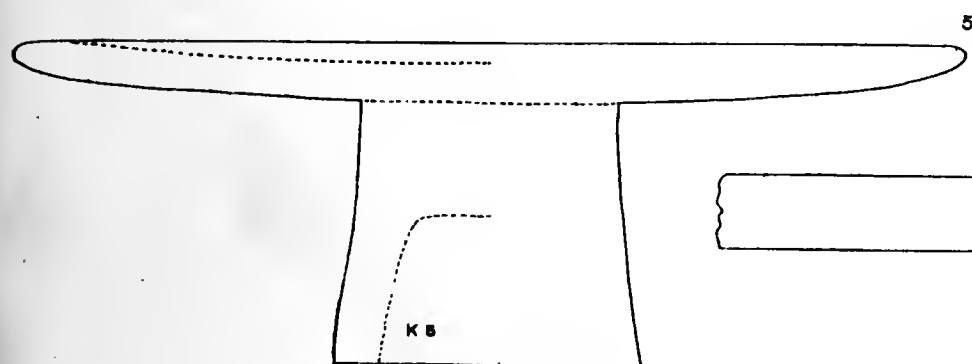
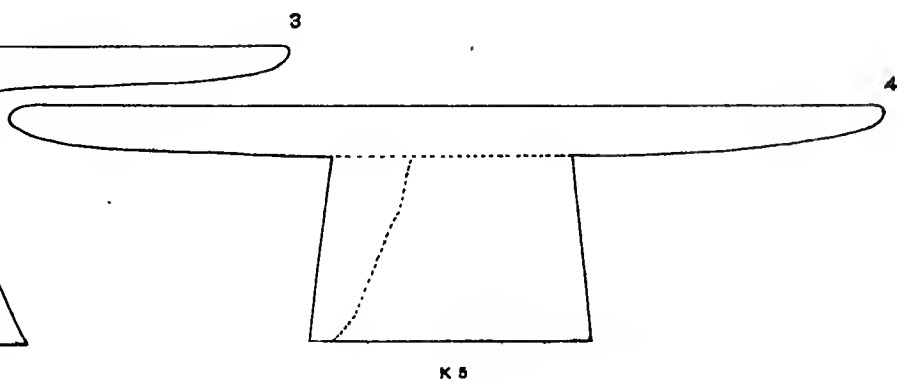
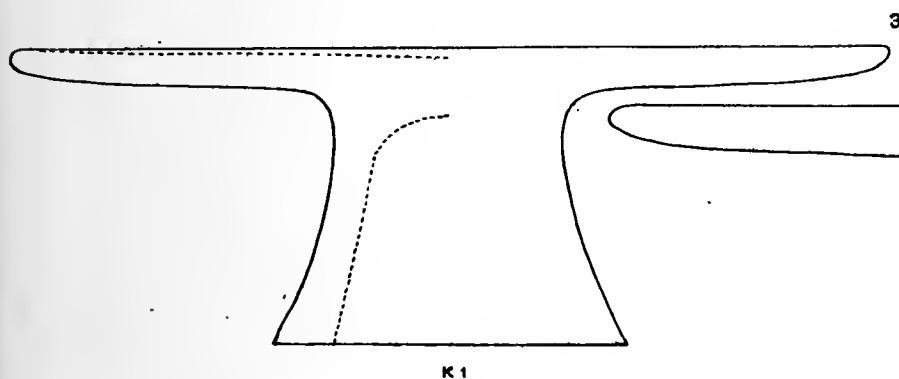
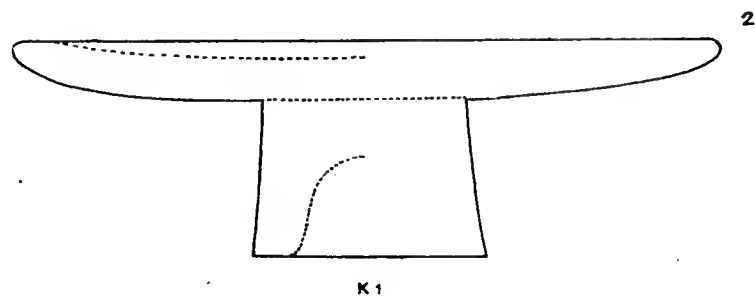
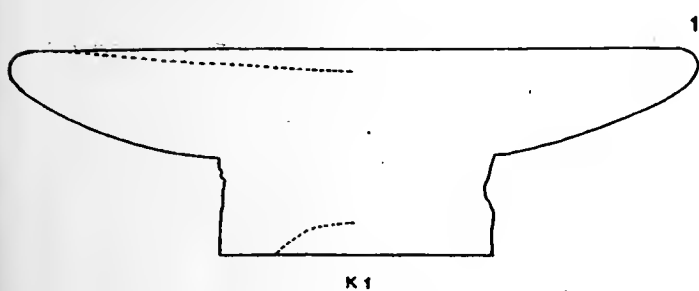


K1

17-28, MARKS ON POTTERY, TOMBS K1, K5









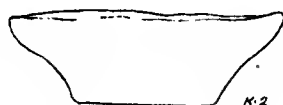
[Notes: *d* is dull; *p*, polished; *r*, rough; *s*, smooth; *bl*, black; *br*, brown; *yl*, yellow; *rd*, red].



1

*p, rd.*

K.2.



2

*d, rd.*

K.2



3

*d, rd.*

K.2.



4

*d, yl.*

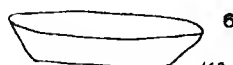
K.2.



5

*d, rd.*

K.2.



6

*d, yl.*

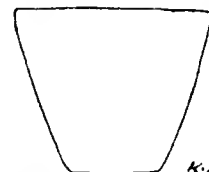
K.2.



7

*p, rd.*

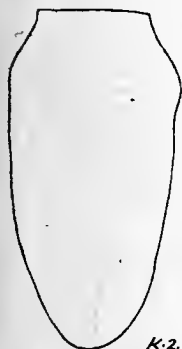
K.2.



8

*p, rd.*

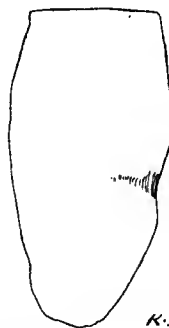
K.5.



9

*r, d, br.*

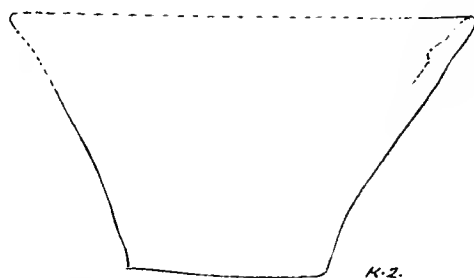
K.2.



10

*r, d, br.*

K.5.



11

*d, yl-br.*

K.2.



12

*s, bl.*

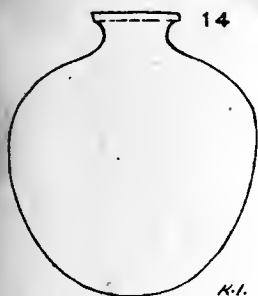
K.1.



13

*d, r, br.*

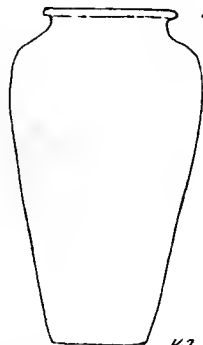
K.2.



14

*s, yl.*

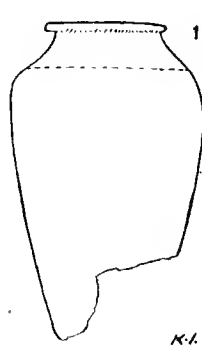
K.1.



15

*d, yl.*

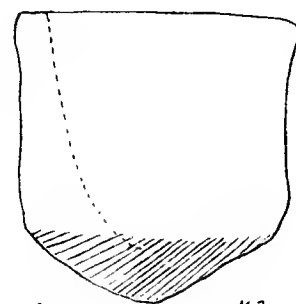
K.2.



16

*d, rd.*

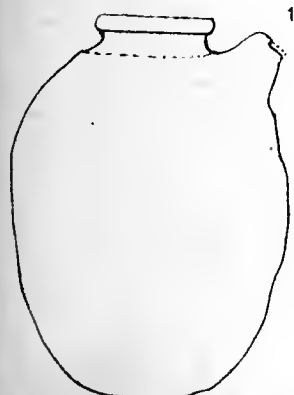
K.1.



17

*d, r, br.*

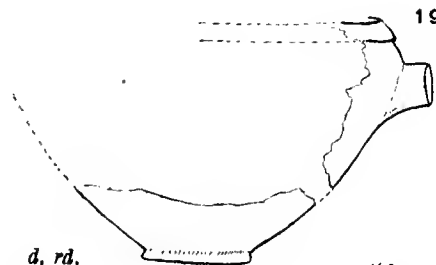
K.2.



18

*d, rd.*

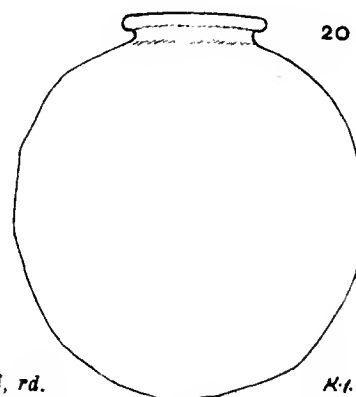
K.2.



19

*d, rd.*

K.2.



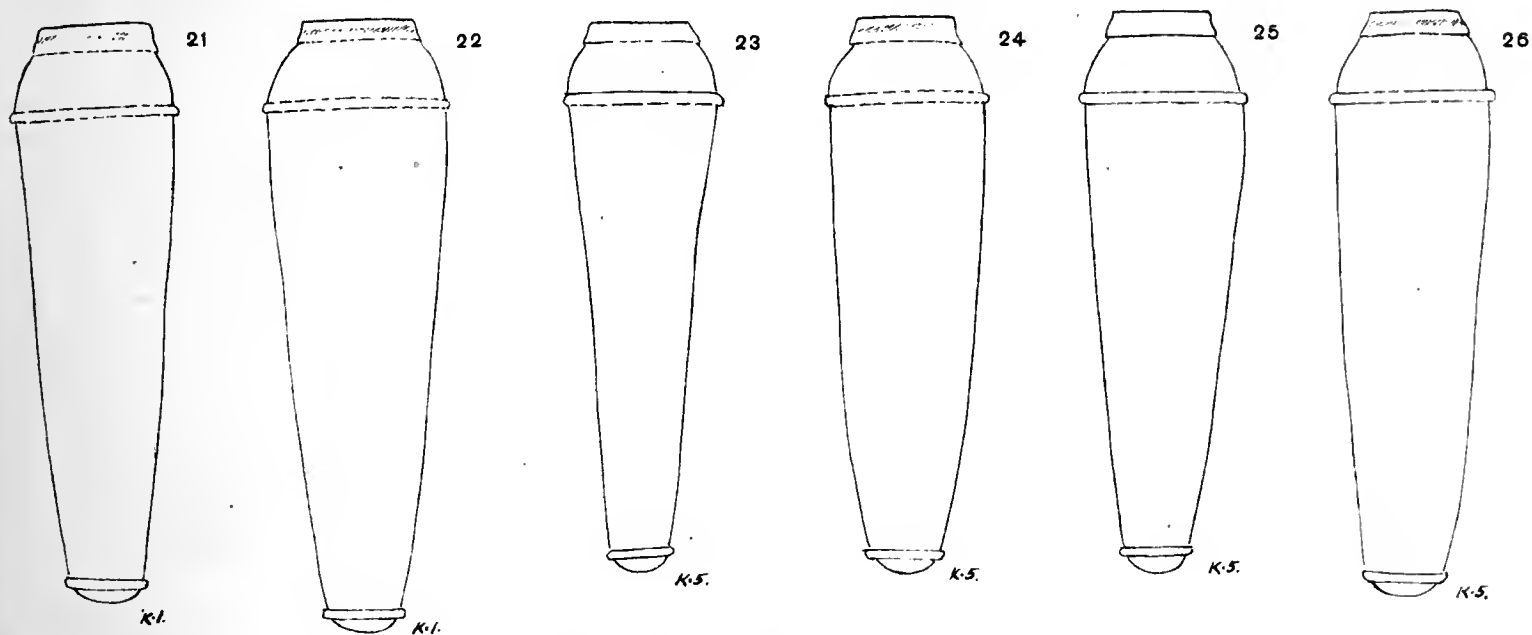
20

*d, rd.*

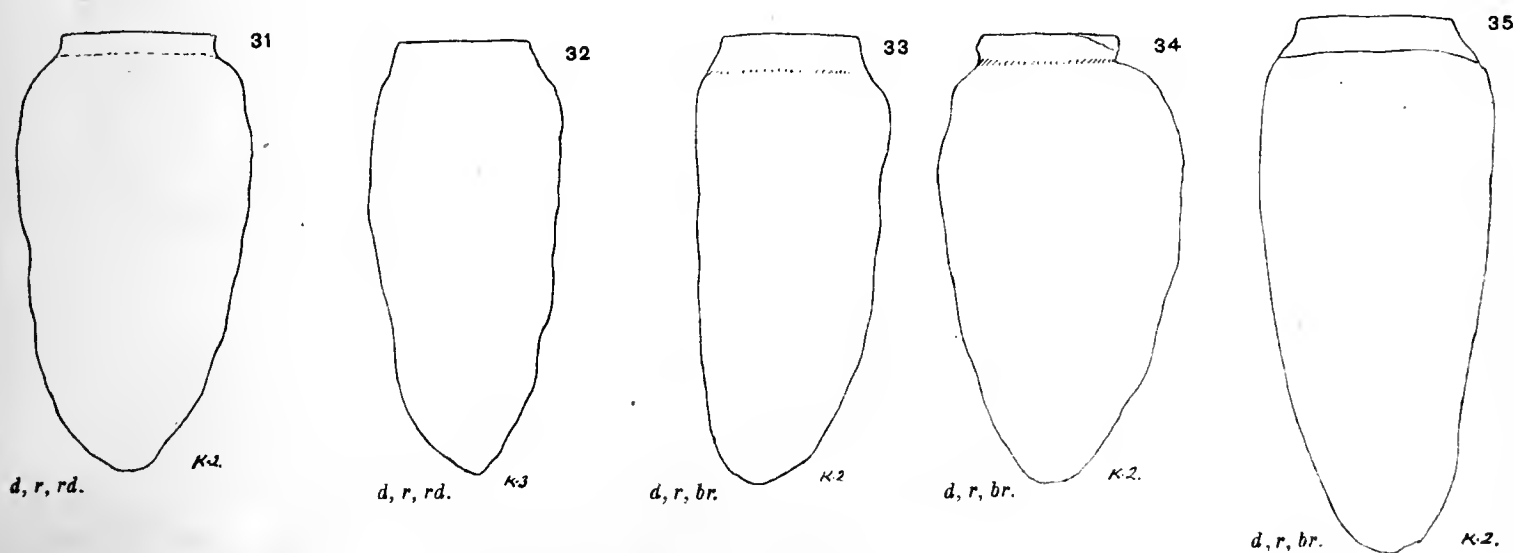
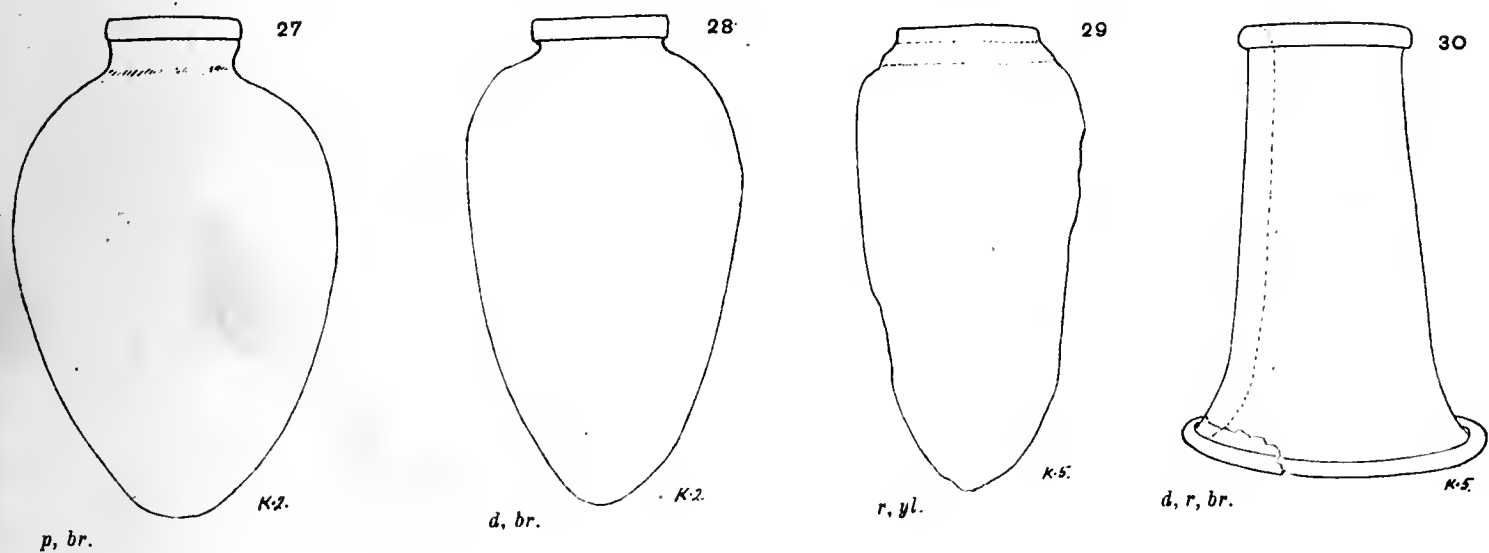
K.1.



[Notes: d is dull; p, polished; r, rough; s, smooth; br, brown; yl, yellow; rd. red].



Nos. 21-26, of smooth surface, and yellow-brown colour.







M 31



M 501

TWO CONTRACTED BURIALS OF THE VITH-VIIIth DYNASTIES.



1:4

POLISHED RED POT.

M 349



1:6

M 41



1:5

TABLE OF OFFERINGS.

M 336



1:3

POLISHED RED.

M 432



1:4

POLISHED RED POTTERY.

M 104



1:4

POLISHED RED POTTERY.

M 104



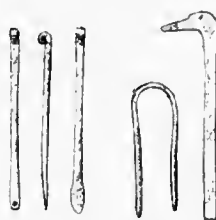
1:2 ANOTHER VIEW OF POT. SHOWING STUDS IN THE NECK. M 104







M 131



GROUP OF COPPER IMPLEMENTS, 349

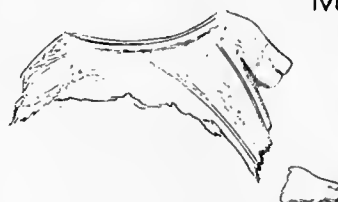


IVORY FITTING, M 1

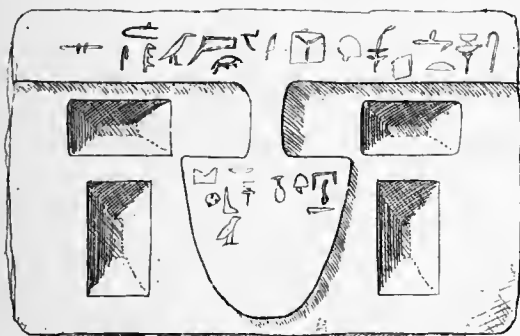


M 347

1:3 TWO COPPER IMPLEMENTS, 131-347



WOODEN HEAD-REST IN FORM OF A LION



1:6 TABLE OF OFFERINGS, M 336



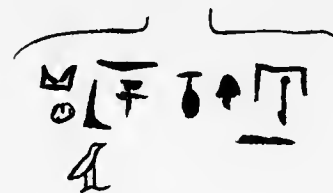
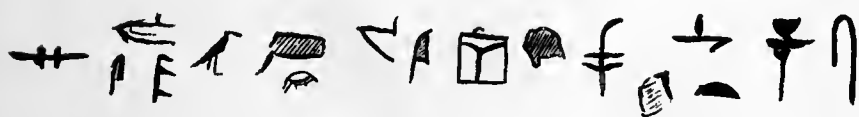
1:300 PLAN OF TOMB, M 2



1:300 PLAN OF TOMB M 1



TWO POTTER'S MARKS

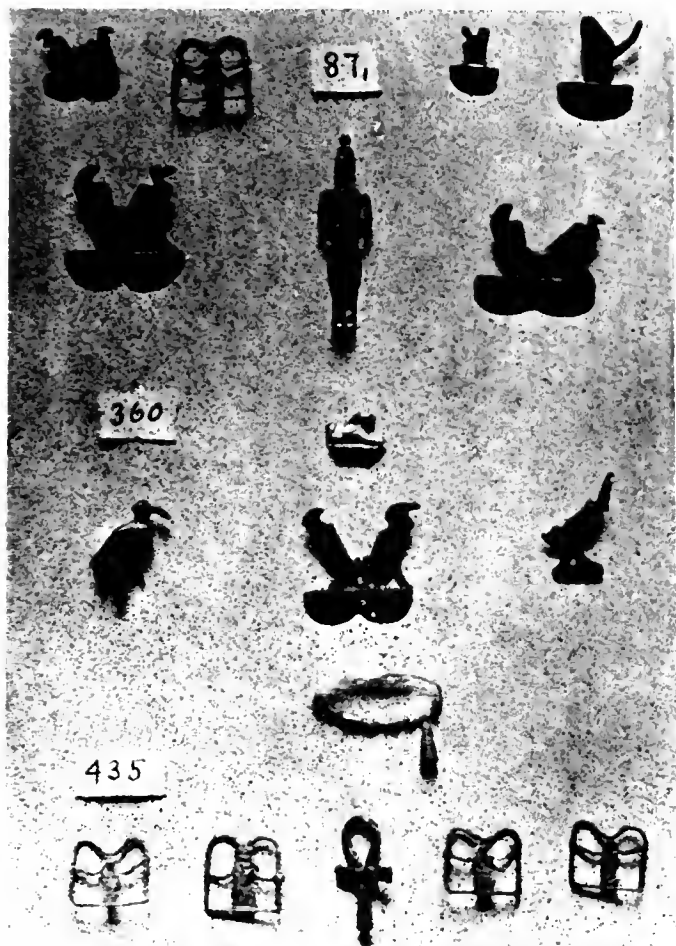


1:3 INSCRIPTIONS ON THE ABOVE TABLE, M 336



INSCRIPTION, M 41





1:1

GOLD PENDANTS.



1:3

441

441

338



1:4

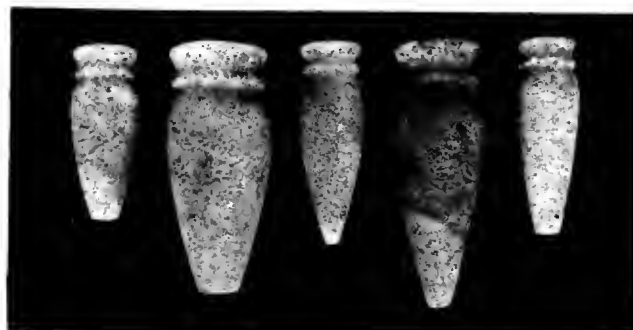
DIORITE AND STEATITE.

TOMB 441



1:4

114: ALABASTER VESSELS: 442



1:3

TYPES OF ALABASTER VESSELS.

M.



1:3

GROUP FROM TOMB 70.



1:4

443

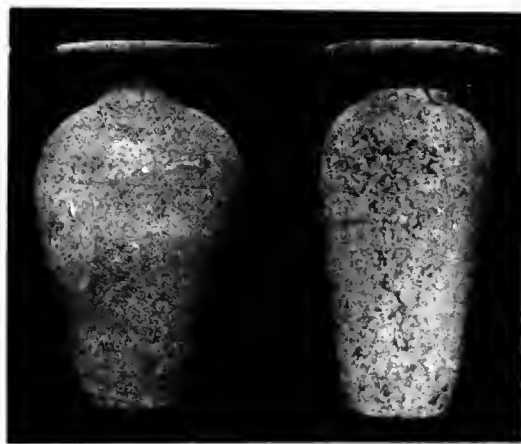


1:3

441

470

470



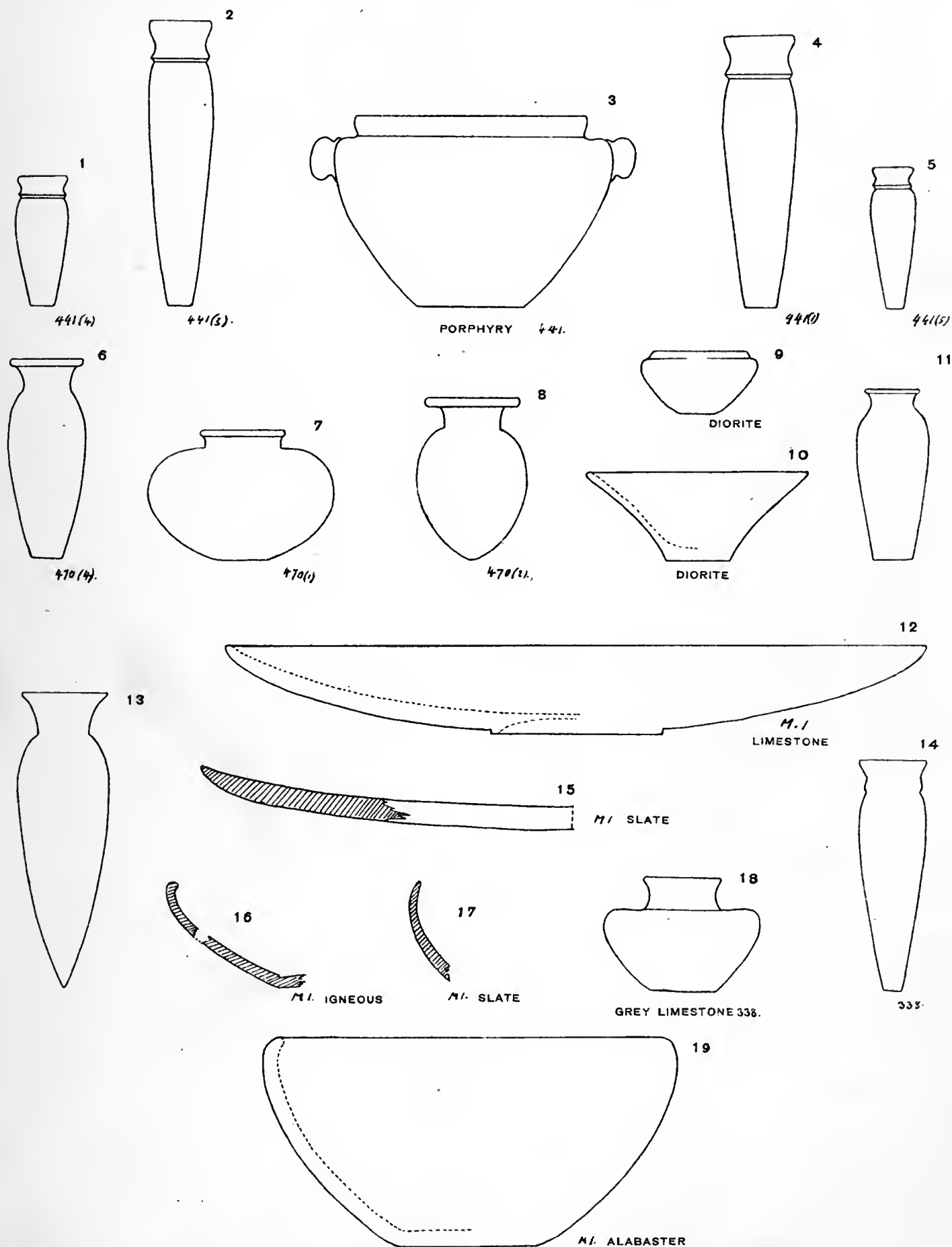
1:3

424

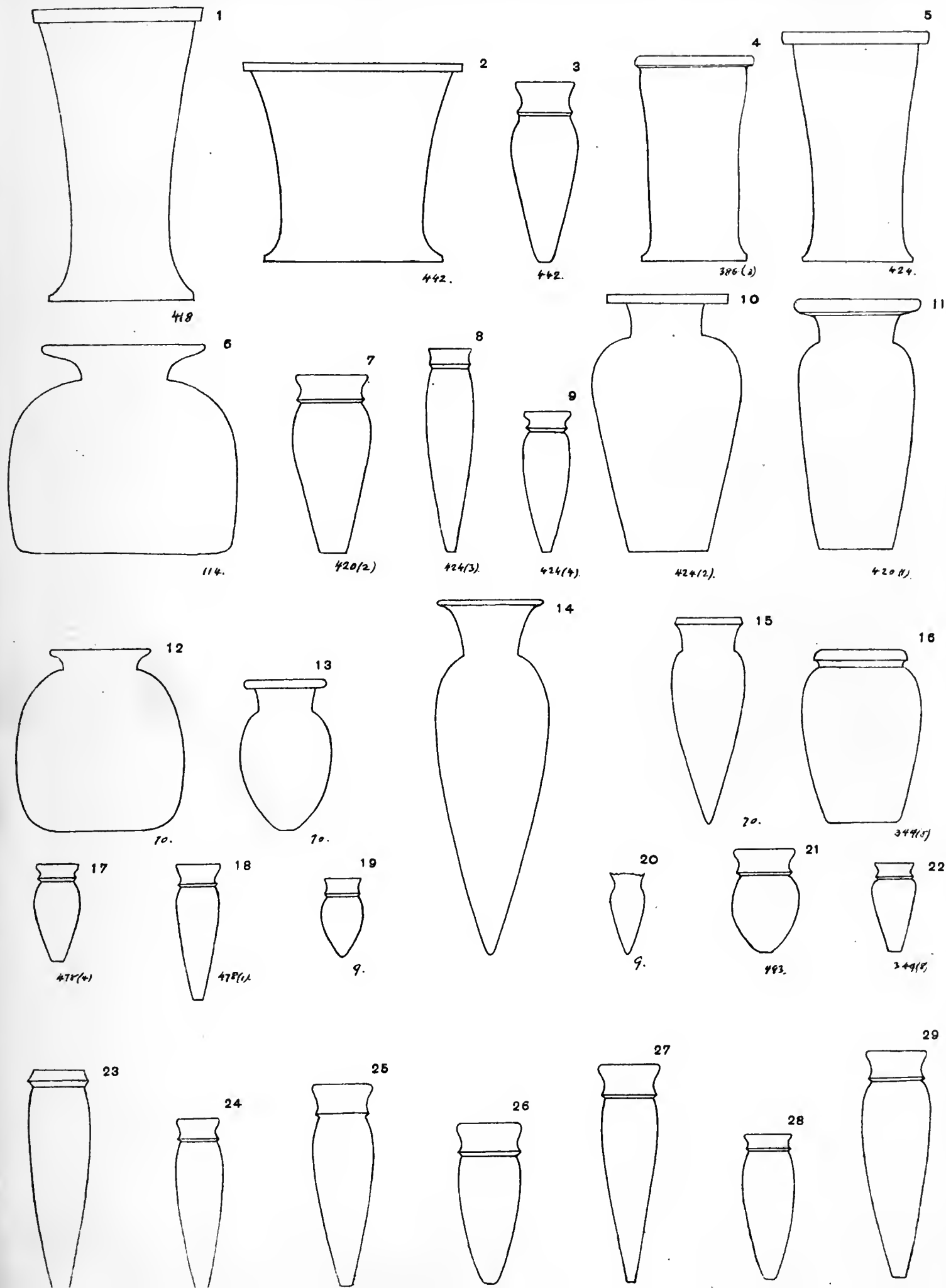
420



## TOMB DEPOSITS OF IVTH-VITH DYNs.





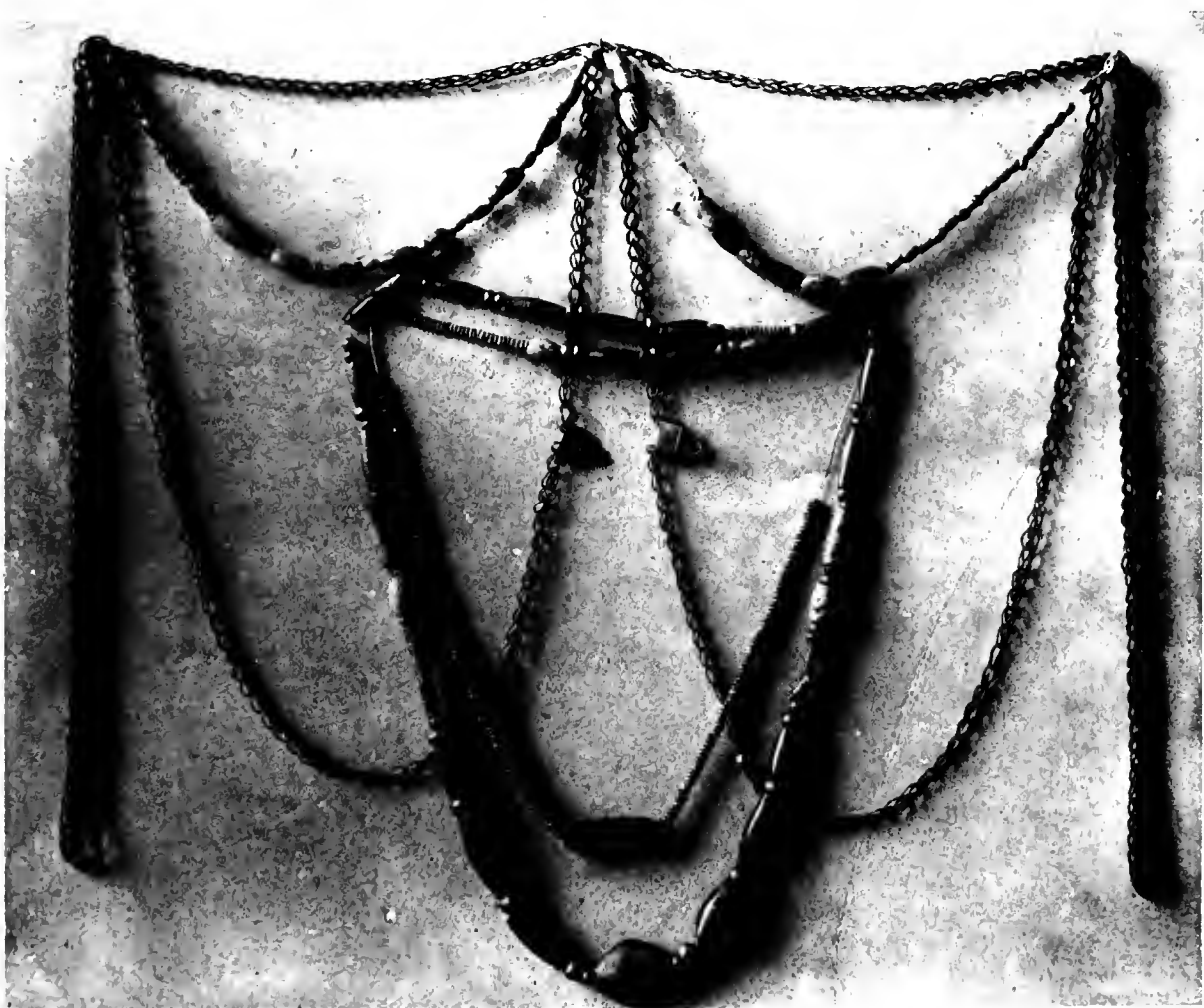




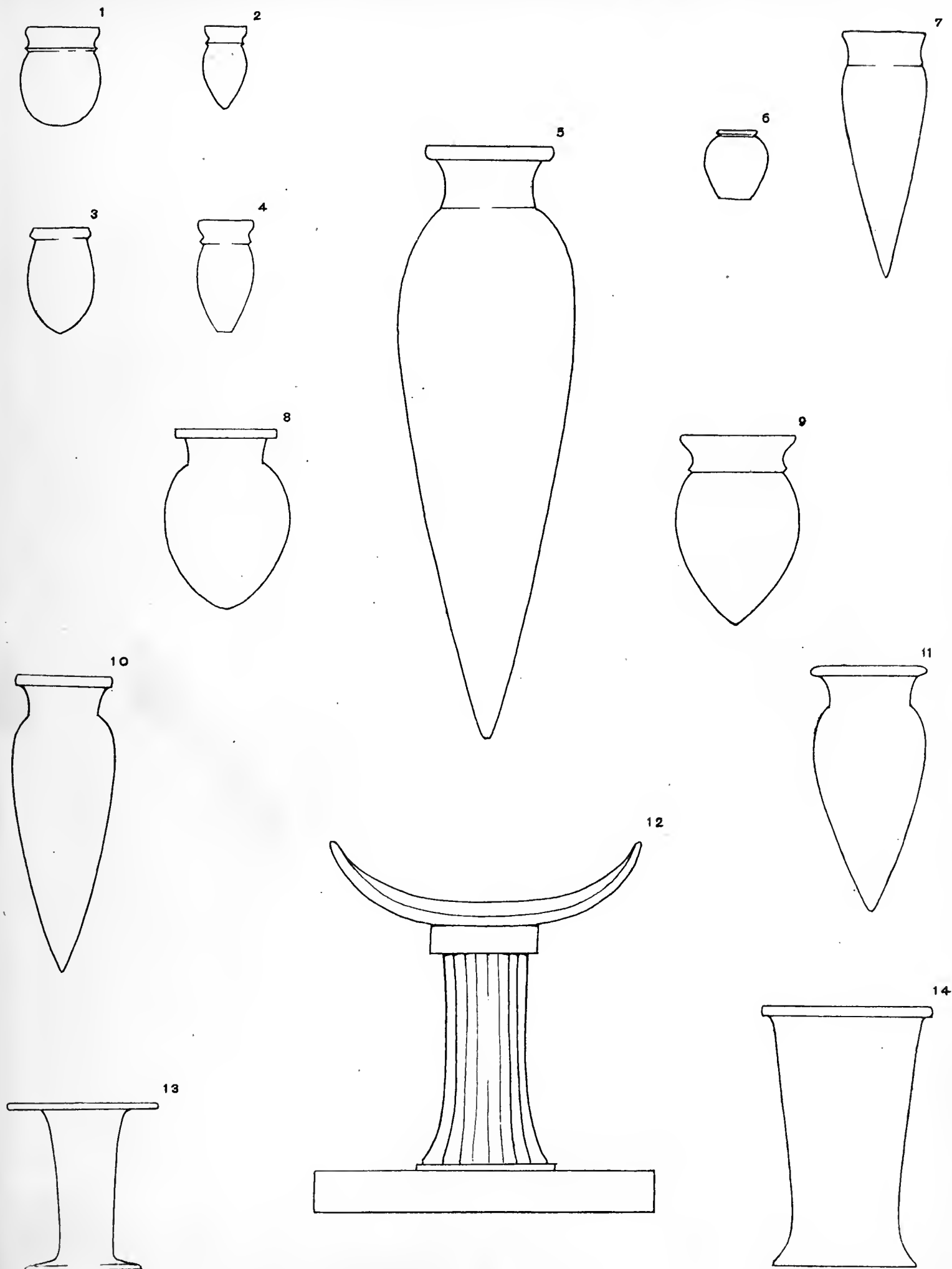




1:5 GROUP OF ALABASTER VESSELS AND HEAD-REST, COPPER MIRROR, &c











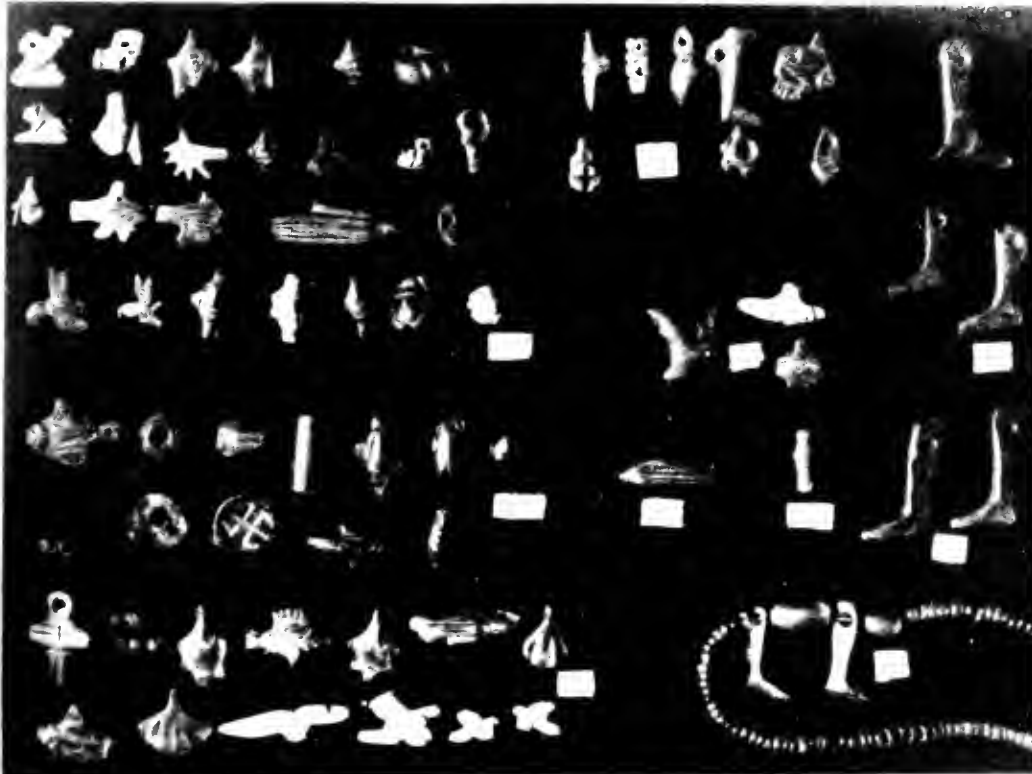
1:1

BUTTON-SEALS.



1:1

IMPRESSIONS OF THE SEALS.



2:3

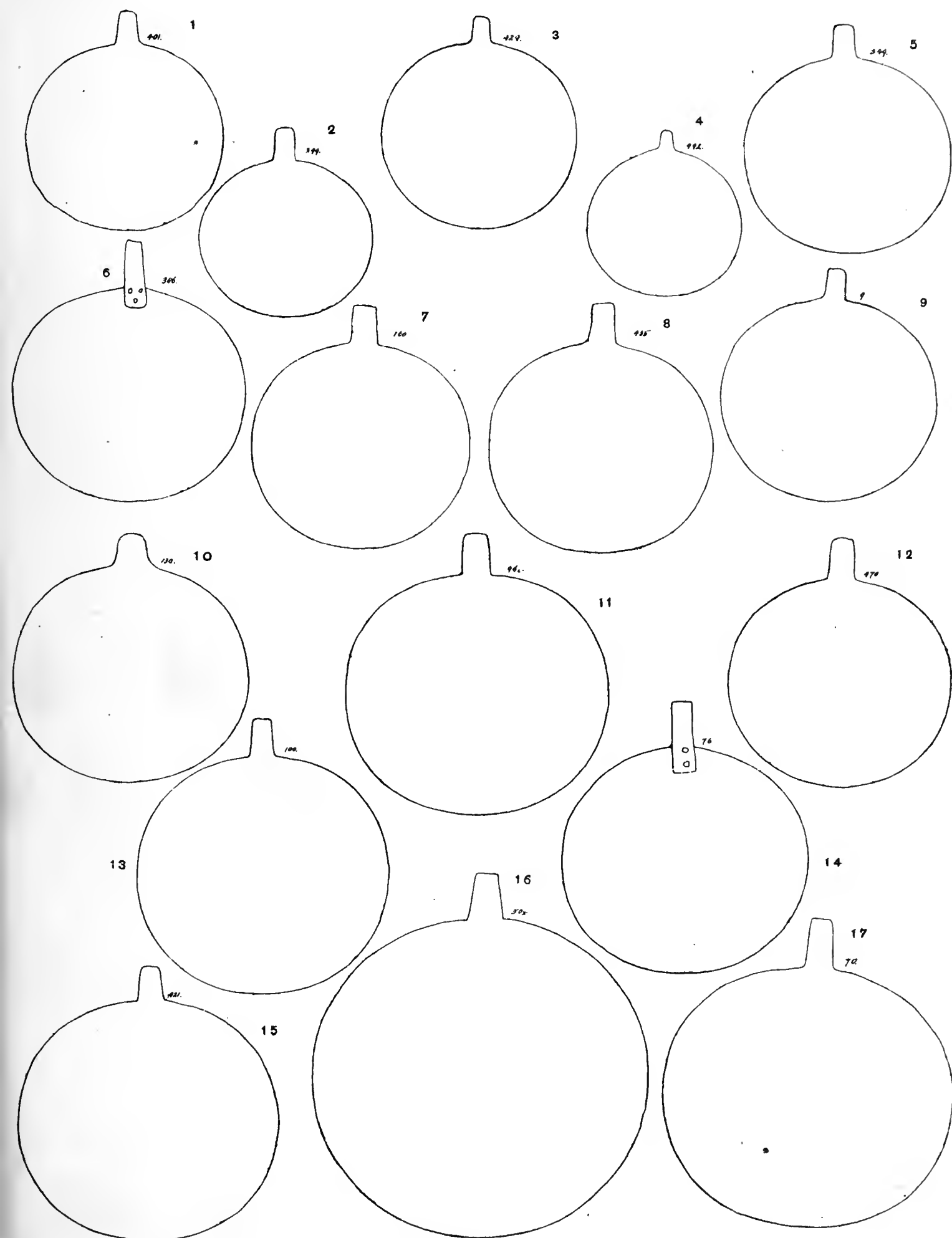
AMULETS AND PENDANTS OF CALNEIAN, NO.



1:2

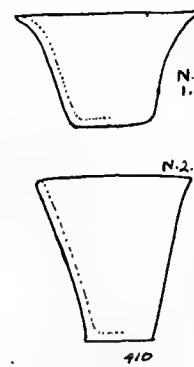
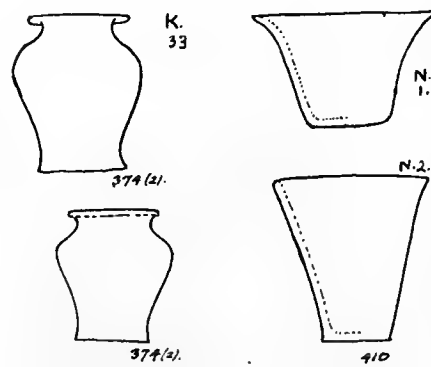
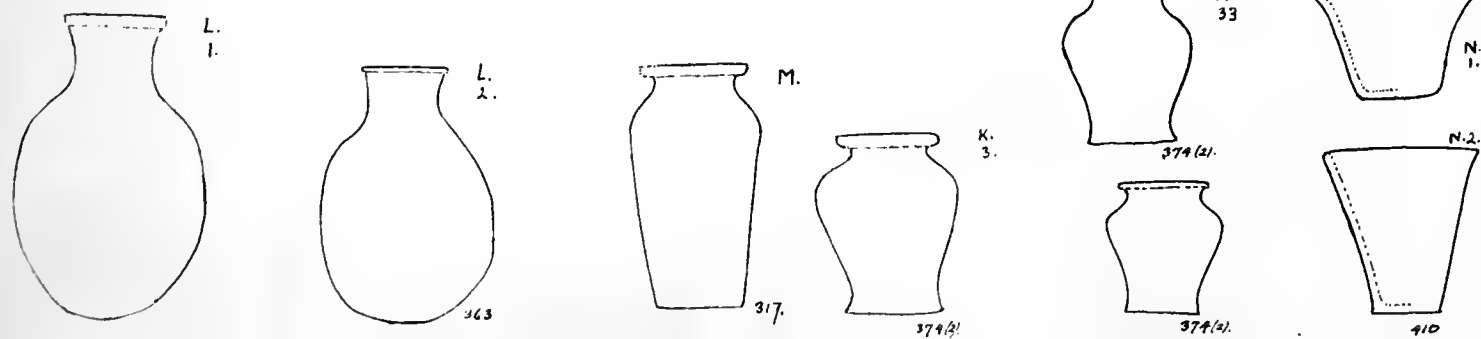
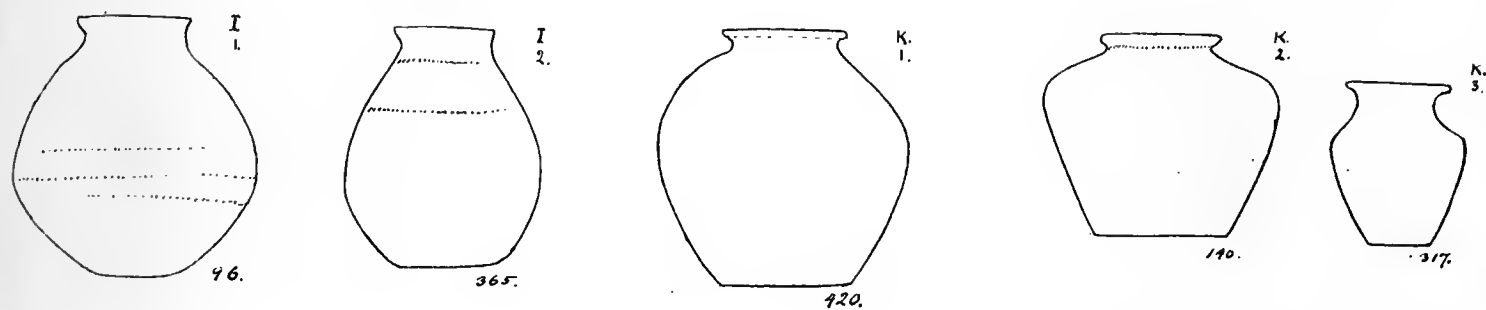
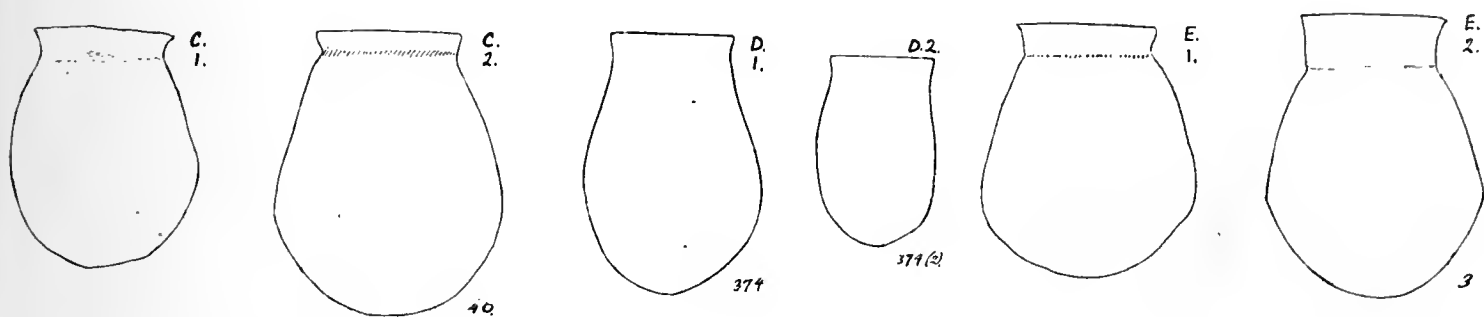
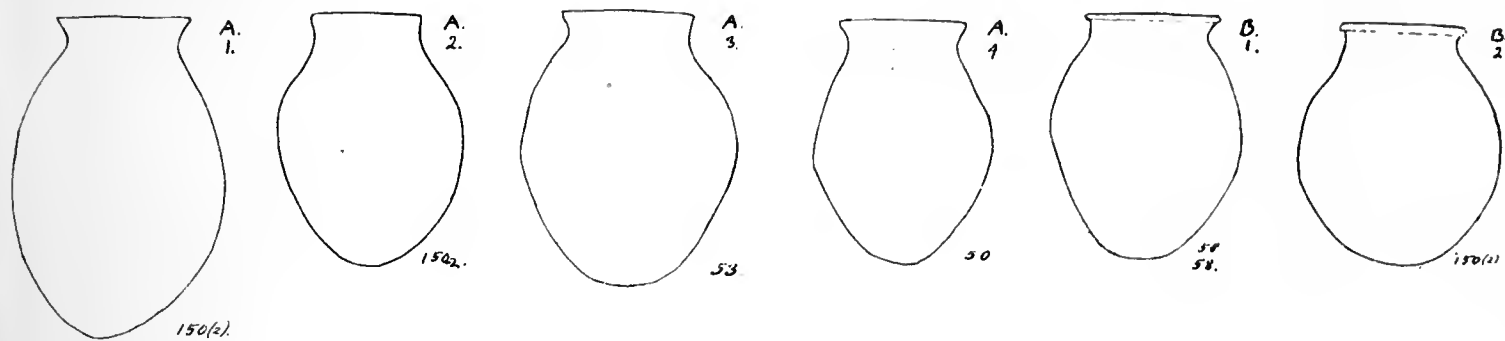
AMULETS OF CALNEIAN, NO.



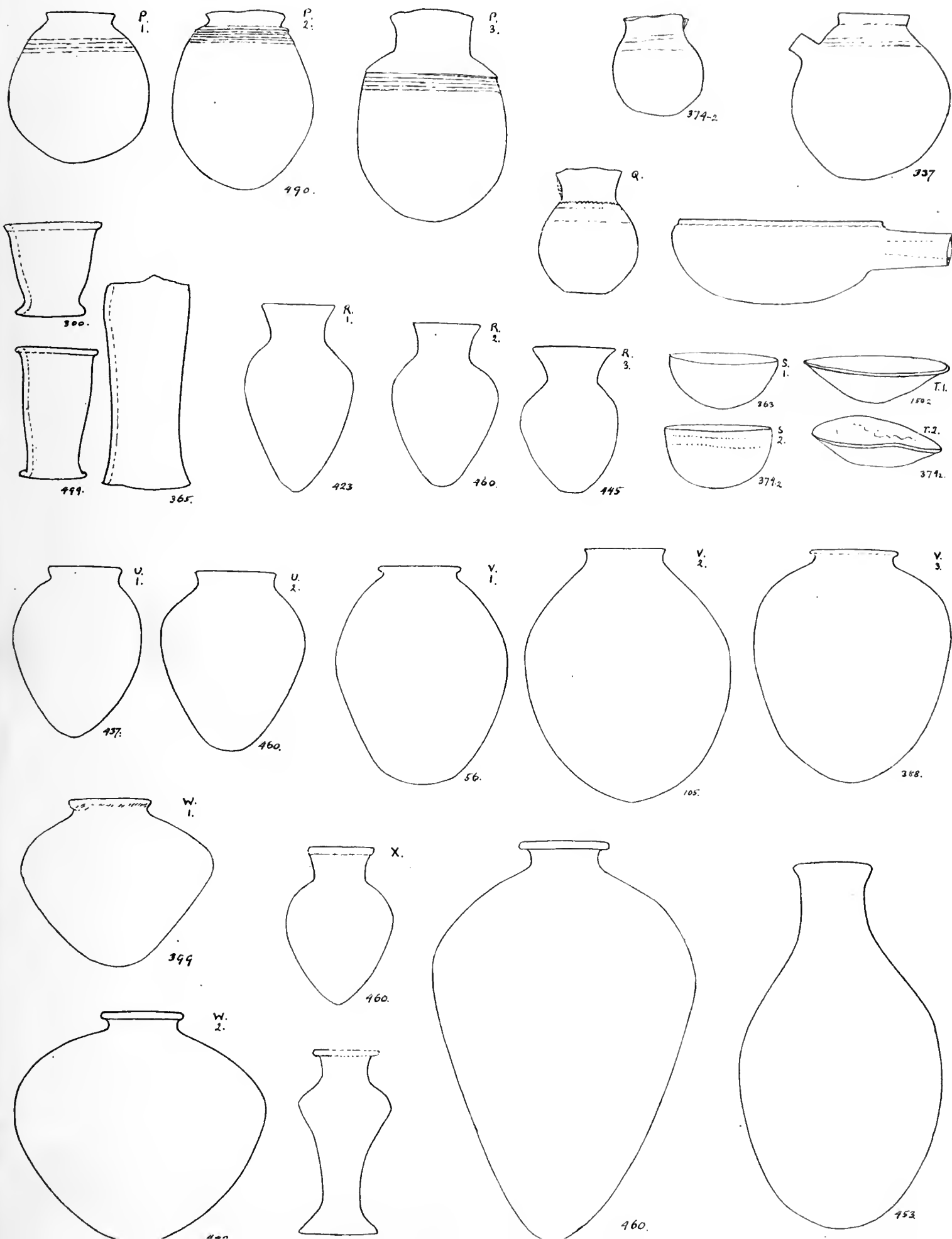
























DT  
57  
B8  
v.7

British school of Egyptian  
archaeology  
Publications

**CIRCULATE AS MONOGRAPH**

PLEASE DO NOT REMOVE  
CARDS OR SLIPS FROM THIS POCKET

---

UNIVERSITY OF TORONTO LIBRARY

---

**CIRCULATE AS MONOGRAPH**

